



Volume 5

Early Accounts of the Ecology of the Big Rivers Area

BIG RIVERS AREA ASSESSMENT



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VOLUME 5: EARLY ACCOUNTS OF THE ECOLOGY OF THE BIG RIVERS AREA

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About This Report

The Big Rivers Area Assessment examines an area near the confluence of the Illinois and Mississippi Rivers. Because significant natural community and species diversity is found in the area, it has been designated a state Resource Rich Area.

This report is part of a series of reports on areas of Illinois where a public-private partnership has been formed. These assessments provide information on the natural and human resources of the areas as a basis for managing and improving their ecosystems. The determination of resource rich areas and development of ecosystem-based information and management programs in Illinois are the result of three processes -- the Critical Trends Assessment Program, the Conservation Congress, and the Water Resources and Land Use Priorities Task Force.

Background

The Critical Trends Assessment Program (CTAP) documents changes in ecological conditions. In 1994, using existing information, the program provided a baseline of ecological conditions.¹ Three conclusions were drawn from the baseline investigation:

1. the emission and discharge of regulated pollutants over the past 20 years has declined, in some cases dramatically,
2. existing data suggest that the condition of natural ecosystems in Illinois is rapidly declining as a result of fragmentation and continued stress, and
3. data designed to monitor compliance with environmental regulations or the status of individual species are not sufficient to assess ecosystem health statewide.

Based on these findings, CTAP has begun to develop methods to systematically monitor ecological conditions and provide information for ecosystem-based management. Five components make up this effort:

1. identify resource rich areas,
2. conduct regional assessments,
3. publish an atlas and inventory of Illinois landcover,
4. train volunteers to collect ecological indicator data, and
5. develop an educational science curriculum which incorporates data collection

At the same time that CTAP was publishing its baseline findings, the Illinois Conservation Congress and the Water Resources and Land Use Priorities Task Force were presenting their respective findings. These groups agreed with the CTAP conclusion that the state's

¹ See *The Changing Illinois Environment: Critical Trends*, summary report and volumes 1-7.

ecosystems were declining. Better stewardship was needed, and they determined that a voluntary, incentive-based, grassroots approach would be the most appropriate, one that recognized the inter-relatedness of economic development and natural resource protection and enhancement.

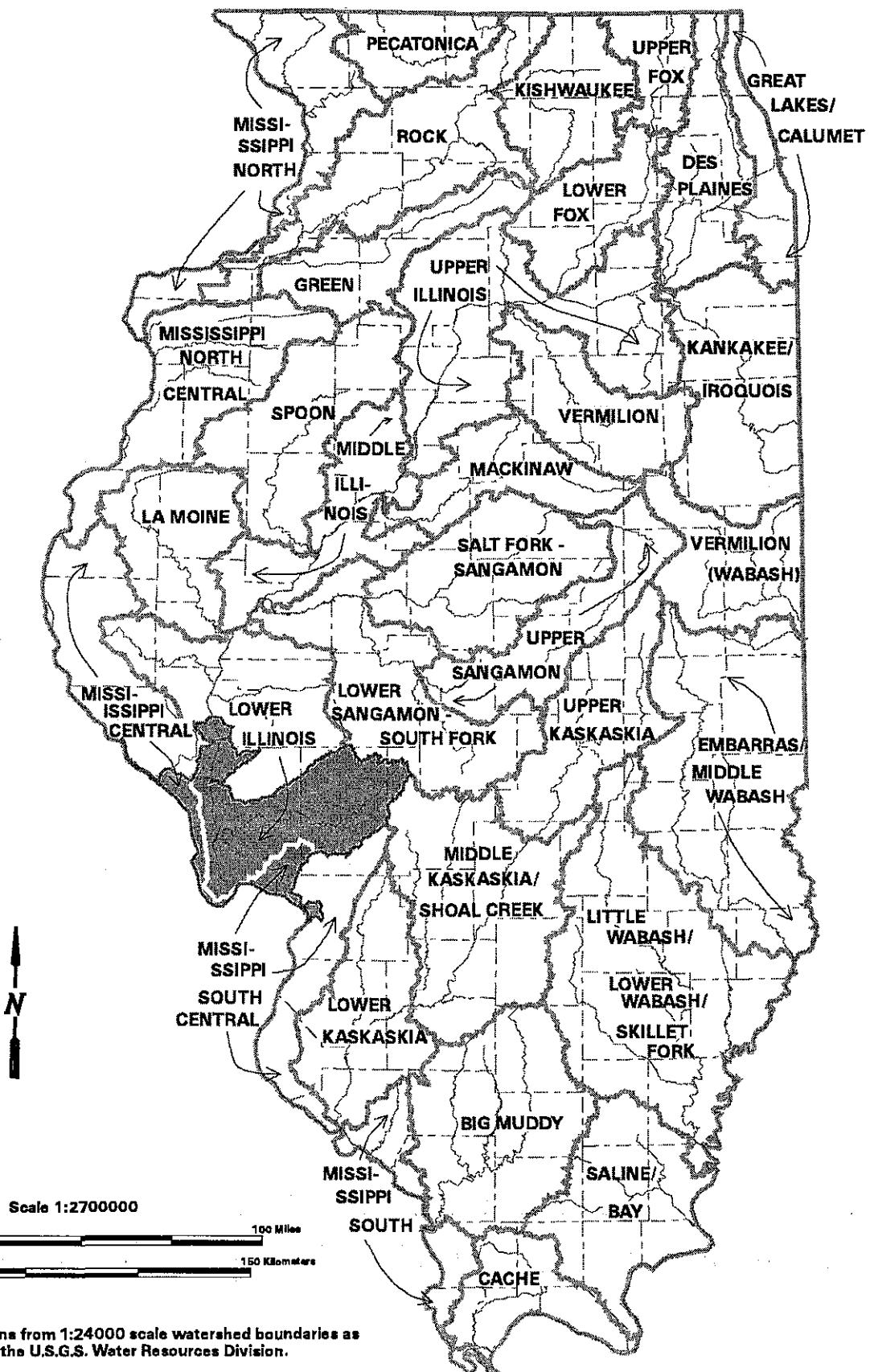
From the three initiatives was born Conservation 2000, a six-year program to begin reversing ecosystem degradation, primarily through the Ecosystems Program, a cooperative process of public-private partnerships that are intended to merge natural resource stewardship with economic and recreational development. To achieve this goal, the program will provide financial incentives and technical assistance to private landowners. The Rock River and Cache River were designated as the first Ecosystem Partnership areas.

At the same time, CTAP identified 30 Resource Rich Areas (RRAs) throughout the state. In RRAs where Ecosystem Partnerships have been formed, CTAP is providing an assessment of the area, drawing from ecological and socio-economic databases to give an overview of the region's resources -- geologic, edaphic, hydrologic, biotic, and socio-economic. Although several of the analyses are somewhat restricted by spatial and/or temporal limitations of the data, they help to identify information gaps and additional opportunities and constraints to establishing long-term monitoring programs in the partnership areas.

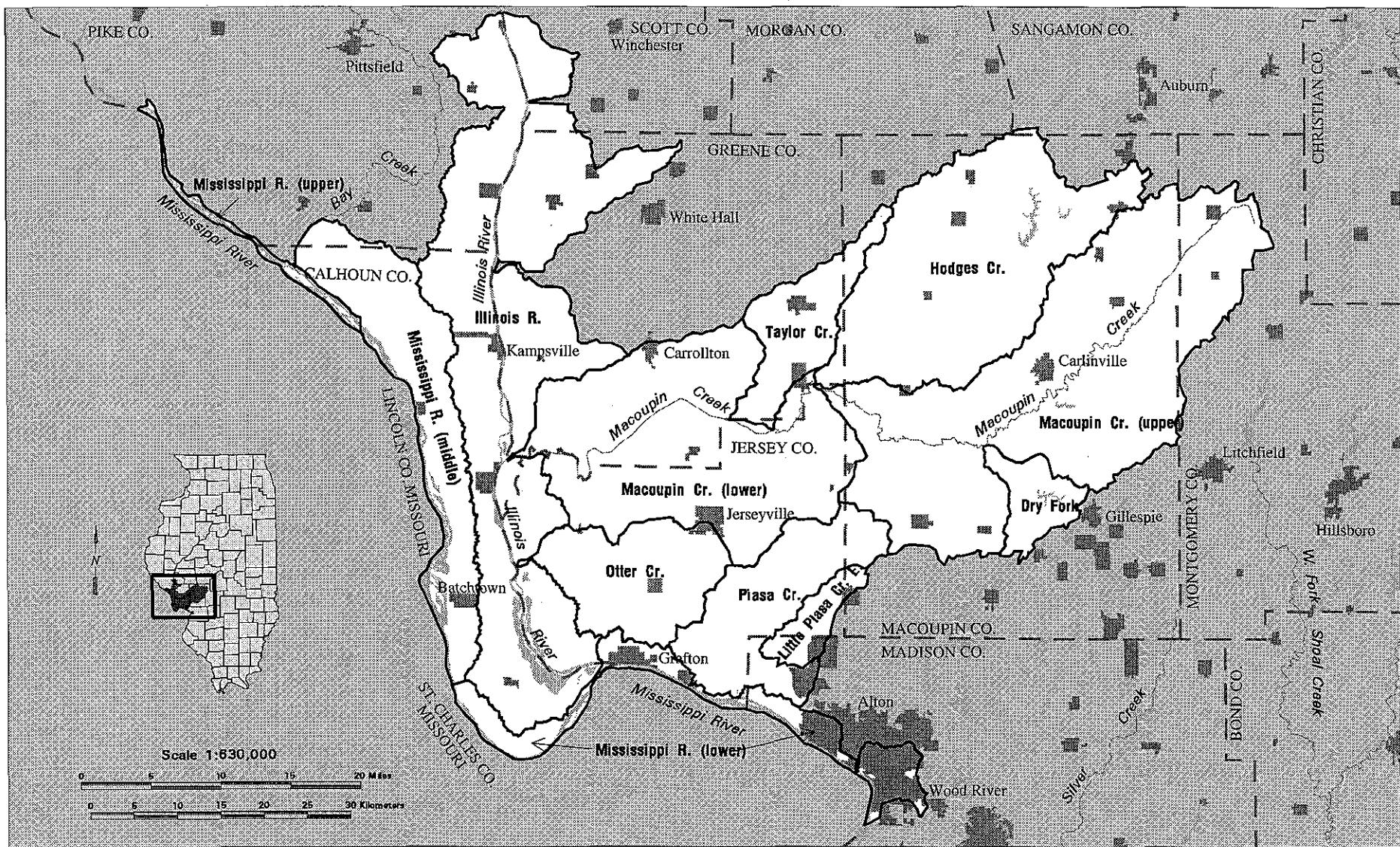
The Big Rivers Area Assessment

The Big Rivers assessment covers an area of 1,133,176 acres near the confluence of the Illinois and Mississippi Rivers. As well as including segments of the Mississippi and Illinois Rivers, the area also includes a section of Macoupin Creek - a large tributary of the Illinois River. Counties encompassed by the assessment include most of Calhoun, Jersey, and Macoupin counties, as well as portions of Pike, Scott, Green, Madison, and Montgomery counties. This area encompasses portions of three major Illinois drainage basins identified by the Illinois Environmental Protection Board: the Mississippi Central, Lower Illinois River, and Mississippi South Central basins. Three of the subbasins in this assessment area (Mississippi River [middle], Mississippi River [lower], and Illinois River) were designated as "Resource Rich Areas" because they contain significant natural community diversity. The Big Rivers Ecosystem Partnership was subsequently formed around this core area of high quality ecological resources.

This assessment is comprised of five volumes. In Volume 1, *Geology* discusses the geology, soils, and minerals in the assessment area. Volume 2, *Water Resources*, discusses the surface and groundwater resources and Volume 3, *Living Resources*, describes the natural vegetation communities and the fauna of the region. Volume 4 contains three parts: Part I, *Socio-Economic Profile*, discusses the demographics, infrastructure, and economy of the area, focusing on the five counties with the greatest amount of land in the area -- Calhoun, Greene, Jersey, Macoupin, and Madison counties; Part II, *Environmental Quality*, discusses air and water quality, and hazardous and toxic



Major Drainage Basins of Illinois and
Location of the Big Rivers Assessment Area



Subbasins in the Big Rivers assessment area. Subbasin boundaries depicted are those determined by the Illinois Environmental Protection Agency.

waste generation and management in the area; and Part III, *Archaeological Resources*, identifies and assesses the archaeological sites, ranging from the Paleo-Indian (10,000 B.C.) through the Postwar Industrial (A.D. 1946), known in the assessment watershed. Volume 5, *Early Accounts of the Ecology of the Big Rivers Area*, describes the ecology of the area as recorded by historical writings of explorers, pioneers, early visitors and early historians.

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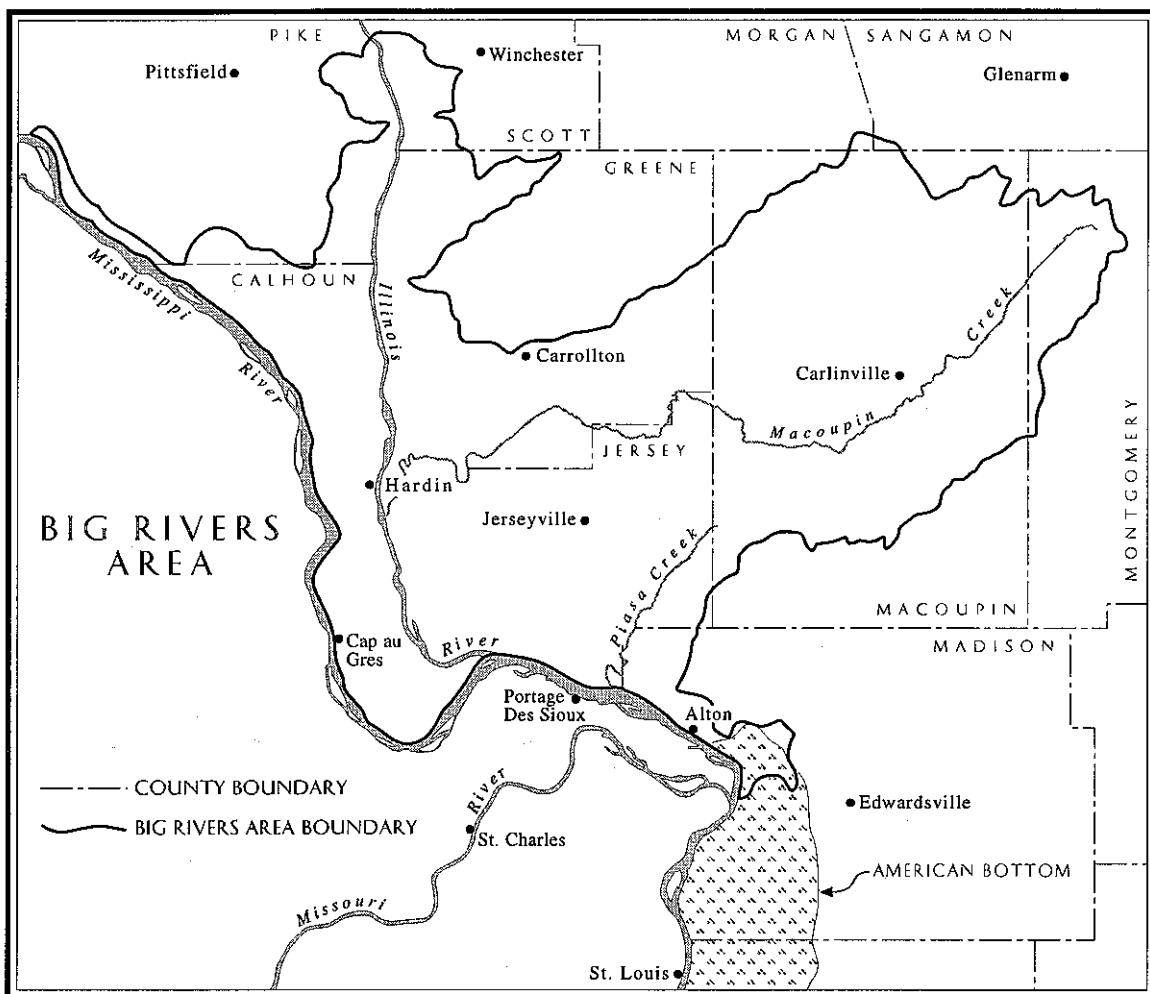
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INTRODUCTION

Scope

The Big Rivers Area encompasses parts of ten counties in the region around the confluence of the Illinois and Mississippi Rivers. Much of the area consists of bottomlands and small upland watersheds that flow directly into the rivers. The largest tributary is Macoupin Creek, which drains about half the area. The Big Rivers Area includes the north end of the American Bottom, a broad lowland along the Mississippi River downstream from Alton. The Missouri River joins the Mississippi at the south end of the Big Rivers Area.

The map on the facing page locates several places that appear repeatedly in early descriptive narratives. The most frequently visited town was Alton, on the Illinois side of the Mississippi River a few miles above the mouth of the Missouri River. Proceeding up the Mississippi a few more miles, travelers often referred to the village of Portage Des Sioux on the Missouri shore. Many observers visited St. Charles on the Missouri River because it afforded a splendid view across Mamele Prairie to the river palisades in Illinois. Cap au Gres is a spectacular bluff on the Mississippi in Calhoun County. *

Three of the most frequently mentioned geographic features extend far beyond the limits of the Big Rivers Area. The American Bottom reaches south along the Mississippi River for about 80 miles beyond the Big Rivers Area. † The narrow northwest arm of the Big Rivers Area consists of a strip of land between the Mississippi and Snicarte Slough: although segments of "The Sny" have been obliterated by drainage projects, it continues to parallel the river for about 25 miles upstream from the Big Rivers Area. ‡ The third far-reaching area is the Military Bounty Tract, which embraces all the land between the Illinois and Mississippi Rivers as far north as Rock Island County. ¶

Most quotations on the following pages describe places and events within the boundaries of the Big Rivers Area. Some narratives have been selected from immediately adjacent areas because they describe ecological features and phenomena that are the same as in the Big Rivers Area. The vegetation, animal life, land use, and environment on the Missouri side of the Mississippi River have a major bearing on ecosystems in Illinois.

* Cap au Gres or Cap au Grès is a sandstone bluff on the east bank of the Mississippi River, 20 miles above the mouth of the Illinois River. Although this cliff is one of the most salient landmarks on the Mississippi River, its exact location has proven to be as equivocal as the spelling of its name. The name has usually been applied to a mile-long segment of bluff, but a British geographer stated in 1778 that Cape au Gres extends for more than 12 miles. In 1820 a military officer made note of both Capo Gray (present-day Cap au Gres) and Little Capo Gray (12 miles south, at the tip of Calhoun County). There once was a village of Cap au Gris in Illinois near Cap au Gres, but the present village of Cap au Gris is across the river in Missouri.

† The American Bottom is portrayed on page 69.

‡ Snicarte Slough is described on pages 179 and 304.

¶ The Military Bounty Tract is described in a footnote on page 66.

Water mills are a featured topic because they had some of the most immediate impacts on the region's ecology. Grist mills and sawmills attracted immigrants and supported rapid expansion of farming and lumbering industries.^{*} Mill ponds drastically affected stream environments and aquatic life. The dams were built on higher-gradient reaches of streams, drowning some of the rarest aquatic habitats in the valley.

Sources

Early descriptions of the region have come largely from explorers, missionaries, travel writers, local residents, engineers, scientists, and historians. Eyewitness narratives have been arranged according to the year of the observation. Retrospective accounts that look farther back on the past are presented in the order of their publication date. The source of each quotation is cited with a number at the end of the excerpt, corresponding to one of the references on pages 433 to 453.

Quotations are true to their sources: spelling, punctuation, and grammar have not been corrected or standardized, but obvious typographical errors (not misspellings) have been edited.[†]

The Illinois, Mississippi, and Missouri Rivers have long served at the center of an international system of waterways, bringing countless persons to the Big Rivers Area. The earliest descriptions of the region are by French traders and missionaries who first came in 1673. A succession of French, British, and American military expeditions documented the valleys up to the time of Illinois' statehood in 1818.[‡]

Succeeding decades saw the removal of native people and a swelling population of whites. Burgeoning steamboat travel during the 1830s and 40s brought a flood of immigrants and tourists, many of whom wrote travelogues for vicarious adventurers. Several authors prepared gazetteers and guides for prospective immigrants and other information-seekers.

During the early and middle decades of the 19th century, the region around the confluence of the Big Rivers was home to some of the era's literary giants, including Timothy Flint, J.M. Peck, and John Russell. Several of the nation's most accomplished writers visited and wrote about the area: William Cullen Bryant, Mary Hartwell Catherwood, and Eliza Steele, to name three. A number of British authors plied their trade on the Big Rivers, including Basil Hall, Charles Joseph Latrobe, and Arthur Cunynghame.[¶]

* Donald Zochert's article "Illinois Water Mills, 1790–1818" has a good discussion of the crucial role of mills in the early economy and development of the region.³⁸⁵

† Words such as *endeavour'd*, *bowl'd*, and *canou* are archaic, not misspelled. Geographic names were not standardized in the past: *Mississippi* has more than a dozen spellings on these pages.

‡ Scientific expeditions that examined the Big Rivers Area during the 19th century are detailed in *A Bibliography of American Natural History*.²²³

¶ For an introduction to luminaries who visited and wrote about the region, see "Illinois, Host to Well-known Nineteenth Century Authors"¹⁶⁶ and *The Literature of the Middle Western Frontier*.²⁹²

With the approach of the fourth quarter of the 19th century, a new kind of writing industry sprang up as “Old Settlers” recorded their increasingly rare reminiscences. The United States Centennial prompted production of historical volumes about most of the Big Rivers counties. This effort continued up to about 1920 with the publication of second and third generations of county histories.

The American Bicentennial stimulated preparation of several volumes of local history, but these books afford little additional information about the early ecology of the Big Rivers Area. Most new information about the past environment has come from modern archaeological research that began in the 1960s. A series of more recent studies have used the U.S. Public Land Survey’s notes and maps to reconstruct the region’s past vegetation.

Literary piracy

Many authors during the 1700s and 1800s copied the work of others and presented it as their own writing. Although this practice would now elicit the serious charge of plagiarism, it was not necessarily considered an ethical offense in the past. *

Close examination of French narratives on pages 8 to 32 will reveal that certain descriptive phrases appear repeatedly among reports by various explorers. Scholars have devoted their careers to sorting out the sources of certain early French accounts of the Mississippi valley.

The subject of literary misappropriation can be illustrated with Thomas Hutchins’ *Topographical Description of Virginia, Pennsylvania, Maryland, and North Carolina*. This 1778 book was one of the first reports about the Big Rivers Area to gain wide circulation. In 1796 Victor Collot (a French spy) evidently pretended to explore the Big Rivers Area, but instead simply took his information from Hutchins’ book. The *Topographical Description* was used to fill out the works of Nicolas de Finiels (1806), Thomas Ashe (1808), and Zadock Cramer (1814)—but each of these authors failed to admit that he had taken from Thomas Hutchins’ report.

It is sometimes possible to get a sense of the validity of a particular observation by noting how often the statement appears in historical literature. But if a fact is repeated by several authors, this does not necessarily mean that each writer independently came to the same conclusion: it may only mean that one person has copied from another. Some of the most interesting observations (and most outlandish stories) were the most often repeated. Most such falsely appropriated statements have been omitted from this report. If a plagiarized passage is quoted because it is an ineluctable part of a narrative, it is identified with a footnote. The topic of plagiarism is further examined in footnotes on pages 187 and 208.

* The widely respected author Timothy Flint stated that he had personally composed “something more than half” of his 1828 geography book about the Mississippi valley. He took the balance from other writers. Even though Flint sometimes “adopted the phraseology . . . entire” from another author, he asserted that he had not “considered it necessary to give individual quotations, or to disfigure the margin with references and authorities.”¹¹⁵ For an introductory discussion about the past acceptability of such literary borrowing, see an essay about “Scholarship and the Quotation Mark” by George Callcott.⁶¹

Terminology

A few terms that have fallen into disuse may require explanation. The word *since* was formerly employed as we currently use *ago*: three centuries since, the Big Rivers Area was part of Louisiana. Before there was a Midwest, the region was part of the *West* or the *Northwest*. Townships were often called *towns*. Humus-rich soil was called a *mould*. If something was termed *peculiar*, it was distinctive or special—not odd.

The length represented by a French league is not always certain. The official length varied according to the chosen standard (*i.e.* post league, marine league, etc.), and most early travelers could only roughly estimate the length of their journeys. A league can generally be assumed to be about two and one-half miles.

Malaria was called *bilious fever*, *intermittent fever*, *ague*, and “the shakes.” This disease was thought to result from poisonous vapors or *miasma* generated by the hot, humid climate and rotting vegetation. People did not yet know that mosquitoes—rather than “noxious exhalations”—spread the disease.

Eighteenth and 19th-century observers customarily referred to many well-known animals and plants with names that are no longer familiar. The most common of these species are discussed in the following paragraphs rather than being footnoted each time they appear in narratives.

The early French usually referred to bison as *les boeufs sauvages*. This name has been variously translated as wild cattle, bullocks, cows, bulls, oxen, or buffaloes.

The coyote was generally known as the prairie wolf during the 1800s. The great majority of wolves mentioned in the Big Rivers Area are coyotes rather than timber wolves.

The identity of native Midwestern cats has often proven to be ambiguous. The Big Rivers Area was certainly home to two species: the mountain lion (*Felis concolor*) and the bobcat (*Felis rufus*). The mountain lion was commonly called a panther or a painter, sometimes a catamount, and rarely a cougar. Early Big Rivers residents seldom if ever referred to bobcats; instead they spoke of wild cats. A third species, the Canada lynx (*Felis lynx*), may have occasionally ranged as far south as the Big Rivers Area—but no report of a lynx from the region is accompanied by a conclusive description. Identifications are further muddled because the bobcat was often called a lynx. Any of these three cat species—the mountain lion, the bobcat, or the Canada lynx—might have been referred to as a wild cat or a catamount.

The greater prairie-chicken was called the prairie chicken, prairie hen, prairie grouse, pinnated grouse—or quite often, simply the grouse. Ruffed grouse were often called pheasants or partridges. Bobwhite quail were also called partridges. Passenger pigeons were usually called wild pigeons. The paroquet is the Carolina parakeet. The name “brant” was formerly applied to goose species other than the Canada goose. Herons and egrets as well as true cranes were called cranes. The name “snipe” was applied in general to several members of the sandpiper family.

A sugar tree is a sugar maple. The shellbark hickory of the 1800s is the shagbark hickory of today. The lynn, linn, lin, and bass are the basswood. The name “black ash” was applied to green ashes and red ashes. The white walnut is the butternut; the white elm is the American elm; the white maple is the silver maple.

If a quotation includes a common name of a plant that is likely to be confusing or obscure, a currently accepted common name and scientific name are given in a footnote. If a quotation has an outdated or incorrect scientific name for a plant, the current and correct scientific name is in a footnote.*

If the common name of an animal is likely to be unfamiliar, a newer name is provided in a footnote. Outdated or incorrect scientific names of animals have not been updated or corrected: instead a current common name is given in a footnote if necessary. Because present-day common names of vertebrate animals are well standardized in field guides and other references, they usually serve to identify each species without resorting to scientific names.[†]

The Big Rivers counties have been favored with a number of early catalogues of plants and animals, but these lists are replete with mistakes ranging from misspellings to misidentifications. Sorting out the author’s intention has been a challenge. Sometimes the challenge first fell to the typesetter who had to read unfamiliar words in the author’s handwriting.[‡] This is the basis of such names as “True Sparrow” in place of “Tree Sparrow,” and “long-billed curfew” instead of “long-billed curlew.”

Many questionable identifications have stemmed from archaic names that could be updated by examining old reference books.[¶] It was possible to identify several species by studying

* Updated scientific nomenclature for plants follows Mohlenbrock’s *Guide to the Vascular Flora of Illinois*.²³⁰ Common names of plants in footnotes do not follow any single published authority, but they are names in general use in the region.

† Common names of animals have been standardized in footnotes according to the following references: *The Fishes of Illinois*,³¹⁰ *Field Guide to Amphibians and Reptiles of Illinois*,²⁶² *The Birds of Illinois*,⁴⁷ and *Mammals of Illinois*.¹⁵⁹ This report makes three exceptions to names in *Mammals of Illinois*. *Canis lupus* is called the timber wolf rather than simply the wolf, to better distinguish it from the prairie wolf (coyote) that is mentioned quite often in early literature. *Felis lynx* is called the Canada lynx rather than simply the lynx, to help differentiate it from the bobcat, which was also called a lynx in days past. Although “bison” is the scientifically accepted name, the popular name is “buffalo”; the two names are used interchangeably on these pages.

‡ In his 1834 gazetteer of Illinois, J.M. Peck offered an apology and an excuse: “But in composing more than one thousand proper names, many of which are not commonly found in print, the most skilful and accurate compositors and proof readers would necessarily commit mistakes.”²⁵¹

¶ Jones and Fuller’s *Vascular Plants of Illinois*,¹⁷⁸ Lyons’ *Plant Names*,²⁰⁸ and the fifth edition of Gray’s *Manual*¹³³ are indispensable references for sorting through old naming riddles. Other especially useful botanical references are by Sudworth³²⁸ and by Sargent.^{294, 295} The best references for past names of fishes are “A Partial Catalogue of the Fishes of Illinois,”²³¹ *Contributions to North American Ichthyology*,^{179, 180} and the 1908 version of *The Fishes of Illinois*.¹¹⁹ Troves of old bird names may be found in *Birds of America*,²⁴⁷ *Local Names of Migratory Game Birds*,²¹⁶ *Descriptive*

descriptions that have not been quoted. Some species were ascertained by considering which ones might reasonably be found in the region.* A small essay would be needed to document how each of the more perplexing species was determined, and the resultant identification is often an educated guess.

A final note

It has been possible to avoid racist language in old narratives about the Big Rivers Area except in reference to native peoples. French immigrants called the local people *les sauvages*.[†] English speakers were as likely to say “savages” as “Indians.” Many white residents and visitors to the region maintained prejudiced and romanticized attitudes toward indigenous Americans, expressed by phrases such as “depraved braves” and “simple-hearted sons of the wilderness.”

The words *settle*, *settler*, *settlement*, and *pioneer* appear about 300 times on these pages in reference to persons who came from the eastern states and Europe to live in the region. These immigrants have often been portrayed as if they entered a virgin, long-uninhabited wilderness.

Many sites along the lower Illinois River and on the American Bottom have a record of continual occupation over centuries and millennia. The largest town on the continent north of Mexico once stood immediately south of the Big Rivers Area at Cahokia. Through their use of fire, hundreds of generations of people appear to have utterly shaped the distribution and composition of the so-called “presettlement” vegetation of the region.

Acknowledgments

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Catalogue of the Birds of Illinois,^{284, 285} *The Birds of North America*,¹⁶ and *Life Histories of North American Birds*.³⁷ Other especially useful sources of bird names are by Banks,²⁰ Widmann,³⁶⁵ Butler,⁶⁰ and Pratten.²⁷⁰

* For example a reference to a “milk vetch” is most likely to pertain to the common *Astragalus canadensis*, rather than a species rarely encountered in the lower Illinois River valley (*A. distortus*, *A. crassicarpus*, or *A. tennesseensis*).

† Illinois historian John F. Steward wrote in 1903, “We are told that the natives of the New world were savages,” but he demurred: “Let us not be deceived by the terms applied to these natives. The beasts the explorers found along the St. Lawrence river were wild, and the French called them *sauvage*. The people they found living a life of wild freedom they also called *sauvage*, although many were so mild in manners as to put the French to shame. We have given the French word *sauvage*, that merely means wild, a most savage interpretation.”³²²

Beverly Miller, Lisa Bell, Paula Hamman, Carol Bullard, Chester Wolenski, Anne Adams, Lindsay Black, Rita Disroe, and Desiree Yomtoob of Ecological Services took part in various stages of the project. Lisa Bell made the map on page xiv. Others who contributed their expertise to the endeavor include Joyce Hipskind, Mary Schroer, Barbara Schuler, Jason Meredith, Suzette Merchant, and Alan Shackelford.

Brian Anderson originally suggested that I look into early accounts of the ecology of Illinois. Research began in 1990 in the library of Gaylord and Dorothy Donnelley, where I was introduced to the treasure of early Illinois literature through the *Lakeside Classics*.

RIVERS, BOTTOMS, BLUFFS, BROKEN LANDS, AND PLAINS

The Big Rivers Area embraces five major physiographic features: the *rivers*, the adjacent *bottoms*, the *bluffs* bordering the bottoms, the *broken lands* or hill country extending back from the bluffs, and the upland *plains*. Early accounts of the Big Rivers Area often mention these five zones. The earliest chroniclers wrote of *les rivières*, *les marais*, *les montagnes*, *les coteaux*, and *les campagnes*.

1673: Jacques Marquette

In the late spring and early summer of 1673, Louis Jolliet led the earliest known French explorers into the Big Rivers Area. Their route took them down the Mississippi River and along the entire western border of Illinois. They later ascended the whole length of the Illinois River. Jacques Marquette, the expedition's priest, is generally credited as the source of the only extensive report about the journey.* According to this chronicle, Jolliet's group came across a pictograph of two animals on the Mississippi River bluff at present-day Alton:

While Skirting some rocks, which by Their height and Length inspired awe,
We saw upon one of them two painted monsters which at first made Us afraid,
and upon Which the boldest savages dare not Long rest their eyes. They are as
large As a calf; they have Horns on their heads Like those of a deer, a horrible
look, red eyes, a beard Like a tiger's, a face somewhat like a man's, a body
Covered with scales, and so Long A tail that it winds all around the Body,
passing above the head and going back between the legs, ending in a Fish's tail.
Green, red, and black are the three Colors composing the Picture. Moreover,
these 2 monsters are so well painted that we cannot believe that any savage is
their author; for good painters in france would find it difficult to paint so well,
—and, besides, they are so high up on the rock that it is difficult to reach that
place Conveniently to paint them.†

* This record of the journey of Jolliet and Marquette is often called Marquette's *Relation* or Marquette's journal, but it is not a journal in the sense of an account that was recorded as the journey proceeded. The *Relation* frequently summarizes wide-ranging topics, skipping from place to place and mentioning events out of chronological order. The identity of the author of the *Relation* is controversial. Francis Borgia Steck, a Franciscan priest, contended that the report was actually written by Claude Daublon, who was Marquette's superior in Canada. Joseph Donnelly, a Jesuit priest, argued that Marquette is indeed the author. For an entry into literature regarding this debate, see missives by Steck,³¹⁸ Donnelly,⁹⁹ and Hamilton.¹⁴⁸ As a matter of expedience the *Relation* is credited here to Father Marquette.

† A substantial body of literature has developed around this pictograph. The image is commonly referred to as "the Piasa Bird," but there were two creatures—not one—and, as Natalia Belting has

. . . While conversing about these monsters, sailing quietly in clear and calm Water, we heard the noise of a rapid, into which we were about to run. I have seen nothing more dreadful. An accumulation of large and entire trees, branches, and floating islands,^{*} was issuing from The mouth of The river pekistanouï,[†] with such impetuosity that we could not without great danger risk passing through it. So great was the agitation that the water was very muddy, and could not become clear.³³⁵

In his discussion of the general region in and near the Big Rivers Area, Père Marquette described several plants:

While passing near the rather high rocks that line the river, I noticed a simple[‡] which seemed to me very Extraordinary. The root is like small turnips fastened together by little filaments, which taste like carrots. From this root springs a leaf as wide As one's hand, and half a finger thick, with spots. From the middle of this leaf spring other leaves, resembling the sconces used for candles in our halls; and each leaf bears Five or six yellow flowers shaped like little Bells.[¶]

pointed out, "The Piasa—It Isn't a Bird!"³⁴ The best review of the topic is in Wayne Temple's "The Piasa Bird: Fact or Fiction?"³²⁹ Another useful summary is by Clara Bayliss.²⁵

^{*} A *floating island* is a mass of drifting wood.

[†] River pekistanouï = Missouri River. Father Marquette further wrote, "Pekitanouï is a river of Considerable size, coming from the Northwest, from a great Distance; and it discharges into the Missisipi."³³⁵

[‡] A *simple* is a kind of medicinal herb.

[¶] The identity of this plant is uncertain. Marquette's characterization of "a leaf as wide As one's hand, and half a finger thick, with spots" is a perfect fit for the fleshy, hood-like spathe of the skunk cabbage (*Symplocarpus foetidus*). But none of the rest of the description fits the skunk cabbage, and the spathe of this species would not persist as late in the season as the time of Marquette's visit to Illinois. Skunk cabbage is not expected to occur as far south as the Big Rivers Area, but the account is not clear about the plant's location. Marquette described bluffs near Alton in this part of his report; but, from the content of his narrative, one can conclude that the plant might have been growing as far north as a point near the mouth of the Des Moines River—or as far south as some indefinite location along the Mississippi below the mouth of the Missouri River.

Marquette employed the words *feuille* and *feuilles*—which Reuben Gold Thwaites translated as "leaf" and "leaves" in this quotation. Except for the reference to "a leaf as wide As one's hand," it seems that "stem" is a more appropriate rendering for *feuille* in the sense of Marquette's narrative. The last part of the description can therefore be loosely rendered, "From the middle of the main stem spring other stems, resembling sconces (arm-like candle-holders); and each stem bears five or six yellow flowers shaped like little bells." This description applies well to the large-flowered bellwort (*Uvularia grandiflora*). The bellwort is an early spring flower, and it would not be expected to bloom as late as this point in Marquette's narrative (after the end of June).

The description of the plant's roots ("like small turnips fastened together by little filaments, which taste like carrots") fits neither the skunk cabbage nor the bellwort.

We found quantities of mulberries, as large as Those of france: and a small fruit which we at first took for olives, but which tasted like oranges; * and another fruit as large As a hen's egg. We cut it in halves, and two divisions appeared, in each of which 8 to 10 fruits were encased; these are shaped like almonds, and are very good when ripe. Nevertheless, The tree that bears them has a very bad odor, and its leaves resemble Those of the walnut-tree. † In These prairies there is also a fruit similar to Hazelnuts, but more delicate; The leaves are very large, and grow from a stalk at the end of which is a head similar to That of a sunflower, in which all its Nuts are regularly arranged. These are very good, both Cooked and Raw. ‡³³⁵

The exploration by Jolliet and Marquette began at the Straits of Mackinac at the north end of Lake Michigan. The explorers canoed all the way south to the junction of the Mississippi and Arkansas Rivers. They traveled via the Fox, ¶ Wisconsin, and Mississippi Rivers, then back up the Mississippi to the Illinois River. After viewing all of this territory, Father Marquette had this to say about the Illinois River:

We have seen nothing like this river that we enter, as regards its fertility of soil, its prairies and woods; its buffaloes, elk, deer, raccoons, geese, swans, ducks, parakeets, and even beaver. There are many small lakes and rivers. That on which we sailed is wide, deep, and still, for 65 leagues. § **

* A small fruit which looks like an olive but tastes like an orange must be that of the spicebush (*Lindera benzoin*).

† Perhaps this is a confused and confusing description of the pawpaw (*Asimina triloba*) or the persimmon (*Diospyros virginiana*).

‡ This is a description of the American hazel (*Corylus americana*). Marquette must have been familiar with the European hazel or filbert.

¶ The group canoed up the Fox River that flows through Wisconsin to Lake Michigan—not the Fox River that runs through Wisconsin and Illinois to join the Illinois River at Ottawa.

§ A French land league is approximately two and one-half miles.

** Marquette's report reads *Nous n'avons rien vue de semblable a cette riviere où nous entrons pour la bonté de terres, des prairies, des bois, des boeufs, des cerfs, des chevreux, des chatz sauvages, des ourardes, des cygnes, des canards, des perroquetz, et mesmes des castors, il y a quantité de petit lacs, et de petites rivieres. Celle sur laquelle nous navigeons est large, profonde, paisible, pendant 65 lieues . . .*³³⁵

In Volume 59 of the *Jesuit Relations*, Reuben Gold Thwaites translated this passage as follows:

We have seen nothing like this river that we enter, as regards its fertility of soil, its prairies and woods; its cattle, elk, deer, wildcats, bustards, swans, ducks, parroquets, and even beaver. There are many small lakes and rivers. That on which we sailed is wide, deep, and still, for 65 leagues.³³⁵

Thwaites' translation has been followed except for four changes:

- (1) Thwaites' rendering of *boeufs* as "cattle" has been changed to "buffaloes." The early French usually referred to buffaloes (bison) as *les boeufs* or *les boeufs sauvages*.

1674: Louis Jolliet

Louis Jolliet kept a journal during his voyage of discovery with Jacques Marquette in 1673, but Jolliet's writings were lost when his canoe capsized on the outskirts of his final destination, Montreal. Jolliet reported his discoveries verbally to Claude Daublon, who prepared an official report in 1674. As recorded by Father Daublon, Jolliet's observations emphasize the fertility and economic potential of the Illinois Country:

At first, when we were told of these treeless lands, I imagined that it was a country ravaged by fire, where the soil was so poor that it could produce

- (2) "Bustards" (*outardes*) has been replaced by "geese." The early French often referred to geese as *les outardes*, which translates to "bustards"; they also used *les oies* or *les oyes*, which means "geese." A footnote on page 37 discusses the early French use of the name *outardes*.
- (3) "Parakeets" has been substituted for "parroquets" (*perroquetz*). This splendid bird is the Carolina parakeet, which has gone extinct since Marquette's time.
- (4) "Wildcats" has been changed to "raccoons." The name *chat sauvages* translates literally as "wild cats." One might assume that this refers to the wildcat (bobcat), but the early French used this name in more than one way.

Sometimes *la chat sauvage* seems to number among the larger game, as in *Ils font la Chasse au cheureuil, au boeuf, au Coq-d'inde au Chat, a vne espece de tigre, et a d'autres animaux* ("They Hunt the roebuck, the bison, the Turkey, the Wildcat, a species of tiger, and other animals").³³⁶ At other times *la chat sauvage* refers to smaller game, as in *faire la guerre aux Elans, aux Cerfs, aux Caribous, aux Ours, aux Castors, & à quantité d'autres animaux plus petits, comme aux Blereaux, aux Porc-Epics, aux Chats sauvages, aux Liévres, aux Ecurieux, aux Perdrix, & autres especes* ("make war on the Elks, Stags, Caribous, Bears, Beavers, and numerous other small animals, as Badgers, Porcupines, Wildcats, Hares, Squirrels, Partridges, and other species").³³⁷ Although the French sometimes referred to the bobcat and the Canada lynx as *la chat sauvage*, they also gave it a more specific name: *le pichou*. The French had no name for the raccoon other than *la chat sauvage*.²¹⁷ During the era when Illinois was part of Louisiana, Thomas Jefferys described the raccoon in this way: "The wild cat of *Louisiana* is very different from that of *Canada*, or indeed from any of the species, and very improperly so named, it having nothing of a cat about it, but its nimbleness."¹⁷⁶

What did Father Marquette intend when he wrote of wild cats? A clue appears earlier in his manuscript, when he reported seeing what seems to be either a mountain lion or a bobcat along the Mississippi River: "a monster with the head of a tiger, a sharp nose Like That of a wildcat, with whiskers and straight, erect ears; The head was gray and the Neck quite black." Whether Marquette saw a mountain lion or a bobcat, his closing remark is significant: "... We saw no more creatures of this sort."³³⁵ This statement indicates that he saw no wild cats along the Illinois River, but he is quite likely to have seen raccoons. In the following year along Lake Michigan, Marquette wrote again of "cats" that must be raccoons: *on tuë deux chats qui n'ont quasi de la graisse* ("We kill two cats, which are almost nothing but fat").³³⁵ (The opossum is another fat beast, but it was called *le rat de bois*, or "wood rat.")

We have seen nothing like this river that we enter, as regards its fertility of soil, its prairies and woods, its buffaloes, elk, deer, raccoons, geese, swans, ducks, parakeets, and even beaver. There are many small lakes and creeks. That on which we sailed is wide, deep, and still, for 65 leagues.

Jacques Marquette on the Illinois River in 1673. ³³⁵

nothing. But we have certainly observed the contrary; and no better soil can be found, either for corn, for vines, or for any other fruit whatever.

The river which we named for Saint Louis, * which rises near the lower end of the lake of the Illinois, † seemed to me the most beautiful, and most suitable for settlement. . . . The river is wide and deep, abounding in catfish and sturgeon. ‡ Game is abundant there; oxen, cows, stags, does, and Turkeys § are found there in greater numbers than elsewhere. For a distance of eighty leagues, I did not pass a quarter of an hour without seeing some.

There are prairies three, six, ten, and twenty leagues in length, and three in width, surrounded by forests of the same extent; beyond these, the prairies begin again, so that there is as much of one sort of land as of the other. Sometimes we saw the grass very short, and, at other times, five or six feet high; hemp, which grows naturally there, reaches a height of eight feet. §

* River Saint Louis = Illinois River.

† Lake of the Illinois = Lake Michigan.

‡ Daublon wrote *remplie de barbues et d'esturgeons*.

§ Daublon wrote *les boeufs, les vaches, les cerfs, les biches, les coqs d'Inde*.

The identity of game animals is often unclear when the French listed them in this manner. Clearly *les boeufs*, or “oxen,” are bison. *Les vaches* (“cows”) might be elk, female bison, or bison in general. Moose were also called *les vaches*, but moose are not thought to have occurred in the Illinois River valley. *Les cerfs* translates as “stags,” which often was used in reference to male elk but might also refer to male deer. *Les biches* translates as “does,” which might refer to female elk or female deer. It seems certain that Jolliet would have reported seeing deer along the Illinois River; it is not certain whether he saw elk and differentiated them from deer. The early name for the turkey, *le coq d'Inde* (“cock of India,” or “Indian chicken”), was often shortened to *le dinde*.

§ A number of native American plants have been called hemp (Indian hemp, water hemp, etc.), but Marquette probably was referring to the true hemp (*Cannabis sativa*). Although hemp is native to the Old World, it became established in the wild in America quite early. It was widely reported by French and English explorers of the Mississippi valley during the 1600s and 1700s. In his *Botany of the Northern and Middle States* (1833), L.C. Beck characterized *Cannabis sativa* as “apparently indigenous, but probably introduced.”³¹

A settler would not there spend ten years in cutting down and burning the trees; on the very day of his arrival, he could put his plow into the ground. And, if he had no oxen from France, he could use those of this country³³⁴

1680: A French official

René Robert Cavelier, the Sieur de La Salle, led the first French effort to establish trading outposts in the Illinois River valley. La Salle's labors are chronicled in a lengthy document by an unidentified French official.[†] The report is titled "Relation of the Discoveries and Travels of the Sieur de La Salle . . . beyond the Great Lakes of New France . . . 1679–81."

La Salle's expedition came down the upper Illinois River in early January of 1680. After building Fort Crèvecœur near Peoria Lake, the company separated into three groups. Cavelier de La Salle headed back to Canada with a few men. Henri de Tonty remained in charge of a contingent along the Illinois River. Louis Hennepin and two others descended the Illinois River and then went up the Mississippi:

The Divine River,[‡] down which they paddled, is smooth and deep, broad as the Seine at Paris, while in two or three places it spreads out to a width of a league or two. It is bordered with bluffs on both sides, the slopes of which are covered with fine, large trees. These bluffs sometimes run back to a distance of a half-league apart, leaving between the slope and the river a marshy bottom-land subject to overflow, but supporting very large trees. Climbing the bluffs, one beholds beautiful prairies stretching beyond eyeshot, here and there diversified with little groves of lofty trees which seem to have been planted for a purpose. Except in the season of great rains, the current of the river is gentle; in all seasons it is capable of floating large vessels as far as the Illinois village,[¶] descending from which the course is almost constantly south by west.

On the 7th of March they found, at a distance of two leagues from its mouth, a tribe called Tamaraos, or Maroas, composed of two hundred families. These people wished to conduct the Frenchmen to their village, west of the Mississippi or Colbert River, and six or seven leagues below the mouth of the Divine River; but Father Louis and his companions preferred to continue their journey. They soon reached the mouth, distant fifty leagues from Fort Crèvecœur, and ninety from the Illinois village. . . . At the angle made by the junction of the two

* Jolliet suggested that bison (the "oxen of this country") could be hitched to a plow.

† Pierre Margry, who edited the original French manuscript, wrote, ". . . was this relation written by Cavelier de La Salle himself, or only by a learned ecclesiastic upon the basis of letters from the discoverer to some one among his friends or associates?"¹¹ Patricia Galloway reviewed various opinions about authorship of this report, and she concluded that at least part of it may have been written by La Salle.¹²⁶

‡ Divine River = Illinois River.

¶ The Illinois village was near Starved Rock.

streams, on the south side, there is a flat-topped rock with steep sides, about forty feet in height, very suitable for the location of a fort; opposite the rock, on the north side, there is a prairie extending as far as the eye can reach, all ready to be cultivated, and capable of furnishing subsistence to a colony. The ice which was floating down the Great River detained them here until the 12th of March, when they pushed onward up the stream.

Below the Divine, the Mississippi River appears to flow toward the south-southwest; above it comes from the north and the north-northwest. It flows between two chains of rather high mountains, which follow the windings of the stream, here and there receding a little, and leaving semicircular spaces covered with grass or trees. Beyond these mountains great plains are to be seen, but the lands are not so fertile nor the woods so fine as those of the Illinois country. The Great River is almost everywhere a league or two in width, and is studded with numerous islands covered with trees, which are so entwined with vines that it is difficult to push through them.¹¹

Cavelier de La Salle returned from Canada to the Illinois valley during the last weeks of 1680. While searching for Henri de Tonty, he came across the scene of a battle between the Illinois and the Iroquois near the mouth of the Illinois River. "In a prairie on the north side," La Salle "found all the grass trodden down, and a little on one side, the body of a woman half burnt and eaten by wolves." He decided to leave a message there for Tonty: ". . . hewing the branches from a little tree on the rock at the left of the mouth of the Illinois River, he nailed to it a bit of board which he had brought for the purpose."¹¹

1680: Louis Hennepin

On the 29th day of February 1680, Louis Hennepin and two other Frenchmen embarked down the Illinois River from Fort Crèvecoeur, a newly erected post near Peoria. In his 1683 book, *Description de la Louisiane (A Description of Louisiana)*, Father Hennepin described the environs of the lower Illinois River. He also depicted the Mississippi River in the general vicinity of the junction of the two rivers:

. . . we set out from Fort Crèvecoeur the 29th of February, 1680, and toward evening, while descending the river Seignelay, * we met on our way several parties of the Islinois returning to their village in their periaguas or gondolas, loaded with meat.

. . . The river Seignelay on which we were sailing, is as deep and broad as the Seine at Paris, and in two or three places widens out to a quarter of a league. It is skirted by hills, whose sides are covered with fine large trees. Some of these hills are half a league apart, leaving between them a marshy strip, often inundated, especially in the autumn and spring, but producing, nevertheless,

* River Seignelay = Illinois River.

very large trees. On ascending these hills, you discover prairies further than the eye can reach, studded, at intervals, with groves of tall trees, apparently planted there intentionally. * The current of the river is not perceptible, except in time of great rains; it is at all times navigable for large barks † about a hundred leagues, from its mouth to the Illinois village, ‡ whence its course almost always runs south by west.

On the 7th of March, we found, about two leagues from its mouth, a nation called Tamaroa, or Maroa, composed of two hundred families. They would have taken us to their village lying west of the river Colbert, ¶ six or leagues below the mouth of the river Seignelay; but our two canoemen, in hopes of still greater gain, preferred to pass on, according to the advice I then gave them. These last Indians . . . despatched some of their young men after us by land, to pierce us with their arrows at some narrow part of the river, but in vain; for soon after discovering the fire made by these warriors at their ambuscade, we promptly crossed the river, gained the other side, and encamped in an island, leaving our canoe loaded and our little dog to wake us, so as to embark more expeditiously, should the Indians attempt to surprise us by swimming across.

Soon after leaving these Indians, we came to the mouth of the river Seignelay, fifty leagues distant from Fort Crèvecoeur

. . . In the angle formed on the south by this river, at its mouth, is a flat precipitous rock, about forty feet high, very well suited for building a fort. On the northern side, opposite the rock, and on the west side beyond the river, are fields of black earth, the end of which you can not see, all ready for cultivation, which would be very advantageous for the existence of a colony.

The ice which floated down from the north kept us in this place till the 12th of March, § whence we continued our route, traversing the river and sounding on all sides to see whether it was navigable. There are, indeed, three islets in the middle, near the mouth of the river Seignelay, which stop the floating wood and trees from the north, and form several large sand-bars, yet the channels are deep enough, and there is sufficient water for barks; large flat-boats can pass there at all times.

* This phrase, "apparently planted there intentionally," probably is the result of cumbersome translation from French to English. Most likely Hennepin meant to say that the trees merely *looked* as if they had been planted. Many early writers remarked that trees growing in the prairie created the aspect of a park or an estate: *i.e.*, the trees were pleasingly arranged "as if planted by hand."

† A *bark* is a sailing vessel.

‡ The Illinois village was near Starved Rock.

¶ River Colbert = Mississippi River.

§ Ice floes were coming down the Mississippi River, making the stream too dangerous to navigate in a fragile bark canoe.

The River Colbert runs southwest, and comes from the north and northwest; it runs between two chains of mountains, very small here, which wind with the river, and in some places are pretty far from the banks, so that between the mountains and the river, there are large prairies, where you often see herds of wild cattle * browsing. In other places these eminences leave semi-circular spots covered with grass or wood. Beyond these mountains you discover vast plains, but the more we approach the northern side ascending, the earth did not appear to us so fertile, nor the woods so beautiful as in the Illinois country.

This great river is almost everywhere a short league in width, and in some place, two leagues; it is divided by a number of islands covered with trees, interlaced with so many vines as to be almost impassable. ¹⁵⁴

1681–82: Zenobius Membré, Henri de Tonty, Nicolas de La Salle, and Minet

Zenobius Membré was a priest on the expedition led by René Robert Cavelier, the Sieur de La Salle, down the Illinois and Mississippi Rivers during the winter of 1681–82. We pick up Father Membré's narrative as they set out to descend the Illinois River from Fort Crèvecœur, near the lower end of Peoria Lake:

As from this spot navigation is open at all seasons, and free from ice, we embarked in our canoes, and on the 6th of February, reached the mouth of the river Seignelay, [†] at 38° north. The floating ice on the river Colbert,[‡] at this place, kept us till the 13th of the same month, when we set out, and six leagues lower down, found the Ozage river, [¶] coming from the west. It is full as large as the river Colbert into which it empties troubling it so, that from the mouth of the Ozage the water is hardly drinkable. . . . Although this river is very large, the Colbert does not seem augmented by it; but pours in so much mud, that from its mouth the water of the great river, whose bed is also slimy, is more like clear mud than river water, without changing at all till it reaches the sea, a distance or more than three hundred leagues, although it receives seven large rivers, the water of which is very beautiful, and which are almost as large as the Mississippi. ³⁰²

Henri de Tonty was an officer in La Salle's expedition. In his *Relation* concerning this enterprise, Tonty reported that the Illinois River was frozen over above Peoria—but, at Fort Crèvecœur . . .

* Wild cow = bison.

† River Seignelay = Illinois River.

‡ River Colbert = Mississippi River.

¶ Ozage river = Missouri River.

The Country . . . is so fine and pleasant, that according to the Account I have had, one might justly call it the Delight of America. — Louis Hennepin in 1698.¹⁵⁵

. . . we found the river open for navigation; and our Savages having to construct some canoes of elm-bark, it was not until the 6th of February that we reached the Mississippi, which M. de La Salle named the Colbert. . . . While our Savages were employed in canoe-building, we fell short of provisions and were compelled to throw a line into the water for catfish; one we caught was of enormous size, furnishing enough meat for a supper for twenty-two men. Our Savages having completed their canoes, we descended the river and encountered on the right, at a distance of six leagues, a river flowing from the west into the Colbert, and apparently, as the natives reported, equal in size and importance to the Great River * itself. It is called Emissourita,[†] abounding in nations. . . . Six leagues farther down, on the left, we found a village of a hundred and eighty lodges. All the inhabitants being away hunting, M. de La Salle caused signs to be made to let them know that we had passed This village is called Tamaroa. Two leagues below we encamped to hunt, killing some roe-deer.[‡]¹⁰

Nicolas de La Salle's report of this journey mentions their camps at the mouth of the Illinois River and at the mouth of the Missouri River:

M. de La Salle remained twelve days at the junction of the river of the Illinois with the Mississippi, because the river was drifting ice.—During this time the Savages made canoes of elm-bark, having left their own in the lake of the Illinois[¶] and having come so far on foot.—This was in December, 1681.

Finally we descended the Mississippi. The first day we went six leagues, encamping on the right bank near the mouth of a river which falls into the Mississippi, making it very turbid and muddy. It is named the river of the Missouris.

. . . The next day, at a distance of seven leagues farther down, we found on the left bank a village named Tamaroa. The inhabitants had gone away hunting. . . . We encamped two leagues farther down, on the right bank,[§] remaining

* Great River = Mississippi River.

† Emissourita = Missouri River.

‡ Roe-deer = white-tailed deer.

¶ Lake of the Illinois = Lake Michigan.

§ This stop was at the present site of St. Louis.

there two days. We killed seven bullocks, four deer, and a number of turkeys, swans, and bustards. *⁹

After scouting the lower Mississippi River, the explorers headed back north. Nicolas de La Salle described their return to the Tamaroa village and the Big Rivers Area, on or about the first of July 1682:

After voyaging a fortnight we reached the Tamaroa village, where we encamped.

. . . In two days we reached the river of the Illinois; as we ascended it we found multitudes of bustards, swans, and ducks, which were moulting, and killed them with sticks. We shot a number of cattle, deer, and turkeys. [†] A fortnight after leaving the Tamaroa village, we reached Fort Crève-Coeur, situated upon a small lake named Pimiteoui [‡]⁹

A man known to us only by the name Minet prepared yet another report about this journey. Minet did not take part in the trip, but a few years later he interviewed Nicolas de La Salle and another member of the expedition, Gabriel Minime. Minet's *Relation* describes their trek down the length of the Illinois River during the winter of 1681–82:

Sleds were made to carry the merchandise the space of 40 leagues, as far as the fort that had been made for the Illinois, named Pimiteouy, [¶] where we found the river not frozen. We continued the trip as far as the place where the Illinois River empties into the Micicypi. [§] We stayed there twelve days because of the continual rains. The savages made themselves other canoes, and, since this river is very large, it carries a large quantity of ice floes, it being the end of December of the year 1681. ^{**}

. . . We left in the morning and camped six leagues from there on the west side of the place where the Misourits River ^{††} empties into the Micicypy River
. . . Here we will simply say that it is very wide and deep and rapid and so

* Nicolas de La Salle wrote *sept boeufs, quatre chevreuils et quantité de poules d'Inde, cygnes et ourardes*. In this translation the “seven bullocks” (*sept boeufs*) are bison. For a discussion of the identity of bustards (*ourardes*), see a footnote on page 37.

[†] Nicolas de La Salle wrote *on y trouva quantité d'ourardes, cygnes et canards qui mouient, on les touit à coups de baston. On tua à coups de fusil quantité de boeufs et de chevreuils et poules d'Inde*. In this translation the “cattle” (*boeufs*) are bison.

[‡] Lake Pimiteoui = Peoria Lake.

[¶] Pimiteouy = Peoria.

[§] Micicypi = Mississippi River.

^{**} The time was actually February 1682.

^{††} Misourits River = Missouri River.

muddy that it is unbelievable. Only this makes the Colbert River * as muddy as it is.

The next day, after having again made six leagues, always descending, being near an island, we saw a village to the left. We went there but found no one, the inhabitants having gone hunting. This nation is called the Tamaroa. . . . We went yet another two leagues that day. We camped on the right bank. Food becoming scarce, we stayed there two days to hunt. We killed seven buffalo, four deer, and many turkey cocks, swans, and bustards. The land is flat, elevated in some areas by small hills. The river is lined with large trees; and the area is full of walnut trees, oaks, elms, plum trees, etc., and everywhere tall grass the height of a man, very first-class.

The third day we left. After having traveled 10 leagues, we camped to the left in a flat area that floods.²²⁷

Minet recorded the return to the Big Rivers Area in the summer of 1682:

. . . we arrived at the village where we had found no one on the way. We knew they were named the Tamaroa. . . . We passed in front of the Missouris River and, leaving the Colbert River to the left, we ascended the Illinois River. On ascending this river we killed a number of Canada geese, swans, and ducks with a stick. Because it was the time of molting, they were unable to fly. We also killed some buffalo, stags, and deer. The Illinois not yet having returned, the animals had taken refuge there.

Fifteen days after having left the Tamaroa, we arrived at Fort Pimyteouy or Crevecoeur † . . .²²⁷

1682: Cavelier de La Salle

On August 22, 1682, the Sieur de La Salle prepared a description of the landscape along the middle and lower Illinois River, as well as the Mississippi River immediately upstream from the mouth of the Illinois. Beginning at the Illinois village near Starved Rock, La Salle described the lower 90 leagues of the river:

The river Téakiki ‡ is almost always of uniform width during these ninety leagues, approaching the width of the Seine before Paris, that is where it is

* Colbert River = Mississippi River.

† Fort Crèvecoeur was below the lower end of Peoria Lake.

‡ At this point in his narrative, La Salle referred to the Illinois River as the Téakiki. Until the early 1800s, the Kankakee River was commonly called the Theakiki (Téakiki, etc.). The Kankakee and Illinois Rivers were often considered to be one and the same stream, and the Illinois River (below the juncture of the Kankakee and Des Plaines Rivers) was often given the same name as the Kankakee.

confined to its bed; but in various place, as at Pimiteoui, * one league east of Crevecoeur and at two or three other points lower down, it widens out to a league or two, and in many places where the two high grounds, which skirt it from the Islinois village down, recede for about a half a league from each other, the ground which they leave between them is marshy and often overflowed, especially after the rains which easily cause these rivers to leave their channels, and swell them to an extraordinary degree, and often more than a pike † high. The Islinois river from their village to the Great river ‡ has a very deep and even bed. It is skirted by woods almost all the way, all the marshes producing very large trees of all kinds, and the slope of the hills is usually covered; ¶ but once you cross the lands overflowed by the river from time to time, and ascend the hills, you find nothing but beautiful plains further than the eye can reach, dotted here and there with tufts of wood, which seem to be there only because needed. These clearings § extend in many places to the river shore, especially near the village, and about sixty leagues east and northeast, where woods are very rarely seen along the bank, which is more uniformly skirted by woods as you descend. The current is scarcely perceptible when there have been no heavy rains, except in spring, it is very navigable however at all times for the largest barks up to the Islinois Indians, ** and above only for canoes, both on account of the rapidity of the water, and the small quantity at several places where the rapid slope and the bars prevent any depth.

The ice which came down the Great river stopped them at the mouth of the Islinois till the 12th of March. †† On the south side it washes a steep rock about forty feet high adapted for building a fort, and on the other side it waters a beautiful prairie, of which the end cannot be discerned, very suitable for cultivation. This place seems to me the most suitable of all to settle, for many reasons which I have not time to deduce here, and I shall be able to make a post there as I return from my voyage.

. . . The Mississipi, going down, appears on leaving the Teatiki, †† to run south southwest, and ascending north northwest; it runs between two chains of pretty

* Pimiteoui = Peoria (including, in a broad sense, Peoria Lake and Upper Peoria Lake).

† One pike spans 13 feet.

‡ Great river = Mississippi River.

¶ La Salle characterized the hillsides as being usually covered with trees.

§ The "clearings" are prairies.

** The river was boatable as far upstream as Starved Rock.

†† La Salle was referring to ice floes on the Mississippi River that had stalled Louis Hennepin's group at the mouth of the Illinois River until March 12, 1680.

‡‡ Teatiki = Illinois River.

high mountains, much higher than Mont Valérien * which wind like the river, from which they sometimes recede a little, leaving moderate prairies between them and its bed, and sometimes they are bathed by the waters of the river, so that while on one side it is bordered by the spur of a mountain, it forms on the other a bay, the end of which is met by a prairie or a woody plateau. The slope of these hills, which are either of gravel or stone is covered from time to time with dwarf oaks or in other places with very small plants. The top of the mountains reveals plains of very poor land, very different from that among the Islinois, but which is pastured by the same animals. † The channel of this great river, almost every where one or two leagues wide, is dotted all along by a number of islands covered with open woods, interlaced by so many vines that they can be traversed only with difficulty. They are subject to inundation in the freshets. They ordinarily conceal the sight of the other bank, which is only rarely discerned, on account of these islands. The bottom is very unequal as you ascend above the river of the Islinois. ‡ You often meet shoals which traverse the channel from one side to the other, over which canoes find it difficult to pass. It is true that when the waters are high, it is every where deep enough for the largest vessels to pass, but the currents are then extremely impetuous and difficult to stem with sails.¹⁵⁴

1687: Monsieur Joutel

In the summer of 1687 Henri Joutel and several other Frenchmen set out from the Sieur de La Salle's failing colony on the Gulf Coast of Texas. They were intent upon reaching Canada and catching a boat back to France. Joutel's contingent walked overland from Texas to the Mississippi River in Arkansas. They then ascended the Mississippi, but the current was so strong that they had to trudge along the shore and tow their dugout canoe upstream.¹

On the second day of September, Joutel and his companions reached the bluffs at Alton and beheld the Piasa Monsters. In *A Journal of the Last Voyage Perform'd by Monsr. de la Sale*, Monsieur Joutel reported,

* Mont Valérien rises about 400 feet above Paris.

† La Salle's description, which was based on a report from Hennepin, was intended to depict the valley of the Mississippi River for an indeterminate distance above the mouth of the Illinois River. The account appears to pertain well to the bluffs in the Big Rivers Area. Dramatic highlands invited inspection by Hennepin and his companions as soon as they began to ascend the Mississippi.

‡ River of the Islinois = Illinois River.

¶ According to Joutel, "We sunk up half way the Leg; other Times over burning Sands, which scorch'd our Feet, having no Shoes, or else over Splinters of Wood, which ran into the Soles of our Feet."¹⁸² Anastasius Douay was part of this expedition; his narrative reveals that their canoe was 40 feet long.⁸³

The 2d, we arriv'd at the Place, where the Figure is of the pretended Monster spoken of by Father *Marquet*. That Monster consists of two scurvy Figures drawn in red, on the flat Side of a Rock, about ten or twelve Foot high, which wants very much of the extraordinary Height that Relation mentions.* However our *Indians* paid Homage, by offering Sacrifice to that Stone; tho' we endeav-our'd to give them to understand, that the said Rock had no Manner of Virtue, and that we worship'd something above it, pointing up to Heaven; but it was to no Purpose, and they made Signs to us, that they should die if they did not perform that Duty.¹⁸²

When the men arrived at the mouth of the Illinois River on September 3, they enjoyed a welcome relief from the swift Mississippi:

We proceeded, coasting along a Chain of Mountains,[†] and at length, on the 3d, left the *Missisipi*, to enter the River of the *Islinois*.

We found a great Alteration in that River, as well with Respect to its Course, which is very gentle, as to the Country about it, which is much more agreeable and beautiful than that about the great River,[‡] by Reason of the many fine Woods and Variety of Fruit its Banks are adorn'd with. It was a very great Comfort to us, to find so much Ease in going up that River, by Reason of its gentle Stream, so that we all stay'd in the Canoe and made much more Way.[¶]

Thus we went on till the 8th, without stopping any longer than to kill a Bull-ock,[§] and one of our *Indians*, who had a craving Stomach, having eaten some of its Suet hot and raw, was taken very ill, and died of it . . .¹⁸²

On the 10th of September, Henri Joutel's entourage reached *Primitehouey*, or Peoria.

1698: Louis Hennepin

In addition to his 1683 book, Louis Hennepin wrote a second one about his 1679–80 trip to the Illinois Country. His 1698 volume, *A New Discovery of a Vast Country in America*, has enough differences to invite examination of both documents.** The following excerpts

* Marquette's *Relation* says of the monsters, ". . . they are so high up on the rock that it is difficult to reach that place Conveniently to paint them."³³⁵

† The Mississippi River bluffs below the mouth of the Illinois River comprise this "Chain of Mountains."

‡ Great River = Mississippi River.

¶ Douay's narrative of the ordeal records that they arrived at the mouth of the Illinois River on September 5th, rather than the 3rd as Joutel stated. Douay remarked that the river presents "a very easy navigation" from its mouth to Fort Crèvecœur.⁸³

§ Bullock = bison.

** See pages 14 to 16 for excerpts from Louis Hennepin's first book, *A Description of Louisiana*.

The Miçissipi is a fine, large river flowing from the north. It divides into several channels at the spot where the River of the Illinois falls into it, forming very beautiful islands. . . . It is bordered by very fine woods.

— Father St. Cosme in 1698.²⁷²

from *A New Discovery* include Father Hennepin's story of exploring the Illinois River below Peoria Lake as well as the Mississippi River above the mouth of the Illinois.

We set out from Fort *Crevecoeur* on the 29th of *February*, 1680, and as we fell down the River, we met with several Companies of Savages, who return'd to their Habitations, with their *Pirogues* or Wooden-Canou's,^{*} loaded with the Bulls[†] they had kill'd

. . . The River of the *Illinois* is very near as deep and broad as the *Meuse* and *Sambre* before *Namur*; but we found some Places where 'tis about a quarter of a League broad. The Banks of the River are not even, but interrupted with Hills, dispos'd almost at an equal distance, and cover'd with fine Trees. The Valley between them is a Marshey Ground, which is overflow'd after great Rains, especially in the Autumn and the Spring. We had the curiosity to go up one of those Hills, from whence we discover'd vast Meadows, with Forests, such as we had seen before we arriv'd at the Village of the *Illinois*.[‡] The River flows so softly, that the Current is hardly perceptible, except when it swells: But it will carry at all times great Barques for above 100 Leagues; that is, from the said Village to its Mouth. It runs directly to the South-West. On the 7th of *March* we met, within two Leagues from the River *Meschasipi*,[¶] a Nation of the Savages call'd *Tamaroa* or *Maroa*, consisting of about 200 Families. They design'd to bring us along with them to their Village, which lies to the West of *Meschasipi*, about seven Leagues from the Mouth of the River of the *Illinois*; but my Men follow'd my Advice, and wou'd not stop Our Resolution was very good They had sent a Party of their Warriours to lie in Ambuscade on a Neck of Land advancing into the River, where they thought we should pass that Evening or the next Morning; but having discover'd some Smoak on that Point, we spoil'd their Design, and therefore cross'd the River, and landed in a small Island near the other side, where we lay all the Night, leaving our Canou in the Water, under the Guard of a little Dog Having thus avoided

* A few pages earlier in his book, Hennepin defined a *Pyrogue*: "a Canou made of the Trunk of a Tree."¹⁵⁵

† Bull = bison.

‡ The Village of the *Illinois* was near Starved Rock.

¶ River *Meschasipi* = Mississippi River.

those Savages, we came to the Mouth of the River of the *Illinois*, distant from their great Village about 100 Leagues, and 50 from Fort *Crevecoeur*.

. . . The Angle between the two Rivers on the South-side, is a steep Rock of forty Foot high, and flat on the Top, and consequently a fit Place to build a Fort; and on the other side of the River, the Ground appears blackish, from whence I judge that it would prove fertile, and afford two Crops every Year, for the subsistence of a Colony. The Soil looks as if it had been already manur'd.

The Ice which came down from the Source of the *Meschasipi*, stopp'd us in that Place till the 12th of *March*; for we were afraid of our Canou: * But when we saw the Danger over, we continu'd our Course, sounding the River, to know whether it was navigable. There are three small Islands over-against the Mouth of the River of the *Illinois*, which stop the Trees and Pieces of Timber that come down the River; which by succession of time, has form'd some Banks: But the Canals † are deep enough for the greatest Barques; and I judge that in the driest Summer, there is Water enough for flat-bottom-Boats.

The *Meschasipi* runs to the South-South-West, between two Ridges of Mountains, which follow the great Windings of the River. They are near the Banks, at the Mouth of the River of the *Illinois*, and are not very high; but in other Places, they are some Leagues distant; and the Meadows between the River and the Foot of those Hills, are cover'd with an infinite number of wild Bulls. ‡ The Country beyond those Hills is so fine and pleasant, that according to the Account I have had, one might justly call it the *Delight of America*.

The *Meschasipi* is in some places a League broad, and half a League where it is narrowest. The Rapidity in its Current is somewhat abated, by a great number of Islands, cover'd with fine Trees interlac'd with Vines.¹⁵⁵

Louis Hennepin and two companions had been dispatched by the Sieur de La Salle to ascend the Mississippi River above the mouth of the Illinois. But at this point in Father Hennepin's book, 25 pages are devoted to an account of descending the Mississippi to the Gulf of Mexico. This part of the missionary's story has been discredited.¹ The following

* The explorers were afraid that floating ice would damage their canoe, which was "made of Bark of Birch-Trees."¹⁵⁵

† These "canals" are the river channels.

‡ Wild Bull = bison.

¹ This detour down the Mississippi River is not mentioned in Hennepin's 1683 account of his explorations, *A Description of Louisiana*. Some scholars have surmised that the publisher—rather than Hennepin—added the lower Mississippi adventure to the 1698 edition in order to increase interest in the book.

paragraphs resume Hennepin's narrative near the mouth of the Illinois River, after the Frenchmen purportedly had returned from the lower Mississippi River:

We embarqu'd the Twenty fourth of *April* . . . ; and our Provisions being spent some Days after, we had nothing to live upon, but the Game we kill'd, or Fish we cou'd catch. Stags, wild Goats, * and even wild Bulls are pretty scarce toward the Mouth of the River of the *Illinois*; for this Nation comes as far as the *Meschasipi* to hunt them; but by good chance we found a great quantity of Sturgeons, with *long Bills*, † as we call'd them, from the shape of their Head. It was then the Season that these Fishes spawn; and they come as near the Shore as they can; so that we kill'd as many as we wou'd with our Axes and Swords, without spending our Powder and Shot. They were so numerous, that we took nothing but the Belly, and other dainty Parts, throwing off the rest.

As we came near the Mouth of the River of the *Illinois*, my Men begun to be very afraid to meet with their Comrades of Fort *Crevecoeur* ‡ therefore to prevent any such thing, I advis'd them to row all the Night, and to rest our selves during the Day in the Islands, which are so numerous in that River. The Trees and Vines wherewith those Islands are cover'd, are so thick, that one can hardly land; and so we might lie there very safe, it being impossible to discover us. This Advice was approv'd, and thereby we avoided any Rencounter; for I did not doubt but our Men came now and then from Fort *Crevecoeur*, to observe the *Meschasipi*, and get Intelligence of us. But when we found our selves pretty far from the River of the *Illinois*, we travell'd in the Day-time, as we used to do, in order to make our Observations, and view the Country; which does not appear so fertil, nor cover'd with so fine Trees above the River of the *Illinois*, as it is below, down the *Meschasipi* to the Sea. ¶¹⁵⁵

The above quotations are from Hennepin's *New Discovery*, which was published in English in 1698. Hennepin's book was also published in France as the *Nouvelle Découverte*. A

* P.R. Hoy, Wisconsin's premier naturalist during the 1800s, asserted, "Hennepin's goats were without doubt antelopes,"¹⁶⁵ but his conclusion is not supportable. Louis Hennepin appears to have often used the name "wild goat" to refer to white-tailed deer—yet he seems to have sometimes made a distinction between deer and wild goats, as in "Deers, wild Goats, and other Beasts." Most often it seems as though he referred to does or young deer as "wild goats," reserving "stags" for antlered deer and perhaps for elk—as in "Stags, Wild-Goats, and Bears" and "Staggs and wild Goats." Sometimes Hennepin appears to have distinguished between elk and deer, as in "Stags and Deers" and "the Elk and the Goat."

† Sturgeons, with *long Bills* = paddlefish.

‡ According to the story, Hennepin and his two companions had disobeyed La Salle's orders by descending the Mississippi River. When they later returned from the lower Mississippi and passed the mouth of the Illinois River, they took care not to be discovered by La Salle's men who were stationed at Fort Crèvecœur.

¶ Father Hennepin had not actually gone down the Mississippi River below the mouth of the Illinois, so he could not have made this comparison of the basis of personal observations.

subsequent translation of the French edition to English renders the previous two paragraphs as follows:

We embarked on the 24th of April and the Indian corn or large millet failing us as well as the boucanned meat, we had no other means of subsistence than hunting or fishing. Deer were very scarce in the parts where we then were, because the Illinois often come there and ruin the hunting. Fortunately we found some long beaked sturgeons We killed them with blows of our hatchets or swords fixed in handles which we used on the occasion, in order to save our powder and lead. It was then the time when these fish spawn, and they are usually seen approaching the shore of the river in order to spawn. We accordingly easily killed them with blows of axe or sword, without going into the water and because we killed as many as we wished, we took only the belly and the most delicate morsels, and left the rest.

If our men had some pleasure in this abundant fishery, they were on the other hand in great fear of the people whom we had left at the fort of the Illinois or Crevecoeur. . . . I proposed to them to sail by night and to cabin by day on the islands with which the river is filled, and which we might find on our way.

The river is all full of these islands, especially from the mouth of the river of the Illinois to the falls of St. Anthony of Padua * This expedient succeeded, and in fact after having sailed during the whole night, we found ourselves far enough from this mouth approaching the north. On the whole the land did not seem to us so fertile nor the woods so fine, as those which we had seen in the countries which are on the lower part of the river Meschasipi.¹⁵⁵

In his 1698 English-language book, Father Hennepin appended an abbreviated version of Louis Jolliet's 1674 report,[†] which he titled "An Account of Several New Discoveries in North-America." Hennepin's version reads in part,

The River of St. Lewis,[‡] which hath its Source near *Missichiganen*,[¶] is the biggest, and the most convenient for a Colony It is deep and broad, and well stock'd with Sturgeons, and other Fishes. The Stags, Bulls, Wild-Goats, Turkey-Cocks, and other Game,[§] are more plentiful on the Banks of the said River, than any where else. There are Meadows Ten or Twenty Leagues broad, encompass'd with fine Forests; behind which are other Meadows, in which Grass grows six Foot high. Hemp grows naturally in all that Country.

* The Falls of St. Anthony are on the Mississippi River at Minneapolis.

† Jolliet's 1674 report is on page 11.

‡ River of St. Lewis = Illinois River.

¶ *Missichiganen* = Lake Michigan.

§ See footnotes on pages 10, 12, 25, 29, and 37 for discussions of early French nomenclature of game animals.

Those who shall settle themselves there, need not be oblig'd, as we are here, to bestow Ten Years labour for felling down the Trees, and grubbing up the Land, before it is fit for Corn; for the Ground is ready for the Plough in that fortunate Country, where they may have good Wine. Their young Wild Bulls may be easily learn'd to plough their Land; and their long curl'd Hair, or rather Wool, may serve to make good Cloth for their wearing. In short, that Soil wou'd afford any thing necessary for Life, except Salt, which they might have another way. *¹⁵⁵

1698: Jean François Busson de St. Cosme

In late November and early December of 1698, Henri de Tonty led a group of French priests down the Illinois River to establish missions on the lower Mississippi. One of the religious men, Jean François Busson de St. Cosme, wrote about their journey after they arrived at the Arkansas River in January. They encountered some difficulties below Permetawi † because they were using fragile bark canoes, and ice was drifting down the Illinois River. On December 3 after several days of slow travel, they were stopped "by the ice which completely barred the river." According to St. Cosme,

During that time we had an abundance of provisions for no one need fast on that river so great is the quantity of game of all kinds: Swans, Bustards, [‡] Duck. It is bordered by a belt of very fine timber which is not very Wide so that one soon reaches beautiful prairies containing numbers of Deer. Charbonneau killed several while we Were detained and others killed some also. Navigation is not very easy on this River Opuanes. [¶] The water is shallow. We were sometimes obliged to walk with a portion of our people while the others propelled the Canoes, not without trouble for they Were often obliged to get into the water which Was already very cold²⁷²

* Rolland Michel Barrin, Count de la Galissonnière, echoed Jolliet's ideas 76 years later. In his "Memoir on the French Colonies in North America," Galissonnière described prairies that were "waiting only for the plough." He supposed that young bison could be caught, gelded, and "adapted to ploughing." He further reported, "These animals are covered with a species of wool, sufficiently fine to be employed in various manufactures . . ." He suggested that this resource could be exploited by turning Illinois into pastureland, attracting bison with salt:

Were the Illinois country sufficiently well settled to admit of the people inclosing a great number of these animals in parks, some of them might be salted, a business susceptible of being extended very considerably, without Illinois possessing a large population for that purpose. This trade would perhaps enable us to dispense with Irish beef for Martinico, and even to compete with the English, and at a lower rate, for the supply of the Spanish Colonies.²³⁷

† Permetawi = Peoria. St. Cosme also spelled it *Pemitewit*.

‡ Bustard = goose.

¶ River Opuanes = Illinois River.

While they were bivouacked along the river, a windstorm cleared away some of the ice. They borrowed heavy wooden canoes to break through the remainder of the iced-over river for a distance of three or four arpents (less than a thousand feet). After that point they had “Free navigation to the Miçissipi” on December 5. St. Cosme continued his narrative:

The Miçissipi is a fine, large river flowing from the north. It divides into several channels at the spot where the River of the Illinois falls into it, forming very beautiful islands. . . . It is bordered by very fine woods.

. . . On the 6th of December we embarked on the Miçissipi, and after proceeding about six leagues we came to the great River of the Myssouries,^{*} which flows from the west, and is so muddy that it dirties the waters of the Miçissipi, which until they meet that river are very clear.¹⁸⁷

1700: André Pénicaut

André Pénicaut ascended the Mississippi River past the mouth of the Missouri River in 1700. He described the Missouri and its influence on the Mississippi:

This river has a frightfully strong current, especially in the spring, when it reaches its crest; for in passing over the islands where it overflows it uproots trees and sweeps them away. This is what causes the Missicipy, into which it rushes, to be all covered in springtime with floating trees and causes the water in the Missicipy at that time to be badly muddied by the water from the Mis- soury, which flows into its water. The source of the Missouri has not been discovered up to the present, nor has that of the Missicipy.²²¹

Continuing past the Missouri River . . .

Having passed opposite its mouth, we went six leagues up the Missicipy and found the embouchure of the big Rivière des Illinois Opposite its mouth is the beginning of a prairie, the most beautiful in the world and very extensive. Continuing our route upstream, we found the Rivière-aux-Boeufs[†] on the left,

* River of the Myssouries = Missouri River.

† Bénard de la Harpe’s account of this voyage states that the leader, Le Sueur, was responsible for the name of the stream: “Twenty-two leagues above the river of the Illinois he passed a small river which he named Riviere aux Boeufs.”³⁰³

André Pénicaut’s *Rivière-aux-Boeufs*—now known as Buffalo Creek—is on the west side of the Mississippi River near the Calhoun–Pike County line. Although Buffalo Creek is a very small stream, it is a good landmark because its mouth is bounded by high bluffs: as Pénicaut noted, “There are two sheer cliffs, to the right and to the left of its mouth.”²²¹ Pénicaut gave the distance from the Illinois River to the *Rivière-aux-Boeufs* as 18 leagues (about 45 miles); this distance fits the location of Buffalo Creek. Corroborating evidence is found in notes about the Mississippi River gathered in 1812 by Territorial Governor Ninian Edwards.¹⁰³ These notes locate a Buffalo River six miles below the Salt River, which corresponds to the location of Buffalo Creek.

... we went six leagues up the Missicipy and found the embouchure of the big Rivière des Illinois . . . Opposite its mouth is the beginning of a prairie, the most beautiful in the world and very extensive.

— André Pénicaut at the mouth of the Illinois River in 1700.²²¹

eighteen leagues higher up. . . . We went on for half a league up this river and made camp on one of its banks. Four of our men went hunting and killed a buffalo bull and a cow within half a league of the spot where we were camped.²²¹

1712: Gabriel Marest

In a letter to a fellow Jesuit missionary, Father Gabriel Marest described the region along the Illinois River and below its confluence with the Mississippi:

Our Illinois inhabit a very pleasant country.

. . . the Country is very fine; the great rivers which water it, the vast and dense forests, the delightful prairies, the hills covered with very thick woods,—all these features make a charming variety.

. . . The Illinois river empties into the Mississipi near the 39th degree of latitude; it is about 150 leagues long, and is seldom easily navigable until toward spring.* It flows Southwest, and comes from the Northeast or East-Northeast. All the plains and prairies are overspread with oxen, roebucks, hinds, stags, and other wild beasts.[†] There is still greater abundance of small game. We find here, especially, multitudes of swans, cranes, bustards, and ducks;[‡] the wild oats, which grow freely on the plains, fatten them to such a degree that they very often die, their fat suffocating them. Turkeys are likewise found here in abundance, and they are as good as those in France.

The Cuivre River, which enters the Mississippi about 18 miles above the Illinois River, was also once known as *la Rivière au Boeuf* or the Buffalo River. Although the mouth of the Cuivre River was often noted as a landmark by persons traveling on this reach of the Mississippi, Pénicaut's description does not match the Cuivre River. There are no cliffs at the mouth of the Cuivre River, and it is about 18 miles—not 18 leagues—upstream from the Illinois River.

* Low water in the rapids on the upper Illinois River (above Starved Rock) had hampered Father Marest when he journeyed through the area in 1711.

† Marest wrote *de boeufs, de chevreuils, de biches, de cerfs, et d'autres bêtes fauves*. Oxen are bison. Roebucks are male deer. Hinds are female deer or elk. Stags might be either deer or elk.

‡ Marest wrote *de cygnes, de grues, d'outardes et de canards*. *Les outardes* (bustards) are geese. A footnote on page 37 further discusses the identity of bustards.

. . . Seven leagues below the mouth of the Illinois river is found a large river called the *Missouri*—or more commonly *Pekitanoui*; that is to say, “muddy water,”—which empties into the Mississippi on the West side: it is extremely rapid, and it discolors the beautiful water of the Mississippi, which flows from this point to the Sea.³³⁸

1721: Father Charlevoix

In a letter dated October 20, 1721, at Kaskasquias,* Father Pierre François Xavier de Charlevoix recalled his journey earlier in the month—from Starved Rock down the Illinois and Mississippi Rivers to the mouth of the Missouri. His narrative[†] begins on the upper Illinois River:

They reckon 70 Leagues from *Pimiteouy*[‡] to the *Mississippi*: . . . from the Rock[¶] this River runs West, inclining a little to the South, but it makes many Windings. From Time to Time we meet with Islands, some of which are pretty large: Its banks are but low in many Places: In the Spring it overflows the greatest part of the Meadows, which are on the Right and Left, and which are afterwards covered with Grass and Herbs, that grow very high. They say it abounds in Fish every where, but we had no Time to fish, nor any Nets that were fit for its Depth. Our business was sooner done by killing a Buffalo, or a Roe-Buck,[§] and of these we had the Choice.

The 6th we saw a great Number of Buffaloes crossing the River in a great Hurry, and we scarce doubted but that they were hunted by one of the Parties of the Enemy,^{**} which they had spoken of: This obliged us to sail all Night, to get

* Kaskasquias = Kaskaskia, a village near the confluence of the Kaskaskia and Mississippi Rivers. Most likely Charlevoix did not write this letter on October 20, 1721, at Kaskaskia: he cited specific dates and locations as a literary device to organize his book in the form of a series of letters to his sponsor, the Duchess of Lesdiguières. Louise Phelps Kellogg concluded that Charlevoix's letters probably were written in 1728.⁶⁸

† Charlevoix's journal was published in French in 1744. English editions appeared in 1761, 1763, and 1766. In 1923 Louise Phelps Kellogg produced yet another edition by comparing the original 1744 French edition with the 1761 English edition.⁶⁹ Although the wording of Kellogg's edition differs from the 1763 edition (quoted here), the meaning is mostly the same in the two versions. Two passages that differ substantially are identified here with footnotes.

‡ *Pimiteouy* = Peoria.

¶ The Rock = Starved Rock.

§ Roe-Buck = deer.

** Earlier in his account of the journey, Father Charlevoix wrote, “. . . one must keep a good Lookout, not to be surprised by the parties of *Sioux* and *Outagamis*, which are drawn hither by the Neighbourhood of the *Illinois*, their mortal Enemies, and who give no Quarter to the *French* they meet on their Route.”⁶⁷ The Sioux include the people now known as the Dakota and the Lakota. The Outagami (Fox) are known as the Mesquakie.

out of such a dangerous Neighbourhood. The next Day before it was light we passed the *Saguimont*, * a great River that comes from the South: Five or six Leagues lower we left on the same Hand another smaller, called the River of the *Macopines*: † These are great Roots, which eaten raw, are Poison, but being roasted by a small Fire for five or six Days or more, ‡ have no longer any hurtful Quality. ¶ Between these two Rivers, at an equal Distance from both we find a Marsh called *Machoutin*, which is exactly half-way from *Pimiteouy* § to the *Mississippi*. **

* *Saguimont* = Sangamon River.

† River of the *Macopines* = Macoupin Creek. Charlevoix described Macoupin Creek as being five or six leagues from the Sangamon River. Five or six French leagues is about 12 to 15 miles, but Macoupin Creek is more than 80 miles downstream from the Sangamon River. Charlevoix understated several other distances: for instance he wrote that Peoria is 15 leagues from Starved Rock.

‡ Louise Phelps Kellogg's edition of Father Charlevoix's journal gives the cooking time as "five or six hours or more." 68 The macoupin was commonly baked for days, not hours.

¶ The macoupin is a water plant that bears large, edible, underground parts (roots, rhizomes, or tubers). The specific identity of the macoupin has been the subject of much speculation as well as many unsubstantiated statements or poorly supported assertions. Perhaps more than one species has been called the macoupin at various times and places.

Dr. William Werner of Macoupin County has made a strong case for identifying the macoupin as an aquatic plant now called the arrow arum (*Peltandra virginica*). 362 Father Charlevoix mentioned that the macoupin's roots are poisonous when raw, which fits the arrow arum. But see Meriwether Lewis' description of the *Moc-cup-pin* on page 49: Lewis stated that he had not seen the plant, yet he wrote that "the leaf is said to be broad and to float on the water." 343 Such a leaf is characteristic of members of the water lily family, but this description does not match the leaves of the arrow arum. J.M. Peck's description of the macoupin (page 178) fits a water lily rather than the arrow arum. The identity of the macoupin is discussed further in a footnote on page 50.

One of the earliest maps of Illinois and the surrounding regions was prepared in 1684 by the royal French hydrographer, Jean Baptiste Louis Franquelin. This map gives the name of the Illinois River as *R. des Illinois ou Macopins* (River of the Illinois or Macoupins). 337 The name might perhaps be taken as evidence that the shores and backwaters of the Illinois River were well vegetated with macoupin plants. However, the name did not gain acceptance, and perhaps it was a mistake on the part of the mapmaker or his informants. Franquelin revised his map after four years, relabeling the Illinois River simply as *Riviere des Illinois*. 347 His two maps show only one tributary of the Illinois River on the west side below Peoria Lake. The name of this tributary is not clear on the 1684 map, but it appears to be *R. Desnoticia*; the tributary is named *R. Macopin* on the 1688 map. Neither map shows a stream corresponding to Macoupin Creek, which enters the lower Illinois from the east.

§ *Pimiteouy* = Peoria.

** The marsh known to Father Charlevoix as *Machoutin* may be Mascooten Bay, which is immediately upstream from Beardstown. Charlevoix located the *Machoutin* "exactly half-way from *Pimiteouy* to the *Mississippi*," which corresponds well to the location of Mascooten Bay. He also said that the *Machoutin* is "at an equal Distance" from both the Sangamon River and Macoupin Creek, but Mascooten Bay is much closer to the Sangamon River than to Macoupin Creek.

A less likely candidate for the *Machoutin* is the wetland known as the *Demi-Quian* (or *Demiquain*,

*All the meadows that I have noted in this journal are all very fine for settlement.
For the rest, the land along this river is in great part swamps.*

— Legardeur Delisle, who journeyed up the Illinois River
as far as Starved Rock in 1722.¹¹²

Soon after we had passed the River of the *Macopines*, we perceived the Banks of the *Mississippi*, which are very high. We rowed however above twenty-four Hours longer, and often with our Sail up, before we entered it; because the River of the *Illinois* changes its Course in this Place from the West to the South and by East. One might say, that out of Resentment at being obliged to pay the Homage of its Waters to another River, it sought to return back to its spring.*

Its Entrance into the *Mississippi* is East South East. It was the 10th, about half past Two in the Morning,[†] that we found ourselves in this River, which at that Time made so much Noise in *France*, leaving on the Right Hand a great Meadow, out of which there rises a little River, in which there is a great deal of Copper. Nothing can be more charming than all this Side; but it is not quite the same on the Left Hand. We see there are only very high Mountains interspersed with Rocks, between which there grows some Cedars; but this is only a Skreen that has little Depth, and which hides some very fine Meadows.

The 10th, about Nine in the Morning, after we had gone five Leagues on the *Mississippi*, we arrived at the Mouth of the *Missouri*, which is North North West, and South South East. I believe this is the finest Confluence in the World. The two Rivers are much of the same Breadth, each about half a League; but the *Missouri* is by far the most rapid, and seems to enter the *Mississippi* like a Conqueror, through which it carries its white Waters to the opposite Shore, without mixing them; afterwards it gives its Colour to the *Mississippi*, which it never loses again, but carries it quite down to the Sea.⁶⁷

etc.). The *Demi-Quian* was a prominent landmark mentioned by several early explorers. It later became known as the Thompson Lake area, legendary for its once-bountiful fish and wildlife. Charlevoix's description does not fit the location of Thompson Lake as well as it fits Mascooten Bay: Thompson Lake was at the mouth of the Spoon River, which is passed less than one-third of the way from Peoria to the Mississippi. Thompson Lake was upstream from both the Sangamon River and Macoupin Creek, so it was not "at an equal Distance" from both the Sangamon and the Macoupin.

* Charlevoix was remarking that the Illinois River seemed to want to double back to its source (its "spring").

† Kellogg presented this passage as, "On the ninth of this month a little after two in the afternoon . . ."⁶⁸

1722: Daniel Coxe

From Daniel Coxe's *Description of the English Province of Carolana*:

Forty Miles above the Yellow River, * on the East side is the River *Checahou* † or the River of the *Alinouecks*, ‡ corruptly by the French call'd *Illinois*, which Nation liv'd upon and about this River, having above 60 Towns, and formerly consisted of 20000 fighting Men, but are now almost totally destroy'd by the *Irocois*, ¶ or driven beyond the *Meschacebe* § Westward. This is a large Pleasant River The Course of this River from its Head exceeds 400 Miles, ** Navigable above half way by Ships, and most of the rest by Sloops, and large Boats or Barges. Many small Rivers run into it . . . ; it affords great Quantities of good Fish, and the Country round about it, abounds with Game, both Fowls and Beasts. Besides the *Illicoueck*, are the Nations *Prouaria*, the great Nation *Cascasquia* and *Caracontaouon*; †† and on the Northern Branch ‡‡ inhabit Part of the Nation of the *Mascontens*. ¶¶⁸⁴

1722: Legardeur Delisle

A detachment of 13 soldiers under the command of the Sieur François Philippe Renaud embarked from Fort Chartres §§ on the 23rd of May 1722. They were in search of copper

* Yellow River = Missouri River. Daniel Coxe: ". . . the Great Yellow River, so nam'd because it is Yellowish and so muddy, That tho' the *Meschacebe* is very clear where they meet, and so many great Rivers of Christaline water below, mix with the *Meschacebe*, yet it discolours them all even unto the Sea." ⁸⁴

† River *Checahou* (Chicago River) = Illinois River. Several rivers in the Mississippi valley have been called something like "Chicago" (*Checahou*, etc.), including the Mississippi River and the Ohio River.

‡ River of the *Alinouecks* (River of the Illiniweks): the Illinois confederation of tribes has been called the Illiniwek.

¶ *Irocois* = Iroquois.

§ *Meschacebe* = Mississippi River.

** The Illinois River is about 270 miles long from its mouth to its origin at the junction of the Des Plaines and the Kankakee. Daniel Coxe probably considered the Kankakee to be part of the Illinois River. The combined length of the Kankakee and Illinois is about 580 miles. (The tortuous Kankakee meanders 310 miles along the course of a 110-mile valley.)

†† *Illicoueck* = Illinois; *Prouaria* = Peoria; *Cascasquia* = Kaskaskia. The *Caracontaouon* (variously spelled) were a relatively little-known group of the Illinois.

‡‡ Northern Branch = Des Plaines River.

¶¶ *Mascontens* = Mascouten.

§§ Fort Chartres is on the Illinois side of the Mississippi River about 70 miles downstream from the Big Rivers Area.

mines that were reputed to occur somewhere along the Illinois River. A journal by Sub-lieutenant Legardeur Delisle provides us with an account of the expedition as they passed through the Big Rivers Area:

. . . Friday the 29th, after hearing Mass we left Cahokia and went to make camp at Grand Island, which is four leagues * from where we had left in the morning.

Next day, Saturday the 30th, we had a strong wind from the southeast which stayed with us all day and brought us to the entrance of the river of the Illinois, which is nine leagues from where we had passed the night.

Next day, Sunday the 31st, we left at broad daylight from the entrance of the aforesaid river. We found no current at all in the aforesaid river of the Illinois because it was low. The first meadow that is within is on the left in going up—about one league. Toward nine o'clock in the morning we went ashore for lunch at a second meadow (which is very fine for settlement, as is the other one), where rain caught us and obliged us to pass the night. We made three leagues that day.

Next day, Monday, the first of the month of June, we left at daybreak. Two leagues up we found the same meadow coming to the river-bank. Toward eleven o'clock rain caught us, which obliged us to camp and to pass the night three leagues from where we had left in the morning.

Next day, Tuesday the 2nd, toward two hours past noon we found a river on the right in going up, which is named River of La Sensue. † At nine o'clock we had passed another, which is also on the right in going up, which is called Macopine River. ‡ We made six leagues during the day.

Next day, Wednesday the 3rd, we left in fair weather. During the day we found four rivers, one of which is on the right in going up, which is called Mauvaise Terre River, § and the three others are on the left in going up, two of which are of names unknown to me and the other is called Pierre à Flèche River, § which is at the beginning of a fine meadow for settlement, which is called Pierre à Flèche Prairie, where we camped to pass the night after making seven leagues in our day.

* A French league is approximately two and one-half miles. Delisle sometimes underestimated the distance that they traveled from point to point along their route.

† River of La Sensue = Apple Creek.

‡ Macopine River = Macoupin Creek.

§ Mauvaise Terre River = Mauvaise Terre Creek.

§ Pierre à Flèche River = Flint Creek.

Next day, Thursday, Corpus Christi Day, the fourth, we left at broad daylight. At noon we went ashore to wait for the hunters who had been in a fine meadow, which is at the right in going up, after a herd of cattle * to try to kill one of them to bring to us; being obliged to wait for them until evening we found it necessary to camp at the farther end of the meadow in which we had gone ashore at noon, and made only four leagues during the day.¹¹²

The Frenchmen explored as far upstream as Starved Rock. Despite the assistance of local residents, they failed to find any copper deposits. They then started back to Fort Chartres. Delisle concluded his journal,

. . . Monday, the 29th, we passed out of the river of the Illinois and found no current at all in the Missici because the Misoury was full, which prevented us in the night from being able to pass it, for lack of current.

. . . All the meadows that I have noted in this journal are all very fine for settlement. For the rest, the land along this river is in great part swamps.¹¹²

1763: Mr. Hamburgh

A Mr. Hamburgh descended the entire length of the Illinois River in 1763. Here is how he described some of what he had seen:

All a Long Down this River the Country is Exceeding Pleasant And Levil and for the most Part Consisting of Large Plains Which Extend themselves as the french Informed me for several Hundreds of Miles, the Plains are Well stocked With Buffelows And Deer Especially Along the River as they Run through it. The Country all Along Down Produces Plenty of mulberry Trees and the Nut Called Bacane †. . . . This River Illinois Enlarges Greatly Below this fort,[‡] And is nigh as Large at the Mouth as the Mississippi—²²⁴

1773: Patrick Kennedy

In the summer of 1773, Patrick Kennedy set out from Kaskaskia with an exploring party. They were in search of a copper deposit that was reputed to be along some tributary of the Illinois River. The men never found the legendary mine—but Kennedy's "Journal of an Expedition . . . from Kaskaskias Village . . . to the Head Waters of the Illinois River" provides a remarkable account of the river valley:

July 23, 1773. We set out from Kaskaskias in search of a Copper mine, and on the 31st reached the *Illinois* River;—it is 84 miles from Kaskaskias. The

* Cow = bison.

† Bacane = pecan (*Carya illinoensis*).

‡ This "french fort of Very Little Importance" probably was at Peoria.

same day we entered the *Illinois* River, which is 18 miles above that of the *Missouri*. The water was so low, and the sides of the river so full of weeds, that our progress was much interrupted, being obliged to row our boat in the deep water, and strong current. The chain of rocks, and high hills which begin at the *Piasas** about three miles above the *Missouri*, extend to the mouth of the *Illinois* River, and continue along the south-eastern side of the same in an east—north east course.—About eighteen miles up this river on the eastern side, is a little river called by the Natives *Macopin* or *White Potato* River; †—it is 20 yards wide, and navigable nine miles to the hills. The shore is low on both sides;—the timber, *Bois Connus*, or *Paccan*, *Maple*, *Ash*, *Button Wood*, ‡ &c.—The course of the *Illinois* River here, is N.N.E; the land is well timbered, and covered with high weeds. There are fine meadows at a little distance from the River; the banks of which do not crumble away as those of the *Mississippi* do: we passed numbers of Islands, some of them between nine and twelve miles in length, and three miles in breadth.—The general width of the River in this day's journey, was about 400 yards.

August 1, about 12 o'clock, we stopped at the *Piorias* wintering ground.[¶] About a quarter of a mile from the River, on the eastern side of it, is a meadow of many miles long, and five or six miles broad. In this meadow are many small lakes, communicating with each other, and by which there are passages for small boats or canoes, and one in particular, leads to the *Illinois* River. The timber in general very tall Oaks. We met with some beautiful islands in this part of the River (48 miles from the *Mississippi*) and great plenty of Buffaloe and Deer.¹⁶⁸

Patrick Kennedy's description of the land shows that they were in Greene County at this point. On the next day the expedition boated below the river bluffs in Pike County, and Kennedy made note of flint in the limestone outcrops:

August 2, At one o'clock we passed an island called *Piere*.—A *Fleche*, or arrow stone is gotten by the Indians from a high hill on the western side of the River, near the above island;—with this stone, the natives make their gun flints, and

* The *Piasas* = Alton.

† *Macopin* or *White Potato* River = Macoupin Creek. Footnotes on pages 31 and 50 discuss the identity of the macoupin.

‡ *Bois Connus* or *Paccan* = pecan (*Carya illinoensis*); *Button Wood* = sycamore (*Platanus occidentalis*).

¶ The Peoria are thought to have traditionally moved down the Illinois River to Greene County during the winter season. Thomas Hutchins' 1778 "New Map of the Western Parts of Virginia, Pennsylvania, Maryland and North Carolina" labels this point in the lower Illinois River valley as the "Piorias Wintering Ground."³⁴⁷

point their arrows.* Half a league above this island, on the Eastern side of it, the meadows border on the River, and continue several miles; the land is remarkably rich, and well watered with small Rivulets from the neighbouring hills. The banks of the River are high, the water clear, and at the bottom of the River are white Marl and Sand.^{† 168}

The expedition continued upstream far beyond the Big Rivers Area, searching unsuccessfully for the purported copper deposit.[‡]

1774: Charles Gratiot

Charles Gratiot was a French Canadian trader. After visiting the north end of the American Bottom, he described the region in a letter to his father:

I am just returned from the Illinois country, part of Louisiana, an extremely hot and feverish country —

. . . That country abounds in wheat and all other provisions, the swamps and rivers are covered with game, Swans, Bustards, Cranes, Geese,[¶] Ducks and of

* Kennedy was describing flint which was quarried from bluffs in the vicinity of Flint Creek in Pike County.

† In 1796 Victor Collot, a French intelligence agent, explored the waterways along the southern border of Illinois. General Collot wrote of journeying up the Illinois River, and he described the river and its tributaries—including the Macopin (“which signifies in the Indian language White Yam”). Collot’s descriptions of the Illinois River obviously were taken from Patrick Kennedy’s 1773 account, which was published as an appendix in Thomas Hutchins’ *Topographical Description*.¹⁶⁸ Apparently Collot did not actually explore the Illinois valley. Collot provided one item of description about the Illinois River that is not in Kennedy’s account: “The river is about five hundred yards wide at its mouth.”⁷⁵

‡ The hope of finding a copper deposit in the Illinois River valley was kept alive by the occasional discovery of a piece of copper. Lewis Beck’s 1823 gazetteer of Illinois says, “Small masses of copper have . . . been found in various places upon the banks; but they are always detached, and afford no evidence of any quantity of that mineral in the vicinity.” The gazetteer’s entry about Peoria says,

It is probable that *copper* exists in this vicinity; for a grant made by the king of France to M. Renault, at the old village of Peoria, embraces a copper mine. The Indians frequently exhibit specimens of copper to the traders, but are unwilling to give their locality. Those which I have seen are native, in the form of rounded malleable masses. They are said to have been found on the surface of the earth, and therefore afford no evidence of a vein of the ore in the vicinity, any more than the masses of granite which are found every where on the prairie, of the existence of a primary formation in their immediate vicinity.²⁷

[¶] Charles Gratiot mentioned both Bustards and Geese. Most likely his original letter (in French) referred to both *les Outardes* (Bustards) and *les Oies* or *les Oyes* (Geese).

The early French in the Mississippi River valley often employed *les outardes* (bustards) as a name for geese. For instance André Pénicaud, who was living in the Mississippi valley in 1699, wrote of

all varieties, which added to the heat, makes the people very lazy, and having besides in the immense prairies numbers of Deer and Buffaloes enormous in size, they hunt these with horses that are trained to this chace, the most of the Canadians that go to this country remain there, there being no better country for a lazy man than that¹²⁹

1778: Thomas Hutchins

British engineer Thomas Hutchins conducted an extensive examination of the middle Mississippi River valley before the Revolutionary War. The following paragraphs are from Hutchins' *Topographical Description*, which was published in 1778:

The *Ridge* which forms the eastern bank of the *Mississippi*, above the *Missouri* River continues northerly to the *Illinois* River, and then directs its course along

*une quantité prodigieuse d'oyes sauvages qu'on appelle des outardes dans le pays,*²⁰⁹ which has been translated as "a prodigious quantity of wild geese, locally called bustards."²²¹

The French frequently referred to geese as both *les outardes* (bustards) and *les oies* (geese). This usage is confusing because the French sometimes referred to both *les outardes* and *les oies* in the same list of species. For example in April 1675 Jacques Marquette described lakes near Chicago as being *plains d'outardes d'oyes de canards de grues* ("full of bustards, geese, ducks, cranes").³³⁵ In 1750 Father Vivier made note *d'une quantité prodigieuse de canards de trois espèces, de sarcelles, d'outardes, d'oies, de cygnes, de beccassines* ("a prodigious number of ducks of three kinds, teal, bustards, geese, swans, snipe").³⁴⁰ In such instances the writer appears to have recognized some unstated difference between *les outardes* and *les oies*.

Perhaps the early French distinguished two kinds of geese (*les oies* and *les outardes*) in the same manner that 19th-century Americans often referred to Canada geese as "geese" but referred to other species of geese as "brants" (see footnotes on pages 49 and 259). Sometimes, though, the French used the name *outarde* specifically in reference to Canada geese: for instance at the southern tip of Illinois in 1795, French-born naturalist André Michaux wrote *tué un Oie du Canada nommée par les françois. Canadiens et Illinois Outarde*²²⁵ ("killed a Canada Goose called by the French Canadians and Illinois Bustard"). The authoritative *Dictionary of Birds* states without qualification that "bustard" is an early French Canadian name for the Canada goose.²³⁵ No less an authority than the pioneering ornithologist Elliott Coues wrote, ". . . outarde is the name by which the voyageurs knew the Canada goose, *Bernicla canadensis*."⁸²

The European bustard is related to the American wild turkey. One might surmise that the French were referring to turkeys when they wrote of *les outardes*. T.C. Clarke held forth this conclusion regarding turkeys in an 1861 article about Illinois for the *Atlantic Monthly*: ". . . bustards the French called them, after the large gallinaceous bird which they remembered on the plains of Normandy."⁷⁴ Mr. Clarke's assertion is not tenable. The Illinois French consistently called turkeys *cocqs d'Inde* (or some variant of this name, such as *Dinde*), and they sometimes mentioned both turkeys and bustards in the same narrative. For instance Sébastien Rasles, a missionary among the Illinois in the 1690s, wrote, *Leurs rivières sont couvertes de cygnes d'outardes, de canards et de sarcelles. A piene fait-on une lieue, qu'on trouve une multitude prodigieuse de coqs d'Inde* ("Their rivers are covered with swans, bustards, ducks, and teal. We can hardly travel a league without meeting a prodigious multitude of Turkeys")³³⁹

Our Illinois inhabit a very pleasant country. — Father Gabriel Marest in 1712. ²³⁹

the eastern side of that River, for about 220 miles, when it declines in gentle slopes, and ends in extensive rich savannahs.* On the top of this *Ridge*, at the mouth of the *Illinois* River, is an agreeable and commanding situation, for a fort, and though the *Ridge* is high and steep (about 130 feet high) and rather difficult to ascend;—yet when ascended,—it affords a most delightful prospect.—The *Mississippi* is distinctly seen from its summit for more than twenty miles,—as are the beautiful meanderings of the *Illinois* River, for many leagues;—next a level, fruitful meadow presents itself, of at least one hundred miles in circuit on the western side of the *Mississippi*, watered by several lakes, and shaded by small groves or copses of trees, scattered in different parts of it, and then the eye, with rapture, surveys, as well the high lands bordering upon the River *Missouri*, as those at a greater distance *up* the *Mississippi*.—In fine, this charming ridge is covered with excellent Grass, large Oak, Walnut trees, &c. and at the distance of about nine miles from the *Mississippi*, up the *Illinois* River, are seen many large savannahs, or meadows abounding in Buffalo, Deer, &c.

In ascending the *Mississippi*, *Cape au Gres*, particularly attracted my attention.—It is about 8 leagues above the *Illinois* River, on the eastern side of the *Mississippi*, and continues above five leagues on that River.[†] There is a gradual descent back to delightful meadows, and to beautiful and fertile uplands, water'd by several Rivulets, which fall into the *Illinois* River between 30 and 40 miles from its entrance into the *Mississippi*, and into the latter *at Cape au Gres*. The distance from the *Mississippi* to the River *Illinois* across the country, is lessened or increased, according to the windings of the former River;—the smallest distance is *at Cape au Gres*, and there it is between four and five miles. The lands in this intermediate space between the above two Rivers are rich, almost beyond parallel,—covered with large Oaks, Walnut, &c. and not a stone is to be seen, except upon the sides of the River.—It is even acknowledged by the French inhabitants, that if settlements were only begun at *Cape au Gres*,—those upon the *Spanish* side of the *Mississippi*[‡] would be abandoned, as the former

* In the 1700s and 1800s, *savannah* or *savanna* was a synonym for “prairie”—especially among British writers.³⁶⁴

† Hutchins located *Cape au Gres* about eight leagues (20 miles) above the mouth of the *Illinois* River, which corresponds to the bluff now called Cap au Gres (*Cap au Grès*). Although Hutchins said that *Cape au Gres* “continues above five leagues” (more than 12 miles) on the *Mississippi* River, the name has usually been applied specifically to the most prominent section of bluff, a sandstone outcrop that extends for about a mile on the east bank of the river between Dogtown Landing and the West Point Ferry landing, immediately downstream from Lock and Dam 25.

‡ Land on the west side of the *Mississippi* River was held by Spain.

would excite a constant succession of settlers, and intercept all the trade of the upper *Mississippi*.

. . . There is plenty of Fish in the Rivers, particularly Cat, Carp, * and Perch, of an uncommon size.—*Savannahs*, or natural meadows, are both numerous and extensive; yielding excellent Grass, and feeding great herds of *Buffaloe*, *Deer*, &c.—Ducks, Teal, Geese, Swans, Cranes, Pelicans, † Turkies, Pheasants, Partridges, ‡ &c. such as are seen in the Sea coast Colonies, are in the greatest variety and abundance.—In short, every thing, that a reasonable mind can desire, is to be found, or may, with little pains, be produced here. ¹⁶⁸

1783–84: Jean Baptiste Perrault

The winter of 1783–84 was so harsh in the Big Rivers Area that navigation was blocked by ice until early April. These conditions were documented by a French Canadian merchant voyageur who spent the winter at Cahokia:

The winter of 83 was very severe. There were two feet of snow and the Crust was strong enough to bear men and dogs so that they were able to kill deer with a Stroke of the Hatchet, a thing which even the old men had never seen before. The bridge before St. Louis ¹ held an entire month, which gave the Creoles and the Spanish ² pleasure of visiting. [§]

The snow still lay deep and strong towards the 15th of March, when the pontes-watamis ^{**} of Chicago who had been on a war party on the river des Kaskatias ^{††} re-passed by les Koas ^{‡‡} on their return. . . . They entered the village in martial fashion ²⁵⁸

The Potawatomi and their captives stayed in Cahokia and “awaited the opening of navigation” for about three weeks before proceeding northward through the Big Rivers Area.

* These carp are native members of the family Catostomidae. The Old Word carp (*Cyprinus carpio*) had not yet been introduced into the region.

† Flocks of pelicans were seen with some frequency along the Illinois River and the Illinois section of the Mississippi River during past centuries (see pages 53, 71, 124, 129, 261, 309, and 382).

‡ In the Mississippi valley during Hutchins’ era, the name “pheasant” usually referred to the ruffed grouse, and the name “partridge” was often applied to the northern bobwhite.

¹ Ice on the Mississippi River served as a bridge in front of St. Louis.

[§] Many of the region’s French Creole inhabitants resided on the east side of the Mississippi River. The west side of the river was Spanish territory.

** Ponteswatamis = Potawatomi.

†† River des Kaskatias = Kaskaskia River.

‡‡ Les Koas = Cahokia.

1787: Thomas Jefferson

When Thomas Jefferson began compiling his *Notes on the State of Virginia*, he was not yet President of the United States—and Illinois was a county of the State of Virginia. Although Jefferson never visited the Big Rivers Area, he wrote about the big rivers in his *Notes*:

The *Missisipi* will be one of the principal channels of future commerce for the country westward of the Alleghaney. . . . Above the mouth of the Missouri, it becomes much such a river as the Ohio,^{*} like it clear, and gentle in its current, not quite so wide, the period of its floods nearly the same,[†] but not rising to so great a height.

. . . The *Illinois* is a fine river, clear, gentle, and without rapids; insomuch that it is navigable for batteaux[‡] to its source. . . . The Illinois, about 10 miles above its mouth, is 300 yards wide.¹⁷⁵

1790: An anonymous cartographer

In June of 1790 U.S. Army Lieutenant John Armstrong submitted a map of the Illinois River to his commanding officer. The map was accompanied by a narrative by the unnamed map-maker, who had descended the river in September of 1789 or perhaps earlier. The narrative describes the entire length of the river; the part quoted here begins at the mouth of the Vermilion River and proceeds downstream:

And from this to where it enters the Mississippi is without any perpendiculer current, except at the going out of Lake de Aussee or Illenois Lake[¶] there is a small current to be perceived. And all along the river there are no hills or mountains to be seen, excepting some few on the west of Lake Deausse and some more on the right hand before it enters the Mississippi, none after passing the Vermillion River.[§] The Meadows are seldom seen, being hid by the wood that grows along the river, but it is said they are at no great distance. The Illanois River from the Vermillion River to Lake Daussee is about 15 yards

* Thomas Jefferson proclaimed, "The *Ohio* is the most beautiful river on earth."¹⁷⁵

† Jefferson wrote of the Mississippi, "These floods begin in April, and the river returns into its banks early in August."¹⁷⁵

‡ A *bateau* is a flat-bottomed boat.

¶ Lake de Aussee, Illenois Lake, Lake Deausse, and Lake Daussee are names that the cartographer applied to Peoria Lake.

§ Vermillion River = Vermilion River, which joins the Illinois River opposite La Salle.

wide * and a little below that Lake it is near 200, but for 20 Leagues before it enters into the Mississippi it is 300 yds in breadth.³²⁵

The cartographer also discussed the character of the Mississippi:

The River Mississippi has a smooth, heavy current and in the Spring, when the Waters are high, runs near 7 Miles an hour. But in the fall of the year, when the Waters are low, it is 4½ or 5 Miles an hour, and continues much the same from its junction with the Missouri till it discharges itself into the Bay of Mexico at the Balise. Till it joins the Missouri, its water is like common river Water, but not clear like that of the Lakes.[†] The Missouri has its Sources either in, or passes thro, some inexhaustable body of white clay and, when it gains the Mississippi, having a much stronger current, immediately casts over its white water to the Opposite shore. It appears curious to see those waters mixing together, but is immediately done and the Mississippi keeps that whiteness even after the Ohio enters it with several other rivers, none of which cause any perceptible alterations.³²⁵

1790: Arthur St. Clair

Three months after arriving in Illinois on a fact-finding mission, Territorial Governor Arthur St. Clair prepared a lengthy account for President George Washington. The Mississippi River is among the wide range of topics in St. Clair's "Report of Official Proceedings in the Illinois Country from March 5th to June 11th, 1790."

Above the Missouri River the Mississippi becomes comparatively a gentle and pellucid stream, whereas, below, it is at all seasons extremely turbid. Above the Illinois River it is truly a gentle stream, its current, as I have been informed, nowhere exceeding three miles an hour.³¹¹

Governor St. Clair emphasized the Illinois River's vital role in international fur trade. Furs were brought down the Missouri River from as far west as the Rocky Mountains; they were then transported to Michilimackinac, on the Straits of Mackinac at the north end of Lake Michigan. From this point the furs were shipped to Canada and across the Atlantic Ocean. Trade goods were shipped in the opposite direction to pay for the furs:

* "About 15 yards wide" must be an error, either in the original manuscript or in the published edition. The narrative describes the Illinois River as being "near 150 yards broad" at the mouth of the Vermilion River. If the Illinois River had constricted substantially between the Vermilion River and Peoria Lake, the explorer probably would have commented on the constriction—as he did earlier in his narrative when describing a narrowing of the channel of the Des Plaines River.

† The Lakes = Great Lakes.

The commerce of the Illinois country is of some importance in itself, but more so when considered as connected with the Spanish side of the Mississippi.*

. . . Even as much the greatest part of the merchandise for the trade of the Missouri River is brought from Michilimackinac by that of the Illinois . . .

. . . The furs in which these goods are generally paid for . . . are carried to Canada . . . up the Illinois River, up the Chicago, and from thence by a small portage into Lake Michigan, and along that lake to Michilimackinac; or from the Chicago up the river Au Plain, and by a portage into the same lake.[†]

. . . An establishment at the mouth of the Illinois River would also be very useful, both with respect to the trade of that river and of the Missouri; but its being regularly inundated once or twice a year forbids it. There is, however, an excellent situation some distance lower down, and nearly opposite to the Missouri, at a place called Payisa,[‡] that would answer; the situation is high, the air pure and healthy, and the soil good, and across the country it is not more than three miles distant from the Illinois River.[¶] It was the opinion of the best informed men I conversed with at Cahokia, and from St. Louis, that if a town were laid out there and a small military post erected, it would be peopled immediately, and St. Louis soon fall again into the same unimportant situation it held before . . .^{§ 311}

1803: Nicolas de Finiels

Nicolas de Finiels is the author of *Notice sur la Louisiane Supérieure* ("Account of Upper Louisiana"). This manuscript details the landscape and villages in and around the American Bottom and St. Louis. During Finiels' tenure in the region, St. Charles was second in population only to St. Louis. St. Charles sits along the Missouri River, seven miles

* Land west of the Mississippi River was governed by Spain.

† This description of the trade route from the Illinois River to Lake Michigan is confused. The route ascended the Illinois River, thence up the Des Plaines River to a portage that linked a small tributary of the Des Plaines with the Chicago River. Traders then descended the Chicago River to Lake Michigan. The Des Plaines River had many names during the era of St. Clair's governorship—including the Au Plain River and the Chicago River. Hermon Dunlap Smith compiled 46 names and variant spellings for the Des Plaines River.³⁰⁷

‡ Payisa = Piasa, the site of Alton.

¶ Governor St. Clair's report gives the impression that there is a three-mile overland shortcut between Alton and the Illinois River. In fact the shortest distance from Alton to the Illinois River is about 18 miles either by land or by water.

§ The Governor and his informants supposed that an American town at Payisa would grow at the expense of Spanish St. Louis because Payisa is located directly along the trade route between the Missouri River valley and the Great Lakes. If a post were established at Alton, traders who were traveling up and down the Illinois and Missouri Rivers might stop there rather than detouring about 20 miles down the Mississippi River to St. Louis.

south of the tip of Calhoun County. Finiels' *Notice* points out that *les Mamelles* (three mounds on the outskirts of St. Charles) afford an engaging vista of the bluffs on the south edge of the Big Rivers Area:

All visitors to St. Charles are taken to visit these mounds, for the town has nothing else of interest to offer. Given this lack of nourishment for hungry travelers, the panorama available from their summits provides a pleasing spectacle. This spectacle is nothing more than a view of the celebrated Paillissa rocks, * which rise vertically on the left bank of the Mississippi and are covered with undulating hillocks. Large trees reaching to the clouds shade these as well as the low point that extends five leagues to the east, creating the confluence of the Mississippi and Missouri rivers. This view would be much more interesting if the banks of the Mississippi, Missouri, and Illinois rivers were not overgrown with trees that obstruct one's view and scarcely permit you to suspect that they exist.¹¹³

Finiels' chapter about "American Illinois" tells us,

The American part constitutes an important component in the whole picture of the Illinois Country.[†] Without it the complexity that makes this region so interesting to the traveler would not exist. It has particular attractions, and their combination provides it with all its charm. The bluffs, which I have already described,[‡] offer a most picturesque view of the plain, and from their heights there are delectable vistas and perspectives. In different places, perpendicular masses of rock protrude from these bluffs, which seem from a distance like vast walls covered with terraces; from them long columns of trees appear as if they wished to take flight. Here and there, deep crevasses cut through the bluffs, creating passages for the mountain streams that cross the plain to mingle with those of the river. But it is above the mouth of the Missouri, where the bluffs draw up close to the bank of the Mississippi, that a striking spectacle meets your eyes. An immense panorama of rocks is deployed along the bank for more than four leagues, after which it disappears at the mouth of the Illinois River. These rocks, which have been given the name Paillissa, attain in several places heights of 130 to 140 feet above the river. Their walls are almost always rounded, and they often appear as a succession of pointed towers that from a distance might be taken for some old, redoubtable fortress. This shape piques the curiosity of the traveler, who is compelled to find a reason for the configuration's unifor-

* The editors of Finiels' account stated that *Paillissa* is an archaic French word for "palisade," and they made passing notice of the similarity between *Paillissa* and *Piasa*.

† The "Illinois Country" was commonly designated to include lands extending for an undefined distance west of the Mississippi River—in addition to the territory of present-day Illinois and adjacent areas on the east side of the Mississippi. "American Illinois" was east of the river; "Spanish Illinois" lay to the west.

‡ These bluffs are *les Mamelles* at St. Charles.

...the Country is very fine; the great rivers which water it, the vast and dense forests, the delightful prairies, the hills covered with very thick woods,—all these features make a charming variety. — Gabriel Marest in 1712.²¹⁷

mity. Undulating hillocks surmount these rocks, sometimes rising thirty to forty feet above their summits. Some of these have massive, ancient trees; others are covered only with grass five or six feet high. It is on these Paillissa heights, near the Illinois River, that you discover the fine perspective that is incomplete from the “breasts” of St. Charles.* You can from there admire the confluences of the Mississippi, Missouri, and Illinois rivers, get drunk on an indescribable spectacle, and lose yourself in the profound meditations that it inspires.

This is not the refined nature that we generally see displayed before us in Europe, which embellishes with her most brilliant gifts the spectacle that here strikes our astonished gaze. . . . The profound solitude that engulfs you on these heights; the majestic and imposing silence that reigns as the murmuring waters of the Mississippi swirling around the rocks present the only intrusion; the wild and rustic appearance of these summits, which the luminous forest renders even more savage and desolate, darkens thoughts provoked by the spectacle of the rocks. Finally, you feel a need for a diversion from the melancholy notions that grip your imagination; you gaze across the clumps of woods and murmuring waters at your feet. Off in the distance to the southwest a streak of dark blue against the trees reveals the course of the Missouri. . . . Returning to the Mississippi, you can follow its waters for a great distance. They recede to the east-southeast, embracing a multitude of islands and twisting every which way to elude the sandbars that seem to want to block them. If you swing your eyes back toward the west and the north, your gaze is consumed by the vast plain that proceeds up the Mississippi from St. Charles; prairies, clumps of woods, ponds, and streams dissect it, and the irregular loops of the river seem to want to imprison it. Moving northward, the left bank of the river, which was almost at water level at the mouth of the Illinois, seems to rise up in the distance. To the eye that likes to discern forms, it presents the famous Cap au Grès, which all travelers admire. This dominates the Mississippi eight leagues above the mouth of the Illinois River and graces the American bank for five leagues with a series of rocks just as interesting as those of the Paillisa.[†]

At the crest of Cap au Grès the land descends toward the east and slopes gently toward the Illinois River, which ascends to the northeast. How beautiful, from

* The “breasts of St. Charles” are *les Mamelles*.

† Nicolas de Finiels obtained his information about *Cap au Grès* and its environs from Thomas Hutchins’ *Topographical Description* (page 39), although Finiels did not credit the source.

Paillissa heights, appears the little Illinois River, which is not more than two hundred toises wide * during most of its course. Its gentle, voluptuous contours seem to embrace the fine plains that it drains from near Lake Michigan to the Mississippi as it descends, just a feeble stream compared to the two rivers with which it mingles its waters. You might say that nature wished to depict the image of the sweet and peaceful life, which sages spend in repose and in agreeable and eternal calm, in contrast to the frightening scene of a long career continually fraught with excess, violent storms, and passions.

All of American Illinois from the mouth of the Illinois River to more than twenty leagues above it is a good location for settlements that would be very advantageous. The lands between Cap au Grès and the Illinois River are high and as fertile as any in this region; they are drained by numerous streams and creeks, some of which flow into the Illinois and some into the Mississippi. There are vast plains, sometimes covered with fine woods and sometimes with immense pastures. The banks of the Illinois never erode like those of the Mississippi and Missouri, and during high water it is navigable almost all the way to Lake Michigan; during low water, you can ascend about ninety leagues from its mouth. This is the usual route of Illinois traders; they prefer to take their furs to Michilimackinac, where they receive the most in return, and at lower prices than in New Orleans.¹¹³

1803–04: Meriwether Lewis and William Clark

Lewis and Clark's "Corps of Discovery" set out to find an overland route across the American West to the Pacific Ocean. The expedition members spent the winter of 1803–04 and much of the following spring along the Mississippi River in Madison County, preparing for their upcoming ascent of the Missouri River. They established their camp at the mouth of the River Dubois (Wood River), opposite the mouth of the Missouri—at the very south edge of the Big Rivers Area. As soon as the soldiers arrived on December 12, Captain Clark sent out some hunters. Upon their return, he wrote,

The hunders which I had sent out to examine the Country in Diferent derections, returned with Turkeys & Opossoms and informed me the country was butifull and had great appearance of Gaim.²⁷⁵

Expedition members went to work at their Wood River camp: preparing equipment, gathering supplies, and training for their upcoming exploration. During their five months in southern Illinois, both Lewis and Clark kept records of the weather and other natural phenomena. Captain Clark's remarks about the area's fauna during the final days of 1803 have been compiled into the following paragraph:

* This width is about one-quarter mile.

December 15th: "Hunters illed Some grouse." * 21st: "Send out Shields & Floyd to hunt to day, they Kill 7 Turkeys. Verry fat." 23rd: "Drewyear Came home to day after a hunt, he Killed three Deer, & left them in the Woods." 24th: "Drewyear returned with 3 Deer & 5 Turkeys. . . . The Indian Come in with a Deer this evening." 25th: "The men frolicked and hunted all day . . . Several Turkey Killed." 26th: "One of my party Killed 7 Turkeys last night at roost." 27th: "At abt 3 oClock to day three frenchmen in a Pierogue Came down pursuing a Swan which they had wounded Some distance above, the Swan swan [†] as fast as they Could row thier Pierogue and I thought rather gained on the pieroge as they passed—they Cought it 2 m below. [‡] . . . Sent out Drewyer to hunt to day, early. He returned Late with a Buck, he Saw three Bar [¶] on the other side of the Prairie." 28th: "Drewyer Kill a Deer & the Indn Kill another." 29th: "Colter Kill a Deer & a turkey." 31st: "Several things Killed to day." § 239

On the 15th of January 1804, William Clark wrote to Major William Croghan to describe his environs at the mouth of the Wood River:

My situation is as comfortable as could be expected in the woods, & on the frontiers; the Country back of me is butifull beyond discription; a rich bottom well timbered, from one to three mile wide, from the river to a Prairie; which runs nearly parrilal to the river from about three miles above me, to Kaskaskia and is from three to 7 miles wide, with gradual rises and several streams of runing water, and good Mill seats; ** This Prarie has settlements on its edges from Kahoka †† within three miles of this place. The Missouri which mouths imedeately opposet me # . . . is the river we intend assending as soon as the

* That is, "Hunters killed Some grouse." These grouse probably are greater prairie-chickens, but they might be ruffed grouse (see a footnote on page 51).

† Evidently "Swan swam" was intended.

‡ The men caught the swan two miles farther down the river.

¶ Bar = bear.

§ William Clark and Meriwether Lewis often did not put periods at the end of their sentences, and they often did not capitalize the first word in a sentence. Punctuation and capitalization have been added to this compilation of Clark's 1803 remarks; otherwise many of these brief excerpts would be unclear. The same editing has been done with Clark's notes and Lewis' notes for 1804 (pages 50 to 54).

** A *mill seat* is a place along a stream that is suitable for constructing a water mill.

†† Kahoka = Cahokia.

Lewis and Clark's camp was on the Mississippi River at the mouth of the Wood River in Madison County, Illinois. The Missouri River entered the Mississippi directly opposite the camp. The mouth of the Missouri River has subsequently shifted south a few miles, and the mouth of the Wood River has been moved north by a drainage project. The Mississippi River has meandered eastward, eroding the site away. The soldiers camped on the east bank of the Mississippi River in

weather will permit. This Great river which seems to dispute the preeminence with the Mississippi, comes in at right angles from the West, and forces its great sheets of muddy Ice (which is now running) against the Eastern bank.¹⁷³

Some time during his encampment at the south end of the Big Rivers Area, Clark jotted in a notebook,

The Country about the Mouth of Missouri is pleasant rich and partially Settled
On the East Side of the Mississippi a leavel rich bottom extends back about 3 miles, and rises by several elevations to the high Country, which is thinly timbered with Oakes & On the lower Side of the Missouri, at about 2 miles back the Country rises graduilly, to a high plesent thinly timberd Country, the lands are generally fine on the River bottoms and well calculating for farming on the upper Country

in the point * the Bottom is extensive and emensly rich for 15 or 20 miles up each river, and about $\frac{2}{3}$ of which is open leavel plains in which the inhabtent of St Charles & portage de Scioux † had ther crops of corn & wheat.³⁴²

Meriwether Lewis penned nearly 900 words to describe the American lotus (*Nelumbo lutea*)—from which the following is excerpted:

The Kickapoo calls a certain water plant with a large Circular floating leaf found in the ponds and marshes in the neighbourhood of Kaskaskias and Cahokia, *Po-kish -a-co-mah*; of the root of this plant the Indians prepare an agreeable dish, the root when taken in it's green state is from 8 to 14 inches in circumference is dried by being exposed to the sun and air or at other times with a slow fire or smoke of the chimnies, it shrinks much in drying. The root of this plant grows in a horizontal direction near the surface of the rich loam or mud which forms the bottoms of their ponds or morasses

. . . The seed vessel or matrix is the form of a depressed cone the small extremity of which is attatced to the uper end of the stalk the surface of the cone when dried by the sun and air after being exposed to the frost is purforated with two circular ranges of globular holes from twenty to 30 in number arond one which forms the center placed at the distance of from an eighth to $\frac{1}{4}$ of an inch assunder, each of those cells contains an oval nut of a light brown colour much resembling a small white oak acorn smothe extreemly heard, and containing a white cernal of an agreeable flavor; these the native frequently eat either in this state or roasted; they frequently eat them also in

Illinois—but because the river has shifted, the location of the camp (defined by longitude and latitude) is now on the west side of the Mississippi in Missouri.¹⁹⁷

* The Point is the peninsula between the Mississippi and Missouri Rivers.

† Portage de Scioux = Portage Des Sioux.

their succulent state the bear feed on the leaves of this plant in the spring and summer in the autumn and winter the Swan, geese, brant, * ducks and other aquatic fowls feed on the root. the cone is brown, pithy and extreemly light, and when seperated from the stalk flots on the suface of the water with its base down. the Indians procure it and prepare it for food in the following manner—they enter the ponds where it grows, barefooted in autumn, and feel for it among the mud which being soft and the root large and near the surface they readily find it they easily draw it up it having no fiborus or colateral roots to attatch it firmly to the mud³⁴³

Meriwether Lewis described a second wild plant with edible underground parts. This species appears to be the wild sweet potato (*Ipomoea pandurata*):

The common wild pittatoo also form another article of food in savage life this they boil untill the skin leaves the pulp easily which it will do in the course of a few minutes . . . this pittaitoies may be used in it's green or undryed state without danger provided it be well roasted or boiled it produces a vine which runs to a considerable length usually intwining itself about the neighbouring bushes and weeds, the vine is somewhat branched, and in it progress at the distance of 2½ inches it puts forth one leaf stem at right angles with the vine, which is furnished with two par of ovate leaves and turminated by one of a similar shape, these are of a pale green colour not indented on their edges, reather a rough appearance, the vine is small and green except near the ground, where it sometime assumes a redish hue. the fruit is connected by a small ligament at both ends extending for many yards in length and atatching together in some instances six eight or more of these pittaitoies it's root is pereniel the vine annual.³⁴³

A third major food plant, the macoupin, was discussed by Lewis:

There is also another root found in mashey land or ponds which is much used by the Kickapoos Chipaways † and many other nations as an article of food it is called by the Chipeways *Mac-cup-pin* this in it's unprepared state is not only disagreeable to the taste but even dangerous to be taken even in a small quantity; in this state it acts as a powerfull aemetic. a small quantity will kill a hog yet prepared by the Indians it makes not only an agreeable but a nutricious food. I have not seen the plant and can therefore only discribe it from information the

* Meriwether Lewis mentioned both geese and brant among the birds that feed on the American lotus. In the 1800s and early 1900s, the name “goose” often was reserved specifically for the Canada goose; other species of goose were called “brant.” Current ornithological nomenclature assigns the name “brant” to a small member of the goose family, *Branta bernicla*. A footnote on page 259 discusses this species’ presence in the region; the footnote also reviews the confusing nomenclature of brants and geese.

† Chipaways = Ojibwe.

leaf is said to be broad and to float on the water the root is from 10 to 12 inches in length and about $\frac{2}{3}$ ^{ds} as much in thickness it has a rough black skin, the pulp is white and of a mealy substance *³⁴³

Further comments about the local fauna, flora, and natural environs come from the 1804 Wood River notebooks of William Clark and Meriwether Lewis:

January 1st: "Pokers hake, the Nut . . . † a plant growing in the ponds with a large broad leaf, stem is the middle of the leaf. In French Volies." ‡ 3rd: "All the after part of the Day the wind so high that the View up the Missourie appeared Dredfull, as the wind blew off the Sand with fury as to Almost darken that part of the atmespear." 5th: "Two men whome I sent to hunt grouse returned with a part of a hog which they found hung up in the woods & brought it in a bear meat." 6th: "A hog was found in the Prairie by Some men they Skined. I send out Shields to enquire in the neighbourhood whoes hog it was & inform me." 8th: "Send out Colter & George to the head of the Deboues R. ¶ to hunt. . . . A French man & his family Came to see me to day. . . . This man made complaint that he had lost a Hogg—Some Hog meat had been brought in as before mentioned, as the men whome brought it in are absent, I postpone the inquirey untill tomorrow. . . . R Field Killed a Deer to day." 9th: "I took Collins & went to the place he found a Hog skinned & Hung up, the Crows had devoured the meet, Killed Prary fowl § and Went across a Prary to a 2nd Bank where I discovered an Indian Fortification, near the Second bank I attempted to cross a Bond of about 400 yds Wide on the Ice & Broke in. . . . The Wind from the W, across the Sand Islands in the Mouth of the Missouras, raised Such a dust that I could not See in that derection, the Ice Continue to run & river rise

* William Trelease, director of the Missouri Botanical Garden, studied this description and decided that the *Moc-cup-pin* probably is the white water lily (*Nymphaea tuberosa*).³⁴³ Glen Winterringer, curator of the herbarium of the Illinois State Museum, studied a description of the "macopine" by the Sieur de Liette, and thought that the species probably is the American lotus (*Nelumbo lutea*).⁵⁴ Archaeologists working in the north part of the American Bottom studied Liette's description of the macopine and concluded that it might be *Ipomoea pandurata*, the wild sweet potato or man-of-the-earth.¹²¹ John Voss and Virginia Eifert of the Illinois State Museum studied a description of the macoupin by Claude Allouez and concluded that it is indeed *I. pandurata*.³⁵⁶ This member of the morning glory family does not grow in flooded situations, so it cannot be the macoupin that was harvested from the backwaters of the Illinois River. Liette described how the Illinois gathered these roots: ". . . I have seen the women . . . wade sometimes up to the waist, so that they often duck their head under the water to pluck them up."²⁴⁹ A footnote on page 31 discusses another possible identity for the macoupin.

† One word in the manuscript is illegible.

‡ A longer description of "Pokers hake" or *Po-kish'-a-co-mah'* is on page 48.

¶ Deboues R. = Wood River.

§ Prary fowl = greater prairie-chicken.

Slowly." 11th: "One man McNeal out last night, he Sepperated from the hunting party about 7 miles from this place, he returned this evening. Sgt. Ordway was also lost all night." 14th: "The party Caught 14 Rabits to day & 7 yesterday." 19th: "Gibson Killed 3 Deer & Colter 3 Turkey, Shields 4 Turkey, Worne & Thompson 14 rabits." 20th: "Many Grous * Caught to Day & Hall Caught 14 Rabits." 23rd: "Caught 14 rabits & Killed 2 Deer." 25th: "2 Deer Killed to day &c." 26th: "Gibson Killed two Deer, R. field one, the men Kill Racoons . . . Rabits &c in great quantity." 27th: "Winser who was out Last night returned. He Killed a Deer & Turkey—Gibson Killed 1 Deer to day, Collons one near camp." 29th: "Shields Killed a Deer to day." 30th: "Send out 10 hunters to day in three parties. . . . Reed Killed a Deer & wild Cat. . . . The hunters killed 5 Deer to day." ²³⁹

February 4th: "Wild fowl pass. . . . Frost, number of Swan & Gees from N. & S." 5th: ". . . send out Shields to get walnut Bark for pills, [†] fowl pass." 6th: "Sick take Walnut pills, Winser killed a Badger. [‡] My P work [¶] &c. Great numbers of wild fowl flying Northerly. Swans in great number." 7th: "Rain Incres a little, The Creek or River a Dubois [§] raisin fast, Swept off a canoo belonging to a Maumies ^{**} Indian from out its mouth. If the present fresh ^{††} continue a few days, the water passing down this small river will Wash off all that immence quantity of mud which has filled up its mouth for 300 yards by the Missourie Oze or mud. ^{‡‡} . . . Swans passing." 8th: "Many Swans from N W." 10th: "Some Gees pass from the S." 11th: "The Sugar Maple runs freely, ^{¶¶} Swans pass from the North." 12th: "Pigeons ^{§§} Gees & Ducks of

* These "many Grous" probably are greater prairie-chickens. Ruffed grouse are native to the region, but they are not likely to have been shot or trapped in large numbers. The expedition's log for January 9 refers to prairie-chickens as "Prary fowl"; but in November 1803 in Alexander County, Meriwether Lewis called them heath hens or grouse ("saw a heath hen or grouse," and "saw some *Heth hens* or *grows*"). ²⁷⁵

[†] Captain Clark had been very sick since February 1.

[‡] About 1918 a Big Rivers resident had a different sort of encounter with a badger near Jerseyville. Descendants of R.M. Wylder tell the story of a badger that climbed the family's patriarch "almost up to his throat before he was able to throw it off." ³⁸²

[¶] "My pills work."

[§] Creek or River a Dubois = Wood River.

^{**} Maumies = Miami.

^{††} Fresh, or *freshet*: a freshening or rise in a stream.

^{‡‡} Sediment from the Missouri River had choked the lower 300 yards of the Wood River.

^{¶¶} Sap was rising in the sugar maples.

^{§§} Pigeon = passenger pigeon.

Various kinds have ret^d!" 13th: "The first appearance of the blue crain." *
15th: "Emmence quantity of Swan in the mars." ^{239, 343}

March 7th: "Saw the first Brant return." 20th: "The men find numbers of Bee Trees, & take great quantities of honey. . . . George Shannon Caught 3 large Cat fish—The musquetors are verry bad this evening. . . . Saw the 1st Snake which was the kind usially tirmed the *Garter Snake*, saw also a Beatle of black colour with two red stripes on his back passing each other Crosswise, from the but of the wing towards the extremity of the Same. † Heard the first frogs." 25th: "Saw the 1st White *Crains* [‡] return." 26th: "A verry smokey day. . . . Several Fish Caught to day." 27th: "The buds of the Spicewood [¶] appeared, and the tausels of the mail Cotton wood [§] were larger than a large mulberry the grass begins to Spring. . . . the atmispere has been verry Smokey and thick. ** . . . Saw large insects which resembled musquitors, but doubt whether

* Blue crain = great blue heron.

† Perhaps these insects are box elder bugs of the genus *Leptocoris*, or milkweed beetles (*Lygaeus*).

‡ The White *Crain* probably is the great egret. Other possibilities are the snowy egret and the whooping crane.

¶ Spicewood = spicebush (*Lindera benzoin*).

§ The male flowers of the cottonwood are staminate catkins ("tassels").

** The smoky atmosphere mentioned on March 26 and 27 probably was caused by widespread burning of woodlands, prairies, and marshes. Early spring was a time of extensive burning in the region. At the confluence of the Mississippi and Ohio Rivers on March 28, 1766, John Jennings noted, "At some distance over this Point, saw a great Smoke." ⁶ On March 22, 1833, Prince Maximilian took note of wildfires at the mouth of the Kaskaskia River: "A wooded chain of hills runs along the Kaskaskia, in which large columns of smoke were rising, doubtless occasioned by the woods being on fire." ³⁴⁴

The principal season for wildfires spanned the autumn and early winter. Meriwether Lewis was hampered by a smoky sky when he used a sextant at the mouth of the Kaskaskia River on November 28, 1803: "This Morning being verry Smokey" prevented him from "being as acurate as I could wish." ²⁷⁵ The smoky, hazy autumnal season was known as Indian Summer. John Bradbury portrayed Indian Summer in the region around St. Louis in 1809–11:

About the beginning or middle of October the Indian summer commences, and is immediately known by the change which takes place in the atmosphere, as it now becomes hazy, or what they term smoky. This gives to the sun a red appearance, and takes away the glare of light, so that all the day, except a few hours about noon, he may be looked at with the naked eye without pain: the air is perfectly quiescent and all is stillness, as if nature, after her exertions during the summer, were now at rest. ⁴⁹

William Faux wrote about Indian Summer in southern Illinois in 1819:

The season, called the *Indian summer*, which here commences in October, by a dark blue hazy atmosphere, is caused by millions of acres, for thousands of miles round, being in a wide-spreading, flaming, blazing, smoking fire, rising up through wood and prairie, hill and

they are really those insects or the fly which produces them, they attempted to bite my horse, but I could not observe that they made any impression with their Beaks." * 30th: "Prior is verry sick. I sent out R Fields to kill a squirel to make him Soup." ^{239, 343}

April 1st: "The Spicewood is in full bloe, the dogs tooth violet, and may apple appeared above ground." 5th: "The buds of peaches, apples & Cherrys appear." 6th: "A large flock of Pelicans appear." 7th: "The leaves of some Apple trees have burst their coverts and put forth, the lieves of the green wood bushes have put foth. Maney of the wild plants have Sprung up and appear above ground." 10th: "No appearance of the buds of the Osage apple, [†] the Osage Plumb [‡] has put forth their leaves and flower buds: tho it is not yet completely in bloe." 13th: "The peach trees are partly in blume the brant, Geese, Duck, Swan, Crain and other aquatic birds have disappeared verry much, within a few days and have gorn further North I prosume. The Summer duck [¶] raise their young in this neighbourhood and are now here in great numbers." 17th: "Peach trees in full Bloome, the Weaping willow has put forth its leaves and are 1/5 of their size, the *violet* and *doves foot*, [§] & *cowslip* ^{**} are in bloe, the *dogs tooth violet* is not yet in blume. The trees of

dale, to the tops of low shrubs and high trees, which are kindled by the coarse, thick, long, prairie grass, and dying leaves, at every point of the compass, and far beyond the foot of civilization, darkening the air, heavens and earth, over the whole extent of the northern and part of the southern continent, from the Atlantic to the Pacific, and in neighbourhoods contiguous to the all-devouring conflagration, filling the whole horizon with yellow, palpable, tangible smoke, ashes, and vapour, which affect the eyes of man and beast, and obscure the sun, moon, and stars, for many days, or until the winter rains descend to quench the fire and purge the thick ropy air, which is seen, tasted, handled, and felt.

So much for an Indian summer, which partakes of the vulgar idea of the infernal. Why called Indian? Because these fires seem to have originated with the native tribes, and are now perpetuated by the White Hunters, who by these means start, disturb, and pen up the game, and destroy the dens of both man and beast, and all this with impunity.³⁴¹

* Perhaps these insects are crane flies (*Tipulidae* or *Trichoceridae*).

[†] Osage apple = Osage orange (*Maclura pomifera*).

[‡] From Meriwether Lewis' description of the "Osage Plumb" (not quoted here), it appears to be *Prunus angustifolia*, which is now called the Chickasaw plum. Lewis sent some living slips of "Osages Plums" to Thomas Jefferson in March of 1804, explaining that the shrub grows along the Osage River, 260 miles west of St. Louis. Although *Prunus angustifolia* is native to southern Illinois, Lewis obtained his specimens in St. Louis from the garden of Pierre Chouteau, "who resided the greater portion of his time for many years with the Osage nation."¹⁷³

[¶] Summer duck = wood duck.

[§] Both the wild geranium (*Geranium maculatum*) and the wild columbine (*Aquilegia canadensis*) have been called the dove's foot.

^{**} A number of early spring wildflowers have been called cowslips, including the shooting star (*Dodecatheon meadia*), bluebells (*Mertensia virginica*), early buttercup (*Ranunculus fascicularis*),

I believe this is the finest Confluence in the World. — Father P.F.X. de Charlevoix at the junction of the Mississippi and Missouri Rivers in 1721.⁶⁷

the forest particularly the Cotton wood begin to obtain from their Size of their buds a Greenish cast at a distance. The Gooseberry which is also in this countrey and lilack * have put forth their leaves. . . . Completed packing fifty Kegs of Pork & roled & filled them with brine, also packed one Bar." † 18th: "Newmon Killed a Black Lune. ‡ Vegetation appears to be supriseingly rapid for a few days past, R F killed a Muskrat." 26th: "The White frost Killed much froot near Kahokia, while that at S^t. Louis escaped with little injurey." 30th: "White frost, Slight did but little injurey." ^{239, 343}

May 9th: "I send to the Missouras [¶] Water for drinking water, it being much cooler than the Mississippi which Keeps possession of about 1/4 of the bead or Channel." ³⁴³

As time neared to depart for the far West, Meriwether Lewis and William Clark became more and more occupied with preparing the crew and loading their boat. This hustle of activity may explain the dearth of natural history observations in early May. The Voyage of Discovery "Set out from the River Dubois up the Missouri" on May 14th.

1804: Zadok Cramer

Zadok Cramer's *Navigator* was an invaluable guidebook for river pilots during the early 1800s. The fourth edition of *The Navigator*, issued in 1804, is the first to include the Mississippi River. Cramer portrayed the area around the mouth of the Illinois River:

The Illinois is navigable for about 500 miles, and the country for 12 or 15 miles around where it joins the Mississippi, can be, perhaps, exceeded by none, either in variety of scenery or in beauty of prospect; and Col. Morgan § is of opinion, that this is the spot that some French writers call the "TERRESTRIAL PARADISE." The large meadows, in which are lakes of limpid waters, the gently ascending copses of wood, added to the extensive view of the rivers,

and marsh marigold (*Caltha palustris*).

* Apparently French residents had brought lilacs to the area.

† Bar = bear.

‡ Black Lune = common loon.

¶ Missouras = Missouri River.

§ George Morgan was a Philadelphia businessman who traded in the Illinois Country.

both up and down, of which you have a pretty sight from off an eminence below the Illinois—all tend to render the place truely delightful.⁸⁶

1805–06: Zebulon Pike

Zebulon Pike commanded a U.S. Army mission to find the source of the Mississippi River in 1805–06. This expedition allowed the Army to prepare a preliminary sketch of the Mississippi's channels and islands before the river had been mapped in detail. The 21 soldiers set out from their camp near St. Louis on August 9, 1805. By August 11 the men had propelled their 70-foot keelboat as far as the mouth of the Illinois River. Major Pike wrote,

Dined at the cave below the Illinois, at the mouth of which river, we remained some time. From the course of the Mississippi, the Illinois might be mistaken for a part of it. Encamped on the lower point of an island, about 6 miles above the Illinois; were much detained by passing the east side of some islands above the Illinois; and were obliged to get into the water and haul the boat through.²⁶⁴

On August 12: ". . . passed Buffaloe, or riviere au Boeuf, * above which, about 5 miles, commences a beautiful cedar cliff, † having passed this, the river expands to nearly two miles in width, and has four islands, whose lowest points are nearly parallel caught one catfish. Distance 29 3-4 miles."²⁶⁴

August 13: "Late before we sailed, passed a vast number of islands; . . . were much detained by sand bars, and were obliged to haul our boat over several of them Distance 27 miles."²⁶⁴

August 14:

. . . passed a camp of Sacs, consisting of 3 men, with their families: they were employed in spearing and scaffolding a fish, about 3 feet in length, with a long flat snout; ‡ they pointed out the channel, and prevented us from taking the wrong one: I gave them a small quantity of whiskey and biscuit; and they in return, presented me with some fish. Sailed on through a continuation of islands, for nearly twenty miles . . . encamped on an island; caught 1375 small fish Distance 28 miles.²⁶⁴

On August 15 the keelboat plied past the mouth of the Salt River. The soldiers continued up the Mississippi and were soon beyond the Big Rivers Area.

* Buffaloe River or riviere au Boeuf = Cuivre River.

† The cliff is Cap au Gres.

‡ This is the paddlefish.

The expedition failed to reach the origin of the Mississippi River. They headed back down the river in the spring of 1806. On April 28, a few miles above the northwest extremity of the Big Rivers Area, the soldiers sacked a nesting colony of passenger pigeons:

Stopped at some islands about 10 miles above Salt river, * where there were pigeon roosts, and in about fifteen minutes my men had knocked on the head and brought on board 298. I had frequently heard of the fecundity of this bird, but never gave credit to what I then thought inclined to the marvellous; but really the most fervid imagination cannot conceive their numbers. Their noise in the woods was like the continued roaring of the wind, and the ground may be said to have been absolutely covered with their excrement. The young ones which we killed were nearly as large as the old, they could fly about ten steps, and were one mass of fat; their crows were filled with acorns and the wild pea. They were still reposing on their nests, which were merely small bunches of sticks joined, with which all the small trees were covered. Met four canoes of the Sacs, with wicker baskets filled with young pigeons. They made motions to exchange them for liquor, to which I returned the back of my hand. †²⁶⁴

Two days later the expedition was back at St. Louis, "after an absence of eight months and twenty two days."

In his summary of observations "on the soil, shores, quarries, ‡ timber, islands, rapids, confluent streams, highlands, prairies; the savages and settlements," Major Pike wrote,

Immediately on the peninsula formed by the confluence of the rivers Mississippi and Missouri is a small Kickapoo settlement, occupied in summer only. On the west shore a rich prairie, with small skirts of woods; and on the east shore is generally high hills, from eighty to one hundred feet, extending to the mouth of the Illinois. The current of the Mississippi, above the entrance of the Missouri is quite mild, until you arrive at the mouth of the Illinois; where, owing to the large sand-bars and many islands, it is rendered extremely rapid. The Illinois river is about four hundred and fifty yards wide at its mouth The current appears not to exceed two and a half miles per hour. . . . From the Illinois to the Buffalo river ¹ the E. shore is hills, but of easy ascent. On the W. is contin-

* The Salt River enters the Mississippi at the town of Louisiana in Pike County, Missouri, bordering the southwest corner of Pike County, Illinois.

† A map of the Mississippi River accompanying Pike's report shows a series of islands labeled "Pigeon Islands." Depending on which part of the river had the nests, the passenger pigeons seen by Major Pike were in Pike County, Illinois, or Pike County, Missouri, or both. As Daniel McKinley has pointed out, "... it is probably not possible to decide to which state the nesting ought to be accredited. At any rate it is a matter of political, not pigeon, geography." ²²⁰

‡ In former times an outcrop of economically valuable minerals might be termed a quarry even though the site had not yet been quarried.

¹ The Buffalo River, now called the Cuivre River, enters the Mississippi on the west side about 18 miles upstream from the mouth of the Illinois River.

ued the prairie, but not always bordering on the river. Timber, on both sides, generally hackberry, cottonwood, and ash. The Buffalo river comes in on the W. shore, and appears to be about 100 yards wide at its mouth. . . . From the Illinois to this river the navigation is by no means difficult, and the current mild.

From thence to Salt river (or Oahahah) the east shore is either immediately bounded by beautiful cedar cliffs,^{*} or the ridges may be seen at a distance. On the W. shore there is a rich low soil, and two small rivers which increase the waters of the Mississippi. The first I called Bar river, about twenty yards in width. The second is about fifteen yards. Salt river . . . is about 100 or 120 yards wide at its entrance, and, when I passed, appeared to be perfectly mild, with scarcely any current. . . . In this distance the navigation of the Mississippi is very much obstructed by bars and islands; indeed, to such a degree as to render it difficult to find (in many places) the proper channel. The shores are generally a sandy soil, timbered with sugar maple, ash, pecan, locust, and black walnut. . . . From this is the river Jaustioni[†] (which is our boundary between the Sac nation and the United States, on the west side of the Mississippi) we have the hills on the W. shore and low lands on the E. the latter of which is timbered with hickory, oak, ash, maple, pecan, &c. The former the same, with an increase of oak. The E. is a rich sandy soil, and has many very eligible situations for cultivation.^{‡ 264}

1806: Thomas Ashe

Thomas Ashe toured the Mississippi and Missouri Rivers in the general vicinity of St. Louis in September of 1806. He reported his observations to British readers in *Travels in America*:

The Mississippi below the Messauri is always muddy. The current is so rapid, that it never can be stemmed by the force of the wind alone acting on sails. . . . During its floods, which are as periodical as those of the Nile, the largest vessels may descend. . . . These floods begin in April, and do not entirely subside till the end of August. Above the mouth of the Messauri, the Mississippi is as clear and gentle as the Ohio, and nearly as wide: the period of its floods are nearly the same, but not rising to so great a height.

^{*} Two of the maps that accompany Pike's report label these uplands along the river in Calhoun County as "Handsome Rocky Cliffs."

[†] River Jaustioni = Fabius River, which enters the Mississippi River near Quincy.

[‡] Another version of Zebulon Pike's account appeared in London in 1811.²⁶⁵ Pike's descriptions of the Mississippi valley are arranged in different ways in the two editions, and the British edition is more generalized: for instance, "1375 small fish" was rendered "a considerable number of small fish" by the British editor.

The Mississippi yields turtle of a peculiar sort, perch, trout, gar, pike, mullets, herrings, carp, spatula,* a fish of fifty-six pounds weight, cat-fish of one hundred pounds weight, buffaloe fish and sturgeon. . . . It also has a prodigious quantity of herons, cranes, ducks, brants, geese, swans, and water-pelicans swimming on its surface, and breeding in its vicinity.[†]

The Messauri is in fact the principal river, contributing more to the common stream than does the Mississippi, even after its junction with the Illinois. It is remarkably cold, muddy, and rapid. Its overflowings are considerable. They happen during the months of June and July.

. . . twenty miles above the Messauri on the east or right hand side the Illinois river enters.[‡]

. . . About twenty miles above St. Louis, the Messauri empties itself into the Mississippi on the West side.

. . . The junction of the two rivers is very beautiful. The waters of the Messauri being white, and those of the Mississippi a transparent green. They do not mix for a considerable time, but repel each other and preserve their particular colours for five or six miles at least. The water of the Messauri is so thick, that one third of a tumbler is always a strong sediment.¹³

1812: Ninian Edwards

Ninian Edwards, Governor of the Northwest Territory in 1812, enlisted field agents to learn details about the water passage from St. Louis to Michilimakanac (Mackinac, at the straits between Lake Michigan and Lake Huron). In 1870 his son Ninian W. Edwards published *History of Illinois, from 1778 to 1833; and Life and Times of Ninian Edwards*, which includes his father's notes about the St. Louis–Michilimakanac route. These notes afford an insight into how well the geography of the Illinois River valley was known in 1812. Following is an extract from Governor Edwards' "Names of the Rivers Emptying into the Illinois River."

* Spatula = paddlefish.

† Although flocks of American white pelicans were often seen along the Illinois section of the Mississippi River during the 1800s, they have never been known to breed in Illinois. Thomas Ashe's list of animals pertains to the Mississippi River in general—not solely the region around the confluence of the Mississippi and Missouri Rivers.

‡ Mr. Ashe continued this section of his narrative with a generalized discussion of the Illinois River valley, derived (without attribution) from Thomas Hutchins' 1778 *Topographical Description* (page 38).

The first river, in going up the Illinois River, is the Fouchai River, on the south side and about six miles from the mouth of the Illinois River. * The River Ma-ka-pinn † is two miles above the Fouchai and on the same side of the Illinois. ‡ On the south side and three leagues above is the Linoise. ¶ On the same side and two leagues above is La Pomme, or Apple River. § On the north side and two leagues above Apple River is River Chabot. ** Mouse River, †† on the south side, is three leagues higher, and from this river it is one day's march to the Mississippi. Two and a half leagues higher, on the north side, is Blue River. ‡‡ Two leagues above Blue River, on the north side, is Pierre a la Fleche, or Arrowstone River. ¶¶ On the south side, two leagues above Pierre a la Fleche, is Negro River. §§ Mauvaise-terre River *** is one and half leagues higher.¹⁰³

* The first sizeable stream to enter the Illinois River is Otter Creek in Jersey County. It is on the east side about 12 miles above the mouth of the Illinois River. Governor Edwards' notes refer to the right bank of the Illinois River (facing upstream) as the "south side." The Illinois River below Hennepin generally trends to the south; Edwards' "south side" would be more appropriately called the "east side."

† River Ma-ka-pinn = Macoupin Creek, which forms the boundary between Jersey and Greene Counties.

‡ Macoupin Creek is about four miles above Otter Creek. The distance from the mouth of the Illinois River to Otter Creek was understated by Governor Edwards. The same underestimation is true for the stated distance from Otter Creek to Macoupin Creek. Edwards' informants were French, and the distances are more nearly correct if stated in French leagues rather than English miles—that is, six leagues (rather than six miles) from the mouth of the Illinois River to Otter Creek, and two leagues (rather than two miles) between Otter Creek and Macoupin Creek. A French league is about two and one-half miles. Except for the distances to Otter Creek and to Macoupin Creek, Ninian Edwards used leagues rather than miles to report all the distances from point to point along the Illinois River.

¶ Perhaps the Linoise was an outlet for several small creeks and sloughs in Greene County that have been eliminated by White Ditch.

§ La Pomme or Apple River = Apple Creek, in Greene County.

** If the distance above Apple Creek is correctly stated, the River Chabot is Hill Creek in Pike County. Hill Creek is quite small, but it is a good landmark because its mouth is bordered by steep hills. The town of Pearl is in the valley of Hill Creek.

†† Mouse River = Sandy Creek, in Scott County.

‡‡ Blue River = Blue Creek, in Pike County.

¶¶ Pierre a la Fleche or Arrowstone River = Flint Creek, in Pike County.

§§ Governor Edwards' information about the Negro River does not fit any stream. Edwards placed the Negro River two leagues above Flint Creek and one and one-half leagues below Mauvaise Terre Creek—but the mouth of Mauvaise Terre Creek is actually only about one league above Flint Creek. Furthering the confusion, an 1823 gazetteer of Illinois states that Mauvaise Terre Creek was "called by the traders, Negro Creek."²⁷ See a footnote on page 102 for further discussion about the Negro River.

*** Mauvaise-terre River = Mauvaise Terre Creek, in Scott County. This is the first sizeable stream entering the Illinois River north of the Big Rivers Area.

... the most of the Canadians that go to this country remain there, there being no better country for a lazy man than that . . . — French Canadian Charles Gratiot, after a visit to the north end of the American Bottom in 1774.¹²⁹

1812: Amos Stoddard

In his *Sketches, Historical and Descriptive, of Louisiana*, Major Amos Stoddard observed,

A prairie bottom stretches from the mouth of the Missouri along the west bank of the Mississippi to sandy creek or bay, about sixty five miles, where our settlements in that quarter terminate; and the width of it is from four to six miles, and in some places it exceeds ten miles. The soil is of a luxuriant nature, and yields in abundance; but the want of wood and spring water, of which the prairie bottom is almost destitute, obliges the settlers to plant themselves on the margins of the high grounds.

. . . It is difficult to ascertain the general width of the Mississippi. That part of it between the falls of St. Anthony * and the Illinois varies from three hundred to nine hundred yards, and in some instances exceeds two thousand yards. At the mouth of the Missouri, it is about two thousand five hundred yards³²⁴

1813: Black Hawk

In the late spring or early summer of 1813 Black Hawk led a Sauk war party to avenge the death of his adopted son. Black Hawk recalled the incident in his autobiography: "I immediately collected a party of thirty braves We started in canoes, and descended the Mississippi I landed, with one brave, near Capo Gray; the remainder of the party went to the mouth of the Quiver."^{† 44}

The men were near the village of Cap au Gris, on the Missouri side of the river opposite Cap au Gres, the bluff in Calhoun County. A fight broke out near the mouth of the Cuivre River. Black Hawk and his companion hid along the road between the Cuivre River and the fort at Cap au Gris. They ambushed two horsemen, but did not pursue two boys who had hidden in bushes along the road.⁴⁴

1813: John Reynolds

Soldiers advanced north through the Big Rivers Area in the autumn of 1813 to attack villages in the vicinity of Peoria Lake. John Reynolds, who later became the fourth Governor

* These falls are at Minneapolis.

† Quiver = Cuivre River.

of Illinois, earned his sobriquet "the Old Ranger" during this war. He told of the 1813 campaign in *My Own Times*, his combined autobiography and history of Illinois:

. . . I was . . . ordered to the Grand Piasa, nearly opposite Portage des Sioux, in Missouri.

. . . we all crossed the Illinois River a few miles above its mouth.

. . . We marched up the margin of the Illinois River and crossed over the bluff to the Salt Prairie, in the Mississippi Bottom. *

. . . In this section of the country the bee trees were numerous. I never saw any part of the earth so much blessed with honey. Boat-loads might have been procured in this part of Illinois. ²⁸¹

1813-15: John Shaw

John Shaw was a Ranger during the War of 1812. Fighting continued beyond the peace treaty of 1814 and into 1815. In the summer of 1813 Shaw was at the fort in Cap au Gris, Missouri. This village is on the Mississippi River opposite Cap au Gres, the enormous sandstone precipice that forms a section of the riverbank in Calhoun County. Shaw was one of 14 soldiers who crossed the river to confront about 60 or 80 Indians upstream from Cap au Gres. According to Shaw's memoir, the soldiers immediately retreated: ". . . we instantly retraced our steps towards Cape au Gris rock, a distance of some four or five miles." All but Shaw were killed along the way. He "quickly turned down the river bank, leaped a small stream in a single bound, and then running along the side of the dripping rock, closely pursued by three Indians." That night, some 20 miles below Cap au Gres, Shaw "made a raft of dry sticks fastened together with grape vines" and returned to the Missouri shore. ^{† 299}

In the following year, Shaw's memoir recalls "a young man named Bolles went to a deer-lick [‡] at the foot of the bluff, about two and a half miles from Cape au Gris, and was there shot and scalped." ²⁹⁹

In May of 1815 the Mississippi River was in flood; this gave the advantage to the Sauk, who used canoes to launch surprise attacks from the backwaters and then flee. A report from St. Louis noted, "The extraordinary rise in the waters of the Mississippi, overflowing its banks in many places, and filling up the lakes and rivulets in the neighborhood, enables the Indians to attack and to baffle pursuit." ³²⁰ During this period the Battle of the Sink-

* Salt Prairie lay along the Mississippi River near Gilead. The soldiers crossed from the Illinois River to the Mississippi where the Dividing Ridge of Calhoun County is narrowest.

† Lyman Draper, who recorded Shaw's reminiscences in 1855, wrote, "The Indians conferred on him the name of Es-sap-pan, or 'The Raccoon'—perhaps expressive of his cunning and sagacity." ³⁰⁰

‡ A deer lick is a place frequented by deer because the earth or groundwater seepage is rich in mineral salts.

Hole took place about four and one-half miles southwest of Cap au Gres. Soldiers from Cap au Gris and nearby Fort Howard chased about 30 or 40 Sauk (and perhaps their allies) into a sinkhole that was about 60 feet long, 12 to 15 feet wide, and 10 or 12 feet deep. According to John Shaw, an undercut on one side was large enough to shelter 50 or 60 persons. *²⁹⁹

1814: Henry Marie Brackenridge

Mr. Brackenridge came to live along the Mississippi River adjacent to the American Bottom in 1810. He then compiled an extensive body of knowledge about the geography of the lower Mississippi River valley and the Missouri River. In 1814 he published *Views of Louisiana*, in which he observed,

Above the Missouri, the Mississippi is clear and limpid, like the Ohio, and bordered by a country extremely beautiful, with many fertile spots

. . . The Mississippi is remarkable for the muddiness of its waters, a quality altogether derived from the Missouri, but is less turbid than that river; the waters above the junction, being clear, the accession of the Illinois, Ohio, and other clear streams tending also to render it more limpid than the Missouri.

. . . The floods of the Mississippi usually begin in April; commencing with the first flood of the Missouri which is usually in March, on the breaking up of the ice; this is followed by the Mississippi above the junction, afterwards by the Ohio, and other rivers. The great flood of the Missouri begins in June, shortly after which those of the Mississippi, in consequence attain their greatest height. It subsides in August.⁴⁸

On one memorable excursion, Henry Brackenridge looked across the prairie south of the confluence of the Illinois and Mississippi Rivers. His vantage point was the Mamelles, a set of hills near St. Charles, Missouri, about 10 miles from the mouth of the Illinois River:

To those who have never seen any of these prairies, it is very difficult to convey any just idea of them. Perhaps the comparison to the smooth green sea, is the best. Elevated about one hundred feet above the plain, I had a view of an immense extent. Every sense was delighted, and every faculty awakened.

After gazing for an hour I still continued to experience an unsatiated delight, in contemplating the rich and magnificent scene. To the right, the Missouri

* Black Hawk recalled this battle in his autobiography: "We crossed the creek, and formed ourselves in the timber. . . . The enemy rushed upon us They surrounded us, and forced us to run into a deep sink-hole, at the bottom of which there were some bushes." ⁴⁴ Black Hawk related this incident as if it were part of the fight on the Cuivre River (page 60), but there were actually two fights in the same neighborhood. The Cuivre River skirmish was in 1813, and the Battle of the Sink-Hole was in 1815. John Shaw incorrectly stated in his memoir that the Battle of the Sink-Hole was in 1814.²⁹⁹

is concealed by a wood of no great width, extending to the Mississippi; the distance of ten miles. Before me, I could mark the course of the latter river, its banks without even a fringe of wood; on the other side, the hills of the Illinois, faced with limestone, in bold masses of various hues, and the summits crowned with trees: pursuing these hills to the north, we see, at the distance of twenty miles, where the Illinois separates them, in his course to the Mississippi. To the left, we behold the ocean of prairie, with islets at intervals. The whole extent perfectly level, covered with long waving grass, and at every moment changing color, from the shadows cast by the passing clouds. In some places there stands a solitary tree of cotton wood or walnut, of enormous size, but, from the distance, diminished to a shrub. Fifty thousand acres of the finest land, are under the eye at once, and yet on all this space, there is but one little cultivated spot to be seen!

When the eyes are gratified, with the survey of this beautiful scene, the mind naturally expatiates on the improvements of which it is susceptible, and creative fancy, adorns it, with happy dwellings and richly cultivated fields. The situation in the vicinity of these great rivers, the fertility of the soil, a garden spot, must one day yield nourishment to a multitude of beings. The bluffs are abundantly supplied with the purest water; those rivulets, and rills, which at present, are unable to reach the great father of waters, and lose themselves in lakes and marshes, will be guided by the hand of man into channels fitted for their reception, and for his pleasure and felicity.⁴⁸

1814: Zadok Cramer

The eighth edition of Cramer's *Navigator* provides these details for river pilots descending the Mississippi River below the Illinois:

From the mouth of the Illinois to Wood river a little below the Missouri, there is a beautiful settlement rapidly increasing, principally of Americans, and a few French. This settlement extends through an extensive rich prairie, affording strong vegetation, and is finely watered. The herds of cattle through this country are numerous, and their lively and sleek appearance, afford an evidence of the rich productions of the soil in which they pasture.

Island No. 1, opposite the mouth of the Illinois, channel right side.

Island No. 2,

Lies nearest the left shore, channel to the right. On the right shore opposite the head of this island is a sand bar.

Island No. 3,

Right side, channel to the left. From the head of this island, Portage

Desieu * strikes the Missouri in nearly a straight line, about six miles distant.

Island No. 4, channel to the right.

Island No. 5, right shore, channel to the left.

Island No. 6, immediately above the mouth of the Missouri,
Channel on either side.⁸⁵

The next landmark, 18 miles below the mouth of the Illinois River, is "Mouth of the Missouri."

In addition to an island-to-island log of the Mississippi River, Zadok Cramer's *Navigator* provides a general overview of the Illinois and the Mississippi. The guidebook mentions that the Illinois River "is 400 yards wide at its mouth." Cramer derived further details about the river from Patrick Kennedy's "Journal of an Expedition . . . to the Head Waters of the Illinois River" (page 35) and Thomas Hutchins' *Topographical Description* (page 38). Cramer's general description of the Mississippi River was taken from Thomas Jefferson's *Notes on the State of Virginia* (page 41). †

1814: Volney P. Richmond and John G. Henderson

As a child growing up in Madison County, Volney Richmond listened to stories of the Wood River massacre, related by the father of two of the children who were killed. The killings occurred on July 10, 1814, close to the point where the two forks of the Wood River join and enter the American Bottom on the east side of Alton. According to the story, a woman discovered her two slain children lying along a road at night. She was frightened from the scene of the massacre by "a crackling noise and flash of light from a burning hickory tree near by." When neighbors arrived they "found the trail of the Indians marked by broken bushes and trampled grass."²⁸³

The killers had an overnight head-start before they were tracked. In his *Early History of the "Sangamon Country,"* John Henderson detailed the subsequent two-day pursuit by mounted Rangers:

The Indians were on foot, and proceeded northward through what are now called, Jersey, Greene, and Morgan counties. . . . The Indians took, of course, every advantage that their mode of traveling gave them over their pursuers. Now their trail led through thickets impenetrable to horsemen, and, again, through swamps that would mire the horses of the Rangers if they attempted to follow. On such occasions it was necessary for the horsemen to dismount, a part of their number to take care of the horses and the balance follow on foot

* Portage Desieu = Portage des Sioux (the portage, not the town).

† Cramer did not give credit to any of these sources for their information.

until they came again to open country or solid ground, where they could again mount their horses.¹⁵²

Although John Henderson stated that the chase extended across Jersey, Greene, and Morgan Counties, he also reported that the Indians ran north to Island Grove in western Sangamon County before turning west to the Illinois River: "Until they arrived at Island Grove, they had not varied much from the 'old Indian trail,' which for centuries had been traveled between Cahokia and Peoria . . ." ¹⁵² This route would have taken them from Madison County north through Macoupin and Sangamon Counties rather than by way of Jersey and Green Counties. The chase ended in Morgan County.

John Shaw took part in the pursuit, which involved some 30 to 50 Rangers.²⁹⁹ The Indians numbered perhaps ten. The two parties were sometimes within sight of each other, but the runners were able to elude the horsemen. All but perhaps two or three of the fugitives managed to escape by swimming the Illinois River near Naples.

1815: William Rector and Michael Jones

The upper Mississippi River has an abundance of side channels. These channels caused much confusion when the U.S. General Land Office prepared to survey the western edge of the Illinois Territory in 1815. A recent act of Congress had defined the western boundary of the territory as the middle of the channel of the Mississippi River—but persons disagreed about what comprises “the middle of the channel.”

William Rector was in charge of the surveying project. He assigned Charles Lockhart to map the islands lying east of the main channel of the river. Michael Jones, Register of the Land Office at Kaskaskia, subsequently expressed doubt about the appropriateness of Rector’s assignment to Lockhart. Rector spelled out the disagreement in a letter to Surveyor General Edward Tiffin:

Soon after M^r Lockhart set out on this business I went to Kaskaskia, and by a conversation with Colo. Jones (the Register of the Land Office for that District) I found that he had doubts, whether the middle of the Channel or bed of the Mississippi, ought to be considered the middle of the river as express^d in the Act of Congress where a Slue or Bayou puts out from the River and after meandering through the bottom several miles, flows into the River & thereby forms an Islands several miles in length & (say) two miles in width. In such cases Colo. Jones seems to think that, the distance from the Easterly margin of the Bayou should be taken across the Slue, the Island & the River to the Westerly margin thereof, & that at half the distance between the Eastern margin of the Slue & the Western margin of the main River, should be considered the middle of the Mississippi River Agreeable to this construction of the Law the middle of the Mississippi River would frequently be found on dry land. And in that case it would become necessary to divide many Islands between the two Territories.

There are many Islands of considerable length, and in places several miles wide—I will in order to shew what effect such a construction of the Law would have, mention, an Island situated some distance above the Illinois River which is formed by a Bayou, called Slue Carty. * This Bayou I am informed from the place where it puts out of the main River meanders through the bottom at least fifty miles, when it again flows into it. And thereby forms an Island twenty or thirty miles in length on a Straight line and in places three or four miles wide. This Bayou in time of high water is navigable for large Boats. But in low water is not. Should the middle of the River be considered at half the distance from the Easterly margin of this Bayou to the West bank of the main river the Illinois Territory would be cut off from the advantage of navigation for a considerable distance and would moreover loose some Territory⁶⁴

The General Land Office decided to use the method advocated by William Rector rather than the approach expressed by Michael Jones. The territorial boundary (now the state line) was established in the middle of the main channel of the Mississippi River, and the boundary line did not cut across any islands. Mr. Jones supported this decision in a subsequent letter to the General Land Office in Washington. He also addressed another concern about the islands:

. . . it may happen that the Claim of an Individual may in time become extinct—The whole quantity purchased may in time be entirely washed away, for it frequently happens in the Mississippi that Islands wear away at the upper point & form or extend at the lower point—besides Boundaries established on the Islands may in time be entirely done away and doubts might arise what were the limits as originally survey'd and what might be considered as Alluvian—for it may so happen that in ten, fifteen or twenty years hence the same Island may have shifted considerably —⁶⁴

1816: Henry Allyn

At the beginning of August in 1816 Henry Allyn joined the crew that laid out the north part of the Fourth Principal Meridian. This meridian is the line of longitude from which the Military Bounty Tract was surveyed into townships and sections.[†] Mr. Allyn's auto-biography relates his role in the endeavor:

* The bayou known as Slue Carty ran down the entire west side of Pike County. This "running slough" later became known as The Sny.

† The Military Bounty Tract was Federal land when it was designated by Congress to be parceled out and awarded as bounties to veterans of the War of 1812. The tract encompasses all of the land between the Illinois and Mississippi Rivers, extending north from the junction of the rivers for 169 miles. The north line of the Military Bounty Tract is at the latitude of the great bend of the Illinois River in Putnam County, the same as the south boundary of Rock Island County.

. . . the Ridge . . . affords a most delightful prospect — The Mississippi is distinctly seen from its summit for more than twenty miles, — as are the beautiful meanderings of the Illinois River, for many leagues

— Thomas Hutchins' description of the view from the Dividing Ridge in Calhoun County in 1778.¹⁶⁸

. . . I engaged on a trip of surveying . . . to run the boundary lines of the Military tract which lay between the forks of the Mississippi and Illinois rivers, and had been ceded since the war * to the U.S. by the Sacs, Fox, † and Potawatomi Indians. All this region was then a wilderness and but little known by Americans.⁵

The Fourth Principal Meridian begins at the junction of the Illinois and Mississippi Rivers, and it extends due north through Jersey, Greene, Scott, and Morgan Counties until it intersects the Illinois River immediately downstream from Beardstown. This southern part of the meridian had already been staked out before Henry Allyn joined the surveyors. Allyn's crew therefore headed north across the Big Rivers Area without having to survey this part of the line:

The Fourth Principal Meridian, which started at the junction of the two rivers had been extended north some distance All our company met . . . and started the next day, for the wilderness, furnished with six pack horses, to convey our outfit. We passed through Edwardsville, a small village on the extreme frontier, and bidding adieu to civilization, entered the wilderness where nothing dwelt but beasts of prey, or men as fierce and wild as they.⁵

A few days later and "some forty miles in the wilderness," Allyn's ankle was sliced in a freak accident.[†] Though badly wounded, Allyn continued on the mission:

We proceeded on, but soon met with a serious mishap. The prairies of Illinois, at this early day, before the stock was numerous to kill out the native grass, were infested with a large green fly, numerous as the locusts of Egypt & as voracious. The cattle of the early settlers could not feed on the prairies only while the dew lasted in the morning: after which the cattle & horses would speed to the brush, & remain till near sunset. Their bite was severe: in less than a second after lighting, the blood would fly, & run down their sides in streams. Soon after starting the flies arose from the grass in myriads, & formed a perfect cloud around our horses, which began to pitch, rear, & snort. Several

* This is the War of 1812.

† Sacs = Sauk; Fox = Mesquakie.

‡ An axe head flew off its handle and bounced off another man's boot, "and the edge struck my left ankle, cutting a large gash to the bone and sever'd the leader, except by a small tissue."⁵

packages got loose and scattered, and one laden with a large sack of flour . . . , and the sack broke open This was an irreparable loss

We gathered what we could from some that fell in heaps, repacked, & arriving at a point of timber made a halt, kindled a fire, to make a smoke for the horses to stand in, & remained until the cool of evening. This practice we followed for several days which hindered our progress, but as we advanced North, the flies decreased, & became less troublesome.

Meanwhile Wheeler paid strict attention to my wound, . . . washing it once a day with a decoction of wild indigo, * as a remedy against mortification.

. . . Our hunter kept us well supplied with wild game Wild bees were plenty, almost every hollow tree was occupied, & we had honey to overflowing.

. . . Thus we progress'd as fast as circumstances would admit. The flies began to diminish, & troubled us but little. The country all prarie except here & there an island of timber of from 100 to 500 acres, & a narrow list of timber along the margins of the largest streams. We arrived at the Illinois bluff, at a place where the bottom was wide & timbered; & after advancing some distance, came to a body of water, but were in doubt whether it was the river. †

We pitched tent & staid over night, & part of our crew went to ascertain the certainty: & after proceeding along the margin, soon came to its termination, then passing around in a N.E. Direction, soon approached the river, which they knew by its having some current, & the surface not being covered so far from the shore by the enormous leaves of the water lily, & the water chestnut. ‡ Those lakes or slues are of frequent occurrence along the bottom lands of this river. Here we had the river to cross, & as it was not fordable, we made a raft of dry logs, & ferried ourselves & baggage over & swam the horses.

. . . The voracious flies that had been such a pest had nearly vanished, so that we were not retarded on that account. ⁵

The crew crossed the Illinois River immediately north of present-day Beardstown:

Having all crossed safely to the N. side of the river, we continued in a N.W. direction which we supposed would be the surest way to soon strike meridian.

* Members of the pea family in the genus *Baptisia* have most often been given the name "wild indigo." Two species of *Baptisia* would have been common along Allyn's route, but the decoction that was administered to him may have been prepared in advance of the trip. Amos Wheeler, the head of the crew, had "a supply of medicines and healing nostrums and salves in case of accident or necessity in this wilderness exposure." ⁵

† This body of water is Muscooten Bay.

‡ Water chestnut = American lotus (*Nelumbo lutea*).

We had not proceeded far until we fell in with it

From our leaving the river, to our arrival at the line, the bottom was heavy timbered till we asunderd the bluff, when an undergrowth of shrubbery set in, & continued until we arrived at the line, & did not end there, which much annoyed my wound. We commenced on the line; the land was broken & rough for a considerable distance, * & the jungles continued several miles. But at length the unbounded prarie opened before us, & the country became level & even. We progress'd without interruption, sometimes continuing the line till dark, in order to reach some island of timber to camp in: at others, stopping too early for the same purpose.⁵

The surveyors extended the Fourth Principal Meridian northward and then staked out the north boundary of the Military Bounty Tract, which now forms the south line of Rock Island County. After many adventures and misadventures, Henry Allyn arrived at Fort Clark in Peoria. The cut in his ankle had failed to heal, so he determined to head back down the Illinois River as quickly as possible: "The boat was a small keel we travelled both night & day The current of the river was so slow, that it added very little to our speed, & oars had to be plied constantly."⁵

1816: Timothy Flint

The Reverend Mr. Timothy Flint had his first view of the American Bottom from a keel-boat on the Mississippi in the spring of 1816. He wrote about his experience in *Recollections of the Last Ten Years*:

I shall only remark, as a very prominent feature in the shore, opposite St. Genevieve, that there commences below Kaskaskias † a very rich and wide bottom, called the "American bottom." ‡ It has a skirt of wood two or three

* This section of the Fourth Principal Meridian extends across a series of deep hollows and narrow ridges on the west side of Sugar Creek in Schuyler County.

† Kaskaskias = Kaskaskia River.

‡ *Illinois in 1837 & 8* describes the American Bottom:

The surface of the alluvial bottoms is not entirely level. In some places it resembles alternate waves of the ocean, and looks as though the waters had left their deposit in ridges, and retired. The portion of bottom land capable of present cultivation, and on which the waters never stand, if, at any extreme freshet, it is covered, is of a soil of exhaustless fertility; a soil that for ages past has been gradually deposited by the annual floods.

. . . The most extensive and fertile tract, of this description of soil, in this state, is the *American Bottom*, a name it received when it constituted the western boundary of the United States, and which it has retained ever since. It commences at the confluence of the Kaskaskia river with the Mississippi, and extends northwardly to the mouth of the Missouri; being bounded on the east by a chain of bluffs, which in some places are sandy and in others rocky, and which vary from 50 to 200 feet in height. This bottom is about 80 miles in length, and com-

miles in width. Still farther from the river, and beyond the timbered land, is a most beautiful prairie of the richest land, from two to four miles in width. Beyond this are lofty and perpendicular stone bluffs, the bases of which appear evidently to have been once worn with running water. This charming skirt, partly timbered, partly prairie, and every where limited by this kind of bluff, extends from this point to a considerable distance above St. Louis.¹¹⁷

On the 10th of September Mr. Flint brought his family to St. Charles, on the Missouri River 13 miles south of the mouth of the Illinois River. In his *Recollections*, he told of seeing a big prairie for the first time:

Having crossed a deep bottom of two miles in width, I came out upon the first prairie of any great size or beauty that I had seen. It was Sabbath, and a fine September morning. Every object was brilliant with a bright sun, and wet with a shower that had fallen the preceding evening. The first time a stranger comes in view of this prairie, take it all in all, the most beautiful that I have ever seen, a scene strikes him that will never be forgotten. . . . The prairie itself was a most glorious spectacle. Such a sea of verdure, in one direction extending beyond the reach of the eye, and presenting millions of flowers of every scent and hue, seemed an immense flower-garden. . . . The best view of this prairie is from the "Mamelles," which bound it on the west. *¹¹⁷

Flint could gaze northward across the grassland and see the distant bluffs of the Big Rivers Area in Illinois:

To the left, your eye catches the much broader curve of the upper Mississippi, which presents a regular section of an immense circle. Your eye follows this curve forty miles. In the whole of this distance, the opposite, or Illinois shore, is marked with a noble and bold outline, over which hovers a blue and smoky mist. The perfect smoothness of the basin enclosed between the two rivers, a carpet of verdure diversified with the most beautiful flowers, and the great extent of the curve, give the perpendicular bluffs that bound the basin, the aspect of mountains. This curve presents an unbroken blue outline, except in one point, and through that chasm is seen the Illinois, whose cliffs are just discovered fading away in the distance, at the east.

Between such magnificent outlines, from the foot of the Mamelles, the prairie, in ascending towards the north, has a width of five miles, and is seventy miles

prises an area of about 450 square miles, or 288,000 square acres. On the margin of the river is a strip of heavy timber, with a rank undergrowth: this extends from a half to two miles in width, and from thence to the bluffs is generally prairie.²²⁹

* *Les Mamelles* is French for "the Breasts." As Timothy Flint explained, "These are a succession of regular, cone-shaped bluffs, which the French,—who are remarkable for giving names significant of the fancied resemblance of the thing,—have supposed to resemble the object whose name they bear."¹¹⁷

in length. On the Mississippi side, the prairie touches the river for most of this distance. The aspect of the whole surface is so smooth, so level, and the verdure so delightful, that the eye reposes upon it. . . . It is often the case that a flock of wild deer is seen bounding over the plain. In the autumn, immense flocks of pelicans, sand-bills, cranes, * geese, swans, ducks, and all kinds of aquatic fowls, are seen hovering over it. The soil is of the easiest culture and the most exuberant productiveness. . . . At the foot of the Mamelles are clumps of hazel bushes, pawpaws, wild grapes, and prairie plums, in abundance. The grass is thick and tall. Corn and wheat grow in the greatest perfection.

. . . At the lower and northern edge of this prairie, is the French village of Portage des Sioux; and on the opposite side of the river the beautiful bluffs of which I have spoken. While I stood on the Mamelles, and was looking in that direction, slight clouds and banks of mist obscured them from view. In a few moments the wind arose and dispersed the mists, and they burst upon me in all the splendour of their height and hoary whiteness. My companion, accustomed as he was to the view, and not at all addicted to raptures, exclaimed that he had never seen them look so beautiful. For myself, although I had seen on passing them, that they were on the skirt of an unpeopled solitude, I could hardly persuade myself, so complete was the illusion, that I did not behold a noble and ancient town, built of stone, whose immense buildings were surmounted with towers and spires.

That they impress other imaginations in the same way, will appear from an incident that occurred some years after. In crossing the prairie, and descending towards Portage des Sioux, I came up with a Frenchman descending also from St. Charles to that place. The village before us was hidden from our view by an interposing bench. As I came up with him, he asked me the distance and the direction to Portage des Sioux. I mentioned the distance, and pointed in the direction, remarking that the village was behind the bench, and could not be seen until we arrived there. He was a gay, buoyant fellow, just from old France, and with the characteristic disposition to see every thing in its best and gayest light. "Derrière les bancs!" † said he, pointing with a flourish of his hand to the hoary pinnacles of the bluffs. "Pas du tout, monsieur! Voilà la

* Flint's reference to "pelicans, sand-bills, cranes, geese" appears to have been intended to read "pelicans, sand-hill cranes, geese." In his 1828 book about the history and geography of the Mississippi valley, Mr. Flint reported, "Swans, geese, ducks of a great many kinds, herons, cormorants, pelicans and sand-hill cranes, are the common and well known migrating water fowls of this country." He further remarked, "Sand-hill crane, *grus Canadensis*, is a fine, stately bird . . . We have seen in the prairie between the Missouri and Mississippi, at the point of junction, acres covered with them, in the spring and autumn. They seemed, at a distance, like immense droves of sheep. They migrate in company with the pelicans . . ." ¹¹⁵

† "Behind the benches!": that is, beyond the slight rise of land that hid Portage Des Sioux from view.

ville! Une place superbe!" * He chose to find the city, not in mud-walled cottages, but in turrets and spires, like those of Paris.¹¹⁷

1816: William Rector

William Rector was in charge of surveying the Illinois and Missouri Territories for the U.S. General Land Office. On December 30, 1816, he wrote to the Commissioner of the General Land Office in Washington. Mr. Rector reported what he had learned from Deputy Surveyors who were at work on the Military Bounty Lands between the Mississippi and Illinois Rivers:

From the report of those who are engaged in Surveying between the Mississippi and Illinois Rivers, it appears that a large proportion of that tract of Country consists of lands of good quality much of which is first rate soil, generally lies well for cultivation, and is generally well watered with good Springs, Brooks and larger streams, some of which are very suitable for Mills. The greatest objection to that part of the Country seems to be the scarcity of timber there is however in many places considerable bodies of excellent timber, some Stone Coal has been discovered in that quarter, and it is believed that great abundance may be found—And from all the information I have received concerning that part of the Country, I conceive it to be very suitable for settlements.⁶⁴

1817: Samuel R. Brown

Samuel Brown's *Western Gazetteer; or Emigrant's Directory* devotes 19 pages to the Illinois Territory. The following excerpts depict the Illinois River:

The placid Illinois traverses this territory . . . nearly 400 miles. . . . Unlike the other great rivers of the western country, its current is mild and unbroken by rapids, meandering *at leisure* through one of the finest countries in the world. . . . It is upwards of 400 yards wide at its mouth

. . . The rivers of the left branch[†] of the Illinois fall in the following order:
1. The Macopin,[‡] a small river, 25 yards wide, 20 miles from the Mississippi; boatable 9 miles to the hills.[¶]

. . . On the left bank of the Illinois, 40 miles from its mouth, are a chain of small lakes communicating by narrow channels, with each other; one of them

* "Not at all, sir! There's the town! A great place!"

† "Left bank" was intended rather than "left branch."

‡ Macopin = Macoupin Creek.

¶ After Macoupin Creek, the gazetteer enumerates four other tributaries, all north of the Big Rivers Area.

discharges into the Illinois. The prairies bordering these lakes constitute the Peoria's wintering ground.

. . . Travellers describe the scenery skirting the Illinois as beautiful beyond description. There is a constant succession of prairies, stretching in many places, from the river farther than the eye can reach, and elegant groves of woodland. The trees are represented as peculiarly handsome; having their branches overspread with rich covering of the vine. Nevertheless, it is the empire of solitude, for the cheering voice of civilized men is seldom heard on this delightful stream.

. . . The banks of the Illinois are the favorite soil of the mulberry, and of the plum.

. . . The Illinois, which hitherto has been little navigated, except by the North West Company's boats, * must in a few years become the theatre of an active commerce. American enterprise will force its way thither. The tide of navigation, like water, will overspread the fine vallies of the Illinois, Mine and Demi-Quain. †⁵⁵

Regarding the Military Bounty Lands, Samuel Brown remarked,

This tract lies on the north bank of the Illinois, near its junction with the Mississippi. It has never been particularly described. Mr. Tiffin, commissioner of the general land office, declares it to be of the first quality. . . . The U.S. are now engaged in surveying them. . . . The growth of vegetation is so luxuriant that the surveyors can make no progress in summer.⁵⁵

1817: Stephen H. Long

In March of 1817 the War Department received a report from Stephen Long about the navigability of the Illinois River. Major Long was familiar with the river because he had made two trips along the valley in 1816: a round-trip by boat as far upstream as Peoria, and a second journey by horse from Edwardsville to Peoria and then to the south shore of Lake Michigan.

The Illinois is about three hundred miles in length, and is of variable width, from seventy yards to one mile. It has a very moderate current, and a depth of water sufficient to render it navigable, at all times, for boats of considerable burden about two hundred and thirty miles from its mouth.

* The North West Company competed with the American Fur Company for fur trade in the region during the early 1800s.

† Mine = La Moine River; Demi-Quain = Spoon River.

The hunders which I had sent out to examine the Country in Dferent derections, returned with Turkeys & Opossoms and informed me the country was butifull and had great appearance of Gain

— Captain William Clark at the south edge of the Big Rivers Area
on December 12, 1803.²⁷⁵

. . . The valley of the Illinois varies in its width from three to ten miles; is generally flat and marshy; and, for the most part, subject to inundation when the river has no more than a medial height. In some parts of it, however, prairies and bottoms of considerable extent are to be met with, elevated much above high water mark. In ascending the river, the bluffs gradually decrease in height, being about one hundred and fifty feet high at the mouth, and about one hundred feet at the head of the river. *²⁰⁶

Stephen Long commanded an expedition up the Mississippi River from the mouth of the Missouri during the summer of 1817. Six oarsmen propelled a wooden skiff from the mouth of the Missouri River to the Falls of St. Anthony and back. Early in their journey on August 14, Long and two companions walked across the high terrace at the south tip of Calhoun County. They began at the Mississippi River and went to look at the Illinois River. Major Long described what they found:

Capt. Colhoun, † my self & one of the men took an excursion across the country this morning & went in sight of the shores of the Illinois. Independant of the Bluffs, there is a ridge of land elevated about 18 feet above the water level extending from the Mississippi to the Illinois. The distances between the two rivers along this ridge is about 4 1/2 miles. The Bluffs of the two rivers meet each other at the distance of about 1 mile in rear of the ridge, being a succession of Knoles ‡ forming an extensive curve between the two rivers. The soil is of a good quality, inclining to sandy in some places. Growth principally Oak,

* This quotation is from an extract of Long's report that was published by Congress. The full report, which appeared in a Washington newspaper, *The National Register*, adds a comment about the depth of floodwaters: "The waters of the Mississippi and Illinois are allowed to expand over their vallies to such a degree that the range is usually between 12 and 20 feet—seldom more than 20." ²⁰⁵

† This version of Stephen Long's journal is quoted from a book published by the Minnesota Historical Society Press in 1978.¹⁸³ The Minnesota Historical Society had published Major Long's journal 88 years earlier as "Voyage in a Six-Oared Skiff to the Falls of Saint Anthony in 1817."²⁰⁷ In this earlier publication, the name of Long's companion is spelled Calhoun rather than Colhoun. The man's name is James E. Colhoun. He was related by blood and by marriage to John C. Calhoun, the Secretary of War during Long's expedition. Calhoun County was named in honor of John C. Calhoun in 1825.

‡ The 1890 edition of Long's journal gives this word as "knobs" rather than "Knoles." The difference probably stems from difficulty with reading Long's handwriting.

Hiccorry, Black & White Walnut, Sycamore, Cotton wood, Pirsimmon, Paw-paw. Upon the point below the ridge is a large prairie extending to the Illinois.¹⁸³

Several months after his return, Major Long prepared a lengthy document about his reconnaissance. One of the many topics in his report concerns the navigability of the Mississippi River:

The part of the Mississippi situated above the mouth of the Missouri, and commonly denominated the upper Mississippi, requires boats of moderate draught in navigating it, otherwise their passage would be obstructed by Sand bars and shoals with which it abounds in the lower stages of the water. In assending the upper Mississippi from the Missouri to the falls of St. Anthony, its current gradually becomes more moderate, decreasing in rapidity from 3 to 1 1/2 miles per hour. Its navigation throughout this part has no very serious obstruction except in a very low stage of the water, when the De Moyen & Rock Island rapids * are impassable for boats of any considerable burden.¹⁸³

1817-53: Gershom Flagg

Gershom Flagg moved from Vermont to St. Louis in the autumn of 1817. He soon bought 264 acres across the Mississippi in northwestern Madison County. His farm was in the Indian Creek valley east of present-day Bethalto, about two miles beyond the bounds of the Big Rivers Area. At first Flagg remained in St. Louis, seeking a job with a crew surveying the Military Bounty Tract. Although he was not hired, he did learn a little about this big parcel of public real estate between the Illinois and Mississippi Rivers. On December 7th he wrote back East to his brother Azariah,

I am pleased with this Country it is the Richest soil and most handsomely situated of any I have ever seen. I have not seen the Military bounty Lands nor can I get business of surveying at present. . . . I am told by the Surveyors that the Land is Rich handsome & well watered but poorly timbered.

. . . I am told that one half of the Lands are Prairie and the other timbered. The timbered Land will be very valuable and the Prairie the reverse so that it is like a Lottery you have about an equal chance to draw a great prize & it must be some prize because the Land is to be fit for cultivation. Some say that the Prairie that has no timber upon it will be returned unfit for cultivation to the General Land Office But I think this will not be the case. †

* The Mississippi River had two major obstructions to navigation below the Falls of St. Anthony at Minneapolis. The Des Moines Rapids extended upstream from Hamilton, Illinois. The second set of rapids extended upstream from Rock Island.

† Despite these expressed sentiments, Gershom Flagg opted for a farm with a large proportion of prairie. When he was interviewed by an agricultural reporter 27 years later, Mr. Flagg felt vindicated

In 1803 Nicolas de Finiels described the Mississippi River bluffs in Jersey and Madison Counties, as viewed from the top of hills 10 miles south of the river:

... the panorama available from their summits provides a pleasing spectacle. This spectacle is nothing more than a view of the celebrated Paillissa rocks, which rise vertically on the left bank of the Mississippi and are covered with undulating hillocks.

*In different places, perpendicular masses of rock protrude from these bluffs, which seem from a distance like vast walls covered with terraces; from them long columns of trees appear as if they wished to take flight. Here and there, deep crevasses cut through the bluffs, creating passages for the mountain streams that cross the plain to mingle with those of the river. But it is above the mouth of the Missouri, where the bluffs draw up close to bank of the Mississippi, that a striking spectacle meets your eyes. An immense panorama of rocks is deployed along the bank for more than four leagues, after which it disappears at the mouth of the Illinois River.*¹¹³

... I have Located 264 acres of Land in the Illinois Territory 26 miles from this place & about ten from the Mouth of the Missouri River about half of it is Rich dry Prairie & the Remainder timbered with Oak Hickory Elm Walnut &c.⁵⁸

Two months later he wrote to his parents,

I have entered 264 a Land 25 miles from this place 10 or 12 from mouth of the Missouri River Part Prairie and part timbered land. . . . I will only say that it is the handsomest and best country that I have ever seen. In places there is Prairies as far as the eye can reach covered with tall grass higher than a mans head.⁵⁸

By September of 1818 Gershom Flagg had moved to his Madison County farm, boarding with a neighbor. He wrote to his brother Artemas,

The face of the Country is very level without any mountains and but few hills. It is not exceeded by levelness richness of soil by any in the United States. The prairies are very large while the timbered land is confined almost wholly to the intervalles * and low rounds.[†] Where ever the land is high and dry enough for

in his choice of farmland. The journalist noted, "At the time Mr. Flagg settled here, he was looked upon by his neighbors in the 'thick woods,' as little better than a crazy man to undertake to cultivate the prairie, when it was evident it would not produce crops, otherwise it would have produced timber."¹⁸⁶

* Residents of New England commonly referred to the bottomland along a stream as an "intervale" or "interval."

† "Low grounds" appears to have been intended.

the fire to run in the spring & fall the timber is all destroyed. The Soil is of such an alluvial nature that the water courses cut out deep channels from 6 to 20 feet deep generally. Where this is the case the streams do not overflow.

We have all kinds of soil from midling poor to the very best.

. . . We have plenty of Apples Peaches &c in places. Grapes & of several kinds and several kinds of Wild plumbs & Cherries in profusion also Dew Berries Black berries Strawberries. The bottom Prairies are covered with Weeds of different kinds and grass about 8 feet high. The high Prairies are also thickly covered with grass but finer & not so tall. The prairies are continually covered (in the summer season) with wild flowers of all colors which gives them a very handsome appearance. These high Prairies are smoother than any interval & not a stone, log, or anything but grass & weeds to be seen for miles except where they border the timber there is generally a thicket of plumb bushes, hazel grape vines, &c &c. The Roots of the grass are very tough it generally requires 3 yoke of Oxen or six horses to plough up the prairies & the plough must be kept at a keen edge by filing often, the steel not being hardened, but this is all that is to be done except fencing to raise a crop. After one year the ground is mellow and requires but a light team to plough it. The Timber in this Country is very different from any you have seen. The most Common timber is White, Black, Spanish, * post, Chincopin, † Pin, and Burrh Oak, Walnut Black & White, Basswood, Cherry Button wood ‡ Ash, Elm, Sassafras, Sumach, Elder, Honey locust, Mulberry, Crab Apple Thorn of different kinds Red-bud, Pecon, Hackberry Maple, Cotton Wood, Pawpaw which bears a fruit larger than an apple. The timber is not so good as I have seen, generally, the fire kills & checks the growth every year. When the fire gets into high thick grass it goes faster than a horse can Run & burns the Prairie smooth.

. . . We have a great plenty of Deer, Turkies, Wolves, Opossums Prairie hens, Eagles, Turkey Buzzards, Swans, Geese, ducks, Brant, sand hill Cranes, Paro-kites & with many other small Animals & birds. Gray squirrels are as thick here as I have ever seen stripeid ones in Vermont. There is more honey here in this Territory I suppose than in any other place in the world, I have heard the Hunters say that they have found 8 or 10 swarms in a day on the St. Gama † & Illinois Rivers where there are no settlements (Truly this must be the Land of

* The Spanish oak of today's botanical manuals is *Quercus falcata*, which is also known as the southern red oak. This species is not likely to have occurred as far north as Madison County. During the 1800s the name "Spanish oak" was applied to a number of species in the red oak subgenus (*i.e.* species that have leaves with bristle-tipped lobes). Pin oak (*Q. palustris*) was commonly called Spanish oak, but Flagg listed both pin oak and Spanish oak.

† Chincopin oak = yellow chestnut oak (*Quercus prinoides* var. *acuminata*).

‡ Button wood = sycamore (*Platanus occidentalis*).

† St. Gama River = Sangamon River.

Milk & honey.) The Climate is not so hot as might be expected there is almost a continual breeze blowing from the large prairies like the breezes on large Lakes & ponds. The country is so open that it is considerable cold in Winter the ground freezes very hard There being generally but little snow.

. . . The Stock of this Country consists principally of horses horned Cattle & hogs. Sheep will do very well here if they can be kept from the Wolves but this cannot well be done in the newsettled parts the wolves are so very numerous. Hogs will live & get fat in the Woods and Prairies. I have seen some as fat upon Hickorynuts, Acorns, Pecons, & Walnuts, as ever I did those that were fated upon Corn. All that prevents this country being as full of Wild hogs as of Deer is the Wolves which kill the pigs when the sows are not shut up til the pigs are a few weeks old. There are places in this Territory where Cattle & horses will live all winter & be in good order without feeding, that is upon the Rivers. Most of the people cut no hay for their Cattle & horses but this is a foolish way of theirs they either have to feed out their Corn or their Cattle get very poor. Cattle & horses do very well in this Country they get very fat by the middle of June. They do not gain much after this being so harrassed by swarms of flies which prevent their feeding any in the heat of the day. They are so bad upon horses that it is almost impossible to travel from the 15th June til the 1st Sept unles a horse is covered with blankets. Where ever a fly lights upon a horse a drop of blood starts. I have seen white horses red with blood that these flies had drawn out of him. As the Country becomes settled these flies disappear.

. . . The people of This Territory are from all parts of the United States & do the least work I believe of any people in the world. Their principal business is hunting deer, horses hogs and Cattle and raising Corn. They have no pasture but turn every thing out to run at large and when they want to use a horse or oxen they will have to travel half a dozen miles to find them through grass and weeds higher than a man can reach when on horse back and the grass and vines are so rough that nothing but their Leather hunting shirts and trowsers will stand any Chance at all.

These kind of People as soon as the settlements become thick Clear out and go further into the new Country. The method of Raising Corn here is to plough the ground once then furrow it both ways and plant the Corn 4 feet each way and plough between it 3 or 4 times in the Summer but never hoe it at all. . . . We have not many good mills in this Country.⁵⁸

In February of 1819 he wrote to a man in Burlington, Vermont,

I have 160 Acres of Land * in this Country ten miles east of the mouth of the Missouri River and have been farming almost a year. The prospect of the

* Flagg had bought a total of 420 acres, but he had already sold part of his land for twice the price he had paid.

farmer is as good here as in any other Country. The Soil is as good as any in the United States for any kind of Grain and produces very good Cotton. 50 bushels of Wheat is said to have been taken off of one Acre of Ground in one season.

. . . The principal objection I have to this Country is its unhealthiness the months of Aug. & Sept. are generally very Sickly. I was taken sick with the feever & ague the 15th Sept. which lasted me nearly two months. I shall try it one season more and if I do not have my health better than I have this season past I shall sell my property and leave the Country. The summer past has been very hot and dry in the month of August the Thermometer stood at 98°. We have had but very little Rain or snow the past fall. We have not seen a single flake of snow since the 5th of January nor but very little ice. For three weeks past there has scarcely been a frost and the Bees (which are very plenty) have been daily at work. . . . Geese have been flying to the north for ten days . . . Grass has grown 3 or 4 inches, the Birds are singing and in *every thing looks like spring season.*⁵⁸

On June 12, 1819, he wrote to his brother Azariah,

I have been very healthy the winter and spring past we have had a very warm winter without snow, late snowy spring with a great deal of Rain but it is now very dry and warm.

. . . The country is settling with extraordinary rapidity Thirteen months ago there was not a family north of here and there is now perhaps two hundred some a hundred and twenty miles north of this. . . . We have a fine country of Land and a plenty of it.⁵⁸

On October 6, 1820, he wrote to brother Artemas,

We have had a very remarkable dry summer there are streams 40 miles in length which have entirely stopped running—two thirds of the wells and springs have dried and the grass is not more than half its usual length. We have had good crops of Wheat and Corn is very good.

. . . We feed our hogs great part of the time upon Melons, Squashes, & Pumpkins & cucumbers &c &c. The hogs now live upon Acorns which here grow as large as hens eggs almost.⁵⁸

He continued his letter nine days later:

Several towns in this state have been very sickly this season especially those situated contiguous to Rivers or mill-Ponds. The waters are very low and in many places covered with a green poison looking skum. The fogs arising from this stagnated waters makes the air very unwholesome.

The weather has been considerable hotter here . . . than it was ever known to be before. The mercury in Thermometer rose to 100 degrees in the shade. Such heat as this several days in succession you will suppose made us think of the place we read of. For my part I thought it was getting to be pretty warm times. Steel or Iron lying in the sun became too hot to be handled. In Short, but in truth, it was as hot as Hell.⁵⁸

On December 10th he told Azariah,

Since the first of April last I have ploughed or broke up upwards of one hundred acres of New Prairie with the help of four yoke of Oxen and a man to drive them and have fenced in or enclosed 40 acres and built a log house &c. We have had scarcely any rain since last April the Streams, Springs & Wells two third of them became dry the weather was extreemely hot the Thermometer rose to 100 degrees in the shade. This fall we have had two snow storms the snow fell in Nov. 8 inches deep and lay on several days the snow is now gone but the weather has become cold and the ground is hard frozen and the Mississippi is full of floating ice. For this country this is called *Hard Times*.⁵⁸

On March 31, 1821, Flagg wrote to Artemas,

Your letter of the 3d December was Recd in January but the waters have been so high since that time that the Mail does not arrive oftener than once in 3 or four weeks which is the reason I have defered writing until the present time We have had a very severe winter and considerable snow and this spring we have had several severe storms. Two men have been found dead in the Prairie supposed to have chilled to death by the cold weather and snow. I was one of the Jurors who examined the body of one of the men who was found dead and it appeared that after being out in the open Prairie for about 24 hours great part of which time it either Rained or snowed accompanied with a very Cold Wind he fell from his horse so benumbed with cold that he never strugled but went to sleep for the last time. I began to plough the first day of March but have only ploughed 16 acres the ground having been frozen for several days past until yesterday.⁵⁸

On August 7th he wrote to his father,

I enjoy my usual good health: it is some sickly in this country as is usual at this season of the year. We have had a very wet spring & summer so far which has been very detrimental to crops, a great deal of Wheat was not worth reaping this year and Corn does not look very well. At present the weather is very hot.⁵⁸

Flagg fell ill with "the bilious fever" * on September 13th and was too weak to write until October 4th, when he wrote to his mother,

* Both malaria and typhoid were sometimes called bilious fever. Gershom Flagg probably had the common ailment, malaria.

It is on these Paillissa heights, near the Illinois River, that you discover the fine perspective . . . You can from there admire the confluences of the Mississippi, Missouri, and Illinois rivers, get drunk on an indescribable spectacle, and lose yourself in the profound meditations that it inspires.

— *Notice sur la Louisiane Supérieure* (“Account of Upper Louisiana”), 1803. ¹¹³

We have had a very sickly season here but in proportion to the sickness there has been but very few deaths. The weather has now become cool and people are getting well very fast.

. . . We have had a very wet season and our crops are not as good as usual. ⁵⁸

He wrote to Azariah on December 21st,

I now own 270 acres of land which I have paid for. On one quarter section I have two log houses near each other and 65 acres well fenced in three fields 26 acres of which is under good cultivation as a plough field and the remainder occupied as a pasture it being in the Prairie. I have three yoke of good oxen and a good plough. I have ploughed considerable for people lately and have now contracted to brake up 90 acres more of New Prairie next spring. I get about \$4 an acre for ploughing. ⁵⁸

On June 9, 1822, he wrote to Artemas,

We have had a very rainy spring which has caused the streams to overflow their banks and in some instances Bridges have been carried away. The weather for a week past has been very hot yesterday the Thermometer rose to 98°. The wet and heat has caused the grass to grow very fast and in great abundance. Our natural pastures are now covered as it were with droves of Cattle and horses which have already fattened on the spontaneous productions of the earth. ⁵⁸

He followed up with another letter, one year and 11 days later:

I have enjoyed uninterrupted health for more than a year. It is a general time of heath in this vicinity at present although a sickly season has been expected owing to the great rains in the spring and fore part of summer. The Rivers have been very high much damage done to Bridges Mills &c &c. ⁵⁸

He wrote again to Artemas on January 25, 1824:

We have a very extraordinary wet summer—dry pleasant fall—& so far warm pleasant winter we have had no snow of consequence and very few days but what we could have ploughed if occasion required. The bees have been flying nearly every day this month and the grass has began to grow in the low lands. ⁵⁸

... and on July 20, 1825 —

We have had a very remarkable year so far; the month of Jan. was entirely dry warm weather the ground was hardly frozen at all and we had neither snow or rain during the month. Crops are now 3 or four weeks earlier than usual Cherries were ripe by the middle of May and people commenced harvesting wheat before the 20 June. I saw ripe blackberries the 19 day of June and Corn now is generally ten feet high. For a few days past it has been very hot and the ground is now very dry indeed.⁵⁸

The next letter from Gershon to Artemas Flagg was on August 16:

We have the hottest weather here that I ever experienced before. We have had no rain of any consequence for several weeks. The sun pours down his scorching rays from day to day without any cessation and the ground has become so heated that there does not seem to be moisture enough in it to produce any dew. I attempted to walk bare foot two days ago upon hard ground which was exposed to the sun but found I could not bear the heat. Iron exposed to the sun becomes so much heated that a person cannot hold it in his hand a minute. Corn and grass are drying up very fast and apples that are lying upon the ground are half baked by the sun. Crops of Corn will be poor I think this year although 5 weeks ago there was never a better prospect But notwithstanding the great heat this state was never more healthy.⁵⁸

On August 2, 1830, Gershon advised Artemas about the Military Bounty Lands, "... it would be buying a pig in a poke to buy land in the Bounty tract without seeing it":

The land is generally good but there is a great quantity of Prairie and some whole townships destitute of timber. . . . We consider the land generally that lies from 4 to ten miles from the large rivers to be the best for farming & for health. The land near the water courses is richer but not considered heathy and after you get some distance from water courses the Prairies are much too large. A belt of timber accompanies all water courses but between the head waters of streams it is generally open level Prairie. The Bounty tract is settling very fast and the Imigration to the state is more now than it has been since I came here.⁵⁸

Gershon Flagg wrote on January 9, 1831, to tell his mother,

We have a very hard winter so far for this country the snow is now 8 or 10 inches deep and has been for some days and the weather quite cold. The Mississippi River is frozen over in places. The past season has been more unhealthy than usual and the crops not as good. The fall was extreemly dry as also the latter part of the summer.⁵⁸

Flagg reported on the progress of his farming enterprise in a July 1836 letter to Artemas:

I own one thousand and eighty three acres of Land about two hundred and forty of it is good timbered land and the other is Prairie land. . . . I have four hun-

dred and fifty five acres well fenced in mostly with White oak and black Walnut Rails nine rails high. It is divided into about a dozen different fields and lots the largest field contains 330 acres. I have . . . 4 good wells well walled up with stone the water good and plenty of it— . . . I have 8 or 10 tons of last years hay on hand and 50 acres of timothy and red top this year one half of which is now cut made and well stacked without any rain on it since it was mowed. The hay is most excellent.⁵⁸

Gershom Flagg had a son, Willard, who was living away from home by 1845. On March 25 Gershom wrote to Willard,

There has been a great fire in M Paddocks * fields this afternoon a all the Men and part of the women in the neighborhood turned out to fight it it was the worst fire to manage that I ever saw in the Prairie we could not put it out even when the wind was in our favor and we had to let it run through the fences and then tear them down to prevent the rails from being burnt They have lost a good many Rails I do not know how many They have hired a wild Irishman lately and he undertook to burn over the stubble ground and the fire spread as it had a right to do all over the fields²⁰⁰

Gershom wrote to Artemas on December 17, 1846,

I had a very severe spell of sickness last sept which lasted about four weeks I lost 30 pounds weight in the time

. . . We have had floods pestilence and war † since I wrote you in 1844 the Mississippi and Missouri Rivers over-flowed their banks in June and July and the bottoms were some 8 or ten feet under water for several weeks and steam Boats crossed over the Prairie from St. Louis to the Illinois bluff about 7 miles The fences in the bottom were all washed away and many houses cattle and hogs were lost and all the crops wer killed and most of the fruit trees 1845 was a very sickly season indeed²⁰⁰

On June 7, 1851, Gershom wrote to Willard, who was living in Connecticut:

We have broke up about 25 acres of Prairie and have as much to brake if we can get it done before wheat harvest We have considerable grubbing [‡] to do yet as well as planting. We have had such great rains here lately that we have been unable to plow our corn²⁰⁰

A week later in another letter to Willard . . .

* The Paddocks were early residents of this rural community, known as Paddock's Grove.

† Flagg was alluding to the war with Mexico that had begun in April.

‡ *Grubbing* is the activity of removing the roots and stumps of trees and shrubs from new cropland.

. . . we have about 30 acres Prairie to break and plant if we can get time to do it before harvest

We have had several tremendous Rains last week which has prevented our plowing the Corn Our Oats were sowed late Our Meadow will also be late in consequence of the dry spring and late freezing The people in the American bottom and on the Mississippi are suffering very much from the flood I was at Alton yesterday and the people there think the water will be as high as it was in 1844

. . . It is likely that all the crops on the grounds of the Missouri Mississippi & Illinois will be destroyed besides considerable on smaler streams

It will destroy thousands of acres of Potatoes The people are moving out of the Bottom²⁰⁰

An update 11 days later:

We have had great Rain storms and in some places Hail and wind lately the creeks have ben high and no plowing corn for a week The state of Macoupin * is nearly covered with water and the creek was overflowing its bottoms tuesday so that it came into the bottom of the waggon beds. . . . The plank Roads in the bottom † I hear have been washed away²⁰⁰

Willard wrote back on June 22nd:

Your letter of June 7th came on the 19th I had a letter from James Smith jun last night who has answered a letter written some time since at last. He tells of high waters and unexpected dulness in trade consequent from it. He says the many high waters of late years are ascribed to the increased quantity of water resulting from the Settlement of the country above but thinks a decrease ought to follow as is usually the case. It seems to me that supposing there is an increase the general rule would not hold good, for the Settlement of the Country drained by the Mississippi and Missouri rivers would remove but a small amount of timber (the decrease of which decreases rains) ‡ but on the other hand the cultivation of the prairies would have a tendency to drain off more water than before. What do you think of it? ²⁰⁰

* Flagg appears to have been referring to the condition of Macoupin Creek.

† These new plank roads were in the American Bottom. On December 20, 1850, Flagg had written, "I learn that there is only about 1½ miles of plank finished in the bottom that is from Cahokia Bridge to the small Bridge near the house on the wet Prairie." ²⁰⁰ The Cahokia Bridge crossed Cahokia Creek at the north end of the American Bottom. The area known as Wet Prairie extended south from the Big Rivers Area between Cahokia Creek and the Mississippi River (south of the present-day Cahokia Diversion Channel).

‡ The 19th century saw much speculation and debate about the effect of forest vegetation on the local climate. Some persons maintained that trees attracted rain. Clearing of forest was said to cause drought. Some claimed that planting trees would increase rainfall in prairie regions.

Father answered son on July 6th:

Your letter of the 22d June was recd yesterday You mention about the Rivers rising higher here as the country becomes more Settled. There is no doubt but this is the case Before the Country is settled the lowest grounds are usually covered with high grass & weeds which are often not burnt over and the ground is very porous and of course the water stands on and soaks into the ground and much of it evaporates or soaks into the ground and the balance being so obstructed with the grass and weeds that it runs off slowly but when the grass becomes eat out or destroyed by cultivation and the Cattle and other stock has trod the ground more solid the watter rushes into the Streams more quickly and of course raises the streams more rapidly and of course higher There is very little timber cleared from the land in this country Where a country is entirely covered with timber and the clearing up the land so as to let the sun and wind have full effect upon the surface of the ground, it becomes more dry and the streams grow smaller and the springs are not so full In addition to this there may be some other cause There may be much more rain in some periods than others²⁰⁰

Gershom wrote to Willard on October 14, 1853, to report,

the wells & Creeks are very low I have never seen a dryer time than this
The Creeks are almost dry & the Rivers very low²⁰⁰

He reiterated the drought conditions on December 15th:

The Rivers are very low and half the wells contain but little water

. . . The Rail Road to Terre Haute is progressing pretty fair The low water on the Illinois river keeps back the rails yet but they have a good many Carrs made at Alton²⁰⁰

1818: Timothy Flint

In August of the year of Illinois' statehood, Timothy Flint explored the high dividing ridge between the Illinois and Mississippi Rivers. He also examined the adjacent lowland on both sides of this highland:

. . . in company with a couple of friends, I made a journey up the Illinois. This river enters the upper Mississippi something more than twenty miles above the mouth of the Missouri. In ascending the Mississippi on the Illinois side, we passed a village of the Illinois Indians. The Illinois brings in a clear and broad stream, four hundred and fifty yards wide, in a channel as strait and regular as a canal. Near the mouth, it seems almost destitute of current. A short distance above the mouth, opens the prairie, that skirts the river. It is beautiful, being from two to three miles in width, of the same fertility with that I have attempted

to describe already.* Beyond this prairie is a skirt of open woods, and the whole is bounded by a lime-stone bluff, smooth and perpendicular, and generally from two to three hundred feet high. A natural wall, so grand, regular, and continued, I have seen no where else. It is many miles in extent, and would look down upon the famed walls of Babylon or China. On the opposite shore, was a deep and tangled bottom, full of a most luxuriant vegetation, but subject to be overflowed. Beyond the bottom, was a long series, league after league, of those singular and regular-shaped hills called "Mamelles." As has been remarked on the Ohio, we observed that when the prairie and stone bluffs shifted to the opposite shore, the wooded bottom and the Mamelles were found on the side on which we were travelling.

This was a district of the military lands. Some of the soldiers were here to examine the value of their acquisitions.[†] Others had already fixed themselves on their lands. The settlers were generally in the timbered land, that skirted the edge of the prairie. Were I to remark here upon the astonishing fertility of this prairie and bottom, it would only seem like repetition of what has been remarked upon the first prairie of the Missouri. For a considerable distance up the Illinois it is still near the Mississippi. After ascending it two days, we were told that river was only three miles distant. A very rough and elevated bluff interposes between the prairies of the two rivers. As we stood on its summit, we could observe the course of each river for a great distance, and could trace the beautiful prairie on each, in configuration and sinuosities, conforming to the meanders of its river. We concluded that from the point where we were, when the ground was covered with ice or snow, a sledge, started from this summit either way, would reach the banks of either river by its own descending force. We descended from the bluff to the upper Mississippi, and rode up another rich and charming prairie, with the grass sometimes as high as our heads, on our horses. We went up to examine the site of a new town, that had been advertised with great eclat in the papers. In effect, for pleasantness and fertility nothing could exceed it. . . . At present all was solitude and silence. Not a single dwelling was any where in view. But deer and wild fowl were in sufficient abundance.

At a considerable distance up the Illinois, and directly on its banks, we came, as we returned, upon the cabins of three families of Pottawatomie Indians. The water of the river,—at this season of the year warm and of a marshy taste,—was

* Earlier in his book Timothy Flint described the bottomland prairie in Missouri, south of the mouth of the Illinois River: "It yields generally forty bushels of wheat, and seventy of corn to the acre. The vegetable soil has a depth of forty feet, and earth thrown from the bottom of the wells, is as fertile as that on the surface."¹¹⁷

† The Military Bounty Lands were awarded to veterans of the War of 1812.

their drink The third night of our journey we were benighted in a storm of thunder and rain, and were glad to take shelter in a wigwam. *

. . . The object of this excursion had been to examine into the moral condition and wants of the new settlers on the Illinois. It was taken in the month of August. I had suffered much from heat, bad food, and exposure, and had breathed the air of the Illinois, charged at this sultry season with miasma. † The week after my return, I was taken down with a severe bilious fever. Emigrants generally suffer some kind of sickness, which is called "seasoning," implying that it is the summit of the gradual process of *acclimation*. This sickness commonly attacks them the first, second, or third year, and is generally the more severe, the longer it is delayed. ¹¹⁷

1818: Nicholas Biddle Van Zandt

After Nicholas Van Zandt left his job as a clerk at the U.S. General Land Office in Washington, he produced *A Full Description of the Soil, Water, Timber, and Prairies of Each Lot or Quarter Section of the Military Lands between the Mississippi and Illinois Rivers*. Mr. Van Zandt set forth his purpose on page one:

The following brief sketch . . . has been prepared, as well with a view to gratify public curiosity respecting a portion of our country, of which so various, contradictory, and uncertain reports are in circulation, east of the mountains, as to afford a correct and safe guide both to the emigrant and to the enterprising capitalist.

. . . The time in which this sketch was prepared prevented any attempt to give it the charm of novelty by employing the magic of the imagination ⁹⁴

This book contains brief descriptions of each Congressional township in the Military Bounty Tract, based on information that had been recorded in the field by the U.S. Public Land Survey. Representative descriptions of two Big Rivers townships are presented in the following paragraphs.

Township 13 South, Range 1 West is at the confluence of the Illinois and Mississippi Rivers, the very tip of Calhoun County:

Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, southeast quarter of 15—level and wet land, overflowed partly by the river.

West half and northeast quarter of section 15, west half of 22, fractional section 28—rich first rate soil.

* For his evening meal, Flint ate "biscuit and uncooked mackerel" which he had brought with him. His hosts ate "a terrapin" and "an opossum."

† An atmospheric condition called *miasma* was thought to be the causative agent of malaria.

A perspective up the entrance of the Illinois River valley in 1803:

*How beautiful, from Paillissa heights, appears the little Illinois River Its gentle, voluptuous contours seem to embrace the fine plains that it drains just a feeble stream compared to the two rivers with which it minglest its waters. You might say that nature wished to depict the image of the sweet and peaceful life, which sages spend in repose and in agreeable and eternal calm, in contrast to the frightening scene of a long career continually fraught with excess, violent storms, and passions.*¹¹³

Fractional sections 17, 33, and section 23, are elevated situations, having a gentle slope to the river. It cannot afford, however, an eligible situation for a town.

From fractional section 17, the land, to the mouth of the Illinois, and for four or five miles up the river, lies low, and is swampy.

The residue of this township is reported to be good farming land.

Timber—maple, hickory, thorn, * willow, pawpaw, boxelder, spicewood, † and hackberry.⁹⁴

Township 13 South, Range 2 West is immediately west of the forgoing township, between Brussels and the Mississippi River:

East half of section 9, section 10, west half of 14, section 15, east half of 16, east half of 21, sections 22, 23, 26—excellent second rate soil.

The residue of this fractional township is good farming land.

Timber—oaks and hickory—hazle ‡ and vines.⁹⁴

Most of Van Zandt's descriptions of townships focus on the topography—for example, “The bluffs are here upwards of 100 feet high, and terminate abruptly.” They also emphasize the agricultural potential of the soil (*e.g.*, “very rich first rate land” or “unfit for cultivation”). In addition to the topography and soils, Van Zandt described the timber resources for 22 townships in Pike and Calhoun Counties. His lists of trees and shrubs in these townships are quoted in the following paragraphs.

* Thorn = hawthorn (*Crataegus*).

† Spicewood = spicebush (*Lindera benzoin*).

‡ The name of the American hazel (*Corylus americana*) was sometimes spelled hazle.

Township 9 South, Range 2 West * (part of the former Crater and Hamburg Precincts in Calhoun County): "Timber—oak, hickory, walnut, elm, maple, ash, dogwood, sugar tree, sassafras—hazle." ⁹⁴

Township 10 South, Range 2 West (part of the former Crater, Hamburg, Gilead, and Hardin Precincts in Calhoun County): "Timber—oak, hickory, dogwood, spicewood, and pawpaw." ⁹⁴

Township 11 South, Range 2 West (part of the former Hardin, Gilead, and Richwoods Precincts in Calhoun County): "South half of section 8, has a salt spring. The prairie bottom east of the bluffs is frequently overflowed. . . . Timber—oak, hickory, and dogwood." ⁹⁴

Township 12 South, Range 2 West (part of the former Richwoods and Point Precincts in Calhoun County): "Timber—oak, hickory, and dogwood." ⁹⁴

Township 14 South, Range 2 West (part of the former Point Precinct in Calhoun County): "Timber—oak and hickory—hazle." ⁹⁴

Townships 3 & 4 South, Range 3 West (Perry and Griggsville Townships in Pike County): "Timber—oak, hickory, cherry, and elm—hazle and vines." ⁹⁴

Township 4 South, Range 4 West (New Salem Township in Pike County): "Timber—oak, hickory, cherry, and elm—hazle." ⁹⁴

Townships 5, 6, 7, & 8 South, Range 4 West (Pittsfield, Martinsburg, and Pleasant Hill Townships in Pike County; and part of the former Bellevue Precinct in Calhoun County):

* A Congressional township is six miles square (thirty-six square miles). These townships are arranged in a rectilinear grid of boundary lines that are spaced six miles apart. A Congressional township is circumscribed and named according to its location north or south of a "base line" and east or west of a "principal meridian." The north-south designation is the "Township," and the east-west designation is the "Range": for example, the Congressional township designated as Township 9 South, Range 2 West is in the ninth tier of townships south of the base line, and it is in the second column of townships west of the principal meridian.

The townships in Van Zandt's account are arranged in seven ranges, beginning on the east with Range 2 West (along the Illinois River) and proceeding west to Range 8 West (along the Mississippi River). Within each range, the townships are presented from north to south (*e.g.* Township 9 South, Township 10 South, etc.).

Congressional townships were laid out as the foundation for real estate descriptions. In addition to Congressional townships, there are civil townships. The boundaries of a civil township may or may not correspond with the boundaries of a Congressional township. Civil townships form the basis for local government, and they are named in the manner of towns and counties.

Before the township form of government was instituted in Illinois, counties were subdivided into precincts rather than civil townships for the purpose of polling. A few counties did not adopt civil townships, maintaining precincts instead.

"Timber—oak, maple, elm, sycamore, hackberry, spicewood, plum, lynn, * buckeye, and sassafras—hazle and vines." ⁹⁴

Township 4 South, Range 5 West (Hadley Township in Pike County): "Timber—oak, hickory, and lynn—hazle." ⁹⁴

Township 5 South, Range 5 West (Derry Township in Pike County): "Timber—oak, hickory, elm, ash, lynn, cherry, and sassafras—hazle." ⁹⁴

Township 6 South, Range 5 West (part of Atlas Township in Pike County): "Snicarty slough passes through the southwest corner of this township. Timber—hickory, oak, locust, ash, hackberry, walnut, sassafras—hazle." ⁹⁴

Township 7 South, Range 5 West (Ross Township in Pike County): "Snicarty slough passes through the middle of this township. . . . Timber—sycamore, willow, pecon, [†] hackberry, oak, walnut, locust, and spicewood." ⁹⁴

Township 4 South, Range 6 West (Barry Township in Pike County): "Timber—hickory, oak, lynn, walnut, elm, sugar tree, hackberry, maple, and ash—briars." ⁹⁴

Township 5 South, Range 6 West (Pleasant Valley Township in Pike County): "Timber—walnut, hackberry, elm, oak, hickory, and maple—hazle—some barrens." ^{‡ 94}

Township 6 South, Range 6 West (part of Atlas Township in Pike County): "Timber—maple, walnut, oak, buckeye, ash, hickory, elm, and plum—briars." ⁹⁴

Township 4 South, Range 7 West (Kinderhook Township in Pike County): "Timber—maple, hickory, oak, lynn, hackberry, elm, sycamore, sassafras, and spicewood—hazle and vines." ⁹⁴

Township 5 South, Range 7 West (part of Cincinnati Township in Pike County): "Timber—oak, maple, elm, willow, hackberry, walnut, pecon, locust, and ash—briars." ⁹⁴

Township 4 South, Range 8 West (Levee Township in Pike County): "Timber—maple, elm, ash, walnut, locust, birch, hickory, and oak—briars." ⁹⁴

1819: E. Dana

In the year after Illinois became a state, Edmund Dana published *Geographical Sketches on the Western Country*, subtitled "Designed for Emigrants and Settlers: Being the Result of Extensive Researches and Remarks, to Which Is Added, a Summary of All the Most Interesting Matters on the Subject, Including a Particular Description of the Unsold Public

* Lynn = eastern basswood (*Tilia americana*).

† Pecon = pecan (*Carya illinoensis*).

‡ Edmund Dana's description of a "barren" is on page 92, and his definition of the term *barrens* is on page 95.

Lands, Collected from a Variety of Authentic Sources, Also, a List of the Principal Roads."

Mr. Dana's account of the Illinois River reveals the prevailing level of knowledge—and ignorance—about the stream:

The Illinois derives its source from the confluence of the Theakiki and Plein,^{*} in the northwest of Indiana.[†] Pursuing generally a northwest course,[‡] it is discharged into the Mississippi 21 miles above the Missouri, where its width is 420 yards.[¶] Its current is gentle and smooth, unimpeded by falls or rapids,[§] and navigable for 400 miles;^{**} much of its banks are overflowed in high waters.

. . . Between Edwardsville and the military bounty lands,^{††} the space over the American bottom, for 8 miles, is first rate land; the remaining distance, 28 miles, is considerably broken; the soil good, except on the high ridges, rather thin, and well supplied with wood and water.

The Parasaw creek^{‡‡} commences its source between 30 and 50 miles east of the Illinois It is a small stream, and navigable only a few miles up. Some excellent bottom lands of a moderate extent, form the margin of this creek; but much of the soil on the bordering high lands is thin; the forest trees consisting of a handsome growth of oak and hickory. A species of wild grass which affords a tolerable forage for cattle, covers the surface of the ground. The languor and muddiness of the stream in the dry seasons, render the water nearly stagnant, and produce an unfavorable effect on health.

. . . A branch of the Grand Praira, which lies between Vincennes and St. Louis, . . . commences about 12 miles northeast of the Parasaw, and extends 17 miles in length, (the width not exactly known) to lands bordering on the Macopen creek.^{¶¶} This praira is interspersed with divers clusters of good timber trees,

^{*} Theakiki = Kankakee River; Plein = Des Plaines River.

[†] The junction of the Kankakee and the Des Plaines is in northeastern Illinois, not northwestern Indiana.

[‡] The general course is to the south and west, not northwest.

[¶] This width is in general agreement with other estimates from the era.

[§] Navigation on the Illinois River was impeded by a series of rapids upstream from Starved Rock.

^{**} The entire length of the Illinois River is about 270 miles.

^{††} Edmund Dana explained, "The *Military Bounty Lands* are located between the rivers Mississippi and Illinois, in the form of an irregular curvilinear triangle; and extend, from their junction, in a straight line, north, 169 miles."⁹⁴

^{‡‡} Parasaw creek = Piasa Creek.

^{¶¶} Macopen creek = Macoupin Creek.

occupying from one to five acres each. In some places it approaches within 200 rods of the Parasaw. The soil is generally good, excepting near that stream, a space of about six miles square, is thinly covered with small stunted oaks; which may be considered rather a barren * than a praira. Here the surface is more rolling and the grass shorter, than on the other parts of the praira. In this tract of barren, some springs of water are to be found; but not so frequently as on the praira; where the surface is varied into broad, gentle swells, so as to make the scenery pleasant and the cultivation convenient. The Grand Praira is bottomed on a yellow, loamy clay, which form a kind of pan, that will render the fertility of the soil durable. . . . The best parts of the Grand Praira, are covered by a black, sandy loam which is not drenched by heavy rains, nor baked by ardent suns. The wild grass, which makes excellent fodder for cattle, grows here with great luxuriance; and the soil is easily penetrated with the plough. There being no stagnant pools, and the water being exceedingly pure, cold and limpid, there is perhaps, no part of the United States where better health may be enjoyed.

. . . Some of the head waters of the Macopen creek take their rise from the Grand Praira.

About ten miles southeast of Illinois, and east of the Mississippi, is a tract of beautiful land, consisting of what is called the *Mound Praira*, † from 400 to 600 rods wide, and from four to five miles long. The soil is of the first quality, well supplied with water, and the surrounding upland is covered with a handsome growth of timber trees.

. . . The alluvial margins of the Illinois are in many places extensive, and become lower as they gradually recede from the river; and the waters overflowing large portions of these bottoms, after the river shrinks within its banks, finding no return passage, become stagnant in the warmer seasons, and contaminating the air with the noxious particles which are exhaled from the *miasmata*, produces agues and summer fevers.

About 25 miles from the mouth of the Illinois, on the east bank of the Mississippi, . . . is situated Alton. . . . The soil of the surrounding lands is of a middling quality; the face of the country rolling; the prevailing growth, walnut, hickory and oak; the ground generally overspread among the trees with an excellent kind of wild grass, by some called red top, ‡ which grows tall and luxuriant, and whether green or well hayed, makes good food for cattle.— Among forest trees, which are tall and thinly set, the settlers mow and make

* Dana's definition of the term *barrens* is on page 95.

† Dana's directions are askew: Mound Prairie was about 10 miles east of the mouth of the Illinois River, and north of the Mississippi River.

‡ The identity of this "red top" is problematic. *Agrostis alba*, a Eurasian introduction, is commonly called redtop, but it cannot be described as a "tall and luxuriant" grass. The flowering stems of big bluestem (*Andropogon gerardii*) often have a reddish hue.

On the East Side of the Mississippi a leavel rich bottom extends back about 3 miles, and rises by several elevations to the high Country, which is thinly timbered with Oaks . . . the lands are generally fine on the River bottoms and well calculating for farming on the upper Country

— Captain William Clark at the mouth of the Wood River
on January 15, 1804 ³⁴²

into hay large quantities for winter forage. The same kind of grass in that part of the country is spread out under the forest trees for hundreds of miles in every direction. When well cured, the hay is esteemed equal to timothy.

. . . *Macopen, Apple and Otter* creeks, discharge themselves into the Illinois, from the northeast, near together, from 25 to 30 miles above the mouth of the Illinois. Except within a few miles of that river, the lands on all these streams are of an excellent quality, and the situation remarkably healthy. Of sixty families which the author found on that tract, in the sickly months of 1818, not one single person was out of health. The public survey of these lands was completed in the spring of 1819.—*Macopen* is navigable 25 miles from its mouth, and by removing flood wood, boats might pass many miles further up. The land within the distance of 10 or 12 miles of the Illinois, is but ordinary second rate, and though well watered, is broken and hilly: but eastwardly of this space, the face of the country is variegated by gentle swells—the soil of a superior quality, well supplied with rivulets and fine springs of pure water, a good proportion of prairie and wood, and the whole presenting a charming rural scenery. The number and variety of plants, growing in the prairies, produce blossoms of every hue, in succession. One species of flower expanding its blossoms as another decays, constantly exhibits vegetable nature, through the long summer season, in her gayest attire. There the senses of sight and smell find their highest gratification, while the mind of the spectator is vastly amused in beholding thousands of the busy insects extracting their nectareous food and winter stores, from the spontaneous bounty of a provident creator.—This wonderful provision for millions of honey-bees, gives them the means of replenishing the hollow trees of the forest with honey, of which the inhabitants, with little care or toil, gather barrels yearly.

A tract of land, extending on the Mississippi Bluffs bordering the bottom lands near Alton, from 10 to 15 miles wide, eastwardly, and on bluffs bordering the Illinois bottoms, northwardly, from 30 to 40 miles in length, is of a waving surface—the growth of trees, hickory and oak, straight and tall, but thinly set; springs and good water, rare. The soil, over some parts, rather thin, is of a dark gray, sandy loam, bedded on yellow, sandy clay, excepting where the Parasaw, Otter, Macopen and Apple creeks flow through, the margins of which consist partly of good bottom and partly of hills and knobs. ⁹⁴

1819: E. Dana

Thirty-nine days after Edmund Dana submitted his *Geographical Sketches of the Western Country* to the copyright office, he was finished with a second book: *A Description of the Bounty Lands in the State of Illinois*. In the “Introductory Remarks” to his second book, Mr. Dana stated,

One tract of country, which has been appropriated and surveyed for the Bounty Lands of soldiers, who served in the late war between the United States and Great Britain, is situated between the rivers Mississippi and Illinois; extending from their junction, by a meridian line, northwardly, precisely 169 miles; presenting an irregular curvilinear triangle, whose acute angle is at the confluence of the two rivers. The southern extremity forms a point: the northern is spread out to an extent of 90 miles wide. . . . The whole area surveyed contains 5,860,000 acres, of which no more than 3,500,000 have been appropriated for Bounty Lands: the residue consists partly of fractional sections, bordering on the great rivers, and partly of lands that were returned by the public surveyors as unfit for cultivation.

. . . It is presumed the Illinois may be ascended by loaded boats with more facility than that of any other river of considerable length in the United States. The current is gentle, not much exceeding two miles an hour; and the surface is smooth, and destitute of rapids, rocks, sawyers, snags, * and sand bars. The water is deep and remarkably clear, but not pleasant to the taste. The mean width is about 400 yards.

* Henry Schoolcraft defined *sawyers*, *planters*, and *snags*:

As these terms may not be familiar to an eastern reader, an explanation may here be given. A sawyer is a large tree which has tumbled into the river above, and got fastened by its roots in the bottom, with its top pointed downwards, and just appearing above the level of the water, or it may terminate a foot or two below, so that its locality can only be told by an experienced hand by the ripple created in the water. This tree is continually forced downward by the current, which is still not strong enough to tear it out, and suffers it occasionally to recoil, so that a regular rotatory motion is kept up, which is performed once in ten or fifteen minutes; and if a boat by passing over it at the time it has overcome the pressure of the current and is recoiling to its original position, the destruction of the boat is inevitable. The power of this engine of destruction is that of elasticity, which is here brought into operation by the pressure of water against a column of live wood eighty or ninety feet in length, the bottom being fastened, and the column inclined at an angle of about eighty degrees, leaving the top at liberty to play like a whip-stalk. When the tree does not reach within two or three feet of the surface of the water, they are called *sleeping sawyers*, and these are the most dangerous, for they cannot be seen.

. . . *Planters*, are trees in a similar situation, but firmly set, and having no motion. *Snags*, are small trees, or limbs of large trees, sticking up in the river, and may either be fixed or have motion.²⁹⁶

. . . The mean width of the Mississippi, where it borders the Bounty Lands, is about three-fourths of a mile. Above the mouth of the Missouri, the Mississippi is much less turbid and rough than below. It is, however, more difficult to ascend than the Illinois. The river containing many islands and sand bars above the Illinois, the main channel is not easily distinguishable, by a stranger.

. . . The bluffs bordering on each of the great rivers, above their junction, are not so elevated as below. . . . On these bluffs, which are in some parts depressed into level or hollow spaces, that consist of good lands, the soil is commonly thin.

Three-fourths of the alluvial margins, or bottom lands, on the Illinois, and nearly one-half on the Mississippi, are inundated by the high waters. . . . In the interior, are many large spaces covered with high lands of a species distinct from what are termed *bluffs*; many of which consist of high precipitous hills and knobs; which frequently extend over a whole township, well supplied with wood and fine springs of water, occasionally forming the sources of considerable streams; but exhibiting, generally a surface too rough to be cultivated, and a soil too thin for tillage.

Of praira lands, although much of these are to be found among the Bounty Lands, the proportion is considerably less than in other parts of the state. About one half of the Bounty Lands may be allowed for praira. Of those, a large part is of the first quality of soil; being either a black vegetable mould, or a dark, sandy loam, from 15 inches to three feet deep; generally bedded on yellow clay, mixed with sand—the surface conveniently waving for cultivation, and adapted to render the prospects more charming. Many of these prairas are not of great extent, and are well interspersed with timber, or skirted with thick margins of wood. There are, however, several townships of first rate praira, covered with grass and plants, producing a numerous variety of flowers of every hue, which blossom and decay, in succession, from spring to the winter months; while scarcely a tree can be discovered within a space far as the eye can reach. Another species of praira is flat, wet, cold, and heavy, the soil often thin and unproductive. Of the latter are tracts of considerable extent in various parts of the Bounty Lands. Another species of prairas may more properly be denominated *barrens*: the surface very rolling, and often much broken by what are denominated *sink holes*; * the timber scattering and of stinted growth, commonly small oak and hickory; the wild grass short—the soil, however, productive of wheat, clover, timothy and fruit trees.

Of the Bounty Lands, as well as of the other parts of the state of Illinois, it is remarkable, that timber trees and good water are less abundant, in many parts

* Many of the barrens in this region were dotted with sinkholes, forming the landform known as a sinkhole plain. Although barrens often developed on sinkhole plains (e.g. the Big Barrens region of Kentucky), barrens also developed on a wide variety of other physiographic settings.

than the necessities of agriculture require. Prairies are frequently of so moderate an extent that they occupy a space not larger than a good farmer would want cleared off for improvements; but many tracts are found, exhibiting an open expanse, to a vast extent, destitute of timber, except on streams and water courses, which it is observable are uniformly lined with skirts of good timber growth. It has been a subject of much inquiry, how an occupant will find a substitute for wood and timber, on the open prairies. By those who have attempted the experiment, we have been credibly informed, that black locust, which is of the first quality for fire-wood or timber, when planted on the prairies, grows with astonishing rapidity. Should this information be correct, of which we have no reasonable doubt, it would seem that one grand objection to open prairies, for farms, will be removed.

Of the inundated tracts in the Bounty Lands, as in most other parts of the west, it has been remarked that they are commonly thickly timbered. Among other kinds that grow on such lands, are to be found sycamore, poplar, cotton wood, * honey locust, walnut, hickory, ash, elm, and grape vines. The better kind of the Bounty uplands produce, with several other species, beech, † sugar-maple, oak, hickory, black locust, ‡ mulberry, cherry, and hackberry. On soils high, broken and thin, the prevailing growth is oak and hickory.

. . . Many of the prairies are sparingly supplied with springs, or running water. It is, however, to be obtained plentifully, by digging between ten and twenty-five feet below the surface.

. . . The Illinois is considered more prolific in fish, than any other stream, which pays tribute to the Mississippi. This probably is the effect of the superior

* Edmund Dana listed both the poplar and the cotton wood, which is puzzling. The eastern cottonwood (*Populus deltoides*) is abundant in the region and was commonly called a poplar during the early 1800s. Perhaps Dana was thinking of a related species, the bightooth aspen (*P. grandidentata*) when he mentioned poplar. The tulip tree or yellow poplar (*Liriodendron tulipifera*) was also commonly known as a poplar, but this species does not naturally occur in the Military Bounty Lands.

† The American beech (*Fagus grandifolia*) is not indigenous to this region. Perhaps the blue beech or water beech (*Carpinus caroliniana*) was intended.

‡ The black locust (*Robinia pseudoacacia*) probably did not originally grow in the wild in the Big Rivers Area. In an 1863 essay about Illinois trees, Dr. George Vasey cited the authority of Dr. George Engelmann, a St. Louis botanist, in reference to the natural range of this species: "The common Locust (*Robinia pseudoacacia*.) which is in common cultivation all through the State, is undoubtedly, native in the southern portion, and, according to Dr. Engleman, as far north as Randolph county." ³⁵⁴

Black locust was a favorite among the region's farmers in the early 1800s. J.M. Peck said of the black locust, "It is of rapid growth, and, as a valuable and lasting timber, claims the attention of our farmers. It forms one of the cleanliest and most beautiful shades, and when in blossom, gives a rich prospect, and sends abroad a delicious fragrance." ²⁵¹

transparency of the water, which flows down that river, caused by the gentleness of its current, and its exemption from rapids and precipitous declivities, which in other streams wear away the soil on the banks, and so suspend the attenuated atoms in the water, as to render them turbid. The following, though not a full catalogue, contains most of the names, after the manner of the country, of all such fish as are most worthy of note, viz: catfish, perch, pike, bass, buffalo, suckers, sturgeon, hickory shad, flat fish, salmon (of a different species from the fish of that name in the waters of the Atlantic,) eels, bill fish, black fish, gars, rock fish, sun fish, mullet and herrings. * The cat is esteemed among the most valuable, and is the most remarkable for its size, weighing from 20 to 170 pounds.

. . . The shortness and moderation of the winter seasons, and the abundant forage that may be gathered, from the wild prairies, render the raising of stock cheap and easy. These extensive open tracts of prairie, will, probably remain uninclosed, for many years. The grass, when well cured, makes excellent hay; and cattle grazing in them, while green, fatten well. The wild nuts falling from the forest trees, and the extensive open ranges, furnish great facilities for making pork.

. . . It is a fact, which, however, ought not to be disguised, that a large portion of the margin of the Illinois, Mississippi and some other western streams, may be reckoned among the situations most unfavorable for health. The stagnant waters remaining in many places, from the overflowings of the rivers, and the putrescent vegetable substances, have often proved destructive to the health and vigor of the new settled woodsman and his family. This compound mass of putrid matter, proceeding from the luxuriant growth of the wild plants and trees, whose abundant decayed foliage, from partial improvements, being acted upon by the sun, to a degree that commences putrefaction and continues, but does not stop its progress by that degree which will dissipate the moisture, whereby it is exhaled and suspended in the form of vapor, consisting of pestilential particles, engenders malignant fevers, which have proved so destructive to recent settlers.

. . . The Illinois, a straight, deep channel, with a smooth surface and gentle current, presents a most convenient route, for all kinds of water craft⁹⁵

The bulk of Edmund Dana's 47-page book consists of a township-by-township description of the Bounty Lands. As he explained, "The author has laboriously employed the greater part of twelve months, in traversing the military Bounty Lands in the state of Illinois, with a view to acquire a knowledge of the natural qualities and peculiar character of the several parts." ⁹⁵

* This list is generalized and cannot be relied upon. It includes names that are most often applied to salt-water fishes.

The following paragraphs present Dana's descriptions of each Congressional township that covers the Big Rivers Area.*

Township 5 South, † Range 2 West: ". . . nearly all of the same quality of the last mentioned township; ‡ mostly high lands, second rate.—Secs. 17, 20, 21, north half of 22, and south halves of 8 & 16, all first rate." ⁹⁵

Township 5 South, Range 3 West: ". . . a poor tract, uneven, broken." ⁹⁵

Township 6 South, Range 2 West: ". . . generally good. North part of secs. 3, 4, 5, 6, 7, 8, 9, and west part of 10 & 16, all first rate: have a good growth of timber. Southeast part of the township, hilly; second and third rate; well timbered." ⁹⁵

Township 6 South, Range 6 West:

. . . greater part first rate land. The lands between Snicarke [¶] and Mississippi, are very pleasantly situated, except that some part of the bottom, on the latter, in high waters, is overflowed. The author's attention was particularly drawn to the southwest quarter of sec. 12, and the northwest quarter of 13, which, in

* The township descriptions are arranged in nine east-west tiers, beginning in the north with Township 5 South in southern Pike County and extending south to Township 13 South at the tip of Calhoun County. The townships within each tier are presented in ranges that are arranged from east to west (e.g. Range 2 West, Range 3 West, etc.).

Portions of the township descriptions are not quoted here. The great majority of omitted passages consist of descriptions of good prospects for future town sites and ferries.

Several of Dana's descriptions appear to list the wrong section numbers. For instance he described sections 12 and 13 in Township 11 South, Range 2 West, but this fractional township does not have a section 12 or 13. The user is advised to carefully compare Dana's descriptions with the existing landscape to help discover possible errors.

Townships do not extend across the Illinois or Mississippi Rivers, resulting in "fractional townships" where they are cut short by the river. Dana did not describe several small fractional townships bordering the Mississippi and Illinois Rivers. Each of these omissions consists of very few square miles.

† Township 5 South is at the latitude of Pittsfield.

‡ The "last-mentioned township" is Township 6 South, Range 6 West, which is described as "greater part first rate land."

¶ Edmund Dana later characterized Snicarte Slough, which he called the Snicarke:

A description of the Snicarke, as it extends through many of the townships in the Bounty Lands, may serve to present a better general view of that part of the country, than can be obtained from a more partial description in townships. It lies parallel with the Mississippi, from which it is distant from one to five miles. Its whole extent is about 80 miles: the width from 10 to 20 rods. It is but a bayou, communicating with the Mississippi, at each extremity. One of the termini is in township 3, south, range 8, west; and the other at township 8, south, range 4, west. The author considers the townships intersected by this stream of water, among the best in the Bounty Lands.⁹⁵

My situation is as comfortable as could be expected in the woods, & on the frontiers; the Country back of me is butifull beyond discription . . . — William Clark, writing to his father-in-law about his Wood River camp in January of 1804.

connection, present one of the most delightful wild sceneries that can be found on the Bounty Lands. A beautiful stream of water intersects this favorite spot, nearly in the centre: the water is pure and limpid, flowing in its course over a pebbly bottom from the back high lands; and so copious and precipitous, as to form several fine mill seats. On the southwest part of sec. 12, is a good mill seat. Sec. 2, 3, north part of 5, north part of 10, are remarkably fine lands. North halves of 14, 15, east halves of 16 & 23, west half of 24, south halves of 25, 26, and north half of 36, are first rate farming lands.—East half of 24, north halves of 10, 9, 25, south halves of 8, 4, 5, 6, & 15, west halves of 23, 24, good soil, but all overflowed by high water: growth, honey locust, ash, oak, hickory, grape vines, plumb trees and cherry.⁹⁵

Township 7 South, * Range 2 West: “. . . well timbered; generally good farming land: west part some broken.”⁹⁵

Township 7 South, Range 3 West: “. . . broken, hilly, thin soil.”⁹⁵

Township 7 South, Range 4 West: “. . . most excellent lands, generally; much of it first rate; handsome situations for farms: growth, honey locust, sugar tree, elm, ash, walnut, sycamore, lynn.”⁹⁵

Township 7 South, Range 5 West:

“. . . generally good. North part of secs. 1, 2, east half of 3, 7, 8, 12, 13, 14, south part of 15, and secs. 17, 22, 24, 25, 36, east half 28, west half 9, all first rate farming lands: the sections next the Mississippi and the Snicarke, inundated in high water: growth, honey locust, sycamore, spice bush, pecan, hackberry, walnut, elm, ash.”⁹⁵

Township 8 South, † Range 2 West: “. . . broken, ordinary soil, but the upland well timbered; large portions next the river, inundated in high waters.”⁹⁵

Township 8 South, Range 3 West: “. . . east part broken; on the west, some good land. Secs. 12, 13, 20, & east half of 24, good land, well timbered: residue, hilly, broken.”⁹⁵

Township 8 South, Range 4 West: “. . . chiefly first rate farming land; valuable growth of timber.”⁹⁵

* Township 7 South forms the southernmost tier of townships in Pike County.

† Township 8 South forms the northernmost tier of townships in Calhoun County.

Township 9 South, Range 2 West: ". . . uneven, hilly. Sec. 9, north half of 4 & 16, west half of 15 & 27, east half of 34, all first rate, the rest broken: growth, oak, hickory, elm, black walnut, maple, ash." ⁹⁵

Township 9 South, Range 3 West: ". . . Secs. 26, 22, west parts of 12, 13, 24, 10, 3, 4, generally first rate; residue third rate, hilly, broken: growth, oak, hickory; some elm, maple, pecan." ⁹⁵

Township 10 South, * Range 2 West:

On the west half of section 31, the author laid off a town in 1818, which is called *Bountyville*, in which some buildings are erected: the situation is pleasant and the soil first rate. Secs. 30, 20, west half of 2, 11, 36, first rate, well timbered; 29, 28, broken into hills, well supplied with fine springs; one of which is copious enough to drive a grist mill. Residue of the township uneven and hilly—growth, oak and hickory. ⁹⁵

Township 10 South, Range 3 West:

. . . contains 6 sections, all good land Sec. 2 contains a good salt spring; and a large fresh water spring, with a thirty feet fall over rock, furnishing an excellent seat for an overshot mill. The back lands swell into considerable hills—good second rate, and watered with fine springs. ⁹⁵

Township 11 South, Range 2 West:

South half of sec. 8, is occupied by one Shaw, D. Church and others On this section is a valuable salt spring: it is also well supplied with freshwater: the soil is first rate. Sec. 17, first rate, occupied by three families Southwest quarter of sec. 35, occupied and considerably improved, first rate. Secs. 12, 13, 14, 23, 24, first rate, settlements on each Secs. 5, 6, 7, and west half of 29, first rate; timber, cotton wood, pecan, ash, locust, poplar, elm, black walnut—residue of the township too broken and hilly for cultivation—timber, oak, and hickory. ⁹⁵

Township 12 South, Range 1 West: ". . . good soil, well timbered; overflowed, mostly, in high water." ⁹⁵

Township 12 South, Range 2 West:

Part first rate. Major Wadsworth, from New-York, in June, 1818, with five families, settled on sec. 25, which is first rate. This township is mostly overflowed, next the Illinois—the situation unhealthy. The major and several who accompanied him, died the first season. Sec. 25, 26, 2, 11, east half of 33, 14, 34, first rate. West half of sec. 2, 11, 26, broken, thin soil. The author built

* Township 10 South is at the latitude of Hardin.

on sec. 1, it being a delightful spot for a town: but finding it unfavorable to health, abandoned it.

No part of the fractional sections, of which this is one, is appropriated for bounty lands. Residue of the township broken into hills: upland timber, oak and hickory; bottom, cotton wood, pecan, locust, black walnut, elm, ash, poplar.⁹⁵

Township 13 South, * Range 1 West:

Generally of a good soil, but much of it overflowed in high water. Sections 28, 17, 33, 23 and east part of 15, are the best in the township; the residue good grazing land: the uplands broken, and the lowlands, in high water, overflowed: timber on the upland, oak and hickory.⁹⁵

Township 13 South, Range 2 West:

Roberts, Esq. occupies section 22, on which a town is laid off. Sec. 22, 25, 26, 15, and west half of 16, all excellent; the residue of the township third rate: the upland timber, oak, and hickory; the bottom, elm, cotton wood, hackberry, ash, and sugar maple.⁹⁵

1819: Ferdinand Ernst

Ferdinand Ernst came from Germany in 1819 to conduct a wide-ranging inspection of southern and central Illinois. He related his experiences in a small book, part of which has been translated to English.

On the 27th of August 1819, Herr Ernst set out from Vandalia for the Sangamon Country. He and a guide rode their horses to the west and north across the Shoal Creek valley, intent on intercepting "a fine, well-traveled road" from Edwardsville. They reached the road on the prairie that forms the high watershed divide between Macoupin Creek, Shoal Creek, and the Sangamon River. Here is how Ferdinand Ernst described the landscape along their route:

We left the forests about the sources of Sugar and Silver creeks to the south, and in the vicinity of the groves about the sources of the Macoupin we came upon this road. We now touched upon points of timber on some branches of this river, and then came into that great prairie which extends from the Illinois river through the greater part of the State from west to east and disappears about the source of the Okaw and upon the banks of the Wabash. This great prairie is the dividing line of the waters flowing southward to the Mississippi and northward to the Sangamon; but is, however, of no considerable height. East of the road are some lakes or swamps from which the two branches of Shoal creek receive

* Township 13 South is at the latitude of Brussels.

their first water. The entire region south of this prairie elevation is especially distinguished by the elevation of the prairie and by the smoothness and fertility of the land; however, no spring or river water is to be found anywhere in it. In general the few springs which may possibly be there occur only in the bordering timber. The banks of the rivers are very high and hilly, upon these alone are found the patches of forest. All rivers here have but little fall and form many stagnant bodies of water, while in dry seasons the rivers dry up almost completely, and thereby are produced those vapors which make the air unhealthy.

As soon as one arrives upon the elevation and northern side of this prairie the grass of the prairie changes and the ground becomes visibly better.¹⁰⁷

In a narrative datelined "St. Louis, on the Mississippi, Sept. 26, 1819," Ernst related what he had learned during an excursion from Portage Des Sioux to the Illinois River:

I here entered a canoe in which a Frenchman took me up the Mississippi. The further banks of that river, in the State of Illinois, consist of rocky walls in which are found some large caves, two of which I visited. We reached the Illinois river towards evening and ascended it about three miles, where we passed the night with a Frenchman who lived upon the military land * on the right bank of the river.

There is certainly no river in North America better adapted for navigation up stream than the Illinois. Its quiet water has everywhere sufficient depth and is clear of snags which make the Missouri and Mississippi so dangerous. From its mouth up stream the Illinois receives the following rivers: From the east (1) the Fouche, (2) the Marais, (3) the Macoupin (navigable nine miles), (4) Negro, (5) the Sangamon (navigable 250 miles)[†]

. . . On the west the Illinois receives (1) the McKees creek, (2) Crooked creek,[‡] (3) Spoon river, and the Kickapoo. These rivers are of no particular significance, and all rise in the military lands.

. . . On the following day I returned to the Mississippi and Portage des Sioux.

* Ernst was referring to the Military Bounty Tract west of the Illinois River.

† The identity of some of these streams is not clear. The Illinois River receives only a few small streams between the Mississippi River and Macoupin Creek. The Fouche appears to be Otter Creek, the same as Governor Edwards' "Fouchai" (page 59). The Marais (French for *swamp*) might designate a slough on the east side of the Illinois River and south of Macoupin Creek. The identity of the Negro River is problematic. Perhaps the Negro River is Apple Creek, the largest affluent of the Illinois River between Macoupin Creek and the Sangamon River. (A branch of Apple Creek has been known as Negro Lick.) Governor Edwards placed the Negro River one and one-half leagues below Mauvaise Terre Creek. Lewis C. Beck stated that Negro Creek is another name for Mauvaise Terre Creek.²⁷

‡ Crooked Creek = La Moine River.

. . . The hazel nuts were ripe here, and bear with astonishing abundance.
. . . The pawpaw is also now ripe and is found here especially frequent. . . . As we were crossing the Missouri we often saw mud turtles sunning themselves on logs, but dropped into the water as soon as they perceived anyone.¹⁰⁷

1819: Edwin James

Dr. Edwin James served as a botanist and geologist on the U.S. Army expedition that explored the Great Plains in 1819–20. Under the command of Major Stephen H. Long, most of the men set out from St. Louis on June 21, 1819. They breasted the Mississippi as far as the Missouri River, where they turned west toward the Rockies:

From St. Louis upward to the Missouri, the water of the Mississippi, for a part of the year, is observed to be clear and of a greenish colour on the Illinois side, while it is turbid and yellow along the western bank. But at the time of our ascent every part of the Mississippi appeared equally turbid, its waters soon becoming blended with the heavy flood of the Missouri.

The Missouri being now swollen by the spring floods, which had subsided in the Mississippi, entered that river with such impetuosity, as apparently to displace almost the whole body of the waters in its channel. We had occasion to observe that the water of the Missouri, passes under that of the Mississippi, rising and becoming mingled with it on the opposite shore, so that a portion of the clear, green waters of the latter river, run for some distance in the middle of the channel, and along the surface of the Missouri waters, rendered perhaps specifically heavier, by the great quantities of earthy matter mingled with them. The waters of the Missouri are so charged with mud and sand, as to be absolutely opaque, and of a clay colour; while those of the Mississippi being comparatively clear, and having a somewhat olivaceous tint, afford an opportunity of tracing their respective courses, after their junction in the same channel. At some stages of water they run side by side, and in a great measure unmixed, as far as Herculaneum, forty-eight miles below their confluence.

. . . We were somewhat surprised to see here, a flock of black-headed terns.* It is remarkable that these birds, whose ordinary range is in the immediate vicinity of the sea coast, should ascend this river to so great a distance.^{† 174}

* Any of three species of black-capped tern might have been seen by the crew at this point in their journey: the common tern, the least tern, and Forster's tern. Howard Evans, author of a book about the natural history of Long's expedition, supposed that the species is Forster's tern.¹⁰⁸ But Titian Ramsay Peale, another member of the expedition, made note of "Minute Terns" at this location. The minute tern is the least tern.

† Edwin James wrote the official report of this expedition, but he did not join the explorers until 1820—many months after the men made these observations at the mouth of the Missouri River. Dr. James relied on notes from other expedition members to prepare the account.

... Col. Morgan is of opinion, that this is the spot that some French writers call the "TERRESTRIAL PARADISE." The large meadows, in which are lakes of limpid waters, the gently ascending copses of wood, added to the extensive view of the rivers, both up and down, of which you have a pretty sight from off an eminence below the Illinois—all tend to render the place truly delightful.

— Zadok Cramer's musings about the junction of the Illinois and Mississippi Rivers in 1803.⁸⁶

1819: Richard Lee Mason

The *Narrative of Richard Lee Mason in the Pioneer West* tells of this adventurer's foray from Pennsylvania to Illinois. Dr. Mason received a large tract of land for his service in the War of 1812, and he traveled to Illinois in 1819 to inspect his allotment. Mason's diary relates, "After dividing my time between St. Louis and Illinois until the 8th day of December, I set out . . . to visit the bounty lands."

Traveled to Milton, a small town over the American bottom, twenty miles. This soil cannot be surpassed in fertility by any land upon the globe. Eighty and 100 bushels of corn to the acre are common crops without any labor except that which is necessary in planting. This, in truth, is the promised land—the land that flows with milk and honey. Stock in any quantities may be raised free from expense Milton is situated on Wood river (a very small stream opposite the mouth of the Missouri river and within one and a half miles of the Mississippi). It is a flourishing little village only one and a half years old.

. . . Milton, together with all the American bottom, is subject to bilious and intermittent fevers * during the warm months.

. . . Thursday, Dec. 9.—Left Milton at 6 o'clock. Passed Alton, distance from Milton one and one-half miles. . . . Traveled twenty-seven miles over a rich country, part rolling, part broken, belonging to the United States. This part of Illinois is high and healthy and is well watered. Arrived at the Widow Jackaway's ferry, one mile above the junction of the Mississippi and Illinois rivers. Passed several small French huts, made principally of bark, very open and but little appearance of comfort. Large strings of geese, ducks, opossums and skunks hung upon the sides of the huts to ripen.

. . . Friday, Dec. 10.—Left Mrs. Jackaway's at 8 o'clock. Crossed the Illinois on a platform placed on two canoes, and arrived in safety on the bounty lands a little above the junction of the bold Mississippi and the Illinois. Each of those rivers is about half a mile wide. Here a new country presented itself, of better quality and under more advantages than I was prepared to meet. Traveled all

* Malaria was called *bilious fever, intermittent fever, ague, chills and fever*, etc. ²⁸²

day through the woods, meadows and prairies. It began raining.* We were fortunate in being able to reach Mme. Belfie's, on the banks of the Illinois. . . Supper being prepared for the family, we were invited to partake. . . Wild goose was very good. After fishing in the dish some time I found something with a new flavor. It proved to be skunk. Made a light supper . . .

. . . Monday, Dec. 13.—Left Mme. Belfie's, crossed the Illinois and breakfasted at the Widow Jackaway's. . . We retraced our former footsteps for four miles and traveled on the shore of the Mississippi twelve miles. On the shore of the Mississippi for miles stand cliffs or bluffs composed of rocks, stones and marine substances. They are from 100 to 400 feet high. In many places there appear to be pillars or regular columns supporting those wonderful heights, which in many places appear almost ready to tumble on those below. In the body of this irregular mass I entered three caves, two large enough to protect a considerable family from the storm and the third sufficiently large to contain twenty men on horseback. This cave is supported by a neat pillar in the center. In several places I saw marks on the cliffs at a considerable height made with the different colors that Indians use to paint themselves. From their arrangement, it appears the men of the desert[†] had tried their agility to place the highest mark on the cliffs. Near those caves are the names of a number of persons cut in the soft parts of the rocks. In traveling along the shore I picked up several specimens of the most beautiful pearl I ever beheld. It is so plentiful here that no person thinks it worth picking up. . . In approaching the Illinois and Mississippi near the mouth from Milton a scene beautiful, grand and sublime presents itself. Immediately after leaving a thick wood you find yourself on the point of a knob or small mountain many hundred feet high. From this eminence you have a view of three bold and beautiful streams—the Mississippi, Illinois and Missouri. The country on one side is bordered with very high bluffs as far as the eye can reach, and on the other is a meadow or plain prairie, which extends for many miles in every direction, and occasionally is interspersed with handsome forest trees.²¹³

* Perhaps Mason's brief remark about the weather heralded the end of the great drought of 1819. He had endured sere conditions on his way across southern Illinois to the Big Rivers on November 7:

Our poor horses and ourselves almost famished for water. Traveled eighteen miles without a drop, and then compelled to use it out of a stagnant pool, where thousands of insects considered the water private property.

. . . Traveled over prairies just burned and through woods on fire. Smoke and dust, together with the want of water, almost produced suffocation, families sending miles for water to drink. . . There has been no rain in this part of the country for near seven months. Many of the farmers have lost stock in consequence of the drought.²¹³

† "Men of the desert," or inhabitants of deserted lands or wilderness: in another word, Indians.

1819: Titian Ramsay Peale

Titian Ramsay Peale served as the assistant naturalist on Major Stephen H. Long's 1819-20 exploration of the Great Plains. On June 22, 1819, as the expedition's steamer began its ascent of the Missouri River, Mr. Peale observed,

The meeting of the waters of the Mississippi and Missouri have a very singular appearance. The Mississippi is clear and of a transparent green, the Missouri thick with yellow mud and being heavier than the Mississippi, the water takes the bottom of the river until it strikes the opposite shore. It is there thrown to the surface and presents large spots of muddy water intermingled with the clear. The Minute Terns * were very numerous near the confluence of the two rivers. This morning heard the cries of a flock of Parrakeets. ^{† 361}

1819: John Mason Peck

In *Forty Years of Pioneer Life*, Dr. Peck summoned up a pyrrhic visage of Upper Alton:

We left St. Charles on February 23rd, 1819, and rode down to the "Point" [‡] Here we crossed the river a little after sunset, and had five miles to ride to the inhabited village. For three miles the pathway lay along the brink of the low water of the river under the cliffs. Not far from the present site of the Alton House, there was a building Here we obtained directions how to find and follow the dubious pathway through the brush and forest, up a long hill to the village. It was cloudy and dark, but on emerging from the forest, we found on every side the appearance of camp-fires. Log heaps, piles of brush, old stumps and other combustible materials were glowing with heat, and spreading an illumination over the plateau. ²⁵⁶

1819: Felix Renick

Near the end of May 1819, Felix Renick arrived at Edwardsville after a 16-day ride from Ohio. He continued west:

from Edwardsville the most common way for travelers going up the Missouri, or indeed, the Mississippi is to cross it above the Mouth of Missouri . . . at the ferry on the Mississippi above the Junction the Mississippi is said to be one mile and 20 poles wide; and is a smooth and beautiful river,—the Missouri at their Junction is not so wide but contains a much larger quantity of water, and appears indignantly to flow or rather roll in; and take possession of at least three

* Minute Tern = least tern.

† Parrakeet = Carolina parakeet.

‡ The Point is the peninsula between the Mississippi and Missouri Rivers.

fourths of the channel before it even deigns to suffer a mixture of their waters; and at once arrogantly takes to itself, and changes the character of the Mississippi from that of a smoothe and easy glideing stream to that of a bold rappid and rolling current—on leaving the ferry we travel 5 or 6 Miles over a low rich and heavy timbered Bottom thence for 2 or three alternately timber and prairie all very rich when we arrive at portage Desiou, * a small French Village on the Bank of the Mississippi—from thence up the Misouri to St. Charles a distance of about twelve miles we pass over some very fine rich prairies and some of an inferior quallity which appears to be prinsipally composed of a bed of sand thinly covered with grass and small grapevines,—on the 1st of June we set out from St. Charles up the Mississippi. The first 10 or 12 miles we pass over is generally a rolling country something similar to the Green River Barrons † thinly timbered with a mixture of Black Jack, Jack oak, black oak, ‡ and some white oak, and well set with a luxurient growth of Sedge grass—we then come into land of a better quality about one half of which is smoothe Open Rolling prairie generally high and dry the limestone rock appears in plenty about the creeks and we suppose may with propriety be termed a limestone land, this kind of country with little variation continues throughout this days travel say 38 or 40 miles and will afford a good settlement but has not yet came into market, except a few Spanish Claims—on the 2nd the land continued nearly the same for about 25 miles, when we come into Ramsey Creek Settlement which is a rich rolling Land covered with a heavy growth of elm hackberry blue ash wild Cherry honey Locust Boxelder etc.; under growth . . . , † this land continued without much variation the balance of our days travel 6 or 7 Miles to Clarkvill §¹⁵³

1819: Calvin Tunnell

In 1819 the family of Calvin Tunnell moved to the wilds on the north side of Macoupin Creek, near the present site of Carrollton. Years later Mr. Tunnell wrote a letter to his granddaughters about the “Prowling Monsters of the Greene County Desert”:

* Portage Desiou = Portage Des Sioux.

† Felix Renick was referring to the Barrens region of the Green River valley in Kentucky. Botanist Constantine Rafinesque described the “Barren Region, or the rather open region” of Kentucky in 1819: “The *barrens* are tracts of ground destitute of trees, or with few scattered small ones; but thickly covered with a luxuriant growth of plants” Rafinesque further noted that the barrens “have a growth of plants very similar to the vegetation of the *prairies* of Ohio, Indiana, and Illinois.”²⁷⁷

‡ The blackjack oak (*Quercus marilandica*) was formerly known also as the black jack or the jack oak. The black oak (*Q. velutina*) was also known as the jack oak. Fire-maintained sprouts of any oak species were sometimes called “black jack” or “jack oak.”

† A word in the original manuscript is unclear. The editor thought that it might be “Spice”; this is an old name for spicebush (*Lindera benzoin*).

§ Clarksville, Missouri, is on the Mississippi at the upstream limit of the Big Rivers Area.

Every sense was delighted, and every faculty awakened. After gazing for an hour I still continued to experience an unsatiated delight, in contemplating the rich and magnificent scene. — Henry Marie Brackenridge, viewing the valley near the confluence of the Illinois and Mississippi Rivers, circa 1810–1814.⁴⁸

Having been requested to write out an account or a little history of an interesting incident of my early life, I now commence

It was on the fourteenth day of February, 1819, . . . that I, with my family, arrived at my little log cabin or shanty, half a mile south of where I now live. . . . It had no door to close the entrance. My wife hung up a quilt to stop the aperature . . . , and to separate our little happy family from the prowling monsters of the desert * which were roaming about the country.

At this time there were but few animals more abundant than the wolves; they were often seen in gangs of four or five and sometimes more. They seldom attacked people—though they did on some occasions

I had not the time to do anything to make us more comfortable I had to go back to Madison County . . . before the ground would thaw and make the prairies impassible; we had no roads at that time. I was gone nearly a week. While I was gone, my wife got up one morning very early, while the morning twilight was yet lingering on the vision. When she stepped out of doors, she discovered a very large black wolf sitting on his haunches in the yard. . . . he for some time kept his position and sat barking a little at her, but she kept moving slowly towards him hollowing and clapping her hands when he finally galloped off as gracefully as if he felt himself at home. . . . On my return I found my family somewhat displeased with that kind of neighbors but seemed to rejoice that no Indians had come to the house during my absence.

They had burned off everything that was not impervious to fire—not a spear of grass was left for our stock to feed on. We learned there was a little green grass about the margin of the lakes, where the fire could not reach it in the Illinois bottom. James Caldwell, who lived half a mile west of me, and myself concluded to drive our cattle thither. We agreed upon a morning not very distant to drive them early.

. . . When the morning for our departure arrived we were scarcely able to distinguish objects through the dimness of the morning twilight I mounted my black horse I also took my rifle Being thus equipped my wife took a little colt and went before, tolling such of the cattle as would follow her while I drove up the rear until we got them in company with

* Calvin Tunnell referred to this sparsely inhabited (“deserted”) region as a desert.

Mr. Caldwell's cattle, when he and I drove them on through what is called the "south rich woods," * which was all burned off smooth and was so loose and mellow that even the small kinds of animals in passing over it would leave the impress of their feet on the virgin soil, which had never been pressed by the feet of the white man. Nothing of interest occurred until we had passed down the bluff into a deep hollow, we came to a beautiful spring where we stopped a few moments and slacked our thirst. This spring was in a narrow valley through which the little streamlet upon which Taylor afterwards built his saw mill † was coursing its winding way and purling along its tortuous channel over the little shoals and pebbles to the Illinois bottom, where it empties itself and finds repose in the inertia of a small lake. ‡ . . . When we had passed the spring a few hundred yards, we came to a grove of sugar maple, interspersed with ash and a few other kinds of timber; the lofty sugar maple here studded the grove, standing as straight as so many candles and were so thick together with other timber that there was no room for underbrush. . . . Mr. Caldwell proposed to me to let the cattle rest an hour while we would look about the forest and find a bee tree. ¶ I had not yet learned the art of finding bees, though I had found a few trees.

We hitched our horses and he went to the hills south of the branch, while I took a southeasterly course along the hill sides and over the deep hollows. When I had hunted round and formed almost a circle and was coming back towards the cattle and when I ascended a hill, the altitude of which was perhaps forty or fifty feet, having gained the summit, I found a panorama of almost the entire circle I had made. I was walking slowly along as bee hunters generally do.

On turning my eyes downward and to the left, I, for the first time, discovered a panther of the largest size—he was then lying ten or twelve feet from me,

* "Rich Woods" was a popular name in the region. In addition to a Richwoods Precinct in Calhoun County, three nearby areas on the east side of the Illinois River were known as Rich Woods. One was in Linden Bottom on the south side of Macoupin Creek in northwestern Jersey County (in Richwood Township), and one was in the broken lands north of Apple Creek in northwestern Greene County.²⁵¹ Calvin Tunnell's "south rich woods" probably was a third "Richwoods," which is described by the 1834 *Gazetteer of Illinois* as extending for several miles between Carrollton and Bluffdale.²⁵¹ The Tunnells lived near Carrollton, and the neighbor who accompanied them on the cattle drive lived west of Carrollton, so they seem likely to have herded their livestock west toward the Illinois River rather than heading northwest or southwest through one of the other two rich woods.

† Taylor's mill stream may be Hurricane Creek, which enters the Illinois River bottomland at Eldred. A different stream named Taylor Creek drains the former Taylor's Prairie, east of Carrollton.

‡ The lake where the Tunnells and their neighbor found forage for their cattle may have been Potato Prairie Lake, which once covered more than one and one-half square miles west and southwest of Eldred. The lakebed is now farmland.

¶ A tree with a hive of honey bees is called a bee tree. The honey bee is not native to North America. Historian Timothy Ball noted that these insects were thought to spread into a region "a little in advance of the white man."¹⁹ According to the 1882 *History of Grundy County*, "The honey bee, the harbinger of civilization, preceded the early settlers here some six or eight years . . ."²³

placing his feet under him and seemingly feeling the ground and was just ready to spring onto me.³⁴⁸

Tunnell shot the cat. His story continues:

His skin when taken off stretching nine and a half feet, from tip to tip. * . . I now took hold to feel the weight of him, I could not raise him from the ground.

. . . I went back to the cattle. Mr. Caldwell arrived soon after. We then drove the cattle on to the little lake into which the little stream aforesaid empties itself where we found plenty of green grass for the cattle. We then turned homeward. When coming nearly to the grove where we saw a few old looking trees standing in a dense and almost impenetrable thicket on the west side of the grove. We hitched our horses and made our way in as best we could. I soon found a very nice bee tree. We then went home—it was night. After supper I told my family all about the day's hunt and showed them the skin of the panther.

My wife then told me she had also been out hunting that day and had found a bee tree. . . . Some of the logs of which our shanty was built were hickory. She said the bees came in great abundance to suck the sap that exuded from the ends of them. She watched them until she got their course. She noticed they went past several trees which stood in a row. . . . She soon went a quarter of a mile when she found them I cut the tree for her; we got three gallons of honey, which was worth a dollar per gallon, and ten pounds of wax, which was worth 28 cents per pound.³⁴⁸

*His great yellow eyes with their lurid glare
were fastened upon me*

*. . . I laid my rifle to my face and took the
most deliberate aim and as the muscles about
his jaws and shoulders began alternately to
contract and swell, and the chest to swell and
heave with concentrated power, I touched the
trigger.*³⁴⁸

1820: Stephen Watts Kearny

Captain Stephen Kearny kept a journal during a U.S. Army expedition that extended westward as far as the upper Missouri River, then eastward across the Great Plains to the upper Mississippi. On their return trip, the soldiers descended the Mississippi from the Falls of St. Anthony in Minnesota. On August 17, 1820, Kearny's boat reached the northwest extremity of the Big Rivers Area:

* The maximum length of a mountain lion (including the tail) is about 7.5 to 8.5 feet, but the skin might stretch another foot when removed from the carcass.

Passed the Salt River on the left, & landed a short distance below at "Louisiana" The Inhabitants we found mostly sick with fevers Passed "Clarksville" on the West; at dark all on board went to sleep leaving the boat to drift at will

August 18th

On awakening in the morning we found we had progressed but slowly during the night, not having made more than 4 or 5 miles.

In the morning passed by "Quiver" * on the West and at noon reached "Capo Gray." † At this point the river is quite narrow, not more than 300 yards wide. . . 12 miles brought us to "Little Capo Gray" ‡

. . . *August 19th*

At day break passed the "Illinois River" on the East. A short distance below this commences a ridge of Rocks (about 1200 feet high, ¹ very irregular, and forming the most antic appearances that can possibly be imagined)

. . . Finding our progress to be but slow we left the Keel Boat and again taking to our canoe passed the Town of "Alton," on the Illinois side, having a large Sandbar in front of it ²⁶⁶

Kearny concluded his account with, ". . . at 5 P.M. reached St. Louis having come down the Mississippi from St. Peters, a distance of 900 miles." ²⁶⁶

1820s: Daniel Harmon Brush

Daniel Brush came to western Greene County as a boy in 1820. His family settled at the base of the Illinois River bluffs. In his autobiography *Growing Up with Southern Illinois*,

* Quiver = Cuivre River.

† Cap au Gres (*Cap au Grès*, or "Capo Gray") is in southern Calhoun County, about three miles south of Bachtown. *Cap au Grès* translates as "Sandstone Cape." This bluff consists of a singular body of massive St. Peters sandstone. Several headlands or prominent bluffs that rise next to the Mississippi River have been named capes (e.g. Cape Girardeau, Cape St. Anthony, etc.).

Valentine Mott Porter, the editor of S.W. Kearny's journal, stated, "'Capo Gray' should be *Cap au Grès*. This is another French term that lent itself to conversion by Americans into an English phrase of similar sound but different meaning. Even the French fell into the habit of rendering the name 'Cap au Gris,' mistaking *grès*, a noun, meaning sandstone, for the adjective *gris*, meaning gray. It was also called 'Cap au Gré,' an obvious error." ²⁶⁶

‡ Little Cap au Gres is the headland at the very south end of Calhoun County, where the Mississippi River turns to flow to the northeast.

¹ This figure may be a blunder in transcription, or perhaps Kearny exaggerated—for the bluffs are close to 200 feet high, not 1,200 feet.

Brush described the natural environment, vegetation, and wildlife in the vicinity of his home during the third decade of the 19th century:

The objective point decided upon by my father and others in the company as a place of settlement was under the bluffs of the Illinois River about 8 miles west from Carrollton and about 4 miles east of the river, where the prairie adjoined the rocky bluffs.

. . . The place selected for homes by the colony was most attractive to the eye and had many superior advantages for farming purposes. A prairie of richest soil stretched out about 4 miles in length and one mile wide, extending to the timber growing next the river. The strip of timber—pecan, hickory, black walnut, oak, persimmon, ash, hackberry, etc.—being some three miles in width to the Bluffs that were bare of timber with walls of rock in places standing perpendicular from the prairie's edge, one hundred or more feet in height. Grass covered the summits, which loomed up above the rock in rounded cones of varied heights, kept denuded of other growth than grass by annual fires that overswept the hills and the prairie ground below. At intervals of half to three-fourths of a mile small spring-fed creeks of living water came through passes in the Bluffs and took their winding way down through the prairie until lost by spreading out in the bottomland towards the river. At many points along the Bluffs ever-living and unchanging springs of cold water, clear and pure, burst forth beneath the solid walls of rock, non-freezing in winter and refreshingly cold in summer, from which little rivulets sang their way over pebbly beds towards the setting sun.

East of the Bluffs a short distance, a fine growth of choicest timber set in and covered the broken ground, as also the valleys, from which ample supplies were obtained for building and fencing purposes. Great groves of sugar maples were common along the little streams that came down through the hills, from which came most of the sugar used by the settlers for many years.

. . . My father at once selected a spot for a habitation near a fine large spring at the entrance of a valley that extended back some distance between hills towards the East . . .

. . . Father and brother Reuben . . . each entered eighty acres of land lying side by side and broke up twenty acres of the prairie and planted corn therein, having enclosed the ground with a split-rail fence. The breaking up consisted in turning over the sod which was matted with grass roots and frequently a "red root" * of one to three or four inches in thickness, very strong and hard to tear out; the strips turned over were 15 to 20 inches wide. A heavy plow with a coulter for cutting the sod as deep as desired, attached to the beam a small way in advance

* Red root = New Jersey tea (*Ceanothus americanus*)—not *C. ovatus*, which is now commonly known as redroot.

of the share, was used. The work required teams of horses or oxen in proportion to the width and depth of the furrow to be cut. If horses were used three or more spans, if oxen three or four yokes, moved the plow.

The strips turned over fitted evenly and snugly into the last-displaced sod, so that when a piece of ground was broken the surface was as smooth and level as before the sod was turned upside down so that no grass was in sight and only the severed roots appeared on top. The corn was planted by striking an axe every 4 feet between the edges of the sods, and dropping 3 or 4 kernels for a hill, and then by a tread of the foot pressing the sod together again. No weeds or grass sprang up on such ground the first year and the corn needed no attention with plow or hoe

. . . The winter of 1820-21 had been passed pleasantly by our family. Spring came and with it delightful weather pushing out the luxuriant vegetation all around, wild fruits such as crabapples, plums, grapes, pawpaws, persimmons, hackberries, mayapples, blackberries, dewberries, and raspberries gave promise of abundant yield, while the luscious strawberry had come and afforded us many rich feasts. Well I remember a day when father and mother after visiting a spot where they had noticed the maturing berries, came back well laden with the scarlet clusters of a half dozen or more on a single stem.

. . . Hay for the winter's roughness was made by mowing prairie grass in season. It grew rank and in abundance close at hand, and when well-cured and preserved in stacks was valuable for winter food for stock.

Such duties as have been mentioned were relieved by many days of joy—angling and swimming in rock-bound pools frequent in near-by streams, hunting for game in adjacent woods, gathering wild grapes about the hilltops and nuts of many sorts, especially hazel, hickory, black and white walnuts, pecans, all found in plenty close around; spearing with fork or gig, or in shallow water seizing with the hands buffalo and other fish on the lower edge of the prairie, when overflowed by the spring rise of the Illinois River the fish came out in schools to rusticate and feed.

Sometimes we ascended the highest points of the Bluffs, clear of aught but grass, and opened old burial places on the loftiest tops

. . . In the fall season when the corn was in roasting ear, raccoons were numerous and destructive to the maturing crop. Then the hunting of the coon at night in his prowling visit to the field afforded excitement and delight. With a well-trained dog, often half a dozen of the thieving pests were caught and slain

. . . Wild animals were numerous in the early years, and bold to a fault. Many a time in evening's early or later hours the terrifying and wild unearthly scream of the panther and the shrill howling of wolves were heard from the hills not far away causing terror and shivers of fright The pigs and the poultry

suffered, however, and it was thought furnished many a meal to the unwelcome prowlers.

Black bears were often seen and sometimes captured. One was discovered rambling round on the open prairie one day by one of the neighbors who was on horseback several miles from his home. He had no gun or other hostile weapon, but concluded he would try driving his find to his home where a rifle could be had with which Bruin might be made to furnish bear steak and bear roast to the hungry settler. He succeeded, and after some time spent in preventing the beast from running off the other way, reached a point near a house where the game, tired and willing to halt, was left while the man procured his gun and returning dispatched the animal at his leisure. *

Deer were very numerous. I have seen hundreds of them in the lower edge of the prairie next to the Illinois bottom timber in early spring feeding together on the tender grass growing there in the moist rich soil in advance of that on higher ground. They seemed almost fearless of man and fed regardless of his presence. The innocent and apparently unsuspecting creatures had not then been hunted to the death with gun and dog

The woods were full of wild turkeys. Twenty-pound gobblers and 15-pound hens often rewarded the hunters who visited the roosting places at early dawn prepared to bring them down, or later called up a flock by imitating the sound of wooing or of friendship made by the bird.

The prairies teemed with the luscious prairie hen and quail. Hundreds did we catch in box traps with figure-four springs † set in the hazel thickets or near the wheat stacks in winter, where the fowls came for feed when the fields were shrouded in snow. The lakes abounded in water fowl; the swan, the goose, the mallard, and many other kinds of ducks thronged the open water by thousands in springtime and were slain by hundreds in the hunting season.

. . . In the spring of 1826 or 1827 the first steamboat ascended the Illinois River and stopped a few days at Bluffdale Landing, which was about three miles west from our house.

* J.W. Spencer, the man who chased the bear to its death, recalled this incident in his autobiography. One morning in early December 1820, he went out in search of horses that had strayed from his settlement. Mr. Spencer related, "I found them about two miles from home, and as we turned on our way homeward, I discovered a large bear on the bluff, headed for the river. When he got on the prairie bottom, I rode after him; the country being very smooth, I found I could drive him, so concluded to try and drive him home." ²⁷⁴ Spencer made the bear run toward a cabin in the timber, where his cousin was alerted and shot the bear.

† A figure-four trap consists of an inverted box, propped up by a trigger that is shaped like a figure 4. When an animal nudges bait on the cross-arm of the 4, the box falls over the animal.

. . . About these times nut gathering in the Illinois bottom was pursued to a considerable extent in the proper season, not only for the winter fireside crackings thus secured, but to furnish a modicum of money occasionally for other pressing needs.

Pecans and hickory nuts abounded in the river woods. The trees were large in trunk, and of great height. Men would cut them down with axes and then assisted by the children gather the nuts, each retaining all he could pick up. Bushels were taken.

. . . An Englishman named Peter Hobson, who emigrated from England, took up land on a small stream some five miles northwest from Carrollton, where he erected a water mill, the first one, I think, built in Greene County.⁵⁷

1820s: John Gunterman

“Uncle” John Gunterman lived on a farm northeast of Fieldon for more than 40 years. He told how he came to live in this hilly quarter of Jersey County:

My father settled on the Illinois River bottom in 1821, and after living there several years, I had an attack of chills and fever, which persisted for two or three years, and from which I could obtain no relief. I finally concluded that the malarial atmosphere arising from the low bottom land, was the cause of my diseased condition, and that I must get away from it, onto higher grounds further east. So I went to my old friend Mathew Darr, who lived in the skirt of timber, his farm extending out into the prairie. I spent a week there, and we talked the matter over from every point of view for the entire week, and the conclusion that we reached was that a man’s life was too short to prepare and haul lumber out onto that prairie to improve a farm, and if he did, he would freeze to death in the winter, or the prairie fires would burn everything up. *¹⁴⁷

1821: Henry R. Schoolcraft

In 1821 Henry Rowe Schoolcraft traveled from St. Louis to Chicago to witness negotiations for a treaty between the United States of America and the Ottawa, Ojibwe, and Potawatomi nations. Schoolcraft ascended the Illinois River by canoe as far as the rapids near Starved Rock. He reported his journey four years later in *Travels in the Central Portions of the Mississippi Valley*.

On August 5 Schoolcraft’s party entered the mouth of the Illinois River:

* John Gunterman’s biographer added, “. . . the most valuable and productive farms in this county are now upon those lands that Mr. Gunterman refused to enter. This feeling of dislike for the prairie lands was general at that time, and for several years thereafter.”¹⁴⁷

We entered the Illinois river at an early hour. . . . It presents to the eye a smooth and sluggish current, bordered on each side by an exuberant growth of aquatic plants, which, in some places, reach nearly across the channel. We soon found the water tepid and unpalatable, and oftentimes filled with decomposed vegetation to a degree that was quite offensive. There is perhaps no stream in America whose current offers so little resistance in the ascent. . . . Both banks are bordered by a dense forest of cottonwood, sycamore, and other species common to the best western bottom-lands. Of the fertility of the soil, no person of the least observation can for a moment doubt; but at the same time, the insalubrity of the climate, particularly during the summer season, must be considered as presenting a formidable impediment to its speedy settlement. *

. . . the appearance of the inhabitants has corresponded with the opinion before expressed of the unhealthiness of the country. Pale and emaciated countenances; females shivering with the ague, or burning with intermittent fever, unable to minister to their children; and sometimes, every member of a numerous family suffering from the prevalent malady at the same time, have been among the more common scenes which we have beheld along the lower parts of this otherwise attractive stream. ²⁹⁸

On August 6 the canoeists passed beyond the upstream limit of the Big Rivers Area, reaching the vicinity of Mauvaise Terre Creek in Scott County:

We left the plantation where we had encamped at a very early hour; and favoured by the sluggishness of the stream, ascended forty or forty-five miles. Most of this day's journey was very agreeable. The weather, though fair, was not hot, and the appearance of the country was often novel and striking in the disposition of rocks and woods. We moved upon so calm and smooth a surface, that sometimes it became a subject of debate whether there was any apparent current. Our progress was less incommoded by aquatic grasses; and the exuberance of vegetation on shore, frequently had the finest effect, contrasted with prominent points of calcareous rocks. Not unfrequently, springs of clear water issue from these cliffs, which, as that of the was absolutely bad, we were constantly on the alert to discover. We observed the influx of several small and unimportant streams. Settlements are "few and far between." The most conspicuous are those situated on Mauvaisterre creek ²⁹⁸

Mr. Schoolcraft summed up the mid-summer condition of the lower Illinois River, and he concluded with a review of its wildlife and fish:

* Schoolcraft later wrote, "We entered the mouth of the Illinois at the most sultry and sickly season of the year, when its waters were foul and unpalatable, when its inhabitants were prostrated with debilitating fevers, and when we were ourselves forced to yield to the prevailing malady." ²⁹⁸ These persons were suffering from malaria ("fever and ague").

The situation in the vicinity of these great rivers, the fertility of the soil, a garden spot, must one day yield nourishment to a multitude of beings. The bluffs are abundantly supplied with the purest water; those rivulets, and rills, which at present, are unable to reach the great father of waters, and lose themselves in lakes and marshes, will be guided by the hand of man into channels fitted for their reception, and for his pleasure and felicity.

— Henry Marie Brackenridge describing the region around the mouths of the Illinois and Missouri Rivers in 1814.⁴⁸

The width of the Illinois, at its entrance into the Mississippi, is generally estimated to be half a mile, but the mist which prevailed at the early hour at which we entered it, prevented our forming an opinion on this subject. Above that point, it is perhaps generally three hundred yards across, until we reach Peoria lake, where it has an irregular expansion, whose utmost width is comprehended within about two miles. During all this distance it admits of navigation, in the lowest stages of water, for vessels of fifty or sixty tons burden. The interruption to navigation from frost, is commonly less than four months. The water moves sluggishly, and, indeed, has more resemblance to a canal than to a stream. The current has been estimated to have a velocity of something like one mile per hour, but even this is questionable.* Its greatest rise by freshets, is about fifteen feet. At these times its banks are partially covered with water, from one to three or four miles back. Of the surface thus inundated, the lagunes only are permanent, if we except some inconsiderable portions, near the mouth of the Sangamo river, and below that point. The aquatic plants which are now so plenteous, will probably diminish when the river comes to be frequently navigated by large vessels, and its banks yield to cultivation and improvement. For notwithstanding the disadvantages which we have mentioned, the lands must settle. They are too fertile to be long neglected with our increasing population; and besides, there are many sites, whose local position and fine elevation, must, we should suppose, exempt them from unhealthiness. The present settlements, we speak of those on the immediate banks of the river, are very thin, scarcely deserving the name. . . . Of huts, or "dwellings with only one floor," there is a limited number. They are generally located near some spring, and the fields in cultivation are situated at such a distance back, as to be invisible from the river. This practice, which results from the fear of inundation, leaves the banks of the stream, with all their rank vegetation, and picturesque wildness.

. . . Pasturage for cattle is spontaneous, and makes the articles beef and pork comparatively cheap. The woods, in many places, afford an abundance of wild

* Schoolcraft later wrote, "At the time of our visit . . . it was at a season when . . . higher tributaries, and the Illinois itself, are generally at their lowest stage."²⁹⁷

honey. Thus the food of chief necessity is easily procured, . . . there are probably few countries in the world, where farmers obtain bread and butcher's meat with so little labour.

Of game and fish, we should judge, from a hasty visit, there is no scarcity, and some variety. The Virginia deer * is common to the forests and prairies of this stream, in its entire length; and it is not uncommon on approaching a habitation, to see a haunch of venison suspended against the side of the house, or hanging upon a contiguous tree. We found the duck and mallard, black duck, teal, and brant, in great numbers upon all parts of this stream. It is also well stored with the cat and buffalo fish, and the gar, besides some other species, which are more esteemed. The first-mentioned species, are not generally eaten in the summer months. But when taken among other fish, are sometimes given as food to hogs, who are known to devour them.

. . . Among the lesser land animals and birds, which frequent the banks of the Illinois, the turkey, prairie hen, and hare, may be mentioned. The otter, muskrat, and raccoon, are also still taken by the Indians, and contribute in a great measure to their support,—the skins being sold to the traders, and the flesh taken as food. The beaver, which has so greatly diminished in all parts of America, within a few years, is now rarely found in this stream, or its tributaries.²⁹⁸

1821: Christina Holmes Tillson

Mrs. Tillson moved to Illinois in 1822. Nearly half a century later she composed her "Reminiscences of Early Life in Illinois." Among the topics she recorded for the benefit of her daughter is the story of Mr. Tillson's investigation of the Military Bounty Tract:

Sometime in 1821 your father went on an exploring trip, his object being to survey and report to non-residents the condition of their lands lying between the Mississippi and Illinois Rivers; he took with him a hunter and two other men. They were out three weeks, and only two or three times did it fall to their lot to find a shelter for the night other than the lone forest or the broad prairie. They would generally find some spring or water course, where they would build their fire. The hunter, who acted as caterer and cook, would cut slices from the game that he had secured through the day, . . . and . . . they would enjoy a sound sleep . . . As the red brethren have a liking for good horses, and the prairie wolves a keen scent for a good lunch, I believe they found it necessary to keep a kind of gander watch, one standing sentinel while the others slept.³⁴⁶

Mrs. Tillson recalled, "They crossed the Illinois near the mouth," and "The course of the exploring party . . . was northward, following the course of the Mississippi."³⁴⁶

* Virginia deer = white-tailed deer.

1823: Henry Allyn

Mr. Allyn wrote his autobiography about 1876, when he was 81 years of age. He recalled the time in September of 1823 when he set out to ascend the Illinois River:

We purchased a suitable canoe at St. Louis We laid in our outfit of flour, and ammunition at St. Louis as we thought sufficient to last us, depending on wild game for our meat. The fourth day we arrived at the mouth of Illinois, being detained some by head winds, & a stiff current. After entering the Illinois we made better progress, with its slow current, being sheltered from the wind by the timber on its margin, & narrowness of its channel.

The vast number, & variety of water fowl was astonishing. Frequently in the front of us, the whole surface, from shore to shore, were covered by them, & on a nearer approach they would take the alarm & rise with such a tremendous roar, as to shock the atmosphere. They would fly in every direction, & jarr the air with the vociferous croakings, with as many cadencies as varieties. Swans, geese, brant, loom * & a greater variety of ducks, than we could count, & with many other kinds for which we knew no name. But no din of battle on the field of Waterloo, or any other, could exceed the roar. But now the settling of the country has spoiled their formerly frequented haunts. We were often thus serenaded by them during our tour. . . . we arrived at Fort Clarke †⁵

1823: Lewis C. Beck

Lewis C. Beck's *Gazetteer of the States of Illinois and Missouri* is the earliest comprehensive reference book about the geography of Illinois. Under the title "General and Statistical View of the State of Illinois," Dr. Beck wrote about the Mississippi and Illinois Rivers:

The character and appearance of the Mississippi above and below the mouth of the Missouri, is so decidedly different, that it has become the generally received opinion that the latter is the main stream, and the former merely a tributary.

Above the mouth of the Missouri, the Mississippi is rarely obstructed by sand bars, [‡] and seldom bordered by very extensive bottoms; [¶] the water is clear and

* "Loom" is not a misspelling, but an alternative name for the loon.

† Fort Clark was at Peoria.

‡ Contrary views were put forth by Louis Hennepin (page 21, recorded by La Salle), Zebulon Pike (pages 55 and 57), J.S. Buckingham (page 220), and J.H. Buckingham (page 238). These men found their travel impeded by bars in the Mississippi River above the mouth of the Missouri. See Stephen Long's assessment on page 75.

¶ Bottomlands along the upper Mississippi might or might not be considered extensive—but they are of limited extent in comparison with the American Bottom or the vast Mississippi Delta region,

limpid, and the current gentle. Below, it is every where obstructed by immense islands and sand bars, and its banks present on every side extensive and fertile alluvions; the water is muddy, and the current impetuous. In fine, it may be said to assume in every respect the character of the Missouri.

. . . The annual inundation takes place about May or June, and the water rises from 10 to 30 feet throughout its whole course, by which means the extensive bottoms which have been formed from time to time are continually fertilized.

. . . The *Illinois river* is formed by the union of the Des Plaines and Theakiki rivers * . . . Above the mouth of the Vermilion river, it is much obstructed by rapids; below this the current is gentle, and the navigation good during the whole summer. . . . The banks of the Illinois are uniformly low as far up as the mouth of Spoon river, particularly on the west side.

. . . The Illinois has proportionately a less number of islands than any of the western rivers, and is seldom obstructed by bars. In many places the banks are elevated, and present the most beautiful town sites, being surrounded on all sides by the most fertile lands. . . . Large rounded masses of primitive rocks † are also scattered along its banks, and on the prairies of the interior.

Along the course of this river are a number of lakes, which communicate with it, and without great care and attention, mislead those who navigate it. They may be known by having less current than the river, and generally in being of a much greater width. The lands near the bluffs being lower than on the immediate bank of the river, extensive ponds are also formed, which here, as elsewhere, are fruitful sources of disease.

. . . On the banks of the Illinois and Ohio, indigenous vines are abundant, and yield grapes, which might advantageously be made into wine.

. . . Large caves are also very abundant in the steep and picturesque cliffs of the Illinois. ²⁷

When Lewis Beck prepared his "General View of the Counties in the State of Illinois," the boundaries of Greene County included present-day Greene and Jersey Counties:

Greene county is watered by the Ma-qua-pin, (Magopin) ‡ and Otter creeks, and several other small streams emptying into the Illinois and Mississippi.

which extends north to the southern tip of Illinois.

* Theakiki river = Kankakee River.

† Primitive rocks are ancient igneous and metamorphic rocks—in contrast to more recent sedimentary formations.

‡ Ma-qua-pin (Magopin) creek = Macoupin Creek.

. . . This county, (I mean also the tract attached to it) * forms a part of the finest district of country in the state; and all who have seen it, agree in the opinion that it is without a parallel.—Fine water courses, a salubrious climate, a fertile soil, and contiguity to navigable streams, are some of the many advantages which it possesses. The face of the country is in general level, or gently undulating. With the exception of those under the bluffs of the Illinois, there are few of those stagnant ponds which in some parts of the state are such fruitful sources of disease.

Although this county contains a large proportion of timbered land, it is diversified with prairies, some of which are beautiful beyond description.

. . . The banks of the Mississippi in the southerly part of this county are generally composed of perpendicular cliffs, varying in height from 80 to 150 feet This bluff continues along the Mississippi and Illinois to the northern part of the county, sometimes, however, receding several miles east, leaving a low but fertile alluvion, which in general is heavily timbered.²⁷

When the *Gazetteer of the States of Illinois and Missouri* was published, Pike County embraced all of the state of Illinois west and north of the Illinois River, and north of the Kankakee River. Lewis Beck's description of southern Pike County applies to the Big Rivers Area:

The southern part of this county includes a part of the lands appropriated by congress for the payment of military bounties.

. . . The quality of the soil of this tract has been variously described. Very little, however, is as yet known with regard to the interior. Those who have explored the country, have generally confined their excursions to the banks of the streams which they have ascended. Some, however, have gone into the interior, and have returned pleased with its appearance, both as it respects soil and situation.

. . . The Illinois bounty tract, altogether, may be called a valuable one: but there are, however, objections to it, which shall be briefly noticed. In the lower part, south of the base line, there is a great body of land subject to inundation; so much so, that in some seasons you can sail over thousands of acres of timbered alluvion. The soil of this is generally fertile; but no dependance can be placed upon the crops, as they are continually exposed to the ravages of the water. This circumstance is also a fruitful source of disease; for as is common in the western country, the land under the bluffs is much lower than that directly on the river—hence there is here formed a chain of ponds, which become

* The following lands were attached to Greene County "until otherwise disposed by the legislature": present-day Macoupin and Scott Counties, almost all of Morgan County, and the southwest corner of Cass County.

The country of the Illinois is perhaps not exceeded in beauty, levelness, richness, and fertility of soil, by any in the United States, nor perhaps in the world. Its appearance is truly delightful, and some are of opinion that this is the spot that is called by some French writers "The Terrestrial Paradise."" — Zadok Cramer in 1814.⁸⁵

stagnant, and send forth their effluvia. These causes will naturally affect the settlement of this portion of the military tract; for it can hardly be supposed, that while there is such an immense quantity of fertile and well situated public land in market, that emigrants will settle on such unfavourable spots as these. There is comparatively but a small proportion of the land below the township line 2, south of the base line,^{*} favourable for settlement; that on banks of rivers being subject to inundation, and that in the interior being very hilly and broken.

. . . There are some directions which are of the greatest importance to those who are about to examine this tract of country. . . . The best season for this purpose is the month of November. In the spring, the country is so inundated, that it is almost impossible to travel; in the summer, the weather is so warm and disagreeable, that an exploring journey is very hazardous. Besides, at this season, the flies and mosquitoes are exceedingly troublesome, and so poisonous, that they have been frequently known to kill horses and other animals in the course of a few hours.²⁷

Lewis Beck predicted that Madison County would “rise to wealth and importance” because of its location: bordering the Mississippi River, near the mouth of the Illinois River, and adjacent to the mouth of the Missouri River. Dr. Beck contrasted conditions along the Mississippi above and below Alton:

This county, both on account of its soil and situation, possesses uncommon advantages. On the west it is washed by the Mississippi, above and below the junction of the Missouri. South of Alton the bank is low, being a continuation of the American bottom North of Alton the bank is generally high, and affords several good town sites. . . . the American bottom, which is a low alluvion, subject to inundation, extends from the mouth of the Kaskaskia to Alton, a few miles above the mouth of the Missouri, and does not afford a single site for a healthy town. Above this, the bank is high, watered by fine springs On the banks of the Mississippi below Alton, it is low and wet, and in many places very marshy. No soil, however, can exceed it in fertility.²⁷

The *Gazetteer's* “Topographical View of the Towns, Villages, Rivers, Creeks, &c. &c. in the State of Illinois” contains bits of information about the ecology of the region:

* The south line of Township 2 South forms the north boundary of Pike County.

Alton, (upper,) a small post-town . . . about one mile east of Lower Alton . . .

. . . The situation of this town is high and healthy. . . . The soil of the surrounding lands is generally fertile; the face of the country undulating; the prevailing growth, walnut, hickory, and oak.

. . . *Carrollton, the seat of justice of Greene County The prairie west of town is low and wet, but with little expense could be completely drained.*

. . . *Chanail-ecarte, (Snicarty,) an arm or bayou of the Mississippi, in Pike county, commonly called a "sloo." . . . It is about 40 miles in length. The lands in the vicinity are first rate, but are subject to annual inundations from the river.*

. . . *Ma-Qua-Pin creek,* a small stream, running a westerly course through Greene county, and emptying into the Illinois It received its name from certain roots, so called, found on the banks, which if eaten raw, are rank poison; but boiled for five or six days or longer, lose their noxious qualities. . . . The creek is 25 yards wide at its mouth, . . . and is boatable for a short distance.*

. . . *Milton, a town in Madison county, situated on Wood river It contains 30 or 40 houses, but a large mill-pond in the centre of the town has rendered it unhealthy, and prevented its increase.*

. . . *Monroe, a town in Pike county, laid out in 1820. It is situated on the first high ground above the junction of the Illinois and Mississippi rivers, on the borders of a prairie about one mile in width, and within half a mile of a good steam boat landing. In the vicinity, are several good stone quarries, good timber, and many fine springs of water. Within half a mile of the town is a good mill seat. . . . The situation of this place, near the confluence of three of the largest streams in the western country, must secure to it important commercial advantages.[†]*

. . . *Mound Prairie, is situated in Madison county, ten miles southeast of the junction of the Illinois with the Mississippi The prairie is from four to six miles in length, surrounded by a thick growth of timber.[‡]*

. . . *Salu, a town in Madison county, laid out in 1819. It is situated on the bluff, a mile and a half east of the Mississippi, and one mile north of Alton*

* *Ma-Qua-Pin creek = Macoupin Creek.*

† The former site of Monroe is near Meppen in Calhoun County.

‡ Mound Prairie extended across northern Godfrey Township.

. . . The town is well supplied with springs, and its situation is considered healthy and advantageous.*

. . . *Wood river* . . . empties into the Mississippi, nearly opposite to the mouth of the Missouri. On this stream are many fine mills seats and flourishing settlements.²⁷

1823: J.C. Beltrami

Constantine Beltrami was an Italian exile who set out to find the source of the Mississippi River. As he headed up the river on May 3, 1823, he made note of the bluffs upstream from Alton:

The eastern bank of the Mississippi, opposite the village called the *Portage des Sioux*, . . . rises in abrupt rocks, hewn by nature into perpendicular pillars. They are so like the substructures of the palaces of Pompey and Domitian in the Villa Barberini upon Lake Albano, as to be a perfect illusion. I almost imagined I was there.³⁶

On his way back south several months later, Beltrami stopped at St. Charles, Missouri, and then proceeded to St. Louis. But first he climbed *les Mamelles* and marveled at the prairie that spread across the bottomland from the southern point of Calhoun County to the mouth of the Missouri:

From St Charles I returned to St Louis across an immense prairie, which conducts, at E.N.E. to the Sioux portage.[†] Small hills or mountains are scattered over the prairie in great profusion, and, on account of their form, are called *Nipples*.

From the tops of these hills the eye is presented with a view of the most delightful and impressive character From the summits of these hills we look down upon a country the most variegated and enchanting, at the sight of which even the most material and sensual of human beings can scarcely help becoming spiritualised and meditative. Herds of cattle and flocks of sheep, intermingled frequently with the does and roebucks,[‡] with pelicans, cranes, swans, and golden plovers, which feed without collision or jealousy over the vast expanse

* Salu was in section 6, Township 5 North, Range 9 West. It later merged with Upper Alton, and it is now part of Alton. An 1820 advertisement for the new town pointed out, "There are no ponds, nor stagnant waters, the source of so much disease in this country in this town, nor in its vicinity, but it is well supplied with springs of pure water."³⁵

† The phrase "to the Sioux portage" is a literal translation from Beltrami's original French "*au portage des Sioux*."³⁵ Beltrami was referring to the village of Portage Des Sioux. The actual portage is the neck of land between the Missouri River on the south and the village of Portage Des Sioux along the Mississippi River on the north.

‡ Males of the European red deer are called roebucks. They are similar to white-tailed deer.

with which they are surrounded, form delightful varieties in this magnificent display of nature.

. . . The highest pyramid of Egypt would, I conceive, be compelled to lower the standard of its pretensions before the *Nipples* of the prairie of St Charles; for unquestionably it does not command the prospect of two such superb rivers, such verdant plains, such fragrant groves, or so many interesting tribes of animal life as serve to diversify this astonishing spectacle.

From this spot, my dear Countess,^{*} I again beheld the chain of perpendicular rocks resembling the substructions[†] of the palaces of Pompey and Domitian, which I mentioned to you in my Fourteenth Letter. The illusion is complete. And as I viewed these rocks rising above the thatch-roofed village of the Sioux Portage, I fancied that I beheld the palace of Armida looking down from its haughty eminence on the humble cabin of Baucis and Philemon.³⁶

1823: William H. Keating

Major Stephen H. Long led a U.S. Army exploring party across northern Illinois during the mid-summer of 1823.[‡] William H. Keating, the expedition's Geologist and Historiographer, compiled a report about the journey from his own records, supplemented by the notes of Major Long and two other scientists. His *Narrative of an Expedition* includes a discussion "Of the Country and navigable Communications between Lake Michigan and the Mississippi River":

The Illinois River is to be ranked among the most important of the western rivers, inasmuch as it affords greater facilities as a water communication between the lakes and the Mississippi than any other stream. . . . For a distance of fifty miles on the upper part of the river shoals abound. . . . Below this, the navigation is exceedingly easy, for boats of moderate draft and burden, to the mouth of the river, a distance of two hundred and fifty miles. The current throughout the distance last mentioned is exceedingly gentle, often quite imperceptible; indeed, this part of the river may with much propriety be denominated an extended pool of stagnant water. Its valley is broad and bounded by parallel ranges of bluffs, presenting, in most places along the margin of the river, low bottoms covered with a dense growth of timber trees, surmounting thickets of weeds, vines, and bushes almost impenetrable. The woodlands thus situated are subject to inundations, during the prevalence of a moderate freshet, but in their

^{*} Each chapter of Beltrami's book is in the form of a letter to the Countess Compagni.

[†] "Substructures" was intended here, but the translator failed to make the change from the French edition's *substructions des palais de Pompée*.³⁵

[‡] This expedition bypassed the Illinois River, but the commander, Stephen Long, was familiar with the river because he had explored the entire length of the valley in 1816.

The first time a stranger comes in view of this prairie, take it all in all, the most beautiful that I have ever seen, a scene strikes him that will never be forgotten.

. . . The prairie itself was a most glorious spectacle. Such a sea of verdure, in one direction extending beyond the reach of the eye, and presenting millions of flowers of every scent and hue, seemed an immense flower-garden.

Timothy Flint, viewing the prairie south of the mouth of the Illinois River for the first time in September 1816.¹¹⁷

rear, at a considerable distance from the river, are extensive prairies of a rolling aspect, and richly adorned with herbage.¹⁸⁴

1825: John H. Fonda

John Fonda canoed the length of the Illinois River in 1825. Much later in life Mr. Fonda recalled the game and fish along the lower reaches of the river:

The river afforded splendid scenery; at times it flowed through large prairies, that formed a boundless area of fertile country, covered with luxuriant grass, and on which we frequently saw deer and elk feeding.* Water fowl were abundant, and we could feast on them at every meal; while the river was swarming with excellent fish, that often formed a delicious addition to our other fare. There was no difficulty in killing game along that beautiful stream. Hardly an hour of the day passed but we had opportunities to shoot deer from the canoes, for it was the latter part of June, and in the heat of mid-day the animals would come down to the river, where in the shade of small groves that lined the river, they found a cool retreat.¹¹⁸

1826: Bernhard, Duke of Saxe-Weimar Eisenach

On the 4th of April—one year after he left his family in Ghent—the naturalist Bernhard arrived at St. Charles, Missouri:

We had it in contemplation to go to an eminence lying below the town, “les Mamelles,” where it was said there was a view of the Missouri and Mississippi both at once. . . . We had no guide, lost our way. . . . In this manner we took a sentimental walk of twelve miles for nothing. . . . We had constantly remained in the vicinity of the river,[†] the return way took us somewhat differ-

* If this reference to elk is authentic, it is among comparatively few eyewitness reports of elk in Illinois. The report is also one of the latest: most statements about elk in Illinois are generalized, and several say that the species had disappeared from the state by 1818.

† Duke Bernhard had stayed too close the Missouri River and walked past the Mamelles.

ently, and we came to a great marshy meadow, from which we could distinguish the heights on the left bank of the Mississippi. The forest is rather thick, with the same trees before-mentioned, * and with large and very thick sycamores. Not a sign of herbage was to be seen. † In the forest, however, there were beautiful birds, a pair were of a dazzling sky-blue, and several paroquets, ‡ similar to those I had seen on the river Alabama. For snakes, and especially for rattlesnakes, which are found in great numbers here in summer, it was now too cold. ³⁹

1826 & '28: Lewis C. Beck

Dr. Lewis C. Beck botanized in the vicinity of St. Louis and in adjacent Illinois in 1820–22. He explored the Illinois River valley at least as far upstream as Peoria. Dr. Beck subsequently published a series of articles in the *American Journal of Science*, titled “Contributions towards the Botany of the States of Illinois and Missouri.” Following are selections from his annotated species lists.

Sisyrinchium bermudianum?: [¶] “On the rocky banks of the Mississippi, nearly opposite to the mouth of the Missouri river—Illinois. April.” ^{§ 28}

Cornus florida: ^{**} “On the banks of the Illinois river, 50 miles above its mouth—not common. March–April.” ²⁸

Batschia canescens: ^{††} “The root affords a beautiful reddish crimson lac, which is much in use among the natives. . . . Common from St. Louis to Fort Clark ^{#‡} on the Illinois—April–May.” ²⁹

Ellisia nyctelea: ^{¶¶} “On the inundated banks of the Illinois river—rare—April.” ²⁹

Dodecatheon Meadia: ^{§§} “. . . on the Sandy Bluff of the Illinois river—April–May.” ²⁹

* Bernhard was referring to the forest along the Missouri River. He had earlier written, “. . . the forest consisted of green-leaved timber, oaks, and various nut-bearing trees, of Canadian poplars, and much sumach.” ³⁹ The Canadian poplar is the eastern cottonwood (*Populus deltoides*).

† It was too early in the season for green herbage.

‡ The sky-blue birds must be eastern bluebirds; the paroquets are Carolina parakeets.

¶ *Sisyrinchium bermudianum* = *S. albidum* (blue-eyed grass).

§ The months in this list refer to flowering periods.

** *Cornus florida* = flowering dogwood.

†† *Batschia canescens* = *Lithospermum canescens* (hoary puccoon).

#‡ Fort Clark = Peoria.

¶¶ *Ellisia nyctelea* = waterpod.

§§ *Dodecatheon Meadia* = *Dodecatheon meadia* (shooting star).

- Polemonium reptans*: * "On the low alluvions of the Illinois and Mississippi. April." ²⁹
- Viola pedata*: † "Banks of the Mississippi, near Alton, Illinois—rare. April–May." ²⁹
- Claytonia virginica*: ‡ "Low alluvions of the Mississippi and Illinois. April." ²⁹
- Myrrhis canadensis*: ¶ "Shady alluvions of the Illinois and Mississippi. June." ²⁹
- Uvularia lanceolata*: § "High bluffs of the Illinois River. April." ²⁹
- Trillium erectum* var. *album*: ** "Rocky banks of streams emptying into the Illinois—common. April." ²⁹
- Oxalis violacea*: †† "Side hills on the Illinois river—rare. April." ²⁹
- Sanguinaria canadensis*: §§ "Banks of the Illinois River, from its mouth to Fort Clark, frequent—March–April." ³⁰
- Aquilegia canadensis*: ¶¶ "Rocky banks of the Mississippi and Illinois—April." ³⁰
- Porcelia triloba*: §§ "Banks of the Illinois and Mississippi, frequent—April." ³⁰
- Hepatica triloba*: *** "Banks of the Illinois and Mississippi, common—March." ³⁰
- Ranunculus abortivus* and *R. fascicularis*: ¶¶¶ "Inundated banks of the Mississippi and Illinois—April." ³⁰
- Orobanche uniflora*: ¶¶¶ "Roots of trees ¶¶¶ on the banks of the Illinois, rare—April." ³⁰

* *Polemonium reptans* = Jacob's ladder.

† *Viola pedata* = bird's foot violet.

‡ *Claytonia virginica* = spring beauty.

¶ *Myrrhis canadensis* = *Cryptotaenia canadensis* (honewort).

§ *Uvularia lanceolata* = *U. grandiflora* (large-flowered bellwort).

** *Trillium erectum* var. *album* = *T. flexipes* (white trillium).

†† *Oxalis violacea* = purple oxalis.

‡‡ *Sanguinaria canadensis* = bloodroot.

¶¶ *Aquilegia canadensis* = columbine.

§§ *Porcelia triloba* = *Asimina triloba* (pawpaw).

*** *Hepatica triloba* = *H. nobilis* var. *acuta* (sharp-lobed hepatica).

¶¶¶ *Ranunculus abortivus* = small-flowered buttercup; *R. fascicularis* = early buttercup.

¶¶¶ *Orobanche uniflora* = one-flowered broomrape.

¶¶¶ *Orobanche* is parasitic on the roots of trees.

Dr. Beck cited these additional species from the banks of the lower Illinois River: *Pulmonaria virginica*, *Phacelia fimbriata*, *Phlox divaricata*, *Phlox pilosa*, *Aesculus glabra*, *Laurus sassafras*, *Laurus Benzoin*, and *Hydrastis canadensis*. *

1827: Chauncey Hobart

The family of Chauncey Hobart moved to the wilds of Schuyler County when he was a boy. In *Recollections of My Life*, the Reverend Mr. Hobart looked back 58 years:

In the fall of 1827, I accompanied my father to St. Louis. We went down the river in a skiff, camping out and shooting geese and ducks in abundance.

. . . On this trip when near the mouth of the Illinois, father shot an immense grey eagle, measuring between seven and eight feet from tip to tip. †¹⁵⁸

1827: Thomas L. McKenney

In mid-September of 1827 Thomas L. McKenney, head of the U.S. Office of Indian Affairs, sped down the Mississippi in a bark canoe. On Saturday the 15th McKenney and his entourage stopped at Louisiana, Missouri, at the upstream extremity of the Big Rivers Area. After "taking breakfast on the beach," they "proceeded on to Clarksville," opposite the northwest corner of Calhoun County. In his *Memoirs, Official and Personal*, Colonel McKenney recorded,

At Clarksville I essayed to procure something fresh to eat—but could find nothing but eggs. Thirty miles lower down, we saw, on a small island, at least three hundred pelicans. They were so numerous as literally to cover the island, giving to it (the island was a sand island, with nothing of vegetation growing out of it,) the appearance of being covered with snow. The rage for shooting whatever came in their way, had seized the count, and the rest of my companions, including Ben, when nothing would do but to have a shot at them. The bird, I knew, was as useless as it was harmless. But no remonstrance could divert them from their purpose, when they were landed amidst the undergrowth of a contiguous island, from the point of which they fired—killing three, and winging two. The winged ones were brought on board the canoe, and being not much injured, I concluded to take them to St. Louis; and, if I could, to Washington.

* *Pulmonaria virginica* = *Mertensia virginica* (Virginia bluebells); *Phacelia fimbriata* = *P. purshii* (phacelia); *Phlox divaricata* = blue phlox; *Phlox pilosa* = downy phlox; *Aesculus glabra* = Ohio buckeye; *Laurus sassafras* = *Sassafras albidum* (sassafras); *Laurus Benzoin* = *Lindera benzoin* (spicebush); *Hydrastis canadensis* = goldenseal.

† Both the bald eagle and the golden eagle have been called gray eagles. Either species has the great wingspan recalled by Hobart.

Unlike the other great rivers of the western country, its current is mild and unbroken by rapids, meandering at leisure through one of the finest countries in the world.

— Samuel Brown, describing the Illinois River in 1817.⁵⁵

Encamped at eight at night, forty miles above St. Louis

. . . At five next morning, embarked, and ran twenty-two miles, when we landed for breakfast. A settler came to our encampment. I asked if he could supply me with some milk. He answered—"We don't use it." I asked why? "The people," he replied, "about these parts, were afraid of the *milk-sick*; and never used milk after early spring. They do not even permit the calves to suck it; if they do, the calves die, as well as the people." . . . All he knew was, that, after a certain season, those who partook of cow's milk, whether human beings or calves, were made sick, and many died from the use of it. I interpreted the poisonous quality of the milk to be produced by some weed that was indigenous to these parts, which the cows ate; and I suppose that to be the fact.*

. . . At half-past twelve, we were opposite, indeed in, the mouth of the Missouri river.

. . . The waters of the Missouri contrast strongly with those of the Mississippi, being clay color; whilst those of the Mississippi are lighter and brighter. There were floating about, and being driven with the current of the Mississippi, numerous fragments of trees, which made it necessary, whilst in their midst, to guard well our canoe of bark, from being crushed by them. The waters of the Missouri, when there is anything of a descent, drive those of the Mississippi far across to the Illinois shore, and would seem to be the master-river of the two—where, by a well defined line, each is separated from the other, and continue so for many miles, when the clay color of the Missouri at last becomes blended with the less turbid Mississippi. Still, a perfect commingling is not consummated, until they pass St. Louis, some forty miles below, when the color of the Missouri water is lost, and the Mississippi carries what would seem to be its own tribute to the Gulf of Mexico, and onward to the "deep blue sea."

. . . Landed at St. Louis, at three, P.M.²¹⁹

1828: Timothy Flint

Timothy Flint's *Condensed Geography and History of the Western States, or the Mississippi Valley* was first issued in 1828. The following paragraphs have been extracted from Flint's wide-ranging commentary about the Mississippi River:

* Milk sickness is further discussed on page 155.

It is a still more beautiful river, than the Ohio, somewhat gentler in its current, a third wider, with broad and clean sandbars, except in the time of high waters, when they are all covered. At every little distance, there are islands, sometimes a number of them parallel, and broadening the stream to a great width. These islands are many of them large, and have in the summer season an aspect of beauty, as they swell gently from the clear stream,—a vigor and grandeur of vegetation, which contribute much to the magnificence of the river. The sandbars, in the proper season, are the resort of innumerable swans, geese and water fowls. It is, in general, a full mile in width from bank to bank. For a considerable distance above the mouth of the Missouri, it has more than that width. Altogether, it has, from its alternate bluffs and prairies, the calmness and transparency of its waters, the size and beauty of its trees, an aspect of amenity and magnificence, which we have not seen, belonging in the same extent to any other stream.

Where it receives the Missouri, it is a mile and a half wide. . . . This mighty tributary seems rather to diminish, than increase its width; but it perceptibly alters its depth, its mass of waters, and, what is to be regretted, wholly changes its character. It is no longer the gentle, placid stream, with smooth shores and clean sandbars; but has a furious and boiling current, a turbid and dangerous mass of sweeping waters, jagged and dilapidated shores, and, wherever its waters have receded, deposits of mud. . . . its character of calm magnificence, that so delighted the eye above, is seen no more.

From the falls of St. Anthony, its medial current is, probably, less than two miles an hour, to the mouth of the Missouri; and from one point to the other, except at the rapids of the Des Moines, there is four feet water in the channel, at the lowest stages.

. . . Its broad and placid current is often embarrassed with islands, which are generally rich alluvial lands, often containing from five hundred to a thousand acres, and abounding with wild turkeys and other small game. For one hundred miles above the mouth of the Missouri, it would be difficult for us to convey an idea of the beauty of the prairies, skirting this noble river. They impress the eye, as a perfect level; and are in summer covered with a luxuriant growth of grass and flowers, without a tree or a bush. A journey, which we made through them, along the Mississippi, from bayou Sniacarta * to the Illinois, in the month of August, can never be forgotten by us.[†] We often made our way with difficulty on horseback through grass and flowers, as high as our head. At other times, we traversed hundreds of acres of a clean, short grass, of the character

* Bayou Sniacarta = Snicarte Slough, or The Sny, which is described on page 304.

† Flint had earlier chronicled this trip in *Recollections of the Past Ten Years*, which is quoted on page 85.

and appearance of the handsomest meadows, intended for the scythe. When this deep prairie skirted the river on one side, a heavy timbered bottom bounded it on the other. Generally, from the slightest elevation on either side, the sweep of the bluffs, corresponding to the curves of the river, were seen in the distance, mixing with the blue of the sky.

. . . Opposite the mouth of the Missouri, the American bottom terminates, and the bluffs come in to the river. The bluffs bound the eastern bank of the river thence to the mouth of the Illinois. From these bluffs, we contemplate one of the most impressive and beautiful landscapes in the world. On the opposite side, the mighty Missouri is seen, bringing its turbid and sweeping mass of waters at right angles to the Mississippi. The eye traces a long distance of the outline of the Missouri valley, bounded on either side with an indistinct and blue line of hills. Above it is the vast and most beautiful Mamelle prairie, dotted with green islands of wood, and skirted at the farthest ken of the eye with hills and forests. Above you, on the same shore, is the valley of the Illinois, itself bounded by hoary and magnificent bluffs of a peculiar character. The river brings in its creeping waters by a deep bed, that seems almost as straight as a canal. You have in view the valleys and bluffs of two noble streams, that join their waters to the Mississippi. You see the Mississippi changed to a turbid and sweeping stream, with jagged and indented banks, below you. You see its calm and placid waters above the Missouri. On the opposite prairie, there are level meadows, wheat fields, corn fields, smokes ascending from houses and cabins, vast flocks of domestic cattle,—distinct indications of agriculture and improvement blended with the grand features of nature. There are clumps of trees, lakes, ponds, and flocks of sea fowl, wheeling their flight over them; in short, whatever of grandeur, or beauty, nature can furnish to soothe, and to enrapture the beholder.

. . . From the sources of the river to the mouth of the Missouri, the annual flood ordinarily commences in March, and does not subside until the last of May; and its medial height is fifteen feet. At the lowest stages, four feet of water may be found from the rapids of Des Moines to the mouth of the Missouri.

. . . Each of the hundred rivers, that swell the Mississippi, at the time of high waters, is more or less turbid. The upper Mississippi is the most transparent of all of them in low water. But, during its floods, it brings down no inconsiderable portion of dark, slimy mud, suspended in its waters. The mud of the Missouri is as copious, as the water can hold in suspension,—and is whitish in color, much resembling water, in which fresh ashes have been mixed. The river below the Missouri assumes the color of that river.¹¹⁵

The Illinois River is mentioned in Flint's treatment of tributaries to the Mississippi River:

In latitude 39°, comes in the Illinois from the east,—a noble, broad and deep stream, nearly four hundred yards wide at its mouth On this river,

and some of the streams above, the peccan tree is found in its utmost perfection.¹¹⁵

The section on fishes in Flint's *Condensed Geography* mentions the Illinois River:

The piccannau, * perch, and other fish of the Illinois, are represented, as excellent; and in that river, they are taken in great abundance. A line, here called a 'trot line,' drawn across the mouth of the Illinois, where it enters the Mississippi, with hooks appended at regular distances, took five hundred pounds in a night.¹¹⁵

We learn more about the Big Rivers Area in Volume II of Flint's *Condensed Geography*:

A noble limestone bluff . . . stretches along the margin of the American bottom to the point nearly opposite the Missouri. This bluff has, in many places, a regular front of perpendicular lime stone, not unfrequently 300 feet high.

Another line of river bluffs commences opposite the mouth of the Missouri, and reaches to the mouth of the Illinois.—At Portage des Sioux, and in other places, these bluffs shoot up into detached points and pinnacles, which, with the hoary color of the rocks, have at a distance the appearance of the ancient spires and towers of a town. This chain of bluffs marks the limits of the alluvion of the Illinois. As along the Mississippi, the face of this grand wall of nature is frequently perpendicular. When the limits of the alluvion are marked on one side by this wall, on the opposite side they are bounded by a succession of singular hills, parallel to each other, called by the French 'mamelles.' What is singular is, that a beautiful prairie is seen on that side, which is bounded by the perpendicular bluffs; and a thick and tangled and heavily timbered bottom on the

* *Piccannau* was a local name for pike and pickerel. Flint's *Condensed Geography* states,

Pike, *esox*. We have noted a great many species of pikes in the Ohio and Mississippi, and their waters. They are called pike, pickerel and jack fish; and perfectly resemble the fish of the same names in the Atlantic waters. The Indians of the Wabash and the Illinois call them *piccannau*. They are of all sizes, from half a pound to twenty pounds.

. . . A fine fish . . . called *piccannau*, is taken in the Illinois and the upper waters of the Wabash.¹¹⁵

Timothy Flint relied on Constantine Rafinesque's *Ichthyologia Ohioensis* (1820) for most of his information about the region's fishes. Rafinesque introduced the genus *Esox*, or pikes, by writing, "French settlers of the Wabash and Missouri call them *Piconeau*, and the American settlers Pikes or Pickerels." Regarding the grass pickerel (*Esox americanus*), Rafinesque wrote, "It is called Salmon Pike, White Pike, White Jack or White Pickerel, and *Picaneau blanc* by the Missourians." In his description of the streaked pike (*E. vittatus*), Rafinesque stated, "It is called *Piconeau* or *Picaneau* by the Canadians and Missourians."²⁷⁸

Rafinesque also listed *Picaneau* as a name for the shortnose gar (*Lepisosteus platostomus*), but Timothy Flint is not likely to have included gars in his list of excellent food fishes in the Illinois River.

side of the river, that is marked with these mamelles. When the prairie is found on the right or left of the river, so are all these accompaniments, and they regularly alternate, and are found first on one side, and then on the other.

We have already spoken of that beautiful tract of country, denominated the 'American bottom' . . . It is from three to six miles wide; and is divided into two belts. The first, bordering the Mississippi, is a heavily timbered bottom. The next belt, reaching to the foot of the perpendicular bluffs, is prairie of the richest quality, covered, in the season of vegetation, with grass and flowers. Parts of this tract have been in cultivation with the exhausting crop of maize 100 years, without producing apparently the slightest exhaustion of the soil. No description will convey an adequate idea of the power of vegetation, and the rank luxuriance, with which it operates at the root, along this plain of exhaustless fertility. Unhappily, here, as almost universally, nature has compensated the prodigality of her gifts on the one hand, by counterbalancing disadvantages on the other. Wherever the gifts of nature are offered with so little labor, and in such abundance, as here, men will be found. But in the autumn, you will enter but few houses in the whole distance, where some of the members of the family are not sick.

A bottom very similar to this, alternately on the right and left bank of the Illinois, marks its course almost from its mouth to its source. It is in the same manner bounded by bluffs. The same line of hills marks a belt beyond the bluffs.

. . . The military bounty lands in Illinois are laid off in the delta of the Illinois and Mississippi. Their shape is that of a curvilinear triangle. . . . These lands embrace all the varieties of soil, found in any part of the valley of the Mississippi. There are rich bottoms, inundated swamps, grassy prairies, timbered alluvions, perpendicular bluffs, 'mamelle' and river hills, barrens, * and all

* Timothy Flint described barrens in his subsequent *History and Geography of the Mississippi Valley* (1832):

The country denominated 'barrens,' has a very distinct and peculiar configuration. It is generally a country with a surface, undulating with gentle hills, of a particular form. They are long and uniform ridges. The soil is for the most part of a clayey texture, of a reddish or grayish color, and is covered with a tall coarse grass. In addition to a peculiarity of feature, more easily felt, than described, the trees are generally very sparse, seldom large, or very small. They are chiefly of the different kinds of oaks; and the barren trees have an appearance and configuration, appropriate to the soil they inhabit. The land never exceeds second rate in quality, and is more generally third rate. It is favorable, in the proper latitudes, to the growth of wheat and orchards. On the whole, this country has an aspect so peculiar and appropriate, that no person, at all used to this country, is in doubt for a moment, when he enters on the region of the barrens. There are large districts of this kind of country in Kentucky, Tennessee and Alabama. They are common in Illinois and Missouri, and are seen with more or less frequency, over all the valley of the Mississippi.¹¹⁶

Travellers describe the scenery skirting the Illinois as beautiful beyond description.

— *Western Gazetteer* (1817).⁵⁵

qualities of soil from the best to the worst. . . . A great portion of them is of first rate quality, as regards richness. The lower portion next the Mississippi, and where the two rivers, for a long distance, are near each other, seldom diverging more than eight miles, is generally of extraordinary fertility; but often inundated, and too often unhealthy. As we ascend the Illinois, and the two rivers diverge, the character of the country becomes more diversified, less subject to inundation, more happily sprinkled with hill, dale, copse and prairie.

. . . On the north side of the Illinois, the rivers that enter on that shore, have their courses, for the most part, in mountainous bluffs, which often approach near the river. For a great distance above its mouth, the river is almost as straight as a canal; has in summer scarcely a perceptible current, and the waters, though transparent, have a marshy taste to a degree to be almost unpotable. The river is wide and deep; and for the greater part of its width, is filled with aquatic weeds, to such a degree, that no person could swim among them. Only a few yards width, in the centre of the stream, is free from them. It enters the Mississippi, through a deep forest, by a mouth 400 yards wide. Perhaps no river of the western country has so fine a boatable navigation, for such a great distance; or waters a richer and more luxuriant tract of country.¹¹⁵

Timothy Flint expressed grave concern about malarial conditions that imperiled residents of low-lying lands:

Emigrants from the Atlantic country will always find it unsafe, to select their residence near stagnant waters and creeping bayous, on the rich and heavy timbered alluvions. Yet these, from their fertility, and the ease with which they are brought into cultivation, are the points most frequently selected.

. . . wherever the bottoms are wide, the forests deep, the surface level, and sloping back from the river, the vegetation rank—wherever the rivers overflow, and leave stagnant waters, that are only carried off by evaporation—wherever there are in the bottoms, ponds, and lagoons, to catch and retain the rains and the overflow, it may be assumed, as a general maxim, that such positions will be unhealthy; and more, or less so, as more or less of these circumstances occur. * Wherever these causes of disease exist, there is no part of this valley,[†]

* Charles Latrobe, a British visitor to the region in 1833, held forth a different opinion about the malarial condition of lowlands versus blufflands:

No part of the rich fertile lands, whether forested, or open prairie, is exempt from the disease,

which has not a summer of sufficient heat and duration, to quicken these causes into fatal action.

The very rich and extensive alluvial prairies of the upper Mississippi, and of the Illinois, which are covered with a prodigious growth of grass and weeds, generally contain marshy basins, small lakes and plashes,^{*} where the water from the bluffs and the high lands is caught and retained. They will ordinarily prove unhealthy,—some think, more so, than the timbered country,—until these reservoirs of stagnant waters are all drained, and the surplus vegetation is burned off, or otherwise removed by the progress of vegetation.[†] These places

and the settlers on the summits of the high bluffs, which in some parts of the course of the Mississippi rise from its shores, are even more exposed to its ravages than those on a level with the stream.¹⁹⁹

Yet Latrobe did seem to agree with Flint on some points:

I am convinced, however, that a little more care in the choice of a plot of ground for an habitation, attention to drainage, raising the floor a few feet from the earth, less exposure to the morning and evening dews, and warmer clothing, would be productive of far better health in the settlers.¹⁹⁹

[†] Flint was referring to the Mississippi valley in general.

^{*} Shallow bodies of water were sometimes called *plashes*, *slashes*, or *splashes* during the early 1800s.

[†] Flint's "progress of vegetation" involves the replacement of wild plants by cultivated ones. Emma Piatt explained that extensive tracts of natural vegetation in early Illinois had fostered a humid environment, poorly suited for raising cereal grains:

When the county was first settled the rank grasses presented an impediment to evaporation, and the result was a moist climate, that gave a too luxuriant growth to wheat and oats. This resulted in the lodging of the latter and producing rust in the former, but culture and pasturage have so modified these conditions that the latter is becoming one of our great staples, and the former, both in its spring and winter varieties, is becoming more and more popular . . .²⁶³

Although Emma Piatt emphasized the viewpoint that vigorous wild vegetation helps maintain a humid environment, Hiram Beckwith reversed this view. He observed that humidity promotes a lush growth of wild plants. Beckwith also remarked that grazing had caused short pasture grasses to replace tall-grass prairie:

There were many ponds and sloughs which aided in producing a humid atmosphere, all which induced a rank growth of grasses.

. . . Early settlers . . . all bear witness to the rank growth of vegetation on the prairies before it was grazed by live stock, and supplanted with shorter grasses, that set in as the country improved.³²

Another historian, John Smith, noted a connection between untamed prairie vegetation and wet conditions. He further stated that pasturage improves the drainage of prairies by killing the native grass:

The sod was very much tougher then than it was in after years when the stock had pastured the prairies and killed out the grass to some extent. It would be astonishing to many of our

strike the eye delightfully. Their openness, and exposure to be swept by the winds, seemed to preclude them from the chance of sickliness. Their extraordinary fertility, and their being at once ready for the plough, held out allurements to immigrants. But there seems to be in the great plan of Providence a scale, in which the advantages and disadvantages of human condition are balanced.— Where the lands are extremely fertile, it seems to be appended to them, as a drawback to that advantage, that they are generally sickly.

Emigrants have scarcely ever paused long enough, or taken sufficient elements into the calculation, in selecting their residence, with a view to its salubrity. When the choice is to be made, they are often encumbered with families, and generally feel stinted both for time and money, and are in a hurry to commence operations for the provision of their families. They are apt to give too little weight to the most important motive of all which ought to determine their election. A deep bottom, a fertile soil, a position on the margin of a boatable or navigable stream; these are apt to be the determining elements of their choice. The heavy forest is levelled. A thousand trees moulder, and putrefy about the cabin. The stagnant waters, that, while shielded from the action of the sun by the forest, had remained comparatively innoxious, exposed now to the burning rays of the sun, and rendered more deleterious by being filled with trunks and branches of decaying trees, and all kinds of putrid vegetation, become laboratories of miasma, and emit on every side the seeds of disease.— When we know,

present residents to see the immense crops of prairie grass that in early days grew upon their present fields. . . . The fact is that there is much of the land of Macon county that is now considered high and dry, or at least sufficiently so for all practical farming purposes, that was so wet that during a greater portion of the year it was absolutely dangerous to ride over it on horseback, for fear of miring.³⁰⁸

Henry Engelmann implicated cultivation rather than grazing as the means of destroying the prairie sod and consequently improving drainage:

The character of our prairies is undergoing a gradual but very perceptible change in the progress of their cultivation. Their natural drainage is generally very imperfect, even in the high prairies, and formerly it was still more obstructed by the dense growth of the tall prairie grasses which year after year grew and died on the same spot, and covered the soil with their decaying remains. Besides impeding the rapid surface drainage, and thus causing the soil to absorb more of the falling rain, it attracted the night dews, and shielded the soil from the desiccating and warming rays of the sun. In consequence thereof, our prairies appear to have been formerly, without exception, wet. This has considerably changed, and continues changing under our eyes. The surface drainage is facilitated, especially on the high and rolling prairies, the tall grasses have disappeared nearly everywhere, the soil is exposed to the sun and to the winds, the prairies have consequently become drier, some of them very markedly so; and although at some points the water still rises in the wells to their very rim, the water level has generally become deeper. The prairie lands are thus becoming more and more adapted, also, to the growth of the more deep-rooted of our ordinarily cultivated dry land plants, especially the fruit trees, for which many portions of the prairies would, however, seem to be still too wet.¹⁰⁶

that such have been precisely the circumstances, in which a great portion of the immigrants to the western country have fixed themselves in open cabins, that drink in the humid atmosphere of the night, through a hundred crevices, in a new and untried climate, under a higher temperature, under the influence of a new diet and regimen, and, perhaps, under the depressing fatigue of severe labor and exposure; need we wonder, that the country has acquired a general character of unhealthiness? *¹¹⁵

1828: Basil Hall

One spring day in 1828, Basil Hall, a Captain in the British Navy, took the riverboat *Illinois* from St. Louis to the juncture of the Mississippi and Missouri Rivers:

On the 20th of May, we embarked in the Illinois steam-boat, on an expedition to the confluence of the Missouri with the Mississippi.

. . . The most striking circumstance observable at this confluence, is the difference in the colour and purity of the two rivers. The Missouri is nearly as thick as peas soup, of a dirty, muddy, whitish colour; while the Mississippi, above the confluence, is of a clear light blue, not unlike that of the deep sea, or the Rhone at Geneva. At some places it looked like the Tweed, when it has got a slight tinge of the moors; [†] but when a glass of it was taken up, it always appeared as clear as any spring water. If a glass of the Missouri were, however, dipped up in like manner, it was perfectly turbid, worse than the rain puddles on a highway, and in a few minutes a stratum of mud was formed in the bottom of the tumbler. The surface of the Mississippi, above the confluence, was clear of drift wood, while that of its companion was all covered over with half-burnt

* J.H. Oakwood reviewed the health disadvantages of wet ground, and he implicated plowing, ditching, and pasturage as causes of improved drainage and a healthier environment:

The flat prairies were full of sloughs and ponds, and in the spring of the year were almost half covered with water.

. . . After the Indians had removed from the country, and after a few farms had been improved in various localities, the prairie grass was not so universally burned off, and much of it was left to decay upon the ground. This, with the rotting sod of the fresh plowed land, and the numerous ponds and sloughs of stagnant water, created a vast amount of malaria. Attacks of bilious fever, and chills and fever in the autumn months, were expected by every one, and in their expectations were seldom disappointed.

. . . This annual period of sickness continued with decreasing effect until about 1850, when a large portion of the country had been brought into cultivation, and a very large portion of the remainder was grazed off by the thousands of cattle that roamed over the prairie, eating the grass close to the ground, and the tramping of the ground by the stock, together with some ditches made by plowing or otherwise, so drained off the surface water that the country became more healthy than when first settled.²³⁸

[†] The water was lightly tea-colored, as if it were tinged with dissolved organic matter.

. . . it is the empire of solitude, for the cheering voice of civilized men is seldom heard on this delightful stream: the Illinois River in 1817.⁵⁵

logs, trees with their branches torn off, and great rafts or floating islands of timber, drifted from the interior, sweeping and swirling along at a furious rate.

The Missouri enters the Mississippi from the westward, nearly at right angles to it; and such is the impetuosity of its current, that it fairly drives the Mississippi over to the left or eastern bank. There were literally not above ten or twelve yards of clear water on that side of the river, while all the rest was muddy.

The line of actual contact was particularly interesting. It seemed as if the dirty Missouri had insinuated itself under the clear Mississippi; for we saw it boiling up at a hundred different places. First a small, curdling, white spot, not bigger than a man's hand, made its appearance near the surface. This rapidly swelled and boiled about, till in a few seconds it suddenly became as large as a steam-boat, spreading itself on all sides in gigantic eddies, or whirlpools, in a manner that I hardly know how to describe, but which was amazingly striking. At other places the two currents ran along side by side, without the least intermixture—like oil and water. But this separation never continued long, and the contaminating Missouri soon conquered the beautiful Mississippi;—indeed the stain is never got rid of for one moment during the twelve hundred miles that the united stream runs over before it falls into the Gulf of Mexico.¹³⁹

1828: Mrs. Basil Hall

Mrs. Hall traveled to the Big Rivers Area with her husband, who is quoted in the preceding section. She recorded her impressions of the Mississippi-Missouri River confluence, and she noted the hill prairies upstream from Alton:

The most remarkable circumstance is the instantaneous change in the character of the water of the Mississippi below and above its meeting with the Missouri. I have often mentioned the muddy nature of the river all the way from the Balize,* but that part of it from the mouth of the Ohio up to St. Louis is doubly dirty, indeed the mud accumulates so fast in the boilers of the steamboats that they were obliged to clean them out every day. The innumerable logs and other driftwood were also proportionately increased, and the strength of the current was such that we had the greatest difficulty in making way against it. All those circumstances arose from the approximation of the Missouri, and as we continued to paddle up from hence they increased, and when we got near the confluence the

* The Balize (Balise) was a pilot's station near the mouth of one of the navigable channels in the Mississippi River delta.

mixture of the two waters was very distinct. Had you been in the United States * I could have told you what it resembled, but you have never seen a dish containing American gravy and, therefore, my simile is lost, but you must know that the said gravy is always of two colours, a lighter and a darker and of a thicker and a thinner substance, if liquid may be so termed. Such was the water of the Mississippi until we got above the confluence and then all at once it was as pure as the sea and quite the same colour. The scenery on both sides all the way to the Portage des Sioux, thirty-three miles from St. Louis, was highly picturesque, so different from the swampy marshy Mississippi we left below. Here the cliffs surmounted by green and grassy knolls were much more pleasing to the eye, and we enjoyed the day's excursion extremely.¹⁴⁰

1830: James Hall

The November 1830 issue of the *Illinois Monthly Magazine* carries an article titled "Notes on Illinois: Surface of the Country." Author James Hall asserted, "The upper Mississippi is a much more beautiful river than it is generally believed to be."

In richness, beauty, and variety of landscape, it far surpasses the Ohio; and we cannot conceive why the French, who knew both, should have called the latter *La Belle* in preference to the former, unless, indeed, they considered that it would have been a solecism in language to have made a *belle* out of the Father of streams. For the first thirty miles above St. Louis, the country, although extremely rich and valuable, is not interesting in its appearance. Within that distance, the Missouri river comes in on the one hand, and the Illinois on the other; and after passing the latter, the shores become attractive.

The whole character of the river is changed, after passing the mouth of the Missouri. Above that, the Mississippi is a clear stream, with a strong, but smooth current. Instead of the low alluvial banks, which are continually accumulating at one spot, and falling in at another, as is the case upon the lower Mississippi, here are bold and beautiful shores, such as no other river that I have ever seen, can boast. On the Illinois side, we now behold a range of tall bluffs, rising perpendicularly from the water's edge, to the height of from one to two hundred feet, and faced with a solid bed of limestone.

. . . The escarpments or steep sides of the rock, exhibit no angular shapes, but are smoothed and rounded as if by the long continued action of a powerful current of water. Numerous holes appear on the face of the solid rock, sometimes shallow and irregular, but often deep and cylindrical; they are precisely such as geologists call *pot-holes*, and are far above the present high water mark. Every projection is rounded, and every cavity is globular, and so regular has been this operation, as to have produced in some instances, a series of columnar

* Mrs. Hall wrote for a British readership.

formations, which display much of the symmetry of art, and which extending from the base to the summit of the rock, seem like immense buttresses intended to strengthen and support these massive walls. The peaks seem to have been long since decomposed, and have mouldered down into gracefully rounded hills, covered with vegetation. . . . After passing a few miles further, these vertical declivities are no longer presented to the eye. We now see the chrystral stream beating against a bank of gravel, from which the shores rise with a gradual slope. . . . The prairie, for the most part, extends to the water, and no pen can describe the singular and captivating effect of such scenery. Imagine a stream of a mile in width, whose waters are as transparent as those of the mountain spring, flowing over beds of rock or gravel. Fancy the prairie commencing at the water's edge—a natural meadow covered with grass and flowers, rising with a gentle slope, for miles, so that in the vast panorama, thousands of acres are exposed to the eye. The prospect is bounded by a range of low hills, which sometimes approach the river, and again recede, and whose summits, which are seen gently waving along the horizon, form the level of the adjacent country. The prairies are not flat, but composed of a succession of swells The timber is scattered in groves and strips, the whole country being one vast illimitable prairie, ornamented by small collections of trees. Sometimes the woodland extends along the river for several miles continuously—sometimes it is seen stretching in a wide belt far off into the country, and marking the course of some tributary stream and sometimes in vast groves, of several miles in extent, standing alone like islands, in this wilderness of grass and flowers. But more often we see the single tree without a companion near, or the little clump composed of a few dozen oaks or elms; and not unfrequently, hundreds of acres embellished with a kind of open woodland, and exhibiting the appearance of a splendid park, decorated with skill and care by the hand of taste. Here we behold the beautiful lawn enriched with flowers, and studded with trees, which are so dispersed about as not to intercept the prospect—standing singly, so as not to shade the ground, and occasionally collected in clusters, while now and then the shade deepens into the gloom of the forest, or opens into long vistas and spacious plains, destitute of tree or shrub.

We doubt whether there can be found, on the globe, a tract of country to compare with this. *¹⁴¹

1830: James Stuart

Three Years in North America is the story of James Stuart, a British citizen who traveled extensively in the United States. Mr. Stuart's travels brought him to the Big Rivers Area

* James Hall later published essentially the same missive in his definitive *Notes on the Western States* (1838).¹⁴³

in the spring of 1830. Mr. Stuart told his readers about the stark contrast between the waters of the Mississippi and the Missouri:

The current of the Mississippi is calculated to be less than two miles an hour; but after its junction with the Missouri above St. Louis, the rapidity of the current is considered to be greater than four miles an hour. Until its junction with the Missouri, the Mississippi is a gentle, placid, clear stream, with smooth shores; but the Missouri totally changes the character of the united stream. It prodigiously increases its depth, and its mass of waters. The current becomes furious and boiling,—the mass of water turbid,—the shores dilapidated,—and great deposits of mud remain wherever the waters recede.

. . . From the sources of the river to the junction with the Missouri, the annual flood generally commences in March, and does not subside until the end of May.

. . . Each of the hundred rivers that swell the Mississippi is more or less turbid. The Upper Mississippi is the most transparent of them all. The mud of the Missouri is as copious as the water can hold in suspension, and it is whitish in colour, much resembling water in which fresh wood ashes have been mixed. The Mississippi below the Missouri assumes the colour of the latter. *³²⁷

The last days of April 1830 found James Stuart at St. Louis. He decided to make “an excursion to the opposite bank of the Mississippi, into the State of Illinois.”

There is a steam ferry-boat across the river, which is about a mile broad.

. . . After crossing the river, I engaged one of the neighbouring farmers, Mr. Abrams, to drive me out for a few hours over the prairie adjoining, which, in one direction, is 100 miles long. The prairie was in great beauty. It consisted of undulating ground, in which there were tracts of roads generally dry. It was covered with wild strawberries, and with crab apples. Here and there, there were lakes, and now and then we came to a plantation of ground, enclosed with the ordinary strong railing of this country, a good cottage, and some cultivated land. The prairie was full of game, deer, wild geese, wild ducks, and the prairie hen. One of the planters . . . gave us a glass of excellent cyder.

. . . With the assistance of a boy, he has killed sixty wild ducks in a morning. There is no restriction against his or any of the planters putting as many cattle or horses as they choose on the uninclosed part of the prairie land, or cutting as much grass as they like; but the extent of the ground is so great, that a good herdsman is indispensably necessary to look after any cattle put upon the prairie.

* James Stuart copied this paragraph and the preceding one from Timothy Flint's *Condensed Geography*.

The Illinois, which hitherto has been little navigated, except by the North-West Company's boats, must in a few years become the theatre of an active commerce.

— Samuel Brown in 1817.⁵⁵

. . . After driving through the prairie, my charioteer, Mr. Abrams, carried me as far as the village of Cahokia . . .³²⁷

On the penultimate day of April, Mr. Stuart took another excursion from St. Louis. This time he and a fellow traveler headed across the American Bottom to Edwardsville:

A considerable part of our drive was through the prairie, where the road was a mere track, but generally smooth and good, unless where the ground was wet or swampy, in which case we were sometimes detained, picking out the driest land we could find. The road improved after we left the prairie, and before we reached Edwardsville, was very good.³²⁷

Stuart's companion had brought provisions for the trip, including "a dozen of venison hams, which are sold at St. Louis at sixpence sterling a-piece." Not tarrying at Edwardsville, the men halted for the night in Lower Alton. Before they reached their hotel, they "passed through some splendid oaks." The next morning, Stuart took note of the "good trees in the vicinity" of Lower Alton.

Stuart learned that there was "a beautiful Mamelle above Lower Alton, from which the view of the Mississippi is very splendid." He took to this height to view the confluence of the Missouri and Mississippi Rivers:

Opposite to the height where I stood I beheld the greatest of the American rivers bringing his vast volume of waters with impetuosity into the clear and comparatively smoothly gliding stream of the Mississippi. The rivers at this point almost form a sea adorned with islands. The Mississippi is a mile and a-half broad. * The width of the Missouri at the opening is rather more than half a mile. On the one side is the beautiful valley of Illinois, and on the other the Mamelle Prairie, and a great extent in every direction of cultivated land, as well as of beautiful forest-trees.³²⁷

He then made a tour up-river from Alton:

I rode along the bank of the river for a considerable way, so as distinctly to perceive the clear water of the Mississippi close to the bank on the east side of the river, and a few yards further to the westward the turbid water of the Missouri.

* Elsewhere in his book, James Stuart remarked that the Mississippi River is about three-quarters of a mile wide in the section between the Ohio River and the Missouri River. He said that the Mississippi is about two miles broad above the mouth of the Missouri.

. . . At about fifteen miles to the north-west of Lower Alton is the mouth of the river Illinois . . . It enters the Mississippi through a deep forest by a mouth 400 yards wide; and no river in the western country has so fine a boatable navigation for so great a distance, its whole length being about 400 miles, most of it accessible for steam-boats. ³²⁷

At this point in his personal story, Stuart inserted a general description of the state of Illinois. The text concludes, "*It is the richest country in point of soil in the world.* The French called it the Terrestrial Paradise." ³²⁷

The next leg of James Stuart's journey took him north and west across the Big Rivers Area from Alton toward Carrollton:

Great part of our road passed through the prairie ground, of which above two-thirds of the whole State of Illinois are composed, most beautiful at all times, but especially at this season, owing to the brilliancy of the flowers now in blossom. Plantations we saw here and there, but the general appearance of the country was that of a fine waving surface of strong grass, covered with strawberry plants, and the finest flowers, and with wood on the high grounds and hollows, and occasional dropping trees, and clumps or islets of wood. In general, there was quite enough of wood in the view, and far more happily disposed than if the trees had been planted by the hand of man.

. . . Some farmers have 300 or 400 cattle on the prairie, and people to attend to them. The cattle do not feed well on the prairie grass without frequently having salt, but salt is abundant in this country. ³²⁷

Continuing north from the Macoupin Creek valley and beyond the Big Rivers Area . . .

From Carrollton we had one of the most beautiful rides I ever enjoyed in so fine a country to Jacksonville, the capital of Morgan-county. It appeared to me that we passed through the most delightful as well as the richest district I had ever seen. The form and appearance of the prairie and of the surrounding woods were most beautiful. Think of Windsor Park, or Strathfieldsaye, or of parks for all the noblemen and wealthy landholders in Britain to be had here at a dollar and a-quarter an acre, in the neighbourhood of such rivers, and all consisting of land of the richest soil, and of the most beautiful waving shape and smooth surface, all laid out by the hand of Nature, as English parks are,—the wood far more beautifully. ³²⁷

1830–59: Jane Moses Wood–Roodhouse

The family of Benjamin Wood and Jane Moses Wood–Roodhouse emigrated from England in 1830 to start a new life in America. In September of 1830 their journey brought them "half-way round the world to this far distant trading post named St. Louis." There Mrs. Wood–Roodhouse set quill to paper:

I am much wearied yet I have made unto myself a solemn promise on the begining of this journey in the year of our Lord 1830 I would set forth what befell myself and mine family for it is only in thiswise mine memory may be refreshed of the events transpiring on this perilous journey from the Old World to the New.³²⁶

The family proceeded to Alton. Mr. Wood and a son continued onward "to inquire of the country of the Mauvaisterre." They found a tavern at Carrollton, where they spent the night. Mrs. Wood-Roodhouse's diary preserves a record of what transpired next:

Benjamin and the lad did leave the tavern by sunrise and followed the trail through thickets and brambles to the edge of the timber where they did come upon a clearing and did find a spring of fine cool water and above the spring they were astounded to see a cabin Benjamin did inquire of the trail leading into the country of the Mauvaisterre Mister R. did say the trail to guide them did go along the tree-notched road until one did reach the level prairie and on until Burnt Haystack Spring * was reached and there they perchance would find some one to guide them onward into the country which they sought.³²⁶

Mr. Wood inspected the valley of Mauvaise Terre Creek west of Jacksonville but "the very name Mauvaisterre did mean barren ground and such did not please him when he could for a sum of monies hold that rich black soil that he did so much desire." Instead of moving to the Mauvaise Terre valley, the Wood-Roodhouse family decided to buy land from a Mr. R. on the outskirts of Carrollton. Their purchase included a cabin, outbuildings, and "great mounds of prairie grass . . . already heaped by the stables."³²⁶

Mrs. Wood-Roodhouse was soon to experience Indian Summer.[†] She wrote about it one October day when "the air was soft and balmy." A neighbor lady came to pay her first visit and . . .

She did laugh a bit when I did inquire of the smoke that does hang low upon the prairies. Did it come from the campfires of the red men I did wish to know or was it smoke drifting from the chimneys of the cabins? It seems that always I do see smoke both at dawn and at eventide. It is the mists she did say rising

* Burnt Haystack Spring was an important landmark in the southeast corner of Scott County, along the route from Carrollton to the Mauvaise Terre valley. A chronicle of six men who passed this way in January of 1820 mentions the site:

Near Manchester they . . . saw where two men the fall before (1819) had cut a considerable amount of prairie-hay. The fire had burned the cocks, but heaps of ashes indicated where they had stood. These two men were the first who ever attempted any kind of agricultural work within the present bounds of Scott county, but their names are unknown—they never returned!¹⁵²

† Other descriptions of Indian Summer may be found on page 356 and in a footnote on page 52.

from the brooks and the streamlets flowing near by and yet I do wish to think
of it as low smoke drifting from many cabins—prairie smoke. *³²⁶

Wood-Roodhouse learned more from her neighbor:

Sugar was scarce and salt had to be fetched in from the salt-licks not so far
away

. . . The winters I did learn were for the most part mild save when the winds
blew. . . . When the cold did come down folk did place boughs of the cedar tree
outside of the cabin walls and did dash them with water that they might freeze to
the logs and earth and snow packed close against them. Inside the wall were
hung with blankets and the hides of buffalo. † One does use these hides atop the
blankets to give warmth to the beds stuffed up with prairie grasses. ³²⁶

She closed her account of this Indian Summer day in October of 1830 by writing, "Tonight
there is a fine sunset in rose and gold" She picked up her portfolio in the following
month to write,

This day did Benjamin and mineself go to bargain at the village store. A poor
place of logs with . . . a vast pile of odorous skins of wild beasts

. . . The air did grow quite damp and there was an fine mist ere we did reach
home. Today there is an fine white mantle of snow o'er all and huge flakes are
steadily falling. The lads do enjoy the snow and like to frolic about in it but
Benjamin has set them about fetching in the cedar boughs to bank the cabin.

. . . Son Isaac did shoot an wild turkey cock in the timber ³²⁶

Jane Wood-Roodhouse finished her entry for the day with, "Greatly do I dread the un-
known winter ahead" Her remark presaged the most severe winter ever recorded in
the Big Rivers Area. Her diary for December says,

This is the Yule in the New World. Greatly have we made preparations for the
merry time We did weave garlands of fir and cedar ‡

. . . The snow does now reach the eaves of our cabin. The lads have made an
wide path to the stables and each morn they do have to make it anew. Adown
the hill from the cabin to the spring they did smooth a path in the snow

* Jane Wood-Roodhouse's diary was found in an attic and was published by a great, great, great
granddaughter under the title *Prairie Smoke*.

† Bison had been extirpated from the region by the time Wood-Roodhouse arrived at Carrollton.

‡ Evergreen trees in general are sometimes called firs. Wood-Roodhouse had earlier remarked
that they insulated their cabin with cedar boughs. Eastern red cedar (*Juniperus virginiana*) is the only
evergreen likely to have been found in the neighborhood of Carrollton in 1830.

This land was a paradise when I could stand on the bluff and look down in the river bottom and count fifty deer in sight. White men hadn't spoiled the country and turned everything to dollars.

— Rowell Honeycut, who came to the Big Rivers Area in 1817.⁸⁹

. . . The sky seems ever overcast and the snow has reached the eaves and we are unable to open the wooden shutters for they do stick fast in the snow. . . . Wild game sore-stricken by the cold and snow we do find at our door. Hares and partridges * and even the wild turkeys do come and feed near the stables.

Benjamin and Isaac did venture forth with the oxen yoked to the cart but did tarry only a short while under the lowering sky. It did take them quite some time to reach the stables from the trail for oxen do move but slowly and they did flounder about in the snow reaching nigh to their neck-yokes.³²⁶

In March of 1831 Wood-Roodhouse wrote, "This night I do burn an extra taper that I may set down such events as did befall us since Yuletide":

Many weeks has there been a mantle of snow and icy winds did blow and most folk did keep within the shelter of their cabins. Son William did say in the timber the snow did lie waist-deep and it was as high as the cabin where the strong winds did blow it. The fowls in their thatched shelter were most buried and the lads did find it was necessary to tunnel from the door of the cabin so the fowls could be fed grain.

Some folk did fetch grain struggling through the deep drifts that they might have their grain made into grist These folk did tell Benjamin or the lads of illness and suffering in the cabins outside. For many winters the Father in Heaven has sent mild weather and the cattle did graze the most part of the winter on the prairies.

. . . At last this long and desolate winter did come to an end with an great freshet in the month of March and much rain did fall. The water did seep into the ground but slowly. The lads did splash quite briskly about in it but mineself and Mary did find it most awkward skipping about from the stones and slabs of wood which Isaac did cast into the mire that we might move about the yard.³²⁶

Mrs. Wood-Roodhouse was widowed (for a second time) in August. Further tragedy in September:

Our summer did come to a sudden close on the twelfth day when there was an killing frost rendering even the corn standing in the fields quite unfit for bread

* British immigrants commonly referred to bobwhite quail as partridges.

or seed. This is indeed a calamity for man and beast as no other grains are grown hereabout.³²⁶

The state of affairs in November of 1831:

The boundry of our acres must be marked and ere the chill of winter is upon us food needs must be laid by and provender for the stock.

Prairie grass has been fetched in and has been placed in huge mounds hard by the stables and our grain has been garnered Trees have been felled and fetched in from the timber and do await the axe at the chopping block. . . . I did learn of an strong lass . . . and I did go to the sod house * adown by the creek and did inquire of her.

. . . The lads William and Isaac did take counsel of our good friend Mister R. in regard to the scarcity of corn and they did join the men going into the south of the state to bargain for corn. . . . William did say we do go into Egypt to buy corn for the southern part of the Illinois state is in jest named Egypt.³²⁶

February 1832:

The winter days do pass slowly by and I do desire the days of spring.
. . . Chilly winds and gray skies do prevail.

Some do come to the ox-mill to have the corn made into grist but do not tarry.^{† 326}

Four months later:

This is the month of June and a most gracious day. I do sit in the shade of the great oak tree with mine portfolio on mine knee but mine quill is idle as I do gaze about me. I do think this is the garden spot of the New World

. . . Red men are rarely seen in our countryside. I did see several encamped not far from Burnt Haystack Spring as we did journey into the country of the Mauvaisterre.³²⁶

September 1832: "Death and desolation has come to our village and many are now afflicted with Asiatic cholera. . . . Travelers no longer travel our tree-notched trail but do avoid this spot."³²⁶

March 1833: "The winter has been for the most part mild" ³²⁶

August 1833: "This season has been one of abundance and of much labor."³²⁶

* This is one of very few references to sod houses on the Illinois prairie. Wood-Roodhouse remarked that the family living in the sod house was "poor indeed in this world's goods."

† Carrollton's mill was powered by oxen rather than by a creek.

In November of 1834 Mrs. Wood-Roodhouse wrote, "This year we did pickle walnuts . . ." She wrote of making "hams and the like . . . smoked up with hickory smoke" and "sugared persimmons." ³²⁶

In May of 1835 one of the sons set out to make his own home:

William did find the spot he did desire but the tract must be cleared. . . . He has already cut down trees to build a cabin . . . and when an likely day comes he will hold an chopping-bee * . . . Hereabout the folk do undercut the trees and this is most perilous for oft the men are crippled or even killed by the downward crash of the many trees. These felled trees are left for the most part to dry in the summer sun. Small limbs and twigs are burned in the autumn. The shorn trunks not of an size to be used in the raising of the cabin are gathered together in one vast pile and are kept continuously burning so by spring the ashes were mixed into the soil and luxuriant crops do grow from it. ³²⁶

In September of 1835, "There is much to be done whilst the weather is yet fine":

Jennie's mother did make promise to set the dyes for us for it is soon we will need the garments stitched for mine household. She does handle the dyes with much skill. Each year she does go questing about in search of madder [†] and logwood [‡] and sassafras also. She has even used the dark juice of the pokeberry and she knows even goldenrod and iris will yield up a bit of juice for her use. ³²⁶

Daughter Mary wed in 1836. At the wedding, "We did have wild honey and biscuits—an vast number. There were raspberry cakes and the fine bride's cake . . ." ³²⁶

In December of 1836 Jane Wood-Roodhouse wrote of the Sudden Change which soon became legend:

Yuletide has come and gone and we do await the coming of the New Year.

. . . The skies are ever gray and the snow does thaw by day and does freeze by night thus forming ridges of ice that one does not wish to tread upon.

A few days agone suddenly from the west an angry black cloud did arise with a great roaring sound and the wind fetching up the cloud did blow bitter cold. The rain falling did freeze in sharp ridges and all atop the snow already on the ground it was an sheet of ice and we did all move about with difficulty. So

* Friends, neighbors, and relatives were enlisted at a "chopping bee" to make short work of clearing timber for cropland.

[†] The root of the European madder (*Rubium tinctorium*) produces a red dye. A similar color can be obtained from related wild species in Illinois such as the stiff bedstraw (*Galium tinctorium*).

[‡] Logwood (*Haematoxylon campechianum*) is a tropical tree that produces a dark blue to black dye. Perhaps Wood-Roodhouse was thinking of the native dogwood (*Cornus*), which makes a red tint.

swift did the storm come the swine and fowls did some freeze almost stiff in their tracks and we did lose quite an number although we did slip and slide about and attempt to rescue the luckless ones.

An horseman passing along the road stopped for shelter and the gentleman's garments were frozen to his saddle and the lads did remove the saddle and gentleman together and did place them before the blazing fire upon the hearth to thaw³²⁶

In November of 1837, "We did enjoy an corn-husking party at the home of Mr. T.":

We did depart from the home place ere the sun had set for these folk do live six miles across the prairie. . . . Great mounds of unhusked corn were piled about and there was prairie grass scattered about the mounds on which to sit.³²⁶

"Pioneer life is most difficult," Mrs. Wood-Roodhouse wrote in October of 1838:

Perils of many kinds beset us. Snakes and weasels and polecats * lurk about and do frighten and annoy us. Mosquitoes and flies come in swarms and settle over all the cabin. They sting and bite us betimes leaving welts turning from red to purple. One does find it needful to build up an fire of green wood on the hearth and start up an acrid smoke even in the smothering heat of the summer to drive these pests out of the cabin and the smoke does choke and most blind us.³²⁶

Jane Wood-Roodhouse's entries in her diary became less frequent as the years went by. In December of 1844 she penned,

The New Year is upon us. The fifteenth year in this far distant land

. . . This valley although one of abundance is also abundant in agues and fevers for there are many sloos † and low dank places where miasmas flow out and contaminate many and they do sicken for the season. I gather herbs and simples and keep them handy like and store up catnip sage and sassafras dandelion tansy and the like and I do concoct nards and nostrums and healing salves.³²⁶

In December of 1846 the family entertained some British guests:

Our lads did take them on an wolf hunt away west of this place out in the timberland. . . . They did tell how they did ride slap-dash among the trees and did loudly hallo until they did find other horsemen and all did form a long line with their leader in advance and at an given time each line drew in to form an vast square and in this way did close in upon all game. The kill was made upon

* Polecat = skunk.

† British emigrants to America were unfamiliar with the word *slough*. Wood-Roodhouse called it "a strange name I think for lowlands covered by water."³²⁶

There being no stagnant pools, and the water being exceedingly pure, cold and limpid, there is perhaps, no part of the United States where better health may be enjoyed.

— *Geographical Sketches of the Western Country*, describing the prairie between Piasa Creek and Macoupin Creek in 1819.⁹⁴

String Prairie * some fifteen miles away. . . . Some of the hunters sighted wolves but only small game was taken.³²⁶

In July or August of 1847 a neighbor died, and the Wood-Roodhouse family went to sit through the night with the corpse:

Grandsire did lay all stiff and stark by the window wrapped about in his winding sheet.

We did hold converse and some did nod and catch a bit of sleep when of an sudden there did come an most fearsome wail from close without. . . . the men folk espyed the dim gray shape and did seize clubs and sticks and persue it roundabout the clearing and did finally catch the beast adown by the piggery. Some did say it was an painter but Paul did say it was not an painter but an timber cat which does lurk about the edge of the timber and does pounce upon his prey in the nighttime.

This beast was of quite an size with an head much like an common pussy-cat save that it was larger and the beast did have strong legs and an long drooping tail. Never do I wish to hear that fearsome cry or to cast mine eyes on such an fierce beast.^{† 326}

In September of 1859, Jane Wood-Roodhouse made one of the last entries in her portfolio:

There came the first week in June an killing frost for both wheat and corn and did render the fruits of the season worthless also. To the chagrin of all there appear early the morn of the fourth of July an frost and to our astonishment there was an frost in August September with an early frost did bring this strange season to an end.[‡]

* String Prairie extended eastward from Carrollton, between the valleys of Apple Creek and Macoupin Creek.

† A painter (panther) is a mountain lion. A “timber cat” might be a bobcat, but Jane Wood-Roodhouse made note of the animal’s long, drooping tail: this indicates a mountain lion rather than a bobcat.

‡ The cold growing season of 1859 was region-wide. In the Kankakee River valley, Timothy Ball noted, “June 5.—Very white frost. 11th—Frost. July 4.—Light frost. Afterward hot. . . . In September light frosts. In October hard frost; cold, some snow.”¹⁷

In effect, for pleasantness and fertility nothing could exceed it.

— Timothy Flint along the Mississippi River in Calhoun County in 1818.¹¹⁷

There is much illness hereabout. Agues and fevers oft abound in such an season.³²⁶

1830s: Samuel Willard

Young Samuel Willard moved to Greene County in the spring of 1831. He and his family rode a steamboat up the Illinois River to a landing west of Bluffdale: “The end of our travel was a passage in a canoe up a ‘sloo,’ and we were put upon a prairie with two and half miles to walk to John Russell’s house.” *³⁶⁹ The Willards set up housekeeping in Carrollton. More than seven decades later Mr. Willard told the Illinois State Historical Society,

I think that few people are aware that our plague, the rat, is a later comer to America than the white man. . . . It is not strange then, that in 1831 I saw men looking with curiosity at a dead rat on the levee in St. Louis as Chicago boys would look at a dead raccoon in the street. In 1833 there were no rats in Carrollton except in the warehouse of John Evans and in the two or three houses next it. But in 1831 prairie wolves used to come within a half-mile of the village, and I heard them take toll of pigs, which beasts acted as scavengers and ran loose, like the cows. . . . A “painter,” that is a panther or really a cougar was said to infest the woods near Carrollton at that time, but there really was one near Upper Alton and even on the road between that place and Lower Alton in the year 1838. †

Strawberries were not cultivated, but delicious small ones were abundant in the grass of the prairies, tiny but sweet. I went into the woods to gather luscious plums for preserves The New Englanders in Illinois greatly missed the golden glow of the dandelion in the grass, and wrote to their friends to bring seeds when they should come, and thus it was introduced.³⁶⁹

When cholera struck Carrollton, about 33 of 500 residents died within seven weeks. * “In contrast with the sadness,” Mr. Willard remembered one thing: “It was noticed after the silence brooded over the town that every morning a mocking bird in a tree near our house

* John Russell’s description of Bluffdale and its environs may be consulted on pages 156 and 164.

† The latest reliable report of a mountain lion from the Big Rivers Area may be this: “Mr. J.E. Andrews writes me that the last Panther was killed in Macoupin County, Illinois, about 1840 . . . ”⁸⁰

‡ Samuel Willard seemed certain that the cholera epidemic was in 1833, but a Carrollton resident wrote of it in her diary in 1832 (page 148).

would begin his song with all its rich variations, warbling and trilling with his clear voice.”³⁶⁹

1830s: Mary Byram Wright

In 1870 Mary Byram Wright contributed some reminiscences to the *Carlinville Democrat*. She described the land around town in the early 1830s: “This tract of land, owing to its ‘lowness,’ had always been avoided. Indeed, the number of lakes dotting its surface had gained for it the name of ‘Frog-Pond Kingdom.’”³⁸¹

Mrs. Wright recalled, “Prairie chickens, deer, quail, rabbits, etc., could be had at any time for the shooting, and occasionally a bear would be found.” She told of a man who was harassed by a pack of wolves, “which roamed in large numbers upon the prairies” north of Carlinville.³⁸¹

Wright’s first winter in Macoupin County was the Winter of the Deep Snow (1830–31):

The winter was unusually cold and the snow that fell in quantities drifted in upon us, often covering everything and deadening the coals in the fireplace. . . . It was a great deal that winter to do the necessary work for the family, our great effort being to get warm, for I can’t remember ever being really warm the winter through, except when at one of the neighbor’s.³⁸¹

1831: Missouri *Intelligencer* and Illinois *Pioneer*

The winter of 1830–31 was a season of unexampled severity in the Big Rivers Area.* Local newspapers chronicled the arctic onslaught. A January 19 report from Rock Spring † is quoted in the February 5 issue of Columbia, Missouri’s *Intelligencer*: “Have had northern winter for four weeks. Snow lies three feet deep on the level in Morgan and Sangamon county. Around Vandalia it is one glaze of ice. Still snowing.”¹⁵ The *Pioneer* (published at Rock Spring), announced a general thaw on March 5 and added: “French settlers along the river say that about fifty years ago the winter was as severe as this one.”^{‡ 15}

* The “Winter of the Deep Snow” is recounted immediately above in Mrs. Wright’s narrative, as well as on pages 146, 277, 284, 302, 304, and 375.

† Rock Spring was at the location of present-day O’Fallon, about 18 miles southeast of the Big Rivers Area. Both of the passages quoted in this paragraph probably were written by J.M. Peck, who edited the *Pioneer* and resided at Rock Spring.

‡ This reference to an exceedingly severe winter “about fifty years ago” corresponds well to the hard winter of 1783–84, documented on page 40. In his 1831 *Guide for Emigrants*, J.M. Peck described the winter season of 1783–84 as “a winter of extraordinary snows,” during which “the snow lay from two to three feet deep in St. Louis.”²⁵⁰ Other winters in the late 1700s are also said to have been exceptionally harsh. W.J.A. Bradford’s geography of the upper Mississippi valley dates extreme cold spells to the winters of 1768 and 1799.⁵⁰ The notorious winter of Valley Forge during

1831: J.M. Peck

John Mason Peck, a Baptist minister, moved to St. Clair County in 1820. Eleven years later he published *A Guide for Emigrants, Containing Sketches of Illinois, Missouri, and the Adjacent Parts.*

In this volume's "General and Particular Views," the Reverend Mr. Peck contrasted the fertility and consistency of the soil in two parts of the Big Rivers Area: the American Bottom and the Illinois River bottomland. He declared, "The soil of the American bottom is as rich as land can be made . . . , " and, "The soil of this bottom is an argillaceous or a siliceous loam, according as clay or sand happens to predominate in its formation." Regarding the Illinois River alluvion, he remarked, "The bottoms of Illinois, where not inundated, are equal in fertility, and the soil less adhesive than most parts of the American bottom."²⁵⁰

Under the heading of *Swine*, Mr. Peck observed, "Thousands of hogs are raised without any expense, except a few breeders to start with, and a little attention in hunting them on the range, and keeping them tame." He provided an example from the Big Rivers Area:

In Maquapin county . . . Mr. F. settled himself on Congress land * three or four years since, † with four or five sows as breeders, worth as many dollars. In 1829, he drove forty-two fat hogs to market The amount of corn given to the whole, before he drove them, did not exceed *one bushel*. They lived on the range, and grew fat on *mast*—the fruit of the oak, hickory, &c.²⁵⁰

Mr. F. sold the hogs for \$135. He used \$100 to pay for 80 acres of his farm,[‡] and the balance went "to pay some small debts, and purchase his salt, iron, and groceries for the ensuing year." The *Guide for Emigrants* vows, "This is not mentioned as an extraordinary occurrence, but as a circumstance that excited no special notice in Illinois."²⁵⁰

Among his "Statistics of Counties, Towns, &c.," J.M. Peck touched on the environment of three Big Rivers locales:

Alton, from its locality and prospects, demands special attention. There are two villages of this name, about two miles distant from each other, and distinguished

the American Revolution was in 1777–78. The winter of 1779–80 is said to have been "the most severe in many years in Illinois,"²²² called "the Great Cold."¹⁰⁹

* Public land was called Congress land. Swine that ranged free on public land were known as Congress hogs.

† That is, "three or four years ago": Mr. F. arrived in 1827.

‡ The Federal government sold this land for \$1.25 per acre.

It is presumed the Illinois may be ascended by loaded boats with more facility than that of any other river of considerable length in the United States.

— Edmund Dana in 1819.⁹⁵

as Upper and Lower Alton, the former being on the high ground back from the river, and the later at the landing.*

. . . *Lower Alton* is thought by many to present superior advantages for commerce and business than any other spot in the State.

. . . One of the finest bodies of timber in the State surrounds it for several miles in extent.

. . . *Upper Alton* is from one half to two miles east from Lower Alton

. . . Its situation is high and healthy The soil of the surrounding country is fertile, and rolling; the prevailing timber, walnut, hickory, and oak.

. . . *Bluffdale* is a retired and romantic settlement under the bluffs that overhang the bottoms of the Illinois. Here the lime stone rocks and precipices overhang the settlement, from the foot of which some of the finest springs gush out, and meander through the adjacent prairie. †²⁵⁰

The *Guide for Emigrants* informed prospective Illinoisans about one of the most dreaded afflictions in the West:

The *milk sickness* is a disease of a singular character, which prevails in certain places. It first affects animals, especially cows, and from them is communicated to the human system by eating the milk, or flesh. The symptoms of the disease indicate poison, and the patient is affected nearly in the same way, as when poisonous ingredients have been received into the system. Cattle, when attacked by it, usually die. In many instances it proves mortal in the human system; in others, it yields to the skill of the physician. Much speculation has been had upon its cause, which is still unknown. The prevailing idea is, that it is caused by some poisonous substance eaten by the cattle, but whether vegetable or mineral, remains undetermined. Physicians and others have attempted to ascertain the cause of this disease, but hitherto without success.

* Lower Alton: "It has the best landing for steamboats on the east bank of the Mississippi, having a solid rock of level surface, of suitable height, and to which boats at any stage of water can come and discharge and receive cargoes." ²⁵⁰

† Bluffdale was not simply a town-site, but an extended community: "The flourishing settlement of *Bluffdale*, extends at the foot of a range of high bluffs and perpendicular cliffs, from Apple Creek to the Macoupin, for ten miles." ²⁵⁴

There is certainly no river in North America better adapted for navigation up stream than the Illinois. — Ferdinand Ernst's impression after canoeing the lowermost three miles of the Illinois River in September of 1819.¹⁰⁷

It infests only particular spots, or small districts, and these are soon found out. . . . Its effects are more frequent in autumn than any other season; and to guard against it, the people either keep their cows in a pasture, or refuse to use their milk. Some have supposed this disease to be produced by the cattle feeding on the *cicuta virosa*, or water hemlock; * as a similar disease once infested the cattle in the north of Europe, the cause of which was traced out by the great naturalist Linnaeus; but it is not known that this species of plant exists amongst the botanical productions of Missouri and Illinois. †²⁵⁰

1831: John Russell

On the second day of July in 1831, John Russell of Bluffdale wrote to the editor of the *Baptist Tract Magazine*. Mr. Russell made a plea for someone willing to minister to "the moral darkness and dissolution of the human beings" in his Greene County neighborhood. As part of his appeal, Russell portrayed the bounty of the land:

You ask me about the eligibility of this place, for a Baptist preacher. I can hardly tell you how much one is needed I pray that no selfish feelings may induce me to urge you to send brother B. here to his injury Land, of the very best kind in the United States, I can rent to him free of any charge, on which, at a moderate computation, 60 bushels of Indian corn, or 25 of wheat can be raised to the acre. Corn is not hoed here, and one can easily tend 20 acres. Wheat is sowed among the corn, and plowed in. . . . Hay and pasture are free as air. Every time I raise my eyes from this letter I glance over thousands of acres of prairie, level as a floor, covered with grass three or four feet high. Here our cattle and the wild deer range with unbounded pasturage before them. Hogs are raised full as easily. . . . In regard to our ministering brother, if he will come to my house he shall find a residence till I can procure him another. . . . I wish I could take him by the hand and lead him to the top of the bluff back of my house, and shew him the almost boundless expanse of prairie that stretches before us, with the Illinois river winding along its border; the

* *Cicuta virosa* is an Old World species of water hemlock, a close relative of the New World *C. maculata*.

† The source of milk sickness is a member of the aster family known as the white snakeroot (*Eupatorium rugosum*). If a cow eats this plant, its milk becomes poisonous. Good reviews of the cause and consequences of milk sickness have been written by James Couch⁸¹ and by Philip Jordan.¹⁸¹

luxuriant grass intermingled with flowers of every hue; the crop of wheat now ready for the sickle²⁶⁸

1831-46: Rebecca Burlend and Edward Burlend

In 1831 Rebecca and John Burlend emigrated from Yorkshire in England to Big Blue Creek, a small tributary of the Illinois River in Pike County. Seventeen years later the story of their life in America was published in London under the title of *A True Picture of Emigration*. The book was written in the person of Mrs. Burlend, but the narrative was put on paper by her son Edward. This story of Mrs. and Mr. Burlend's life provides vignettes of the natural environment in a small valley at the very north edge of the Big Rivers Area:

An improved eighty acres was the first land we purchased

. . . On the land there were about four hundred sugar maples They like a low situation and a deep soil, and grow to a larger size than any trees in this country.*

. . . All the fences here are made of rails, there are no thorns in the neighbourhood.[†]

. . . Great numbers of quails frequented our home-stead to feed on our small stock of Indian corn; we caught several of them with snares, which were excellent eating. My husband also shot a few rabbits, of which there are vast numbers in America. We likewise saw several deer, but as we had no rifle, we could not kill any. We observed several kinds of birds, which we had not before seen, one in particular, which we took to be a species of turkey, engaged our attention; my husband tried several times to kill one, without effect. One Saturday, however, he was successful, and brought home his game with as much apparent consciousness of triumph, as if he had slain some champion hydra of the forest. The following day we expected Mr. B.[‡] . . . to dine with us. We accordingly dressed our bird, and congratulated ourselves with the idea of having our countryman to dine with us on a fine boiled turkey. Sunday morning arrived, and in due time our turkey was in the pot boiling for dinner. Mr. B. came; we told him how happy we were on account of the treat we were going to give him. He was surprised at our story, as those birds are difficult to obtain with a common fowling-piece, and desired to see the feet and head. But

* This book was published in London, and its intended audience was British: the phrase "in this country" refers to England.

† The farmers made fences of split wooden rails, rather than separating their fields with hedges of thorn-bearing bushes and trees.

‡ Many authors in the early and middle 1800s followed a literary convention that maintains the anonymity of persons who are mentioned in the text.

This soil cannot be surpassed in fertility by any land upon the globe. . . . This, in truth, is the promised land—the land that flows with milk and honey.

—Richard Mason at the north end of the American Bottom in 1819.²¹³

the moment he saw them, he exclaimed “it’s a buzzard,” a bird which, we subsequently learnt, gormandizes any kind of filth or carrion, and consequently is not fit to be eaten. We were sorely disappointed; our turkey was hoisted into the yard, and we were obliged to be contented with a little bacon, and a coarse Indian corn pudding, for which our stomachs were not altogether unprepared, although recently in anticipation of more sumptuous fare. The reader may think we were stupid not to know a turkey; the bird in question is very much like one, and indeed on that account is called in Illinois a turkey-buzzard.*

. . . By the beginning of March our Indian corn was done, and it had served so long only through the greatest care. There was however by this time a little fresh grass in the woods, to which we were very glad to turn our little stock all unenclosed lands, whether purchased of government or otherwise, are considered common pasturage; and as there are in Illinois thousands of acres in that state, any person can keep as many cattle during summer as he chooses. They are turned out at spring, and thus run where they please. . . . Even in this country we observe foxes and hares to have their favourite haunts, from which it is difficult to break them. Domesticated animals manifest this principle of attachment still more strongly. Hence no American farmer, having his cattle on the range, would fear being able to find them in a few hours Rivers and smaller streams have certainly some confining influence, but independent of that, their habits are to frequent those situations only to which they are accustomed. In that country cattle have a great liking for salt The milch cows require more of it than the rest This induces them to come to their stand to be milked twice-a-day. Oxen and heifers will take no harm if they have a little twice-a-week, or even not so often. Where so many different herds of cattle run at large, there is a greater danger of their intermixing than of their being lost. . . . In this manner the cattle graze during summer, and when the pasturage fails, they cease to range

. . . I must now leave our small herd of cattle running in the woods, to acquaint the reader with our first summer’s performances and success. The first fruits of our industry were derived from our sugar orchard Our sugar trees † therefore at this time afforded us a seasonable boon. The weather was favourable, and by hard working we made nearly three hundred weight, besides a

* The turkey-buzzard (turkey vulture) has been called a stink turkey.

† Sugar tree = sugar maple (*Acer saccharum*).

barrel of molasses. We disposed of the greater part of it to a store-keeper . . . at the rate of seven or eight cents per pound.

. . . About this time we were sorely tormented with another scourge, which unlike the one just noticed, * possessed exceedingly little of a poetical or sublime character. It certainly operated on the nerves powerfully enough, but that in a manner rather calculated to move the lower than the more elevated passions of our nature. I refer to the mosquitoes; swarms of which infest that country during spring and autumn, much to the annoyance of its inhabitants.

. . . They seldom are seen on the prairies, or indeed in any place remote from thick shady woods; thus some of our neighbours have been quite free from them, while we were tortured incessantly.

. . . Many persons in England have a wrong idea of the uncultivated lands in America, imagining they are all wood. This is by no means the case. In Illinois there are thousands of acres with not a tree upon it, but covered with a sort of strong wild grass, growing sometimes three or four feet high. These lands are termed prairies, and require only to be broken up with a prairie plough, and they become at once fine arable land. As I before intimated, this kind of land, though the soonest cultivated, is not the most productive being, as the farmers term it, of a stronger quality than the other. The soil of both prairies and woodland is quite black, probably owing to the vegetable matter, which for ages has decayed thereon. At the season of the year now under notice, these prairies present to the eye a most charming appearance. Let the reader imagine himself by the side of a rich meadow, or fine grass plain several miles in diameter, decked with myriads of flowers of a most gorgeous and varied description, and he will have before his mind a pretty correct representation of one of these prairies. Nothing can surpass in richness of colour, or beauty of formation many of the flowers which are found in the most liberal profusion on these extensive and untrodden wilds. The naturalist would here meet with abundance of materials for his genius to arrange, while the poet, reminded of his elegies, would perceive how —

“Many a flower is born to blush unseen,
And waste its sweetness on the desert air.”

In contrasting the hues of flowers grown in America with those in England, I must acknowledge that the former country presents the more splendid; but if they are superior in colour, they are much inferior in odour. Perhaps the superabundance of light and heat, which produces such fine colour, is prejudicial to the production of odoriferous plants, as any thing at all approaching the fragrance of the honey suckle or sweet briar, I never witnessed in America. In

* Mrs. Burlend had discussed lightning storms in the previous paragraph of her book (not quoted here).

the woody districts, the trees most commonly met with are the oak, ichory,* walnut and sugar maple, besides a great deal of underwood and wild fruit trees of the plum family. As all these grow in a wild state, it is not to be supposed that the trees are as numerous as they are in the plantations of this country. The strong timber trees grow at various distances from each other, sometimes being as near to each other as they can possibly grow, at others twenty or thirty yards apart. They not only vary considerably in this respect, but also in magnitude and age. Not a few are to be found in the last stage of decay, their patriarchal dignity gradually submitting to the all-subduing influence of time. Numbers more are quite hollow, in which bees, owls, and rabbits severally find shelter and propagate their species. Every thing here bears the mark of ancient undisturbed repose. The golden age still appears, and when the woodman with his axe enters these territories for the first time, he cannot resist the impression that he is about to commit a trespass on the virgin loveliness of nature, that he is going to bring into captivity what has been free for centuries.

. . . my husband worked hard every day with his grubbing hoe and axe, tearing up the roots of underwood and cutting down some of the largest trees. When trees are cut down in America, as little regard is paid to the timber, they do not cut them off level with the ground as in England, but about three feet from it. The remaining part is burnt after it has been exposed to the sun's rays a few months. Many trees however are allowed to remain standing, after the bark has been cut, to cause them to die. In this state they remain even after the land is sown, for, being destitute of foliage, they do no harm to the crop.

. . . The woods abound with wild plum-trees, for which the climate is nevertheless too hot, as they frequently wither on the trees before they are fully ripe, and are eaten by pigs, or remain to decay and fertilize the ground. Grapes, strawberries and raspberries likewise grow wild in great abundance; the settlers gather them near their houses, in order to make wine of them; but there are thousands of bushels left to decay where they grew, after birds and insects have devoured as many of them as they choose. The raspberries are of a different species from those grown in England; the bushes themselves are quite similar in appearance, and the flavour of the fruit not much different; but when the berries are ripe they are quite black like the fruit of the bramble. Of all the fruits that are met with in the woods, nuts are the most plentiful; hazels and filberts are found in all directions. During the first two years of our residence in that country my children gathered bushels of them, and even recently I have often been surprised that no bad consequences have ensued from the quantities they have eaten. There are two different kinds of walnut, termed the black and the white walnut, and indeed the ichory is considered as belonging to the same genus, but its fruit is different.

* Ichory = hickory, as a British citizen might say it.

. . . America is certainly and emphatically the country for the feathered tribe, whether numbers, variety, or beauty be the subject of special consideration; nor will any one wonder that they are so numerous when he considers the comparative safety with which they rear their young, and the abundance of food that must be found in a country highly productive, whose seeds and fruits are the undisputed property of the first finder. During the breeding season, their noise, I cannot call it music, is, in the woods, one continued gabble; as their species are so numerous, their tones possess every degree of hoarseness, chatter and chirp, that can possibly be conceived. . . . Some idea of their noise may be gathered by imagining an assembly consisting of magpies, jays, and turkeys, together with a few of the minor species as the gold-finch, the spink, and the sparrow, all giving full play to their vocal energies, and each endeavouring to make his own favorite note as significant as possible one kind is completely black like a rook, and this sort is a downright pest to the ripe and ripening crops; assembling in flocks almost like a cloud, they require all the farmer's vigilance to prevent their flying away with the fruits of his industry. Of the parrot, the owl, and the jay families there are great numbers, but the humming bird is the most interesting little bird of any I notice, of which there are hundreds buzzing about during the summer season. . . . In vain did I listen for the cuckoo at the spring of the year, and happy should I have been to see the tame confiding red-breast hopping about our door, but it never appeared. *

* Mrs. Burlend was familiar with the European robin, which is a "red-breast" like the American robin. Early white immigrants to the Big Rivers Area made note of the absence of robins. According to an 1866 gazetteer of Madison County, robins "came less than thirty years ago" (page 258). W.C. Flagg of Madison County was more specific: "Robins came about 1842 or 43" (page 383).

Several other eyewitnesses remarked about the paucity of familiar songbirds in the undeveloped sections of Illinois. For instance Thomas McKenney, descending the Mississippi River in the summer of 1827, came to "the line where the civilized and savage limits meet" at Keokuk: "And here, too, we began to hear the lowing of cattle, and to see the half-tamed horses and hogs, and to be charmed with the singing of birds." ²¹⁹ Charles Marsh, who came to De Kalb County in 1849, recalled late in his life, "Of the small birds there were few upon the wild prairie or about our early prairie homes. They came later as trees and orchards were planted and grew . . ." ²¹⁰

Ornithologist J.A. Allen noted the lack of many familiar birds in the prairie wilds of Iowa in August of 1867. He characterized the prairie region as lacking the American robin, eastern bluebird, barn swallow, common crow, chipping sparrow, song sparrow, and "other sparrows." Allen predicted that the bird fauna would change as the virgin tracts are "converted to cultivated farms, with orchards, clumps of sheltering trees, and wind-breaking hedges." ⁴

Elmer Baldwin of La Salle County said it this way:

The prairie region could not boast of as full a list of the feathered tribes as a timbered country. In fact, the more common singing birds were at first almost entirely wanting, and one of the causes of discontent and homesickness was the absence of the well-remembered bird music, which made the groves and orchards of the older States vocal with song. This was more marked away from the timber, but even along the edge of the timber, where the first settlements were made, it needed groves, orchards, and gardens, and especially the fruits

Proceed we next to notice another class of animals, which, though not as numerous as the one just described, are now by no means rare during warm weather in Illinois: snakes are the creatures now referred to, of which there are not only a great variety, but vast numbers of each species, many of which are exceedingly venomous. One kind called the black snake, *alias* the racer, is noticed for pursuing people who may chance to come near them during the breeding season; . . . it is fortunate that its bite is not venomous: one kind about the size of a small eel * is able to raise itself nearly in a perpendicular direction; when struck it immediately appears to be broken or disjointed into three or four pieces not unlike the herb or weed termed foxtail, when its joints are disunited; a third called the copperhead has a most angry appearance, and its bite is venomous, but it usually endeavours to get away on the approach of man. The species are too numerous for me to attempt to enumerate them here

The rattlesnake, however, is not to be despised, for although it is not so numerous as some of the other kinds, it is more dreaded than them all; this formidable foe never attacks man except in self-defence, and then its bite, if no antidote be taken, is speedily fatal. The usual medicine given to a person thus bitten, is a strong infusion of a herb called the rattlesnake's master. † . . . This reptile is becoming less and less numerous, as none are allowed to escape when once observed. They are usually found in pairs, and often among the growing corn.

. . . There is a species of ant found on the prairies, about half the size of a working bee. In traversing these grounds, particularly in summer, a person will naturally feel inclined to rest himself occasionally, and may probably select for himself, as a seat, some little hillock, of which there are many. If he does, however, I will venture to assert he will be caught trespassing, and have to pay the smart too.

The butterflies in America are really splendid, nothing can surpass them in design, depth of colouring, or in the delicacy with which their finely powdered wings are finished.

. . . I cannot however close these succinct observations on insects, without noticing one which flies about during the evenings in summer, and emits a light considerably brighter than that of the glow worm. When I first beheld it, I was not aware of its existence. It was one evening as husband and I were returning from the chapel, on a road that was principally through an uncultivated piece of wooded land. As we were passing along, we observed in many places what we took to be sparks of fire dancing about most mysteriously. Our curiosity

they bore, to make an acceptable home for the birds of song.¹⁷

* This is the slender glass lizard, or "joint snake."

† The name "rattlesnake master" has most often been applied to *Eryngium yuccifolium*, a member of the umbellifer (carrot) family.

In approaching the Illinois and Mississippi near the mouth from Milton a scene beautiful, grand and sublime presents itself. Immediately after leaving a thick wood you find yourself on the point of a knob or small mountain many hundred feet high. From this eminence you have a view of three bold and beautiful streams—the Mississippi, Illinois and Missouri. The country on one side is bordered with very high bluffs as far as the eye can reach, and on the other is a meadow or plain prairie, which extends for many miles in every direction, and occasionally is interspersed with handsome forest trees. — Richard Lee Mason on December 13, 1819.²¹³

was excited not a little, but not knowing what to think, we dared not approach them, for fear they were connected with something super-human. Superstition certainly got hold of us, and we hastened home imagining some strange catastrophe was about to occur. On reaching home we found a neighbour waiting our arrival, to whom we related what we had witnessed. He smiled at our simplicity, and told us they were light bugs, the name they are known by in Illinois; fire-flies I believe is a more general term, which gave us no small satisfaction, as we had been much disturbed to know what such a prodigy could imply.

. . . I have already stated that owls are very numerous, they are also very noisy during the night. There is another bird, however, that outdoes them in this respect. . . . It thus appears to keep crying: "Whip away," or "Whip poor Will," as some will have it. . . . there is a species of frog, known as the bull-frog, whose voice completely drowns the preceding; it abounds in small creeks and ponds, of which there are many in some districts, though none near our farm.

. . . Other animals might be mentioned with propriety, as being peculiar to that country, as the mink, the opossum, and the raccoon

. . . The farmers in that country are much troubled with a weed that grows amongst the wheat, and of which it is next to an impossibility to clear it. . . . it is called 'cheat,' * and not undeservedly, as it sometimes stands on the ground as

* The names "cheat" and "chess" have been given to *Bromus secalinus* and related species of aggressively weedy species of annual brome grass. These grasses were terrible pests in fields of wheat and other small grains. In an 1847 essay about wheat culture, Hiram Kennicott mused *Of Chess in Wheat*:

Enough, and more than enough, has already been said and written upon this subject. To me, its appearance in our wheat fields has ever appeared to be the punishment which Nature inflicts upon those who slight or abuse her bounty. For of one thing rest assured—that whenever and wherever you sow and do not get wheat, you will be very likely to have chess. But do all things in proper season, that a careful farmer finds necessary to produce wheat, and you

abundant as the crop itself, and yet it is so valueless, that even the poultry will not eat it.²⁷³

Mrs. Burlend returned to England for a few months in 1846. Her story—as put on paper by her son Edward—was published in London in 1848.

1832: Bluffdale

Under the pen name of “Bluffdale,” John Russell contributed an article to the February 1832 issue of the *Illinois Monthly Magazine*. The article is titled “Bluffdale,” and it tells of Mr. Russell’s neighborhood:

“Ever charming, ever new,
“When will the prairie tire my view?
“Or craggy bluff, so wild and high,
“Rudely rushing on the sky?”

The settlement of Bluffdale, in Greene county, Illinois, presents, more than any other place I have yet seen, a union of all that is peculiar and striking in the Western landscape.

... Almost hanging over the houses of this little settlement, are the *bluffs*, in many places a solid, perpendicular wall of calcareous rock, rising to the height of two hundred feet. Immediately back of this wall, and not unfrequently commencing at its very edge, rises a chain of hills, in the shape of cones, from one to two hundred feet still higher. The bluffs are occasionally broken by *ravines*, which afford an easy ascent to the highlands. In the warm season of the year, these beautiful cones are covered, to their summits, with the richest verdure, presenting a fine relief to the sterile brownness of the cliffs below.

From the bluffs, but more especially from the hills behind them, the prospect is beautiful, beyond the powers of the most vivid imagination to picture. Standing at an elevation of three or four hundred feet above the surrounding country, the eye ranges over an almost boundless prospect. The immense prairie on the West, without a single tree, or even shrub, to intercept the view—level as a floor—covered with luxuriant grass, intermingled with flowers of every hue; the Illinois river, winding for miles along its western border, and appearing in the distance no wider than a ribbon; the blue hills beyond, almost faded into the haze of distance; the lakes, upon whose transparent bosom thousands of every variety of water fowls are sporting in all the happiness of fearless nature; the innumerable cattle sprinkled over this rich pasture, far as the eye can see, and generally disposed in groups—all this presents a *tout ensemble* which the most careless observer cannot see with indifference.

will not be troubled with chess.¹⁸⁸

. . . From the heights, herds of deer are often seen peacefully grazing with the domestic cattle that have intruded on their domain. Large springs of the purest water gush from the rocks, and wind along the prairie till they become absorbed in the loamy soil.

. . . Such is the nature of the soil, that rains, however copious, are quickly absorbed; consequently the roads are always free from mud, and the prairies from putrescent waters. Nothing can be more pure and limpid than the cold springs that gush from the bluffs. The rank vegetation is never suffered to undergo decomposition, and load the air with disease. The grass has hardly ceased to vegetate, before it is consumed by the devouring flames. Miles of prairie are seen on fire at once, and, especially when viewed from the heights, forcibly calls to mind the conflagration of all things.

. . . From the richness of the soil, its springs, boundless pasturage, its excellent quarries of building and fencing stone, and its proximity to the Illinois river, it must unavoidably become a place of wealth.

. . . I have seen no other place that united as many desirable qualities as Bluff-dale . . .⁴⁵

1832: William Cullen Bryant

At eight o'clock on the morning of June 6, 1832, William Cullen Bryant headed up-river from St. Louis on a steamboat. He later related in *Illinois Fifty Years Ago*,

I saw nothing remarkable on the Mississippi until we arrived within a few miles of its junction with the Missouri. I then perceived that the steamboat had emerged from the thick, muddy water, in which it had been moving, into a clear, transparent current. We were near the eastern bank, and this was the current of the Mississippi. On the other side of us we could discern the line which separated it from the turbid waters of the Missouri. We at length arrived at the meeting of these two great streams. The Missouri comes in through several channels between islands covered with lofty trees, and where the two currents encounter each other there is a violent agitation of the waters, which rise into a ridge of short, chopping waves, as if they were contending with each other. The currents flow down side by side unmixed for the distance of twelve miles or more, until at length the Missouri prevails, and gives its own character and appearance to the whole body of water.

At a place called Lower Alton, a few miles above the mouth of the Missouri, we stopped to repair one of the boilers, and I climbed up a steep grassy eminence on the shore, which commanded a very extensive view of the river and surrounding country. Everything lay in deep forest. I could see the woods beyond the Missouri, but the course of that stream was hidden by the gigantic trees with which it is bordered. On every side was solitude, vast, dark, and impenetrable.

When I awoke the next morning we were in the Illinois, a gentle stream about as large as the Connecticut, with waters like the Ohio, somewhat turbid. The Mississippi has generally on one side a steep bank of soft earth ten or twelve feet in height which the current is continually wearing away, and which is constantly dropping in fragments into the water, while on the other side it has a sandy beach. But the Illinois has most commonly a shore which presents no appearance of being eaten by the current, but which slopes as regularly to the water as if it had been smoothed by the spade. As we proceeded up the river, bluffs began to make their appearance on the west side. They consisted of steep walls of rock, the tops of which were crowned with a succession of little round eminences covered with coarse grass and thinly scattered trees, having quite a pastoral aspect, though the country does not appear to be inhabited. We stopped to take in wood on the west shore, and I proceeded a few rods through the forest to take my first look at a natural prairie. It was one of the wet or alluvial prairies. The soil was black, and rather moist and soft, and as level as if the surface had been adjusted by some instrument of art. To the north and south along the river it stretches to an extent of which I can not judge, but to the east it was bounded at the distance of about five miles by a chain of rounded eminences, their sides principally covered with grass and their summits with wood, forming the commencement of the uplands on which the dry prairies are situated. The prairie itself was covered with coarse, rank grass four or five feet in height, intermingled with a few flowers. Here and there stood a tall and lonely tree in the midst of a wilderness of verdure.¹³²

1833: Charles Joseph Latrobe

British writer Charles Latrobe traveled extensively across the United States in 1832 and '33. In *The Rambler in North America*, Mr. Latrobe wrote of descending the Mississippi from Prairie du Chien, Wisconsin, to St. Louis: "There was yet one spectacle intervening, towards which we had looked forward with no inconsiderable interest, and that was the junction of the Mississippi with its vast tributary the Missouri"

The Mississippi, as though in pride to welcome its competitor, spread his clear waters over a vast extent of surface. By degrees the cotton-wood plantations * which bordered the western shore, were observed to be receding far into the perspective,—the even current of the parent stream became checked,—its surface agitated;—then the boat glided suddenly from the clear water into a turbid yellow stream in which the mud could be seen boiling from below, and we were in the Missouri. The first irruption of the turbid current of this great river upon the Mississippi, carries it completely across the vast bed of the other. The Missouri then in a manner which was perfectly unaccountable to us, but perhaps caused by the far greater density of its water, disappears for nearly ten miles.

* Natural groves such as this were sometimes called plantations, especially by British writers.

There is perhaps no stream in America whose current offers so little resistance in the ascent. — Henry Rowe Schoolcraft, who canoed up the entire length of the Illinois River in the summer of 1821.²⁹⁸

The surface of the river showed little or no token of the adulteration of the current, and it was not till we got below the islands, and within a few miles of St. Louis, that we observed the two rivers, distinguishable from their difference of colour, flowing for a while distinctly side by side, till in fine, mingling their waters, they form one immense torrent.¹⁹⁹

1833: Truman Marcellus Post

One glorious spring day in 1833, Truman Post set out from St. Charles, Missouri, for Carrollton. He crossed the Mississippi River at Grafton and walked across the heart of the Big Rivers Area. To quote from Mr. Post's "Life Story" . . .

Never shall I forget my first vision and impression of the prairie that morning; the vast, silent green waste, houseless, manless, the red man gone, the white man not yet entered; the ocean-like expanse, now a level plain, now rippling into verdant wavelets, now with a vast sea roll of gradual rise and fall, occasionally billowing into bluffs that bordered the rivers and the water courses with long stretches and curvature of forest flecked and embroidered with the redbud and the haw; the grassy desert, studded here and there with oases of the oak, maple, walnut, and pecan, fringed with the sassafras, the persimmon, and the sumach; and occasional islets of the wild plum, cherry, and apple scattered through the sea of verdure and with their fragrance hitting the sense from afar; amid which the plumage of the paroquet glistened and the thrush and the mocking bird burst into song—it seemed to me a fairy landscape. I seemed as wandering in a Magian realm, under a mighty Solitude that bent entranced over a vision of a new, strange, infinite beauty. The Genius of Morning seemed on all things; it was the morning of the day, of the land, and of my own life. It was youth's walk amid the fields of morning.

But the day waxed on, and as I followed the bridle trail or the points of the compass, through grassy and forested wilds and up and down the acclivities and descents of the water courses, the sun grew fierce in his rays, and I grew weary and foot-sore. . . . I sat down beside a grassy brook and thrust my bruised and fevered feet into its waters. Suddenly, as I sat thus self-musing, two large water snakes came swimming along by me, so carelessly and quietly that it seemed they were yet too unfamiliar with man to recognize him for a foe. I was out in the wilds of nature, almost beyond the shadow of the dominion and fear of my race over the animal world.²⁶⁷

1833: Patrick Shirreff

A Tour through North America was written by Patrick Shirreff, a British farmer. At the end of September in 1833 Mr. Shirreff's excursion brought him to Alton:

. . . I walked down to the junction of the Missouri, and returned to Alton, where I crossed the Mississippi in a horse ferry-boat. The stream is more than a mile in breadth, flows at the rate of one or two miles an hour, and is slightly turbid. The situation of Alton, from the opposite side of the ferry, is beautiful. An island divides the river, which, being land-locked above and below, has the appearance of a lake. The western bank is low, the eastern, high and rocky, terminated by wood on the summits of the bluffs, as the projecting knolls or hills on the banks of some American rivers are called.

. . . The purpose of my present excursion was to view the prairie in the neighbourhood of St Charles, at the foot of the Mamelles, so beautifully described by Mr Flint, whose account is given as a quotation in Mr Stuart's "Three Years' Residence in America." *

. . . The road from Alton to St Charles passes up the west bank of the Mississippi for above a mile, and for ten or twelve through its densely wooded bottoms, at no great distance from the river before the prairie is reached. On attaining the opposite side of the ferry, the exuberant and varied vegetation excited my admiration, and far surpassed every thing I had seen on the banks of the Illinois and its tributaries. The height and circumpherence of the trees are immense, and such was the rankness of the vegetation, that I culled several leaves from young shoots of the button-wood † two feet in length. The climbing plants were in proportion to the rest of the vegetable family, reaching the summits of the most gigantic trees; sometimes three species were clinging to the same trunk, and seemed vying with each other in richness and beauty. The vines particularly attracted my notice. ‡ . . . Here the stem of the vine was occasionally seen nearly a foot in diameter, issuing from the earth twenty or thirty feet from the root of the tree which supported its branches, and stretching seventy or eighty feet before coming in contact with the trunk, forming, together with its supporter, a striking representation of a massy flag-staff. . . . From such I collected fruit, and discriminated several varieties by the form and flavour of the grape.

. . . I now enjoyed the umbrageous vegetation of the Mississippi bottom, after having become familiar with the nakedness of the prairie. . . . This bottom of

* Flint's view from the Mamelles is quoted on page 70.

† Button-wood = sycamore (*Platanus occidentalis*).

‡ During Patrick Shirreff's era, grape plants often were referred to simply as "vines."

the Mississippi was undescribably rich, and I was so engrossed by the wonders of its shadowy vegetation, as to be insensible of the approach of rain and thunder, until torrents fell around me. Shelter was obtained from the inclining trunk of a large tree, and the foliage of many of the climbing plants formed vegetable umbrellas.

The soil of the bottom is of considerable tenacity, and the rain rendered it unpleasant and fatiguing to walk on. . . . Weeds, which in other situations were observed of diminutive size, here obtained magnitude, and I estimated the height of some Indian corn at twenty feet; amongst this crop purple convolvulus* were twining.

. . . On entering the prairie, which is elevated a little above the bottom land, two lines of road diverge, and I was directed on that leading to St Charles My way, for a considerable, distance, was over a waxy soil covered with water, the road being bounded with tall grass, over which I could not see. On attaining a higher elevation, the rank grass disappeared, the soil became dry, and for miles was of poorer quality than any I had seen since leaving the shores of Lake Michigan. † . . . I reached St Charles

. . . it was arranged that I should visit the Mamelles in the morning
. . . I ascended the Mamelle on foot, from the top of which the scene was unvaried from that I had seen before, with exception of the addition of part of the small valley running towards St Charles The prairie is bounded to the west by the ridge of bluffs, of which the Mamelles form a part; and to the east by the forest on the Missouri and Mississippi bottoms. On the north the Mississippi curves gracefully round the margin, and its bold eastern bank forms a beautiful outline. The centre is monotonously flat; and at no great distance from where I stood were two insignificant clumps of stunted trees, which afforded no relief to the eye, and excited ideas of sterility. . . . The view from the Mamelle was found to be extensive, but not pleasing; ‡ and, hurrying from my elevated position, I scampered off for St Charles.³⁰⁵

* A purple convolvulus is a member of the morning glory genus *Ipomoea*.

† Mr. Shirreff had walked most of the way from Chicago to Springfield, and he had ridden stagecoaches from Springfield to Jacksonville and Alton. He was investigating the agricultural potential of the region, so he could speak with authority about the quality of the prairie that he was viewing.

‡ Shirreff supposed that his negative impression of the scene was fostered by the cold, cloudy, windy weather: "Had the season of the year and the state of the weather been more favourable for viewing this prairie, I might have admired its beautiful outlines" But he maintained that he was a better judge than Timothy Flint regarding the fertility of Mamelle Prairie. Shirreff pointed out that this was the first extensive prairie that Flint had ever seen, but—"To me, who had already become acquainted with the fertility of such places, and formed opinions of their utility in relation to civilized man, the scene was associated with the disease and destruction of the human race, and not their enjoyment and support."³⁰⁵

. . . there are probably few countries in the world, where farmers obtain bread and butcher's meat with so little labour. — Henry Schoolcraft, after a trip on the Illinois River in 1821.²⁹⁸

1834: A New-Yorker

Charles Fenno Hoffman authored *A Winter in the West* under the pen-name “A New-Yorker.” During an extensive tour of Illinois, Mr. Hoffman traveled overland from Peoria to St. Louis by way of Jacksonville and Alton. At the end of this segment of his journey, he related some impressions of the Big Rivers Area in early springtime:

Our route from Peoria, by way of the flourishing towns of Springfield, Jacksonville, and Alton, through the small meadow-like and half-cultivated prairies of Lower Illinois, was very agreeable.

... The prairies are smaller and more fertile-looking than in the upper country; * and when not under cultivation, resemble what at the North is called a “river-flat,” or natural meadow. †

... A few miles below Alton, on the Mississippi, I passed a deserted village, the whole population of which had been destroyed by the “milk-sickness.” ‡ The hamlet consisted of a couple of mills and a number of frame-houses, ¶ not one of which was now tenanted

... We were now on the famous “American bottom;” and I was really astonished at the prodigious size of the trees, and the magnificent vegetation which this region displays; but the scattered inhabitants looked far from healthy. At Alton we struck the Mississippi; the view from its bluffs is here magnificent, though I think that Flint’s fervid pen § has done it full justice. A few miles below we passed the mouth of the Missouri, where its white and turbid current could be seen rushing in among the islands, and staining the limpid tide of the

* Charles Fenno Hoffman had previously crossed the prairies between Chicago, Ottawa, Dixon, Galena, Prairie du Chien, and Peoria.

† Hoffman likened the small prairies of southern Illinois to streamside meadows in his native Northeast.

‡ Hoffman described milk sickness in a footnote: “A fatal spasmodic disease, peculiar, I believe, to the Valley of the Mississippi. It first attacks the cattle; and then those who eat beef or drink milk.” ¶

¶ This mill town, called Milton, stood where Illinois Route 3 now crosses the Wood River. The unhealthy situation of Milton and its environs is described on pages 104, 123, and 387.

§ Excerpts from Timothy Flint’s fervid pen that describe these bluffs and the adjacent bottomland are on pages 70, 85, and 133.

"father of rivers" far down the western shore, while for twenty miles below that clear stream still preserved its purity on the eastern side. . . . the Upper Mississippi, except in its breadth and volume of water, bears but little resemblance to the lower river . . .¹

Mr. Hoffman quoted "General G.B. Clark" (George Rogers Clark) as having described the Illinois River in 1777 as "a natural canal passing through natural meadows."¹

1834: John M. Palmer

John Palmer, who would become Governor of Illinois, spent most of his adolescence at Paddock's Prairie, about ten miles east of Alton and eight miles north of Edwardsville. In 1834 he moved to Upper Alton to attend Alton College. When Palmer set out to walk there from Paddock's Prairie, his path led him west from Paddock's Creek, across Indian Creek, then to the Wood River valley. In his "Story of an Ernest Life," Palmer recalled of his trek, "We had crossed Indian creek, when the dogs started a rabbit . . ."²⁴²

Once settled in at college, John Palmer and a brother "took a contract to remove the trees from a street leading from Upper Alton to Middletown." He recalled, "The trees were large white oaks. We grubbed them up and were well paid for doing so."^{*242}

1834: A.A. Parker

Late in 1834 Amos Parker took a steamboat from Peoria to St. Louis. In a book published two years later, Mr. Parker remarked,

The Illinois river is a wide, sluggish stream; clear water, but generally, hardly any perceivable current. It is a very shoal river, having many sand bars.—Our boat did not draw more than two feet of water, yet was continually running aground. I should think the lead was thrown [†] a quarter part of the time; and it used to amuse me, sometimes, to hear the leadsman sing out "*two feet and a half*"—"*two feet large*"—"*two feet*"—"*two feet scant*,"—and then aground; and perhaps it would be half a day before we could get afloat again. We were seven days going to St. Louis—rather slow travelling, and somewhat vexatious All along down, the country is rather low, except some bluffs on the river—and where we found a bluff on one side, there would be either a low marsh or a lake on the other. Probably, there are twenty lakes below Peoria, on one side or the other of the river. They were all long and narrow, and often had an outlet into the river. They appeared more like former beds of the stream, than any thing else.

^{*} When John Thurston came through Alton in the spring of 1836, he found that State Street was "all stump, rock & root."³³²

[†] A line with a lead weight was lowered from the bow of the boat to plumb the depth of the river.

. . . As we approached the Mississippi, we saw a good many stately bluffs on the right hand bank, composed of limestone, and rising almost perpendicular, from two to three hundred feet high. Some of them are really grand and beautiful.

At length, with no small degree of pleasure, we came in full view of the majestic Mississippi river. The moment our boat entered the stream, it felt its power, and started off with new life and vigor. It seemed something like travelling, after leaving the sand bars and sluggish current of the Illinois, to be hurried down the Mississippi at the rate of eight or ten miles an hour.

. . . Whatever others may say, I cannot call the Illinois a pleasant stream. It has a marsh on one side or the other from its mouth to its source, and is full of shoals and sand bars. I passed down the river in a boat that drew less than two feet water, but it often run aground. The worst bar is just below Beardstown. We had to lighten the boat of its freight, water in the boiler, and passengers, before we could pass this bar; and then, the hands had to jump into the water and push the boat over. For about two hundred miles from its mouth, it has many long and narrow lakes, of about the width of the river itself; and probably they were formerly its channel. These lakes generally have an outlet into the river, and these so much resemble it, that a person not well acquainted with the stream, would be puzzled to know what channel to take. The river occupies too much ground for its quantity of water, and for about half of the year, it is a difficult stream to navigate.²⁴³

One more observation by Mr. Parker:

The valley of the Illinois river, plainly indicates that a much larger stream once run there. Had its channel been formed by its present quantity of water, it would have been not more than forty rods wide; but now, it carries a breadth of from fifty rods to more than a mile; it is, therefore, full of shoals and sand bars. The high banks all along down the stream, are about two miles apart; and the space between them not occupied by the river, is either a low marsh or a narrow lake.²⁴³

1834 & '37: J.M. Peck

John Mason Peck completed a prodigious personal project when he published his *Gazetteer of Illinois* in 1834. The Reverend Mr. Peck intended to ensure that "no creek, prairie, or settlement, known by name amongst the people, would escape notice." A second edition of Peck's gazetteer was issued in 1837. The second edition was "entirely revised, corrected, and enlarged," but the descriptions of natural features are nearly identical in the first and second editions. The following paragraphs quote from the 1834 edition; significant differences between the two versions are indicated with footnotes.

Part Second of the *Gazetteer of Illinois* describes the Big Rivers counties. First are some descriptions of ecological features in Calhoun County:

The mouth of Bay creek is in the northern part of this county, which affords a harbor and navigation for steam boats seven miles.* There are no other creeks worth naming. Several fine prairies lie at the foot of the bluffs on both sides of the county, amongst which are Illinois, Salt, Bellevue. On the rivers considerable tracts are subject to inundation, and in the interior are bluffs, ravines and sink holes.[†]

. . . The bottoms furnish excellent range for stock. Cattle, beef, pork, corn, honey, and beeswax are its exports.

Formerly honey from the trees was obtained in profuse quantities. It grows more scarce as the population increases.

. . . Surrounded by rivers and low bottoms, Calhoun county is less healthy than others on the military tract.²⁵¹

Greene County (including present-day Jersey County) is thus described:[‡]

The banks of the Mississippi in the southerly parts of this county are generally composed of perpendicular cliffs, varying in height from 80 to 200 feet, consisting of horizontal strata of lime and sand stone; frequently imbedded with coal.

. . . These cliffs commence at Alton, and extend along the Mississippi and Illinois rivers to the northern part of the county; sometimes, however, receding several miles east, leaving a low and fertile alluvion which is usually timbered on the banks of the river, and a prairie surface towards the bluffs.

Greene county has much excellent land, both timber and prairie; the surface approaches nearer to a level than the counties further north, with proportionate quantities of timber and prairie.²⁵¹

Madison County:

A portion of this county lies in the American bottom, but much of it is high, undulating, and proportionably divided into timber and prairie.

. . . Around Alton, and along Wood river, and Cahokia creek, is one of the finest bodies of timber in this part of the state.

The prairies are very advantageously situated for settlements, and will soon be covered with well cultivated farms.²⁵¹

* In his 1839 *Traveler's Directory*, Mr. Peck characterized Bay Creek in this manner: "In passing up the Mississippi river, from the mouth of the Illinois, the first navigable water on the Illinois side is *Bay creek*, which has a wide and navigable slough, extending nearly to the site of Bellevue . . ."²⁵⁴

† A *sinkhole* is a funnel-shaped or basin-like depression in the land, which often drains underground into a crevice or a cave. Sinkholes are characteristic of limestone terrain.

‡ Jersey County was part of Greene County when Peck compiled his gazetteer.

Macoupin County:

Some of the prairies on the eastern side are large, level, and wet; but a large portion of the county is excellent soil, and well proportioned into timber and prairie, and rapidly settling. About one third of the county is timbered land. It is an excellent agricultural county²⁵¹

Montgomery County:

It is watered by Shoal creek and its branches, some of the heads of the Macoupen, a branch of the South Fork of the Sangamon, and the Hurricane Fork, and is proportionably divided into timber and prairie.²⁵¹

Pike County:

Besides the Mississippi and Illinois rivers, which wash two sides, it has the Snycartee slough running the whole length of its western border, which affords steam boat navigation to Atlas at a full stage of water.

. . . The land is various. The section of country, or rather island, between the Snycartee slough and the Mississippi, is a sandy soil, but mostly inundated land at the spring floods. It furnishes a great summer and winter range for stock, affording considerable open prairie; with skirts of heavy bottom timber near the streams. Along the bluffs, and for two or three miles back, the land is chiefly timbered but cut up with ravines, and quite rolling. In the interior, and towards Schuyler county, excellent prairie and timbered uplands are found, especially about the Blue rivers * and McKee's creek. This must eventually become a rich and populous county.

In Pleasant Vale, on Key's creek, † is a salt spring, twenty feet in diameter, which boils from the earth, and throws off a stream of some size forming a salt pond in its vicinity. Salt has been made here, though not in great quantities.

In the county are seven water saw mills, four grist mills, one carding machine, five stores, and a horse ferry that crosses the Mississippi to Louisiana.²⁵¹

Part Third of Peck's *Gazetteer* contains "a particular description of each town, settlement, stream, prairie, bottom, bluff, &c." Mr. Peck touched on the ecology of several places in the Big Rivers Area:

Lower Alton has the best landing for steamboats on the east bank of the Mississippi, having a rock of level surface, of suitable height, forming a natural wharf.

. . . One of the finest bodies of timber in the state surrounds it for several miles in extent, from which vast quantities of lumber may be produced.

* Blue rivers = Blue Creek and Little Blue Creek.

† Key's creek = Kiser Creek.

. . . *Alton (Upper)*, a pleasantly situated town on elevated ground, two and a half miles back from the river and Lower Alton The situation of the town is high and healthy. The country around was originally timbered land, and is undulating; the prevailing growth is oaks of various species, hickory, and walnut.

. . . *Atlas* a small town in Pike county situated on the north west quarter of section twenty-seven, six south, five west. *

It is under the bluffs, on a handsome sloping tract of ground, half a mile from the Snycartee slough, which is navigable with steam boats to this place, except in low water. †

. . . *Bluffdale*, a settlement in Greene county, ten miles west of Carrollton, and under the bluffs that overhang the Illinois bottom. The land is rich, dry, and beautifully situated for six miles in extent, under overhanging bluffs and precipices from which springs of "crystal waters" gush forth. The settlement is generally arranged along the bluffs from Apple creek to the Macoupen

Cape au Gris. A small French settlement of this name (which means *Cape of Grit or Grindstone*, from the rocks near,) was formed on the Mississippi, above the mouth of the Illinois, at the southern bend of the river in Calhoun county, [‡] about forty years since. In 1811 . . . about twenty families . . . had a village on the bank of the river, and cultivated a common field of about five hundred acres in the prairie, one mile from the river. They were driven off by the Indians during the last war with Great Britain.

. . . Carlinville . . . is situated on the north side of the Lake Fork of the Macoupen, in a beautiful prairie.

. . . Carrollton . . . is . . . situated on the borders of String prairie

. . . Around Carrollton is a beautiful country, tolerably level, rich soil, suitably proportioned into timber and prairie, and densely populated with industrious and thriving farmers.

. . . *Grand Passe*, two lakes in the Illinois bottom, at the south west corner of Greene county, so called by the French explorers of Illinois, from the successive flocks of geese seen flying from the one to the other. They are connected with Apple creek by a stream called Fishing creek.

* The location of Atlas (section 27, Township 6 South, Range 5 West) is in southwestern Pike County.

† The 1837 edition says, ". . . Snycartee slough, which is navigable for steamboats to this place, in high water." ²⁵³

‡ The village was 12 miles upstream from the tip of Calhoun County.

. . . *Illinois Prairie*, formerly called *Wolf prairie*, commences near the mouth of the Illinois river, in Calhoun county, and extends twenty miles along the foot of the bluffs, adjoining the alluvion of the Illinois. Its average width is one mile and a half, the soil is good, and thirty families are settled here.

Illinois River, a beautiful stream of water that passes diagonally through the state, and enters the Mississippi twenty miles above the mouth of the Missouri.

. . . In going up the river at a low stage of water the following bars and impediments to the navigation exist:

1. French bar, gravel, twenty miles above the mouth, near Smith's ferry,—three feet deep at low water.
2. A bar fourteen miles further up,—channel close to an island,—two and a half feet at low stage.
3. At Hodge's warehouse, seven miles above the mouth of Apple creek, there is difficulty in getting a point, but no bar.
4. Six miles below Naples is a centre bar,—channel near the side of the river.

. . . From this imperfect sketch of the obstructions to the navigation of this river at low water, it will be seen that, with comparatively trifling expense, which the legislature ought to provide immediately the navigation of the Illinois may be made good at all stages of water. *

At high floods this river overflows its banks and covers its bottoms for a considerable extent. The Mississippi, at extreme high water, backs up the Illinois about seventy miles, to the mouth of the Mauvaiseterre.

. . . *Lake Fork*, † a main branch of Macoupen creek, which rises in the prairie between the heads of Shoal creek, and Sangamon waters, and near Macoupen point, which see. Below the *point* it passes through a small lake, or pond.

. . . *Linden Bottom*, in Greene county, south of the Macoupen, called also the "Richwoods." It is a fine tract of timbered land, elevated and rich, yet in appearance its surface resembles alluvion.

* J.M. Peck revised this paragraph for his 1837 edition by noting that the State legislature had appropriated (but had not yet spent) \$100,000 to improve navigation on the Illinois River.

† The upper reaches of the main stem of Macoupin Creek were once known as the Lake Fork. The central and southwestern Illinois region has several Lake Forks. In addition to the former Lake Fork in Macoupin and Montgomery Counties, there are Lake Forks in the following watersheds: the Kaskaskia River (Piatt, Douglas, and Champaign Counties), Shoal Creek (Montgomery and Bond Counties), Salt Creek (Logan, Macon, and De Witt Counties), Silver Creek (Madison County), and the Flat Branch of the South Fork of the Sangamon River (Shelby and Christian Counties). All these Lake Forks once arose in—or flowed through—shallow lakes in flat, undissected headwater areas.

The vast number, & variety of water fowl was astonishing. . . . on a nearer approach they would take the alarm & rise with such a tremendous roar, as to shock the atmosphere. . . . But no din of battle on the field of Waterloo, or any other, could exceed the roar.

— Henry Allyn, recalling a canoe trip up the lower Illinois River in 1823.⁵

It has a large settlement extending from the Macoupen river to Otter creek.

. . . *Little Piasau*, called also Cave Spring branch, rises in a large spring among the bluffs of Lower Alton, and passes through the town into the Mississippi.

. . . *Macoupin Creek*, a considerable stream that rises in the north part of Macoupin county; runs south westerly, passes through Greene county, and enters the Illinois river twenty-six miles above its junction with the Mississippi

. . . The country along its banks is generally fertile, suitably proportioned into timber and prairie

Macoupen is aboriginal, and in all the French authors, spelled *Ma-qua-pin*, but it has become legalized on the statute books of the state in the uncouth form given at the head of this article, and usually pronounced by the people, *Ma-goo-pin*.

This word is said to be the Indian name of a vegetable with a large round leaf, growing in the lakes and ponds of Illinois, called by some people “splatter-dock,” * and found plentifully near this stream.

The large roots of this plant, if eaten raw, are very deleterious. The Indians, in early times, dug holes in the earth, which they walled with stone, and after heating them with large fires, put in the roots, covered them with earth, and in two days, the rank, poisonous taste was gone. They were then put on poles, and dried for food. In this form they was eaten by the natives. †

. . . *Macoupen Prairie*, a large prairie in Greene county, between the Piasau and Macoupen, moderately undulating, rich, and rapidly settling.

* The name *spatterdock* (or “splatter-dock”) has been loosely applied to water lilies in general, and specifically to the yellow pond lily (*Nuphar luteum* ssp. *macrophyllum*). Peck’s identification of the macoupin as a kind of water lily is controversial (as discussed in footnotes on pages 31 and 50).

† Peck cited “Charlevoix’s voyage to North America, 1721” in support of this statement. Charlevoix’s discussion of the *Macopine* is on page 31.

. . . Towards the Illinois river, on the west, and the Macoupen creek on the east, are extensive bodies of fine timber. Emigrants from Vermont, and other northern and eastern states are covering over this part of the country with fine farms.

. . . *Macoupen Settlement* lies near the timber bordering upon the Macoupen creek and prairie, in Greene county, nine miles south of Carrollton. This settlement was commenced in December, 1816, . . . and was then the most northern white settlement in the Illinois territory. The prairie land is rich, but rather level, and the timber adjoining good.

. . . *Macoupen Point*, a noted stand at the junction of the roads from Edwardsville to Springfield, and from Hillsboro' to Morgan county and Beardstown, sometimes called Henderson's stand.

It is in the north west corner of Montgomery county at the head of the timber, on the South fork of the Macoupen. South, along the roads to Edwardsville and Hillsboro', the surface of the prairie is flat and wet. North, towards Sugar creek, it is dry, and undulating.

. . . *Richwoods*. * Three tracts of timbered land in Greene county are known by this name, one of which is also called *Linden bottom*.

The timbered tract north of Apple creek, and between Apple creek prairie and the Illinois bluffs, bears this name.

A tract of timber lying between Carrollton and Bluffdale, several miles in extent, has also received this name. The land is undulating, rich, well timbered, and is occupied by a large settlement. See Linden bottom.

. . . *Salt Prairie*, in Calhoun county, lying between the bluffs and Salt Prairie slough.

It is a dry, rich prairie, six miles long, and half a mile wide, densely settled with about sixty families. Fine springs break out from the foot of the bluffs, and a large saline rises at the head of the prairie, which furnishes abundant salt water for stock.

Salt Prairie Slough, a small arm of the Mississippi, in Calhoun county, six miles long, near the foot of which is Gilead. It is navigable for small boats, and affords an excellent harbor. Thirteen flat boats left this slough in one season, loaded with corn. †

* A "rich woods" is a *mesic forest* in the parlance of forest ecology. Early Illinois farmers sometimes referred to fertile, productive stands of sugar maple, elm, ash, basswood, etc. as "rich woods"—in contrast to the more prevalent oak-hickory forest.

† This sentence about corn is omitted from the 1837 edition.

. . . *Snicartee*, (in French, *Chenail-ecarte*, said to mean the "cut off," or "lost channel,") an arm of the Mississippi, in Pike county, commonly called a "Slough," in the dialect of the country. It is a running water at all stages of the river, and for several months furnishes steam boat navigation to Atlas. It leaves the Mississippi in section nineteen, three south, eight west, * in Adams county, enters it again in Calhoun county, section seven, eight south, four west, † and runs from one to five miles from the main river. It is about fifty miles in length. The lands in the island are of first rate alluvion, proportioned into timber and prairie, but subject to annual inundations.²⁵¹

1835: Chandler Gilman

On the fourth day of October 1835, Chandler Gilman embarked from Peoria on the *Cat Fish*. In *Life on the Lakes*, Mr. Gilman told his readership about the day's journey down the Illinois River:

Alton, Ill., Sunday, Oct. 5.

All day yesterday on the Illinois river, having left Peoria about nine o'clock at night. . . . The captain gave his boat the sobriquet of Cat Fish She draws very little water, and makes about six miles the hour down stream. The Illinois is a calm placid river, with little or no current, and full of sand bars. The banks are well wooded, though very low; the spring freshets overflow them far and wide. We saw, during the day, two or three flocks of paroquets;[‡] they present a most beautiful appearance when on the wing, their green plumage glittering in the sun beams. This morning, at 7, the captain called us on deck that we might take our first view of Alton. . . . The situation at first disappointed me, the land is exceedingly rough; a ledge of rocks lies to the North, and below, steep, broken hills, rise immediately from the river bank: a creek makes in just in the middle of the town, giving yet more irregularity to the surface. The landing is very good, the boat runs close alongside a rock, which forms a natural wharf; so that a short plank is only wanted to put any thing ashore.¹³⁰

In the closing paragraph of his book, Chandler Gilman related,

On Tuesday we rode out to Upper Alton, three miles from the river, and thence through the wide prairie which lies back if it. . . . The Prairie land is dry, with

* The upstream end of Snicarte Slough (in section 19, Township 3 South, Range 8 West) was on the Mississippi River midway between Marblehead and Fall Creek in Adams County.

† According to J.M. Peck the lower end of Snicarte Slough is in section 7, Township 8 South, Range 4 West, in the northwest corner of Calhoun County. Bay Creek intersects The Sny and enters the Mississippi River at this point, but the "running slough" of The Sny actually continues to parallel the Mississippi for 12 more miles farther downstream, finally joining the river near Hamburg.

‡ Paroquet = Carolina parakeet.

a deep rich soil, the very sight of which would gladden the heart of an agriculturalist. We passed several large fields of corn, that looked rich and fully ripe. The Major had planned a jaunt to Carlinville, but inexorable necessity compelled us to hurry homeward.¹³⁰

1836: A member of the Edward Collins family

Late in 1836 the family of Edward Collins moved from Ohio to Beardstown. En route on November 31st, the Collinsees departed from St. Louis for the Illinois River. They took passage on the steamer *Wyoming* because it was "the only boat that could run when there was ice in the river." One of the Collins children later recounted the first day of their trip up the lower Illinois:

The ice came thicker and faster, an unusual break-up at that time, but we moved slowly along.

The deck hands stood on the bow of the boat with long poles with sharp spikes in the end and when a large cake of ice came they would push it one side of the boat.

. . . When the night came they lighted up the boat and the large cakes of ice would strike the boat and every timber would shiver and shake. Loud voices were heard and great excitement prevailed.

. . . They stopped frequently for wood.⁸⁷

On the night of the second day after leaving St. Louis, the Collins family arrived at Uncle Beard's ferry landing at Beardstown.

1836: Edmund Flagg

Edmund Flagg, who characterized himself as "a wanderer from distant New England," traveled extensively across Illinois in 1836. Two years later he published an account of his journeys, *The Far West: Or, A Tour beyond the Mountains*.

Mr. Flagg began his visit to the Big Rivers Area by ascending the Mississippi on a river-boat. He described how the character of the Mississippi changed as his boat passed the mouth of the Missouri River:

Below its confluence with its turbid tributary, the Mississippi . . . is no longer the clear, pure, limpid stream, gushing forth from the wreathy snows of the Northwest; but it whirls along against its ragged banks a resistless volume of heavy, sweeping floods, and its aspect of placid magnificence is beheld no more.

. . . It was nearly midday, after leaving St. Louis, that we reached the embouchure of the Missouri. Twenty miles before attaining that point, the confluent streams flow along in two distinct currents upon either shore, the one white,

clayey, and troubled, the other a deep blue. The river sweeps along, indeed, in two distinct streams past the city of St. Louis, upon either side of Blood Island, nor does it unite its heterogeneous floods for many miles below. At intervals, as the huge mass rolls itself along, vast whirls and swells of turbid water burst out upon the surface, producing an aspect not unlike the sea in a gusty day, mottled by the shadows of scudding clouds.

. . . The Mississippi, above its junction with its turbid tributary, is . . . a clear, sparkling, beautiful stream; now flashing in silvery brilliance over its white sand-bars, then retreating far into the deep indentations of its shady banks, and again spreading out its waters into a tranquil, lakelike basin miles in extent, studded with islets.³⁴⁵

The next leg of Flagg's trip took him to Alton and beyond:

The site of Alton, at the confluence of three large and navigable streams; its extensive back country of great fertility; the vast bodies of heavy timber on every side; its noble quarries of stone; its inexhaustible beds of bituminous coal only one mile distant, and its commodious landing, all seem to indicate the design of Nature that here should arise a populous and wealthy town. . . . Yet Alton, with all its local and artificial advantages, is obnoxious to objections. Its situation, in one section abrupt and precipitous, while in another depressed and confined, and the extensive alluvion lying between the two great rivers opposite, it is believed, will always render it more or less unhealthy

. . . A contract has been recently entered upon to construct a culvert over the Little Piasa Creek, which passes through the centre of the town, upon which are to be extended streets. . . . The creek issues from a celebrated fountain among the bluffs called "Cave Spring."

. . . At Alton terminates the "American Bottom," and here commences that singular series of green, grassy mounds, rounding off the steep summits of the cliffs as they rise from the water, which every traveller cannot but have noticed and admired. It was a calm, beautiful evening when we left the village; and, gliding beneath the magnificent bluffs, held our way up the stream, breaking in upon its tranquil surface, and rolling its waters upon either side in tumultuous waves to the shore. The rich purple of departing day was dying the western heavens; the light gauzy haze of twilight was unfolding itself like a veil over the forest-tops; . . . the flashing fireflies along the underbrush were beginning their splendid illuminations A little French village * . . . in a few miles

* The village is Portage Des Sioux. About the time when Edmund Flagg visited the Big Rivers Area, another Eastern author passed through the region. When Catherine Stewart published her book a few years later, she explained how Portage Des Sioux is supposed to have received its name:

. . . with this place, is connected a traditionary account, stating that many years ago, the

Greene and Jersey Counties in 1823:

... it is diversified with prairies, some of which are beautiful beyond description.²⁷

appeared among the underbrush on the left. Upon the opposite shore the bluffs began to assume a singular aspect, as if the solid mass of limestone high up had been subjected to the excavation of rushing waters. The cliffs elevated themselves from the river's edge like a regular succession of enormous pillars, rendered more striking by their ashy hue. This giant colonnade—in some places exceeding an altitude of an hundred feet, and exhibiting in its façade the openings of several caves—extended along the stream until we reached Grafton, at the mouth of the Illinois; the calm, beautiful ever-placid Illinois; beautiful now as on the day the enthusiast voyageur first deemed it the pathway to a "paradise upon earth." The moon was up, and her beams were resting mellowly upon the landscape. Far away, even to the blue horizon, the mirror-surface of the stream unfolded its vistas to the eye; upon its bosom slumbered the bright islets, like spirits of the waters, from whose clear depths stood out the reflection of their forests, while to the left opened upon the view a glimpse of the "Mamelle Prairie," rolling its bright waves of verdure beneath the moonlight like a field of fairy land. For an hour we gazed upon this magnificent scene, and the bright waves dashed in sparkles from our bow, retreating in lengthened wake behind us, until our steamer turned from the Mississippi, and we were gliding along beneath the deep shadows of the forested Illinois.

. . . I have mentioned that remarkable range of cliffs commencing at Alton, and extending, with but little interruption, along the left shore of the Mississippi to the mouth of the Illinois. Through a deep, narrow ravine in these bluffs flows a small stream called the Piasa. The name is of aboriginal derivation, and, in the idiom of the Illini, denotes "*The bird that devours men.*" Near the mouth of this little stream rises a bold, precipitous bluff, and upon its smooth face, at an elevation seemingly unattainable by human art, is graven the figure of an enormous bird with extended pinions. This bird was by the Indians called the "*Piasa;*" hence the name of the stream. The tradition of the Piasa is said to be still extant, among the tribes of the Upper Mississippi . . .

. . . He was as artful as he was powerful; would dart suddenly and unexpectedly upon an Indian, bear him off to one of the caves in the bluff, and devour him.

Sauks warred with the Sioux, and pursued them to this spot, where they had encamped. To elude their pursuers, they carried their canoes, with their little property, across a strip of land, two miles in width, between the Mississippi and Missouri rivers, and followed up the latter in safety. Thus originates the name of the village, *Portage Des Sioux*.³²³

. . . Connected with this tradition, as the spot to which the Piasa conveyed his human victims, is one of those caves to which I have alluded. Another, near the mouth of the Illinois, situated about fifty feet from the water, and exceedingly difficult of access, is said to be crowded with human remains to the depth of many feet in the earth of the floor. The roof of the cavern is vaulted. It is about twenty-five feet in height, thirty in length, and in form is very irregular. There are several other cavernous fissures among these cliffs not unworthy description.

The morning's dawn found our steamer gliding quietly along upon the bright waters of the Illinois. The surface of the stream was tranquil; not a ripple disturbed its slumbers; it was currentless; the mighty mass of the Mississippi was swollen, and, acting as a dam across the mouth of its tributary, caused a *back-water* of an hundred miles. The waters of the Illinois were consequently stagnant, tepid, and by no means agreeable to the taste. There was present, also, a peculiarly bitter twang, thought to be imparted by the roots of the trees and plants along its banks, which, when motionless, its waters steep; under these circumstances, water is always provided from the Mississippi before entering the mouth of the Illinois. But, whatever its qualities, this stream, to the eye, is one of the most beautiful that meanders the earth. As we glided onward upon its calm bosom, a graceful little fawn, standing upon the margin in the morning sunlight, was bending her large, lustrous eyes upon the delicate reflection of her form, mirrored in the stream; and, like the fabled Narcissus, so enamoured did she appear with the charm of her own loveliness, that our noisy approach seemed scarce to startle her; or perchance she was the pet of some neighbouring log-cabin. The Illinois is by many considered the "*belle rivière*" * of the Western waters, and, in a commercial and agricultural view, is destined, doubtless, to occupy an important rank. . . . It traverses the entire length of one of the most fertile regions in the Union, and irrigates, by its tributary streams, half the breadth. Its channel is sufficiently deep for steamers of the larger class; its current is uniform, and the obstacles to its navigation are few, and may be easily removed. The chief of these is a narrow bar just below the town of Beardstown, stretching like a wing-dam quite across to the western bank; and any boat which may pass this bar can at all times reach the port of the Rapids. †

* The French appellation *la belle rivière* ("the beautiful river") usually was applied to the Ohio River.

† Ottawa is Edmund Flagg's "port of the Rapids" on the Illinois River. Bedrock in the riverbed stopped large boats from ascending farther except during very high water. The effective upstream limit to commercial navigation on the Illinois River often was 12 miles downstream from Ottawa at La Salle, where the river was frequently choked by bars of sediment discharged by the Vermilion and Little Vermilion Rivers.

Flagg stated that any boat that could proceed past the Beardstown Bar could continue up the river as far as Ottawa. He later learned that this was not the case. His boat reached Peoria—but, "Much to our regret, the stage of water in the Illinois would not permit our boat to ascend the stream, as had been the intention, to . . . Ottawa, at the foot of the rapids." ³⁴⁵

. . . The banks of the Illinois are depressed and monotonous, liable at all seasons to inundation, and stretch away for miles to the bluffs in broad prairies, glimpses of whose lively emerald and silvery lakes, caught at intervals through the dark fringe of cypress * skirting the stream, are very refreshing. The bottom lands upon either side, from one mile to five, are seldom elevated much more above the ordinary surface of the stream, and are at every higher stage of water submerged to the depth of many feet, presenting the appearance of a stream rolling its tide through an ancient and gloomy forest, luxuriant in foliage and vast in extent. It is not surprising that all these regions should be subject to the visitations of disease, when we look upon the miserable cabin of the woodcutter, reared upon the very verge of the water, surrounded on every side by swamps, and enveloped in their damp dews and the poisonous exhalations rising from the seething decomposition of the monstrous vegetation around. The traveller wonders not at the sallow complexion, the withered features, and the fleshless, ague-racked limbs, which, as he passes, peep forth upon him from the luxuriant foliage of this region of sepulchres; his only astonishment is, that in such an atmosphere the human constitution can maintain vitality at all. And yet, never did the poet's dream image scenery more enchanting than is sometimes unfolded upon this beautiful stream. I loved, on a bright sunny morning, to linger hours away upon the lofty deck, as our steamer thridded the green islets of the winding waters, and gaze upon the reflection of the blue sky flecked with cloudlets in the bluer wave beneath, and watch the startling splash of the glittering fish, as, in exhilarated joyousness, he flung himself from its tranquil bosom, and then fell back again into its cool depths. Along the shore strode the bluebacked wader; † the wild buck bounded to his thicket; the graceful buzzard—vulture of the West—soared majestically over the tree-tops, while the fitful chant of the fireman at his toil ‡ echoed and re-echoed through the recesses of the forests.

Upon the left, in ascending the Illinois, lie the lands called the "*Military Bounty Tract*," reserved by Congress for distribution among the soldiers of the late war with Great Britain. It is comprehended within the peninsula of the Illinois and Mississippi Rivers This tract of country is said to be exceedingly fertile, abounding in beautiful prairies and lakes; but the delta or alluvial regions cannot but prove unhealthy.³⁴⁵

Edmund Flagg ventured up the Illinois River as far as Peoria. Several weeks later he was back in and around the Big Rivers Area. On his way to Alton, he pursued a route across the sandy terrace in the vicinity of present-day Roxana and Wood River:

* Edmund Flagg almost certainly did not see cypresses along the Illinois River. Even though he was not a botanist, Flagg often placed names on the plants that he noted during his journeying. His identifications are frequently questionable.

† Bluebacked wader = great blue heron.

‡ The fireman tended the boiler on the steamboat.

. . . the traveller finds himself on the deep sand-plains, stretching away for some miles, and giving support to a stunted, scragged growth of shrub-oaks. . . . I shall not soon forget, I think, the day I entered Alton for the second time during my ramble in the West.

. . . In the evening, . . . passing through the principal street of the town, I ascended that singular range of bluffs which, commencing at this point, extend along the river The ascent is arduous, but the glorious view from the summit richly repays the visiter for his toil. . . . It was the sunset hour. The golden, slanting beams of departing day were reflected from the undulating bosom of the river, as its bright waters stretched away among the western forests, as if from a sea of molten, gliding silver. . . . Beyond the village extends a deep forest; while a little to the south sweep off the waters of the river, bespangled with green islands, until, gracefully expanding itself, a noble bend withdraws it from the view. It is at this point that the Missouri disgorges its turbid, heavy mass of waters into the clear floods of the Upper Mississippi, hitherto uncheckered by a stain. At the base of the bluffs, upon which you stand, at an elevation of a hundred and fifty feet, rushes with violence along the crags the current of the stream; while beyond, upon the opposite plain, is beheld the log hut of the emigrant couched beneath the enormous sycamores, and sending up its undulating thread of blue, curling smoke through the lofty branches. A lumber steam-mill is also here to be seen. Beyond these objects the eye wanders over an interminable carpet of forest-tops, stretching away till they form a wavy line of dense foliage circling the western horizon. By the aid of a glass, a range of hills, blue in the distance, is perceived outlined against the sky: they are the bluffs skirting the beautiful valley of the Missouri. The heights from which this view is commanded are composed principally of earth heaped upon a massive ledge of limerock, which elevates itself from the very bed of the waters. As the spectator gazes and reflects, he cannot but be amazed that the rains, and snows, and torrents of centuries have not, with all their washings, yet swept these earth-heaps away, though the deep ravines between the mounds, which probably originated their present peculiar form, give proof conclusive that such diluvial action to some extent has long been going on. As is usually found to be the case, the present race of Indians have availed themselves of these elevated summits for the burial-spots of their chiefs. I myself scraped up a few decaying fragments of bones, which lay just beneath the surface.

At sunrise of the morning succeeding my visit to the bluffs I was in the saddle, and clambering up those intolerably steep hills on the road leading to the village of Upper Alton, a few miles distant.

. . . At Upper Alton my visit was not a protracted one. In a few hours, having gathered up my *fixens* and mounted my *creetur*, I was threading a narrow pathway through the forest. The trees, most of them lofty elms, in many places

This county . . . forms a part of the finest district of country in the state; and all who have seen it, agree in the opinion that it is without a parallel.

Jersey and Greene Counties as described in the *Gazetteer of the States of Illinois and Missouri* (1823).²⁷

for miles locked together their giant branches over the road, forming a delightful screen from the sunbeams³⁴⁵

The next leg of Edmund Flagg's journey took him northward to Carlinville, then east toward Hillsboro:

Well, it is here, upon this pathway, just on the margin of a beautiful prairie, sweeping away towards the town of Hillsborough, that I find myself at the close of the day, after a long and fatiguing ride. The afternoon has been one of those dreary, drizzly, disagreeable seasons which relax the nerves and ride like an incubus upon the spirits; and my route has conducted me over a broad-spread, desolate plain; for, lovely as may appear the prairie when its bright flowerets and its tall grass-tops are nodding in the sunlight, it is a melancholy place when the sky is beclouded and the rain is falling. There is a certain indescribable sensation of loneliness, which steals over the mind of the solitary traveller when he finds himself alone in the heart of these boundless plains, which he cannot away with; and the approach of a forest is hailed with pleasure, as serving to quiet, with the vague idea of *society*, this sense of dreariness and desertion. Especially is this the case when rack and mist are hovering along the border, veiling from the view those picturesque woodland-points and promontories, and those green island-groves which, when the sky is clear, swell out upon every side into the bosom of the plain.

. . . The region through which, for most of the day, I journeyed * was that, of very extensive application in the West, styled "Barrens," by no means implying unproductiveness of soil, but a species of surface of heterogeneous character, uniting prairie with *timber* or forest, and usually a description of land as fertile, healthy, and well-watered as may be found. The misnomer is said to have derived its origin from the early settlers of that section of Kentucky south of Green River, which, presenting only a scanty, dwarfish growth of timber, was deemed of necessity *barren*, in the true acceptation of the term. This soil there and elsewhere is now considered better adapted to every variety of produce and the vicissitudes of climate than even the deep mould of the prairies and river-

* From the context of this section of his narrative, it appears that Flagg was describing the landscape of the general region—not solely the countryside that he saw as he rode from Upper Alton to Carlinville and Hillsboro.

bottoms.* The rapidity with which a young forest springs forward, when the annual fires have once been stopped in this species of land, is said to be astonishing;† and the first appearance of timber upon the prairies gives it the character, to some extent, of barrens. Beneath the trees is spread out a mossy turf,‡ free from thickets, but variegated by the gaudy petals of the heliotrope,§ and the bright crimson buds of the dwarf-sumach in the hollows. Indeed, some of the most lovely scenery of the West is beheld in the landscapes of these barrens or "oak openings," as they are more appropriately styled. For miles the traveller wanders on, through a magnificence of park scenery on every side, with all the diversity of the slope, and swell, and meadow of human taste and skill. Interminable avenues stretch away farther than the eye can reach, while at intervals through the foliage flashes out the unruffled surface of a pellucid lake.¶ There are many of these circular lakes or "sinkholes," as they are

* In others words, "The *worst* soil of the prairies is best adapted to wheat; it is *generally* too fertile; the growth too rapid and luxuriant; the stalk so tall and the ear so heavy, that it is lodged before matured for the sickle."³⁴⁵

† Later in his book, Edmund Flagg characterized timbered land as "always the *magnum desideratum* in Illinois":

This scarcity of timber will not, however, be deemed such an insurmountable obstacle to a dense and early population of this state as may have been apprehended, when we consider the unexampled rapidity with which a young growth pushes itself forward into the prairies when once protected from the devastating effects of the autumnal fires

. . . The tough sward of the prairie, when firmly formed, it is well known, refuses to receive the forest; but, once broken into by the ploughshare or by any other cause, and protected from the autumnal flames, and all is soon rolling with green; and the sumach, the hazel, and the wild-cherry are succeeded by the oak.³⁴⁵

‡ Edmund Flagg liked to describe vegetation as mossy, so this passage should not necessarily be taken as an indication that mosses were an especially prominent part of the ground layer in barrens or oak openings.

§ The name "heliotrope" was formerly applied to sunflowers and sunflower-like plants in general. Flagg was not referring to the genus *Heliotropium*, which is in the borage family.

¶ Edmund Flagg used the terms *barrens* and *oak openings* as if they are synonyms—as did other writers, for example: "these are the 'barrens,' or 'oak openings,' as they are called,"¹⁷⁷ and "oak openings, or 'barrens.'"³⁰⁴ The two terms were sometimes used to denote two different kinds of vegetation. Brushy areas were more often termed "barrens." Grassy, park-like areas with open-grown trees were more likely to be called "oak openings." But either term—*barrens* or *oak openings*—might be applied to brushy areas, or to grassy wooded areas, or to both kinds of vegetation at the same time.³⁶⁴

Although Flagg's prose must be based in part on what he saw during his ride across southwestern Illinois, he appears to have borrowed freely from Charles Joseph Latrobe's *Rambler in North America* to craft his description of barrens or oak openings. (Or perhaps both Latrobe and Flagg borrowed from a third source.) Flagg wrote of "a mossy turf, free from thickets, but variegated by the gaudy petals of the heliotrope, and the bright crimson buds of the dwarf-sumach." Latrobe wrote of "a grassy turf seldom encumbered with brush-wood, but not unfrequently broken by jungles of rich and

termed in Western dialect, which, as they possess no inlet, seem supplied by subterranean springs or from the clouds. The outline is that of an inverted cone, as if formed by the action of whirling waters; and, as sinkholes exist in great numbers in the vicinity of rivers, and possess an outlet at the bottom through a substratum of porous limestone, the idea is abundantly confirmed. . . . Some of them in Greene county burst forth from the earth and the fissures of the rocks with sufficient force to whirl a *run* of heavy buhrstones, and the power of the fountains * seems unaffected by the vicissitudes of rain or drought.³⁴⁵

Edmund Flagg wandered much of southern Illinois and adjacent Missouri before returning to the Big Rivers Area. One July morning he visited the Mamelles at St. Charles, Missouri. From the top of these eminences, it was possible to gaze from five to 17 miles across the Mamelle Prairie to the Mississippi River bluffs in Illinois:

The morning star was beaming beautifully forth from the blue eastern heavens when I mounted my horse for a visit to that celebrated spot, "*Les Mamelles*."

. . . The view from the summit of the Mamelles, as the morning sun was flinging over the landscape his ruddy dyes, was one of eminent, surpassing loveliness. It is celebrated, indeed, as the most beautiful prairie-scene in the Western Valley, and one of the most romantic views in the country. . . . In front is spread out the lovely Mamelle Prairie, with its waving ocean of rich flowers of every form, and scent, and hue, while green groves are beheld

gaudy flowering plants, and of dwarf sumac." Other parallels can be found by comparing Flagg's description with Latrobe's, which follows:

And first the 'oak-openings,' so termed from their distinctive feature of the varieties of oak which are seen scattered over them, interspersed at times with pine, black walnut, and other forest trees, which spring from a rich vegetable soil, generally adapted to the purposes of agriculture. The land is ordinarily dry and rolling. The trees are of medium growth, and rise from a grassy turf seldom encumbered with brush-wood, but not unfrequently broken by jungles of rich and gaudy flowering plants, and of dwarf sumac. Among the 'oak-openings' you find some of the most lovely landscapes of the West, and travel for miles and miles through varied park scenery of natural growth, with all the diversity of gently swelling hill and dale—here, trees grouped, or standing single—and there, arranged in long avenues as though by human hands, with slips of open meadow between. Sometimes the openings are interspersed with numerous clear lakes, and with this addition become enchantingly beautiful. But few of these reservoirs have any apparent inlet and outlet. They are fed by subterraneous springs or the rains, and lose their surplus waters by evaporation. Many lie in singularly formed hollows, reflecting in their clear bosoms the varied scenery of the swelling banks, and the alternation of wood and meadow. Michigan and Illinois abound with these 'oak-openings.'¹⁹⁹

Mr. Latrobe traveled extensively across the Midwest. His description of oak openings is most reminiscent of the morainal country of the southern Great Lakes region.

* Springs were sometimes called fountains.

swelling out into its bosom, and hundreds of cattle are cropping the herbage. In one direction the view is that of a boundless plain of verdure; and at intervals in the deep emerald is caught the gleam from the glassy surface of a lake, of which there are many scattered over the peninsula. All along the northern horizon, curving away in a magnificent sweep of forty miles to the west, rise the hoary cliffs of the Mississippi, in the opposite state, like towers and castles; while the windings of the stream itself are betrayed by the heavy forest-belt skirting the prairie's edge. It is not many years since this bank of the river was perfectly naked, with not a fringe of wood. Tracing along the bold façade of cliffs on the opposite shore, enveloped in their misty mantle of azure, the eye detects the embouchure of the Illinois and of several smaller streams by the deep-cut openings. . . . Here and there in the smooth surface stands out a solitary sycamore of enormous size, heaving aloft its gigantic limbs like a monarch of the scene.³⁴⁵

Flagg set out across Mamele Prairie with Grafton as his objective:

I pushed forth into the pathless prairie, and was soon in its centre, almost buried, with my horse beneath me, in the monstrous vegetation. Between the parallel rolls of the prairie, the size of the weeds and undergrowth was stupendous; and the vegetation heaved in masses heavily back and forth in the wind, as if for years it had flourished on in rank, undisturbed luxuriance. Directly before me, along the northern horizon, rose the white cliffs of the Mississippi, which, as they went up to the sheer height, in some places, of several hundred feet, presented a most mountain-like aspect as viewed over the level surface of the plain. . . . my tired horse could advance through the heavy grass no faster than a walk; the pale bluffs, apparently but a few miles distant, seemed receding like an *ignis fatuus* as I approached them; and there lay the swampy forest to ford, and the "terrible Mississippi" beyond to ferry, before I could hope for food or a resting-place. In simple verity, I began to meditate upon the yielding character of prairie-grass for a couch. And yet, of such surpassing loveliness was the scene spread out around me, that I seemed hardly to realize a situation disagreeable enough, but from which my thoughts were constantly wandering. The grasses and flowering wild-plants of the Mamele Prairie are far-famed for their exquisite brilliancy of hue and gracefulness of form. Among the flowers my eye detected a species unlike to any I had yet met with, and which seemed indigenous only here. Its fairy-formed corolla was of a bright enamelled crimson, which, in the depths of the dark herbage, glowed like a living coal.* How eloquently did this little flower bespeak the being and attributes of its Maker.

. . . One who has never looked upon the Western prairie in the pride of its blushing bloom can hardly conceive the surpassing loveliness of its summer flora; and, if the idea is not easy to conceive, still less is it so to convey. The

* This plant probably is the Indian paintbrush (*Castilleja coccinea*).

autumn flowers in their richness I have not yet beheld; and in the early days of June, when I first stood upon the prairies, the beauteous sisterhood of spring were all in their graves; and the sweet springtime of the year it is when the gentle race of flowers dance over the teeming earth in gayest guise and profusion.

. . . There is one feature of the Mamele Prairie, besides its eminent beauty and its profusion of flowering plants, which distinguishes it from every other with which I have met. I allude to the almost perfect uniformity of its surface. There is little of that undulating, wavelike slope and swell which characterizes the peculiar species of surface called prairie. With the exception of a few lakes, abounding with aquatic plants and birds, and those broad furrows traversing the plain, apparently ancient beds of the rivers, the surface appears smooth as a lawn. This circumstance goes far to corroborate the idea of alluvial origin. And thus it was that, lost in a mazy labyrinth of grass and flowers, I wandered on over the smooth soil of the prairie, quite regardless of the whereabout my steps were conducting me. The sun was just going down when my horse entered a slight footpath leading into a point of woodland This I pursued for some time, . . . when, lo! to my surprise, on emerging from the forest, I found myself in the midst of a French village a dark young fellow . . . informed me that the village was called "*Portage des Sioux*"

. . . My *conducteur* stopped, at length, at the gate of a small brick tenement, the only one in the village

. . . From this *amiable* personage I learned . . . that the village of Portage des Sioux had been standing about half a century: . . . that it was terribly shaken in the great earthquakes of 1811, many of the old cottages having been thrown down and his own house rent from "turret to foundation-stone"—the chasm in the brick wall yet remaining — *³⁴⁵

Early the next morning Flagg reached the south bank of the Mississippi opposite Grafton, where he found himself "beneath the vine-clad sycamores, with the brilliant, trumpet-formed flower of the *bignonia* † suspended from the branches upon the margin of a stream." He gazed at the prairie-capped bluffs on the Illinois shore:

The scene is a lovely one: the mighty river rolling calmly and majestically on—the moss-tasselled forest upon its bank—the isles of brightness around which it ripples—the craggy precipice, rearing its bald, broad forehead beyond —³⁴⁵

* The region experienced four or five severe earthquakes in the winter of 1811–12. The quakes were centered near New Madrid, on the Mississippi River in extreme southeast Missouri. The magnitude of these earth movements has been estimated at greater than 7.0 or 8.0 on the Richter Scale, which classifies them among the very strongest on record in North America.

† *Bignonia* = *Campsis radicans* (trumpet creeper)—not *Bignonia capreolata* (cross-vine).

From the tops of these hills the eye is presented with a view of the most delightful and impressive character we look down upon a country the most variegated and enchanting, at the sight of which even the most material and sensual of human beings can scarcely help becoming spiritualised and meditative.

— Giacomo Constantino Beltrami, viewing the lowland at the south edge of the Big Rivers Area in the autumn of 1823.³⁶

As soon as he crossed the Mississippi and arrived at Grafton, Flagg set out to explore a cave:

It is approached by a rough footpath along the river-margin, piled up with huge masses of limestone, which have been toppled from the beetling crags above: these, at this point, as before stated, are some hundred feet in perpendicular height. The orifice of the cave is elliptical in outline, and somewhat regular, being an excavation by the whirling of waters apparently in the surface of the smooth escarpment; it is about twenty feet in altitude, and as many in width. Passing the threshold of the entrance, an immediate expansion takes place into a spacious apartment some forty or fifty feet in depth, and about the same in extreme height: nearly in the centre a huge perpendicular column of solid rock rears itself from the floor to the roof. From this point the cavern lengthens itself away into a series of apartments to the distance of several hundred feet, with two lesser entrances in the same line with that in the middle, and at regular intervals. The walls of the cave, like everything of a geological character in this region, are composed of a secondary limestone, abounding in testaceous fossils. The spot exhibits conclusive evidence of having once been subject to diluvial action; and the cavern itself, as I have observed, seems little else than an excavation from the heart of an enormous mass of marine petrification. Large quantities of human bones of all sizes have been found in this cavern, leaving little doubt that, by the former dwellers in this fair land, the spot was employed as a catacomb. . . . The spot is now desecrated by the presence of a party of sturdy coopers The view of the water and the opposite forest from the elevated mouth of the cavern is very fine, and three or four broad-leaved sycamores fling over the whole a delightful shade. The waters of the river flow onward in a deep current at the base, and the fish throw themselves into the warm sunlight from the surface. What a charming retreat from the fiery fervour of a midsummer noon!

The heavy bluffs which overhang the village, and over which winds the great road to the north, though not a little wearisome to surmount, command from the summit a vast and beautiful landscape.

. . . The traveller over the bluffs, long before he stands upon their summit, heartily covets any species of locomotion other than the back of a quadruped. But the scenery, as he ascends, caught at glimpses through the forest, is increas-

ingly beautiful. Upon one of the loftiest eminences to the right stand the ruins of a huge stone-heap; the tumulus, perchance, of some red-browed chieftain of other days. It was a beautiful custom of these simple-hearted sons of the wilderness to lay away the relics of their loved and honoured ones even upon the loftiest, greenest spots of the whole earth; where the freed spirit might often rise to look abroad over the glories of that pleasant forest-home where once it roved in the chase or bounded forth upon the path of war.

. . . From the site of the stone-heap of which I have spoken, and which may or may *not* have been erected to the memory of some Indian chieftain, a glorious cosmorama of the whole adjacent region, miles in circumference, is unfolded to the eye. At your feet, far below, flow on the checkered waters of the Mississippi, gliding in ripples among their emerald islands; while at intervals, as the broad stream comes winding on from the west, is caught the flashing sheen of its surface through the dense old woods that fringe its margin. Beyond these, to the south, lies spread the broad and beautiful Mamelle Prairie, even to its faint blue blending with the distant horizon laid open to the eye, rolling and heaving its heavy herbage in the breeze to the sunlight like the long wave of ocean. And the bright green island-groves, the cape-like forest-strips swelling out upon its bosom, the flashing surface of lakes and water-sheets, almost buried in the luxuriance of vegetation, with thousands of aquatic birds wheeling their broad flight over them, all contribute to fill up the lineaments of a scene of beauty which fails not to enrapture the spectator. Now and then along the smooth meadow, a darker luxuriance of verdure, with the curling cabin-smoke upon its border, and vast herds of domestic cattle in its neighbourhood, betray the presence of man, blending *his* works with the wild and beautiful creations of Nature. On the right, at a distance of two miles, come in the placid waters of the Illinois, from the magnificent bluffs in the back-ground stealing softly and quietly into the great river through the wooded islands at its mouth. The day was a sultry one; the atmosphere was like the breath of a furnace; but over the heights of the bluffs swept the morning air, fresh and cool from the distant prairie. For some miles, as is invariably the case upon the banks of the Western rivers, the road winds along among bluffs and sink-holes; and so constantly does its course vary and diverge, that a pocket compass is anything but a needless appendage. . . . The road is not a little celebrated for its tortuosity. At length the traveller emerges upon a prairie. On its edge beneath the forest stands a considerable settlement, bordering on Macoupin Creek

It was evening, at the close of a sultry day, that the village of Carrollton appeared before me among the trees. . . . Three sides of the town are bounded by forest, while the fourth opens upon the prairie called "String Prairie." . . . The neighbouring region is fertile and healthy; well proportioned with prairie and timber, well watered by the Macoupin and Apple Creeks

. . . About a dozen miles north of Carrollton is situated the village of Whitehall, a flourishing settlement in the prairie's edge, from the centre of which, some

miles distant, it may be seen. Three years ago the spot was an uncultivated waste³⁴⁵

At this point in *The Far West*, Edmund Flagg continued north to Jacksonville and made his final exit from the Big Rivers Area.

1836: Frederick Julius Gustorf

Herr Gustorf was a newly naturalized American citizen when he traveled through the Big Rivers Area. He documented his journey in a diary:

Thursday, April 28th, 1836, on board the *Bee* on the Mississippi.

. . . At four o'clock this morning I left St. Louis . . . en route to Peoria We went upriver and, after a few hours, reached Alton I cannot understand how anybody would build a town on such a low part of the river bank. Newly constructed warehouses are now under water, and in the street (so far I can see only one) the inhabitants are wading through water up to their knees.

. . . April 29 . . . We . . . proceeded . . . up the Illinois River last night On the whole, the banks of the Illinois are flat and without charm.¹³⁶

Gustorf visited a farm near Peoria for two months, then headed back through the Big Rivers Area:

July 3 At two o'clock in the morning I left Peoria on board the steamboat *Liberty* for St. Louis. Where the Illinois enters the Mississippi, I saw the romantically located town of Grafton. What a pleasant sight after my monotonous stay on the prairies. It is a relief to see hills and valleys again, interspersed with forests and meadows.¹³⁶

1836: James Logan

Late in October of 1836 James Logan boarded the steamboat *Wyoming* at Peoria, bound for St. Louis. He wrote for his British readership,

Dr Clark and I purchased some bread and cheese, and went on board at nine in the morning, soon after which the steamer commenced her voyage. The bed of the Illinois river is narrow and muddy, its water a little discoloured, and the current rather slow. . . . The scenery . . . was very beautiful, the high banks being adorned with forests of numerous species of trees in their autumnal livery, while the waters were covered with ducks and geese newly arrived from the northern regions We arrived at the mouth of the river at nine o'clock next morning, and entered the Mississippi, the waters of which are of a dark hue. An hour more brought us to the mouth of the Missouri, which is of a very yellow colour, its water being impregnated with the clayey soil of the country

through which it passes. So large a body of water does it pour into the Mississippi, that this yellow colour continues as far as New Orleans. It is a rapid river, and when in flood does much mischief. At its mouth are seen great numbers of trees stuck in the mud called "snags" by the Americans.

The scenery of the Mississippi above its junction with the Missouri is magnificent. Its eastern banks are rocky, and here and there crags of limestone protrude from among the trees, so diversified in form as to give the appearance of ruinous towns. The trees are chiefly hardwood. The crimson, yellow and brown hues of their foliage contrasted beautifully with the dark-green of the cedars and the white colour of the cliffs. Many islands, some of them beautifully wooded, also occurred. The same kind of scenery, a little varied, continued as far as St. Louis²⁰⁴

1836: J.M. Peck

Five years after he published his *Guide for Emigrants*, John Mason Peck issued *A New Guide for Emigrants to the West*. This 374-page compendium briefly describes each county in Illinois. A few comments about the ecology of the Big Rivers Area can be gleaned from the discussions of each county.

Calhoun County: ". . . alluvial and sometimes inundated along the rivers; . . . good soil;—prairies at the foot of the bluffs."²⁵²

Greene County (including Jersey County): * "Much excellent land, both timber and prairie, in due proportion"²⁵²

Macoupin County: "A large proportion of the county is excellent soil, well proportioned into timber and prairie, and slightly undulating."²⁵²

Madison County: "A part of this county lies in the American bottom, and is a rich and level alluvion; but much of the county is high, undulating, and proportionately divided into timber and prairie."²⁵²

Montgomery County: "Surface, high and undulating, and proportionably divided into timber and prairie. Soil, second rate."²⁵²

Pike County: ". . . it has the Snycartee slough, running through its western border, and navigable for steamboats The land and surface various, . . . some rich alluvion, inundated at high water—large tracts of table land, high, rolling, and rich, with due proportion of timber and prairie."²⁵²

* Jersey County was part of Greene County until 1839.

1836: John Gates Thurston

Easterner John Thurston passed through the Big Rivers Area in the spring of 1836. He carried a journal-book in which he wrote,

Alton. This is the rudest and most uninteresting spot that I ever saw
. . . I should not like to remain in such a spot when there is so fair a portion of the creation around it, or rather within a few miles of it which might be made a paradise of at little expense.³³²

Thurston headed up the river:

June 1st. Today we entered the Illinois River. This is a beautiful stream; it is not near so rapid as the Mississippi, and its banks are not subject to be carried off by the washing of its waters. The bottoms are rather low in many places which renders it unhealthy in such parts as are inundated frequently. In many parts the bluffs rise near the river to a moderate height and are covered with scattering trees and tall grass which gives it the appearance of a park and these parks are seen for many miles. Today we saw a prairie of vast extent. It was bounded on the river a distance of thirty or forty miles. There is a thin strip of wood bordering the river from three to ten rods wide the whole distance, and this hedge is so dense that the prairie could not be seen half of the time. We landed at a place called Naples, a town situated on a prairie. This prairie was perhaps from five to ten miles across. We went out and gathered strawberries while the boat was discharging some freight. I was told by a passenger who had passed up this river twenty-four years ago that it seemed at that time like one continuous prairie. The leaves were off, and the timber lands, which are not heavy now, were then of small growth, and the whole country appeared like one vast plain with hardly a tree to be seen. I noticed one place of about ten miles in extent with scattering trees of moderate size at a short distance of the whole space—not a shrub was to be seen, but as far as the eye could reach was a continuous succession of trees and tall grass.³³²

1836: R.M.Y.

The June 1836 issue of the *Illinois Monthly Magazine* reprints an article by Richard Montgomery Young titled "Military Bounty Lands." This article describes the physical features and natural resources of the region between the Illinois and Mississippi Rivers, extending from the juncture of the two rivers northward to a line corresponding to the south boundary of Rock Island County. Much of Young's commentary is of a broad nature, and it applies to the Big Rivers Area only in a general sense.

When composing his article, Judge Young paraphrased many passages from Edmund Dana's *Description of the Bounty Lands* (page 94), but he did not credit Dana. Young also added his own observations and expanded upon many of the topics that Dana addressed.

. . . I again beheld the chain of perpendicular rocks resembling the . . . palaces of Pompey and Domitian The illusion is complete. And as I viewed these rocks rising above the thatch-roofed village of the Sioux Portage, I fancied that I beheld the palace of Armida looking down from its haughty eminence on the humble cabin of Baucis and Philemon.

J.C. Beltrami, studying the Jersey County bluffs in 1823.³⁶

Statements in Young's "Military Bounty Lands" sometimes depart substantively from Dana's *Bounty Lands*; these differences are noted by footnotes in the following excerpts from Young's article:

This tract of country, generally denominated the Military Tract, was surveyed during the years 1815 and 1816, and the greater part subsequently appropriated in bounties to the soldiers of the regular army, who served in the late war between the United States and Great Britain. It is situated between the rivers Mississippi and Illinois, and extends from their junction due north by a meridian line, denominated the fourth principal meridian, one hundred and sixty-nine miles, presenting an irregular curvilinear triangle, the acute angle of which is at the junction of these two rivers. . . . The whole tract . . . contains . . .

5,360,009 * acres It is presumed that the Illinois may be ascended by loaded boats with more facility, than any of the rivers in the west, the current being unusually gentle, and not in general exceeding two miles an hour. The surface is smooth, and the water deep and remarkably clear; and there are but few sand bars, and no rapids, rocks, sawyers or snags,[†] until you reach the 'Starved Rock,' about one mile above the town of Utica.

. . . The mean width of this river is about four hundred yards.

. . . The mean width of the Mississippi river bordering on the bounty lands extends three fourths of a mile. It is beautifully interspersed with small islands of timber land, and very much resembles that part of the Ohio river, which lies between Louisville and its mouth; its waters being equally transparent, and its current equally gentle. Its navigation from St. Louis to the foot of the Des Moines rapids, forty-five miles above the town of Quincy, is never obstructed, except for a few weeks during the winter season, when it is blocked up by the ice. This however, does not occur every season, as we had arrivals of steam boats at Quincy from St. Louis, as late as the month of January of the past winter.

* This acreage figure seems likely to have resulted from mis-copying Edmund Dana's figure of 5,360,000 acres.

† *Sawyers* and *snags* are defined in a footnote on page 94.

. . . it may be remarked in general in relation to the bluffs of the Mississippi and Illinois, as well as those upon the smaller river's that they exhibit a surface too rough to be cultivated and a soil too thin for successful tillage. The hills, or bluffs as they are called in this country, which are every where to be seen on the margins of the Mississippi and Illinois rivers, are generally neither very high nor precipitous, and very rarely approach to the water's edge. The bottoms between the river and bluffs are generally alluvial and expand from one to five miles in width. Two thirds of these bottom lands are subject to occasional inundation from high water, * and when this happens the river is seen gradually to rise several successive days until the channel within the banks is no longer capable of containing the immense accumulation of waters from above, at which time they burst over the banks in all directions, extending themselves from bluff to bluff in all the terrific grandeur of a mighty river. Again they gradually recede until they are confined within the ordinary channel. When these inundations occur as late in the season as the months of June and July, a sickly season arising from the noxious vapors engendered by a decay of vegetation may be expected in these and contiguous parts of the country; but if early, and the bottoms become dry before the hot season commences, no difference in the health of the inhabitants is expected to ensue on that account. Taking the military tract together, about two thirds may be set down as prairie land, † and the remaining one third as timber land. The detached groves, or those which are found occasionally as islands in the prairies, and those at the heads or sources of the streams, generally produce the finest timber, with a soil generally of good quality, and not unfrequently very rich. The soil on the prairies is generally good, and a large portion of it may be considered as first rate, having either a black vegetable mould, or a dark sandy loam from fifteen to thirty inches deep generally bedded on a stiff yellow clay. Many of the prairies are of convenient dimensions for farming operations, others too large at present, and again we find many only large enough for a single farm. The emigrant in travelling over the delightful region in the spring and summer months, will generally see timber either before him or to the right or left, with a few miles, but he will occasionally after descending one of our beautiful slopes to the verdant valley beneath, through which the gentle rivulet is meandering its course with its flowery border, get as it were out of sight of land, while his vision is bounded only by the blue horizon above, and not a tree can be discovered as far as the eye can reach. Again when he approaches the summit of the opposite slope, his vision is relieved with the green forest on his right and left, and a cluster of beautiful island groves immediately in the advance, with their varied shrubbery in full bloom, scattering its fragrance for many a mile around; the prairie in the mean time, being covered with a smooth green coat of grass, and

* Edmund Dana stated that three-fourths of the Illinois River bottomlands are inundated during high water. He said that nearly half of the Mississippi River bottoms are subject to inundation.

† Dana stated that about half of the Bounty Lands is prairie.

innumerable flowers of every variety and hue, which blossom and decay in succession from the first opening of the spring until the severe frosts of winter. There is also a species of prairie which is flat, wet, and the soil cold, heavy and for the most part thin and unproductive. This description of prairie is most generally to be found on the dividing ridges or high lands between water courses, and not unfrequently on the sides of declivities; made so no doubt, by the seepings of the waters, which collect on the bosoms of large flat prairies, and from thence find a subterraneous passage to the streams below through the sides of the neighboring hills.

There is another description of lands denominated the *barrens*, being neither timber land nor prairie, but partaking partly of each, and lying between them. This however, constitutes but a very small portion of the lands on the military tract. The surface is generally rolling, and often much broken, being intersected at very short intervals by numerous ravines, * which connect themselves to some water course in the neighborhood, and thereby furnish aqueducts for the adjacent prairies, through which to discharge the vast quantities of water which fall upon them during the rainy seasons of the year. These lands are generally overgrown, first with hazel thickets, and afterwards with scattering trees of oak and hickory, generally of stinted growth, owing, no doubt, to the injury they receive when young from the frequent burnings of the prairies; the soil is thin, and the wild grass grows taller † than upon the smooth prairies, but is generally of a course, rough quality, being much inferior to prairie grass, both for grazing and for hay. It is generally believed that such lands will produce wheat, clover, timothy, and blue grass, quite as well as our lands of better quality, and that they are better adapted to the growth and culture of fruit trees.

It has been a subject of much inquiry and speculation with persons who visit this part of the country previous to emigration, what our citizens are to do for timber and fire-wood on the prairies, when our forests and groves are cut away, and applied to the purposes of present improvement and fuel; and fears are not unfrequently expressed by those who are ignorant of our resources, that it will be impracticable on this account, even to settle and improve our large prairies, and that they will consequently remain as so many barren wastes.

This is a great mistake, as it is known to the old settlers, from actual observation, that the quantity of timber, instead of being diminished, increases with the settlements. Timber trees seem to be of indigenous growth in every part of the country; where the fires are stopped, they grow up spontaneously, and in a few years are fit for use. The black locust may also be cultivated to a great advantage. . . . The first improvements are usually made on that part of the prairie

* Edmund Dana wrote that the surface of these barrens is broken by sinkholes rather than by ravines.

† Dana stated that the wild grass of the barrens is short rather than tall.

Opposite the mouth of the Missouri, the American bottom terminates, and the bluffs come in to the river. . . . From these bluffs, we contemplate one of the most impressive and beautiful landscapes in the world. On the opposite side, the mighty Missouri is seen Above you, on the same shore, is the valley of the Illinois, itself bounded by hoary and magnificent bluffs of a peculiar character. The river brings in its creeping waters by a deep bed, that seems almost as straight as a canal. You have in view the valleys and bluffs of two noble streams, that join their waters to the Mississippi. . . . There are clumps of trees, lakes, ponds, and flocks of sea fowl, wheeling their flight over them; in short, whatever of grandeur, or beauty, nature can furnish to soothe, and to enrapture the beholder.

—Timothy Flint's view from the bluffs at Alton in 1828.¹¹⁵

which adjoins the timber, and you may see at the commencement a string of farms circumscribing the entire prairie as with a belt. The burning of the prairies is then stopped the whole distance of the circuit in the neighborhood of these farms, to prevent injury to the fences and other improvements. When this is done the timber springs up spontaneously on the parts not burnt, and the groves and forests commence a gradual encroachment on the adjacent prairies; by and by you will see another tier of farms springing up on the outside of the first, and farther out in the prairie; and thus farm succeeds farm, as the timber grows up until the entire prairie is occupied. . . . My official duties have, for the last five years, made it necessary for me, in going the rounds of the Circuit, to travel through every part of this country The river and creek bottoms are commonly thickly timbered. Among the kinds of trees that grow on such lands, are to be seen the black and white walnut, always indicating rich land, ash, elm, hackberry, lynn or bass wood, burr oak, honey locust, mulberry, sugar tree and cotton wood and numerous grape vines. The detached groves, and those at the heads of the streams frequently produce the same kinds of timber as the bottoms, and the lands within them, are for the most part, equally fertile. Although the timber in the forests and groves not unfrequently indicate the quality of the land in the adjoining prairies, yet it is by no means a certain criterion, as I have frequently seen prairie lands of excellent quality, with a soil varying from eighteen to thirty inches deep, adjoining woodlands of oak and hickory of stunted growth, where the soil at best did not exceed the second quality; on soils high, broken, and thin the prevailing growth is oak and hickory. Taking the country altogether, there are but few springs; but water may be plentifully obtained any where on the smooth prairies, by digging from fifteen to forty feet below the surface.* The well water is pure and salutary, and generally preferred to the spring water. The surface of the ground every

* Dana reported that water is plentiful 10 to 25 feet below the surface.

where in this country, is remarkably free from stones, except on the rivers, creeks and branches, in which many good quarries are found both of lime and sand stone.

. . . The agricultural productions of this part of Illinois are Indian corn, wheat, rye, oats, barley, potatoes, hemp, flax, etc. The tame grasses, such as timothy, red clover, red top or herd grass,* are also now cultivated to some extent, and so far succeeded well. The principle articles produced for exportation, consist in horses, beef cattle, milch cows, live hogs, barrelled beef and pork, bacon, lard, hides, butter, Indian corn, wheat and flour. Some of our backwoodsmen, also, still continue to carry on a considerable traffic with the merchants, in deer skins, and furs, such as otter, muskrat and racoon, and in honey and bees wax. Some farmers have been frequently known to make more money in this way, than from the product of their farms. Horses, cattle, sheep, and hogs can be raised here with but little trouble and expense, compared with the eastern states. The mildness of the climate, with the wild grass upon the prairie and bottom lands, has not unfrequently relieved the owners from all care and expense of feeding them through the whole year; but it is generally necessary to feed from the commencement of December until the latter part of March. . . . The shortness and moderation of the winter seasons, and the abundant forage which may be gathered from the wild prairies, render the raising of stock both cheap and easy. The grass, when cut from the upland prairies and well cured, make an excellent substitute for hay; and cattle will keep in good order the whole winter on this food alone. It has also been frequently remarked, that both horses and cattle fatten quite as fast in the spring and summer, on the wild grass of the prairies, as upon the tame pastures of the east.

. . . It is a fact, however, which ought not to be disguised, that a large portion of the lands on the margins of the Mississippi and Illinois rivers, as well as those upon the banks of the smaller streams, including such also as border upon the large, flat, wet prairies, may be reckoned among the situations most unfavorable to health. The stagnant waters which sometimes remain after the overflowings of these rivers, not unfrequently produce pestilential vapors, proceeding from putrescent vegetable substances, which very often engender malignant fevers and agues, and prove destructive to the health and vigor of the newly settled emigrant and his family. Habitations should, therefore, at the commencement of a settlement be as far removed as convenient from stagnant waters and low, rich alluvial grounds, which are thickly shaded by forest trees, and located on more open and elevated ground, where air and water can be enjoyed in their native purity.—Lands of this description, which in a state of nature, prove most injurious to health, when drained, opened to the sun, and

* Redtop (*Agrostis alba*) was called Herd's grass in the southern states. Timothy (*Phleum pratense*) was called Herd's grass in the northern states.

cleared of the trees and rank weeds, which generally grow upon them, have often become salubrious places of habitation. But the new comer should be aware before he is acclimated, that it is a dangerous experiment to attempt the improvement. But of this quality, there is a small part only of the whole tract, most of the residue furnishing situations as healthful as any part of the western country, Old Kentucky not excepted.

. . . Taking all the bounty tract together, and there is no region of country in the west, more eligibly situated for all the purposes of agriculture and commerce.²⁷⁶

1836: Alfred S. Weeks

Alfred Weeks emigrated from Long Island, New York, to Jacksonville in the spring and summer of 1836. He went by steamboat from Pittsburgh, noting that the Mississippi River was "thick with mud." The weather was hot by the time he arrived in Alton on July 12. The next day he began his ascent of the Illinois River. The last entry in his diary says, "This morning found us in the Illinois river. This river has much less current than either the Ohio or the Mississippi, and the water is clear, but it is not considered good."¹⁴⁹

1836–37: Daniel Harmon Brush

Near the end of 1836 Daniel Harmon Brush and his sister decided to travel by carriage from Edwardsville to a farm east of Jacksonville. Their route took them through the heart of the Macoupin Creek valley. Mr. Brush recounted how they were caught in what became known throughout Illinois as the Sudden Change or Sudden Freeze:

About the middle of December, the weather being very pleasant we started The second morning when we started it was fair All went well until mid-day when it commenced to rain. We were out on a large and unsettled prairie in the southern part of Greene County, between the Piasa and Macoupin creeks, some 8 or 10 miles from a stopping place. We pushed on as rapidly as possible, the storm increasing in violence as we went, and ere long the water came down in torrents, filling the gullies and ravines and making a lake of every depression in the prairie, while the elevations were covered 3 or 4 inches deep with the moving flood. We neared a point about 10 miles south of the Macoupin Creek, where a settler occasionally kept wayfarers, and applied for shelter. The rain was still falling in a seeming solid mass and the water all around was at least 3 inches deep on the slopes as well as on the tops of the ridges and on the level ground. A little before we arrived at the farmhouse the wind suddenly veered around to the north blowing with terrific violence and arctic coldness, and the running water had frozen at least 3 inches thick over all the surface of the surrounding country. We were weatherbound for several days, bitter cold prevailing. When a let-up came I had the horses rough shod, so they could keep their feet on the ice over which we had to travel, and we started on our way rejoicing. The traveling was good. Every place was bridged. The streams

across our road had been over-flowing from the heavy rain and ice had formed on their surface so thick and strong that after the water fell it stood like a bridge that bore us up without a break or crack. Thus we had a smooth, firm roadway on which our sharp-shod horses made brisk headway. This condition continued all the way to our destination. No snow had fallen on the ice and it was one glare mass on hill and in dale, over rivulets and the larger streams, as also over depressions in the prairies. I never saw the like before, nor anything approaching it since.

. . . About the tenth of January or perhaps a little earlier in 1837 we started on our return trip. As far as Edwardsville the ice bridges were generally intact and bore up our team and conveyance without a break. *⁵⁷

1836-40: Eliza W. Farnham

Near the end of April in 1836, Eliza Burhans ascended the Mississippi and Illinois Rivers on the steamboat *Banner*. In *Life in Prairie Land*, she related her impressions of the meeting of the Missouri and the Mississippi:

When the light came up over the heavy forest which clothed the eastern bank of the river, I saw that the waters were still muddy, and knew, therefore, that we could not have passed the mouth of the Missouri. Nine hours' running had brought us twenty-two miles! †—a dismal augury for the 240 that yet remained. As the daylight gained, I saw that the current under the eastern shore was dark and clear, and a few minutes after the scattered town of Alton began to peer up from among its beautiful bluffs, just touched with the first tender hue of spring.

And now the waters widened on the west, and opened up inland a broad, eddying, plunging sea of mud. On the spine of a sand-bar which was just visible between the two streams, the currents met, and the waters of the Missouri rose into a circling wave which toppled an instant and ran on, eager to mingle with the purer element that glittered and danced beyond. But the Mississippi, as if disdaining the foul alliance thus tumultuously sought, stole angrily away beneath the dark forest on the opposite shore, and preserved her identity a long way down, in a narrow transparent vein, growing more slender, till at length its bed was wholly usurped by the muddy monster.

This, then, was the junction of these two streams! The point where the mighty son of the mountains meets the clear-eyed daughter of the lakes—

Nothing could be more impressive. — Eliza Burhans at the confluence of the Mississippi and Missouri Rivers in 1836.¹¹⁰

* Other stories about the Sudden Change are on pages 149, 285, and 375.

† The *Banner* had departed from St. Louis nine hours earlier.

majestic union of powers whose feeble birth is in the deep wilderness and the untrodden solitude, whose maturity makes the ocean tremble.

. . . Both streams at this time were swollen to their fullest capacities by the spring floods. The gigantic Missouri poured out his turbid waters with a force that made his feeble neighbor recoil and leave a chasm between the transverse muddy wall, and the clear dark stream that glided timidly by on the other side.¹¹⁰

After a stop in Alton, "We got under weigh again . . . and ran slowly under the magnificent bluffs that tower above the Mississippi on the Illinois side." After three or four miles the *Banner* sprang a leak, and it was run aground on a wooded island to keep from sinking:

The island was small and uninhabited. There was nothing of interest upon it, save two or three little glades in which the early spring flowers were just unfolding their petals. We spent three or four hours in the checkered wood, admiring the various arts by which nature ushers her tender and beautiful train into being . . .¹¹⁰

Miss Burhans' quiet contemplation of Nature was interrupted by the approach of a fellow traveler who "broke through a thick copse." A while later their boat was repaired and under way. During the evening they entered the Illinois River valley:

We worried on through the flood of water that was pouring down the bed of the Illinois and submerging its banks, till the night of the fifth day brought us to the landing place of our friends in the town of Pokerton. *¹¹⁰

Eliza Burhans came to live at Tremont in Tazewell County, where she wed Thomas Farnham. After four years on the Grand Prairie, she temporarily relocated to Alton in 1840:

The opening of . . . spring found me domiciliated for a time . . . in the beautiful city of Alton.

. . . The position of Alton is one of much beauty. It stands at one of the most charming points on the upper Mississippi; having its clear, dark waters broken by two beautiful, wooded islands near the opposite shore, and commanding from the bluffs a fine view of the junction of the Missouri with the former stream. Immediately above the city, terminates a line of limestone bluffs, bold and towering, which wall in the Mississippi for near fifty miles. Immediately below, commences the celebrated "American bottom," which extends almost unbroken to the mouth of the Ohio. The town is divided into upper, middle, and lower Alton.

* Burhans disembarked from the riverboat at Pekin. Her five days of travel included the first part of her journey as well as the trip up the Illinois River.

Altogether, it has, from its alternate bluffs and prairies, the calmness and transparency of its waters, the size and beauty of its trees, an aspect of amenity and magnificence, which we have not seen, belonging in the same extent to any other stream. — Timothy Flint describing the Mississippi River above the mouth of the Missouri River in 1828.¹¹⁵

. . . In the immediate vicinity . . . there is great variety of scenery. High, rolling ridges, divided by deep valleys or round basins, as perfect in finish as if constructed by rules of art, diversify the whole surface. The heights are for the most part covered with the hazel, low shrub oak, and forest trees. The level grounds between, are clad with a smooth green turf, set during the spring and summer with a great variety of wild flowers. In the vicinity of the town are many beautiful groves and tracts of barrens; and farther back, are small prairies, divided and bordered by clumps of trees and clean open woodlands.

Many a charming ride and walk had we through these natural parks, when they were in their perfection of beauty. When the early showers were over, and the clouds had passed away, we used to ramble into the groves or barrens and return after an hour or two with great clusters of the phlox, painted cap,^{*} moccasin flower[†] and geranium, bright and fresh from their pleasant homes by stream and tree, to adorn and perfume ours. While we were gathering them, the quail was running to and fro on the clean turf, and whistling to the merry breeze; the robin was singing in the tree top, and the brown thrasher performing his seriocomic solo, a little farther off on the lower branches. The winds ran wild among the trees, shaking their long arms and making their lengthening shadows dance upon the bright sward with a gay motion; as if the very genius of mirth were disporting itself in the universal jubilee.

Oh, glorious were those days!

. . . Indeed we almost lived out of doors. . . . A pleasant proposition was made one evening to forsake the abodes of men for a whole day and betake ourselves to the woods.

. . . We started at eleven in high spirits for our picnic ground

. . . The morning was breezy and fresh in the green, open wood, and the bright phlox, and dazzling painted cap, and tender geranium danced and sparkled

* “Painted cap” may be a misprint of “painted cup,” a flower which Farnham mentioned twice in her descriptions of the Grand Prairie of central and northern Illinois. The painted cup (*Castilleja coccinea*) is more commonly known as the Indian paintbrush.

† The name “mocassin flower” has been applied to any of a number of orchids in the genus *Cypripedium*. They are otherwise known as lady’s slippers.

gaily, as the winds went by, like careless children who had nothing to do but revel in the life and beauty about them.

We rode five miles. Our way, for the most part, wound along the summit of swells that divided cool, shadowy ravines, and then descended the height to the shore of the Mississippi. Here we left our carriages . . . and commenced the ascent of another bluff We climbed the hill for half a mile, and as we rose, that rose before us; now a little opening shaded by overhanging oaks presented itself, and now we were bending beneath their sweeping branches. Gradually as we ascended, the prospect widened, until at length, when the summit was fairly attained, a prospect burst upon us magnificent beyond description!

. . . On the very pinnacle of the bluff, the east side of which was thickly wooded and the west opening upon the river, we found a little shaded nook, just large enough to admit our number. Here, after the vines and light undergrowth had been cleared away, we spread our white napkins, table cloths, &c., and laid out our simple refreshments. . . . A committee was now appointed, and sent out with authority to search the neighboring hills and hollows for water. Their protracted investigations had begun to give rise to some anxiety in the more youthful members of our party, when they returned with a brimming pail of the purest and coldest water.¹¹⁰

After enjoying lunch, some of the group played chess while others "strolled out to enjoy the prospect":

I was among the latter; and rarely indeed had nature invited more irresistibly, than into the pomp and glory about me. Behind lay the still wood, into the green depths of which the younger members of our party had strayed, in search of flowers, and whatever else of rare and beautiful might be found. Before, and far below us the Mississippi rolled its majestic waters, now sleeping as placidly in the misty sunlight, as if they had never tumbled and rushed in angry floods, terrifying the hearts of beholders. Away in the distance, where they shone and flashed like molten silver, clusters of green islands sat upon their bosom, the farther ones still, as if chiseled in emerald, the nearer ones alive with their tossing foliage. . . . To the left, on the Illinois side, bold rocky bluffs overhung the waters in which they had been mirrored for centuries. To the right, the horizon stretched away in the faint sunlight, until the eye was pained with the endeavor to define it, and the Mississippi might be seen at intervals, like a silver thread, shimmering through the green extent. . . . Nothing could be imagined more magnificent than the entire view, while in our immediate vicinity the bluffs were alternately piled into high conical hills and hollowed into deep ravines, laden with vegetation, which, tossed by the winds, lent a peculiar grace and changefulness to the landscape. Beneath us a precipice, two hundred feet in height, overhung the water—its face hollowed in so deeply, that it was only by a somewhat dangerous experiment that one of the gentlemen, laying himself flat

upon its summit and looking over, could see its entire depth! On its very brow a deep-worn, narrow track told of the wanderings of the Indian!

. . . Rude graves, that had closed long years before over those who shared in them, * were piled around us on the summits of the hills. On one of these a solitary wild rose-bud had unfolded its delicate petals

. . . We then bade adieu to the fairy spot, and, taking up the line of march in true Indian style, we descended the bluff, slaked our thirst at a delicious spring that gushed from the bank into a rocky basin below, and . . . were soon on our way homeward¹¹⁰

1837: S.W. Kessinger

Zanesville was established in 1837 to serve as a stagecoach stop and commercial center on the road between Edwardsville and Springfield. The town was in northwestern Montgomery County, far out on the prairie at the east edge of the Big Rivers Area.[†] The Honorable S.W. Kessinger was familiar with the area when Zanesville was founded: "In 1837, the northern part of Montgomery County, with the exceptions of occasional small streams, the banks of which were studded with trees, was one wide expanse of prairie and swamp."²²

1838: A.D. Jones

Abner Dumont Jones' *Illinois and the West* served as a guidebook for persons contemplating a move to Illinois. Mr. Jones visited Alton in May and June of 1838 while gathering facts for his book. He mused about the local bluffs on pages 47 and 48 of his guide:

Alton is situated at the foot of and upon the first bluffs on this side of the river; and from thence up far above the mouth of the Illinois river, they continue in their broken and unequalled beauty. Nothing of the kind can exceed the solemn beauty and grandeur of these rugged highlands when seen from the river by moonlight. I have sat for hours upon the rear guard of our creeping boat to gaze at their illusive beauties. It requires no poet's imagination to people them with light and life, with form and color. Nay, it requires a sterner philosophy than I possess to rob them of their ideal charm, and to resolve all that scene of constantly changing beauty and of life, to piles of dull, insensate limestone. No, no. Sunlight might have dissipated the "dear, delusive dream," but that false, fickle light, "reflected, not originated,"—pale, thin, impalpable—forbade the sacrilegious thought, that those beauteous temples, domes, spires and turrets,

* Farnham was describing the graves of "a mystery-loving and sanguinary race" from a time when "the light canoe skimmed those majestic waters."¹¹⁰

† Zanesville was originally platted in the headwaters of the West Fork of Shoal Creek, but it was later moved two and one-half miles west to become a railroad station at the very edge of the Macoupin Creek valley.

... it would be difficult for us to convey an idea of the beauty of the prairies, skirting this noble river. They impress the eye, as a perfect level, and are in summer covered with a luxuriant growth of grass and flowers, without a tree or a bush. A journey, which we made through them, along the Mississippi, from bayou Sniacarta to the Illinois, in the month of August, can never be forgotten by us.

— Timothy Flint describing the prairies that he explored along the Mississippi River in Calhoun and Pike Counties in 1818.¹¹⁵

were aught else than the visioned things they seemed. No wonder that the now banished Indian, filled these heaven-struck temples with the bones of their fallen, when their silent canoe glided down this stream so noiselessly, that the sleeping swan was undisturbed by the paddle's dip, and the unaffrighted deer drank from its limpid wave in conscious security. No wonder that they peopled these wild caves with spirits of the air and of their depraved braves. How many a wild shriek has rung through these tassellated arches as the husband and father was borne thither from the gory field of fight and fame! How have those wild rocks been wet with the maternal tear, and their echos broken with the lover's sad lament! Are ye *not* peopled, ye deep and solemn aisles? Dressed up in your wild and gorgeous beauty, are ye not animate with the thoughts and doings which never die? And was I wrong, when, from thy pillared courts, bursts of sweet music, such as earthly harps never emit and mortal voices never chant, seemed to float around, above, below, and fill my soul with peace and heaven? Away, thou dull philosophy, that fain would rob us of these "angel visits," and make all the scenes of this work-day world, dark and thorny as its sun-lit paths!¹⁷⁷

Abner Jones remarked about the contrast in the waters of the Mississippi and the Missouri. He concluded, "Above the mouth of the Missouri, the Mississippi is changed to a comparatively placid stream, and to my apprehension, a much more beautiful one." And "Above the mouth of the Missouri, the river becomes more placid and its current much less rapid, although it is even here a bold and rapid stream."¹⁷⁷

1838: S. Augustus Mitchell

Illinois in 1837 was published in 1838 by S. Augustus Mitchell and by Grigg & Elliot in Philadelphia.* The book was billed as "A Sketch Descriptive of the Situation, Boundaries, Face of the Country, Prominent Districts, Prairies, Rivers, Minerals, Animals, Agricultural Productions, Public Lands, Plans of Internal Improvement, Manufactures, &c. of the State of Illinois: Also, Suggestions to Emigrants, Sketches of the Counties, Cities, and

* This book was republished in the following year with the title of *Illinois in 1837 & 8.*²²⁹

Principal Towns in the State: Together with a Letter on the Cultivation of the Prairies, by the Hon. H.L. Ellsworth; to Which Are Annexed the Letters from a Rambler in the West."

This book is largely a compendium of information from other sources. The majority of *Illinois in 1837* was taken wholesale from two of J.M. Peck's books: *Guide for Emigrants* and *Gazetteer of Illinois*. Ecological descriptions that were taken by Mitchell from Peck's works are not repeated here.*

A few remarks about ecological features in Madison County appear to be original rather than copied by Mitchell from an earlier source. *Illinois in 1837* states, "On the banks of the Mississippi, below Alton, it is low and wet, and in many places very marshy." The Mississippi bluffs upstream from Alton are described as "watered by fine springs." The new town-site of Randolph, at the mouth of Piasa Creek, is said to have "abundance of

* S.A. Mitchell acknowledged in his preface that he had relied on other sources for his material:

The bulk of the information hereafter detailed is quite recent, being derived from the lately published and valuable *Gazetteer of Illinois*, and the *Emigrant's Guide*, by the Rev. J.M. Peck; also, from Flint's *Geography and History of the Western States*, Beck's *Gazetteer of Illinois and Missouri*, Schoolcraft's *Travels*, and the works of Darby, Hall, Long, &c.²²⁸

Mr. Mitchell's admission did not appease J.M. Peck, whose work was so liberally pirated by Mitchell. In the introduction to his 1839 *Traveler's Directory*, Peck railed,

Those persons who have examined a BOOK published by S. *Augustus Mitchell*, of Philadelphia, entitled, "ILLINOIS IN 1837, WITH A MAP," will find portions of that work copied into this. Nearly three-fourths of the pages of that BOOK were unwarrantably and illegally taken from the author's "Guide for Emigrants," and his "Gazetteer of Illinois,"—the fruits of his own industry, from his own researches, and of which either he or his publishers held the copy-rights. He has taken the opportunity of reclaiming his own property. The author by no means expects to preclude those who follow him from making a proper use of his labors, but when taken by wholesale—by whole chapters, sections and pages, he will claim his own property, and take measures to prevent further depredations.²⁵⁴

Although Peck was unhappy about Mitchell's piracy, Peck borrowed freely from L.C. Beck's 1823 *Gazetteer of the States of Illinois and Missouri* to write his own books. For instance compare Peck's description of Upper Alton in his 1831 *Guide for Emigrants* . . .

Its situation is high and healthy The soil of the surrounding country is fertile, and rolling; the prevailing timber, walnut, hickory, and oak.²⁵⁰

. . . with Beck's description of Upper Alton in his 1823 *Gazetteer*:

The situation of this town is high and healthy. . . . The soil of the surrounding lands is generally fertile; the face of the country undulating; the prevailing growth, walnut, hickory, and oak.²⁷

As another example of Peck's appropriation of Beck's wording, compare Peck's description of the bluffs and bottoms in Greene County (page 173) with Beck's description of the same bluffs and bottoms (page 121). Although Peck did not often cite Beck as the source of specific points of information in his *Guide for Emigrants*, in his *Gazetteer*, or in his *Traveler's Directory*, Peck did credit Beck in the front of all three of his books as a major source of information.

limestone and good timber, water privileges * and never-failing springs, a good landing for steamboats, and other advantages." ²²⁸

1838: Howard Stansbury

The U.S. Army Corps of Engineers conducted a survey of the Illinois River in 1837 to determine what improvements were needed to maintain a navigation channel for riverboat traffic. The results of this investigation were reported by Howard Stansbury in February of the following year:

This noble stream is formed by the junction of the Kankakee, or Theakiki, and Des Plaines rivers The bottom lands extend from one to five miles on each side of the river, seldom rising more than a few feet above the level of the stream in its ordinary stages, and from the fact that they are constantly overflowed by every freshet, to a depth varying from one to fifteen feet, are now, and must ever remain, uninhabited. Hence, the river presents the appearance of flowing through an ancient, vast, and solitary forest, clothed with a foliage rich and luxuriant beyond description, whose solemn silence has never been broken, save by the howl of the panther, or the still more savage yell of the red man. It was upon this stream, that the first settlement was made by the French emigrants from Canada: and here, from the salubrity of the climate, the surpassing beauty of the scenery, and the richness of the soil, they promised themselves the possession of a second paradise.

In an agricultural, commercial, as well as military point of view, this stream is destined to occupy an important rank amongst the rivers of the west. . . . it traverses . . . an extent of country unrivalled for the fertility of its soil, perhaps in the world. Most . . . tributary streams are susceptible of being rendered so far navigable as to allow the descent of flat-boats in the spring; and many of them, if cleared of the snags and logs, will admit of a limited navigation by keel boats, and even by small steamboats, for a considerable distance from their mouths.

. . . The instructions of the department [†] required an examination to be made from the mouth of the river to the termination of the canal from Lake Michigan, and the party accordingly proceeded to Peru, the point at which the canal will intersect the river. [‡] It was at once ascertained, both from observation and the information of others, that the river was several feet above low water mark, and

* In this context a *water privilege* is a site suitable for building a water-powered mill.

† Instructions for this survey came from the Department of War.

‡ The Illinois and Michigan Canal was planned to extend alongside the Illinois River as far downstream as Peru. The western terminus of the canal ended up at La Salle when the canal was completed.

that all the obstructions to the navigation were in consequence entirely concealed from view, owing to the previous rains which had prevailed to an unusual degree. This proved to be the case during the whole period occupied in making the examination, the stream continuing to rise at intervals, so as to preclude the opportunity of observing the obstacles with that minuteness so desirable and necessary in projecting any plan for their removal. *

. . . The Illinois river, from Peru to its mouth, flows over a bottom of sand and alluvial matter, with a current so very gentle and uniform as to cause but a few hours' difference in the time occupied by steamboats in ascending or descending its stream, an estimated distance of two hundred and fifty miles. Its banks consist almost entirely of very low alluvial bottoms, skirted by lagoons or lakes, most of which are connected with the river, the whole overflowed by every freshet for several miles on each side. For the greater part of the year, the navigation by steamboats drawing from three to four feet is uninterrupted, and it is only for about two months in the summer that three feet cannot be obtained as far as Peru For the last three years, the water has not been as low as this, but has admitted the passage of boats drawing from two and a half to three feet, without interruption.

The obstructions consist entirely of bars, formed for the most part by the deposit of sand and alluvial matter brought down by the tributary streams, and in some cases by the widening of the bed of the river itself. Their position is in almost all cases oblique to the axis of the streams, though sometimes running for miles parallel with it, having deep water on each side of the spit, which is frequently only a few yards in width. A remarkable uniformity prevails in the

* The year 1837 proved to be a most inopportune time to search for shallow areas and other obstructions to navigation on the Illinois River. The river had already surpassed flood stage when orders to conduct this survey were issued on April 26, 1837. Felix Township—located where the Kankakee and Des Plaines join to form the Illinois River—had been covered with water as soon as the ice broke up:

Felix was especially exposed to . . . inundations The one of 1837 is especially remembered. In the early spring of this year, a sudden flood broke up the ice, which, forming a gorge, held back the waters until their weight made the ice give way, and the flood of water and ice made its way down the Illinois, submerging the islands in its course and flooding its banks until even the highlands were reached, threatening destruction to homes and stock which were supposed to be out of the reach of anything save another deluge. Huge masses of ice were lodged upon the banks in every conceivable shape, which, gradually melting in the spring sun, kept the soaked earth saturated until the middle of summer, when the hot stifling weather of August gave rise to an unusual amount of sickness all along the river.²⁴

Continued rains in the headwaters region kept the Illinois River unusually high during the summer of 1837. H.S. Bloom, who came to live along Rock Creek near Kankakee in March of 1837, was caught far out on the prairie during a thunderstorm in which “the whole face of the earth was covered with water.” He later recalled, “The summer of 1837 had been very wet; an unusual amount of rain had fallen and the streams had been filled the season through”²⁴¹

Perhaps no river of the western country has so fine a boatable navigation, for such a great distance; or waters a richer and more luxuriant tract of country.

— The Illinois River as portrayed in *A Condensed Geography and History of the Western States* (1828).¹¹⁵

shape and position of these bars relative to the banks, indicating a similar uniformity in the laws by which they were formed; so that a description of one of them is sufficient to give a clear idea of the nature of all. When the water is low, the greater portion of these bars are exposed, and at a medium stage, the vast quantity of aquatic weeds with which the bottom of the river is covered, points out their position with unerring exactitude. In some cases the bottom is irregular, consisting of sand reefs, as they are termed by the pilots, which have no well defined form, but consist of lumps, or small isolated elevations, not connected in a regular chain, having deep water between and around them, and rendering the navigation in their vicinity somewhat intricate.

The form and position of these bars, although composed of material so easily operated upon by a current, remain from year to year without perceptible alteration, unless it should happen that the river breaks up suddenly in the spring; in which case the ice, instead of gradually dissolving, is carried down in masses by the current, and by its mechanical action upon the bottom, some change is occasioned in the channel. This, I was informed, is not, however, ordinarily the case, and a most remarkable uniformity in the form and position of the bars, the depth of water on them, and the direction of the channel, from year to year, is the consequence.

A few logs and snags are here and there to be found; but the obstruction from this cause is much less than I have ever witnessed in other fresh water streams. No danger is apprehended from them, as, for reasons above stated, they retain their positions from year to year, and being few in number, and their localities perfectly well known, they are easily avoided.

. . . When compared with other streams in the west, the Illinois, even in its present unimproved state, is superior to most of them in the depth of its waters. The improvement of the Tennessee contemplates at the utmost the attainment of a depth of only twenty-four inches; and that of the Ohio, between Pittsburgh and Wheeling, a depth of thirty inches; whilst the Illinois in its natural state, has at no time (with the exception of two or three bars) a less depth than two feet, and that only in extremely dry seasons, and for a short period in midsummer. For the last three years its navigation by steamboats of from one hundred to one hundred and fifty tons, has not been suspended for a single day, except in winter by the ice, whilst scarce a season passes when the Ohio, even as far down as Cincinnati, is not for a longer or shorter period too low for navigation, even

by boats of the smallest class. The only question then was, to what extent is the improvement of the Illinois necessary? This would in some degree influence the mode of improvement to be adopted.

But two methods present themselves which are at all applicable to the present or probable state of the trade, or to the regimen of the river itself. These are, the construction of wing dams, so as to direct and concentrate the force of the current upon the bar to be removed; and the excavation of channels through the several obstructions of a depth sufficient to furnish at the lowest stage three feet water over them, which is the greatest depth contemplated.

To the first of these plans, there are several strong objections.

1. The current of the river is so sluggish, that it is believed a velocity could not even by this means be given to it, sufficient to remove the bars entirely, and even if the plan were successful, its effects would only be temporary; for the matter removed, as soon as it reached a portion of the river, where there was little or no current, would again be precipitated, and form lower down another obstruction equally detrimental with the first, unless indeed a succession of works of the kind should be erected, so as to remove the deposite entirely from the river
2. The elevation of the banks above the surface of the water is so small, that the erection of such works at each bar, by obstructing the free passage of the water, would cause the inundation of the adjacent flats to be more frequent; and, for the same reason, the overflowing water would be deeper and remain much longer, stagnating in the low grounds and extensive lagoons, in which the bottoms abound, and thus proving a serious injury to the health of the surrounding region of country.
3. No stone was observed upon the whole length of the stream, except near the mouth, where a high rocky ridge separates its valley from that of the Mississippi. The total absence of this indispensable material would, of itself, constitute a serious objection to the adoption of this plan. . . . Many of these dams would require to be from one-half to three-fourths of a mile in length

These remarks apply with peculiar force to that part of the river embraced between Beardstown and its junction with the Mississippi. The high water from the latter, not unfrequently backs up as high as that town, and causes the current, especially near the mouth, to flow up the stream. This portion of the river, as might be expected, is now more full of bars than any other; and the inevitable consequence of the adoption of the plan under consideration would be, that the deposite brought down by the increased velocity of the stream, meeting either a counter-current, or one deadened and rendered sluggish, from the back water of the Mississippi, would soon be precipitated, and, by its

accumulation, form a more serious obstacle to the navigation than at present exists; and that by the very means taken to remove them.

. . . The only plan, which is at all likely to prove of any advantage, is the second one proposed, viz: To excavate channels through the bars, and that only to a limited extent. This mode is believed to be peculiarly adapted to this river, as the deposits form very slowly, in consequence of the quantity of alluvial matter brought down by the current being unusually small. It is not pretended that the channels thus formed would remain permanent ever afterward . . . Such would not be the case. The same causes which originally combined to form the obstructions will continue to operate; and the filling up of the excavated channels, in the course of time, will be the necessary consequence. But no doubt is entertained that, as in this case the operation of these causes is unusually slow, a considerable period would be necessary to produce the result.

The plan recommended, is to purchase a dredging machine, to be constantly employed during the summer months, first in excavating channels through the bars, and afterward in keeping open the passages thus formed. It is believed that a depth of three feet would amply accommodate any probable amount of transportation upon the river; and from the fact that two feet water is already found, (save on one or two bars,) an excavation of one foot in depth, and, in many cases, of six inches only, would effect this object. A dredging machine, calculated to work in such a small depth of water, could with ease open a channel through all the bars in the course of one working season.

The only objection to this plan, (certainly the most economical,) is the danger that, by cutting through the bars, the river above would be more rapidly drained, and by thus lowering the surface of the water, other bars higher up would be exposed, which now lie too deep to form any obstruction. . . When it is considered that the greatest depth to be excavated will not exceed one foot, and that, in many cases, six inches only will be necessary; that the fall of the stream is very small, and the current in consequence is very sluggish; and that it is constantly receiving supplies of water from numerous and large tributaries, it is believed much danger from this cause need not be apprehended.

It has been suggested that a system of lock and dam navigation would be the best mode of improvement for this river. I consider such a scheme would be not only impracticable, within any reasonable expense, but that it would prove ruinous to the navigation of the stream.

The bed of the river consisting, as it does, of sand and alluvial matter, does not afford sufficient foundation to give the necessary solidity to the works which would be required. Materials for their construction would have to be transported from a great distance. It would, therefore, be very expensive. The advantage to be gained would not be commensurate to such expense since a constant navigation of two feet is now open. . . It would be of use only for

It appeared to me that we passed through the most delightful as well as the richest district I had ever seen. The form and appearance of the prairie and of the surrounding woods were most beautiful. Think of Windsor Park, or Strathfieldsaye, or of parks for all the noblemen and wealthy landholders in Britain to be had here at a dollar and a-quarter an acre, in the neighbourhood of such rivers, and all consisting of land of the richest soil, and of the most beautiful waving shape and smooth surface, all laid out by the hand of Nature, as English parks are,—the wood far more beautifully.

— British author James Stuart, north of Carrollton in 1830.³²⁷

a limited period of the year, and some years not at all. During the whole of the residue of the year, the dams would prove a more serious impediment to the trade than the obstructions they were intended to remove. And lastly, they would occasion the constant inundation of the bottoms for many miles on each side of the river, and would spread pestilence and death amongst the population of its valley.

I will now proceed to an enumeration of the different obstructions, their localities, with the estimated quantity of earth to be removed from each . . .

After entering the river, the water is good as far as Macoupin creek, about twenty-three miles from the mouth, when commence what are termed the French bars.

The channel crosses over to the eastern shore above the head of the island above Macoupin creek, and then recrosses to the island. Upon the upper bar, two feet is found generally, although the water has been as low as eighteen inches. Upon the lower, two and a half feet can be obtained. Through the lower a cut of two hundred yards, and through the upper a cut of three hundred yards, will be required. The depth is constantly varying, being dependant upon the height of the Mississippi. The bottom consists of sand and soft mud, and is easy of excavation. The number of cubic yards to be removed amounts to six thousand five hundred, which should be deposited between Macoupin island and the western shore.

From the French bars the water continues good for fourteen miles, to the mouth of Apple creek. The river is shoal in places, but no serious obstacle is met with.

APPLE CREEK BARS.

Two bars occur at this point. The first makes out from the east shore immediately above the mouth of the creek; the other extends diagonally across and down the river from the eastern to the western shore above it. They are both short, although the upper bar is one of the shoalest in the river. To give three

feet in the lowest stage, the first will require a cut of one foot for fifty yards, and the second a cut of twenty-two inches for sixty yards—1,600 cubic yards.

After crossing the two bars above Apple creek, the river continues shoal for about four miles, and may require some little excavation. The obstructions consist of lumps and “sand reefs,” having no regular formation, but rendering the channel crooked and uncertain. No regular bar occurs, however, until reaching the

OTWELL BAR.

This obstruction is formed by a bar crossing the river diagonally from the east to the western shore. It is one of the shoalest bars in the river, having but 18 inches water upon it in very dry seasons. The bottom consists of blue mud and sand in which a pole may be sunk thirty feet. It will require an excavation of 18 inches for 150 yards—2,250 cubic yards.

The next obstruction occurs at the

GRAND PASS BARS, *

Four miles above Otwell bar, and six miles below Bridgeport. These consist of two bars distinguished by the name of Grand Pass, and Stewart’s bar. They, by a deposit extending from the foot of two small islands, cross the river obliquely to the western bank, and, forming a curve, return to the eastern shore. The lower, or Stewart’s bar, will require a cut of one foot for two hundred yards—2,600 cubic yards.

BRIDGEPORT BARS.

Just below Bridgewater † the channel passes between Garrison’s island and the west shore, crosses from the head of the island to the east shore, and, immediately below the town, re-crosses to the west bank. In the island chute, a cut of six inches for one hundred yards will be necessary, and above the head of the island a cut of one foot for one hundred yards—2,125 cubic yards.

LITTLE BLUE RIVER BAR.

This bar lies opposite the mouth of Little Blue river, ‡ two miles below Augusta. It will require a cut of six inches for four hundred yards—2,000 cubic yards.

* The Grand Pass bars were at Pearl.

† “Bridgeport” was intended here instead of “Bridgewater.” A Bridgewater post office existed in Greene County from 1887 to 1904,³ but it was nine miles south of Bridgeport and three miles east of the Illinois River. Bridgeport is extinct; it was in the southwest corner of Scott County, across the river from the present-day hamlet of Bedford.

‡ Little Blue river = Little Blue Creek.

Never shall I forget my first vision and impression of the prairie that morning; . . . the ocean-like expanse, now a level plain, now rippling into verdant wavelets, now with a vast sea roll of gradual rise and fall, occasionally billowing into bluffs that bordered the rivers and the water courses with long stretches and curvature of forest flecked and embroidered with the redbud and the haw; . . . islets of the wild plum, cherry, and apple scattered through the sea of verdure and with their fragrance hitting the sense from afar; amid which the plumage of the paroquet glistened and the thrush and the mocking bird burst into song—it seemed to me a fairy landscape.

— Truman Post's recollection of a walk from Grafton to Carrollton in 1833.²⁶⁷

BEVINGTON BAR.

One mile above Augusta,^{*} the channel crosses abruptly from the east to the western shore. A cut of six inches for one hundred yards will be necessary—500 cubic yards.

BIG BLUE RIVER BAR.

This bar lies opposite the mouth of Blue river,[†] and will require a cut of six inches for eighty yards—400 cubic yards.³¹⁴

The next obstruction consisted of the Mauvaisterre Bars, which were beyond the upstream limit of the Big Rivers Area.

1839: J.M. Peck

John Mason Peck produced *The Traveler's Directory for Illinois* to accompany his *New Sectional Map of the State of Illinois*.²⁵⁷ Descriptions of the ecological features of each county in the *Traveler's Directory* are quite similar to those in Peck's earlier *Gazetteer*, so these descriptions are not quoted here.

The Big Rivers Area extends into the southwestern part of Scott County. This county was not created until 1839, so it is not described in J.M. Peck's earlier works[‡] or in L.C. Beck's 1823 gazetteer. Peck's 1839 *Traveler's Directory* has this to say about the newly established county:

* Augusta is now Florence.

† Blue river = Blue Creek (Big Blue Creek).

‡ Peck's earlier works include *A Guide for Emigrants* (1831), *A New Guide for Emigrants* (1836), and *A Gazetteer of Illinois* (1834 and 1837).

Scott county was formed from the southwestern part of Morgan county, in January, 1839. * It is watered by the Mauvaiseterre, Sandy, and some smaller streams. It has, proportionably, more timbered land and less prairie than Morgan county; but in other respects is similar. †²⁵⁴

A section headed "Illinois River: Obstructions to Its Navigation at Low Water, and Plan of Improvement" bases most of its information on Howard Stansbury's engineering report (page 209). Mr. Peck added the following remarks about the river below Peru:

From this point to its mouth the river flows over a bed of sand, an alluvial deposit, with a very gentle current. Its banks consist chiefly of low alluvial bottoms, which are skirted with small lakes, most of which are connected with the river by sloughs and outlets, an the greater portion inundated at high floods.

For most of the year, in ordinary seasons, the navigation by steamboats, drawing from three to four feet water, is uninterrupted. During the years of 1835, 1836, and 1837, the water was not as low as this, and boats drawing two and a half and three feet passed without interruption, except from ice in the winter. During 1838, the western streams were the lowest, and the season from June, the driest ever known within the memory of man, steamboat navigation on the Illinois was interrupted almost entirely after the 20th of July. †²⁵⁴

Macoupin Creek has been diverted by a ditch that empties into the Illinois River about six miles above the creek's natural mouth. According to Peck, the former embouchure of

* Scott County was established on February 16, 1839.³¹⁶

† Prior to 1839 Morgan County embraced the area that would become Scott County and Cass County. Because the Big Rivers Area extends into such a small part of the old (pre-1839) Morgan County, the older descriptions of Morgan County as a whole hardly pertain to the Big Rivers Area. As an example of an older description of Morgan County (including present-day Scott and Cass Counties), Peck's 1836 *New Guide for Emigrants* states,

Morgan.—A first rate county,—well proportioned into prairie and forest lands,—much of the surface undulating; watered by the Illinois river and Mauvaise-terre, Indian, Plum, Walnut, and Sandy creeks, and the heads of Apple creek.²⁵²

The 1839 *Traveler's Directory* makes the following remarks about Morgan County after Scott and Cass Counties had been split off:

Morgan county is one of the richest agricultural counties in the state, is well proportioned into timber and prairie, and contains many extensive and well cultivated farms.

Improved farms, now sell from 10 to 20 and even 30 dollars per acre, and will soon command 50 dollars. Emigration, attended with industry and enterprise, in a few fleeting years, has changed a region that we have seen in all the wildness of uncultivated nature, into smiling villages and luxuriant fields, and rendered it the happy abode of intelligence and virtue. The same remarks will apply to the adjacent counties.²⁵⁴

‡ Later in his book, Peck quoted the Peoria *Register* as reporting that steamboat navigation was halted by extremely low water at Peoria on September 4, 1838.

Macoupin Creek was not readily apparent to most river travelers: "Macoupin Creek enters a slough behind an island, the mouth of which is hid from the main channel." ²⁵⁴

1840: An anonymous correspondent

In her classic *Summer on the Lakes*, Margaret Fuller published a letter from someone who had walked across the northern part of the Big Rivers Area. This letter, datelined "Springfield, Illinois, May 20, 1840," informs us,

Yesterday morning I left Griggsville, my knapsack at my back, pursued my journey all day on foot, and found so new and great delight in this charming country, that I must needs tell you about it. Do you remember our saying once, that we never found the trees tall enough, the fields green enough. Well, the trees are for once tall, and fair to look upon, and one unvarying carpet of the tenderest green covers these marvellous fields, that spread out their smooth sod for miles and miles, till they even reach the horizon. But, to begin my day's journey. Griggsville is situated on the west side of the Illinois river, on a high prairie; between it and the river is a long range of bluffs which reaches a hundred miles north and south, then a wide river bottom, and then the river. It was a mild, showery morning, and I directed and my steps toward the bluffs. They are covered with forests, not like our forests, * tangled and impassable, but where the trees stand fair and apart from one another, so that you might ride every where about on horseback, and the tops of the hills are generally bald, and covered with green turf, like our pastures. Indeed, the whole country reminds me perpetually of one that has been carefully cultivated by a civilized people, who had been suddenly removed from the earth, with all the works of their hands, and the land given again into nature's keeping. The solitudes are not savage; they have not that dreary, stony loneliness that used to affect me in our own country; they never repel; there are no lonely heights, no isolated spots, but all is gentle, mild, inviting,—all is accessible. In following this winding, hilly road for four or five miles, I think I counted at least a dozen new kinds of wild flowers, not timid, retiring little plants like ours, but bold flowers of rich colors, covering the ground in abundance. One very common flower resembles our cardinal flower, though not of so deep a color, another is very like rocket or phlox, but smaller and of various colors, white, blue and purple. Beautiful white lupines I find too, violets white and purple. The vines and parasites † are magnificent. I followed on this road till I came to the prairie which skirts the river, and this, of all the beauties of this region, is the most peculiar and wonderful. Imagine a vast and gently-swelling pasture of the brightest green grass, stretching away from you on every side, behind, toward

* The author was writing to someone "back home" in the Northeast.

† Grape plants often were simply called vines during the 1800s. Viny plants that climb over other plants were called parasites even though they are not actually parasitic.

Let the reader imagine himself by the side of a rich meadow, or fine grass plain several miles in diameter, decked with myriads of flowers of a most gorgeous and varied description, and he will have before his mind a pretty correct representation of one of these prairies. Nothing can surpass in richness of colour, or beauty of formation many of the flowers which are found in the most liberal profusion on these extensive and untrodden wilds.

— Rebecca Burlend, who emigrated from England to the north edge of the Big Rivers Area in 1831.²⁷³

these hills I have described, in all other directions, to a belt of tall trees, all growing up with noble proportions, from the generous soil. It is an unimagined picture of abundance and peace. Somewhere about, you are sure to see a huge herd of cattle, often white, and generally brightly marked, grazing. All looks like the work of man's hand, but you see no vestige of man, save perhaps an almost imperceptible hut on the edge of the prairie. Reaching the river, I ferried myself across^{* 125}

1840: J.S. Buckingham

British writer James Silk Buckingham, Esquire, boarded the northbound *Flying Dutchman* at St. Louis on June 19, 1840. He told of his experiences in *The Eastern and Western States of America*:

Beyond Alton the scenery of the Mississippi begins to improve, and grows, indeed, quite picturesque, with fine bold cliffs on the one side, and richly wooded bottoms on the opposite shore—undulated hills on the one hand, and extensive prairies on the other, with the mouths of two noble streams, the Missouri and the Illinois, discharging their volume into the Mississippi—the openings of the valleys of both being visible for some distance as you pass them.

. . . The cliffs on the Illinois side appear to be from 150 to 200 feet in perpendicular elevation, and to have their fronts marked with a series of projections and indentations, succeeding each other in perpendicular lines of ridges and hollows, as if scooped out by the hand of man. The day was perfectly calm, the water clear, tranquil, and with a surface as smooth as glass; and the reflection of these singular rocks, as well as of the passing fleecy clouds that floated over them, as distinctly as in the finest mirror, added much to the beauty of the scene.

* Margaret Fuller introduced this letter by noting that it shows "the painter's eye," and she said that it is "admirably descriptive of the country." Indeed.

About 15 miles above Alton, we passed the town of Hamburgh,* in the State of Illinois, and continuing to ascend the stream, we were at sunset about 70 miles above St. Louis; the strength of the current, which was at least 3 miles an hour, prevented our going more than about 8 miles an hour by the lead. Here the cliff scenery became even more beautiful than below. The perpendicular rocks rose immediately from the water, which was sufficiently deep quite close to their sides, to admit of our boat going along within a few feet of them. From the top of the cliff, which reached about two-thirds of the way only to the summit, there rose in steep slopes and rounded bosoms of grass, some of the most exquisite bits of verdant lawn that could possibly be conceived. It equalled in smoothness, evenness, and softness, as well as in uniformity and depth of colour, the finest parklawns I had ever seen in England; and being clustered with natural clumps of trees, in separate groups, as well as separate trees, it presented something between the most perfect park and the beautiful woodland pastures of Kentucky.

To add to the loveliness of the picture, there were many islands of varied sizes and diversified forms, breaking the current of the clear Mississippi, all of them richly wooded, and the foliage decked in the brightness and fulness of the glorious June. We already began to think the Upper Mississippi more beautiful than the Ohio . . .⁵⁹

By the next morning Buckingham's riverboat was at Clarksville, across the Mississippi River from the northwest corner of Calhoun County:

On the morning of the 20th we found ourselves abreast of Clarkesville, a small town in Missouri, from which we learnt that we had only gone 30 miles since midnight, the fog obliging the engineer to lessen his speed, and the helmsman to creep his way more cautiously through the winding channels of the river, the depth in many places not exceeding 4 feet, and bars of sand just even with the water's edge being very frequent. Another danger requiring to be particularly guarded against, is the snags, as they are called, which at this season of the year are more than usually abundant. In the spring, when the freshets from above cause the river to overflow its banks, the lands near the edge become so loosened, that in the summer months great chasms appear, by the drying up of the moisture, when the heavy weight of timber on the outer mass, often weighs it down, and occasions the whole, trees, soil, and all, to break away with a crash, when it falls into the river.

Several acres at a time are sometimes carried away in this manner; indeed, the river, in its windings, is continually gaining on one side by new deposits, and losing on the other by the breaking away of old masses, and this process goes on on both sides the river equally. On the new deposits a first growth of trees

* The town that Buckingham passed "about 15 miles above Alton" is Grafton. Hamburg is many miles farther up the Mississippi River in Calhoun County.

springs up, most generally willows and cotton-wood; beyond this are seen other thick beds of trees of other kinds, taller and of anterior growth, while the matured forest forms a still more remote belt of many years' growth, from an earlier alluvial deposit.

The large trees hurled into the river by the falling of the disjointed acres of soil on which they stand, are most of them floated down the stream as drift-wood, and either thrown on shore in their progress, or find their way out to the Gulf of Mexico, but some of them, from the weight of their roots, go to the bottom in the middle of the river; and these, sinking gradually into the soft mud, stand nearly upright in the stream. The current, of course, bends the upper end of such trees forward, by which the greater number of them are kept under the surface, with the upper part of the branch pointing down the stream, and it is only by the agitation of the current, and its constant alternation of rising and falling as the stream flows over it, that it is perceived at all. If a steamboat ascending the river, runs with any velocity upon this pointed tree, she gets "snagged," as the phrase is, the tree sticking through her bottom, and a dangerous leak being the consequence. But sometimes the plank of the vessel is stove in, and then she fills and sinks very speedily.

. . . Our morning scenery was quite as beautiful as that of the preceding evening —bold cliffs, grassy and lawn-like plains, finely wooded islands, and a clear and broad expanse of water, were the principal objects composing the picture. At 12 miles above Clarkesville we passed the small town of Louisiana⁵⁹

At this point the *Flying Dutchman* churned upstream beyond the Big Rivers Area. Mr. Buckingham's northward advance was eventually halted by shallow water in the rapids at Keokuk. He headed back downstream:

On the following morning, June 22nd, we were down among the bluffs or cliffs that add so much grandeur to the banks of the Upper Mississippi; and we thought then, as we had before thought in ascending the stream, that it was quite as beautiful as, and much more grand than the Ohio. The clearness of its waters is a striking feature of its beauty, and its entire freedom from all drift-wood and extraneous matter gives it an aspect of purity which contrasts strikingly with the turbid and muddy aspect of the lower stream, while its sweeping breadth, and large and thickly-wooded islands, give it an air of magnificence which neither the Ohio nor the Hudson, beautiful as both of these undoubtedly are, can ever possess.

There are a great number of fishes in the Mississippi, some of which are unsuited for food, but are curious in other respects. One of these is called the alligator-gar, or *lepiosteus ferox*; it is found sometimes exceeding eight feet in length, and is described as strong, fierce, voracious, and formidable, not only to fish, which it devours by tribes, but even men who go into the water near it. Its leaps or darts equal the flight of a bird in rapidity. It has a long, round, and

pointed mouth, thick set with sharp teeth; its body is covered with scales of such a texture as to be impenetrable by a rifle bullet, and, when dry, to elicit sparks of fire when struck against a steel. It often weighs 200 lbs., and is considered as a far more formidable creature than the alligator, being, in short, the shark of the river, and is as voracious as the shark of the ocean. We saw the body of one of these creatures in the Museum of the National Academy of Sciences at St. Louis The Devil-jack-diamond fish, or *litholepis adamantinus*, is another of these river monsters, which is as voracious as the alligator-gar, and, like it, has scales which, when dry, will strike fire with steel. * It is found from 4 to 10 feet in length; and one has been caught weighing upwards of 400 lbs. The cat-fish of the Mississippi, *silurus Mississippiensis*, is a large fish, often weighing above 1000 lbs., † but this is eaten and considered perfectly wholesome and

* In 1820 Constantine Rafinesque published *Ichthyologia Ohiensis*, the first comprehensive treatise about the fishes of the Ohio River valley. Rafinesque's description of the alligator gar reads in part,

This is a formidable fish living in the Mississippi It has been seen sometimes in the lower parts of the Ohio. It reaches the length of eight to twelve feet, and preys upon all other fishes, even Gars and Alligators. Mr. John D. Clifford told me that he saw one of them fight with an alligator five feet long and succeed in devouring him, after cutting him in two in its powerful jaws. . . . The scales are large, convex, and rhomboidal.²⁷⁸

Ichthyologia Ohiensis describes another gar, *Litholepis adamantinus*—the notorious Devil-Jack Diamond-Fish:

This may be reckoned the wonder of the Ohio. It . . . probably lives also in the Mississippi. . . . Wonderful stories are related concerning this fish, but I have principally relied upon the description and figure given me by Mr. Audubon. Its length is from 4 to 10 feet. One was caught which weighed 400lbs. . . . the prongs of the gig cannot pierce the scales which are as hard as flint, and even proof against lead balls! . . . It is a voracious fish The whole body covered with large stone scales . . . : they strike fire with steel! and are ball proof!²⁷⁸

No gar has flinty scales that can withstand a gunshot. The Devil-Jack Diamond-Fish was spawned along the Ohio River in 1818, when Constantine Rafinesque visited John James Audubon to gather material for *Ichthyologia Ohiensis*. Richard Ellsworth Call, who edited and reissued *Ichthyologia Ohiensis* in 1899, discussed the affair:

During Rafinesque's celebrated visit to Audubon . . . , it appears that, while a guest of the great ornithologist, he was victimized in a most cruel and reprehensible manner Audubon's facile pencil and vivid imagination conspired together to produce drawings of fishes, said to dwell in the Ohio, which were nothing if not wonderful. With a suave manner and with an air of absolute truthfulness, these drawings were shown to Rafinesque, and the size and beauty of their living prototypes proclaimed. . . . in some cases at least, Rafinesque . . . gave these grotesque forms a name and place in the ichthyologic system.²⁷⁹

Constantine Rafinesque's fantastic descriptions of gars were widely repeated by subsequent writers, including J.S. Buckingham. After the publication of Rafinesque's *Ichthyologia*, the "scales that strike fire with steel" were attributed to the alligator gar as well as the mythical devil-jack diamond-fish.

† Buckingham misstated the size of catfish in the Mississippi River. He derived most of his information about fishes from Timothy Flint's *Condensed Geography and History of the Western*

From the bluffs, but more especially from the hills behind them, the prospect is beautiful, beyond the powers of the most vivid imagination to picture.

— John Russell at Bluffdale in Greene County in 1832.⁸⁸

good. The Buffalo-fish, or *bubalus Mississippensis*, * is another large fish, which is abundant in the river, and deservedly prized for the table. There are also sturgeon in great variety,—perch, pike, black-fish, and salmon, all excellent of their kind, as well as a saw-fish, and a great variety of eels.[†]

Squirrels abound on the banks of the Mississippi, but chiefly in autumn, when they prey upon the corn-fields, nuts, and fruits. They sometimes cross the river, either by swimming or embarking on a piece of bark or wood, serving them for a canoe, and spreading their fine bushy tails to the wind like a sail, they get wafted across the current by its force.[‡]

. . . It is in the autumn and winter months that the river most abounds with wild fowls and aquatic birds. They are then seen here in innumerable flocks, and in great variety; indeed, those who have navigated this stream at that period, say that the whole of the valley, near the river, seems full of life.

. . . In our passage down the river, we saw the Snagboat of the United States, employed at the expense of the general government, to remove these impediments from the stream; and by its aid, this particular danger to navigation is said to have greatly diminished of late.

. . . At noon, we repassed the mouth of the Missouri river, and quitted the clear waters of the Upper Mississippi, for the turbid current of the united streams, which seemed to us now even more muddy than before.^{§9}

On the evening of June 22, Mr. Buckingham embarked from St. Louis to go up the Illinois River on the *Troubadour*:

States, which says, “Cat fish of the Mississippi, *silurus Mississippensis* . . . It is often taken weighing over an hundred pounds.”¹¹⁵ *Silurus Mississippensis* is an illegitimate scientific name for a species whose vernacular name would be “Mississippi catfish.” The “Great Mississippi Cat” is the blue catfish.¹¹⁹ The other species that sometimes attains a giant size is the flathead catfish.

* *Bubalus Mississippensis* is not an accepted scientific name. The largest species of buffalo in the Mississippi River is the bigmouth buffalo, which includes *Ichthyobus bubalus* among its synonyms.

† This list is not an accurate portrayal of the Mississippi River’s fish fauna.

‡ On this point Mr. Buckingham borrowed from the prose of Timothy Flint: “It is a fact, to which we can bear ocular testimony, that they cross rivers; at some times swimming; at other times on a chip, or piece of bark, raising and spreading their tails, by way of sail.”¹¹⁶ (During Flint’s era a “chip” was a piece of wood chopped by an axe.)

. . . of the skill of the pilots we had a most unfavourable specimen, in their running us aground off the mouth of the Missouri Here, with closed windows to keep out the damp fog of the river—intolerably close heat—and with legions of mosquitoes, we passed on the whole the most unpleasant night that we had yet experienced in the country, always excepting that on which we were burnt out of the Planters' Hotel, at Augusta, in Georgia.

At daylight on the following morning, . . . by great exertion, the boat was floated off, and we proceeded to Alton

. . . A few miles above this, we passed . . . Grafton . . . , and then entered the river which gives name to the State

. . . The entrance is very narrow, scarcely a quarter of a mile across, but it expands gradually as you proceed upwards, and some beautiful small prairies are seen in the way. These are bordered by picturesque hills, at distances of from one mile to five from the river-banks, which gives the whole scenery the appearance of that observed on the Upper Ohio; but this soon passes away, and is succeeded by low, flat, and wooded land, which becomes very monotonous and uninteresting. The water is very shallow, and the current slow, while many parts of the banks on either side are so overflowed, that the trees appear to be growing out of the water, the flood extending sometimes for a mile or two inland. It is this which makes the river Illinois a very unhealthy stream in the autumnal months, the vast quantity of decayed vegetation, and the miasma of the plains occasioning bilious fevers and ague to be almost universal. These do not begin generally, however, till the 1st of August, and they attain their greatest violence in the month of September, when the heat is great, and the water low.

In the course of the forenoon, we got aground twice, from the ignorance or carelessness of the pilots, and were detained each time about a couple of hours before we got off again; while our utmost speed, even after we had cast off the heavy flatboats we had been towing, did not exceed 5 miles in the hour, and made our progress tedious in the extreme.⁵⁹

At lunchtime on June 23rd, one of Buckingham's fellow travelers declared that he had not slept the night before—"from the bugs and mosquitoes—both of which were indeed abundant." The *Troubadour* reached Naples at midnight, then proceeded upstream at dawn on the 24th: "During the day we had to suffer all the united inconveniences of heat, dirt, noise, insects, fetid odours, bad food, and worse company" ⁵⁹ The boat arrived at Peoria about midnight.

Among Mr. Buckingham's observations is a remark about the effects of rotting vegetation on the Illinois River and its fish:

There are a great many cat-fish in the river, of large size, which, during the spring and summer months, are deemed wholesome food, and are generally eaten; but in the autumn, they partake of the general sickliness of the country,

From the richness of the soil, its springs, boundless pasture, its excellent quarries of building and fencing stone, and its proximity to the Illinois river, it must unavoidably become a place of wealth: Western Greene County in 1832.⁸⁸

pine away and die, and hundreds of the dead bodies may be then seen floating on the surface of the river, as we were assured by those who professed to have seen them. This is attributed to some change that takes place in their food, and in the condition of the bottom of the river. From the waters being shallow, and the river's bed prolific in the production of long rank grass and weeds, these, when the waters get low, undergo decay like the land plants, and the decomposition of their vegetable matter imparts to the water of the river a quality which it is believed kills the fishes in it, and assists, perhaps, in producing the autumnal fevers among the human inhabitants of its banks, as all persons drink of it.⁵⁹

1840: Mrs. Steele

Eliza Steele boarded the steamboat *Home* at Peoria on July 9. As Mrs. Steele related in *A Summer Journey in the West*, her boat had gone far downstream into the Big Rivers Area by the following day:

This morning we passed one of those machines employed by the government, during low water for the purpose of clearing away the sandbars. It is a large wooden ark, worked by steam. A great shovel takes up the mud, brings it up, and throws it into the scow at the other side which is emptied upon the shores. The State has appropriated \$100,000 to improvements upon this river. There are several sandbars, and below Ottawa ledges of sandstone which, if removed, would render the navigation unimpeded at all seasons of the year quite to Ottawa, two hundred and ten miles above the mouth of the river. . . . We are continuously passing streams which run into the river Macoupin creek, its name taken from the Indian Maquapin, a water plant, whose smooth leaf floats upon the bayous and lakes in this region; its esculent root, after being baked under heated stones is a favorite food with the native tribes. . . . We have now upon each hand, the two last counties which border the Illinois. * Green, on the east, contains excellent land It is one of the richest portions of land in the State, . . . containing beautiful prairies, and excellent timber. In the cliffs which border the Mississippi on this county, bituminous coal is found among the sandstone and limestone strata, and crystal springs flow from their sides. Calhoun county on our right is the southern point of the triangle containing the military bounty lands. The point where the Mississippi and Illinois meet is low

* Mrs. Steele appears to have taken many of her facts about the Illinois River and adjacent counties from Peck's *Gazetteer*.

prairie subject to inundation and consequently unhealthy; coal has been found here, and large trees are famous for their honey. . . . The afternoon is beautiful; we are peeping up the forest glades, as the channel runs near the shore, or inhaling the rich perfume which the summer breeze shakes out from the trees. Suddenly the forest is passed and we gaze over the low prairie which lies between the two rivers, bounded by a line of round green hills which range across the country. ‘The bluffs of the Mississippi!’ exclaimed my companion, ‘and we soon shall see its famous waters.’ . . . The Illinois flowed as straight and still as a canal, about four hundred yards wide, we glided over its waters and soon found ourselves in a broad majestic stream which came rolling down between a range of bluffs; here, a mile broad, upon whose bosom some lonely islands stretched across from the mouth of the Illinois. The view was delightful upon each side; the fair plains of Missouri at our right, and upon the Illinois side, bold beautiful cliffs, or green cone like hills, covered with a soft carpet of verdure, sinking down upon the east side into lovely green dells. This style of hill is called by the French, Mamele. . . . The rapid tide of the ‘father of waters,’ presented a great contrast to the languid Illinois. The color is brown, but of a different tint from the Illinois, being a dark coffee brown, but clear and sparkling.

. . . The bluffs upon the Illinois shore, as we descend the Mississippi, become more bare and precipitous, and have a waterworn appearance as if the water had once flowed along their summits. The regular stratification of the sandstone and limestone of these cliffs, present the appearance of mason work, crowning the heights with castellated resemblances, so that we might imagine we were passing beneath some mountain fastness, with its frowning walls, dungeon keep, and warder’s tower. Occasionally masses of white limestone are strewed along the shore, or grouped upon the green sloping bank, as if some large city had there arisen upon the river’s side.³¹⁹

Mrs. Steele disembarked at Alton, where she “spent a delightful day”:

Alton is built . . . upon a sloping bank. . . . The markets are stored with wild game—deer, partridges, * prairie hen, † and water-fowl; fruits both wild and cultivated; various sorts of fish; corn, beef, pork, and vegetables of the finest order. . . . We ordered a carriage to-day to take us to Upper Alton After leaving the town we drove through some rich prairie land, interspersed with trees, through which we obtained fine views of the swift rolling Mississippi, and across it the verdant plains of Missouri, with green swelling hills beyond.

* Both the northern bobwhite and the ruffed grouse were sometimes known as partridges in former times. The bird in this instance probably is the bobwhite, which was much more plentiful than the grouse.

† Prairie hen = greater prairie-chicken.

. . . We found our friends in a large picturesque house . . . shaded by the graceful cotton wood, and pretty red bud and locust. . . . our friends drove us in their carriage through a pleasant road in an oak forest, to the Monticello Female Seminary.

. . . We returned to our hotel where we are waiting the arrival of our steamboat which is to take us to St. Louis. When I look around in this interesting country, and upon such towns as Alton, I wonder why our Atlantic cities are so full of people.³¹⁹

The next leg of Eliza Steele's "Summer Journey in the West" put her back on a passenger boat, headed down the Mississippi River:

Alton looked very pretty when we turned to bid a sorrowful adieu We are now all eagerly looking out, for the giant Missouri, whose junction with the Mississippi is but two miles below Alton. At length the point is in view, all gather upon the guards, and bend our eyes towards the right shore,—we are now before the mouth and behold an extraordinary scene. The Missouri does not, as travellers tell us, come rushing, and bounding, and dashing along, striking the Mississippi with such a concussion that volumes of mist arise in the air,—we beheld nothing so wonderful—a broad stream rolled down between its verdant banks, rapidly, and very like a torrent, but in quite a decent and proper manner. Its color—alas, for our pellucid lakes *—is a tint not often recognized by artists, but generally called gruel or soap-suds hue. It holds in solution such an extraordinary quantity of clay, that one wonders how the steamboat can force its way through it. Its rapid current is distinguished by the curls and little whirlpools among the mud. Where it meets the Mississippi is a small ridge of clay, and thick masses push themselves under the clear brown water, coloring it more with its impurity, until at last, the unhappy Mississippi, after struggling for some time, is completely lost in the clayey stream, as some pure young heart, striving against temptation, but lost at last. The streams continue separate for some miles below St. Louis, and there the river takes the Missouri character.

. . . Such an admirer of water as you know I am, you may be sure I regretted the soiling of my bright brunette Mississippi. To watch the foam of our vessel had been a favorite pastime, but alas, what a change from the diamond and emerald of our lakes, the topaz of the Illinois, the Zircon of the Mississippi to the soapsuds of the Missouri. I have called the Mississippi coffee color; it is now coffee-au-lait, and indignant must the father of waters be under so great an oppression. Several green islands adorn the stream . . . , and we are soon in sight of the city of St. Louis.³¹⁹

* Eliza Steele had traveled the Great Lakes.

After his boat was repeatedly stranded on sand bars—taking seven days to travel from Peoria to St. Louis in 1834—Amos Parker remarked, *Whatever others may say, I cannot call the Illinois a pleasant stream.*²⁴³

1841: J.C. Wild and Lewis F. Thomas

In 1841 J.C. Wild prepared and published a series of illustrations of various points along the Mississippi River, mostly in the reach between the Illinois and Ohio Rivers. In the accompanying text, Lewis F. Thomas provided glimpses of natural features and natural resources in the Big Rivers Area.

Among the economic advantages of Alton, Lewis Thomas listed “the fine body of excellent timber by which it is surrounded.” He also wrote that Alton is “backed by the oak-crowned summits of the bluffs.”³⁶⁸

Mr. Thomas mentioned that the Illinois bank of the Mississippi River is “heavily wooded” immediately above the mouth of the Missouri. He made note of four small islands at the junction of the rivers, “looking like bright bouquets upon the swelling bosom of the soft water.” He further remarked about the embouchure of the Missouri, “A sand bar (the spur of an island) stretches partly in front of the ‘mouth,’ covered with driftwood, indicating the ravages of the river upon its own densely forested banks.”³⁶⁸

Mr. Thomas summed up flooding patterns on the two rivers:

The floods of the Missouri usually begin early in March, and continue until the latter end of July; during which time it rises and subsides as its different tributaries bring down their increased volume of water. It so happens that seldom more than two great rivers are high at the same period. Many of these floods are never felt in the Mississippi. The great rise of the Missouri itself, from the melting of the snows, takes place about the middle of June, and beings to subside about the latter end of July.^{*}³⁶⁸

The Piasau Rock—legendary site of the paintings first described by Jacques Marquette †—was illustrated by J.C. Wild. The accompanying text says,

The Piasau, or Pi-as-sau Rock . . . is situated on the northern confines of the city of Alton, immediately on the Mississippi, from the surface of which it rises to a height of nearly a hundred feet Its summit is sparsely studded with dwarf cedars.³⁶⁸

* Dr. George Engelmann of St. Louis strove to dispel the notion of a “June rise” on the Missouri and Mississippi Rivers (see page 266).

† Father Marquette’s description of the Piasa pictograph is on page 8.

1842: James K. Paulding

In June of 1842 James K. Paulding rode a steamer up the Illinois River from its mouth to Ottawa. He reported the following observations in the January 1849 issue of *Graham's American Monthly*:

That gallant officer and enterprising traveler, Major Long,^{*} did the Illinois great injustice when he described it as "an extended pool of stagnant water," for it was, when I saw it, one the prettiest streams to be found in this country of fine rivers. The width is such as to give a full view of objects on both sides in passing; the basin was full without overflowing; and though the current was gentle, its waters were neither muddy nor stagnant. It should, however, be observed, that my journey was in the season when the rivers of the great Mississippi valley, though beginning to subside, were still high, and that those who wish to see them to advantage should visit the South and West before the heats of summer. Else will they be assuredly disappointed, and accuse me of indulging in a favorite amusement of travelers.[†]

The Illinois, until you approach the Rapids,[‡] seems made on purpose for steam navigation, which is seldom, if ever, molested either by winds or waves. With the exception of points where the prairies approach the borders, the river is every where skirted by those magnificent forests which constitute one of the most striking and beautiful features of this new world; and completely sheltered from the storm, seems to glide along unconscious of the uproar of the elements around. It flows through a region which, even in this land of milk and honey, is renowned far and near for its almost unequaled fertility, and the ease with which it may be brought to produce the rich rewards of labor. There is, perhaps, no part of the world where the husbandman labors less, and reaps more, than throughout a great portion of this fine state, on which nature has bestowed her most exuberant bounties.

. . . With the exception of here and there a solitary plantation, or a little embryo town, few traces of man appear on its borders until you arrive at the great prairie, above the head of steam navigation,[¶] which extends all the way to the lakes.[§] At long distances we came upon one of those evidences of the busy

^{*} Mr. Paulding was referring to Major Stephen H. Long, whose report about the Illinois River (written by William Keating) is quoted on page 125.

[†] Travelers sometimes found entertainment by exaggerating their descriptions of regions they had visited.

[‡] The rapids extended upstream from Starved Rock.

[¶] The upstream limit of navigation for steamboats was in the vicinity of La Salle, or Utica, or Ottawa—depending on the depth of water in the Illinois River.

[§] Paulding was referring to the Great Lakes.

body, man, in the shape of a little village, a clearing, or an establishment for putting up pork for exportation, where I was told, notwithstanding the "hard times," * they throw the ears, feet, and often heads of the swine into the river, to feed the eels and catfish. Indeed, from what I observed throughout the whole extent of my journey, in this suffering region, there is almost as much wasted there as would serve to feed the starving manufacturers of England. ²⁴⁶

1843: A. & Z.

On the nineteenth day of October 1843, a Bond County resident wrote to the *Prairie Farmer* in Chicago. He signed his letter "A. & Z": †

To the Editors of the Prairie Farmer: I enclose some extracts from the memorandum of a rover

. . . *Monticello* is a small village a few miles north of Alton, with several well-built and spacious dwelling houses, and a fine Female Seminary, built of stone, which I should judge was well supported, if numerous groups of happy maidens, walking in the cool of the day near the premises are any criterion. But the beauty of the place is nearly destroyed by the careless growth of young timber and brush, which is the case with a great proportion of the towns in the prairie country, so far as I have had opportunity to observe. Timber, like sheep, in a wilderness like this, crowds close around and seeks the protection of man. ‡

. . . *Carrollton*, the county seat of Green co., and a very pretty place. I have learned within a few days that some of her enterprizing inhabitants have kiln-dried a lot of corn meal, and shipped to the West Indies. This place seems to be surrounded by a peculiarly fertile and well cultivated soil, and wealthy farmers. Saw the best corn here I have seen this season. ¶ 'Twas "black as

* The region was suffering an economic depression.

† The editors of the *Prairie Farmer* appended a note to the letter of A. & Z.:

Mr. "A. & Z." is welcome to our columns, although we have not the remotest idea who he is. Will he please write often?

Notices of the country, giving correct information, and not written with a view of puffing any particular location, are what we should like to publish. The *Prairie Farmer* we desire to make a record of passing events that shall be referred to ten or twenty years hence to mark the progress of the West. It is the only journal of the West in convenient form for preservation, and is therefore best adapted to become its chronicler; and those who take it from its commencement and keep the files complete, years hence will prize them highly. ²

‡ The manner in which barrens and some prairies grew up into woods as soon as they were protected from wildfires is described on pages 187, 198, 233, 245, 247 (footnote), 280, and 337.

¶ Crops were not uniformly good in 1843. Across the river in Pike County, Joseph King wrote on May 20, "Our wheat crop in this county, this year, is almost a *total* failure—there *will not*

Upper Town . . . has some points that, transferred to canvas, would bear comparison with the boasted scenery of the old world.

. . . in the season when the heights and broken swells are covered with verdure, few more beautiful spots are to be found in the country.

— Eliza Farnham at Upper Alton in 1840.¹¹⁰

your hat." There are quite a number of English settlers about here, and most of them take peculiar pains in their farming operations, but seem to be amply rewarded by their fine farms, good crops, and cattle. Many of them have drained their lands for several years by blind ditching.* Irishmen will dig and cover these ditches $2\frac{1}{2}$ feet deep, at 30 cents per rod or less, the lumber being furnished to their hand. In a deep soil I believe the drains are covered about 18 inches deep with slabs or plank, supported by cross-pieces fitted into the banks of the ditch—a very slight fixing, compared to the English method, in which bricks moulded and burned for the purpose are used. These drains last only from three to five years; but the ravines and sags thus drained produce better than the uplands. The craw-fish frequently perforate the earth, so as to let in a current of water from the surface in time of rain, and thus destroy the sluice. Bartlett's ditching machine is thought much of, by some, for these as well as open ditches. This machine leaves the ditch in the right shape at the bottom, (a right angle,) so that it may be planked without cross-pieces.

. . . *Timber culture.* As I think the subject of timber one of great importance, I will here mention a fact or two on that subject which I neglected to do in its proper place. I saw a row of some half dozen or more beautiful cotton-wood trees on the farm of Messrs. Hobson, near Carrollton. They were two to three feet in diameter at the butt; and notwithstanding they have grown up in the open field, I think the best of them would now make two to three rail-cuts apiece.[†] These trees are the growth of not over twenty three years, and I think of less time.

be enough for seed, should everything mature that is now on the ground. I had 68 acres myself, all of which I plow up for other grain—nor am I alone."¹⁹³ Far to the north in Lockport at the end of the 1843 growing season, John Davis wrote, "The corn crop this year is represented as unusually light, and I was strongly impressed with the fact, so far as fields are left standing." Mr. Davis was visiting from Massachusetts, and he had been astounded by the "extraordinary vigor and growth of the country"—but not the corn crop: "Indeed it seemed scarcely equal to our crops in Massachusetts."²⁰¹

* The *blind ditch* was a precursor to modern subsurface drainage tile lines. A blind ditch was constructed by digging a trench, laying planks at the bottom to form a hollow conduit, then back-filling the trench with soil. The open space at the bottom of the trench bled water from the soil and carried it to an outlet in a stream channel or ditch.

† A fence rail was usually cut about ten feet long. The author was saying that these trees had grown tall enough to be cut into two or three rail lengths (about 20 or 30 feet).

. . . the calm, beautiful ever-placid Illinois; beautiful now as on the day the enthusiast voyageur first deemed it the pathway to a "paradise upon earth."

— Edmund Flagg, who toured the Big Rivers Area in 1836.³⁴⁵

When prairie is first broken with the plow, cotton-woods will come up spontaneously quite plenty. Would not those who find it necessary to raise timber do well to encourage the growth of a good proportion of this species? This kind of timber is said to last many years in rails, if the bark is taken off while it is green. I am told that the French, on the river below here,^{*} have fences of this sort, which have been in wear forty years.²

1843: John Davis

On the morning of November 26, 1843, John Davis was aboard the *Mermaid* as it steamed upstream from St. Louis and entered the mouth of the Illinois River:

We entered the Illinois, about 10 O'Clock. The western bank of the Mississippi,[†] during all this morning presented a succession of towering bluffs of a very singular formation, and quite white. The cliffs often rose several hundred feet perpendicular, and consisted of alternate swells, and depressions, many of the recesses resembling great arches set on end.

The Illinois is a broad, tranquil, shallow stream. Although our boat drew less than 30 inches, she began to experience difficulties before we had ascended 30 miles, and much time was wasted in feeling our way along, very slowly. We, however, reached Peoria . . . , on the evening of the 28th about 10 O'Clock.²⁰¹

1844: E.S. Smith

Elizabeth Smith took passage by riverboat from Cincinnati to Fort Madison, Iowa, in early July of 1844. She wrote to her sisters as the trip progressed down the Ohio and up the Mississippi. At St. Louis on July 9th she reported, "Our Boat was heavily laden and rather slow, and when we got into the Mississippi the current was so strong that we could not go more than 4 or 5 miles an hour . . . "[‡] Two more nights and a full day of travel carried

* A. & Z. was referring to French settlements on the American Bottom along the Mississippi River.

† Davis would have been correct to refer to these bluffs as being on the northern (or eastern) bank of the Mississippi.

‡ Miss Smith's boat had to contend with one of the greatest rises of the Mississippi River, the notorious flood of 1844.

her through the Big Rivers Area to Fort Madison. This leg of her trip was different: "We had a nice new boat, the river was not as high, and it was much more pleasant above the mouth of Missouri & Illinois." ³⁵²

1845: Solon Robinson

Solon Robinson, a prominent farmer and writer from northwestern Indiana, set out on New Year's Day 1845 to "proceed through the South Western States." His excursion was "for the purpose of procuring information and promoting the interests of 'The Cultivator,'" an Eastern agricultural magazine. Subscribers to the *Cultivator* kept apprized of Robinson's inspection tour in a series of letters titled "Notes of Travel in the West."

On the 16th day of his tour down the Illinois River valley, Robinson's buggy reached Carlinville. The following day took him south across the Big Rivers Area toward Alton:

During this day's drive, after leaving Carlinville, I witnessed the rapid increase of timber that is every where taking place in the prairie country, where protected from fire. * Though during the past fall, in consequence of the great drouth that followed the great flood, [†] immense damage, not only to the young timber, but in the destruction of fences, has been done throughout the whole of my journey. And this drouth still continues, so much so that the few mills that are to be found in this part of the State, are almost useless, and settlers complain of "long trips to mill." The roads, even in the beds of streams that are sometimes impassible, (where bridges are not, and that is every where when it is possible to "get along" without them,) are dusty

. . . Over a rough uncultivated tract, mostly timbered, I went to the somewhat famous town of Alton, or rather towns, for there are three of them, Upper, Middle and Lower From Alton to St. Louis is 25 miles, down the far famed American bottom—an immense tract of land that was covered, and in some places greatly injured, by the great flood. But it never was under that kind of a state of cultivation which would satisfy any man who had an aspiration above a "hog and hominy" kind of existence, and was willing to have the "shakes" [‡] half the year, for permission even to enjoy that much.

. . . Fences are much swept away, and probably the barns with them, for they are not to be seen now, although the little old miserable dwellings, like the

* On the basis of what he had learned when he passed through Sangamon County, Solon Robinson noted, "As an evidence of the rapid growth of timber, I was told of one 80 acre lot that was cut off nine years ago, and will now afford fifteen cords to the acre. This kind of wood is worth about \$1,25 a cord in Springfield." ¹⁸⁶

[†] The Mississippi valley had experienced the greatest flood in history during the year prior to Robinson's visit to the Big Rivers Area.

[‡] Malaria was called "the shakes."

The lower Illinois River in 1836: . . . *this stream, to the eye, is one of the most beautiful that meanders the earth.*³⁴⁵

owners, hang on. The land in many places is much grown over with bushes, mostly crabapple, which abound by the million.

. . . During the flood, the ferry was nine miles wide; now less than a ninth of that . . .¹⁸⁶

On January 22 Solon Robinson took this ferry across the Mississippi to St. Louis and continued his tour southward.

1846: Charles Lanman

Charles Lanman boated up the Mississippi River in the spring and summer of 1846. He found the Mississippi unpleasant downstream from the Big Rivers Area:

. . . as the current is exceedingly rapid, the course of the river is constantly changing. . . . the water is always so very muddy that a tumbler full will always yield half an inch of the virgin soil. The surface of the stream is never placid, but for ever turbulent and full of eddies and whirlpools, as if its channel were composed of a continued succession of caverns.

. . . When I left the turbid and unruly bosom of the Lower Mississippi, I felt towards it as a person would naturally feel towards an old tyrant who had vainly striven to destroy him in his savage wrath.¹⁹⁸

Lanman found relief when he finally passed the mouth of the Missouri and entered the Big Rivers Area:

I would now speak of the Upper Mississippi, and I only regret that I cannot strike the poet's lyre, and give to this parent of perpetual streams" an undying hymn of praise. The moment that you pass the mouth of the Missouri on your way up the Father of Waters, you seem to be entering an entirely new world, whose every feature is "beautiful exceedingly." The shores now slope with their green verdure to the very margin of the water, which is now of a deep green color, perfectly clear, and placid as the slumber of a babe. My first view of this spot was at the twilight hour, when the time was holy, and every object that met my gaze seemed to have been baptized with an immortal loveliness. Over the point where the sun had disappeared, floated a cavalcade of golden clouds, and away to the eastward rolled on, along her clear, blue pathway, the bright, full moon, and now and then a trembling star,—the whole completely mirrored in the bosom of the softly flowing but ever murmuring stream. On my right lay a somewhat cultivated shore; on my left a flock of islands, whose

heavy masses of foliage rested upon the water; and in the distance was the pleasant and picturesque town of Alton No living creatures met my gaze, save a wild duck and her brood gliding into their shadowy home, and an occasional night-hawk as he shot through the upper air after his living food; and no sound fell upon my ear, but the jingling of a distant cow-bell and the splash of a leaping sturgeon.¹⁹⁸

One June evening he and a friend fished from a skiff at the mouth of a bayou opposite Alton. Mr. Lanman caught a catfish:

His length was nearly four feet, and his weight must have been upwards of sixty pounds. While we were recrossing the river to reach our steamboat, a savage little steamer from Keokuck came rushing down, ahead of another with which it was racing, and passed so very near our shallop that we were swamped, and while my companion and myself were swimming to the shore for dear life, the monster we had captured was probably scooting away towards the Torrid Zone, not much injured, but a good deal frightened.¹⁹⁸

1847: J.H. Buckingham

Mr. Buckingham, a newspaperman from New England, toured Illinois in the summer of 1847. He sent a set of letters back East to be published in the *Boston Courier*. After boating part-way down the Illinois River, Buckingham arrived at Jacksonville. He then took a stagecoach across the Apple Creek valley, stopping at Whitehall on the evening of July 15. He wrote of the day's journey,

The country begins to lose that level appearance that it has exhibited before,* and, as we proceed to the south, is more wooded, with more up-hill and down-hill. There is, however, still much prairie land to pass over, and the soil is, if possible, richer than it is farther north. Everything will grow here, and the settlers have taken some pains to plant trees, particularly the locust and the rock or sugar maple. In the valleys and on the hill-sides we find oak, and walnut, and the hazel-nut. On the hills are the blackberry and other bushes known in

* A few days earlier in the vicinity of Springfield, Buckingham had been awed by the agricultural productions of the broad prairie lands:

The fields of corn—the miles and miles of corn to be seen here—would strike a Massachusetts farmer with astonishment. A farmer in this neighborhood thinks nothing of raising one hundred acres of corn in one lot, and it grows of itself without any assistance. . . . I am almost afraid to tell you that I saw yesterday, in one drove, eleven hundred head of cattle, besides several hundred horses, and some mules, which were on their way East for sale Hogs, of course, are plenty, and it is for the purpose of fattening these that so much corn is raised. . . . The animals are marked and turned out into the open prairie, and they come home at night, like the cattle, of their own accord, to be fed with "something warm and comfortable,"—something that they cannot get in their daily wanderings.²⁶⁹

New-England—the mustard, the mullen, the whitewood, &c. * We are now in a part of the country that is “fenced in” As we pass through a more generally settled district, we find the prairie grass is nearly run out, and in its place is the timothy, and the red-top, and the clover. This is surely a great country²⁶⁹

He arrived at Alton on July 16th:

On the top of the last hill I had my first glimpse of the Mississippi river—apparently a calm, sluggish stream, as smooth as plate glass, with a bright polish which reflected the rays of the burning sun with dazzling splendor—it was painful to look at it. I found afterwards, that it was not so sluggish, but that it ran at the rate of about four or five miles an hour. . . . Opposite to the city is a large island which prevents a view of the Missouri shore, but on the bluffs one can see over the low land and its trees, and have an uninterrupted sight of the hills of the neighbor-state.

. . . There is an abundance of lime stone to be found in the town, close down to the edge of the river.²⁶⁹

Buckingham “rode out a few miles in the neighborhood . . . to see the country”:

The prairies once presented a vast expanse of waste land, covered with grass, and flowers of all the colors of the rainbow. Only a few years have been devoted to their cultivation, and now they are covered with corn and wheat, and oats, potatoes, hemp, and trees. Time was when there were no trees, except on the borders of the streams—now the locust is to be seen every where, and the farmers have planted that and many other descriptions of trees on the borders of their lots, in groves, and before their dwellings.²⁶⁹

On July 17 he boarded the *Luella* for St. Louis:

Our passage down the river was very pleasant The scenery was beautiful. A short distance from Alton we came to the low land called the American Bottom—which at times, when the river is highest, is generally overflowed; it is rich soil, richer than any other in the world. This bottom-land extends on both sides of the river for nearly a hundred miles, and has proved to be inexhaustible—it never wears out. . . . at one place farther south, it is said that corn has been raised every year in succession for one hundred and fifty years.

* Mr. Buckingham’s “white-weed” may be the ox-eye daisy (*Leucanthemum vulgare*). Earlier in his trip, between Tremont and Delavan, Buckingham had made note of “the white-weed of our New-England, the wild indigo, the yellow mustard, the mullen, the clover, red and white, the purple nettle, the various colored phlox, numerous yellow, pink and crimson flowers, and almost everything else that is beautiful, that we have ever heard of.”²⁶⁹

The view from the summit of the Mamelles . . . was one of eminent, surpassing loveliness. It is celebrated, indeed, as the most beautiful prairie-scene in the Western Valley, and one of the most romantic views in the country. . . . In front is spread out the lovely Mamelle Prairie, with its waving ocean of rich flowers of every form In one direction the view is that of a boundless plain of verdure; and at intervals in the deep emerald is caught the gleam from the glassy surface of a lake. . . . All along the northern horizon, curving away in a magnificent sweep of forty miles to the west, rise the hoary cliffs of the Mississippi, in the opposite state, like towers and castles, while the windings of the stream itself are betrayed by the heavy forest-belt skirting the prairie's edge.

— Edmund Flagg, describing his view from St. Charles, Missouri,
across the prairie to the river bluffs in Illinois.³⁴⁵

A few miles from Alton, I believe only three, is the mouth of the Missouri, a yellow-colored water, which empties into the Mississippi, but does not mix with it for miles and miles in its course. The difference in the two streams is marked so strongly, that while one is on the clearer waters of the latter, the waters of the other, running only a few feet distance from the boat, look like a sand-bar extended along the side. After we proceed some miles, the two become united; but after all it is like the amalgamation of milk and molasses, with a streak of light and a streak of dark. The Mississippi, however, never again becomes the clear, bright water that it is in the regions above. The bottomlands are well wooded, and the foliage of the trees is the most dense I have ever seen. I believe that oaks and elms, and maple and locust, and walnut, are the most abundant, although other varieties are interspersed. Occasionally you will see a lombardy poplar, but it is where somebody has planted it—it is not natural to the soil. There are no chestnuts and no pines.²⁶⁹

After a brief stay in St. Louis, Buckingham headed back up the Mississippi:

And this is the “mighty father of rivers!” . . . but he is a small father, after all, at this end, not being over a mile and a half to a mile and three quarters wide above St. Louis. . . . From here upwards, he is slim and shallow. About twenty miles above St. Louis, the Missouri river empties in him, as I have already stated, and as the Missouri is the bigger, if not the better stream, it seems rather a mistake that it should lose its identity—it would be more appropriate to give the name Missouri to the whole river below, and to lose the Mississippi.

. . . We stopped at Alton during the night, and took in two passengers, but until morning there was not much to be seen The bottom lands which lie along the river for nearly a hundred miles, are not interesting in the matter of scenery, as there is much sameness in them; after they are once seen, they only appear beautiful for their richness of soil and their beautiful supply of produce. The

shore is generally bold—sufficiently so for the light draught boats to run up where it pleases the captains, for any purpose whatever²⁶⁹

Buckingham boated up the Mississippi as far as Galena. After this leg of his journey, he reflected,

I am sure that no vessel in head wind ever sailed more miles to beat up one, than I sailed in the steamer *Kentucky*, a few days ago, to get half a mile up stream. At times, we shot across to the left bank to within a few feet, hardly leaving us room to turn, and then went directly back again to within a few feet of the bank on the opposite side. Sometimes, by this crossing and re-crossing, we gained a little, and once, I believe, the channel was so twisted, that when we were on the right we were actually lower down the river than we were a short time before when over on the left. This was owing to the shallowness of the river and the sand-bars.

The sand-bars in the Mississippi are continually shifting, and a pilot who does not constantly travel over the route is very apt to become unfitted for his business, and not by any fault of his own. Once we ran upon a sand-bar, which the captain said did not exist when he came down on his last trip. . . . the Captain and Pilot took a small boat and went out to take soundings, and find the channel; having found it, they planted buoys for the benefit of whoever might come after them, but without much hope that they would be of service for many days. . . . It is supposed that with a comparatively trifling expense, a clear channel might be kept open all the season²⁶⁹

1847: A.W. French

In an address to the second annual meeting of the Illinois State Historical Society, A.W. French recalled his arrival in Illinois decades earlier, in 1847. After an overnight stop in St. Louis, Mr. French had proceeded up the Mississippi. His words are preserved in the *Transactions* of the Historical Society:

. . . I took passage to go up the river to stop at a place . . . called Gilgal. The island, so called made by the Sny Cante Slough * which comes out of the Mississippi above Hannibal and returns to it near Clarksburg, † a distance of about 30 miles, was the home of many deer, and I saw them very often. A spot on these swampy plains would raise tens of thousands of geese and ducks—enough to darken the sky for a few moments.¹²⁴

* Properly spelled, this is Sny Carte Slough. Evidently the typographer could not read Mr. French's handwriting.

† Hannibal and Clarksville ("Clarksburg") are in Missouri. Snicarte Slough is on the Illinois side of the Mississippi River.

It was upon this stream, that the first settlement was made by the French emigrants from Canada: and here, from the salubrity of the climate, the surpassing beauty of the scenery, and the richness of the soil, they promised themselves the possession of a second paradise.

Howard Stansbury describing the Illinois River in 1838.³¹⁴

1847: Rudolph Friedrich Kurz

Herr Kurz, a Swiss artist, was living at St. Louis in the spring of 1847. He took the opportunity to go on an excursion to Galena:

At the end of May Mr. Michel most kindly invited me . . . to go up the Mississippi with him. . . . bluffs begin near Alton with what is called the Pia * rock, well known from an Indian tradition and an age-old, half-disintegrated hieroglyphic drawing of a colossal eagle

The bluffs extend along the left bank of the river all the way to Warsaw. They are not lofty but oftentimes original in form and beautiful in color. Between them are wild glens and ravines, where one sees grotesque forms of trees, masses of rock, and boulders that have fallen from the heights above. The Mississippi is beautifully clear until it mingles with its tributary, the Missouri, which is invariably muddy † Therefore only as far as Illinoistown, ‡ opposite St. Louis, can one follow the clear stream; after that the waters become turgid and dark.¹⁹⁵

1849: Alonzo Delano

Alonzo Delano was a Forty-Niner. He set out for California on April 6. The first part of his journey brought him down the Illinois River from Peru. When he reached St. Joseph, Missouri, he wrote a letter to be published in the Ottawa *Free Trader*:

I do not intend to give you a sketch of the scenery along the Illinois River, as it is too familiar to the most of your readers; but I was utterly astonished at the vast multitude and height of the Indian mounds from Beardstown quite to the mouth. I have often read of them but had never formed an adequate idea of their number. Every prominent bluff seemed covered and attest that a dense population of a race, now unknown, once covered this beautiful region, and

* Pia = Piasa.

† Later in his journal Kurz reiterated and expanded on this observation: "The Missouri is invariably muddy. . . . That is what gives the Mississippi its 'coffee and milk' color below Alton."¹⁹⁵

‡ Illinoistown = East St. Louis.

whose only history is written in these hillocks that crown the summits of the bluffs or are scattered over our rich prairies. *⁹⁷

1850: Orville Hickman Browning

At 1 a.m. on October 27, Orville Hickman Browning boarded the steamer *Connecticut*, which was moored to the Illinois River landing at Frederick in Schuyler County. The river was low, and the 70-mile trip to Hardin in Calhoun County consumed more than a full day. Mr. Browning's diary reads, "Sunday Oct 27 All this day on the River, boat a good part the time on sand bars—and did not reach Hardin til 2½ Oclock in the morning." ²⁴⁸

1850: Arthur Cunynghame

In the autumn of 1850, Arthur Cunynghame took a passenger boat from Keokuk to St. Louis:

In many parts of the river, the water was exceedingly shallow, occasionally not more than three and a half feet deep; yet, fortunately, we did not touch the ground.

The snags, which presented themselves in a sort of *chevaux-de-frise* to the ascending boats, were sufficiently formidable

Wild fowl of all description were very numerous, from the lordly swan to diminutive teal; and they were sometimes so tame as almost to allow the vessel to cleave her way through their groups. ⁹²

Mr. Cunynghame's boat passed Alton early in the morning of October 21.

1851: W.W. Davis

W.W. Davis and his father made a quick tour of Illinois in 1851. One leg of their trip took them through the Big Rivers Area. Their excursion corresponded with one of the wettest times in the middle of the 19th century. [†] Mr. Davis' chronicle of the trip relates,

From St. Louis, 20 miles up the Mississippi to Alton. Here we had to take stage across the country. Our introduction to the Sucker state. [‡] No luxurious Con-

* Evidently Mr. Delano had mistaken loess hill prairies for Indian mounds. Many of these grass-clad hills are capped with burial mounds, but the great bulk of such eminences consists of geologic deposits that have not been built up by human activity.

[†] Gershon Flagg's account of this rainy season is on page 83.

[‡] John Dean Caton, one of the state's most prominent early citizens, explained that the nickname "Sucker State" originated in the lead-mining region of Jo Daviess County:

cord coach with upholstered backs, but a rough spring wagon with a canvas cover and soft boards for seats. What roads! A series of swamps.⁹⁶

The 79-mile stagecoach trip from Alton to Jacksonville took 23 hours. A little more than two weeks later the Davises boarded the *Connecticut* at Naples to proceed up the Illinois River: "Heavy rains made the river look like a vast lake, bottom lands covered to the distant hills."⁹⁶

1852: Daniel S. Curtiss

Daniel Curtiss prepared the majority of his *Western Portraiture, and Emigrants' Guide* by gathering information from other publications. A few remarks about the Big Rivers region appear to be original, and they are quoted in the following paragraphs.

Mr. Curtiss counseled, "Immediately along the Illinois river the lands, generally, are low, rich, sometimes wet, and heavily timbered with elm, oak, walnut, linn, pawpaw, locust, sycamore, and many other varieties; valuable for lumber, building, and fencing."⁹³

The poorly drained, unhealthful condition of the American Bottom was described by Curtiss, who added, "It will be recollect that a few years ago, Lotteries were numerously got up in the West, declared for the specious purpose of *Draining the American Bottoms*; but we have never learned that they produced any such beneficial results, although many thousand dollars worth of tickets were sold for years."⁹³

According to Mr. Curtiss, rivers flooded annually in the region. He portrayed these floods as "an event of great sublimity, and characteristic of the West." Curtiss further stated, "Memorable and destructive floods occurred on the Mississippi and Illinois rivers, in 1832 and 1846." *⁹³

Most of the lead seekers who constituted the population of Jo Daviess, went up the Mississippi river from the southern part of the State. Their practice was to go up in the spring and work at lead mining during the summer, and to go down the river in the fall and spend the winter in a warmer climate. This annual migration up and down the river, corresponded exactly with the habits of a fish found in the Mississippi, well known as sucker, and hence that appellation was applied to those migratory miners, and was soon thereafter applied as a general name to the inhabitants of the State.⁶⁵

* Daniel Curtiss' years for high waters (1832 and 1846) do not match the dates most commonly recorded for extraordinary floods on the Illinois and Mississippi Rivers. An 1869 report by the U.S. Army Corps of Engineers states that "the highest flood which has ever occurred since the settlement of the country" on the upper Illinois River was in February 1832,³⁷⁰ but other eyewitnesses and early historians cite years other than 1832 for the greatest rises in the Illinois River.

The season after the Deep Snow of 1830–31 was often recalled as one of the wettest times in the Illinois River basin: "In the spring of 1831, when the snow melted, the face of the country was covered with water. The little creeks became great rivers, and all intercourse between the settlers was stopped; for people could have traveled better with steamboats than with ox teams."¹⁰⁰ John Lindley, who emigrated from Kentucky to McLean County while the deep snow was melting in March of

1853: An Old Pioneer

The April 1853 issue of the *Western Journal and Civilian* carries an article, "Birds of the Mississippi Valley." John Mason Peck, writing under a pseudonym, provided a general review of the region's birdlife. One paragraph pertains specifically to the Big Rivers Area:

The Prairie Hen or Grouse of Illinois (*tetrao pratensis*) lives all the year and breeds in the middle section of this valley. This is a beautiful bird, nearly the size of the domestic fowl, and hovers about the cornfields of the farmer near the prairies. It is but a few years since they were abundant in the prairies, on both sides of the river, adjacent to St. Louis, but the demand of the eating saloons and the activity of our sportsmen have nearly extinguished the breed within twenty or thirty miles of that city. The Legislature of Illinois, during its late session, have passed an act, to take effect in certain counties in the middle and northern sections of the State, to prevent the destruction of game in the breeding season; but in great kindness to the sportsmen of St. Louis, have left the adjacent counties free to all depredations on wild game.⁸

1853: L. Grosvenor

The Reverend L. Grosvenor's Thanksgiving 1853 discourse at the Presbyterian church in Jerseyville contained a few remarks about the plants and animals of the area:

Till 1834, the place called Jerseyville had been known as Hickory Grove, from time immemorial. This name was derived from the fact that the piece of oak forest intersprinkled with 'semi-occasional' hickory tree, still standing in part on the land of Davis, Morean, Corbett and Burke, was then the only growth of trees on the ground belonging to Jerseyville.

. . . the old school house, . . . in 1836, was built on land devoted for school purposes it was a very common thing to meet the wild deer going to school from the old Red House, to the old school house . . .

1831, recalled that "the country was a sea of water from one to three feet in depth," and "this was the case more particularly in Macoupin and Sangamon Counties."¹⁰⁰

The 1879 *History of Tazewell County* states that 1835 was a record year for flooding on the Illinois River: "It is claimed that the greatest rain-fall that has ever occurred in this country was in 1835," and, "The Illinois and tributaries are said to have been higher than at the breaking up of the big snow in the spring of 1831, or any time since." The editors added, "The years 1842, 1844, and 1858, are also notable as years of great rain-fall."⁷¹

Before the watershed and floodplain of the Mississippi River were radically altered for agriculture, the most notorious flood in the Big Rivers Area occurred in 1844 (see testimonies on pages 244, 267, 280, 282, 369, 385 to 388, 391 to 395, and 414).

The bottom lands . . . from the fact that they are constantly overflowed by every freshet . . . , are now, and must ever remain, uninhabited. Hence, the river presents the appearance of flowing through an ancient, vast, and solitary forest, clothed with a foliage rich and luxuriant beyond description, whose solemn silence has never been broken, save by the howl of the panther, or the still more savage yell of the red man.

— Civil Engineer Howard Stansbury, upon completion of a survey
of the Illinois River in 1837.³¹⁴

. . . In 1833, the Indian and the buffalo had long departed for the West . . . ; but the hungry wolf still made night hideous, and the timid deer shook their antlers here, and galloped over the places of our present sanctuaries and homes.

(Within the memory of Mrs. Ford Lewis, a wandering bear came too near Jerseyville to be healthy for him, when soon a posse of citizens, with guns and hounds, started in pursuit of Bruin, running him nearly where Wm. Whitworth now lives, finally capturing him some distance northwest of Jerseyville.)⁷⁸

1854: Carl Schurz

On October 2, 1854, Carl Schurz wrote from St. Louis to tell his wife about his recent trip across the state of Illinois. At the end of his account, Mr. Schurz related,

From Alton to St. Louis, one travels on the Mississippi. Its dark waters move majestically between the eternal forests on its banks. Great herons glide on slow wings over the waves of the stream, swooping here and there to spear their prey. Swarms of large birds of prey move across the dark primeval forest of the shore, and strengthen the melancholy impression which the solitary wildness makes on the soul of the wanderer. For scarcely has the city of Alton vanished from sight, when cultivation ceases on both sides of the river. All is solitude until one reaches the immediate vicinity of St. Louis. Where the broad Missourimingles its yellow, muddy waters with those of the Mississippi, the color of the stream changes. At first, the water of the latter is clearly distinguishable from that of the former, one side of the stream being dark brown, the other pale yellow. But soon the Missouri with its tremendous mass of water overcomes the Mississippi, and the whole stream becomes clay-colored.¹⁰²

1854: J. Ambrose Wight

As editor of the *Prairie Farmer*, Ambrose Wight took a train from Chicago to Springfield to attend the second annual Illinois State Fair. In the October 1854 issue of his magazine, Mr. Wight reported,

As the State Fair waned, I determined to indulge a long cherished intention of seeing how the country south of Springfield would look So jumping

In 1836 Edmund Flagg portrayed the Big Rivers Area from the blufftop at Alton—*a range of heights upon the Illinois shore, from the summit of which is spread out, like a painting, one of the most extraordinary views in the world:*

*The ascent is arduous, but the glorious view from the summit richly repays the visiter for his toil. . . . It was the sunset hour. The golden, slanting beams of departing day were reflected from the undulating bosom of the river, as its bright waters stretched away among the western forests, as if from a sea of molten, gliding silver. . . . the eye wanders over an interminable carpet of forest-tops, stretching away till they form a wavy line of dense foliage circling the western horizon.*³⁴⁵

aboard the Alton train on the Chicago and Mississippi road we were soon off to the South.

. . . The greater part of the way is through an expansive prairie, a considerable proportion of which is still unbroken.

. . . The drouth has been very severe in all this region the past season.* About the only present evidence of it, besides the low state of the streams, is the dwarfish size of the corn. . . . The grass on the upland prairies, which I have been told were as dry as brown paper in August, is now green as it commonly is in July; and as a consequence the cattle are pricking up again, and butter is still a possible thing.

. . . As we approach Macoupin, the timber, old and young, begins to be more plenty. It has all the time been in sight, in the distance—say five to ten miles away—but it now approaches us, as we pass through more broken or rough land. There is much less of young timber along the Railroad lines, than in the north end of the State. It seems to lie in heavy bodies together.

. . . I saw but two flocks of sheep from Springfield to Alton, but droves of cattle were many

. . . As we approach Alton the country becomes rough, though there are beautiful orchards in the vicinity Alton itself is situated upon the hills, and among the hills, and under the hills. It has a very picturesque appearance . . .

. . . The high bluffs must be 150 feet at least from the Mississippi, which is now very low. In the great rise of 1844, Alton stood like the world of old, “in the water and out of the water:” and as Judge Baillache of the Telegraph told me, reaching eight or ten feet up the building in which his paper was printed³⁶⁶

* The drought of 1853–54 was one of the most extreme on record in Illinois. Dr. E.R. Roe discussed some of the ecological impacts of this extraordinary dry spell at the 1859 annual meeting of the Illinois State Natural History Society.^{287, 288}

Ambrose Wight also made an excursion west from Springfield to Pittsfield, which he reported in the *Prairie Farmer*'s November 1854 issue. When he reached the Illinois River at Naples, Mr. Wight made note of the broad bottomland, "over which the water rushes in its spring tantrums to the depth of from one to ten feet." After crossing the river east of Griggsville . . .

When we get fairly mounted upon the bluffs, which are from one to two hundred feet high, we begin to trundle on over a very pretty succession of rolling lands, a good part of them covered with young timber, which seems to crowd in and take possession at once of every unoccupied rod for many miles together. This timber is now from twenty to thirty feet high; the growth of the settlement of the country. * The soil is loamy and marks a country originally given to openings † rather than to prairie.³⁶⁷

1854-57: Henry Lewis

Artist Henry Lewis labored for years to portray the landscape at various points along the entire length of the Mississippi River. The fruit of his labors, *Das illustrirte Mississippithal*, was published over a three-year period in Düsseldorf. His colored lithographs were reissued in 1967 along with an English translation of the accompanying text.

* Ten years earlier J. Ambrose Wight had reported on another trip across Illinois with fellow *Prairie Farmer* editor, J.S. Wright. They had made note of "the progress which the young timber had made and is making wherever it has the necessary protection."

So surely does a young growth spring up after settlement, that we could generally pretty nearly tell how long a particular section had been settled, by the size of this young growth. As we advanced southward, we found it to increase in size, till in Sangamon and Morgan counties it frequently constituted a forest of half grown trees. Sometimes this younger growth formed a piece of woodland by itself, and sometimes it has sprung up amid the scattering trees, which form what are called "barrens"—the old trees of which now stand like patriarchs watching the thrift of their stalwart progeny. If those among us, who are so careless of their shrubby grounds as to suffer the fires to run through and kill the young shoots every season; while they mourn over our scantiness of timber, could but look at these young forests, they might calculate precisely how long it would take to *balance* timber and prairie on their farms. We have not a doubt, judging from observation on the ground, that by far the greater half of the timber in these two counties has grown there since the country was settled. . . . We are satisfied more and more, that one of the surest ways for a farmer to make money is to keep the fires out of every rod of his grounds on which there are any signs of a shrub starting. On the large prairies timber will not always spring up from keeping out the fires, but there are many places where plowing will occasion the shooting up of a vigorous growth of poplars.³⁸⁰

† Mr. Wight was referring to oak openings. During the 1800s the term *oak openings* was applied to areas that were neither open prairie nor dense woods. Some writers referred to brushy areas as oak openings, and others reserved the term for grassy areas with widely scattered trees.³⁶⁴

One of Lewis' plates portrays the setting of Grafton.* The accompanying text about the Illinois River begins,

This beautiful river joins the Mississippi on the east side some twenty miles above the mouth of the Missouri. . . . The surface of the Illinois has almost no current; its standing water is not pleasing to the taste. But aside from these peculiarities, it is one of the pleasantest streams that wind through the valley. It can truly not be given a more fitting name than "*la belle rivière*" of the Western states. Its bed is deep and seldom offers obstructions to navigation by larger boats. Its banks are low and exposed to yearly floods, and its bottoms are from one to five miles wide. One need not wonder that such a region breeds illnesses.²⁰³

Another plate is titled "Balustrade Bluffs with the Grand Staircase." The text informs the reader,

Balustrade Bluffs. This remarkable chain of rocks starts at Alton and stretches upstream for a distance of thirteen miles to the mouth of the Illinois. The rocks which extend for two miles immediately above Alton have been given the name Balustrade because of their regular contour. A section . . . is called "*the grand staircase*,"[†] and actually, on close examination, it does have the appearance of a gigantic ruined staircase. The height of this chain of rocks is eighty to one hundred feet above the surface of the river.

. . . Besides the cave described in an earlier number,[‡] several small caves are also found in this rocky range.²⁰³

Another plate shows the Piasa Rock near Alton:

* Henry Lewis boated down the Mississippi River in the summer of 1848 to make sketches of riverside scenes for his book. One evening in August he camped two miles below Clarksville, Missouri, at the upstream end of the Big Rivers Area. Lewis erected his tent beneath a tree that was 34 feet in circumference. He later regretted that he did not sketch the tree, which "would have made a splendid study."²¹⁸

One of the published sets of Henry Lewis' portraits includes a plate titled "Artist's Camp—Clarksville."²⁶¹ This scene includes a tree (probably a sycamore) that appears to be 15 to 20 feet in circumference—but not close to 34 feet. Another published set of Lewis' illustrations includes the same scene but titles it "Grafton, Illinois."²⁰³ The picture appears to depict Grafton rather than Clarksville.

Lewis' portraits are well enough rendered to make it possible to identify the species of some trees with a good degree of certainty. Among the streamside trees are cottonwoods, sycamores, and silver maples. Although his portrayal of riverside vegetation appears to be generally accurate, Lewis tended to exaggerate the height and steepness of bluffs along the river.

[†] Lewis' field notes locate the Staircase Bluffs as being "opposite Portage de Sious."²¹⁸

[‡] A previous number in Lewis' series describes a cave at Grafton. His description of the cave is a close paraphrase of one that had previously been composed and published by Edmund Flagg (page 183).

The row of hills in which this cave is found extends below Grafton in an unbroken chain from the mouth of the Illinois above, to the city of Alton at the point of the American Bottom. In several places the hills rise as much as a hundred feet and are so strangely shaped that they have been given the name of *Colonade Cliffs*, but they are also called *Piasa Bluffs*. *²⁰³

An illustration of the embouchure of the Missouri River is supplemented by these words:

... the Mississippi is a clear, sparkling, and beautiful stream above its union with its turbid tributary. Shedding its bright luster over the white sand bars, and then withdrawing into the deep bays along its shadowy banks, it spreads its quiet waters in a lakelike basin which is dotted with fair islands for miles around.²⁰³

1857: J.M. Peck

One of the most valuable descriptions of the region's barrens came from the hand of John Mason Peck, who lived several miles beyond the limits of the Big Rivers Area:

... I reside in the county of St. Clair, eighteen miles from the Mississippi river, due east from St. Louis. I removed from Missouri in the month of March, 1821, and resided that year on a farm that was settled and improved about 1810.

... I settled on a tract of "barrens," so called from the timber being shrubby, stunted and scattering; with patches of prairie, intermingled with patches of under brush, of oak and hickory, growing from grub roots. † On such tracts of

* In his account of the visit by Jolliet and Marquette to the Piasa Bluffs, Nehemiah Matson wrote, "This cliff for many years afterward was known as the 'Ruined Castle' . . ." ²¹⁴

† A *grub* is a particular growth form of a tree or shrub, consisting of an old mass of roots that supports a clump of young sprouts. Where wildfires are frequent (recurring annually or nearly so), some fire-tolerant woody species such as oaks, hickories, and New Jersey tea are maintained as grubs because their roots survive and continue to enlarge from year to year even though the above-ground stems are repeatedly killed back by fire. After each fire, the roots send up another set of sprouts.

In his 1836 *New Guide for Emigrants to the West*, Mr. Peck described the process by which the grubs in barrens become trees:

When the fires are stopped, these barrens produce timber, at a rate of which no northern emigrant can have any just conception. Dwarfish shrubs and small trees of oak and hickory are scattered over the surface, where for years they have contended with the fires for a precarious existence, while a mass of roots, sufficient for the support of large trees, have accumulated in the earth. As soon as they are protected from the ravages of the annual fires, the more thrifty sprouts shoot forth, and in ten years are large enough for corn cribs and stables.

... The rapidity with which the young growth pushes itself forward, without a single effort on the part of man to accelerate it, and the readiness with which the prairie becomes converted into thickets, and then into a forest of young timber, shows, that, in another generation, timber will not be wanting in any part of Illinois.²⁵²

Tracing along the bold façade of cliffs on the opposite shore, enveloped in their misty mantle of azure, the eye detects the embouchure of the Illinois and of several smaller streams by the deep-cut openings.

— Edmund Flagg at the mouth of the Illinois River in 1836.³⁴⁵

new country, the autumnal fires contend with the annual growth, and partially or wholly kill the young timber, until settlements are made and the prairie grass killed out.

. . . In this part of the State, the prairies lying near the timber were first cultivated. Very seldom would a settler make his pitch in the interior of a prairie.

. . . The destruction of the peculiar grass of the prairies (*poa pratensis*) * by the feeding of stock in the summer, by the growth of hazel patches, shrubs, brushwood, and finally timber; and by the introduction of Kentucky blue-grass, has destroyed the touch adhesive sward of our prairies that yet remain such, and modified, but not essentially changed the character of our prairie soils.

. . . The surface in barrens is more undulating than the prairies, and while it drains off the water from excessive rains rapidly, it also has its soil washed away where the surface slopes, or small ravines exist.

. . . Then these barrens had a thinner and lighter soil at first than the soil of the prairies in this part of the State.²⁵⁵

Circa 1858: Joseph C. Howell

In 1858 or soon thereafter, Joseph C. Howell prepared “A Brief History of Macoupin County.” Referring to the early 1820s, Mr. Howell wrote,

The Settlers during these time done but Little farming just a Sufficient amount of Corn was Raised for Bread and for Meats they mostly Depended on Wild Meat Deer those days being very plenty.¹⁶³

Other excerpts from Howell’s historical account —

1854 Was the most Remarkably Dry Season Ever Known Crops of all Kinds almost a failure

. . . The Winter off 1855 and Spring was cold and a good deal of Snow Spring opened finely and farmers got their corn planted Early but had to Continue replanting up to June

* *Poa pratensis* is the scientific name for Kentucky bluegrass, which is not a native prairie grass.

. . . 1858 In this Year the Early part of the Season opened with poor prospects to the farmers Raining throughout the Spring to that Extent that great fears are felt for Wheat Crops and which proved very Destructive the Wheat Crop was Nearly all ruined by Rain and Lot to the farmers Many throughout the County were Ruined¹⁶³

1859: Thomas Keddy

The November 24, 1859, issue of the *Prairie Farmer* carries an article by Thomas Keddy. In his "Notes on Illinois," Mr. Keddy cited several farmers in Scott and Morgan Counties who "deserve honorable mention for their industry and advanced system of cultivation." He singled out Jeremiah Hurd, of the Barrens near Winchester in Scott County, for special praise: ". . . he combines more elements of the advanced modern agriculturist than any other in the Union, with whom we have had the pleasure of coming in contact." Thomas Keddy described Mr. Hurd's farm in the Barrens as "a locality renowned for hazel bushes—a siliceous loam and clay subsoil, consisting of nearly two sections of land."¹⁸⁵

1865: A.A. Hilliard

In the years before barbed wire was mass-produced, hedges of Osage orange proved to be the most successful method for fencing the Illinois prairie. In an essay titled "Some Facts in the History of Osage Hedging in Illinois," Mr. A.A. Hilliard of Macoupin County introduced the topic:

It is about twelve years since the osage plant was first introduced in this section, (central Illinois—this I state from memory only.) I believe Prof. Turner, * of Jacksonville, is entitled to the credit of being the first to introduce and make successful experiments with that plant in making hedges. A few years later quite an osage fever arose in this vicinity; seed was procured in large quantities from Texas, plants raised, and hundreds of miles, perhaps thousands, were planted out in hedge-rows, all with the mistaken notion that all had been done that was necessary to procure so valuable an article as a live hedge fence at so trifling an expense. They were generally left to grow up, some with cultivation and some care in clipping the top, but more without any attention, and in spite of grass and weeds, have reached the height of six, eight, and in some cases, fifteen feet; and in general they made a tolerable fence, so far as to turn cattle and horses, with numerous pig holes through the bottom.¹⁵⁷

* Professor Jonathan Baldwin Turner of Illinois College in Jacksonville was the chief early proponent of Osage orange hedges. John Kennicott, another promoter of agricultural progress, visited Professor Turner in 1850. Dr. Kennicott subsequently reported to readers of the *Horticulturalist and Journal of Rural Art and Rural Taste*, "I did wish to say something about hedges, in which praiseworthy interest our own persevering PROFESSOR TURNER, is doing more good to his kind, and more credit to his own abilities, than when he was hammering the '*dead languages*' into '*dead heads*,' in Illinois college."¹⁹¹

The June 1836 issue of the *Illinois Monthly Magazine* sums up the Military Bounty Tract: *Taking all the bounty tract together, and there is no region of country in the west, more eligibly situated for all the purposes of agriculture and commerce.*²⁷⁶

Mr. Hilliard went on to detail the proper method of maintaining an Osage orange hedge.* He concluded his essay,

How long the Osage hedge will last is a question not to be answered at present. My impression is, it will take a long time to determine that part of the experiment, perhaps one hundred years or more; I trust I shall not be deemed visionary when I predict that the introduction of this plant is destined to exert an influence in settling up and fencing the great prairies of the Western States and Territories second only to that of the steam engine. †¹⁵⁷

1866: James T. Hair

James T. Hair's *Gazetteer of Madison County* pronounces, "The natural features of the county are more strongly marked than in the interior of the State":

The majestic bluffs of the Mississippi tower, a rocky wall, along its shore from the mouth of the Illinois to Alton, and then sweeping inland around the great "American Bottom" round their fronts into grassy sloped hills that go down more gently to the fertile fields that stretch out below. From these one may look across upon the wide deep forests and distant hills of the Missouri or upon the rich fields and waving harvests and dotting lakes of the great "American Bottom." . . . The forests and prairies are more suitably distributed than in

* Mr. Hilliard stressed that Osage orange plants need to be tended and pruned to make a hedge dense enough to pen swine. As Dr. Kennicott emphasized,

There are hundreds of miles of new Maclura, or Osage Orange hedges, through the whole of this central Illinois region—and yet I saw but *one* that would turn stock of all kinds, and that had grown up too rapidly, and not thick enough at bottom for future use. Prof. T. has some hedges commenced *right*—they turn chickens, and would almost turn a rat now—and hereafter they bid fair to be as impenetrable as a brick wall, and as formidable as a hedge of Cherokee rose, in Louisiana.

The great fault every where committed, is in *not cutting back enough*. The hedge looks dense and formidable at two or three years old, and the proprietors "*hate to mutilate it.*" But they *must cut* and keep cutting, or they will never have a fence—that is clear to me—and yet, except upon Prof. TURNER'S grounds, I did not see ten hedges that had been half cut—nor three that had been cut enough.¹⁸⁹

† Eight years later a De Kalb man invented the first commercially successful design for barbed fence wire, which immediately began to supplant Osage orange hedges.

most parts of the State, scarcely any portions of the county being without an abundant supply of good timber, consisting mostly of Oak.

. . . *The Soil* in the county is mostly of excellent quality—and in the American Bottom, . . . it is of almost unsurpassed fertility.¹³⁸

Mr. Hair's gazetteer includes sections about the flora and fauna:

FLORA OF MADISON COUNTY.

The following is a partial list of the trees and plants of this county:

Asimina Triloba, or Papaw is found very abundant in the American and creek bottoms. *Nelumbium luteum*, Water Lily, * common.

Podophyllum peltatum or May Apple, very abundant in shady places.

Sanguinaria Canadensis or Bloodroot; *Lepidium Virginicum* or Wild Pepper-grass; *Portulaca oleracea* or Purslane; *Tilia americana* or Linden, † not abundant.

Zanthoxylum americanum, Prickly Ash, scarce.

Rhus typhina (?) sumach; ‡ *Rhus toxicodendron*, Poison Oak; ¶ *Vitis aestivalis*, Summer Grape, common.

Vitis cordifolia, Frost Grape, § abundant.

Ampelopsis quinquefolia, Virginia Creeper; ** *Aesculus pavia*, Buckeye, †† scarce.

Acer saccharinum, Sugar Maple; # *Acer dasycarpum*, White Maple; ¶¶ *Negundo aceroides*, Box Elder; §§ *Baptisia tinctoria*, Indigo Weed, *** not abundant.

Cercis canadensis, Red-bud, abundant.

* *Nelumbium luteum*, Water Lily = *Nelumbo lutea* (American lotus).

† *Tilia americana* or Linden = eastern basswood.

‡ *Rhus typhina*, sumach = staghorn sumac.

¶ *Rhus toxicodendron*, Poison Oak = *Toxicodendron radicans* (poison ivy).

§ *Vitis cordifolia*, Frost Grape = *Vitis vulpina*.

** *Ampelopsis quinquefolia*, Virginia Creeper = *Parthenocissus quinquefolia*.

†† *Aesculus pavia* (red buckeye) has not been scientifically documented as far north as Madison County. The native buckeye of the Big Rivers Area is *Ae. glabra* (Ohio buckeye).

Acer saccharinum, Sugar Maple = *Acer saccharum*.

¶¶ *Acer dasycarpum*, White Maple = *Acer saccharinum* (silver maple).

§§ *Negundo aceroides*, Box Elder = *Acer negundo*.

*** *Baptisia tinctoria* (yellow wild indigo) has not been scientifically recorded from Madison County. Members of the genus in the region are *B. lactea* (white wild indigo) and *B. leucophaea* (cream wild indigo).

Gymnocladus canadensis, Kentucky Coffee-Tree. * (?)
Gleditschia triacanthos, Honey Locust; † Prunus americana, Red Plum, ‡
abundant.
Prunus Chicasa, Chickasaw Plum. † (?)
Prunus ecrotina, Wild Cherry; § Fragaria virginiana, (?) Wild Strawberry;
Rubus occidentalis, Black Cap Raspberry; Rubus canadensis,
Dewberry, ** common.
Rubus villosus, Blackberry, †† abundant.
Rosa setigera, Climbing Rose; Rubus lucida, (?) Dwarf Wild Rose, ‡‡ common.
Crataegus, ¶ two species or more.
Pyrus coronana, Wild Crab, §§ abundant.
Ribes cynosbati, Wild Gooseberry, common.
Cornus florida, Dogwood; *** Sambucus canadensis, Elder, ††† common.
Eupatorium perfoliatum, Thoroughwort, not common.
Ambrosia artemisiaefolia, Ragweed; ‡‡‡ Xanthium strumarium, Cockle Bur;
Bidens bipinnata, Spanish Needle; ¶¶¶ Bidens chrysanthemoides, Beggar
Ticks; §§§ Manta cotula, Mayweed; **** Leucanthemum vulgare, Ox-eye
Daisy, †††† common.
Erechtites hieracifolia, Fire Weed, ‡‡‡‡ not common.

* Gymnocladus canadensis, Kentucky Coffee-Tree = *Gymnocladus dioica*.

† Gleditschia triacanthos, Honey Locust = *Gleditsia triacanthos*.

‡ Prunus americana, Red Plum = American plum.

† Prunus Chicasa, Chickasaw Plum = *Prunus angustifolia*.

§ Prunus ecrotina, Wild Cherry = *Prunus serotina* (wild black cherry).

** Rubus canadensis, Dewberry = *Rubus flagellaris*.

†† Rubus villosus, Blackberry = *Rubus allegheniensis*.

‡‡ Rubus lucida, Dwarf Wild Rose = *Rosa carolina* (pasture rose).

¶¶ Crataegus = *Crataegus* (hawthorn).

§§ Pyrus coronana, Wild Crab = *Malus coronaria*.

*** Cornus florida, Dogwood = flowering dogwood.

††† Sambucus canadensis, Elder = elderberry.

‡‡‡ Ambrosia artemisiaefolia, Ragweed = *Ambrosia artemisiifolia* (common ragweed).

¶¶¶ Bidens bipinnata, Spanish Needle = *Bidens bipinnata*.

§§§ Bidens chrysanthemoides, Beggar Ticks = *Bidens cernua*.

**** Manta cotula, Mayweed = *Anthemis cotula*.

†††† Leucanthemum vulgare, Ox-eye Daisy = *Leucanthemum vulgare*.

‡‡‡‡ Erechtites hieracifolia, Fire Weed = *Erechtites hieracifolia*.

Cirsium lanceolatum, (?) Common Thistle; * *Lappa major*, Burdock; †
Taraxacum densleonis, Dandelion, ‡ common. Introduced during the last
thirty years.

Diospyros virginiana, Persimmon; *Plantago major*, Plantain, *Verbascum*
thapsus, Mullein, common.

Hedeoma pulegioides, Pennyroyal, ¶ not common.

Monarda didyma, Horsemint; § *Nepeta cataria*, Catnip, common.

Marrubium vulgare, Hoarhound; *Solanum nigrum*, Nightshade; *Physalis*
viscosa, Ground Cherry, ** not common.

Datura stramonium, Jamestown Weed; †† *Asclepias cornuti*, Milkweed; §§
Fraxinus Americana, White Ash; *Fraxinus Sambucifolia*, (?) Black
Ash; ¶¶ *Phytolacca decandra*, Poke Weed; §§§ *Amarantus hybridus*, Pig
Weed; *** *Rumas crispus*, Sour Dock; ¶¶¶ *Sassafras officinale*,
Sassafras; ¶¶¶ *Benzoin ordoriferous*, Fever Bush, ¶¶¶ (?) common.

Ulmus americana, White Elm, §§§ abundant.

Ulmus fulva, Red Elm; **** *Morus rubra*, Red Mulberry; *Urtica dioica*, Stinging
Nettle, common.

Cannabris sativa, Hemp, ¶¶¶¶ *Humulus lupulus*, Hop, not common.

* *Cirsium lanceolatum*, Common Thistle = *Cirsium vulgare* (bull thistle).

† *Lappa major* (= *Arctium lappa*), the great burdock, is rare in the region. The common burdock
is *A. minus*.

‡ *Taraxacum densleonis*, Dandelion = *Taraxacum officinale*.

¶ *Hedeoma pulegioides*, Pennyroyal = *Hedeoma pulegioides*.

§ *Monarda didyma* (Oswego tea) is a cultivated herb, rarely escaped from gardens. The common
Monarda in Madison County is *M. fistulosa* (wild bergamot).

** *Physalis viscosa*, Ground Cherry = *Physalis pruinosa* and ?*P. heterophylla*.

†† *Datura stramonium*, Jamestown Weed = jimson weed.

‡‡ *Asclepias cornuti*, Milkweed = *Asclepias syriaca* (common milkweed).

¶¶ *Fraxinus sambucifolia* is an old name for the black ash (*F. nigra*). If black ash occurred in
the county, it must have been quite rare, restricted to seepage areas. The more common red ash
(*F. pennsylvanica*) and green ash (*F. pennsylvanica* var. *subintegerrima*) have been called black ashes.

§§ *Phytolacca decandra*, Poke Weed = *Phytolacca americana*.

*** *Amarantus hybridus*, Pig Weed = *Amaranthus hybridus*.

¶¶¶ *Rumas crispus*, Sour Dock = *Rumex crispus* (curly dock).

¶¶¶ *Sassafras officinale*, Sassafras = *Sassafras albidum*.

¶¶¶¶ *Benzoin ordoriferous*, Fever Bush = *Lindera benzoin* (spicebush).

§§§ *Ulmus americana*, White Elm = American elm.

**** *Ulmus fulva*, Red Elm = *Ulmus rubra* (slippery elm).

¶¶¶¶¶ *Cannabris sativa*, Hemp = *Cannabis sativa*.

Platanus occidentalis, Sycamore, abundant.
Juglans cinerea, Butternut, * not common.
Juglans nigra, Black Walnut, † abundant.
Carya olivaeformis, Pecan, ‡ not common, (abundant in township 4 9.) ¶
Carya alba, Shell Bark Hickory, § common.
Carya tomentosa, White Heart Hickory, ** (?) abundant.
Carya glabra, Pig Nut Hickory; Quercus macrocarpa, Overcup Oak, ††
common. (Found here only on lowlands.)
Quercus obtusiloba, Post Oak, ††† abundant.
Quercus alba, White Oak, common.
Quercus Prinus, Chesnut White Oak, Quercus Castanea, Yellow Oak, ¶¶
not common.
Quercus imbricaria, Laurel Oak, §§ abundant.
Quercus nigra, Black Jack, *** common.
Quercus tinctoria, Black Oak, ¶¶¶ abundant.
Quercus rubra, Red Oak; Quercus palustris, Water Oak, ¶¶¶ common.
Castanea pumila, Chinquapin. ¶¶¶ (?)
Corylus Americana, Hazel Nut, abundant.
Carpinus Americana, Horn Beam, ¶¶¶ not common.
Betula, (?) Birch, scarce. (I have seen this in only two localities.)
Alnus Serulata, Alder. **** (?)

* Juglans cinerea, Butternut = *Juglans cinerea*.

† Juglans nigra, Black Walnut = *Juglans nigra*.

‡ Carya olivaeformis, Pecan = *Carya illinoensis*.

¶ Township 4 North, Range 9 West is Chouteau Township, at the southernmost extremity of the Big Rivers Area.

§ Carya alba, Shell Bark Hickory = *Carya ovata* (shagbark hickory).

** Carya tomentosa, White Heart Hickory = mockernut hickory.

†† Quercus macrocarpa, Overcup Oak = burr oak.

††† Quercus obtusiloba, Post Oak = *Quercus stellata*.

¶¶ Both *Quercus prinus* and *Q. castanea* are synonyms for *Q. prinoides* var. *acuminata* (yellow chestnut oak). The binomial *Quercus prinus* is now applied to the rock chestnut oak, which does not occur in the Big Rivers Area.

¶¶¶ Quercus imbricaria, Laurel Oak = shingle oak.

*** Quercus nigra, Black Jack = *Quercus marilandica* (blackjack oak).

¶¶¶¶ Quercus tinctoria, Black Oak = *Quercus velutina*.

¶¶¶¶¶ Quercus palustris, Water Oak = pin oak.

¶¶¶¶¶¶ Both *Castanea pumila* (chinquapin) has not been scientifically documented from the region.

¶¶¶¶¶¶¶ Carpinus Americana, Horn Beam = *Carpinus caroliniana* (American hornbeam).

**** Alnus Serulata, Alder = *Alnus serrulata*.

Salix, Willow, several varieties.
Populus angulata, Cottonwood, * abundant.
Juniperus Virginiana, Red Cedar, not common. (On the river bluffs above Alton.)
Arisaema triphyllum, Indian Turnip; [†] *Typha latifolia*, Cat-tail; *Sagittaria varabilis*, Arrow Head; [‡] *Cypripedium pubescens*, Yellow Lady's Slipper; *Cypripedium candidum*, (?) White Lady's Slipper, common.
Scipus pungens, (?) Bulrush. [¶]
Poa pratensis, Spear Grass, [§] *Poa compressa*, Blue Grass, ** common.

FAUNA OF MADISON COUNTY.

The following is a list, also partial, of the animals of the county:

The Bats, Shrews and Moles are common, but we know nothing of the species.
The Panther, (*Felis concolor*,) ^{††} was occasionally seen in the early time, as also, still later, and more common, the Wildcat; (*Lynx rufus*,) ^{‡‡}
The Gray Wolf, (*canis occidentalis*,) and Prairie Wolf, (*Canis latrans*,) ^{¶¶} may perhaps still exist within our limits. The Gray Fox; (*Vulpes Virginianus*,) is still not unfrequently found, particularly along the cliffs of Mississippi, which furnish numerous hiding places.
The Weasel, one or more species; the common Mink; (*Putorius Vison*;) American Otter; (*Lutra canadensis*;) the Skunk; (*Mephitis mephitica*;) the Badger, (*Taxidea Americana*;) the Raccoon; (*Procyon Lotor*;) the Black

* *Populus angulata*, Cottonwood = *Populus deltoides* (eastern cottonwood).

† *Arisaema triphyllum*, Indian Turnip = Jack-in-the-pulpit.

‡ *Sagittaria varabilis*, Arrow Head = *Sagittaria latifolia* (common arrowleaf).

¶ *Scipus pungens*, Bulrush = *Scirpus americanus*.

§ *Poa pratensis*, Spear Grass = Kentucky bluegrass.

** *Poa compressa*, Blue Grass = Canada bluegrass.

†† Panther (*Felis concolor*) = mountain lion.

‡‡ Wildcat (*Lynx rufus*) = bobcat.

¶¶ Gray Wolf (*canis occidentalis*) = timber wolf; Prairie Wolf (*Canis latrans*) = coyote. James Hall spelled out the differences in his 1831 *Notes on Illinois*:

Wolves are very numerous in every part of the state. There are two kinds: the common, or black wolf, and the prairie wolf. The former is a large fierce animal, and very destructive to sheep, pigs, calves, poultry, and even young colts.

. . . The prairie wolf, is a smaller species, which takes its name from its habit of residing entirely upon the open plains. Even when hunted with dogs, it will make circuit after circuit, round the prairie, carefully avoiding the forest, or only dashing into it occasionally when hard pressed, and then returning to the plain. In size and appearance, this animal is midway between the wolf and the fox . . . ¹⁴²

The day was perfectly calm, the water clear, tranquil, and with a surface as smooth as glass; and the reflection of these singular rocks, as well as of the passing fleecy clouds that floated over them, as distinctly as in the finest mirror, added much to the beauty of the scene.

—J.S. Buckingham on the Mississippi River near Alton on June 19, 1840.⁵⁹

Bear, (*Ursus Americanus*,) have all been seen in the county at one time or another, though the Bear and the Otter are probably now extinct.

The Opossum; (*Didelphys virginiana*,) still lives.

Of the Squirrel family we still have the Fox, Gray, Flying, Ground and Prairie Squirrel; * (*Sciurus*, *Ludovicianus*, *Carolinensis*, *Volucella*, *Striatus* and *Spermophilus*.[?] the Woodchuck; (*Arctomys monax*,) and probably once had the Beaver; (*Castor canadensis*.)

Of the Muridae we have the introduced species of Rats and Mice, but what natives besides the Meadow Mouse, I am not able to mention excepting the still common Musk Rat; (*Fiber zibethicus*.)

Of the Hares we have (*Lepus sylvaticus*,) the so-called Rabbit † still in great plenty.

Of the ruminating animals we had the American Elk; (*Cervus canadensis*,) and still have the Deer; (*Cervus virginianus*) and at no remote period the American Buffalo (*Bos americanus*,) must have found pastures in this part of the State. The heads, horns and bones of the slain animals were still numerous in 1818. ‡

* Ground Squirrel (*Sciurus Striatus*) = thirteen-lined ground squirrel; Prairie Squirrel (*Sciurus Spermophilus*) = Franklin's ground squirrel.

† Rabbit (*Lepus sylvaticus*) = eastern cottontail.

‡ James Hair did not provide evidence to substantiate his assertion about bison remains. There are relatively few specific first-person recollections about masses of buffalo bones in the region during the early 1800s. Most of the second-hand reports amount to hearsay. Asa Hinman, whose parents migrated to Pike County in the early 1830s, related, "The buffalo had disappeared, but from the amount of horns and bones that lay bleaching on the prairies they must have been here in vast numbers."⁷² Joseph Andrews is reported to have found the ground "covered with buffalo bones" near the present site of Brighton in Macoupin County.³⁵⁸ Early testimony from Iroquois County provides another such report: "Mr. Johns and others say that, in a hickory grove about four miles above Milford, they have seen the remains of buffalo, and elk horns, that then covered the ground."³³

Mr. Hair's statement appears in different forms in subsequent county histories. *History of Madison County* (1882): "The heads, horns and bones of the slain animals were still numerous in 1820."³⁵⁷ *History of Macoupin County* (1911): "The heads, horns and bones of the slain animals were still numerous in 1830."³⁵⁸ *Centennial History of Madison County* (1912): "The heads, horns and bones of these animals were found in abundance as late as 1820 . . ."²³⁶ Such statements are examples of careless boilerplate editorial policy—by which unsubstantiated material is copied from one volume to the next.

Of BIRDS we have or have had the following:

Cathartes aura, Turkey Buzzard; * Falco columbarius, Pigeon Hawk; †
Nanclerus furcatus, Swallow-tailed Hawk; ‡ Icteria mississippiensis,
Mississippi Kite; Buteo borealis, Red-tailed Hawk; Haliatus leuco-
cephalus, Bald Eagle; Falco fulvus, Ring-tailed Eagle. ¶
Bubo virginianus, Great Horned Owl; Syrnium nebulosum, Barred Owl;
Nyctea nivea, Snowy Owl.
Conurus carolinensis, Carolina Parrot. §
Picus villosus, Hairy Woodpecker; Picus pubescens, Downy Woodpecker;
Melanerpes erythrocephalus, Red-Headed Woodpecker; Colaptes
auratus, Golden-Winged Woodpecker. **
Trochilus colubris, Ruby-Throated Humming Bird.
Chaetura Pelasgia, Chimney Swallow. ††
Antrostomus vociferus, Whippoorwill; Chordeiles popetue, Night Hawk.
Ceryle alcyon, Belted Kingfisher.

* Cathartes aura, Turkey Buzzard = turkey vulture.

† Falco columbarius, Pigeon Hawk = merlin. Although the merlin (or "pigeon hawk") has never been common in Illinois, this list and three subsequent ones (pages 296, 351, and 381) count the pigeon hawk among the birdlife of the Big Rivers Area. All but one of these four lists include the scientific name of the merlin, but the listings might be mistaken: the species might have been misidentified, or perhaps the scientific name of the merlin (*Falco columbarius*) was incorrectly listed for one of two other species that have been called pigeon hawks. Both the sharp-shinned hawk and Cooper's hawk were called pigeon hawks during the days when they preyed on passenger pigeons. (Kennicott said of Cooper's hawk, "Follows the pigeon in their migration." ¹⁹²) Even though the sharp-shinned hawk and Cooper's hawk were more common than the merlin, each appears only once in the four bird lists reproduced on these pages.

Reports of the merlin might have been stemmed from misidentification of the peregrine falcon. Although ornithologist Otto Widmann reported that peregrine falcons nested between Alton and Grafton in the 1880s and '90s, ³⁶⁵ this species is not included on any of the four lists that are quoted here.

The merlin currently breeds far to the north of Illinois. H. David Bohlen knew of "no definite records of breeding" of merlins in the state. ⁴⁷ Robert Ridgway said of the merlin in Illinois, "This little Falcon, like the Peregrine, is resident, locally, but it is comparatively rare. Like its larger relative, it nests in cavities of large trees in forest, but where suitable cliffs occur, it also builds its nest among rocks." ²⁸⁴ The palisades between Alton and Grafton appear to afford plenty of nesting sites for merlins and peregrine falcons.

‡ Nanclerus furcatus, Swallow-tailed Hawk = swallow-tailed kite.

¶ "Ring-tailed eagle" is an old name for the golden eagle. Over the years the name appears to have become more or less restricted to immature golden eagles. The name has fallen into disuse.

§ Conurus carolinensis, Carolina Parrot = Carolina parakeet.

** Colaptes auratus, Golden-Winged Woodpecker = northern flicker.

†† Chaetura Pelasgia, Chimney Swallow = chimney swift.

The view was delightful upon each side; the fair plains of Missouri at our right, and upon the Illinois side, bold beautiful cliffs, or green cone like hills, covered with a soft carpet of verdure, sinking down upon the east side into lovely green dells.

— Eliza Steele on the Mississippi River above Alton, July 10, 1840. ³¹⁹

Tyrannus carolinensis, King Bird; *Sayornis fuscus*, Pewee. *

Turdus migratorius, Robin; came less than thirty years ago; *Sialia sialis*, Blue Bird.

Pyrangra rubra, Scarlet Tanager; *Pyrangra astiva*, Summer Red Bird. †

Hirundo horreorum, Barn Swallow; *Cotyle riparia*, Bank Swallow, *Progne purpurea*, Blue Martin; ‡ *Ampelis cedrorum*, Cedar Bird. ¶

Mimus polyglottus, Mocking Bird; *Mimus carolinensis*, Cat Bird; *Harporhynchus rufus*, Brown Thrush; § *Troglodytes aedon*, House Wren.

Sitta carolinensis, White-bellied Nuthatch. **

Chrysomitrис tristis, Yellow Bird; †† *Junco hyemalis*, Snow Bird; ‡‡ *Spizella socialis*, Chipping Sparrow; *Spizella pusilla*, Field Sparrow; *Melospiza palustris*, Swamp Sparrow; *Cyanospiza cyanea*, Indigo Bird; ¶¶ *Cardinalis virginianus*, Cardinal Red Bird, (*Toxia cardinalis*, Cardinal Grosbeck, Wilson;) §§ *Pipilo erythrophthalmus*, Cheewink. ***

Dolichonyx oryzivorus, Bobo'link; *Aegelaius phoeniceus*, Red Winged Black Bird; *Sturnella magna*, Meadow Lark; ††† *Icterus baltimore*, Golden Oriole. ***

Corvus carnívorus, American Raven; *Corvus americanus*, Common Crow; *Cyanurus cristatus*, Blue Jay.

* *Sayornis fuscus*, Pewee = eastern phoebe.

† *Pyrangra astiva*, Summer Red Bird = summer tanager.

‡ *Progne purpurea*, Blue Martin = purple martin.

¶ *Ampelis cedrorum*, Cedar Bird = cedar waxwing.

§ *Harporhynchus rufus*, Brown Thrush = brown thrasher.

** *Sitta carolinensis*, White-bellied Nuthatch = white-breasted nuthatch.

†† *Chrysomitrис tristis*, Yellow Bird = American goldfinch.

‡‡ *Junco hyemalis*, Snow Bird = dark-eyed junco.

¶¶ *Cyanospiza cyanea*, Indigo Bird = indigo bunting.

§§ *Cardinal Red Bird* (*Toxia cardinalis*, *Cardinal Grosbeck*) = northern cardinal.

*** *Pipilo erythrophthalmus*, Cheewink = rufous-sided towhee.

††† *Sturnella magna*, Meadow Lark = eastern meadowlark.

*** *Icterus baltimore*, Golden Oriole = northern oriole.

Ectopistes migratoria, Wild Pigeon; * Zenaidura carolinensis, Common Dove.[†]
Meleagris gallopavo Wild Turkey.
Cupidonia cupido, Prairie Hen; Pinated Grouse; [‡] Bonasa umbellus, Ruffed
Grouse, came about 1835; Ortyx virginianus, Quail.[¶]
Grus canadensis, Sand Hill Crane.
Herodias egretta, White Heron; [§] Ardea herodias, Great Blue Heron; Botaurus
lentiginosus, Bittern.^{**}
Tantalus loculator, Wood Ibis, ^{††} were here in the summer of 1854 and 1855.
Aegialitis vociferus, Killdeer Plover, Ball Head, ^{‡‡} Yellow-legged and Upland
Plover.^{¶¶}
Philohela minor, Woodcock; Gallinago wilsonii, English Snipe; ^{§§} Macrorham-
phus griseus, Red Breasted Snipe; ^{***} Gambetta melanoleuca, Telltale
Snipe; ^{†††} Gambetta flavipes, Yellow Legs; ^{‡‡‡} Limosa fedoa, Marbled
Godwit, (Scolopax fedoa, Wilson;) Numenius longirastris, Long-billed
Curlew; Numenius hudsonicus, Short-billed Curlew; ^{¶¶¶} Rallus virginianus, Virginia Rail.
Cygnus americanus, American Swan; ^{§§§} Cygnus buccinator, Trumpeter Swan.
Anser hyperboreus, Snow Goose; Bernicla canadensis, Canada Goose; Bernicla
Brenta, Brant. ^{****}

* Ectopistes migratoria, Wild Pigeon = passenger pigeon.

† Zenaidura carolinensis, Common Dove = mourning dove.

‡ Cupidonia cupido, Prairie Hen or Pinated Grouse = greater prairie-chicken.

¶ Ortyx virginianus, Quail = northern bobwhite.

§ Herodias egretta, White Heron = great egret.

** Botaurus lentiginosus, Bittern = American bittern.

†† Tantalus loculator, Wood Ibis = wood stork.

‡‡ "Ball Head" may be a misprint of "Bull Head." The black-bellied plover, lesser golden-plover, and solitary sandpiper have been called bullheads.

¶¶ Upland Plover = upland sandpiper. The listing of "Yellow-legged and Upland Plover" is ambiguous. The upland sandpiper (or upland plover) has yellow legs. The greater yellow-legs (listed here as the Telltale Snipe) has been called the big yellow-legged plover. The lesser yellow-legs (listed here as the Yellow Legs) has been known as the yellow-legged plover.

§§ Gallinago wilsonii, English Snipe = common snipe.

*** Macrorhamphus griseus, Red Breasted Snipe = short-billed dowitcher.

††† Gambetta melanoleuca, Telltale Snipe = greater yellow-legs.

‡‡‡ Gambetta flavipes, Yellow Legs = lesser yellow-legs.

¶¶¶ Numenius hudsonicus, Short-billed Curlew = whimbrel.

§§§ Cygnus americanus, American Swan = tundra swan.

**** Bernicla Brenta, Brant = brant (*Branta bernicla*). The brant somewhat resembles a half-scale Canada goose. Two other species (the snow goose and the greater white-fronted goose) were

Anas Boschas, Mallard; Anas obscura, Black Duck; Dafila acuta, Pin-tail Duck; Nettion carolinensis, Green Winged Teal; Querquedula discors, Blue Winged Teal; Spatula clypeata, Shoveller; Mareca americana American Widgeon; Aix sponsa, Summer or Wood Duck; Aythya americana, Red Head Duck; Aythya vallisneria, Canvass Back Duck, occasionally; Bucephala albeola, Butter Ball; * Lophodytes cucullatus, Hooded Merganser.

commonly called brants during the 1800s and early 1900s. The issue is somewhat clouded because the Canada goose was sometimes called a brant.²¹⁶ Hunters during this era disagreed about whether the true brant (*Branta bernicla*, formerly classified as *Bernicla brenta*) occurred in Illinois.

Captain Adam H. Bogardus, a market hunter, reported that he shot the true brant species (*Branta bernicla*) in the Grand Prairie of central Illinois during the 1860s and 70s: "Shooting brant geese is much the same method as shooting Canada geese. . . . In early spring a man may see acres of . . . corn-fields covered with brant." Bogardus differentiated brant from Canada geese ("They are about half the size of the latter . . ."), and he distinguished brant from snow geese and white-fronted geese—both of which he called "Mexican geese."⁴⁶

Major W. Packard of McLean County wrote the following about the snow goose and greater white-fronted goose in 1903: "Both varieties are generally known to the hunters under the common, but improper name of 'brant,' the Brant or Brent Goose, being a smaller, more compact bird, differently colored, of different habits, and not one of our visitors."²⁴⁰

L.C. Sanford, an Eastern waterfowler who also hunted the upper Great Plains, asserted in 1903, "Brant are exclusively a coast bird, and never occur inland . . ."—but his book does report the true brant species (*Branta bernicla*) from Illinois.²⁹³ Martin Howell, an Eastern sportsman who hunted extensively in Illinois, took pains to distinguish the brant ("the regular brent-goose"); he stated in 1874, "We killed one out of a flock in the Illinois River, in 1860, on a sand-bar, and believe it is the only flock we ever saw in that valley."¹⁶⁴ Charles Askins, a retired market hunter, remarked that the brant "is sometimes called a maritime bird," but he added, "I have seen plenty of brant in Illinois in a time past."¹⁴

Robert Ridgway's *Descriptive Catalogue of the Birds of Illinois* (1895)²⁸⁵ lists "brant" as a name for several kinds of goose. Ridgway gave "white brant" as a synonym for the greater snow goose (now called the snow goose). The blue-winged goose (or blue goose, which is now recognized as a color phase of the snow goose) is called the blue brant, white-headed brant, or bald brant. The American white-fronted goose (greater white-fronted goose) is the brant, pied brant, speckled brant, gray brant, harlequin brant, prairie brant, or yellow-legged brant. Ridgway did not list "brant" among the synonyms for any of three races of *Branta canadensis*, the Canada goose. As veteran wildfowler William Leffingwell wrote in 1890, "The nomenclature of the Goose family will put in doubt and mystify the wild fowl hunter greatly, for they receive their names in the West, not scientifically and historically, but locally. And when we find them classified under one name in a given locality, in another, perhaps not remote, names will be thrust upon them entirely dissimilar."²⁰²

The name "brant" has been the cause of much confusion, misidentification and mis-reporting of goose observations. For further discussions of these matters, consult works for Illinois,^{47,79} Indiana,⁶⁰ Missouri,³⁶⁵ Wisconsin,¹⁹⁴ and the Mississippi valley.⁷⁷

* Bucephala albeola, Butter Ball = bufflehead.

Pelecanus erythrorhynchus, Rough-billed Pelican.*
Colymbus torquatus, The Loon.¹³⁸

The *Gazetteer of Madison County* includes a note under the heading of *Destructive Frost*:

On the night of the 26th, April, 1834, this county was visited by a frost which killed the leaves of the White Mulberry, Black Locust, Honey Locust, Catalpa, Coffee Nut, Black Walnut, Hickory, Sycamore, Ash, Persimmon, and perhaps some other trees, to a height of about twenty feet. The foliage of the Apple tree was not injured, but its fruit, as well as other kinds of fruit, was generally destroyed. †¹³⁸

1866: Otter Creek

On May 21, 1866, a correspondent with a pseudonym contributed a letter to a Jersey County newspaper. "Otter Creek" detailed an excursion to the Illinois River bluffs in Jersey County:

All things being in readiness we were soon on our way to the Illinois Bluff. The beautiful morning, the cool bracing air, the smooth road through the forest was delightful, an hours drive brought us to the bluff overlooking the great Illinois bottom. Our admiration knew no bounds as we drew the rein and stopped to gaze over the beautiful scene to the north and to the south a gem of a lake, nestling in all its brilliant beauty with its emerald setting of green-leaved forest trees; far beyond towered the bare grim wall of the opposite bluff. Down the hill by a circuitious route and we were in the bottom. Stopping a moment to take a delicious draught from a cool spring, we drove on again for several miles for the purpose of visiting a singular hill or ridge near the mouth of the Macoupin Creek. Hitching our horses we ascended a narrow ridge, no trees grew near, only a few shrubs planted here and there as though to relieve the monotony of such baldness. It took us perhaps half an hour to gain the summit, and we had before us a plain view of one of the greatest natural curiosities in Jersey County. The "Hog-back" as it is called, it is a singular mound or rather a ridge, one mile and a half long. At the highest point near the center of the ridge it is about three hundred feet high. It gradually inclines from the center either way towards the ends and terminates abruptly at the height of about fifty feet. It is widest near the center which is capped by an artificial mound filled with human bones. From the center either way the ridge grows more narrow. In some places the summit is a mere path which you can astride, and looking down from the fearful elevation over the smooth and almost perpendicular bare sides, it is

* Pelecanus erythrorhynchus, Rough-billed Pelican = American white pelican.

† Immediately north of the Big Rivers Area in Morgan County, "Commencing May 1st, 1834, there were frosts and freezes for ten consecutive nights killing all vegetation. Even forest trees were injured so as to soon die." ¹⁰¹

In an agricultural, commercial, as well as military point of view, this stream is destined to occupy an important rank amongst the rivers of the west. . . it traverses . . . an extent of country unrivalled for the fertility of its soil, perhaps in the world.

— U.S. Senate Document 272, characterizing the Illinois River in 1838.³¹⁴

quite trying on ones nerves and takes quite a highlander to accomplish the feat of walking over the path. But many cattle go over it and it is worn deep and the footing is secure. The base of this isolated ridge or mound is solid limestone near two hundred feet and this is capped by a reddish hard, and compact clay, showing it to be singular in its formation and doubtless a part of the neighboring bluff. . . . But the most singular features of this great curiosity is that the whole apex of the ridge is filled with human bones. On every side where time and storms have loosened the clay and soil, protrude bones and pieces of human skulls. In the wider part of the ridge long burrows * are raised to cover the remains of an extinct race, and wherever over the surface a stone is seen protruding it is to mark the resting place of a skeleton.²⁶⁸

1866: A.H. Worthen

The Big Rivers Area extends into the American Bottom and the bordering range of river bluffs and hills in the northwest quadrant of Madison County. A.H. Worthen discussed this region in Volume I of the *Geological Survey of Illinois*:

The western portion of the county is diversified with hills and valleys, and the streams are all skirted with belts of excellent timber, that furnish an ample supply for the adjacent prairie. The principal varieties of timber found on the uplands in this county are black, white and red oak, shell-bark and pig-nut hickory, linden, wild cherry, honey locust, red-bud, dog-wood and sassafras. On the creek and river bottoms we find cottonwood, sycamore, red and slippery elm,[†] hackberry, black and white walnut, red birch,[‡] willow, soft maple,[¶] sugar maple, box elder, white and black ash, swampy oak,[§] burr oak, pecan, mulberry and persimmon.

. . . The western border of this county is occupied by a belt of bottom land that comprises the northern extremity of the *American Bottom*, which commences

* That is, *barrows* or burial mounds.

† One species, *Ulmus rubra*, has long been known as both the red elm and the slippery elm.

‡ Red birch = river birch (*Betula nigra*).

¶ Soft maple = silver maple (*Acer saccharinum*).

§ Swampy oak = ?swamp white oak (*Quercus bicolor*) or ?pin oak (*Q. palustris*).

just below the city of Alton and extends to the mouth of the Okaw,* in Randolph county. Its width in this county varies from one to six miles. A considerable portion of this bottom is below the high water level of the Mississippi, and is therefore subject to periodical inundations from the annual overflows of the river, while other portions are above high water mark, and owe their origin to some other cause than the existing river.

. . . The soil on the *American Bottom*, in this county, is a deep, mellow, sandy loam, exceedingly fertile, and producing excellent crops of corn, oats, potatoes, etc., with but little labor. The city of St. Louis is mainly supplied with vegetables from the gardens that are established on this rich bottom land. Much of its surface is subject to overflow from the high water of the Mississippi, but wherever it is sufficiently elevated to be free from the danger of submergence, it may be considered as the most valuable land in the county. Some portions of it are low and swampy, and are too wet for cultivation. These wet places, however, are gradually filling up by the wash from the surrounding highlands, and will eventually become dry and susceptible of cultivation.³⁷³

1867: Jas. H. Wilson and Wm. Gooding

In early 1867 the Secretary of War directed the Army Corps of Engineers to "conduct surveys and examinations, and to prepare plans and estimates for a system of navigation by way of the Illinois river, between the Mississippi and Lake Michigan, adapted to military, naval, and commercial purposes." A surveying party was assigned "the duty of making a careful hydrologic survey of the bed of the Illinois river from La Salle to Grafton on the Mississippi, paying particular attention to the location, cause, character, and extent of the different sand bars and obstructions to navigation during low water, also to gauging the river and its different tributaries, and making examinations of the various points likely to be selected as sites for locks and dams."³⁷⁰

Fieldwork was "favored by fine weather and an extremely dry season." At the conclusion of the project, a summary report was prepared by Brevet Major General James H. Wilson and by William Gooding, an engineer who had overseen construction of the Illinois and Michigan Canal. In their "Report upon the Survey of the Illinois river," Wilson and Gooding argued against a proposal to extend the Illinois and Michigan Canal beyond its downstream terminus at La Salle. They asserted that a series of navigation dams should be constructed on the lower and middle Illinois River instead of building a canal alongside the river below La Salle.[†] Wilson and Gooding further urged that a seven-foot navigation

* Okaw = Kaskaskia River.

† The study considered and rejected two other proposals for maintaining a sufficiently deep navigation channel in the Illinois River below La Salle: "(1) By dredging and wing-dams. (2) By drawing a sufficient supply of water from Lake Michigan to give the requisite depth in the Illinois river."³⁷⁰

channel should be maintained in the Illinois River—rather than the four-foot depth advocated by some interested parties.

In support of their plan for a series of impoundments on the Illinois River, Wilson and Gooding testified,

From the reports and profiles herewith it will be seen that this system of improvement will submerge but little if any valuable land. The height of the bottom lands above low water in the river, except such as are now low and marshy and inundated by a slight rise of water, is generally not less than from 10 to 15 feet, and in many places from 18 to 20 feet. The maximum height to which the water at the lowest stage will be raised by the highest dam will be only six or seven feet at the dam, and this will gradually diminish from the lower to the upper end of the pool, where it will be raised only two or three feet. All such land, therefore, as would be overflowed by the construction of the dams would be overflowed now by a slight rise of the river, and cannot consequently be considered very valuable. From extensive observation and inquiry we are of the opinion that the influence of these dams upon the health of the country lying immediately along the river will be beneficial rather than injurious.

. . . most of the sand-bars in the Illinois river are due to local causes, and are undergoing but little change. Reasoning from cause to effect, we should not expect these sand-bars to be materially increased by the change which would be made in the bed of the river by the proposed improvement, but to the contrary, as the level of the water is raised by the dams, the tendency will be to cause all affluent streams carrying sediment to deposit it in the dead water within their own mouths, before they reach the main river. Where the affluents enter the river without flowing for any distance through the bottom lands, the sediment which they would otherwise bring into the pools may be almost entirely cut off by small dams a short distance above their mouths. Such dams should be built, no matter what plan of improvement may be ultimately adopted.

The dams for raising the river levels when constructed will be no more likely to produce deposit in the pools above them than the bars and shoals at present in the deeper portions of the river above them, and experience has already demonstrated that no obstructions need be anticipated from this cause.

Extensive obstructions * of slack-water improvements elsewhere have confirmed our previous convictions that there is no danger of any material damage or expense from deposit in the pools of the dams. We entertain no doubt that these

* This sentence probably was intended to begin with "Extensive observations" rather than "Extensive obstructions." In support of their proposed "slack-water" (lock-and-dam) navigation system on the Illinois River, Wilson and Gooding cited good experiences with such improvement projects in four other states as well as Canada.

Along the Illinois shore, just across from the confluence of the two rivers, extends a chain of hills from whose summit, like a painting, one of the most incomparable panoramas on earth meets the eye.

— *Das illustrirte Mississippithal*, describing the view from the bluffs at the confluence of the Missouri and Mississippi Rivers in the 1850s.²⁰³

dams can be so constructed as to be in little or no danger from ice or floods and of such materials as to last many years.

. . . There is probably no river in the United States of a length equal to the Illinois from La Salle to its mouth (222 miles) which would have its width and current so little affected by a succession of dams which would deepen the water for the whole distance, as this river. The aggregate fall is only 28.62 feet, or an average of about 1½ inch per mile. The river is in fact a *natural canal*, but the depth of water is not *quite* sufficient for a good navigation without checking the current by placing barriers across it. These barriers or dams will not make *dead water* anywhere in the channel of the river, but merely diminish the velocity of the current, and that to such a moderate extent as to be hardly perceptible to the casual observer.

The water in the Illinois river at La Salle at the time of the highest flood which has ever occurred since the settlement of the country (February, 1832) was about 28 feet above low-water mark. In all the great floods since that period the water has covered the bottoms from bluff to bluff, making the river, say, from a mile to a mile and a half in width, which at such times has a strong current. It is obvious, then, that dams which would raise the water at the lowest stage but six or seven feet, would have no perceptible effect in time of floods. The width and velocity being both increased to such an extent in high water, the quantity of water in the river at a low stage would be but a small fraction of the whole volume in time of floods.

From our own observations of the effect of dams across other rivers, and the opinions of practical engineers and others who have closely observed these effects, we believe that a dam across the Illinois river raised six or seven feet above low water would have no sensible effect on the surface of the water when it was six or seven feet above the comb of the dam, and that steamboats fully laden could then pass over the dams without difficulty.

The volume of water in the Illinois river will at all times be sufficient to keep the dams so covered as, in a great measure, to prevent decay and if constructed in a faithful manner upon the plan indicated, we believe that they will be very durable.³⁷⁰

1868: George Engelmann

The *Transactions of the St. Louis Academy of Science* carries an article titled "The Variations in the Stage of the Mississippi River at St. Louis," in which Dr. Engelmann stated,

The long accepted notion that the melting snows of the Rocky Mountains and the elevated plains at their eastern base were the principal cause of the great annual rise in our river, which has been thought to occur generally in June and was therefore popularly known as the "June rise," is undoubtedly erroneous; for the rise commences and often attains its flood height before the snow water could reach here; in 1863 in March, in 1862 in April; the highest rises however, those above 30 feet, have mostly occurred in June, if we except the rise of April, 1862, and that of April, 1785.* Moreover, this snow water in many years amounts to very little; it may, and no doubt does, swell the upper affluents of the Missouri, but can have a very secondary effect on the great Mississippi itself, as is also proved by the ordinary fallacy of the predictions of high or low water, based upon the quantities of winter snows in the Rocky Mountains.

The spring and summer rains, which extend over the great plains of the Mississippi valley, are undoubtedly the main source of the rise of the river at that period of the year. The variations of the stage of the river in 1865 present a

* William Bradford's 1846 geography of the Mississippi valley calls 1785 "the year of the great flood":

. . . the Mississippi rose fifteen or twenty feet higher at St. Louis than ever before known, and at some narrow points on the river, thirty feet. The villages of St. Genevieve, Fort Chartres, Kaskaskia, St. Philippe, and Kahoka were totally submerged. St. Genevieve was at that time situated on a bottom prairie, that has since been entirely washed away.⁵⁰

In a treatise published by the Illinois State Agricultural Society in 1857, Governor John Reynolds described the great flood of 1785 as well as other extensive inundations:

At long intervals, the floods of the Mississippi inundate these bottoms. In 1725, a great inundation of the American bottom occurred. In the year 1770 another of less depth visited the bottom, and two years thereafter, in the year 1772, a great rise in the river overflowed the whole bottom. This flood tore away part of Fort Chartres (situated on the Mississippi, twenty miles above Kaskaskia,) and thereupon the English garrison moved to the last named village. The next extraordinary flood occurred in the year 1785, and was next to the highest ever known in the Mississippi. I have often seen the marks of the high water of 1785 on the houses in the French villages, for many years after we settled in Illinois, in 1800. The next inundation was in the year 1844, and was some higher than that of 1785. The height of the flood of 1844 is marked on a stone monument, erected on Water street, in the city of St. Louis, and exhibits a terrific flood, rushing over the whole bottom, from bluff to bluff. Since my observation, there have been many small rises in the river, that seemed to portend danger; but no great injury was produced by them. Those deep and sweeping inundations did much injury to the agricultural interest of the country.²⁸⁰

good illustration of this, as both floods, that of March to May, and the second greater one of July and August, correspond with the heavy and *extensive* rains of those months, especially of March and July. But I repeat that, as a general thing, the rains falling at St. Louis give by no means a sure indication of their volume and extent throughout the upper countries.

The year 1844 was the year of our great flood, and in it the "June rise" was not to be mistaken. The river reached a height of 20 feet not before April 26, and continued above that stage till August 10, 3½ months; on May 14 it reached 25 feet, and continued at or above that until August 5, over 2½ months; over a month, from June 13 to July 17, it was higher than 30 feet; for 16 days, from June 20 to July 6, it ranged above 35 feet, and for 8 full days, June 24 to July 1, it maintained itself above 40 feet.¹⁰⁵

Dr. Engelmann's article is accompanied by a "DIAGRAM, exhibiting the monthly quantities of Rain, and the Rise and Fall of the Mississippi River at St. Louis, Mo., during the years 1861 till 1864."

1868: Benj. D. Walsh

Benjamin Walsh was the Acting State Entomologist as well as the Senior Editor of the *American Entomologist*. The first issue of the *Entomologist* features an article titled "The Bughunter in Egypt" *—in which Mr. Walsh presented "A Journal of an Entomological Tour into South Illinois."

Walsh arrived at "the beautiful city of Alton" on June 18. On the following evening—after traveling "through a perfect wilderness of heavy timber"—Walsh stopped for the night at Elsah. † The next morning he inspected "the most splendid vineyard" that he had ever seen. One variety of grape was damaged by a leafhopper, and most of the damage was "in those portions of the vineyard which adjoin the timber."³⁵⁹

On June 22 Benjamin Walsh visited a farmer near Alton who complained that "Locusts were upon his wheat in great numbers" and "Locusts have been injuring his wheat." Walsh knew that these "Locusts" (cicadas) would not damage wheat: ". . . the mere fact of the Locusts having lit upon the wheat certainly does not prove anything against them; for, as the wheat field adjoined the timber, they would naturally do this in any case." On a subsequent tour across Macoupin County, Walsh saw the same kind of damage in a field of wheat "growing upon natural prairie-land, distant at least two miles from the nearest

* Southern Illinois was known as "Egypt." (Today the region is more often called "Little Egypt.") The basis for the Egyptian moniker is explained on page 285.

† Walsh described his route from Alton to Elsah as "fifteen miles of dusty roads and other fifteen miles of primitive wilderness that never knew what dust was."³⁵⁹

That gallant officer and enterprising traveler, Major Long, did the Illinois great injustice when he described it as "an extended pool of stagnant water," for it was, when I saw it, one the prettiest streams to be found in this country of fine rivers.

— James K. Paulding, who boated up the Illinois River from its mouth to Ottawa in 1842.²⁴⁶

timber, and where, consequently, no Locusts could have been present." * He determined that the damage was caused by a wheat midge. The heads of this wheat were roughened up "in the very peculiar style, that is characteristic of the work of the Yellow-bird † upon wheat infested by the Wheat-midge." ‡³⁵⁹

The last day of Walsh's stay in the Big Rivers Area was the 23rd of June: "On awaking early in the morning, my ears are saluted from the surrounding shrubbery by the weird notes of the mocking-bird, imitating with the most perfect exactness the cry of the whip-poor-will . . ." ³⁵⁹

1868: A.H. Worthen

Volume III of the *Geological Survey of Illinois* was issued in 1868. Amos H. Worthen, the State Geologist, authored reports about three Big Rivers counties for this volume. First is Jersey County:

The central and eastern portions are mostly prairie, and are comparatively level or gently rolling; while the western portion becomes more broken as we approach the river bluffs, which are intersected by deep ravines, separated by narrow ridges, many of which are from one hundred and fifty to two hundred feet in height. This portion of the county is heavily timbered.

. . . The principal *alluvial* deposits of this county are the bottom lands bordering on the Illinois river, which form a belt on the eastern bank of that stream, with an average width of about one and a half to two miles. The soil on this bottom land is a deep sandy loam, formed mainly by the wash from the high lands of the adjacent bluffs, and the sediment deposited by the river, which submerges the lower portion of it during its annual overflows. . . . The surface of these lands is gradually being elevated from year to year by the causes already alluded

* Cicadas lay their eggs in tree branches, and the larvae feed on tree roots. Mr. Walsh knew that he would not find cicadas far out on the treeless prairie.

† This "Yellow-bird" might be the American goldfinch, and it might be the yellow warbler. Both species were formerly called yellow birds, and both are known to feed on insect infestations in commercial crops.

‡ Wheat-midge = ? orange wheat blossom midge (*Sitodiplosis mosellana*).

to; the swampy portions are filling up, and the arable area is thus constantly increasing.

When the country was first settled, these bottoms produced annual crops of most luxuriant grasses, growing oftentimes, in wet portions, to a height of six or eight feet, and the annual decay of so great an amount of vegetable matter upon the surface produced a malarious atmosphere that was quite deleterious to the health of the early settlers upon these lands. But, when the soil was once broken and the ground brought under cultivation over a considerable portion of the surface, and the luxuriant growth of vegetation on other portions was consumed by the herds of cattle that were allowed to graze upon it, the general health of the settlers improved from year to year, until at the present time these bottom lands are considered to be quite as healthy as those upon the prairies, and more so than the timbered lands of the adjacent bluffs.

. . . Boulders of granite, sienite, green-stone, quartz-rock and porphyry, are often met with in the beds of the small streams, and have been washed out of the gravel bed, which forms the middle division of the drift * in this vicinity. †

. . . The limestone bluffs in the vicinity of Jersey Landing ‡ are exceedingly bold and picturesque. They are capped by heavy beds of Loess, which makes the entire elevation from two hundred and twenty-five to two hundred and fifty feet in height, with a precipitous limestone cliff from one hundred and fifty to two hundred feet high. At the time of our last visit to this locality (in May, 1864), a pair of eagles, guided by that instinct that leads them to select the most inaccessible location for their breeding places, had built their nest upon a projecting shelf of limestone, about thirty feet below the summit of the perpendicular limestone cliff, about half a mile above the village. Below them was a mural wall of limestone nearly one hundred and fifty feet high, and from above they could only be reached by a rope let down—a feat which but few would be bold enough to undertake. While we were prosecuting our examinations at the foot of the bluff, the male bird sat perched upon a tree at the summit of the cliff,

* *Drift* is a general term for glacial deposits—including both glacial till (laid down by ice) and outwash (deposited by glacial meltwater). Although “drift” is now considered synonymous with “glacial drift,” this was not the case in Amos Worthen’s time. The theory of continental glaciation was developed and debated throughout the last half of the 19th century. Before the concept of an Ice Age became generally accepted, the drift was widely believed to have been laid down by a Great Flood. Boulders lying on the surface (now called “glacial erratics”) were thought to have been carried there and dropped by icebergs that rode the floodwaters.

† The editors of the 1885 *History of Greene and Jersey Counties* paraphrased Worthen’s statement and added, “They are sometimes called ‘lost rocks,’ which name is quite suggestive, as they are indeed far away from their original ledges.”⁷⁶ The editor of the 1919 *History of Jersey County*¹⁴⁷ subsequently appropriated the discussion of lost rocks from the 1885 history book.

‡ Jersey Landing = Elsah.

keeping a vigilant watch while his mate occupied the nest below. The accompanying view, (plate F), * is given to illustrate the scenery produced by this limestone, where it forms the bluffs of the Mississippi. It is a view of the prominent bluff, known as Mount Vernon, just below Jersey landing, where the perpendicular cliff, nearly two hundred feet high, is composed almost entirely of Burlington limestone.

. . . Adjacent to the bluffs of the great rivers which form the southern and western boundaries of the county, and extending back for a distance of from three to six miles, the surface is broken into steep ridges, which are separated by deep ravines. . . . This portion of the county was originally covered with a heavy growth of timber, consisting of the usual varieties of oak, hickory, wild-cherry, etc.

Between Jerseyville and Fieldon, the surface is comparatively level, and the timber consists of the usual varieties of oak, hickory, ash, elm, linden, cherry, honey-locust, and black-walnut; and the valleys of the streams afford, in addition to these, cotton-wood, sycamore, white † and sugar-maple, coffee-nut, ‡ hackberry, pecan, and white-walnut.

. . . The prairies are generally small, and are restricted to the north-eastern part of the county. They are covered with the deep black soil so characteristic of the prairies in central and northern Illinois Fine springs of water are abundant in the limestone region; and good wells are obtained on the prairies at a depth of from twenty to forty feet. ³⁷⁵

Greene is the second county that A.H. Worthen treated in Volume III of the *Geological Survey of Illinois*:

This county lies immediately north of Jersey . . . , and is bounded on the west by the Illinois river It is well timbered and well watered Fine springs are also abundant along the river bluffs, and throughout the limestone region generally; and good wells are usually to be obtained on the uplands, at depths varying from thirty to forty feet.

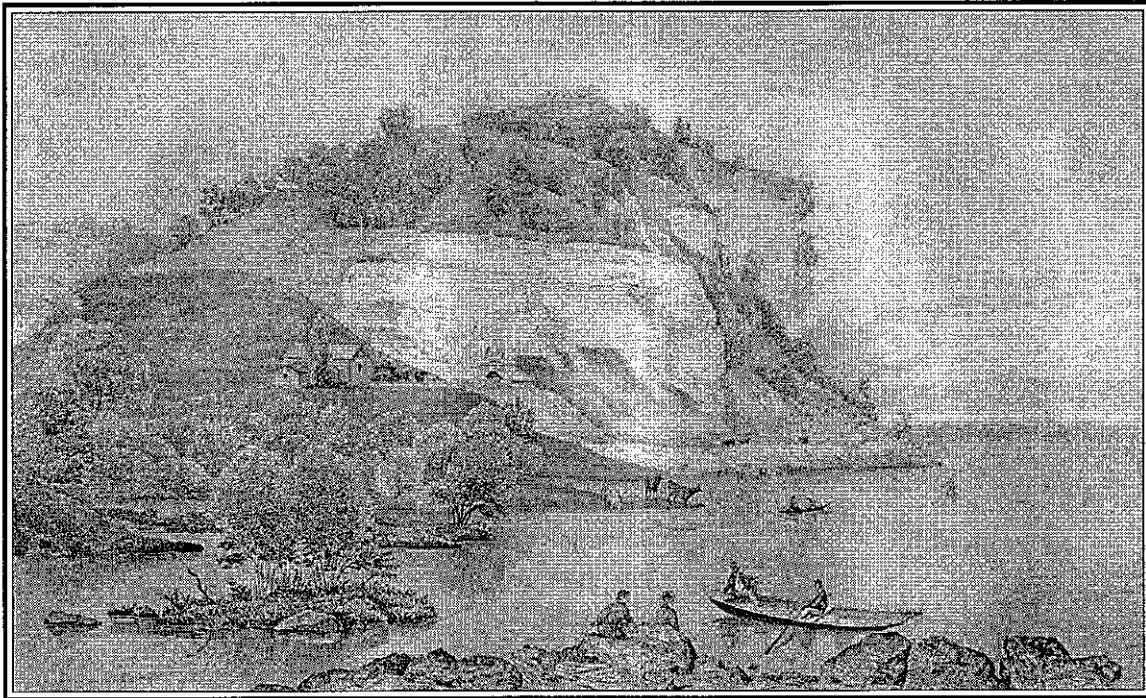
. . . The prairies are small; and the county has an abundant supply of timber, of the same varieties observed and noticed in the report on Jersey county.

. . . The principal alluvial deposits in this county are those forming the bottom lands on the Illinois river The greater portion of these bottom lands are prairie, sufficiently elevated to be susceptible of cultivation, and exceedingly productive. Adjacent to the river bluffs they are elevated entirely above high

* Plate F is on the facing page.

† White maple = silver maple (*Acer saccharinum*).

‡ Coffee-nut = Kentucky coffee tree (*Gymnocladus dioica*).



Outcrop of Burlington Limestone—MOUNT VERNON BLUFF, JERSEY COUNTY

water mark, and are not subject to overflow from the annual river floods. Belts of heavy timber occupy some portions of these bottom lands, and skirt the small streams by which they are intersected. The varieties of timber observed in this county are the same that have been enumerated . . . as occurring in Jersey county.

Loess.—This formation is usually confined to the vicinity of the river bluffs, which it caps to the depth of from forty to sixty feet, and gives origin to the bald grassy knobs, which form so notable a feature in the topography of the bluffs, both on the Illinois and the Mississippi. It is largely composed of beds of marly sand, which sustain a thick growth of wild grass, and occasionally a stunted growth of oak.

. . . Large boulders of metamorphic rocks are not so abundant in the Drift of this region as in many other portions of the State; but a few were seen of moderate size, composed of green-stone, porphyry and granite, giving unmistakable evidence of their northern origin.

. . . At James J. Eldridge's place,* the limestone measures a hundred feet in thickness, above the road at the foot of the bluff, and is capped by a mound of

* Bluff Dale Farm, the home of James J. Eldred (not Eldridge) was in section 16 of Bluffdale Township, along the bluffs north of the town of Eldred.

Loess sixty feet high; and the bluffs very generally culminate in this vicinity in bald knobs, covered only with grass, giving a very picturesque outline to the landscape.

. . . The prairies are usually small; and all the streams are skirted with belts of excellent timber.³⁷⁴

Mr. Worthen's discussion of Scott County:

This county lies immediately north of Greene . . . , and it is bounded on the west by the Illinois river A broad belt of alluvial bottom lands, from three to four miles in width, skirt the shore of the Illinois river, and extend from north to south throughout the county. These bottoms are mostly prairie, with narrow belts of timber skirting the streams. The middle portion of the county is generally rolling; and some portions of it adjacent to the river bluffs are broken and hilly. The eastern portion is comparatively level, and is interspersed with small prairies. More than one-half of the entire surface of the county was originally covered with a heavy growth of timber, embracing the usual varieties already enumerated in the counties south of this.*

. . . From the point where the limestones disappear in the bluffs, about one mile above the south line of the county, to the *Mauvais-terre* creek, the Quaternary[†] deposits are the only formation exposed in the vicinity of the bluffs Where these heavy accumulations of Quaternary beds occur, the surface is cut up into somewhat abrupt hills and ridges These lands, however, possess an excellent soil, and were originally heavily timbered with white-oak, hickory, ash, elm, walnut, sugar-maple, linden, wild-cherry, etc.; and, since they have been brought under cultivation, they prove to be among the most productive lands in the county. Wherever the land was originally covered with such a growth of timber as that just mentioned, there can be no question as to the superior quality and productive capacity of the soil; and these lands are really preferable, for most agricultural purposes, to the best prairie lands of the adjacent region.

. . . The Loess caps the river bluffs, and often reaches a thickness of forty to sixty feet, forming bald grassy knobs along their summits.³⁷⁶

* Worthen was referring to Greene and Jersey Counties when he wrote of "the counties south of this." His list of trees in Jersey County is on page 270. Worthen did not enumerate the trees in Greene County, but he did say that they are the same as in Jersey County.

† Geologic materials overlying the bedrock are from the Quaternary age (Pleistocene and more recent times).

1870: William C. Purdy

The following information from William C. Purdy is among the Joseph C. Howell papers at the Illinois Historical Survey:

Richard Wilhelms & family settled . . . in Macoupin county in the winter of the year 1819 or 20 and lived in a hollow Sycamore tree a part of the Winter until he got his cabin up. . . . One Joseph Vincent measured the tree in which Wilhelms & family lived with a 10 foot rail and found that it was the length of a 10 foot rail in the clear, the tree is on the NW 1/4 of Sec 19-7-6 * entered by Telmachus Camp in August 1819—the remains of the stump is yet to be seen this 12th April 1870 —¹⁶³

1870: A.H. Worthen

The fourth volume of the *Geological Survey of Illinois* treats Calhoun and Pike Counties. In the chapter about Calhoun County, Amos H. Worthen reported,

This county is bounded on the north by Pike county, on the east by the Illinois river, and on the south and west by the Mississippi. . . . It was originally a heavily timbered region, the whole of the uplands and a portion of the bottoms being covered with a heavy growth of timber, embracing the usual varieties of oak and hickory, linden, elm, hackberry, sugar maple, black and white walnut and honey locust; all of which are found on the uplands, while on the bottoms we find cottonwood, sycamore, ash, soft maple, coffee-nut, hornbeam, pecan, willow, &c.

. . . The alluvial deposits are mainly restricted to the bottom lands which skirt the Illinois and Mississippi rivers on three sides of the county, except between *Cap au Gres* [†] and Milan, [‡] where the limestone bluffs jut boldly out to the river's edge. . . . A considerable portion of these bottom lands are prairie, and are the only natural prairie lands in the county. . . . The most of these bottom lands are dry enough for cultivation, and are among the most productive and valuable lands in the county.

* This sycamore was in the northwest quarter of section 19, Township 7 North, Range 6 West. It stood along Cahokia Creek north of Staunton, about 6 miles south of the Big Rivers Area.

† Worthen gave the location of *Cap au Gres* as section 30, Township 12 South, Range 2 West. This bluff rises directly from the Mississippi immediately below Lock and Dam 25, 12 miles upstream from the southern point of Calhoun County.

‡ Milan was a small town at the south end of Calhoun County, located where the first bedrock outcrop is encountered on the bank of the Mississippi River as one proceeds upstream from the mouth of the Illinois River.

. . . On the northwest quarter of section 16, town 11 south, range 2 west, * there is a large sulphur spring, slightly impregnated with salt. The water is said to have been a much stronger brine formerly than now, but a boring was made to the depth of 198 feet, which changed the character of the water flowing from the spring, so that it is now a strong sulphur water, but so strongly impregnated with salt as to render it rather unpalatable. . . . Fine springs of fresh water abound in the central and northern portions of the county, where the Burlington limestone is the prevailing rock. ³⁷⁷

In a companion chapter, "Geology of Pike County," Mr. Worthen stated,

Pike county lies between the two great rivers, the Illinois and the Mississippi A large proportion of the surface, on the upland, was originally heavily timbered, but there are several small prairies in the central and northern portions of the county.

. . . *Loess*.—The river bluffs on both sides of the county, are capped with this formation, which ranges in thickness from ten to sixty feet or more. . . . It gives origin to the bald knobs so frequently met with along the river bluffs, and is often rounded into natural mounds, which have been very generally used by the Indians as burial places for the dead.

. . . The greater portion of the uplands in this county, were originally covered with a heavy growth of excellent timber, but there are a few small prairies, seldom more than two or three miles in width, interspersed over its surface, and occupying the most level portions of its area. The surface of the county is generally rolling, and in the vicinity of the streams, becomes quite broken and hilly. The timber consists of white, red, and black oak, pig-nut and shell-bark hickory, black walnut, elm, linden, wild cherry, honey locust, sugar maple, sassafras, etc. The soil on the prairies and more level timbered lands, is a dark, chocolate colored clay loam, very productive ³⁷⁸

1872: William A. Grimshaw

Mr. Grimshaw delivered the keynote address at the inaugural meeting of the Pike County Old Settlers Association on August 21, 1872. He told the assembly,

Once our prairies were the home of the bounding deer in vast herds, of the prairie wolf, the prairie fowl [†] in great flocks, the timber land abounded with the squirrel, the turkey and the pigeon, and in the hollow trees we had the beautiful but noisy paroquet; as well as in their haunts numerous other birds and animals. These have in a great measure disappeared until game is a rarity. The wild

* The location of this mineral spring is about one mile southeast of Gilead.

[†] Prairie wolf = coyote; prairie fowl = greater prairie-chicken.

Nothing of the kind can exceed the solemn beauty and grandeur of these rugged highlands when seen from the river by moonlight.

— Abner Jones, upstream from Alton in 1838.¹⁷⁷

fruits once abounding have been superseded by more luscious cultivated fruits. And yet, who of the old settlers does not . . . find a good taste in the mouth when he thinks of those nice preserved plums, crab-apples and ground cherries . . . We then think of the prairie and woodland each abounding in the season in beautiful flowers, rivaling in their colors the rainbow.⁷²

1873: John G. Henderson

An anecdote about Scott County during the third decade of the 19th century:

Wild animals, even of the larger kinds, were still abundant. The buffalo and the elk had been exterminated, but deer, wolves, panthers, wild-cats, foxes, and turkeys, were abundant. Rattlesnakes, which the Indians never killed, were plenty. In the winter season they congregated in dens, which, when discovered, were watched during the first early warm days of spring, and thus large numbers of them were destroyed. In the spring of 1821, Alexander Beall, who was out hunting, stopped at a spring, near Winchester, to drink. Just as he was about leaving he was startled by the rattling of a snake. As he reached for a stick to strike it, a number of them set up their whirring notes of defiance about him. He succeeded in killing a dozen or more. The following spring the place was watched, and, in one day, one hundred and ninety-six rattlesnakes were killed. The place yet bears the name of "Rattlesnake Spring."¹⁵²

1873: A.H. Worthen

According to the "Geology of Macoupin County" . . .

The principal streams in the county are Macoupin creek, and its tributaries . . . Heavy belts of timber occur on either side of these water courses, which furnish an adequate supply for the prairies that occupy all the highlands between the streams, and cover fully two-thirds of its entire area.

. . . Fine belts of timber skirt the banks of all the streams in the county, furnishing an adequate supply for fencing the adjacent prairie, and for fuel to those who prefer wood to coal. The principal growth upon the uplands is two or three varieties of oak and hickory on the ridges adjacent to the streams, while on the more level lands skirting the prairies there are fine groves which, in addition to these varieties, contain elm, linden, wild cherry, honey locust, black walnut and

hackberry; and indicate a soil of excellent quality. On the creek bottoms the cottonwood, sycamore, white and sugar maple, ash, redbud, dogwood, sassafras, persimmon, paw-paw and white walnut are common.

. . . The soil on the level prairie is of a black, peaty character, becoming of a chocolate-brown color on the more rolling surfaces, and degenerating into a light ash-gray colored soil on the oak ridges, which are the poorest lands in the county; but these poorer soils upon the broken lands that border the streams are excellent fruit lands, and also produce good crops of wheat and clover, if properly cultivated. Underdraining * would no doubt greatly benefit the prairie soils, as the crops are much injured in excessively wet seasons from the superabundance of moisture absorbed by the soil and held by the impervious clays of the subsoils beneath until dissipated by surface evaporation.

The bottom lands in this county are restricted to a narrow belt along the lower course of the Macoupin, and some portion of this has been cleared of the heavy growth of timber with which it was originally covered³⁷⁹

1875: Joseph Gillespie

When he addressed the Madison County Old Settlers' Reunion at the 1875 county fair, Judge Joseph Gillespie recalled the early days: "We did not suffer from the long droughts in the fall then, as now, and we had fewer frosts. Nearly all the hay was cut from the wild prairies. . . . Paroquets [†] were common; also gophers [‡] abounded everywhere." ²³⁶

1876: Z.A. Garrison

Z.A. Garrison, an early resident of Montezuma Township in Pike County, wrote the following reminiscence:

Fifty years ago I with my father and his family crossed the Illinois river in a small hand ferry-boat at Meacham's Ferry, where Montezuma now stands. We went west four miles and settled in the timber, a pretty country abounding with game of all kinds. Deer, turkey and bees were very plenty. The Indians were our most numerous neighbors, being about twenty to one white man. In the winter of 1829 and 1830, [¶] the deep snow fell, which was four feet on a level.

* Underdraining is accomplished by a system of subsurface drainage tile lines.

[†] Paroquet = Carolina parakeet.

[‡] When Judge Gillespie spoke of gophers, he might have been referring to the thirteen-lined ground squirrel, Franklin's ground squirrel, or possibly the pocket gopher.

[¶] The legendary Winter of the Deep Snow was in 1830–31, not 1829–30. John Lammy's history of Calhoun County states that an unprecedentedly deep snowfall occurred in the early spring of 1829 (page 279).

The summer following I was tending the ferry for Solomon Seevers at Montezuma and saw the first steam-boat that ploughed the Illinois river. It was a small stern-wheeler. When opposite the ferry the wheel rolled up so much grass that it could not turn, and the men had to cut it loose and pole her through the grass. There was but one water mill in the county and that was on Big Blue.* It was a tub-wheel and a very faithful one it was. . . . Women wore . . . deer-skin moccasins. Men and boys dressed in buckskin . . . , and on the head a coon or fox skin cap⁷²

1876: Asa Hinman

Asa Hinman, the son of early Pike County immigrants, wrote an article about local history for the July 1, 1876, edition of the Griggsville *Reflector*. He recalled the era of the early 1830s:

The first settlements were nearly entirely confined to the edge of the timber where small fields could be cleaned and plowed with one yoke of oxen or a span of horses, the prairie sod being tough, requiring heavy teams to plow it.

At this time game was very abundant. Deer, turkeys, prairie chickens, quail, raccoon, opossum and skunk were here in immense numbers. The buffalo had disappeared, but from the amount of horns and bones that lay bleaching on the prairies they must have been here in vast numbers.

At this time occasional bands of Indians would come in to hunt, but the settlers would form into companies, shoulder their rifles and march out to their camps and drive them away.

. . . Well, I have told you game was plenty; so was wild honey; the land productive and every man and boy who was large enough knew how to use the rifle and bring down the game. And up to the winter of 1830-'1 the winters had been very mild. . . . The men would frequently manufacture caps for themselves and boys from the skins of foxes, coons and muskrats. Honey, at that day, was almost the only sweetening, besides maple sugar, that was used. . . . The people had no money What they did was mostly trade in furs, peltries and beeswax

. . . In December, 1830, snow fell to the depth of three feet on a level and drifted in many places to eight or ten feet. This was kept up by snow-falls until the middle of March. This has been known and referred to as the winter of the deep snow. During this winter vast numbers of deer, turkey and other game died, or were killed by thoughtless hunters. During these early settlements

* Big Blue = Blue Creek, which drains the first watershed north of the Big Rivers Area on the west side of the Illinois River.

wolves were very abundant and very destructive on pigs and sheep. This county had a great many snakes, of which the rattlesnake was the most numerous and dangerous, persons and animals being frequently bitten by them, causing the most intense pain and occasionally producing death. The habits of these reptiles were to gather up late in the fall at some rocky bluff or other place where they could make their way underground beyond the reach of frost and remain there until warm weather in May, when they crawled out and lay around in the sun a few days and then dispersed for miles over the surrounding country. During the time of their coming out in May we used to visit their dens and kill them in large numbers. This practice, in the course of a few years, greatly lessened their numbers, but still, in some localities a few remain.⁷²

1876: John Lammy

At the celebration of America's 101st Independence Day in Hardin, John Lammy delivered an oration about Calhoun County's "Early History and First Settlers." His remarks disclose some aspects of the ecology of the Big Rivers confluence area in the early 1800s:

EARLY SETTLEMENT.

The first white man that ever took up his abode in Calhoun county is said to have settled at the Two Branches in Point precinct * about the year 1801.

. . . The next settlers were French trappers and half breeds who formed quite a large colony on the Illinois river about a mile above where the Deer Plain Ferry † now stands. These remained there until the great high water of 1815 or 1818 drove them away.

. . . After these in time was Major Roberts, who came . . . in June 1811 . . .

. . . In May, 1822, the father of Chesley Twitchell . . . landed . . . at Cole's Grove, on Gilead Slough. ‡

. . . Hamburg was a wilderness of forest and underbrush, and nothing for a road but an Indian trail.

* Before the township form of government was instituted in Illinois, counties were subdivided into precincts for polling purposes. Point Precinct occupied about 50 square miles at the southern tip of Calhoun County.

† The Deer Plain ferry crosses the Illinois River at its mouth.

‡ Gilead is along the Mississippi River in the central part of Calhoun County, where the dividing ridge between the Illinois and Mississippi Rivers narrows to less than three miles. A remnant of Gilead Slough lies north of Gilead. Cole's Grove was at Salt Prairie, the current location of Gilead. The name of Salt Prairie commemorates a spring in Salt Spring Hollow southeast of Gilead.

There is, perhaps, no part of the world where the husbandman labors less, and reaps more, than throughout a great portion of this fine state, on which nature has bestowed her most exuberant bounties

— James Paulding after a trip up the Illinois River in 1842.²⁴⁶

. . . About this time also, the Metz family moved in. Johnnie, we believe, it was who built a house and made a small clearing by the big spring on the present site of Brussels.

. . . The first settler here after Major Roberts was Judge Ebenezer Smith
. . . He came in . . . 1819

. . . Five families of Whites were all that were to be found in the present limits of Calhoun county.

. . . The only building of any kind for miles around was an Indian trading post. The house was close to the road-side spring

. . . Jacob Pruden . . . located in 1829, building near the big spring of A.G. Squier. . . . In 1829, Pruden moved on the farm now known as the Mortland farm. He bought out a man named Still, whose reasons for selling were that "the hollow was so full of wolves and rattlesnakes that he was afraid to stay."

. . . John Ingersoll . . . moved to the spring south of C.C. Squier's, in the year 1825.

. . . GILEAD.

. . . Jacob Crader settled by the Cave Spring, four miles west of Hardin, and the same distance north of Gilead. Here he built two water power corn mills in 1829, the year long remembered as the year of the great snow, a snow falling in the early spring of that year to a depth never before experienced by any of the settlers.

In 1830, Jacob moved with his family to the old Uhrig place, now the Catholic Church neighborhood in Crater precinct. He and his boys had to chop a way for their wagon through the forest to get there. The early frost of 1831 so injured their corn that it was unfit for food

. . . Samuel Crater, brother to Jacob, Sr. moved up to what is now known as Indian Creek, in the year 1829. On this creek he also successively built two water mills

John Huff settled at the Great Salt Spring at a very early day, date not known.

After him came R.S. Quigley, who took possession of the spring and with a view of utilizing it for the making of salt, erected a large frame building and brought machinery for salt making from Ohio. In order to get a greater supply he bored to a depth of 250 feet, but only succeeded in getting a large flow of fresh water containing sulphur, rendering the whole affair useless. Soon after he abandoned the place

. . . Andrew Uhrig moved in, in 1829, and settled on the river near what is known as Hurricane Island Slough. . . . High water of "44" drove him to the bluff on what is known as Uhrig's farm.

. . . PANTHER CREEK. *

Earliest settler not known. Mrs. John White came from Kentucky in 1834. Found Peacock in possession of the only orchard on the creek.

. . . In 1845 Dan Looper owned the only mill within twenty miles of them, and it was run by hand. Wild hogs were numerous and very fat in the fall. Wolves came into the door yards, sometimes as many as twelve or fifteen at a time.

. . . Mrs. Elizabeth Crosby moved . . . to Panther Creek in 1837. . . . The ridges that are now covered with beautiful forests, or that have just been cleared of them were, at that time, . . . bare as the prairie, without even a shrub.

. . . Incidents of Settlement.

From 1815 up to 1820, the . . . settlers . . . began to extend their settlements as far as Lower Dardenne, Barique and Cuivre creeks, on the Mississippi. † . . . The chief allurements . . . were the vast numbers of wild turkey and deer, the presence of honey and, we suppose, the absence of women.

. . . French and Indian High Water.

Captain Nixon visited the county long before removing to it. He stated that, while on his way in a canoe from near the present Deer Plain postoffice, ‡ across Little Prairie down to the present site of the town of Grafton . . . he passed the colonists of the Illinois River, who had taken refuge on a mound in Little Prairie These . . . were much surprised and demoralized by the unexpected flood. . . . This was between the years 1815 and 1820.

* Panther Creek drains into the Illinois River in extreme northern Calhoun County.

† Dardenne Creek, Perque Creek, and the Cuivre River are in Missouri. They enter the Mississippi River at the south end of Calhoun County.

‡ Deer Plain is at Calhoun Point, where the Illinois and Mississippi Rivers come together.

*This is surely a great country . . . — J.H. Buckingham, traveling across the heart of the Big Rivers Area by stagecoach in July of 1847.*²⁶⁹

. . . Manner of Life.

. . . The wild turkey and deer furnished them meat, and the hollow trees of the forest yielded them stores of honey. . . . Every spring and fall the men would cut a lot of cordwood near the river. Then making a raft of ash or cottonwood logs, they would shoulder the cordwood on board. Running the raft to St. Louis they would carry the wood ashore, cord it, and sell it, getting from a dollar to a dollar and a quarter a cord. . . . The cables used to tie up the rafts were large and costly,—grapevines obtained from the forest.

The milling was first done by means of a sycamore block hollowed by fire, and then cleaned out.

. . . MILLS.

The first, probably was . . . at Coles Grove. Date unknown. It was a horse power.

The next was, probably, John Mett's, in Brussels. A horse power, probably in 1828.

Gilman's on Muddy Creek, probably co-temporary with Metts. A water power.

The Cave Spring mill, near the residence of John McNabb. Built by Jacob Crater in 1829. Water power.

Indian Creek mill, built by Samuel Crater in 1829 or 1830.¹⁹⁶

1876: Warner & Beers

In its brief histories of each county, Warner & Beers' *Atlas of the State of Illinois* contains snippets about the ecology of the Big Rivers Area. Calhoun County comes first:

The bottom lands . . . are exceedingly rich and fertile, but partly subject to inundation. . . . The county once carried splendid timber, but most of that was long ago cut out and sold as timber or cordwood. Cottonwood, sycamore, box elder, black walnut, elms and willows, white oak, black oak, hickory, sugar maple and so forth.

. . . The population up to about 1840 was very roaming and floating, mostly attracted by the timber only, and its facilities for shipments.³⁶⁰

Greene County: ". . . Macoupin and Apple Creeks furnish abundant water power."³⁶⁰

Madison County: "The greatest flood was that of 1844, when the Mississippi inundated almost the entire American Bottom." ³⁶⁰

The first Macoupin County courthouse had only two rooms, so "it was the custom of the jury to retire for deliberation to an adjoining thicket." The town site of Bunker Hill was earlier known as Wolves' Run. ³⁶⁰

1877: Charles Hallock

Six pages of Charles Hallock's *Sportsman's Gazetteer* are devoted to listings for Illinois. The entry for Jersey County reads,

In the vicinity of the mouth of the Illinois River there is good deer hunting. In the marshes and lakes are snipe in their season, and ducks most of the year. In the corn fields and stubble, an abundance of quail. On the brushy hillsides there are ruffed grouse, locally known as "pheasants." Great numbers of geese and brants frequent this vicinity, and many are killed as they pass from their feeding grounds in the fields to the sandbars and lakes. There are a number of places in the Mississippi, near the mouth of the Illinois, where the current is too rapid and the shallow waters too turbulent to freeze at any time. Both geese and ducks (mallards) frequent these open places. Take rail to Alton, thence by wagon road. ¹⁴⁶

Madison County: "Alton. Duck and snipe shooting." ¹⁴⁶

Pike County: "Rockport. Geese, brant, ducks, pinnated * and ruffed grouse, woodcock and quail." ¹⁴⁶

Across the Mississippi River in Pike County, Missouri: "Clarksville. Snipe shooting is excellent on the marshes back of the town." ¹⁴⁶

1877: C.A.W.

The July 19 issue of *Forest and Stream* carries the following notice from a Macoupin County correspondent:

Carlinsville, Ill.—We have good prospect in this part of the moral vineyard for an abundance of game; chicken and quail have hatched well. The farmers rejoice in an abundant crop of wheat. Ministers of the gospel are quiet, and, take it all in all, we are content. ¹⁴⁵

* Pinnated grouse = greater prairie-chicken.

1878?: Guy Rivers

The April and May 1879 issues of *Forest and Stream* carry a five-part series titled "Down the Big River." These articles chronicle the voyage of Guy Rivers and Charles Caywood, presumably during the previous year. The men launched a 16-foot skiff onto the Mississippi River at Rock Island on the 23rd of May. A week of drifting and rowing brought them to the mouth of the Illinois River. They almost overlooked it:

The low cape forming the northern corner of the mouth of the Illinois will probably be mistaken by the *voyageur*, as it was by us, for one of the willow-covered islands with which the main river is interspersed, and the Illinois itself for a large slough.²⁸⁶

Messrs. Rivers and Caywood stopped for lunch opposite Alton "under a large oak close to the bank." A wagon road ran about 30 feet from the riverbank. "Between the road and the river there was no wood but the one oak tree, but back of the road was a tangled thicket of oak and underbrush."²⁸⁶

A local man told them that the mouth of the Missouri River was about five miles farther down the Mississippi—but only a mile downstream was a chute that led to the main channel of the Missouri. When they arrived at this chute, Mr. Rivers immediately recognized it as a distributary of the Missouri River by "the golden tinge of the incoming waters." He told the readers of *Forest and Stream*,

The "shute" ran down a decline with the impetuosity of a rapid. It was about five rods in width, by as many feet in depth. The banks were covered with a sedge of willow shoots, and selvedged with great numbers of drifting logs, which had come thus far and been washed to the shore, and anchored in the soft mud.²⁸⁶

The men rowed their skiff into the chute. They barely managed to surmount the current and reach the Missouri River. They then floated down to the junction with the Mississippi:

The scene was a grand one, and long to be remembered. The salient points of attraction, the broad, sea-like surface of the stream, the willow-covered islands a short distance above us, the long line of cottonwoods fringing either shore, the leveling rays of the setting sun, glancing from the rippling current and giving it a golden tinge, all combined to form a picture worthy of remembrance.²⁸⁶

1879: Clement L. Clapp

The *History of Greene County* was issued in 1879 by the publishing house of Donnelley, Gassette & Loyd. Clement L. Clapp compiled the local historical information for this volume. Mr. Clapp included the following details about the former environment and natural resources of the Big Rivers Area:

Several mineral springs, in which sulphur chiefly predominates, are to be found in various parts of the county and have been resorted to by many for medicinal purposes, with the best of results. . . . Just northeast of Greenfield are the Greenfield Springs, which are impregnated with iron, magnesia, calcium, and other ingredients. . . . Some three or four miles northeast of Carrollton, . . . there is another natural font of healing A similar spring, on the farm of Mr. Thos. Luneen, southeast of Carrollton, just beyond the limits of the city, was much resorted to in years past, and at other points they may be found.

. . . In the northern part of the county is what is known as the "Grand Pass." It is a narrow channel, connecting a chain of small lakes below the bluffs and near the river. It is said by some to derive its name from the fact that the water which usually flows south from one lake into the other, in times of high water, reverses its direction and runs backward into the lake from which it came.* It was for many years an important feature of the landscape for the reason that here only could a passage be had beyond the lakes.

. . . The winter of 1819 and '20 proved to be an unusually severe one. The long grass of the prairies had been destroyed by fires lighted by the Indians or hunters, and much of the undergrowth in the woods was killed by the same element. Before the close of the winter, the provisions gathered by them for their stock, from places where it had escaped the ravages of the fire, gave out and they were compelled to cut down trees, from the boughs of which the cattle and horses could procure a scanty supply of food. Many of these wandered away and were lost, while some of them died from the effects of cold and hunger.[†]

. . . In the latter part of November, 1830, snow commenced to fall and continued with short intervals until January, 1831. As one snow fell upon another, and was driven before the cold wind, it soon accumulated in many places to a depth of from seven to twelve feet, and whole fields were covered with a white mantle five or six feet thick. Fences and small buildings were entirely hidden, windows were darkened, and great distress was caused to the inhabitants, as

* Another purported derivation of the name "Grand Pass" is on page 175.

† Forage must have been especially scarce in the woods and prairies during the winter of 1819-20 because an extraordinary drought fostered unusually hot and widespread wildfires at the end of the 1819 growing season. According to Edwin James, who came to St. Louis early in 1820, "In the Autumn of 1819 the burnings, owing to the unusual drought, continued until very late in the season, so that the weeds in the low grounds were consumed, to the manifest injury of the forests."¹⁷⁴ John Woods, a farmer near the Wabash River in Edwards County, wrote, "The fires in the fall of 1819 were much greater than usual, as every thing was so excessively dry, and much mischief was done to the woods and plantations . . ." He further remarked, "It was supposed, that these fires extended many hundred miles."³⁷² Richard Lee Mason endured this great drought and the resultant wildfires when he crossed southern Illinois on his way to the Big Rivers Area in November of 1819 (see a footnote on page 105).

well as to stock and game. In the heavy timber where there were no drifts the snow was said to average three feet in depth. The sun would occasionally melt the top of the snow, and then a cold night would freeze it into an almost impenetrable crust. For years before, the weather had been very mild until after Christmas, sometimes continuing all winter so warm that the cattle would browse and feed with but very little care from man. . . . The deer and other game suffered very severely. Prairie chickens and rabbits were very easily caught, and the deer in running over the snow would often cut through the crust and be unable to extricate themselves. They were then an easy prey to mankind, or the wolves.

. . . Until the latter part of February, when the snow went off with a great freshet, the ground was not seen.*

The Summer which followed was a very wet one and at its close, on the 12th of September, came a hard frost biting the corn in the field, and rendering it valueless for bread or seed. The succeeding Winter was a very severe one, and in the Spring following seed corn was a scarce article. It was at this time that southern Illinois received the name of "Egypt," because the people of the northern counties had to go into the south part of the State for corn.

. . . The Fall of 1836, is made memorable by the event known as the "sudden freeze." . . . Mr. Washington Crowder, a resident of Sangamon County, was married on the 21st of December, 1836, and distinctly remembers going for his license the day before. This event fixes the date beyond a doubt. † . . . He saw in the northwest a heavy, black cloud rapidly approaching him, accompanied by a terrific, deep, bellowing sound. . . . he was in the act of drawing his reins taut, when the wave came over him. At that instant the snow and slush under his horse's feet turned to ice, while his coat, wet with the rain, became instantly as stiff as a board. He went on to Springfield, where he found his clothing frozen to the saddle, and being unable to dismount was compelled to call an assistant, who carried man and saddle to the fire to thaw them apart. . . . The wave passed over Greene County about one or two o'clock, and came so suddenly that chickens and small animals were frozen in their tracks. Several inches of snow had fallen a short time before and on that day it was quite warm,

* Greene County historian Eileen Smith Cunningham pronounced, "The Winter of the Deep Snow became a dating point in pioneer legendry. Residence in the Illinois country before that date was qualification for membership in Old Settlers associations and special designation as a 'Snow Bird.'" And "Only those who came to the county 'before the deep snow' are deemed genuine 'old settlers,' although this rule is not very rigidly enforced." ⁹⁰

† A number of different dates have been given for the Sudden Change. One of the most authoritative accounts states the day as December 16, 1836. ⁹¹ The date of December 20 is supported by the record of a marriage in Lee County: ". . . Dec. 20, a remarkably cold day, Levi Carter was married to Mrs. Gillette . . ." ³²¹

*A short distance from Alton we came to the low land called the American Bottom—
which at times, when the river is highest, is generally overflowed; it is rich soil,
richer than any other in the world.* —J.H. Buckingham on July 17, 1847.²⁶⁹

with light, spring-like showers, and the whole earth was covered with slush and water. The change was so sudden and the wind so strong that the water in the ponds in the road froze in waves, sharp-edged and pointed, as the gale had blown it.

One old settler remembers the day as warm and showery during the forenoon. Near two o'clock in the afternoon it grew dark as if a rain storm was coming, and, in an instant, the strong wind, with the icy blast, came and all was frozen. . . . The ice had frozen in the short time between two o'clock, p.m., and nine o'clock the next morning, fully six inches thick. He also found raccoons, opossums, and other animals frozen to death. Walking across the logs they were suddenly chilled and, falling off, they were unable to move again.

Travel was almost entirely suspended, and the whole country had the appearance of a vast field of ice.⁷³

In his chapter about Bluffdale Township, Mr. Clapp attested,

The topography of this quaint little region, presents, more than any other place that I have seen, a union of all that is most striking and peculiar in western landscape. Almost overhanging the homes of the settlers are the bluffs, in many places a solid perpendicular wall of Burlington limestone, rising sometimes to the height of two hundred feet. Immediately back of this wall and not unfrequently at its very brink, rises a series of conical hills from one to two hundred feet higher. During the Summer season, these cones are crowned to their very summit with the very richest verdure, presenting a fine contrast with the brown, rugged cliffs below.⁷³

This volume recounts the drama of twelve soldiers in Greene County in 1814: “Early one morning, as the party started out across the prairie, and were crossing a small ridge, which was covered with a hazel thicket, they fell into an ambuscade of the Indians . . .”⁷³ The hazel thicket, a small elm, tall grass, and a ravine provided cover for combatants during the ensuing battle.

Samuel Thomas was an American soldier who fought in the Big Rivers region. He later became one of the earliest white residents of Greene County, arriving in 1816:

It was during this year that Mr. Thomas first visited Greene County, with a view to making it his home. He cut and stacked a quantity of hay on the land on which he subsequently settled, and made other preparations for residence there. He then returned to his family in the Wood River settlement, and,

during his absence, the Indians destroyed all the results of his labor north of the Macoupin. . . . in the Summer of 1818, he . . . prepared to emigrate to the new lands, from which the Indians had just been driven.

. . . It was in the month of August, and the prairies were fragrant and beautiful. Just before they arrived at the Macoupin—or Maquapin (white potatoe) as the Indians named it, and it was for a long time called—near the present town of Kane, they found one or two cabins . . . , but did not stop here. Crossing the creek and the bottom lands, Mr. Thomas ascended the bluffs, passed on through the timber and selected a spot for a home about three miles from the stream, on section 33, township 10–12. * A beautiful grove and a clear spring of water were among the attractions that fixed his choice. Here Mr. Thomas killed a deer, cut a bee-tree and engraved his name on the bark of a monarch of the forest, to indicate that the land was claimed.⁷³

In May of 1821 three-year-old Matilda Pruitt wandered away from her family and became lost in the Apple Creek valley, which lies next to the Big Rivers Area in central Greene County. Years after the incident, William A. Tunnell wrote an account of the search for Matilda. Mr. Tunnell set the stage by portraying the landscape and plant cover:

It was only during the previous year that the sound of the white man's rifle first broke the silence of the primeval forest. The hillsides and little valleys reaching from the prairie down toward the southwest where the ravines fell into Apple Creek were clothed with a luxurious growth of vegetation, so rich and dense that with its accumulated weight it sank down into a tangled and confused mass of briars, thorns, nettles, grape vines, pea vines, and every imaginable kind of vine or shrub bearing fruits, flowers, or thorns.⁷³

According to Mr. Tunnell's narrative, the search for Matilda Pruitt proceeded through "entangled brush-wood," "thorny brushwood," "the thickest brambles," "masses of grape vines," and "briers and thorns." The searchers found her tracks "in various places, where fallen trees had been consumed by fire, leaving a soft bed of ashes, in which she had delighted to walk, as there were no briars or thorns to wound her feet." At several points "the little footprints were accompanied by those of a bear." On the fourth day, little Matilda was discovered in "a beautiful grove of giant oaks overshadowing the bluffs of Apple Creek, in the neighborhood of Beeman's old mill." At that spot, "The deep shade of the thick grove had kept the earth destitute of vegetation; it was carpeted only with a light covering of short grass." The girl had subsisted on "green leaves of the wild sorrel."^{† 73}

* Section 33, Township 10 North, Range 12 West is in Carrollton Township.

† William A. Tunnell wrote the story of Matilda Pruitt's plight in a romantic style, so he may not have been concerned with describing the vegetation accurately. Rowell Honeycut's recollection of the search for Til Pruitt is on page 364.

In addition to Mr. Tunnell's narrative about Matilda Pruitt, Clement Clapp's history of Greene County contains the saga of a search for an ancient silver mine on Macoupin Creek in the 1820s. This tale, which is related in the same dramatic manner as Miss Pruitt's story, says that the fortune-seekers pushed through "thick brush and grape-vines" on the uplands above Apple Creek. The men stopped at a little spring along a tributary of Taylor Creek (a branch of Macoupin Creek). There they "spread their saddle blankets on the stunted growth of vegetation beneath the thick shade" in a "grove of wide spreading walnuts." ⁷³

As they neared their destination on Macoupin Creek, the men rode "over hills and ravines, through brush and brambles, frequently interwoven with grape vines." They came to the Macoupin Creek valley near the east line of Greene County and headed upstream: "A string of lakes and marshes stretched along their way on the left, and beyond them arose the heavy timber bordering on the Macoupin Creek." At the mouth of a tributary, Coop's Creek, they encountered a rocky bluff. Not far away were the old silver diggings, now abandoned: "There were several mounds of earth overgrown with briars, young cottonwood and sycamore . . ." * ⁷³

The *History of Greene County* includes an extensive list of native woody plants:

The county has an abundant supply of timber conveniently located. The following list of indigenous trees and shrubs of the county is the result of years of observation and study by Dr. Daniel Bowman, an old settler of this county and one of the most skillful practical botanists in the State. With the exception of a single shrub growing along the bluffs, which Dr. Bowman has never seen in bloom, the list is believed to be complete.

BOTANIC NAMES.

COMMON NAMES.

Clematis Virginiana	Virgin's Bower.
Uvaria Trilabia	Pawpaw. †
Menispermum Canadensis	Moon Seed. ‡
Xanthoxylum Americanum	Prickly Ash. ¶
Ptelea Trifolia	Wafer Ash. §
Rhus Toxicodendron	Poison Ivy. **

* Mr. Clapp averred that the tale of the lost silver mine is "no high-wrought work of the imagination, no fancy sketch, and if it possesses not the interest of a highly-finished romance, it yet has the merit of being true in every important particular." ⁷³

† Uvaria Trilabia (Pawpaw) = *Asimina triloba*.

‡ Menispermum Canadensis (Moon Seed) = *Menispermum canadense*.

¶ Xanthoxylum Americanum (Prickly Ash) = *Xanthoxylum americanum*.

§ Ptelea Trifolia (Wafer Ash) = *Ptelea trifolia*.

** Rhus Toxicodendron (Poison Ivy) = *Toxicodendron radicans*.

Rhus Aromatica	Sweet Sumac. *
Tilia Americana	Linden Tree. †
Vitis Cardifolia	Winter Grape. ‡
Vitis Etivalis	Blue Grape. ¶
Vitis Riparia	Frost Grape. §
Ampelopsis Quinquefolia	Woodbine. **
Acer Rubrum	Red Maple.
Acer Dasycarpum	Silver Maple. ††
Acer Saccharinum	Sugar Tree. ‡‡
Negundium Americanum	Boxelder. ¶¶
Aesculus Glabra	Buckeye. §§
Staphylea Trifolia	Bladder Nut.
Celastrus Scandens	Staff Tree. ***
Euonymus Atropurpureum	Spindle Tree. ¶¶¶
Eunoymus Americanus	Burning Bush. ¶¶¶
Ceanothus Americanus	Red Root. ¶¶¶¶
Cercis Canadensis	Judas Tree. §§§

* *Rhus Aromatica* (Sweet Sumac) = fragrant sumac.

† *Tilia Americana* (Linden Tree) = eastern basswood.

‡ *Vitis Cardifolia* (Winter Grape) = *Vitis vulpina* (frost grape)—not *V. cinerea*, which is commonly known as the winter grape.

¶ *Vitis Etivalis* (Blue Grape) = *Vitis aestivalis* (summer grape).

§ *Vitis Riparia* (Frost Grape) = riverbank grape—not *V. vulpina*, which is commonly known as the frost grape.

** *Ampelopsis Quinquefolia* (Woodbine) = *Parthenocissus quinquefolia* (Virginia creeper or woodbine).

†† *Acer Dasycarpum* (Silver Maple) = *Acer saccharinum*.

‡‡ *Acer saccharinum* is an old name for the sugar maple, which is now known as *A. saccharum*. The binomial *A. saccharinum* is now applied to the silver maple.

¶¶ *Negundium Americanum* (Boxelder) = *Acer negundo*.

§§ *Aesculus Glabra* (Buckeye) = Ohio buckeye.

*** *Celastrus Scandens* (Staff Tree) = bittersweet.

¶¶¶ *Euonymus Atropurpureum* (Spindle Tree) = *Euonymus atropurpureus* (wahoo).

¶¶¶ The binomial *Euonymus americanus* has been applied in the past to the wahoo (*E. atropurpureus*). The plant now known as *E. americana* (strawberry bush) is not to be expected in Greene County because its documented range is distant from the Big Rivers Area.

¶¶¶ Ceanothus Americanus (Red Root) = New Jersey tea. A related species, *Ceanothus ovatus*, is now commonly known as the redroot.

§§§ *Cercis Canadensis* (Judas Tree) = redbud.

Gymnocladus Canadensis	Coffee Tree.	*
Gleditschia Triacanthus	Honey Locust.	†
Amorpha Canescens	Indigo Bush.	‡
Cerasus Serotina	Wild Cherry.	¶
Cerasus Virginiana	Choke Cherry.	§
Prunus Americanus	Wild Plum.	**
Spiraea Opulifolia	Nine Bark.	††
Crataegus Coccinae	White Thorn.	##
Crataegus Crussgalli	Cock-spur Thorn.	¶¶
Crataegus Tomentosa	Black Thorn.	§§ ***
Pyrus Coronaria	Crab Apple.	†††
Amelanchier Canadensis	Shadberry.	###
Rosa Setigera	Prairie Rose.	
Rosa Lucida	Wild Rose.	¶¶¶

* *Gymnocladus Canadensis* (Coffee Tree) = *Gymnocladus dioica* (Kentucky coffee tree).

† *Gleditschia Triacanthus* (Honey Locust) = *Gleditsia triacanthos*.

‡ *Amorpha Canescens* (Indigo Bush) = leadplant. A related species, *Amorpha fruticosa*, is commonly called the false indigo.

¶ *Cerasus Serotina* (Wild Cherry) = *Prunus serotina* (wild black cherry).

§ *Cerasus Virginiana* (Choke Cherry) = *Prunus virginiana*.

** *Prunus Americanus* (Wild Plum) = *Prunus americana* (American plum).

†† *Spiraea Opulifolia* (Nine Bark) = *Physocarpus opulifolius*.

Crataegus Coccinae (White Thorn) = *Crataegus pedicellata* (scarlet thorn).

¶¶ *Crataegus Crussgalli* (Cock-spur Thorn) = *Crataegus crus-galli*.

§§ *Crataegus Tomentosa* (Black Thorn) = *Crataegus calpodendron* (pear hawthorn).

*** Early lists of wild plants in Illinois often name three species of hawthorn: *Crataegus coccinea*, *C. tomentosa*, and *C. crus-galli*. These hawthorns are the three native species listed for the general region in a botanical manual that was popular in the 1800s, *Field, Forest, and Garden Botany*.¹³⁴ Perhaps this trio of hawthorns appears repeatedly in reports for the Big Rivers region because the names were copied from list to list. The uniformity in naming could not have stemmed from a limited number of species and an unchanging concept of the taxonomy of hawthorns. Classification of the many highly variable forms of *Crataegus* is exceedingly difficult, and nomenclature of this genus is exceptionally complex.

The red haw (*Crataegus mollis*) is one of the most widely recognized hawthorns in the Illinois, but this species does not appear in early botanical lists for the Big Rivers Area. The two major botanical manuals from the middle and late 1800s (Gray's *Manual*¹³³ and Wood's *Class-Book*³⁷¹) treat the red haw as a variety (var. *mollis*) of the black thorn (*C. tomentosa*), which is included in the Big Rivers lists.

††† *Pyrus Coronaria* (Crab Apple) = *Malus coronaria* (wild sweet crab).

Amelanchier Canadensis (Shadberry) = *Amelanchier arborea* (shadbush).

¶¶¶ *Rosa Lucida* (Wild Rose) = *Rosa carolina* (pasture rose).

Rosa Carolina	Swamp Rose.*
Rubus Vilosus	Blackberry.†
Rubus Canadensis	Low Blackberry.‡
Rubus Strigosus	Dewberry.¶
Rubus Occidentalis	Wild Raspberry.§
Ribes Rotundifolium	Gooseberry.**
Hydrangea Arborescens	Wild Hydrangea.
Cornus Stolonifera	White Dogwood.††
Cornus Sericea	Red Osier.##
Cornus Florida	Flowering Dogwood.
Lonicera Flava	Yellow Honeysuckle.¶¶
Symporicarpus Vulgaris	Corn Bush. §§
Sambucus Canadensis	Common Elder.***
Viburnum Prunifolium	Black Haw.
Cephalanthus Occidentalis	Button Bush.
Diospyros Virginiana	Persimmon.
Tecoma Radicans	Trumpet Flower.****
Fraxinus Americana	White Ash.
Fraxinus Undrangulata	Blue Ash.###
Aristolochia Siphon	Dutchman's Pipe.¶¶¶
Benzoin Odoriferum	Spice Wood. §§§

* *Rosa carolina* is an old name for the swamp rose (*R. palustris*). Currently the binomial *R. carolina* is applied to the pasture rose.

† *Rubus Vilosus* (Blackberry) = *Rubus allegheniensis* (common blackberry).

‡ *Rubus Canadensis* (Low Blackberry) = *Rubus flagellaris* (common dewberry).

¶ *Rubus strigosus* (red raspberry) is a northern species. This report probably is based on a misidentification.

§ *Rubus Occidentalis* (Wild Raspberry) = black raspberry.

** *R. Rotundifolium* (Gooseberry) = *Ribes missouriense* (Missouri gooseberry).

†† *Cornus Stolonifera* (White Dogwood) = red osier.

C. Sericea (Red Osier) = *Cornus obliqua* (pale dogwood)—not *C. stolonifera*, which is commonly known as red osier.

¶¶ *Lonicera Flava* (Yellow Honeysuckle) = *Lonicera prolifera* (grape honeysuckle).

§§ *Symporicarpus Vulgaris* (Corn Bush) = *Symporicarpos orbiculatus* (Coralberry).

*** *Sambucus Canadensis* (Common Elder) = elderberry.

**** *Tecoma Radicans* (Trumpet Flower) = *Campsis radicans* (trumpet creeper).

Fraxinus Undrangulata (Blue Ash) = *Fraxinus quadrangulata*.

¶¶¶ *Aristolochia Siphon* (Dutchman's Pipe) = *Aristolochia tomentosa*.

§§§ *Benzoin Odoriferum* (Spice Wood) = *Lindera benzoin* (spicebush).

Sassafras Officinale	.....	Sassafras.*
Ulmus Americana	.....	White Elm.†
Ulmus Fulva	.....	Slippery Elm.‡
Celtis Occidentalis	.....	Hackberry.
Juglans Cinerea	.....	White Walnut.¶
Juglans Nigra	.....	Black Walnut.
Carya Alba	.....	Shag Bark Hickory.§
Carya Sulcata	.....	Shellbark Hickory.**
Carya Olivaeformis	.....	Pecan nut.††
Carya Tomentosa	.....	Thick-shelled-nut.‡‡
Carya Porcina	.....	Pig-nut.¶¶
Carya Amara	.....	Bitter-nut. §§
Prinos Ambiguus	.....	Winterberry.***
Morus Rubra	.....	Mulberry.****
Platanus Occidentalis	.....	Sycamore.***
Quercus Alba	.....	White Oak.
Quercus Macrocarpa	.....	Over Cup.¶¶¶
Quercus Obtusiloba	.....	Post Oak. §§§
Quercus Bicolor	.....	Swamp Oak.****
Quercus Castanea	.....	Chestnut Oak.****

* Sassafras Officinale (Sassafras) = *Sassafras albidum*.

† Ulmus Americana (White Elm) = American elm.

‡ Ulmus Fulva (Slippery Elm) = *Ulmus rubra*.

¶ Juglans Cinerea (White Walnut) = butternut.

§ Carya Alba (Shag Bark Hickory) = *Carya ovata*.

** Carya Sulcata (Shellbark Hickory) = *Carya laciniosa*.

†† Carya Olivaeformis (Pecan nut) = *Carya illinoensis* (pecan).

‡‡ Carya Tomentosa (Thick-shelled-nut) = mockernut hickory.

¶¶ Carya Porcina (Pig-nut) = *Carya glabra* (pignut hickory).

§§ Carya Amara (Bitter-nut) = *Carya cordiformis* (bitternut hickory).

*** Prinos Ambiguus (Winterberry) = ? *Ilex verticillata*.

**** Morus Rubra (Mulberry) = red mulberry.

**** Platanus Occidentalis (Sycamore) = *Platanus occidentalis*.

¶¶¶ Quercus Macrocarpa (Over Cup) = burr oak.

§§§ Quercus Obtusiloba (Post Oak) = *Quercus stellata*.

**** Quercus Bicolor (Swamp Oak) = swamp white oak.

***** Quercus Castanea (Chestnut Oak) = *Quercus prinoides* var. *acuminata* (yellow chestnut oak).

Quercus Imbricaria	Shingle Oak.
Quercus Nigra	Black Jack. *
Quercus Tinctoria	Black Oak. †
Quercus Rubra	Red Oak.
Quercus Palustris	Pin Oak.
Corylus Americanus	Hazel. ‡
Carpinus Americanus	Water Beech. ¶
Ostrya Virginica	Iron Wood. §
Salix Tristis	Gray Willow. **
Salix Humilis	Sage Willow. ††
Salix Eriocephala	Creek Willow. ‡‡
Salix Sericea	Swamp Willow. ¶¶
Betula Nigra	Red Birch. §§
Populus Tremuloides	Aspen. ***
Populus Angulata	Cotton Wood. †††
Juniperus Virginiana	Red Cedar. ***
Smilax Rotundifolia	Bramble. ¶¶¶
Smilax Quadruncularis	Greenbriar. §§§
Myrica Gale	Sweet Gale. **** 73

* Quercus Nigra (Black Jack) = *Quercus marilandica* (blackjack oak).

† Quercus Tinctoria (Black Oak) = *Quercus velutina*.

‡ Corylus Americanus (Hazel) = *Corylus americana* (American hazel).

¶ Carpinus Americanus (Water Beech) = *Carpinus caroliniana* (blue beech, musclewood, or American hornbeam).

§ Ostrya Virginica (Iron Wood) = *Ostrya virginiana* (ironwood or hop hornbeam).

** Salix Tristis (Gray Willow) = *Salix humilis* (prairie willow).

†† Salix Humilis (Sage Willow) = prairie willow.

‡‡ Salix Eriocephala (Creek Willow) = heart-leaved willow.

¶¶ Salix Sericea (Swamp Willow) = silky willow.

§§ Betula Nigra (Red Birch) = river birch.

*** Populus Tremuloides (Aspen) = quaking aspen.

††† Populus Angulata (Cotton Wood) = *Populus deltoides* (eastern cottonwood).

††† Juniperus Virginiana (Red Cedar) = *Juniperus virginiana* (eastern red cedar).

¶¶¶ Smilax Rotundifolia (Bramble) = catbrier.

§§§ Smilax Quadruncularis (Greenbriar) = *Smilax rotundifolia* (green brier).

**** *Myrica gale* is found far to the north of the Big Rivers Area. This report is most likely based on a misidentification.

A list of animals is included in a discussion of Carrollton's "School Cabinet of Natural History." * This educational museum was comprised of three sets of specimens: "a number of birds and bird-skins for class use" provided by a teacher, "a fine collection of mounted birds and animals, over one hundred in number" prepared by a Winchester resident, and "a number of bird skins and a fine assortment of insects" contributed by Mr. Forbes, Curator of the State Museum. † Following is the list of vertebrates (birds, mammals, reptiles, amphibians, and fishes) in Carrollton's School Cabinet of Natural History:

BIRDS.

ORDER PASSERES.

LATIN NAME.	ENGLISH NAME.
<i>Turdus Migratorius</i> ,	Robin
<i>Harpornynchus Rufus</i> ,	Brown Thrush *
<i>Sialia Sialis</i> ,	Blue Bird
<i>Parus Montanus</i> ,	Mountain Chickadee ¶
<i>Parus Atricapillus</i> ,	Black-capped Chickadee
<i>Sitta Carolinensis</i> ,	White-bellied Nuthatch §
<i>Eremophila Alpestris</i> ,	Horned Lark, ♂ ♀ **
<i>Protonotaria Citrea</i> ,	Prothonotary Warbler
<i>Deudroeca Coronata</i> ,	Yellow-rumped Warbler
<i>Pyranga Rubra</i> ,	Scarlet Tanager, ♂ ♀
<i>Vireo Olivaceus</i> ,	Red-eyed Vireo
<i>Collurio Ludovicianus</i> ,	White-rumped Shrike ††
<i>Coturniculus Passerimus</i> ,	Yellow-winged Sparrow #‡
<i>Spizella Monticola</i> ,	True Sparrow ¶¶
<i>Spizella Pusilla</i> ,	Field Sparrow

* The list of animals is prefaced with the statement, "The birds and insects are all natives of Greene County, and represent nearly every family." To the contrary, several species (such as the peacock) are not natives, and many indigenous families are not represented in the list.

† Stephen A. Forbes was curator of the Museum of the Illinois State Natural History Society. He also directed the Illinois State Laboratory of Natural History, now named the Illinois Natural History Survey.

‡ *Harpornynchus Rufus*, Brown Thrush = brown thrasher.

¶ The mountain chickadee does not occur in Illinois.

§ *Sitta Carolinensis*, White-bellied Nuthatch = white-breasted nuthatch.

** ♂ = male; ♀ = female.

†† *Collurio Ludovicianus*, White-rumped shrike = loggerhead shrike.

#‡ *Coturniculus Passerimus*, Yellow-winged Sparrow = grasshopper sparrow.

¶¶ *Spizella Monticola*, True Sparrow = tree sparrow.

<i>Spizella Socialis</i> ,	Chippy Sparrow *
<i>Zonotrichia Albicollis</i> ,	White-throated Sparrow
<i>Euspiza Americana</i> ,	Black-throated Bunting †
<i>Goniaphea Ludoviciana</i> ,	Rose-breasted Grosbeak
<i>Cardinalis Virginianus</i> ,	Cardinal Grosbeak ‡
<i>Junco Hyemalis</i> ,	Snow Bird ¶
<i>Pipilo Erythrophthalmus</i> ,	Marsh Robin ♀ §
<i>Galeoscoptes Carolinensis</i> ,	Cat Bird, ♂ ♀
<i>Chrysomitris Tristis</i> ,	Goldfinch
<i>Quiscalus Purpureus</i> ,	Crow-Blackbird, ♂ ♀ **
<i>Agelaeus Phoeniceus</i> ,	Red-winged Blackbird, ♂ ♀
<i>Icterus Baltimore</i> ,	Baltimore Oriole ††
<i>Sturnella Magna</i> ,	Meadow Lark ‡‡
<i>Cyanospiza Cyanea</i> ,	Indigo Bird ¶¶
<i>Molothrus Ater</i> ,	Cow Bird
<i>Cyanurus Cristatus</i> ,	Blue Jay
<i>Corvus Americanus</i> ,	Crow
<i>Tyrannus Carolinensis</i> ,	King Bird
<i>Myiarchus Crinitus</i> ,	Great-crested Fly-catcher
<i>Lophophanes Bicolor</i>	Tufted Titmouse

ORDER PICARIAE.

<i>Chordieles Virginianus</i> ,	Night Hawk
<i>Chaetura Pelagica</i> ,	Chimney Swift
<i>Trochilus Colubris</i> ,	Humming Bird §§
<i>Colaptes Auratus</i> ,	Yellow Hammer ***
<i>Melanerpes Erythrocephalus</i> , . .	Red-headed Woodpecker
<i>Picus Pubescens</i> ,	Downy Woodpecker
<i>Picus Villosus</i> ,	Hairy Woodpecker

* *Spizella Socialis*, Chippy Sparrow = chipping sparrow.

† *Euspiza Americana*, Black-throated Bunting = dickcissel.

‡ *Cardinalis Virginianus*, Cardinal Grosbeak = northern cardinal.

¶ *Junco Hyemalis*, Snow Bird = dark-eyed junco.

§ *Pipilo Erythrophthalmus*, Marsh Robin = rufous-sided towhee.

** *Quiscalus Purpureus*, Crow-Blackbird = common grackle.

†† *Icterus Baltimore*, Baltimore Oriole = northern oriole.

‡‡ *Sturnella Magna*, Meadow Lark = eastern meadowlark.

¶¶ *Cyanospiza Cyanea*, Indigo Bird = indigo bunting.

§§ *Trochilus Colubris*, Humming Bird = ruby-throated hummingbird.

*** *Colaptes Auratus*, Yellow Hammer = northern flicker.

<i>Hylotomus Pileatus</i> ,	Pileated Woodpecker
<i>Ceryle Alcyon</i> ,	Belted Kingfisher
<i>Coccygus Americanus</i> ,	Yellow-billed Cuckoo

ORDER RAPTORES.

<i>Nyctea Scandiaca</i> ,	Snowy Owl
<i>Otus Vulgaris</i> . Var. <i>Wilsonianus</i> ,	Long-eared Owl
<i>Scops Asio</i> ,	Screech Owl
<i>Aquila Chrysaetus</i> ,	Grey Eagle *
<i>Pandion Haliaetus</i> ,	Osprey
<i>Nauclerus Furcatus</i> ,	Swallow-tailed Kite
<i>Accipiter Cooperi</i> ,	Cooper's Hawk
<i>Buteo Borealis</i> ,	Red-tailed Hawk
<i>Archibuteo Lagopus</i> ,	Black Hawk †
<i>Falco Columbarius</i> ,	Pigeon Hawk ‡
<i>Falco Sparverius</i> ,	Sparrow Hawk ¶

ORDER LIMICOLAE

<i>Tringa Maculata</i> ,	Pectoral Sandpiper
<i>Gallinago Wilsoni</i> ,	Wilson's Snipe §
<i>Philolula Minor</i> ,	American Woodcock
<i>Totanus Solitarius</i> ,	Solitary Tatler **
<i>Limosa Hudsonica</i> ,	Godwit ††
<i>Aegialitis Vociferus</i> ,	Kildeer Plover
<i>Tringa Maculata</i> ,	Jack Snipe #‡

ORDER GALLINAE.

<i>Pavo Cristatus</i> ,	Peacock ¶¶
<i>Cupidonia Cupido</i> ,	Prairie Chicken, ♂ ♀

* *Aquila Chrysaetus*, Grey Eagle = golden eagle.

† *Archibuteo Lagopus*, Black Hawk = rough-legged hawk.

‡ *Falco Columbarius*, Pigeon Hawk = merlin. A footnote on page 257 discusses the likelihood that this is a misidentification.

¶ *Falco Sparverius*, Sparrow Hawk = kestrel.

§ *Gallinago Wilsoni*, Wilson's Snipe = common snipe.

** *Totanus Solitarius*, Solitary Tatler = solitary sandpiper.

†† *Limosa Hudsonica*, Godwit = Hudsonian godwit.

#‡ *Tringa Maculata*, Jack Snipe = pectoral sandpiper.

¶¶ The peacock is not a native American species.

<i>Bonasa Umbellus</i> ,	Pheasant, ♂ ♀ *
<i>Ortyx Virginianus</i> ,	Quail †

ORDER LAMELLIROSTRES.

<i>Cygnus Americanus</i> ,	American Swan ‡
<i>Anas Boschas</i> ,	Mallard Duck, ♂ ♀
<i>Dafila Acuta</i> ,	Sprig-tail Duck, ♂ ¶
<i>Querquedula Discors</i> ,	Blue-winged Teal, ♂ ♀
<i>Nettion Carolinensis</i> ,	Green-winged Teal, ♂ ♀
<i>Spatula Clypeata</i> ,	Spoon-billed Duck, ♂ ♀ §
<i>Aix Sponza</i> ,	Wood Duck, ♂ ♀
<i>Bucephala Clangula</i> ,	Golden-eyed Duck, ♂ **
<i>Lophodytes Cucullatus</i> ,	Hooded Merganser, ♂
<i>Mergus Merganser</i> ,	Fish Duck, ♂ ††
<i>Bucephala Albeola</i> ,	Butter-ball Duck, ♂ ♀ #‡
	Cinnamon Duck, ♂ ¶¶

ORDER HERODIONES.

<i>Botaurus Mugitans</i> ,	Bittern §§
<i>Herodias Egretta</i> ,	White Heron ***
<i>Nyctherodius Violaceus</i> , . . .	Yellow-crowned Night Heron
<i>Nyctiardea Grisea</i> ,	Black-crowned Night Heron
<i>Butorides Virescens</i> ,	Green Heron †††

* *Bonasa Umbellus*, Pheasant = ruffed grouse.

† *Ortyx Virginianus*, Quail = northern bobwhite.

‡ *Cygnus Americanus*, American Swan = tundra swan.

¶ *Dafila Acuta*, Sprig-tail Duck = northern pintail.

§ *Spatula Clypeata*, Spoon-billed Duck = northern shoveler.

** *Bucephala Clangula*, Golden-eyed Duck = common goldeneye.

†† *Lophodytes Cucullatus*, Fish Duck = common merganser.

#‡ *Bucephala Albeola*, Butter-ball Duck = bufflehead.

¶¶ *Cinnamon Duck* = ?cinnamon teal. Ridgway's *Descriptive Catalogue* (1895) says the species "is of irregular and uncertain occurrence, having been only once or twice taken in Illinois." 285

§§ *Botaurus Mugitans*, Bittern = American bittern.

*** *Herodias Egretta*, White Heron = great egret.

††† *Butorides Virescens*, Green Heron = green-backed heron.

ORDER ALECTORIDAE.

Rallus Virginianus, Virginia Rail
Porzana Carolina, Carolina Rail, ♀ ♂ *
Rallus Longirostris, Clapper Rail †
Porphyris Martinica, Gallinule ‡

ORDER LONGIPENNES.

Larus Delawarensis, Ring-billed Gull

ORDER PYGOPODES.

Colymbus Torquatus, Great Northern Loon ¶
Podilymbus Podiceps, Diedapper, or Grebe §

MAMMALIA.

Lynx Rufus, American Wild Cat **
Putorus Ermineus, Common Weasel ††
Putorius Lutreolus, Common Mink
Cariacus Virginianus, Antlers of Virginia Deer #‡
Vespertilio Subulatus, Little Brown Bat
Scalops Aquaticus, Common Mole
Sciuropterus Volans, Flying Squirrel
Sciurus Cinereus, Fox Squirrel
Lepus Sylvaticus, Gray Rabbit ¶¶
Bos Americanus, Buffalo Calf

REPTILES.

Tropidonotus Grahami, Graham's Snake §§

* Porzana Carolina, Carolina Rail = sora.

† The clapper rail is a coastal species which is not likely to be found in Illinois.

‡ Porphyris Martinica, Gallinule = purple gallinule.

¶ Colymbus Torquatus, Great Northern Loon = common loon.

§ Podilymbus Podiceps, Diedapper or Grebe = pied-billed grebe.

** Lynx Rufus, American Wild Cat = bobcat.

†† Putorus Ermineus, Common Weasel = long-tailed weasel.

#‡ Cariacus Virginianus, Virginia Deer = white-tailed deer.

¶¶ Lepus Sylvaticus, Gray Rabbit = eastern cottontail.

§§ Tropidonotus Grahami, Graham's Snake = Graham's crayfish snake.

Eutaenia Sirtalis,	Common Garter Snake
Liopeltis Vernalis,	Green Snake *
Eumeces Fasciatus,	Blue-tailed Lizard †
Sceloporus Undulatus,	Swift ‡
Ophibolus Doliatus,	Milk Snake
Bascanium Constrictor,	Black Snake ¶
Heterodon Platyrhinus,	Spreading Adder §

Batrachians.

Bufo Lentiginosus,	American Toad
Hyla Versicolor,	Tree Toad **
Chorophilus Triseriatus,	Tree Frog ††
Ambystoma Tigrinum,	Tiger Salamander
Sperlerpes Longicaudus,	Cave Salamander #‡

Fishes.

Esox Salmoneus,	Little Pickerel ¶¶
Luxilus Cornutus,	Silverside §§
Catostomus Commersonii,	Sucker ***
Dorysoma Cepedianum,	Hickory Shad †††
Semotilus Corporalis,	Common Chub #‡‡
Amiurus Catus,	Cat Fish ¶¶¶
Pomotis Auritus,	Sun Fish §§§ 73

* Liopeltis Vernalis, Green Snake = smooth green snake.

† Eumeces Fasciatus, Blue-tailed Lizard = five-lined skink.

‡ Sceloporus Undulatus, Swift = fence lizard.

¶ Bascanium Constrictor, Black Snake = racer.

§ Heterodon Platyrhinus, Spreading Adder = eastern hognose snake.

** Hyla Versicolor, Tree Toad = gray treefrog.

†† Chorophilus Triseriatus, Tree Frog = western chorus frog.

#‡ Sperlerpes Longicaudus, Cave Salamander = longtail salamander.

¶¶ Esox Salmoneus, Little Pickerel = grass pickerel.

§§ Luxilus Cornutus, Silverside = striped shiner.

*** Catostomus Commersonii, Sucker = white sucker.

††† Dorysoma Cepedianum, Hickory Shad = gizzard shad.

#‡‡ Semotilus Corporalis, Common Chub = creek chub.

¶¶¶ Amiurus Catus, Cat Fish = brown bullhead.

§§§ Pomotis Auritus, Sun Fish = pumpkinseed.

The preceding list includes 91 species of birds, ten mammals, eight reptiles, five amphibians, and seven fishes. The *History of Greene County* also enumerates 117 kinds of insects, 19 crustaceans, and 19 other types of invertebrates in Carrollton's school museum. Many of these invertebrates are non-natives such as marine forms.

1879: Donnelley, Gassette & Loyd

Biographies of local residents in the *History of Greene County* provide a few glimpses of wildlife during the immigrant era. First, from the life of Thaxton Clay:

In 1819 the subject of this sketch came to this county, at which time it was but a wilderness. . . . Large game, such as bears, panthers, elk, wolves and deer could be seen at almost any time. Chills and fevers were among the indispensables at this time⁹⁸

The family of S.M. Henderson:

. . . in 1819 they reached their wilderness home, although privations and hardships ended not for many years. . . . One night as the family lay in the new camp, without a door or shutter, the screams of a huge panther woke them as he came leaping on the branches of the lately fallen trees near the hut. *⁹⁸

Rowell Hunnicutt moved to "the Bluffs Region" of western Greene County in 1820. Six years later he established a trading business:

. . . our subject for a period of three years . . . officiated as the commander of a small keel boat, in which he would load honey, beeswax, deer hides and furs, such as coonskins, mink and otter, and from the mouth of Apple Creek, . . . he would ply the little craft to St. Louis, where he would lay in a supply of dry goods, groceries and whisky . . . for the return voyage.⁹⁸

1880: Chas. C. Chapman & Co.

The publishing house of Charles C. Chapman produced the *History of Pike County*. According to the chapter about Detroit Township,

The pioneers had many encounters with wild animals during the early settlement of the county, two or three of which, related by Mrs. Dinsmore, who is still residing in this township, we will place on record in this connection. On one occasion, while she and her husband were passing through the woods, a huge lynx [†] came bounding up behind her and grabbed her dress with his claws. She

* Mrs. Henderson made a commotion until "the shocking blood-sucker retired." ⁹⁸

[†] In addition to Mrs. Dinsmore's two encounters with a lynx, the *History of Pike County* has two other references to lynx: on page 302 (panthers, catamounts, wild cats, and lynx), and on page 306 (catamount and lynx). The species now called a lynx or Canada lynx (*Felis lynx*) is a northern animal,

The Illinois is by many considered the “belle rivière” of the Western waters, and, in a commercial and agricultural view, is destined, doubtless, to occupy an important rank. — Edmund Flagg, 1836.³⁴⁵

hastily called the dogs and they quickly came to her side. The wild animal loosened his hold and gazed upon the dogs. They were greatly frightened and did not attempt an attack upon the lynx, but ran to the house. The lynx, too, concluded to leave and took to the forest.

The same lady tells of another time when she was attacked or about to be attacked by one of these fierce creatures. She was engaged in the woods making sugar, with her camp fire near a large log. She heard a noise upon the opposite side, which was made by the lynx just in the act of preparing to make a leap, as she supposed. She set the dog upon it, and as it sprang over the log he alighted upon a large, powerful lynx. The fierce contest that ensued was a short one, for the dog was completely overpowered; and as soon as he could release himself from the clutches of his antagonist he “run home a-howlin’ with his tail between his legs, and run under the house,” where he remained for some time.

We will give Mrs. Dinsmore’s panther story in her own language as nearly as we can. “One day when I was a-comin’ thro’ the woods I seen a large painter come out of the brush and begin to drink out of a puddle of water in the path; and I shooed at him, and he paid no attention to me, and I took off my bonnet and shooed and shooed at him; but he wouldn’t shoo; he jist staid there and lapped away till he got done and then went off.”⁷²

From the chapter about Spring Creek Township:

The surface is very broken and principally covered with timber, with small necks of prairie. Many springs of sparkling water are found gushing from the hillsides in this township.

... the wind-splitting prairie rooters * ... were the only hogs then known in these parts; but they were hogs, and did not like to be trifled with. They lived on roots and nuts and could outrun a horse. When the farmer went to feed them he put the corn where he was sure the contrary fellows would find it.⁷²

not likely to have been found in the Big Rivers Area. Although a few early reports of lynx in Illinois (as far south as McLean County¹⁰⁰) are accompanied by descriptions that appear to match the Canada lynx, most past references to lynx in Illinois probably pertain instead to the bobcat (*Felis rufus*). As mammalogist Walter Hahn pointed out in 1909, the bobcat was known as the bay lynx, wild cat, catamount, or bob cat; and the Canada lynx was sometimes called a wild cat.¹³⁷ The nomenclature and identity of native cats is further discussed on page 4.

* Lean and fleet swine “split the wind.”

Derry Township:

Wild animals, such as the deer, wolf, coon, and the wild turkey, were numerous here in the early settlement of the township. There were also some panthers, catamounts, wild cats and lynx found here.

For the pioneers this was literally a land of "milk and honey," especially the later. . . . Wild honey and venison were their common, everyday fare. The venison was preserved by drying. Wm. Hornback found a tree within 200 yards of his house, which he cut, and took from it several bucketfuls of honey on Christmas Day, 1829. Mr. Hornback also tells us that he has shot many turkeys while standing in the door of his house. During the big snow in the winter of 1830-1, the wild turkeys congregated in such large numbers in Mr. Howard's corn-field that he had to call upon his neighbors, among whom was Mr. Hornback, to assist him in killing them, in order to save his corn. Many of those slaughtered on the occasion were thrown away, while some were preserved and used for food.⁷²

Pleasant Vale Township:

In those early days the wagons, for the most part, were rudely constructed by the settlers themselves, and consisted wholly of wood. The wheels were sawn from large sycamore trees, and holes were bored in the center, in which to insert the axletrees.

. . . In pioneer times, when there were scarcely any fences, and not land enough under cultivation to stop the great prairie fires which occurred in the fall for the year, they proved very disastrous to those living on the prairie. The township consists, for the most part, of Mississippi river bottom land, a large portion of which is prairie. The grass on this bottom land grew to an enormous height, was very thick, and as high as a man's head while on horseback. This grass was so heavy and thick that when the settlers went a-fishing in the Sny * they would hitch the team to a large brush or tree and drag it through the grass and mash it down, to make a road for them to pass over. In the fall of the year this luxuriant growth of grass would be set on fire by the Indians or hunters, and especially when the wind was high, would sweep resistlessly over the whole country, high and low, destroying a great deal of property.

The pioneers early learned to guard against this destructive element by plowing wide strips of land around their premises and around their grain and hay. As soon as the alarm of fire was given, each settler would immediately begin to "back fire." This was done by setting the grass on fire next outside the plowed strip, which would burn slowly and meet the rapidly advancing flames that came rolling in majestic grandeur, from 20 to 30 feet in the air.

* The Sny is described on page 304.

This bottom land is now under a high state of cultivation, and since the completion of the levee has become one of the richest farming districts of America. The land lying between the Sny and Mississippi is timber land, and as fertile as the prairie. It is now rapidly being cleared and improved. This district bears the appearance of being a new country, however, for wild animals are quite numerous here, and also the gray and bald eagle.*

Most of the land in this township was obtained from the Government at \$1.25 per acre, and it was very readily paid for. The fur-bearing animals were very plenty here then, and a settler would obtain fur enough during the fall and winter to pay for 160 acres of land. We have it from good authority that it was not an uncommon occurrence to see five or six coons in one tree at one time during those pioneer days. Mr. Francis Jackson related to us that he saw at one time nine coons in one tree. Snakes also were very numerous and annoying, and especially the rattlesnake. The Mississippi bluffs, which extend from the northwest to the southeast, through this township, were a constant den for the timber rattlesnakes, which were from five to eight feet long. The settlers were lasting enemies of these reptiles, and finally adopted a plan which resulted in their almost total extermination. They fastened bearded hooks to long poles and thrust these into their dens, drawing the snakes out and killing them, until no more snakes could be found. This was done in the spring of the year, before the snakes could crawl.

Wild cats, wild hogs, foxes, wolves, panthers and other wild animals abounded here when this township was first settled; some of which species remain to this day.

On the N.W. qr. of sec. 29[†] is a salt spring, which at one time afforded considerable salt water. Mr. Keyes carried water from this spring to his home, on sec. 22, a distance of a mile and a half, boiled it down, and made salt for family use and for his neighbors.

. . . There is some excellent farming land along the course of Keyes creek[‡] At one time this creek and others abounded in countless numbers of fish, and thus aided in furnishing the settlers with the necessities of life.⁷²

The biography of Nathan Jones preserves the following record: "In company with Joshua R. Stanford he kept the first store in Griggsville, taking in trade the first year (1833) 9 bear-skins, from bears killed within 10 miles of town."⁷²

* "Gray eagle" is an old alternative name for both the golden eagle and the bald eagle.

† The northwest quarter of section 29 in Pleasant Vale Township is two miles south-southwest of New Canton.

‡ Keyes creek = Kiser Creek.

A British emigrant in 1832, after two years' residence at Carrollton:
*I do think this is the garden spot of the New World . . .*³²⁶

One of the principal geographic features of Pike County is The Sny, which runs beside the Mississippi River and extends the length of Pike County. The editors of the *History of Pike County* explained,

Along the whole of the west side of Pike county there runs a bayou of the Mississippi river, named by the early French *Chenal Ecarte* (crooked channel) but in English generally called "Sny," for short, from the French pronunciation of *Chenal*. This bayou commences in Adams county about 12 miles below Quincy, and runs southeasterly somewhat parallel with the river, until it ends in Calhoun county, its channel being generally about midway between the river and the bluffs. The low land drained by this "bayou," "channel," "slough," "creek," etc., as it is variously called, comprises about 110,000 acres. This was subject to overflow every spring, and being the most fertile ground in the West, it is very important that it be reclaimed if possible. Without improvement it is entirely useless, and even a source of malaria and sickness.⁷²

William Ross was a founding resident of Atlas, the first lasting white settlement in Pike County. In 1826 Colonel Ross built a keel boat with a 50-ton capacity and launched it on The Sny. He hauled farm produce down the Mississippi River as far as New Orleans. Shallow water hampered the endeavor: "To get their boats over sand-bars they would unload the barrels, roll them over the bars and then reload. On one trip it required one whole day to get over a distance of twelve miles." *⁷²

The *History of Pike County* tells of the travails of Benjamin Barney during one winter in the mid-1820s. Colonel Barney struggled to carry the mail 40 miles from Carrollton to Atlas. He was hampered by high water and ice floes in the Illinois River—and, "To add to the already great peril in which he found himself, a large pack of wolves, about 50 in number, followed him . . ."⁷²

Colonel Ross, Colonel Barney, and their neighbors endured the most celebrated meteorological phenomenon of the century:

We now come to the winter of the deep snow, 1830-'1. The snow of that winter commenced falling Nov. 10, and did not all go away until the following

* The story of Ross' business venture does not give the location of this shallow water, but it probably was in the Big Rivers Area. The Mississippi River was ordinarily deep enough to accommodate a 50-ton boat below the mouth of the Missouri River. In his 1869 geography text, J.W. Foster provides the following statistics: "The least low-water depths on the bars are: at St. Louis, 2 feet . . . The range between low and high-water is: at Rock Island, 16 feet; at the mouth of the Missouri, 35 feet; at St. Louis, 37 feet; at Cairo, 51 feet . . ."¹²²

April, yet the largest fall of snow did not begin until the 29th of December. This was the heaviest snow that ever fell in Illinois within the memory of the oldest settler of this part of the State. According to the traditions of the Indians as related to the pioneers, a snow fell from 50 to 75 years before the settlement by the white people, which swept away the numerous herds of buffalo and elk that roamed over the vast prairies at that time. This tradition was verified by the large number of bones of these animals found in different localities on the prairies when first visited by the whites.*

. . . In the northern portion of the county the snow at first was about three feet deep on a level, and as it settled a crust formed on the surface. The winter was also unusually cold, and this, in connection with the snow covering the mast and other food of wild animals, resulted in starving and freezing to death most of the game, as deer, wild hogs and turkey. The deer, indeed, had been rendered scarce by the sweeping fires of the preceding autumn which the Indians had set out. . . . What wild game there was alive in the forest was easily caught, on account of their reduced condition and the depth of the crusty snow which impeded their progress in the chase. Col. Ross chased down two deer with a horse, and caught and killed them by hand.

. . . In the northern part of the county the snow was so deep as to cover the ears of the outstanding corn and make it very difficult to gather.

. . . During the spring a freshet came with the melting snow, and the waters of the Sny undermined the mills at Rockport so that they sank down. Col. Ross had 50 or 60 men at work there nearly all spring filling up the places washed out.

. . . The year 1831 was also marked by a freeze in August which nearly ruined the corn crop before it was sufficiently mature⁷²

The chapter about zoology[†] starts with the four-legged creatures, then turns to the winged ones:

QUADRUPEDS

Of the species of native animals[‡] that once roamed the flowery prairies and wild forests of Pike county, but few of the smaller remain, and none of the larger. Of the latter we cannot even find a specimen preserved in taxidermy. The

* A footnote on page 374 addresses the legendary buffalo-killing winter. A footnote on page 256 discusses buffalo bones on the prairie.

† This discussion of animals in the *History of Pike County* (1880) is virtually the same as the chapter about zoology in three other county histories by Chas. C. Chapman & Co.: Knox County (1878),⁶⁹ Fulton County (1879),⁷⁰ and Tazewell County (1879).⁷¹

‡ The discussion treats mammals, not animals as a whole.

buffalo which grazed upon the verdant prairies has been driven westward. With or before it went the beaver, elk, badger, panther, black wolf * and black bear. Some animals that were quite numerous have become very rare, such as the gray fox, the catamount, otter, lynx, and the beautiful Virginia deer. †

There still remain many of the different species, mostly inhabiting the country adjacent to the Illinois and Mississippi rivers and a few of the other larger streams. These are, however, fast disappearing, and ere long will be known only in history, as are the deer, the beaver, and the bison. Among those still to be found here are the gray wolf, ‡ which is numerous in some parts, the opossum, raccoon, mink, muskrat, the common weasel, the small brown weasel, § skunk, woodchuck, or Maryland marmot, prairie mole, common shrew mole, || meadow and deer mouse, and the gray rabbit. ** Of squirrels there are the gray timber squirrel, †† the fox, chipmunk, the large gray prairie squirrel, the striped and the spotted prairie squirrel, †‡ and the beautiful flying squirrel. The dark-brown and the reddish bat ¶¶ are common. Other small animals have been found here which have strayed from other localities.

BIRDS

. . . Pike county is highly favored, compared with any county north of it, as the Virginia red-bird and cedar-bird §§ remain here during the winter, and the indigo-bird *** is here in its season. Parroquets ¶¶¶ also used to abound in this region.

* Black wolf = timber wolf.

† Virginia deer = white-tailed deer.

‡ Because this statement describes the gray wolf as "numerous in some parts," it must refer to the coyote (*Canis latrans*, formerly known as the prairie wolf). The previous paragraph says that the black wolf had been extirpated from the county; this must be a reference to *Canis lupus*, which is usually called the gray wolf or timber wolf.

§ Common weasel = long-tailed weasel; small brown weasel = least weasel.

|| Common shrew mole = shrew.

** Gray rabbit = eastern cottontail.

†† Gray timber squirrel = gray squirrel.

†‡ Large gray prairie squirrel = Franklin's ground squirrel; striped and spotted prairie squirrel = thirteen-lined ground squirrel.

¶¶ The dark-brown bat might be any of a number of species, including the big brown bat, little brown bat, or other members of the genus *Myotis*. The reddish bat probably is the red bat.

§§ Virginia red-bird = northern cardinal; cedar-bird = cedar waxwing.

*** Indigo-bird = indigo bunting.

¶¶¶ Parroquet = Carolina parakeet.

The following list is as nearly correct as can be compiled from the available information upon the subject:

Perchers.—. . . The ruby-throated humming-bird . . . is at the head of the list. . . . The chimney swallow * . . . is quite numerous. Of the whippoorwill family there are two representatives,—the whippoorwill proper . . . and the night-hawk. The belted kingfisher . . . is the only member of its family in this region. At the head of the fly-catchers is the king-bird, the crested fly-catcher † and the wood pewee.

Sub-order of *Singers—Thrush family*.—Of this family are the robin, the wood thrush, Wilson's thrush, ‡ the blue-bird, the ruby-crowned and the golden-crested wren, § tit-lark, § the black and the white creeper, ** blue yellow-backed warbler, †† yellow-breasted chat, worm-eating warbler, blue-winged yellow-warbler, †† Tennessee warbler, and golden-crowned thrush. ¶¶ *Shrike family.*—This family is represented by the great northern shrike, §§ red-eyed fly-catcher, white-eyed fly-catcher, the blue-headed and the yellow-throated fly-catcher. ***

Swallow family.—This family of birds are very numerous in Pike county. Among them are the barn swallow, white-bellied swallow, ††† bank swallow, cliff swallow, and purple martin. *Wax-wing family.*—The cedar-bird is the representative of the wax-wing in America. *Mocking-bird family.*—The genera of this family are the cat-bird, brown thrush, ††† the house and winter wren.

Finch and Sparrow family.—The snow bunting and Smith's bunting ¶¶¶ appear

* Chimney swallow = chimney swift.

† Crested fly-catcher = great crested flycatcher.

‡ Wilson's thrush = veery.

§ Ruby-crowned wren = ruby-crowned kinglet; golden-crested wren = golden-crowned kinglet.

§ Tit-lark = water pipit.

** Black and white creeper = black-and-white warbler.

†† Blue yellow-backed warbler = northern parula.

†† Blue-winged yellow-warbler = blue-winged warbler.

¶¶ Golden-crowned thrush = ovenbird.

§§ Great northern shrike = northern shrike.

*** Red-eyed fly-catcher = red-eyed vireo; white-eyed fly-catcher = white-eyed vireo; blue-headed fly-catcher = solitary vireo; yellow-throated fly-catcher = yellow-throated vireo.

††† White-bellied swallow = tree swallow.

††† Brown thrush = brown thrasher.

¶¶¶ Smith's bunting = Smith's longspur.

only in winter. The purple finch, the yellow-bird * and the lark finch † inhabit this county. Of the passerine genus of this family are the Savannah sparrow, the field and the chipping sparrow, the black snow-bird, ‡ the tree sparrow, the song sparrow, the swamp and the fox-colored sparrow, ¶ the black-throated bunting, § the rose-breasted gros-beak and the ground robin. ** *Titmouse family* is represented by the chickadee and the tufted titmouse. *Creeper family*.—There are two specimens of this family,—the white-bellied nut-hatch †† and the American creeper. # *Skylark family*.—This melodious family is represented here by only the common skylark ¶¶ of the prairie. *Black-bird family*.—The rusty black-bird, the crow black-bird, §§ the cow-bird, the red-winged black-bird, the meadow lark, the orchard and the Baltimore orioles *** of this family, are the most beautiful and brilliant of birds that inhabit this region. *Crow family*.—The blue-jay and the common crow comprise the species of this family.

Birds of Prey.— . . . Most raptorial birds have disappeared. Among them are the golden eagle, which was always rare but now no longer seen here; the bald eagle, or properly the white-headed eagle, once quite common, now scarce. Some well-preserved specimens of this genus are in the county. . . . The *Hawk family* has eight or nine species, some but seldom seen, others common. The turkey-buzzard ††† has almost, if not quite, disappeared. Of the owl genera are several species Among them are the barn owl, the screech owl, the long and the short eared owl, the barred owl, and the snowy owl, the latter being the rarest.

Climbers.—But few of this order remain in the county, the most common of which are the woodpeckers. Of the various kinds are the golden-winged, #‡‡

* Yellow-bird = American goldfinch.

† Lark finch = lark sparrow.

‡ Black snow-bird = dark-eyed junco.

¶ Fox-colored sparrow = fox sparrow.

§ Black-throated bunting = dickcissel.

** Ground robin = rufous-sided towhee.

†† White-bellied nut-hatch = white-breasted nuthatch.

‡‡ American creeper = brown creeper.

¶¶ Common skylark = horned lark.

§§ Crow black-bird = common grackle.

*** Baltimore oriole = northern oriole.

††† Turkey-buzzard = turkey vulture.

#‡‡ Golden-winged woodpecker = northern flicker.

the pileated, the hairy, the downy, the yellow-bellied, * red-bellied and the red-headed. At an early day the Carolina parrot, † generally called the "parrokeet," was often seen, but he has now entirely deserted this section. The yellow and black-billed cuckoos are occasionally seen.

Scratchers.— . . . The wild turkey, the choicest of game, has almost entirely disappeared . . . In an early day they were in abundance. *Grouse family.*—The chiefest among this family is the prairie chicken, which, if not carefully protected, must ere long follow the wild turkey, never to return. The ruffed grouse, ‡ wrongfully called "pheasant," has of late made its appearance. It is quite fond of cultivated fields, and, if properly protected and encouraged until it becomes fairly settled, will make a fine addition to the game, and fill the place of the prairie chicken. *Partridge family.*—The fate of that excellent bird, the quail, ¶ is only a question of a short time. *The Dove family.*—The wild pigeons § continue to make their semi-annual visits, but not in such vast numbers as years ago. Acres of forest were so often filled at night with these birds that the breaking of boughs and the flying of pigeons made a noise that could be heard for miles, and the shot of a sportsman's gun could not be heard at a distance of ten feet. . . . The plaintive notes of the Carolina dove, ** commonly known as the turtle-dove, are still heard.

Swimmers.—This order of birds, which formerly frequented this county in large numbers, have almost disappeared. . . . *Diver family.*—The great northern diver, or loon, §§ sometimes visits this section *Gull family.*—Of this family are Wilson's tern §§ and silvery gull. ¶¶ *Pelican family.*—The rough-billed pelican §§ . . . has now altogether ceased to make its visits here. *Cormorant family.*—The double-crested cormorant, or sea raven, has been seen here. *Duck family.*—This family of migratory birds visited the ponds and streams of this county in large numbers before it became so thickly settled, both on their northern and southern passage, but now mostly confine themselves to the Illinois

* Yellow-bellied woodpecker = yellow-bellied sapsucker.

† Carolina parrot = Carolina parakeet.

‡ Ruffed grouse = ruffed grouse.

¶ Quail = northern bobwhite.

§ Wild pigeon = passenger pigeon.

** Carolina dove = mourning dove.

§§ Great northern diver or loon = common loon.

¶¶ Wilson's tern = common tern.

¶¶ Silvery gull = ?ring-billed gull or ?herring gull. The specific epithet (species name) of the herring gull is *argentatus*, referring to its silvery plumage.

§§ Rough-billed pelican = American white pelican.

and Mississippi, where large numbers are found. This family furnishes most game for sportsmen and for the table. There are the wood-duck, the big black-headed duck, * the ring-necked duck, the red-head, the canvas-back, the dipper, † the shell-drake or goosander, ‡ the fish-duck, ¶ the red-breasted, and the hooded merganser, the mallard and the pintail, the green-winged and the blue-winged teal, the spoonbill § and the gadwall, the baldpate, ** the American swan, †† the trumpeter swan and the white-fronted goose.

Waders.— . . . They frequented the marshes, but cultivation has drained their favorite haunts. *Crane family*.—The whooping crane, always rare, is now never seen. The sand-hill cranes stop on their journeys north and south. *Heron family*.—The great blue heron or crane, least bittern, the green heron, # night heron and the American bittern, compose those of this family visiting this region. *Ibis family*.—The glossy ibis has been seen here. *Plover family*.—The golden plover, ¶¶ the killdeer and the king plover §§ comprise this family known here. *Phalarope family*.—The Wilson's and the red phalarope have frequented the swamps of this county. *Snipe family*.—Various birds of this family have been common in and around the swamps of this county. Among them were Wilson's snipe, *** grey or red-breasted snipe, ¶¶¶ the least and the semi-palmated sandpiper, the willet, the tell-tale, the yellow-leg, ¶¶¶ the solitary

* Big black-headed duck = greater scaup.

† The name "dipper" has been given to three small waterfowl that are good divers: the ruddy duck, the bufflehead, and the pied-billed grebe.

‡ Shell-drake or goosander = common merganser.

¶ Three species of merganser have been reported from Illinois: the common merganser, the red-breasted merganser, and the hooded merganser.⁴⁷ The *History of Pike County* lists all three of these species—plus the fish-duck, which is a colloquial name for mergansers in general.

§ Spoonbill = northern shoveler.

** Baldpate = American wigeon.

†† American swan = tundra swan.

¶¶ Green heron = green-backed heron.

¶¶¶ Golden plover = lesser golden-plover.

§§ "King plover" might be a misprint of "ring plover," which is an old name for the "belted plovers." These ring-necked shorebirds include the killdeer, the semipalmated plover, and the piping plover.

*** Wilson's snipe = common snipe.

¶¶¶ Grey snipe or red-breasted snipe = short-billed dowitcher.

¶¶¶ Both the greater yellowlegs and the lesser yellowlegs have been called the "tell-tale."

sandpiper, the spotted sandpiper, the field plover, * long-billed curfew, † the common rail, ‡ the clapper rail or mud hen, ¶ and the coot.

Reptiles.—All of the species of this class that ever inhabited this region are still to be found here except the poisonous snakes. The rattlesnake . . . has a series of horny joints at the end of the tail . . . These were the most venomous of all snakes found here, and were numerous in the early settlement. There are two kinds, the bandy, or striped, § and the prairie rattlesnake, ** the latter being still occasionally found. The copperhead was always rare. Among the harmless snakes are the water-snake, the garter-snake, the bull-snake, the milk-snake, the black-snake, †† and the blue racer. †††

Many reptiles found here are erroneously called lizards, but are salamanders and other like innocent creatures. Lizards are never found in this county. Among the tortoises or turtles are found the map turtle, ¶¶ the snapping and the soft-shelled turtle. Of the batrachian, or naked reptiles, §§ there are a few, and, though loathsome to sight and touch, are harmless. The toad, the bull-frog, the leopard-frog, the tree-toad, *** with some tailed batrachia, ¶¶¶ comprise the most of this order. The Illinois river bull-frog is as large a man's head, often much larger, ¶¶¶ and his deep bellowing can be heard for a mile or more.

FISHES

. . . The waters of this county are quite prolific of the finny tribe. The commerce in fish has become quite extensive along the Illinois and Mississippi.

* Field plover = upland sandpiper.

† Long-billed curfew = long-billed curlew.

‡ Common rail = sora.

¶ The clapper rail is a coastal species. Perhaps this Pike County reference is to the closely related king rail or Virginia rail.

§ Bandy rattlesnake or striped rattlesnake = timber rattlesnake.

** Prairie rattlesnake = eastern massasauga.

†† Black-snake = ? rat snake or ? common kingsnake.

††† Blue racer = racer.

¶¶ Map turtle = ? a member of the genus *Graptemys*, or perhaps any of a number of other aquatic turtles with conspicuous patterning on the shell.

§§ The so-called "batrachian, or naked reptiles" are amphibians.

*** Tree-toad = gray treefrog.

¶¶¶ Tailed batrachia = salamanders.

¶¶¶ The largest recorded specimen of a bullfrog in Illinois is 154 millimeters (6 inches) long, according to "The Amphibians and Reptiles of Illinois." ³⁰⁹

Sickle-backed family.—This family furnishes the game fish, and are never caught larger than four pounds in weight. The various genera found here are the black bass, * goggle-eye, † the croppy, or big black sun-fish, ‡ and the two common sun-fish. ¶ *Pike family.*—There are but two species of this family,—the pickerel, § weighing from five to twenty-five pounds, and the gar pike. ** *Sucker family.*—Of this tribe are the buffalo, red-horse, white-sucker, two species of black-suckers, mullet ranick. †† Fish of this family are found in all the streams of the county. They abound wherever there is water. *Cat-fish family.*—Of this voracious family the channel cat-fish, the mud cat-fish ‡‡ and two species of the small cat-fish ¶¶ inhabit the waters of this county, and are caught ranging in weight from one to thirty pounds.

The shovel-fish §§ is yet abundant, and its flesh, as well as its general appearance, resembles that of the cat-fish.

Besides these varieties there are the chub, silver-sides, *** and fresh-water herring, ††† and large numbers of other species denominated minnows, which are found in the smallest spring branches, and well as the larger streams. 72

A subsequent section titled “Native Animals” states,

The wild animals infesting this county at the time of its settlement were the deer, wolf, bear, wild cat, fox, otter, raccoon, woodchuck or ground-dog, ‡‡‡ skunk, mink, weasel, muskrat, opossum, rabbit and squirrel; and the principal feathered game were the quail, prairie-chicken, and wild turkey. Several of these animals furnished meat for the early settlers; but their principal meat did not consist long of game. Pork and poultry were soon raised in abundance.

* Black bass = large-mouth bass and small-mouth bass.

† Goggle-eye = ? warmouth or ? rock bass.

‡ Croppy or big black sun-fish = crappie.

¶ Common sun-fish = a member of the genus *Lepomis*.

§ Pickerel = northern pike.

** Gar pike = gar.

†† The name “mullet ranick” is abstruse. Redhorses (*Moxostoma*) have been called mullets.

‡‡ The name “mud cat-fish” might have been applied to a number of catfishes. The first scientific report of the flathead catfish in Illinois calls it the Mud Cat.²³¹

¶¶ Two species of the small cat-fish = bullheads.

§§ Shovel-fish = paddlefish.

*** Silversides = ? striped shiner.

††† Fresh-water herrings are in the family Clupeidae, which includes several species of shad.

‡‡‡ This is evidently a misprint of “ground-hog.”

The wolf was the most troublesome animal, it being the common enemy of the sheep. It was quite difficult to protect the sheep from their ravages. Sometimes pigs and calves were also victims of the wolf. . . . The effect the destruction of these animals the county authorities offered a bounty for their scalps; and, besides, big hunts were inaugurated for their destruction, and "wolf hunts" are prominent among the memories of the early settlers. Such events were generally turned into a holiday, and everybody that could ride a nag or stand the tramp on foot joined in the deadly pursuit. A large circuit was generally made by the hunters, who then closed on every side, driving the hungry wolves into the center of the corral, where they were despatched. The return home with the carcasses was the signal for a general turnout, and these "pleasure parties" are still referred to by old citizens as among the pleasantest memories of early life in Pike county. Many a hungry wolf has been run down on the prairies where now is located a town or a fine farm residence. This rare old pastime, like much of the early hunting and fishing the pioneers indulged in here, departed at the appearance of the locomotive.⁷²

And "Bee-Hunting":

During the early settlement of this part of the State, one of the prevailing customs of the pioneers was "bee-hunting." . . . Large trees containing many gallons, and often a barrel, were frequently found by the bee-hunters. . . . After the bee-tree was discovered it was no trouble to get possession of the honey. The tree was felled, and the hunters would rush for their booty ere it was lost by running out upon the ground.⁷²

Following are excerpts from the chapter about botany in the *History of Pike County*: *

Persons coming to the West for the first time in their lives are deeply impressed with the high and rolling character of our prairies, which they had before always imagined low and level; and this feature of the prairie, combined in early days with its beautiful, dreamy covering of flowering plants and grassy verdure in spring and summer, inspired one to sing . . .

. . . Also the beautiful, clean-cut hills of our forests present a tasteful view scarcely ever witnessed in the East. But at the present day both our prairie and our timber are under either cultivation or pasturage, and blue grass, white clover and a large number of introduced weeds from the East have taken the place of the original flora. Industrially this cultivation is a gain, but poetically it is a loss. Only in the most retired situations can many interesting plants be found which used to be abundant. Several species of prairie clover, false wild

* The author of this discourse about the flora is unknown. Considering the comprehensive and technical nature of the discussion, the author may be Frederick Brendel, who wrote *Flora Peoriana*⁵³ ("the result of thirty-five years observations") in 1887. Two other central Illinois botanists may have had the expertise to prepare this list: Elihu Hall of Athens and John Wolf of Canton.

indigo, * rosin-weed, mountain mint, loosestrife, etc., have almost disappeared with the original prairie, while a few of the modest strawberry, star-grass and blue-eyed grass remain with us as sweet reminiscences of the past.

Nearly all the plants growing spontaneously in cultivated or waste grounds are "introduced;" that is, they have been brought here by white settlers,—unintentionally, of course, with reference to most of the weeds. In the timbered sections no particular weed is on the increase in the present decade, but in the prairie section, the garden parsnip, common thistle, rich weed (in artificial groves), toad flax, wild lettuce, and oxybaphus (a four-o'clock plant) are increasing rapidly; and along the railroads several sand plants are making good headway, as sand-bur, polanisia, ox-eye daisy, etc.

Before settlement by the whites the prairie was mostly covered by two or three kinds of grass. Several other kinds grew in patches here and there, notably the Indian grass and blue joint, † which grew very tall. In wet places grew "slough" grass ‡ and many sedges, and along the channeled sloughs abounded several species of golden-rod, aster and wild sunflower, which in the latter part of summer and in autumn formed waving yellow stripes across the prairie, and were peculiarly charming. They seemed to have a sedative effect upon the feelings.

About 2,300 species of plants are found within the United States, 1,600 of which can be found in Illinois, and about 950 in Pike county. We now give a list of all the common plants growing spontaneously in Pike county, and some of the most interesting rare ones, excepting mosses, mushrooms, etc.; and we name all the trees and shrubs, rare as well as common. We give the English names, following Gray's Manual, fifth edition, mainly, in respect to names, and altogether with respect to the order in which the families range. . . . We endeavor to select the most common name as we can judge from Gray's Botany.

. . . *Crowfoots*.—Common virgin's bower . . . and Pitcher's virgin's bower [¶] . . . are occasionally found The Pennsylvanian, Virginian and wood anemones [§] occur here and there. Liver-leaf ("liver-wort") ** is common on

* False wild indigo = leadplant (*Amorpha canescens*).

† Blue joint = big bluestem (*Andropogon gerardii*)—not *Calamagrostis canadensis*, which is now commonly known as blue-joint grass.

‡ Slough grass = prairie cord grass (*Spartina pectinata*).

¶ Common virgin's bower = *Clematis virginiana*; Pitcher's virgin's bower = leatherflower (*Clematis pitcheri*).

§ Pennsylvanian anemone = *Anemone canadensis* (meadow anemone); Virginian anemone = *A. virginiana* (tall anemone); wood anemone = *A. quinquefolia*.

** Liver-leaf or liver-wort = *Hepatica nobilis* var. *acuta* (sharp-lobed hepatica).

forest hillsides. Rue anemone, and the early, the purplish and the tall meadow-rues * are common in the woods. The true buttercups of the East are not found here, but the most common flower corresponding to them is the creeping crowfoot. † The small-flowered, the hooked, the bristly and the early crowfoots ‡ also occur. Isopyrum § grows in moist, shady places. Marsh marigold \$ is common in early spring, growing in mud supplied with fresh water: in the East they are called "cowslips" . . . Water plantain spearwort, ** growing in mud, and yellow water crowfoot, †† growing in water . . . , are seen occasionally. Wild columbine ‡‡ . . . abounds in the margins of the woods; so also two species of wild larkspur. ¶¶ Yellow puccoon §§ is very scarce. White baneberry *** is occasionally seen in the deep woods.

Custard-Apple Family.—The papaw ††† is common along the Illinois river. It fruits better in Calhoun county than Pike, being of a more modern growth here.

The papaw is common along the Illinois river. . . . This is a fragile bush . . . bearing fruit . . . which have a pulp like a banana. To "learn" to like them one must merely taste of them at times far apart.⁷²

. . . *Moonseed Family*.—

Canadian moonseed ‡‡‡ is abundant in the woods. It is . . . sometimes called sarsaparilla.

* Rue anemone = *Thalictrum thalictroides*; early meadow-rue = *T. dioicum*; purplish meadow-rue = *T. dasycarpum*; tall meadow-rue = *T. dasycarpum* var. *hypoglaucum*.

† Creeping crowfoot = *Ranunculus repens*.

‡ Small-flowered crowfoot = *Ranunculus abortivus*; hooked crowfoot = *R. recurvatus*; bristly crowfoot = *R. pensylvanicus*; early crowfoot = *R. fascicularis*.

§ Isopyrum = *Isopyrum biternatum* (false rue anemone).

\$ Marsh marigold = *Caltha palustris*.

** Water plantain spearwort = *Ranunculus ambigens*.

†† Yellow water crowfoot = *Ranunculus flabellaris*.

‡‡ Wild columbine = *Aquilegia canadensis*.

¶¶ Two species of wild larkspur = *Delphinium tricorne* (dwarf larkspur) and *D. carolinianum* (wild blue larkspur).

§§ Yellow puccoon = *Hydrastis canadensis* (goldenseal). The name "yellow puccoon" is more often applied to *Lithospermum incisum*, in the borage family.

*** White baneberry = *Actaea pachypoda*.

††† Papaw = *Asimina triloba* (pawpaw).

‡‡‡ Canadian moonseed = *Menispermum canadense*.

. . . *Barberry Family*.—May-apple * is abundant and blue cohosh † somewhat rare.

Water Lilies.—The pond, or white water lily, ‡ is abundant in large, open ponds in the river bottoms, and the yellow water, or frog lily, § growing in shallow, stagnant water, is scarce, as is also the yellow nelumbo, ¶ a similar plant.

Poppy Family.—The well-known blood-root ** is the only representative of this family growing wild in this country.

Fumitory Family.—The celebrated Dutchman's breeches †† is the only member of this family in our woods.

. . . *Mustard Family*.—Marsh cress ‡‡ is common; lake cress, ¶¶ growing in water, is sometimes seen; and horse-radish §§ flourishes beyond the bounds of cultivation. Pepper-root *** . . . is common in the dense forest. Two varieties of spring cress ††† are frequent. Two species of the delicate little rock cress ‡‡‡ are also frequent. Hedge mustard ¶¶¶ is the most common mustard-like weed that grows on cultivated and waste grounds. Tansy mustard §§§ is rare. Black mustard **** . . . flourishes on cultivated and waste grounds. White mustard †††† is very rare at the present day. Shepherd's purse ‡‡‡‡ is abundant early in the

* May-apple = *Podophyllum peltatum*.

† Blue cohosh = *Caulophyllum thalictroides*.

‡ Pond lily or white water lily = *Nymphaea tuberosa*.

§ Yellow water lily or frog lily = *Nuphar luteum* ssp. *macrophyllum*.

¶ Yellow nelumbo = *Nelumbo lutea* (American lotus).

** Blood-root = *Sanguinaria canadensis*.

†† Dutchman's breeches = *Dicentra cucullaria*.

‡‡ Marsh cress = *Rorippa islandica* var. *fernaldiana* (marsh yellow cress).

¶¶ Lake cress = *Armoracia aquatica*.

§§ Horse-radish = *Armoracia rusticana*.

*** Pepper-root = *Dentaria laciniata* (toothwort).

††† Two varieties of spring cress = *Cardamine bulbosa* (bulbous cress) and ? *C. pensylvanica* (Pennsylvania bitter cress) or ? *C. parviflora* var. *arenicola* (small-flowered bitter cress).

‡‡‡ Rock cress = *Arabis*.

¶¶¶ Hedge mustard = *Sisymbrium officinale*.

§§§ Tansy mustard = *Descurainia pinnata* ssp. *brachycarpa*.

**** Black mustard = *Brassica nigra*.

†††† White mustard = *Brassica hirta*.

‡‡‡‡ Shepherd's purse = *Capsella bursa-pastoris*.

season,—a weed everywhere Wild peppergrass * is common in late summer Whitlow grass † grows in sandy ground.

. . . Caper Family.—*Polanisia* ‡ . . . is common on sandy ground, and is extending along the railroads where sand and gravel are deposited.

Violets.—Common blue violet § is abundant, the other kinds more rare, namely, hand-leaf, arrow-leaved, larkspur, bird foot, downy yellow, § etc.

. . . Rock-Rose Family.—Frost-weed ** grows in sandy soil, and pin-weed †† on dry ground.

St. John's-worts. ‡‡—Two or three rare species are found in this county.

Pink Family.—Starry campion, sleepy catchfly, corn cockle, sandwort, long-leaved stitchwort and forked chickweed ¶¶ are found here and there. Common chickweed §§ and three species of mouse-ear chickweed *** and bouncing bet ¶¶¶ are more common. Carpet weed ¶¶¶ is common on the sand

Purslane Family.—Akin to the beautiful portulaca is our universal purslane, ¶¶¶ often called "pursley." Spring beauty §§§ belongs to this family.

* Wild peppergrass = *Lepidium*.

† Whitlow grass = *Draba reptans*.

‡ *Polanisia* = *Polanisia dodecandra* (clammyweed).

§ Common blue violet = *Viola pratincola*.

§§ Hand-leaf violet = *Viola triloba* var. *dilatata* (cleft violet), arrow-leaved violet = *V. sagittata*; larkspur violet = *V. pedatifida* (prairie violet); bird foot violet = *V. pedata*; downy yellow violet = *V. pubescens*.

** Frost-weed = *Helianthemum canadense*.

†† Pin-weed = *Lechea*.

‡‡ St. John's-wort = *Hypericum*.

¶¶ Starry campion = *Silene stellata*; sleepy catchfly = *Silene antirrhina*; corn cockle = *Agrostemma githago*; sandwort = a member of the genus *Arenaria* in the broad sense, including perhaps *Minuartia* and *Moehringia*; long-leaved stitchwort = *Stellaria longifolia*; forked chickweed = *Paronychia*.

§§ Common chickweed = *Stellaria media*.

*** Mouse-ear chickweed = *Cerastium*.

¶¶¶ Bouncing bet = *Saponaria officinalis*.

¶¶¶ Carpet weed = *Mollugo verticillatus*.

¶¶¶¶ Purslane = *Portulaca oleracea*.

§§§ Spring beauty = *Claytonia virginica*.

It is the richest country in point of soil in the world. *The French called it the Terrestrial Paradise.*

— James Stuart, who visited the Big Rivers Area in 1830.³²⁷

... *Mallows Family*.—Common, or low mallows and velvet-leaf, or Indian mallows * are very abundant. ... Sida and bladder ketmia, or flower of an hour, † are common.

... *Linden Family*.—Bass-wood, ‡ known as lin among Southern people, is the only member of this family growing here.

Geranium Family.—Wild crane's-bill ¹ is common in early spring Carolina crane's-bill [§] is rather rare. Spotted and pale touch-me-nots ^{**} are common in moist, shaded places, growing in dense patches. ... Yellow wood-sorrel ^{††} is everywhere, and here and there the violet wood-sorrel ^{‡‡} prevails to some extent. This is erroneously called "sheep-sorrel." Sheep, or field sorrel ^{¶¶} grows on sandy or gravelly ground

... *Rue Family*.—The northern prickly ash, ^{§§} a common shrub in our woods but growing scarcer, and the still rarer hop-tree, ^{***} are the only members of this family in Pike county.

... *Cashew Family*.—... The smooth sumac ^{†††} is common everywhere, fragrant sumac ^{‡‡‡} abundant in sandy ground, and poison ivy ^{¶¶¶} is common along fences—some places abundant.

* Common mallows or low mallows = *Malva neglecta*; velvet-leaf or Indian mallows = *Abutilon theophrastii*.

† Sida = *Sida spinosa* (prickly sida); bladder ketmia or flower of an hour = *Hibiscus trionum*.

‡ Bass-wood = *Tilia americana*.

¶ Wild crane's-bill = *Geranium maculatum*.

§ Carolina crane's-bill = *Geranium carolinianum*.

** Spotted touch-me-not = *Impatiens capensis*; pale touch-me-not = *I. pallida*.

†† Yellow wood-sorrel = *Oxalis stricta*.

‡‡ Violet wood-sorrel = *Oxalis violacea*.

¶¶ Sheep sorrel or field sorrel = *Rumex acetosella*.

§§ Northern prickly ash = *Zanthoxylum americanum*.

*** Hop-tree = *Ptelea trifoliata* (wafer ash).

††† Smooth sumac = *Rhus glabra*.

‡‡‡ Fragrant sumac = *Rhus aromatica*.

¶¶¶ Poison ivy = *Toxicodendron radicans*.

. . . *Vine Family*—Virginia creeper * . . . is as abundant as any weed. The winter, or frost grape † is common, but the summer grape, ‡ a delicious fruit, is very scarce, if indeed it can be found at all in this county. It used to be abundant, but the vines have been destroyed by reckless grape gatherers.

Buckthorn Family.—The noted red-root, or New Jersey tea, ¶ a shrub in the margin of prairies and to some extent in all other situations, is the only representative of this family here, and it is becoming rarer by the encroachments of cultivation and pasturage.

. . . *Staff-tree Family*.—The climbing bittersweet and waahoo § are all there are of this family in our limits.

. . . *Soapberry Order* includes the Maple, Bladdernut and Soapberry (proper) families. Of the maples the most common are the sugar and the white. ** . . . The red †† does not grow in this county. Box-elder ‡‡ is sometimes called ash-leaved maple The American bladdernut ¶¶ is a tree-like shrub The Ohio buck-eye §§ is common in the river bottoms.

Milkworts.—Seneca snakeroot and two other species of milkwort *** are found in this region.

Pulse Family.—. . . The first in the list . . . are the clovers,—red and white. ††† Two other species of this genus occur, indeed, but are too rare to enumerate

* Virginia creeper = *Parthenocissus quinquefolia*. Elsewhere the text refers to the Virginia creeper as American ivy.

† Winter or frost grape = *Vitis cinerea*.

‡ Summer grape = *Vitis aestivalis*.

¶ Red-root or New Jersey tea = *Ceanothus americanus*.

§ Climbing bittersweet = *Celastrus scandens*; waahoo = *Euonymus atropurpureus*. The author also noted that the climbing bittersweet is often called waxwork, and the waahoo is known as burning bush.

** Sugar maple = *Acer saccharum*; white maple = *A. saccharinum* (silver maple).

†† Red maple = *Acer rubrum*.

‡‡ Box-elder = *Acer negundo*.

¶¶ American bladdernut = *Staphylea trifolia*.

§§ Ohio buck-eye = *Aesculus glabra*.

*** Seneca snakeroot = *Polygala senega*; two other species of milkwort = ?*P. sanguinea* (field milkwort) and ?*P. verticillata* (whorled milkwort).

††† Red clover = *Trifolium pratense*; white clover = *T. repens*.

The noted red-root, or New Jersey tea The leaves make a very good tea.⁷²

here. Then the white sweet clover, * more recently escaped from cultivation; then two species of prairie clover, † almost extinct. Goat's rue, false indigo (Amorpha) and lead plant ‡ abound on dry, sandy loam in river bottoms. The common locust ¶ was introduced here, but this is too far north for it to be hardy enough to withstand our winds and the borer. A honey-locust § occurs here and there. One milk vetch ** is frequent. Six species of tick trefoil †† abound.

. . . Two species of bush clover ‡‡ are found here. One vetch (tare) and one marsh vetchling, ground-nut, kidney bean, false indigo (Baptisia) and wild senna ¶¶ are found here and there. Hog peanut, §§ called wild pea or bean by some, abounds everywhere in the woods. Red-bud *** is an ugly little tree except in the spring . . . Partridge pea ††† is abundant "in spots," grows like a weed in low places . . . The sensitive plant ‡‡‡ may be found within the bounds of this county, but if so, it is very scarce. Kentucky coffee-tree ¶¶¶ is rare.

. . . Rose Family.—. . . The wild plum (yellow or red) §§§ is becoming very scarce. The wild black cherry **** is abundant; the choke-cherry †††† is a shrub found occasionally. Nine-bark, common meadow-sweet and goat's-beard ‡‡‡‡ are

* White sweet clover = *Melilotus alba*.

† Two species of prairie clover = *Dalea candida* (white prairie clover) and *D. purpurea* (purple prairie clover).

‡ Goat's rue = *Tephrosia virginiana*; false indigo or Amorpha = *Amorpha fruticosa*; lead plant = *A. canescens*.

¶ Common locust = *Robinia pseudoacacia* (black locust).

§ Honey-locust = *Gleditsia triacanthos*.

** Milk vetch = *Astragalus canadensis* (Canada milk vetch).

†† Tick trefoil = *Desmodium*.

‡‡ Bush clover = *Lespedeza*.

¶¶ Vetch or tare = *Vicia*; marsh vetchling = *Lathyrus palustris*; ground-nut = *Apios americana*; kidney bean = *Phaseolus polystachyus*; false indigo or Baptisia = *Baptisia*; wild senna = *Cassia marilandica*.

§§ Hog peanut = *Amphicarpa bracteata*.

*** Red-bud = *Cercis canadensis*.

††† Partridge pea = *Cassia fasciculata*.

‡‡‡ Sensitive plant = *Cassia nictitans*.

¶¶¶ Kentucky coffee-tree = *Gymnocladus dioica*.

§§§ Wild plum (yellow or red) = *Prunus americana* (American plum).

**** Wild black cherry = *Prunus serotina*.

†††† Choke-cherry = *Prunus virginiana*.

‡‡‡‡ Nine-bark = *Physocarpus opulifolius*; common meadow-sweet = *Spiraea alba*; goat's-beard = *Aruncus dioicus*.

The Soil in the county is mostly of excellent quality—and in the American Bottom, . . . it is of almost unsurpassed fertility. — *Gazetteer of Madison County* (1866).¹³⁸

species of spiraea frequently found. Agrimony * is a coarse herb occasionally found . . . One species of avens † is very common; three other species are found. Common cinquefoil, or five-finger, ‡ . . . abounds in dry soil. Norwegian cinquefoil ¶ . . . is . . . not common. Another species is also found. One species of wild strawberry § abounds in retired situations; it was common over the original prairie. The blackberry and the raspberry ** prevail here as elsewhere, but their sylvan territory is narrowed to close limits by the encroachments of man. Of the roses proper the dwarf wild rose †† is the most common, but its territory is also very limited now-a-days. The early wild rose ‡‡ occurs. Three species of red haw (hawthorn) occur, and two varieties of one species. The black, or pear, thorn is the most common, with two varieties, then the scarlet-fruited thorn, and lastly the cockspur thorn. ¶¶ The crab-apple §§ is well known.

Saxifrages.—Two or three species of gooseberry *** are common; swamp saxifrage ¶¶¶ and a species of alum-root ¶¶¶ are sometimes met with.

Orpine Family.—Ditch stonecrop ¶¶¶ is common during wet seasons.

* Agrimony = *Agrimonia*.

† Avens = *Geum canadense* (white avens).

‡ Common cinquefoil or five-finger = *Potentilla simplex*.

¶ Norwegian cinquefoil = *Potentilla norwegica* (rough cinquefoil).

§ Wild strawberry = *Fragaria virginiana*.

** Blackberry = *Rubus allegheniensis* (common blackberry) and perhaps related species of *Rubus*; raspberry = *R. occidentalis* (black raspberry).

†† Dwarf wild rose = *Rosa carolina* (pasture rose).

‡‡ Early wild rose = *Rosa blanda* (meadow rose).

¶¶ Black thorn or pear thorn = *Crataegus calpodendron*, including var. *mollis* (downy hawthorn); scarlet-fruited thorn = *C. pedicellata*; cockspur thorn = *C. crus-galli*.

§§ Crab-apple = *Malus ioensis* (Iowa crab apple) and perhaps *M. coronaria* (wild sweet crab apple).

*** Gooseberry = *Ribes*.

¶¶¶ Swamp saxifrage = *Saxifraga pensylvanica*.

¶¶¶ Alum-root = *Heuchera*.

¶¶¶ Ditch stonecrop = *Penthorum sedoides*.

Evening Primrose Family.—Common evening primrose, enchanter's nightshade, and one species of willow-herb,^{*} are common; seed-box, water-purslane, sun-drops and two other species of false loosestrife[†] occur occasionally.

Loosestrife Family.—One species not infrequent.[‡]

Gourd Family.—The wild balsam-apple[¶] is . . . about cultivated grounds, and the one-seeded star cucumber[§] flourishes in the shaded river bottoms.

Parsley Family.—. . . Two species of black snakeroot^{**} prevail in this county. Parsnip^{††} itself is becoming a common weed in open but protected places; and there may be found here and there the cow parsnip, cowbane, meadow parsnip, spotted cowbane, rattlesnake master, two species of water parsnip, honewort, chervil, two species of sweet cicely, poison hemlock.^{‡‡}

. . . *Ginseng Family.*—Ginseng,^{¶¶} on account of its popular medical qualities, has been pretty well thinned out. The true wild sarsaparilla^{§§} . . . is sometimes found, and spikenard^{***} is common in the forest ravines.

Dogwoods.—The most common dogwood is the white-berried, or panicled cornel; next the rough-leaved, the alternate-leaved, the flowering, the silky, and lastly the red-osier.^{†††}

* Common evening primrose = *Oenothera biennis*; enchanter's nightshade = *Circaeae lutetiana* ssp. *canadensis*; willow-herb = *Epilobium*.

† Seed-box = *Ludwigia alternifolia*; water-purslane = *L. palustris*; sun-drops = *Oenothera pilosella*; false loosestrife = *Ludwigia*.

‡ This might be *Lythrum alatum* (winged loosestrife).

¶ Wild balsam-apple = *Echinocystis lobata*.

§ One-seeded star cucumber = *Sicyos angulata* (bur cucumber).

** Two species of black snakeroot = *Sanicula marilandica* (sanicle) and *S. canadensis* (Canadian black snakeroot).

†† Parsnip = *Pastinaca sativa*.

‡‡ Cow parsnip = *Heracleum lanatum*; cowbane = *Oxypolis rigidior*; meadow parsnip = *Thaspium*; spotted cowbane = *Cicuta maculata*; rattlesnake master = *Eryngium yuccifolium*; two species of water parsnip = *Sium suave* and *Berula erecta*; honewort = *Cryptotaenia canadensis*; chervil = *Chaerophyllum procumbens*; two species of sweet cicely = *Osmorhiza longistylis* (anise-root) and *O. claytonii* (sweet cicely); poison hemlock = *Conium maculatum*.

¶¶ Ginseng = *Panax quinquefolius*.

§§ Wild sarsaparilla = *Aralia nudicaulis*.

*** Spikenard = *Aralia racemosa*.

††† White-berried cornel or panicled cornel = *Cornus racemosa* (gray dogwood); rough-leaved dogwood = *C. drummondii*; alternate-leaved dogwood = *C. alternifolia*; flowering dogwood = *C. florida*; silky dogwood = *C. obliqua* (pale dogwood); red-osier = *C. stolonifera*.

Honeysuckle Family.—Common elder * is becoming too abundant. Yellow honeysuckle † is common. Horse gentian, or fever-wort, ‡ is a forest weed The true black haw is scarce, but sheep-berry, which is generally called black haw, is common. ¶

Madder Family.—Two species of the small bed-straw § are abundant, and the sweet-scented ** is common, while occasionally may be found cleavers, or goose-grass. †† Wild liquorice ‡‡ occurs rarely. . . . Button bush ¶¶ is common in wet ground.

Composites.—This order is by far the largest of all.

. . . Iron-weed §§ is common on flat ground Four species of button snakeroot *** (one called also blazing star) are abundant on protected original prairie, and occur nowhere else. Five species of thoroughwort grow here, that called boneset ††† being abundant. The species called trumpet, or Joe-Pye weed, ‡‡‡ is a tall, interesting weed Kuhnia ¶¶¶ is not rare; it resembles boneset. Mist-flower §§§ grows in our limits. Of the asters there are about 30 species growing within this county, about half of them very common. . . . The most remarkable of them is the New England aster, **** a large purple flower along the roadsides in September. Five species of fleabane . . . are common,

* Common elder = *Sambucus canadensis* (elderberry).

† Yellow honeysuckle = *Lonicera prolifera* (grape honeysuckle).

‡ Horse gentian or fever-wort = *Triosteum perfoliatum* (late horse gentian).

¶ Pike County has two species that have been known as the black haw or the sheep-berry (nannyberry). *Viburnum prunifolium* is the most common, and it is usually called black haw. *V. lentago*, which is usually called nannyberry, is relatively rare because it is generally restricted to seepage areas. The author of this list appears to have used the names in the opposite manner.

§ Two species of small bed-straw = *Galium trifidum* (small bedstraw) and *G. obtusum* (wild madder).

** Sweet-scented bedstraw = *Galium triflorum*.

†† Cleavers or goose-grass = *Galium aparine*.

‡‡ Wild liquorice = *Galium circaeans*.

¶¶ Button bush = *Cephalanthus occidentalis*.

§§ Iron-weed = *Vernonia*.

*** Button snakeroot = *Liatris*.

††† Boneset = *Eupatorium perfoliatum*.

‡‡‡ Trumpet or Joe-Pye weed = *Eupatorium purpureum*.

¶¶¶ Kuhnia = *Brickellia eupatorioides* (false boneset).

§§§ Mist-flower = *Eupatorium coelestinum*.

**** New England aster = *Aster novae-angliae*.

namely, horse-weed, * which is abundant on waste and cultivated grounds, Robin's plantain, common fleabane, and two daisy fleabanes, one of them called also sweet scabious. † About 18 species of golden-rod can be found in this county, only half of them common, however. The most abundant is the *Solidago Canadensis*. ‡ . . . Four

Four species of rosin-weed used to prevail on the original prairie, but their territory is very limited at the present day. The most noted of them has divided leaves, and is also called compass plant, or polar plant, the leaves having once been thought to point north and south. They do indeed stand with their faces somewhat parallel, but they are just as apt to have their edges toward other points of the compass.⁷²

species of rosin-weed used to prevail on the original prairie, but their territory is very limited at the present day. The most noted of them . . . is also called compass plant, or polar plant[†] One species of rosin-weed . . . is called prairie dock.[§] This and the compass plant flourish on flat prairie soil which is not pastured. The species called cup-plant^{**} grows along the banks of channeled sloughs. . . . *Parthenium*, †† a similar plant, is not rare. Ragweed^{‡‡} is the most common weed we have along the roadsides: called also hogweed, Roman wormwood, etc. Great ragweed^{¶¶} is the largest weed that grows in this country. Common along fences. Cockle-bur^{§§} is on the increase. We have a State law "providing" for their destruction. Ox-eye, Lepachys and six species of cone-flower^{***} are almost common. Six species of wild sunflower^{†††} flourish along fences in unfrequented situations. They are tall weeds, but not troublesome. One kind has tuberous roots and is really an artichoke.^{‡‡‡} Three species

* Horse-weed = *Conyza canadensis*.

† Robin's plantain = *Erigeron pulchellus*; common fleabane = *E. philadelphicus* (marsh fleabane); two species of daisy fleabane = *E. strigosus* and *E. annuus* (sweet scabious).

‡ Solidago Canadensis = *Solidago canadensis* (Canada goldenrod).

† Compass plant or polar plant = *Silphium laciniatum*.

§ Prairie dock = *Silphium terebinthinaceum*.

** Cup-plant = *Silphium perfoliatum*.

†† Parthenium = *Parthenium integrifolium* (wild quinine or feverfew).

‡‡ Ragweed = *Ambrosia artemisiifolia* (common ragweed).

¶¶ Great ragweed = *Ambrosia trifida* (giant ragweed).

§§ Cockle-bur = *Xanthium strumarium*.

*** Ox-eye = *Heliopsis helianthoides* (false sunflower); Lepachys = *Ratibida pinnata* (yellow coneflower); cone-flower = *Rudbeckia*.

††† Wild sunflower = *Helianthus*.

‡‡‡ *Helianthus tuberosus* (Jerusalem artichoke).

of tickseed * occur in this county. The true Spanish needle † does not grow here, but three species of its genus abound here, especially during wet seasons, namely, common and swamp beggar-ticks and the large bur-marigold. ‡ The smaller bur-marigold § is found in shallow running water. Fetid marigold § is abundant in dry situations along the wagon roads. When struck, even lightly, it yields a rank aromatic odor: called also false dog-fennel. Sneeze-weed ** . . . is abundant during wet seasons and exceedingly scarce at other times. May-weed, or dog-fennel, †† every one is familiar with. So with yarrow. †‡ The ox-eye daisy, or white-weed, ¶ a vexatious weed in the East, is just beginning to creep in along the railroads. Biennial worm-wood §§ is a common but harmless weed in waste places. Common and plantain-leaved everlasting *** are common. Fire-weed ††† abundant. Golden rag-wort ††‡ here and there in the spring. The famous Canada thistle ¶¶ is seldom seen: the common thistle §§§ abounds more and more. Two other species are common, growing very tall. Burdock **** is a Composite. Dandelion †††† belongs in this connection. Wild lettuce and false or blue lettuce †††† are common Two species of sow-thistle, ¶¶¶¶ comparatively harmless, are modestly on the increase.

* Tickseed = *Coreopsis*.

† Spanish needle = *Bidens bipinnata*.

‡ Common beggar-ticks = *Bidens frondosa*; swamp beggar-ticks = *B. connata*; large bur-marigold = *B. coronata* (tall swamp marigold).

§ Smaller bur-marigold = *Bidens cernua* (nodding bur marigold).

§ Fetid marigold = *Dyssodia papposa*.

** Sneeze-weed = *Helenium autumnale*.

†† May-weed or dog-fennel = *Anthemis cotula*.

‡‡ Yarrow = *Achillea millefolium*.

¶¶ Ox-eye daisy or white-weed = *Leucanthemum vulgare*.

§§ Biennial worm-wood = *Artemisia biennis*.

*** Common everlasting = *Gnaphalium obtusifolium* (sweet everlasting); plantain-leaved everlasting = *Antennaria plantaginifolia* (pussytoes).

††† Fire-weed = *Erechtites hieracifolia*.

††‡ Golden rag-wort = *Senecio aureus*.

¶¶¶ Canada thistle = *Cirsium arvense*.

§§§ Common thistle = *Cirsium vulgare* (bull thistle).

**** Burdock = *Arctium minus*.

†††† Dandelion = *Taraxacum officinale* (common dandelion).

†††† Wild lettuce = *Lactuca canadensis*; false or blue lettuce = *L. floridana* (woodland lettuce).

¶¶¶¶ Sow-thistle = *Sonchus*.

Lobelias.—The celebrated medical lobelia, or Indian tobacco, * flourishes along our garden fences. The great lobelia, or blue cardinal flower, † is abundant in moist ground. The cardinal flower ‡ is the most showy, dazzling-red flower we have growing wild: found in wet ground and on the banks of sloughs. A small and slender species of lobelia § is common in protected situations.

Campanula, or Bellflower Family.—The tall bellflower § is common. Venus's looking-glass ** is found here and there.

. . . *Ebony Family*.—Persimmon, or date plum; †† rather scarce, but more abundant farther south.

Plantain Family.—The common plantain §§ of our door-yards. Four other species of this family may occur in this county, but they are exceedingly rare.

Primrose Family.—Two species of loosestrife (*Lysimachia*) ¶¶ occur.

Figwort Family.—Mullein, toad-flax ("butter-and-eggs"), fig-wort, beard-tongue, two species of *Gerardia*, two species of louse-wort and cow-wheat, §§ are common, while monkey-flower, hedge hyssop, false pimpernel, purslane and corn speedwell *** are sometimes seen. Toad flax has persistent roots like witch-grass ¶¶ and threatens to become a pest.

. . . *Vervains*.—. . . The most abundant plant belonging to this family, and growing wild, is the hoary vervain; §§ next are the bracted (prostrate), the

* Medical lobelia or Indian tobacco = *Lobelia inflata*.

† Great lobelia or blue cardinal flower = *Lobelia siphilitica*.

‡ Cardinal flower = *Lobelia cardinalis*.

¶ This plant is *Lobelia spicata* (pale spiked lobelia).

§ Tall bellflower = *Campanula americana* (American bellflower).

** Venus's looking-glass = *Triodanis perfoliata*.

†† Persimmon or date plum = *Diospyros virginiana*.

Common plantain = *Plantago rugelii* (red-stalked plantain).

¶¶ Loosestrife (*Lysimachia*) = *Lysimachia*.

§§ Mullein = *Verbascum thapsus* (great mullein); toad-flax or butter-and-eggs = *Linaria vulgaris*; fig-wort = *Scrophularia marilandica* (Maryland figwort); beard-tongue = *Penstemon*; *Gerardia* = *Gerardia*; two species of louse-wort = *Pedicularis canadensis* (lousewort) and *Pedicularis lanceolata* (swamp wood betony); cow-wheat = *Melampyrum lineare*.

*** Monkey-flower = *Mimulus*; hedge hyssop = *Gratiola*; false pimpernel = *Lindernia dubia*; purslane speedwell = *Veronica peregrina* (white speedwell); corn speedwell = *V. arvensis*.

¶¶ Witch-grass = *Agropyron repens* (quack grass).

Hoary vervain = *Verbena stricta*.

white, or nettle-leaved, and the blue.* They all prefer dry, waste grounds, and are much inclined to hybridize. Fog-fruit[†] is abundant in sandy ground along the rivers.

Mint family.—Common are wood sage, or American germander, wild mint, bugle-weed, American pennyroyal, and hedge nettle, two species.[‡] Motherwort, catnip, heal-all, and wild mint[¶] are abundant. Here and there are water horehound, mountain mint, horse-mint, blephilia (two species), giant hyssop (two species), false dragon-head, or lion's-heart, mad-dog skullcap and one other species of skullcap.[§] Ground ivy, or gill-over-the-ground,^{**} is abundant about dwellings. What is generally called "horse-mint" in the West is "wild bergamot" according to the books, while wild mint is often taken for peppermint. True peppermint, spearmint, and horehound^{††} are scarce within our limits. South of the Illinois river horehound takes the place of catnip along the fences and roadsides.

. . . *Borage Family.*—Hairy and hoary puccoon, smooth lungwort, stick-seed, beggar's lice and common hound's-tongue^{##} are common; all other species rare. . . . Smooth lungwort is often called "blue-bells." It is common in early spring about door-yards and along fences near dwellings. Common hound's-tongue flourishes along the roads

. . . *Water-leaf Family.*—Ellisia^{¶¶} appears in cool, shady places

* Bracted vervain or prostrate vervain = *Verbena bracteata* (creeping vervain); white vervain or nettle-leaved vervain = *V. urticifolia*; blue vervain = *V. hastata*.

† Fog-fruit = *Phyla lanceolata*.

‡ Wood sage or American germander = *Teucrium canadense*; wild mint = *Mentha arvensis* (field mint); bugle-weed = *Lycopus virginicus*; American pennyroyal = *Hedeoma pulegioides*; two species of hedge nettle = *Stachys palustris* (woundwort) and *S. aspera* (hyssop hedge nettle).

¶ Motherwort = *Leonurus cardiaca*; catnip = *Nepeta cataria*; heal-all = *Prunella vulgaris*; wild mint = *Mentha arvensis* (field mint).

§ Water horehound = *Lycopus*; mountain mint = *Pycnanthemum*; horse-mint = *Monarda fistulosa* (wild bergamot); two species of blephilia = *Blephilia ciliata* (pagoda plant) and *B. hirsuta* (wood mint); two species of giant hyssop = *Agastache scrophulariaefolia* (purple giant hyssop) and *A. nepetoides* (yellow giant hyssop); false dragon-head or lion's-heart = *Physostegia* (obedient plant); mad-dog skullcap = *Scutellaria lateriflora*.

** Ground ivy or gill-over-the-ground = *Glechoma hederacea*.

†† Peppermint = *Mentha spicata*; spearmint = *Mentha x piperita*; horehound = *Marrubium vulgare*.

‡‡ Hairy puccoon = *Lithospermum caroliniense*; hoary puccoon = *L. canescens*; smooth lungwort = *Mertensia virginica* (Virginia bluebells); stick-seed = *Lappula echinata* (beggar's lice); beggar's lice = *Hackelia virginiana* (stickseed); common hound's-tongue = *Cynoglossum officinale*.

¶¶ Ellisia = *Ellisia nyctelea* (Aunt Lucy).

Polemoniums, or Phloxes.—Greek valerian, paniculate, hairy and divaricate phlox * are frequent. The true wild sweet-William † is very rare.

Convolvulus, or Morning-glory Family.—The most common plant of this order growing spontaneously beyond the bounds of cultivation is hedge bindweed, or Rutland beauty. ‡ Eight species of dodder (“love-vine”) § may be found, all rare except one.

. . . *Nightshade Family.*—. . . The most common weeds of this family are jimson-weed, horse-nettle (“bull nettles”), common or black nightshade and two species of ground-cherry. § The white-flowered jimson-weed (*Datura Stramonium*) is called common stramonium or thornapple

Gentians.—One beautiful species of American centaury, American Columbo and several species of gentian ** are found within our limits, but all of them are scarce.

. . . *Dogbanes.*—Spreading dogbane †† in the borders of thickets and Indian hemp (*Amsonia*) ‡‡ on the river banks are common.

Milkweeds.—Common milkweed, or silkweed, ¶¶ is common Swamp milkweed §§ is also common. Butterfly weed, or pleurisy-root, whorled milkweed and two species of green milkweed *** occur not rarely.

* Greek valerian = *Polemonium reptans* (Jacob's ladder); paniculate phlox = *Phlox paniculata* (garden phlox); hairy phlox = *P. pilosa* (downy phlox); divaricate phlox = *P. divaricata* (common phlox).

† Wild sweet-William = *Phlox maculata*.

‡ Hedge bindweed or Rutland beauty = *Calystegia sepium* (American bindweed).

§ Dodder or love-vine = *Cuscuta*.

§§ Jimson-weed = *Datura stramonium*; horse-nettle or bull nettle = *Solanum carolinense*; common nightshade or black nightshade = *S. ptycanthum*; ground-cherry = *Physalis*.

** American centaury = *Sabatia angularis* (marsh pink); American Columbo = *Frasera caroliniensis*; gentian = *Gentiana*.

†† Spreading dogbane = *Apocynum androsaemifolium*.

‡‡ Indian hemp or Amsonia = *Amsonia tabernaemontana* (blue star).

¶¶ Common milkweed or silkweed = *Asclepias syriaca*.

§§ Swamp milkweed = *Asclepias incarnata*.

*** Butterfly weed or pleurisy-root = *Asclepias tuberosa*; whorled milkweed = *A. verticillata*; green milkweed = any of several species of *Asclepias*.

Olive Family. — . . . five species of ash,—white, black, blue, red and green, * the white being the most common.

. . . *Birthworts.*—Wild ginger † is common in deep, wooded ravines.

. . . *Four-o'clock Family.*—*Oxybaphus* ‡ is rapidly increasing along the railroads, and in low, sandy places.

Pokeweeds.—The common poke ¶ . . . is well known.

Goosefoots.—Lamb's-quarters, or pigweed, § a common weed in our gardens Next in abundance to lamb's-quarters are oak-leaved goosefoot, maple-leaved goosefoot, Jerusalem oak and Mexican tea. ** Wormseed †† is a fetid plant belonging to the genus goosefoot. Orache #‡ is becoming abundant in the towns and cities.

Amaranths.—. . . Pigweed ¶¶ is one of the most common weeds in cultivated ground. . . . White pigweed, §§ generally known in the West as "tumble-weed," is abundant in some fields. *Amaranthus blitoides* *** has recently become very abundant in our towns. . . . *Acnida* and *Froelichia* ¶¶¶ are common in sandy soil near the rivers.

Buckwheat Family or Knotweeds.—Goose-grass ¶¶¶ is the most ubiquitous member of this order, forming a carpet in every door-yard. A taller variety with

* White ash = *Fraxinus americana*; black ash = *F. nigra*; blue ash = *F. quadrangulata*; red ash = *F. pennsylvanica*; green ash = *F. pennsylvanica* var. *subintegerrima*. Mohlenbrock lumps green ash with red ash as *F. pennsylvanica*.²³⁰

† Wild ginger = *Asarum canadense*.

‡ *Oxybaphus* = *Mirabilis nyctaginea* (wild four-o'clock).

¶ Common poke = *Phytolacca americana* (pokeweed).

§ Lamb's-quarters or pigweed = *Chenopodium album* (lamb's quarters). The text later notes that this species "should be called goosefoot only, or lamb's-quarters"—not pigweed.

** Oak-leaved goosefoot = *Chenopodium glaucum*; maple-leaved goosefoot = *C. gigantospermum*; Jerusalem oak = *C. botrys*; Mexican tea = *C. ambrosioides*.

†† Wormseed = *Chenopodium ambrosioides* var. *anthelminticum*.

Orache = *Atriplex patula* (spear scale).

¶¶ Pigweed = ? *Amaranthus retroflexus* (rough pigweed) and ? *A. hybridus* (green pigweed).

§§ White pigweed = *Amaranthus albus*.

*** *Amaranthus blitoides* = *Amaranthus graecizans* (prostrate pigweed).

¶¶¶ *Acnida* = *Amaranthus tuberculatus* (water hemp); *Froelichia* = *Froelichia floridana* (cottonweed).

¶¶¶ Goose-grass = *Polygonum arenastrum* (sidewalk knotweed).

wider leaves also abounds under the shade trees about the premises.* Two species of smart-weed, mild water-pepper, water Persicaria and two other species of knotweed † are all common. . . . Arrow-leaved tear-thumb, black bindweed and climbing false buckwheat ‡ are common vines. Pie-plant, "yellow dock" and sheep-sorrel § represent another division of the knotweed family. The most common member of this division in Pike county is curled, or "yellow" dock; then follow sheep-sorrel (abounding in sandy soil), pale, water, swamp and bitter docks. §

Laurel Family.—Sassafras ** is common along the bluffs and bottoms of the rivers. Spice bush †† is also found in Pike county.

Sandal-wood Family.—Bastard toad-flax #‡ rather scarce.

Spurges.—Spotted spurge, ¶¶ an herb growing more prostrate than all others, on cultivated ground Three other species of spurge §§ are almost common. Three-seeded Mercury, *** known in former years to inhabit only the dark forest, has followed to our city residences where it can find a similar situation. Croton ¶¶¶ is common near the rivers

Nettle Order.—Of the Elm family are the white and the slippery elm and the hackberry, #‡‡—the first mentioned abundant, the other two scarce. Of the

* This description fits *Polygonum erectum* (erect knotweed).

† Smart-weed = *Polygonum*; mild water-pepper = *P. hydropiperoides*; water Persicaria = *P. punctatum* (smartweed); knotweed = any of several species of *Polygonum*.

‡ Arrow-leaved tear-thumb = *Polygonum sagittatum*; black bindweed = *P. convolvulus*; climbing false buckwheat = *P. cristatum* (crested bindweed).

§ Pie-plant = *Rheum rhabonticum* (rhubarb); yellow dock = *Rumex crispus* (curly dock); sheep-sorrel = *Rumex acetosella* (sour dock).

¶ Pale dock = *Rumex altissimus*; water dock = *R. orbiculatus*; swamp dock = *R. verticillatus*; bitter dock = *R. obtusifolius*.

** Sassafras = *Sassafras albidum*.

†† Spice bush = *Lindera benzoin*.

#‡ Bastard toad-flax = *Comandra umbellata*.

¶¶ Spotted spurge = *Chamaesyce maculata* (nodding spurge).

§§ Three species of spurge = *Euphorbia* and perhaps *Chamaesyce*.

*** Three-seeded Mercury = *Acalypha*.

¶¶¶ Croton = *Croton*.

#‡‡ White elm = *Ulmus americana* (American elm); slippery elm = *U. rubra*; hackberry = *Celtis occidentalis*.

Bread-fruit and Fig family is the red mulberry, * which is scarce. Of the Nettle family proper are the true nettle (rare), wood nettle (common), richweed, pellitory, hemp and hop. † Richweed, or clearweed, like the Mercury of the last paragraph, has followed man to his artificial groves and is very abundant on flat ground under heavy shade-trees, in some places. . . . botanists have placed in this order the Osage orange ‡ tree of our hedges

. . . Plane-Tree Family.—“Sycamore,” or button-wood, or American plane. ¶

. . . Walnut Family.—Black and white walnut (butternut) § are well known. Three species of shell-bark and two of smooth-bark, besides pecan in the river bottoms, are common in this country. The list comprises the shag-bark, the western shell-bark, the mocker-nut or white-heart, the pig-nut or broom, bitter-nut or swamp hickories, and the pecan. ** The latter used to be abundant in the river bottoms, but the larger trees having been cut out for both the timber and the fruit, most of the pecan growth now is too young to produce much fruit.

Oak Family.—. . . White oak, †† of course, takes the lead here as else where, but the black jack ‡‡ is about as abundant. The latter is usually the “second growth,” and is as good as hickory for firewood. Bur-oak, scarlet oak and black oak (yellow-barked, or quercitron) ¶¶ are common. Laurel or shingle oak, yellow chestnut oak and red

Laurel oak is so called on account of the shape of its leaves, and is also called shingle oak, on account of its being so good in pioneer times for clapboards.⁷²

* Red mulberry = *Morus rubra*.

† Nettle = *Urtica dioica* (stinging nettle); wood nettle = *Laportea canadensis*; richweed or clearweed = *Pilea pumila*; pellitory = *Parietaria pensylvanica*; hemp = *Cannabis sativa*; hop = *Humulus lupulus*.

‡ Osage orange = *Maclura pomifera*.

¶ Sycamore, button-wood, or American plane = *Platanus occidentalis*.

§ Black walnut = *Juglans nigra*; white walnut or butternut = *J. cinerea*.

** Shag-bark hickory = *Carya ovata*; western shell-bark hickory = *C. laciniosa*; mocker-nut or white-heart hickory = *C. tomentosa*; pig-nut or broom hickory = *C. glabra*; bitter-nut or swamp hickory = *C. cordiformis*; pecan = *C. illinoensis*.

†† White oak = *Quercus alba*.

‡‡ Black jack = *Quercus marilandica* (blackjack oak). In the 1800s the name “black jack” was often applied to sprouts of fire-damaged oaks of any species. In this case, though, the author appears to refer to a distinct species—said to be “as good as hickory for firewood.” Blackjack oak (*Q. marilandica*) was widely favored for firewood. In 1839 J.M. Peck characterized the black jack as “a dwarfish, knarled looking tree, excellent for fuel, but good for nothing else.”²⁵⁴

¶¶ Bur-oak = *Quercus macrocarpa*; scarlet oak = *Q. coccinea*; black oak, yellow-barked oak, or quercitron = *Q. velutina*.

oak * are occasionally met with. . . . Two species of iron-wood flourish here. . . . one . . . is called hop hornbeam. [†] The other iron-wood or hornbeam is also called blue or water beech. [‡]

Birch Family.—The red, or river birch [¶] is sometimes found along the rivers and creeks.

Willows.—The most common willow, as well as the largest, is the black; then the prairie, glaucous, heart-leaved, shining and long-leaved. [§] . . . Several other species of willow occur, but are rare. The quaking asp, or American aspen, the cotton-wood, balm-of-Gilead, Lombardy poplar and silver-leaf, or white poplar, ^{**} are well known.

Arum Family.—Indian turnip (Jack-in-the pulpit) ^{††} abundant; skunk cabbage ^{‡‡} common in wet places supplied by spring-water; sweet flag and green dragon ^{¶¶} very rare.

Duckweeds.—One species common on the surface of ponds. ^{§§}

. . . *Cat-tails.*—Common cat-tail (a kind of flag) and a species of bur reed ^{***} occur in wet places.

Pondweeds.—Several species ^{†††} grow throughout this country.

* Laurel or shingle oak = *Quercus imbricaria*; yellow chestnut oak = *Q. prinoides* var. *acuminata*; red oak = *Q. rubra*.

† Iron-wood or hop hornbeam = *Ostrya virginiana*.

‡ Iron-wood, hornbeam, blue beech, or water beech = *Carpinus caroliniana*.

¶ Red birch or river birch = *Betula nigra*.

§ Black willow = *Salix nigra*; prairie willow = *S. humilis*; glaucous willow = *S. discolor* (pussy willow); heart-leaved willow = *S. rigida*; shining willow = *S. lucida*; long-leaved willow = *S. exigua* (sandbar willow).

** Quaking asp or American aspen = *Populus tremuloides* (quaking aspen); cotton-wood = *P. deltoides* (eastern cottonwood); balm-of-Gilead = *P. X gileadensis*; Lombardy poplar = *P. nigra* var. *italica*; silver-leaf poplar or white poplar = *P. alba*.

†† Indian turnip or Jack-in-the pulpit = *Arisaema triphyllum*.

‡‡ Skunk cabbage = *Symplocarpus foetidus*.

¶¶ Sweet flag = *Acorus americanus*; green dragon = *Arisaema dracontium*.

§§ Duckweed = *Lemna*.

*** Common cat-tail = *Typha latifolia*; bur reed = *Sparganium*.

††† Pondweed = *Potamogeton*.

... *Water-Plantain Family*.—Arrowhead * (two species, with several variations) is abundant. . . . Water plantain † is sometimes found: grows in same situation as last.

Amaryllis Family.—The star-grass ‡ is common.

... *Iris Family*.—The larger blue flag ¶ is becoming rare. The blue-eyed grass § looks like the star-grass just mentioned, except that the flowers are white or pale blue.

Yam Family.—Wild yam-root ** is a green vine sometimes seen in the woods.

Smilax Family.—Common green-brier, *Smilax hispida* and carrion flower †† are all not very rare.

Lily Family.—Purple trillium, or three-leaved nightshade, ‡‡ is abundant One other species of trillium sometimes occurs. Bellwort ¶¶ is an early flower in the woods. Smaller Solomon's seal §§ and false spikenard *** are common. Wild orange-red lily ††† is common in the margins of prairies which are not pastured and have never been broken. White dog's-tooth violet and great Solomon's seal ‡‡‡ are reported here. . . . Squill (eastern quamash, or wild hyacinth) ¶¶¶ is said also to be found in this county. Wild garlic . . . and wild leek §§§ are common in low places not pastured.

* Arrowhead = *Sagittaria*.

† Water plantain = *Alisma plantago-aquatica*.

‡ Star-grass = *Hypoxis hirsuta* (yellow star grass).

¶ Larger blue flag = *Iris shrevei* (wild blue iris).

§ Blue-eyed grass = *Sisyrinchium albidum*.

** Wild yam-root = *Dioscorea villosa* (wild yam).

†† Common green-brier = *Smilax rotundifolia*; *Smilax hispida* = *S. hispida* (bristly catbrier); carrion flower = *S. pulverulenta*.

‡‡ Purple trillium or three-leaved nightshade = *Trillium recurvatum* (red trillium or wake robin).

¶¶ Bellwort = *Uvularia grandiflora* (yellow bellwort).

§§ Smaller Solomon's seal = *Polygonatum biflorum*—but this listing may be a misidentification of small specimens of *P. canaliculatum*.

*** False spikenard = *Smilacina racemosa*.

††† Wild orange-red lily = *Lilium philadelphicum* (wood lily).

‡‡‡ White dog's-tooth violet = *Erythronium albidum*; great Solomon's seal = *Polygonatum commutatum* (Solomon's seal).

¶¶¶ Squill, eastern quamash, or wild hyacinth = *Camassia scilloides*.

§§§ Wild garlic = *Allium vineale*; wild leek = *A. tricoccum* or *A. burdickii*, or perhaps both.

Rush Family.—The bog-rush * is a very common, yellowish, grass-like herb along roads and paths, especially those leading through the forest; but it is also found to some extent in all other situations.

Pickerel-weed Family.—Water star-grass, † growing under running water in the forest brooks, is common.

Spiderworts.—Common spiderwort ‡ is common.

Sedges.—There are three or four dozen species of sedge ¶ growing within the limits of any one county, but they are all unimportant plants. . . . What is generally called lake grass § along the rivers is a true sedge, and its English name is great bulrush. It is by far the largest of the sedges. The river club-rush ** is next in size.

Grasses.—Blue grass †† takes the lead for prevalence and utility. Next, two species of fox-tail. ‡‡ Besides these the most common grasses are white grass, rice cut grass, Indian rice or water oats, timothy, rush grass (two species), bent grass, ¶¶ wood reed-grass, dropseed (two genera); reed bent-grass, blue joint grass, porcupine grass, fresh-water cord-grass, §§ Koeleria, Eatonia (two species), melic grass, fowl meadow grass and its congener, Glyceria fluitans, low spear-grass, *** red top, Eragrostis (three species), fescue (two species), chess, Bromus ciliatus, reed (a tall, broom-corn-like grass growing in dense

* Bog-rush = *Juncus tenuis* (path rush) and perhaps other members of the genus.

† Water star-grass = *Zosterella dubia*.

‡ Common spiderwort = *Tradescantia virginiana*.

¶ Sedge = Cyperaceae (*Carex*, *Cyperus*, *Scirpus*, etc.).

§ Lake grass = *Scirpus tabernaemontanii* (great bulrush).

** River club-rush = *Scirpus fluviatilis* (river bulrush).

†† Blue grass = *Poa pratensis* (Kentucky bluegrass).

‡‡ Fox-tail = *Setaria*.

¶¶ White grass = *Leersia virginica*; rice cut grass = *L. oryzoides*; Indian rice or water oats = *Zizania aquatica* (wild rice); timothy = *Phleum pratense*; two species of rush grass = *Sporobolus asper* (rough dropseed) and *S. vaginiflorus* (poverty grass); bent grass = *Agrostis*.

§§ Wood reed-grass = *Cinna arundinacea*; two genera of dropseed = *Sporobolus* (dropseed) and *Muhlenbergia* (muhly); reed bent-grass = *Calamagrostis*; blue joint grass = *C. canadensis*; porcupine grass = *Stipa spartea*; fresh-water cord-grass = *Spartina pectinata* (prairie cord grass).

*** Koeleria = *Koeleria macrantha* (June grass); two species of Eatonia = *Sphenopholis obtusata* (wedge grass) and *S. nitida* (shining wedge grass); melic grass = *Melica*; fowl meadow grass = *Glyceria striata*; Glyceria fluitans = *G. septentrionalis* (manna grass); low spear-grass = *Poa annua* (annual bluegrass).

fields in the swamps of the river bottom), *hordeum pratense*^{*} (a kind of wild barley), two species of lyme-grass or wild rye, bottle-brush grass, reed canary grass, *Paspalum*, wire grass,[†] eight species of panic-grass, among them two kinds of tickle-grass and one old-witch grass, crab-grass and barn-yard grass, sand-bur (in sand) and two species of beard-grass.[‡] About two dozen other kinds of grass can be found in the county, but they are all very rare.

Horse-tails.—Scouring rush and common horse-tail[¶] (especially along railroads) are common; two other species scarce.

Ferns.—Maiden-hair, brake, a spleenwort, a shield fern, a bladder-fern and the sensitive fern[§] are common in the order here named, while one species of flowering fern^{**} and two or three other ferns may be found.⁷²

1881: Inter-State Publishing Company

The Big Rivers Area extends into the southwest corner of Sangamon County, occupying about one square mile of Talkington Township. According to the 1881 *History of Sangamon County*,

The township was not generally so early settled as other parts of the county for the reason that the greater part of it is prairie The township now is regarded as one of the best in the county, was long considered by the early settlers as worthless, except for grazing purposes. The vast prairie would be fine for herding cattle, but being so far from timber it could never be settled.

* Red top = *Agrostis alba*; Eragrostis = *Eragrostis* (love grass); two species of fescue = *Festuca pratensis* (meadow fescue) and ?*F. obtusa* (nodding fescue); chess = *Bromus secalinus* or a related annual brome; *Bromus ciliatus* = *B. ciliatus* (Canada brome grass); reed = *Phragmites australis* (common reed); *hordeum pratense* = *Hordeum pusillum* (little barley).

† Two species of lyme-grass or wild rye = *Elymus virginicus* (Virginia wild rye) and *E. canadensis* (Canada wild rye); bottle-brush grass = *E. hystrix*; reed canary grass = *Phalaris arundinacea*; *Paspalum* = *Paspalum* (bead grass); wire grass = ?*Poa compressa* (Canada bluegrass).

‡ Two kinds of tickle-grass (panic-grass) = ?*Leptoloma cognatum* (fall witch grass) and some other species (—not *Agrostis* or *Eragrostis*); old-witch grass = *Panicum capillare*; crab-grass = *Digitaria*; barn-yard grass = *Echinochloa crus-galli*; sand-bur = *Cenchrus longispinus*; two species of beard-grass = *Andropogon gerardii* (big bluestem) and *Schizachyrium scoparium* (little bluestem).

¶ Scouring rush = *Equisetum hyemale*; common horse-tail = *E. arvense*.

§ Maiden-hair fern = *Adiantum pedatum*; brake = *Pteridium aquilinum* (bracken fern); spleenwort = *Asplenium*; shield fern = *Dryopteris*; bladder-fern = *Cystopteris*; sensitive fern = *Onoclea sensibilis*.

** Flowering fern = *Osmunda*.

So reasoned all the early settlers, many of whom settled upon the poorest land to be found because it was in the timber. *¹⁷²

1881: Illinois State Fish Commissioners

In October of 1881 members of the State Fish Commission rode the steamer *Daisy* up the Illinois River as far as Peoria. The commissioners subsequently reported to Governor Cullom,

We found the Illinois river admirably adapted to fish, and its waters well filled. The lakes and ponds along the river are, in our judgment, unequaled in the State as natural homes for the Bass, Croppie, Wall-eyed Pike, and, in fact all native fish, needing but a proper enforcement of the laws to make them almost secure against depletion. ³¹⁵

1881: Willard Glazier

Willard Glazier canoed the length of the Mississippi River in 1881. In *Down the Great River*, Captain Glazier recalled his stop at Alton on October 7:

Alton is divided about its centre by a stream called Piasa Creek, [†] which has its source in several springs within the city limits. This stream is arched over and is used as a main sewer.

. . . Irregular bluffs . . . raise their heads on each side of the valley, and give a picturesque appearance to the scenery. The city is built on the limestone rock, which is honeycombed with numerous caves, and along the banks of the river the rock forms perpendicular bluffs. ¹³¹

1882: W.R. Brink & Co.

Brink's *History of Madison County* reviews the local physiography and natural resources:

The surface of the country presents a pleasing variety, gently rolling prairies predominating. The majestic bluffs of the Mississippi present a rocky wall along its shore from the mouth of the Illinois to Alton and then tending inland around the great American bottom, round their fronts into grassy sloped hills that go down more gently to the fertile fields of the garden spot of Illinois.

* Thirty-one years later, the editor of the next *History of Sangamon County* said of Talkington Township, "Owing to the fact that its surface is mostly prairie land, and remote from a plentiful supply of timber, its settlement began late and was very much retarded, although it has developed as one of the most fertile portions of the county, and especially well adapted to stock-growing. For this reason the farms are extensive and population rather sparse." ²¹

† The stream is correctly known as Little Piasa Creek (see page 181).

These bluffs, like adamantine walls checking the course of destruction of raging floods, are from eighty to one hundred and fifty feet in height. From their crest a lovely panorama spreads out to view, comprehending as it does a view of the valley of the great Missouri which commingles its muddy waters with those of the Mississippi in their onrushing to the sea, and the intervening landscape of cultivated fields, here and there marred by stretches of sand or sloughs waiting to be made to bloom and blossom as the rose before the hand of industry when once redeemed by drainage. Eastward from the bluffs are far-reaching prairies relieved by grove-crowned eminences, beautiful valleys and inviting hillsides. On many of the prairies are stretches of young and vigorous timber, where once was an open space consequent upon annual fires sweeping everything before them. The timber tracts, in the main, follow the meanderings of the various streams or crown the bluffs that hem in the valleys.

. . . The largest bodies of timber skirt the streams. Oak in great variety abounds, embracing black, white, overcup, * post, &c. There are also white, black and shellbark hickory, † soft ‡ and sugar maple, ash, sassafras, black and white, or English walnut, ¶ wild cherry, elm, pecan, sycamore, honey locust, box alder, § paw-paw, buckeye, redbud, persimmon, hackberry and other woods indigenous to south and central Illinois. Of shade trees there are black locust, elm, maple, and representatives of the numerous family of evergreens. ** The preservation of the forest growth is a matter of vital importance. When it is remembered that wood is an article of constant daily consumption, positively indispensable to nearly every use and appliance of modern civilization; that railroads require millions of ties annually for purposes of construction as well as reparation, it becomes a question of moment when will the supply be exhausted? The cessation of prairie fires, with their besom of destruction, admits a growth not enjoyed before the occupation of the land in the interests of agriculture. This is but an aid. Will nature's work be supplemented by intelligent action?

. . . In addition to . . . natural means of drainage, tiling has been resorted to with excellent results. Wet, marshy lands have, through its agency, been reclaimed and made to gladden the hearts of progressive husbandmen by the rich harvests of the cereals they have borne. This tiling, which is fast coming into general

* Overcup oak = burr oak (*Quercus macrocarpa*)—not *Q. lyrata*, which is now commonly known as overcup oak.

† Shellbark hickory = shagbark hickory (*Carya ovata*)—not *C. laciniata*, which is now commonly called shellbark hickory.

‡ Soft maple = silver maple (*Acer saccharinum*).

¶ White walnut or English walnut = butternut (*Juglans cinerea*).

§ Box alder = box elder (*Acer negundo*).

** The only evergreen tree native to Madison County is the eastern red cedar (*Juniperus virginiana*).

The Illustrated Mississippi Valley (published in 1854-57) says of the Illinois River, . . . it is one of the pleasantest streams that wind through the valley. It can truly not be given a more fitting name than "la belle rivière" of the Western states.²⁰³

use, is made out of a species of fire-clay, of which extensive beds are found in the county. As the benefits of tile draining become more manifest it will be still more extensively used, and millions will be added to the wealth of the county.

Here and there in deep valleys, or along the hillsides which fringe them are perennial springs of clear, pure, cold water.

. . . This county contains nearly all the elemental classes of soil known to agricultural writers. Argillaceous, calcareous and silicious soils, vegetable and alluvial loams, are represented by turns in the different geological formations which abound, often blended with each other in such minute gradations as to make it a task of some difficulty to classify them without preceding analysis. Part of these soils are characterized by a spontaneous growth of natural grasses and forest trees. Cultivation of the soil has greatly diminished the former, so that where once a luxuriant growth of wild grasses furnished sustenance to herds of cattle and droves of hogs, cultivated fields more than compensate for their extinguishment. Here we find a stretch of the great sedimentary basin of the Mississippi valley, with its aggregations of centuries constituting a soil of inexhaustible fertility, and destined yet to be the great market garden whence will be supplied the wants of one of our nation's greatest cities.* Hard by, frowning down upon this valley, save above Alton where, rock-ribbed in perpendicular walls, it overlooks the bright waters which reflect them back again, are the bluffs, whose heights are crowned with clay loam, or here and there but a thin covering of silicious soil, whose unfruitfulness, by a wise dispensation of nature, is compensated for by the coal measure beneath.

. . . The great American Bottom is largely alluvial This bottom commences, a short distance below Alton near where Wood river emerges from the highlands. . . . Originally a larger portion of this was a kind of bottom prairie on which flourished an enormous growth of wild grasses. The higher portions of this bottom, and this includes the greater part, are now mostly under cultivation producing quantities of market produce, such as potatoes, cabbage, &c. Good crops of both corn and wheat are raised, but much of the land, especially near St. Louis, is too valuable to be planted in these cereals. Much of the land does not overflow, while the lower portions, are being rapidly brought under cultivation by being drained and protected by levees.

* Vegetable crops were grown in the American Bottom to feed St. Louis.

. . . The soil is in some places a rich dark sandy mould, while in other places it is the sticky humus, enormously rich but difficult to work.³⁵⁷

After a long discourse about the Cahokia Mounds (which lie outside the Big Rivers Area), the volume's discussion of archaeological features continues,

There is still another class of antiquities in Madison county, found in the caverns and cave shelters along the rocky bluffs above Alton.

. . . the caves and cave shelters about the bluffs show numerous evidences of occupation in times past. Accumulations of ashes in these caves are not uncommon, showing that for long periods these places were inhabited by savage men, who lived on the flesh of animals, and also of the unsavory shell fish found along the shore of the Mississippi. Large accumulations of the shells of the *Unio** and other shell fish are found near these old cavernous abodes.

. . . In several of the caves about the Piasa and in the vicinity of the mouth of the Illinois river we have found among the debris of these cave dwellings human bones that had been broken lengthwise, apparently to extract the marrow. Farther up on the Illinois river, Judge Henderson and others have found similar evidence of apparent cannibalism.

. . . As these cavernous retreats have not been thoroughly explored, much interesting information may be derived from this source.³⁵⁷

Chapter VI of the *History of Madison County* provides a detailed enumeration of flowering plants and vertebrate animals:[†]

FLORA.

It is not the purpose of this chapter to give an elaborate or scientific treatise on the plants found in this county. The design is rather to give a catalogue of the various plants indigenous to this region. The state of Illinois is divided east and west into three quite distinct botanical belts, viz.: The heavily-timbered regions of the south, whose flora is distinguished by its great variety and luxuriant growth, the central portion, embracing the great prairies of the state with their multifarious forms of vegetation, and the northern part which is divided between woodland and prairie.

* *Unio* is a genus of fresh-water mussel.

† The treatment of fauna and flora in this volume is similar to treatments in several other county histories that were produced by W.R. Brink & Co., by J.L. McDonough & Co, and by Brink, McDonough & Co. Some of these other volumes were published before the *History of Madison County*, which indicates that the Madison County discussion of animals and plants was largely copied from earlier work and was not prepared specifically for Madison County.

Madison county has most of the botanical characteristics common to the timbered and prairie regions of the state.

The plants of a country are a sure index of the character of the soil, and for this reason the following list will be of special interest to the agriculturist.

To add a detailed botanical description of each plant, or of all the species, genera, or even families, represented here, would fill a large part of this volume, to the exclusion of other more appropriate matter. By way of preface, it may be stated that vegetation is a sure index of the character of the soil in which it is growing. No class of persons realizes this fact so fully as does the practical, observant farmer. If he wishes to buy uncultivated land, the kinds of trees, shrubs, or grass growing in the locality decide for him the approximate depth and fertility of the soil, and the consequent value of the land for agricultural purposes. According to its flora Illinois has been divided by botanists into three parts; the heavily timbered regions of the south, whose dense vegetation is remarkable for its variety; the central portion, which, except in the vicinity of the watercourses, is mostly prairie, and noted for the great number and variety of its grasses, and other indigenous plants; and the northern section, which is about equally divided between woodland and prairie. This county lies within the great prairie belt, a region famous for the fertility and depth of its soil, and the luxuriance of its flora. Plants, like animals are greatly influenced in their growth and development by surrounding circumstances. As man and the domestic animals have driven many species of the native animals from this region, so numerous kinds of indigenous plants have disappeared before the onward march of civilization. Hence, we find to-day in the fields and meadows few of the grasses and other plants that flourished in their native beauty here fifty years ago. Thus, under the great laws of evolution and succession, all animated nature, from age to age, moves gradually, but grandly forward toward the eternal destiny which the Almighty, in the beginning, ordained for all His creatures. For this region the following is a complete

LIST OF NATIVE WOODY PLANTS.

Acer Saccharinum, Rock Sugar Maple.*

A. Nigrum, Black Maple.†

A. Dasycarpum, Soft Maple, Silver Leaf Maple.‡

A. Negundo, Box Elder, Ash Leaf Maple.¶

* Acer Saccharinum, Rock Sugar Maple = *Acer saccharum* (sugar maple).

† *Acer nigrum* (black maple) is considered by Mohlenbrock to be synonymous with the sugar maple (*A. saccharum*).²³⁰

‡ A. Dasycarpum, Soft Maple or Silver Leaf Maple = *Acer saccharinum* (silver maple).

¶ A. Negundo, Box Elder or Ash Leaf Maple = *Acer negundo*.

Aesculus Glabra, Stinking Buckeye. *

A. Serrulata, Smooth Leaf Alder. †

Amelanchier Canadensis, True Service-Berry. ‡

Amorpha Fruticosa, False Indigo Shrub.

A. Canescens, Lead Plant. ¶

Ampelopsis Quinquefolia, Virginia Creeper. §

Asimina Trioba, Papaw. **

Betula Nigra, River or Red Birch.

Carpinus Americana, Blue Beach. Hornbeam. ††

Ceanothus Americanus, Red Root. §§

C. Ovalis, Great Red Root. ¶¶

Cercis Canadensis, Judas Tree, Red Bud.

Celastrus Scandens, Bitter Sweet Wax Work. §§§

Celtis Occidentalis, Hackberry.

Cephalanthus Occidentalis, Button Bush.

Prunus Virginiana, Choke Cherry.

P. Serotina, Black Cherry, Cabinet Cherry. ***

Cornus Alternifolia, False Dogwood. †††

C. Sericea, Kinnikinnic ¶¶¶

C. Circinata, Pigeon Berry. ¶¶¶

C. Stolonifera " Red Osier. §§§

* Aesculus Glabra, Stinking Buckeye = Ohio buckeye.

† A. Serrulata, Smooth Leaf Alder = *Alnus serrulata* (smooth alder).

‡ Amelanchier Canadensis, True Service-Berry = *Amelanchier arborea* (shadbush).

¶ A. Canescens, Lead Plant = *Amorpha canescens*.

§ Ampelopsis Quinquefolia, Virginia Creeper = *Parthenocissus quinquefolia*.

** Asimina Trioba, Papaw = *Asimina triloba* (pawpaw).

†† Carpinus Americana, Blue Beach or Hornbeam = *Carpinus caroliniana* (blue beech, American hornbeam, or musclewood).

‡‡ Ceanothus Americanus, Red Root = New Jersey tea.

¶¶ C. Ovalis, Great Red Root = *Ceanothus ovatus* (redroot), which is not to be expected as far south as the Big Rivers Area.

§§ Celastrus Scandens, Bitter Sweet Wax Work = climbing bittersweet.

*** P. Serotina, Black Cherry or Cabinet Cherry = *Prunus serotina* (wild black cherry).

††† Cornus Alternifolia, False Dogwood = alternate-leaved dogwood.

¶¶¶ C. Sericea, Kinnikinnic = *Cornus obliqua* (pale dogwood).

¶¶¶¶ C. Circinata, Pigeon Berry = *Cornus rugosa* (round-leaved dogwood), which is not to be expected as far south as the Big Rivers Area.

§§§ C. Stolonifera, Pigeon Berry or Red Osier = *Cornus stolonifera* (red osier).

C. Paniculata, Pigeon Berry. *

 C. Sanguinea, " †

 Corylus Americana, Hazelnut.

 Crataegus Coccinea, Hawthorn. ‡

 C. Tomentosa, " ¶

 C. Crus-galli " §

 Carya Alba, Shagbark Hickory. **

 C. Sulcata, Thick Shellbark Hickory. ††

 C. Tomentosa, White Heart Hickory. ‡‡

 C. Glabra, Pig-nut Hickory. ¶¶

 Dirca Palustris, Leatherwood.

 Euonymus Americanus, Strawberry Tree. §§

 Fraxinus Americana, White Ash.

 F. Viridis, Green Ash. ***

 F. Sambucifolia, Black Ash. †††

 F. Quadrangulata. Blue Ash.

 Gleditschia Triaechanthos, Three-Thorned Acacia, Honey Locust. ***+

 Gymnocladus Canadensis, Kentucky Coffee Tree. ¶¶¶

 Hamamelis Virginica, Witch Hazel. §§§

 Juglans Cinerea, Butter Nut.

 J. Nigra, Walnut. ****

 Juniperus Virginiana, Red Cedar.

* C. Paniculata, Pigeon Berry = *Cornus racemosa* (gray dogwood).

† *Cornus sanguinea* is a Eurasian species of dogwood.

‡ Crataegus Coccinea, Hawthorn = *Crataegus pedicellata* (scarlet thorn).

¶ C. Tomentosa, Hawthorn = *Crataegus calpodendron* (pear hawthorn).

§ C. Crus-galli, Hawthorn = *Crataegus crus-galli* (cock-spur thorn).

** Carya Alba, Shagbark Hickory = *Carya ovata*.

†† C. Sulcata, Thick Shellbark Hickory = *Carya laciniosa* (shellbark hickory).

‡‡ C. Tomentosa, White Heart Hickory = mockernut hickory.

¶¶ C. Glabra, Pig-nut Hickory = *Carya glabra*.

§§ Euonymus Americanus, Strawberry Tree = *Euonymus atropurpureus* (wahoo).

*** F. Viridis, Green Ash = *Fraxinus pennsylvanica* (red ash)—including var. *subintegerrima* (green ash).

††† F. Sambucifolia, Black Ash = *Fraxinus nigra*.

††† Gleditschia Triaechanthos, Three-Thorned Acacia or Honey Locust = *Gleditsia triacanthos*.

¶¶¶ Gymnocladus Canadensis, Kentucky Coffee Tree = *Gymnocladus dioica*.

§§§ Hamamelis Virginica, Witch Hazel = *Hamamelis virginiana*.

**** J. Nigra, Walnut = *Juglans nigra* (black walnut).

- Lonicera Grata*, Woodbine. *
- Menispermum Canadense*, Moonseed.
- Morus Rubra*, Red Mulberry.
- Ostrya Virginica*, Hop-Hornbeam, Iron-Wood. †
- P. Angulata*, Cotton Tree. ‡
- Platanus Occidentalis*, Buttonwood Sycamore. ¶
- Populus Tremuloides*, Quaking Asp, Aspen.
- P. Monilifera*, Necklace Poplar, Cottonwood. §
- Prunus Americana*, Wild Plum.
- Pyrus Coronaria*, Crab Apple. **
- Quercus Macrocarpa*, Burr Oak.
- Q. Obtusiloba*, Post Oak. ††
- Q. Alba*, White Oak. #‡
- B. Prinus*, Swamp Chestnut Oak. ¶¶
- Q. Bicolor*, Swamp White Oak. §§
- Q. Imbricaria*, Laurel Leaf Oak. ***
- Q. Nigra* Black Jack Oak. ¶¶¶
- Q. Tinctoria*, Yellow Bark Oak, Quercitron Oak. ¶¶¶¶
- Q. Coccinea*, Scarlet Oak. ¶¶¶¶¶
- Q. Rubra*, Red Oak. §§§
- Q. Palustris*, Swamp Spanish Oak, Pin Oak. ****

* *Lonicera grata* is a Eurasian species sometimes called the Italian woodbine or the American woodbine. In this instance a related American species, *L. prolifera* (grape honeysuckle) probably is intended.

† *Ostrya Virginica*, Hop-Hornbeam or Iron-Wood = *Ostrya virginiana*.

‡ *P. Angulata*, Cotton Tree = *Populus deltoides* (eastern cottonwood).

¶ *Platanus Occidentalis*, Buttonwood Sycamore = sycamore.

§ *P. Monilifera*, Necklace Poplar or Cottonwood = *Populus deltoides* (eastern cottonwood).

** *Pyrus Coronaria*, Crab Apple = *Malus coronaria*.

†† *Q. Obtusiloba*, Post Oak = *Quercus stellata*.

#‡ *Q. Alba*, White Oak = *Quercus alba*.

¶¶ *B. Prinus*, Swamp Chestnut Oak = *Quercus michauxii*.

§§ *Q. Bicolor*, Swamp White Oak = *Quercus bicolor*.

*** *Q. Imbricaria*, Laurel Leaf Oak = *Quercus imbricaria* (shingle oak).

¶¶¶ *Q. Nigra*, Black Jack Oak = *Quercus marilandica*.

¶¶¶¶ *Q. Tinctoria*, Yellow Bark Oak or Quercitron Oak = *Quercus velutina* (black oak).

¶¶¶¶¶ *Q. Coccinea*, Scarlet Oak = *Quercus coccinea*.

§§§ *Q. Rubra*, Red Oak = *Quercus rubra*.

**** *Q. Palustris*, Swamp Spanish Oak or Pin Oak = *Quercus palustris* (pin oak).

- Rhus Glabra, Sumach.*
 R. Toxicodendron, Climbing Poison Ivy. †
 Ribes Cynosbati, Prickly Gosseberry. ‡
 R. Hirtellum Smooth Gooseberry. ¶
 R. Rotundifolium, " §
 R. Lacustre, Swamp, " **
 R. Floridum, Black Current. ††
 Ros Lucida, Prairie Rose. #‡
 R. Blanda, Wood Rose. ¶¶
 Salix Tristis, Rose Willow. §§
 S. Humilis, Cone Willow. ***
 S. Eriocephala, Silky-head Willow. †††
 S. Nigra, Black Willow. †††
 S. Fragilis, Joint Willow, Brittle Willow. ¶¶¶
 Sambucus Canadensis, Elderberry.
 S. Pubens, Red Fruit Elderberry. §§§
 Sassafras Officinale, Sassafras. ****
 Shepherdia Canadensis, Buffalo Berry. ††††
 Smilax Hispida, Greenbrier.
 Spiraea Opulifolia, Vinebark Spiraea. ††††
-

* *Rhus Glabra*, Sumach = smooth sumac.

† *R. Toxicodendron*, Climbing Poison Ivy = *Toxicodendron radicans* (poison ivy).

‡ *Ribes Cynosbati*, Prickly Gosseberry = prickly gooseberry.

¶ *R. Hirtellum*, Smooth Gooseberry = *Ribes hirtellum*.

§ *R. Rotundifolium*, Gooseberry = *Ribes missouriense* (Missouri gooseberry).

#‡ *R. Lacustre*, Swamp Gooseberry = *Ribes missouriense* (Missouri gooseberry).

†† *R. Floridum*, Black Current = *Ribes americanum* (black currant).

#‡ *Ros Lucida*, Prairie Rose = *Rosa carolina* (pasture rose).

¶¶ *R. Blanda*, Wood Rose = *Rosa blanda* (meadow rose).

§§ *Salix Tristis*, Rose Willow = *Salix humilis* (prairie willow).

*** *S. Humilis*, Cone Willow = *Salix humilis* (prairie willow).

††† *S. Eriocephala*, Silky-head Willow = *Salix eriocephala*.

††† *S. Nigra*, Black Willow = *Salix nigra*.

¶¶¶ *S. Fragilis*, Joint Willow or Brittle Willow = *Salix fragilis* (crack willow).

§§§ *Sambucus pubens*, Red Fruit Elderberry = *S. racemosa* ssp. *pubens* (red-berried elder).

This species has not been scientifically documented from the Big Rivers Area.

**** *Sassafras Officinale*, Sassafras = *Sassafras albidum*.

†††† *Shepherdia canadensis* has not been scientifically documented from the Big Rivers Area.

†††† *Spiraea Opulifolia*, Vinebark Spiraea = *Physocarpus opulifolius* (ninebark).

Spiraea Tomentosa, Hardhack, Willow Spirae. *
Staphylea Trifolia, Rattle-box, Wood-Bladder Nut. †
Symphoricarpuus Vulgaris, Coral Berry. ‡
Tecoma Radicans Trumpet-Creeper. ¶
Tilia Americana, Bass-wood.
Ulmus Fulva, Red Elm. §
U. Americana, White Elm. **
U. Racemosa, Cork Elm, Hickory Elm. ††
Viburnum Prunifolium, Black Haw, Arrow Wood.
V. Lentago, Sheepberry. ‡‡
Vitis Aestivalis, Summer Grape.
V. Cordifolio, Frost grape. ¶¶
Zanthoxylum Americanum, Prickly Ash.
Lendera Benzoin, Spice Bush. §§
Rubus Strigosus, Red Raspberry, ***
" Occidentalis, Black Raspberry. †††
Rubus Vilosus, Blackberry. ‡‡‡
Robinia Pseudocacia, Black Locust. ¶¶¶

Of the forest trees the most valuable deserve special mention. Rock Sugar Maple is excellent; the Black Cherry is used by cabinet makers and is a wood of good color and grain. The Shag-bark hickory is perhaps the most valuable of its kind. The White Oak is much used in making furniture and agricultural implements. The Blue Ash is capital for flooring. The Honey Locust is a very durable wood and shrinks less than any other in seasoning. The Walnut is

* *Spiraea tomentosa* has not been scientifically documented from the Big Rivers Area.

† *Staphylea Trifolia*, Rattle-box or Wood-Bladder Nut = bladdernut.

‡ *Symphoricarpuus Vulgaris*, Coral Berry = *Symporicarpos orbiculatus*.

¶ *Tecoma Radicans*, Trumpet-Creeper = *Campsis radicans*.

§ *Ulmus Fulva*, Red Elm = *Ulmus rubra* (slippery elm).

** *U. Americana*, White Elm = *Ulmus americana* (American elm).

†† *U. Racemosa*, Cork Elm or Hickory Elm = *Ulmus thomasii* (rock elm), which has not been scientifically documented from the Big Rivers Area.

‡‡ *V. Lentago*, Sheepberry = *Viburnum lentago* (nannyberry).

¶¶ *V. Cordifolio*, Frost grape = *Vitis vulpina*.

§§ *Lendera Benzoin*, Spice Bush = *Lindera benzoin*.

*** *Rubus strigosus* has not been scientifically documented from the Big Rivers Area.

††† *Rubus Occidentalis*, Black Raspberry = *Rubus occidentalis*.

‡‡‡ *Rubus Vilosus*, Blackberry = *Rubus allegheniensis* (common blackberry).

¶¶¶ *Robinia Pseudocacia*, Black Locust = *Robinia pseudoacacia*.

nearly all gone. The Plane tree or Sycamore is used by cabinet makers. Of the Oak family the most valuable kinds are the Burr Oak, Panel Oak, * and Pin Oak.

GRASSES.

In the following list of grasses, the common grain plants, not being indigenous to the county, are omitted. Some of the grasses given are not native, but are among those best adapted for animals. Hence we include them:

Phleum Pratense, Timothy.
Agrostis Vulgaris, Red top. †
Muhlenbergia Diffusa, Nimble Will. ‡
Calamagrostis Candensis, Blue-joint a native grass of the prairies,
where it grew from ten to fifteen feet in height. ¶
Dactylis Glomerata, Orchard grass.
Poa Pratensis, Kentucky Blue-grass.
Poa Compressa, Wire Grass. §
Festuca Elation, Meadow Fescue. **
Bemus Secalinus, Common Cheat. ††
Phragmites Communis, Common Reed. #‡
Arundinaria Macrosperma, Large Cane. ¶¶
Lolium Perenne, Darnel Rye Grass. §§
Anthoxanthum Oderatum, Sweet-scented Vernal-grass. ***
Phalaris Arundinacea, Reed Canary Grass.
P. Canariensis, Canary Grass. ¶¶¶
Panicum Sanguinale, Crab Grass. #‡‡

* Panel Oak = ? red oak (*Quercus rubra*).

† Agrostis Vulgaris, Red top = *Agrostis alba*.

‡ Muhlenbergia Diffusa, Nimble Will = *Muhlenbergia schreberi*.

¶ Calamagrostis canadensis (blue-joint grass) is a native of the prairies, but it grows about 3 to 5 feet tall—not 10 to 15 feet.

§ Poa Compressa (Wire Grass) = Canada bluegrass.

** Festuca Elation, Meadow Fescue = *Festuca pratensis*.

†† Bemus Secalinus, Common Cheat = *Bromus secalinus*.

Phragmites Communis, Common Reed = *Phragmites australis*.

¶¶ Arundinaria Macrosperma, Large Cane = *Arundinaria gigantea* (giant cane).

The known natural range of giant cane is far south of the Big Rivers Area.

§§ Lolium Perenne, Darnel Rye Grass = English rye grass.

*** Anthoxanthum Oderatum, Sweet-scented Vernal-grass = *Anthoxanthum odoratum*.

¶¶¶ P. Canariensis, Canary Grass = *Phalaris canariensis*.

‡‡‡ Panicum Sanguinale, Crab Grass = *Digitaria sanguinalis* (hairy crab grass).

Panicum Glabrum, Smooth Panicum.*
Panicum Capillare, Witch Grass.
Panicum Crus-galli, Barnyard grass. †
Setaria Glauca, Common Foxtail. ‡
S. Viridis, Bottle Grass. ¶
S. Italica, Italian Milet. §
Andropogon Scoparius, (?) Brown beard grass. **

FAUNA.

The following chapter embraces all the animals within the memory of man that have had their habitation in this county. Prior to the advent of the white man, the principal animals were the buffalo, bear, wolf, wild cat, deer, panther, &c., which have mostly disappeared before the onward march of civilization. These various occupants of the wild prairies and forests afforded rare sport to the pioneer settlers of this region, and furnished an interesting subject of study to the student of natural history. That all classes of readers may find pleasure and profit in the article, both the technical and common names of the animals enumerated are given.

Without transcending the scope and purpose of the chapter by describing in detail the orders, families, &c, we append the following list: ††

Of the ruminating animals that were indigenous to this territory, we had the American Elk (*Cervus Canadensis*), and still have the deer of two kinds; the more common well known American deer (*Cervus Virginianus*), and the white-tailed Deer (*Cervus Leucurus*). ‡‡ And at a period not very remote, the American Buffalo (*Bos Americanus*), must have found pastures on the alluvial prairies and rich bottom lands of this county. The heads, horns and bones of the slain animals were still numerous in 1820. ¶¶ The Black Bear (*Ursus Americanus*)

* *Panicum Glabrum*, Smooth Panicum = *Digitaria ischaemum* (smooth crab grass).

† *Panicum Crus-galli*, Barnyard grass = *Echinochloa crus-galli*.

‡ *Setaria Glauca*, Common Foxtail = yellow foxtail.

¶ *S. Viridis*, Bottle Grass = *Setaria viridis* (green foxtail).

§ *S. Italica*, Italian Milet = *Setaria italicica* (Italian millet).

** *Andropogon Scoparius*, Brown beard grass = *Schizachyrium scoparium* (little bluestem).

†† Brink's discussion of mammals appears to have been loosely adapted from Hair's 1866 treatment of Madison County mammals (page 255).

‡‡ Illinois has only one kind of deer, the white-tailed deer.

¶¶ This remark about "heads, horns and bones" can be found in many county histories, and it appears to be little or nothing more than unsubstantiated repetition of lore. The issue is discussed in a footnote on page 256.

were quite numerous even in the memory of the older settlers. Bears have been seen in the county within the last fifty years. The Gray Wolf (*Canis Occidentalis*) and Prairie Wolf (*Canis latrans*) * are not unfrequently found, as also the Gray Fox (*Vulpes Virginianus*), which still exists by its superior cunning. The panthers (*Felis concolor*) † was occasionally met in the earlier times: and still later and more common, the Wild Cat (*Lynx rufus*); ‡ the Mink (*Putorius Vison*); American Otter, (*Lutra Canadensis*); the Badger (*Taxidea Americana*); the Raccoon (*Procyon Lotor*). The coonskin among the early settlers was regarded as a legal tender. The Bear and Otter are now extinct in the county, and were valuable for their furs. Many of the pleasures, dangers and excitements of the chase are only known and enjoyed by most of us of the present day through the talk and traditions of the past. The Buffalo and the Elk have passed the borders of the Mississippi to the westward, never more to return.

To the weasel family (*Mustelidae*) belong the well-known animals, minks, skunks, otters, common weasels, &c. Otters and minks are hunted for their furs The former . . . are at present rarely seen.

. . . The skunk (*Mephitis Americana*) . . . is nocturnal. . . . It was very common a few years ago, but like most of the wild animals, is gradually disappearing. Of the opossum family (*Didelphidae*), the only species here is the common opossum, (*Didelphys Virginiana*).

. . . RODENTIA, OR GNAWERS.

. . . the American beaver, *Castor Canadensis*, is still met with in this county in the timbered nooks of Wood River.

. . . The black rat (*Mus rattus*) was formerly very common, but of late years it has been almost extirpated by the brown or Norway rat (*Mus decumanus*) which is much larger and stronger.

Of the mice we note, as found here, the common house-mouse (*Mus musculus*), the field-mouse, the meadow-mouse, ¶ the jumping-mouse (*Jaculus hudsonius*, § of the family *Jaculidae*) . . . and the tree-mouse. ** The musk-rat (*Ondatra Zibethicus*) . . . has but one species. . . . It is amphibious, building its mud houses in ponds and shallow lakes. It is . . . still quite common.

* Gray Wolf (*Canis Occidentalis*) = timber wolf; Prairie Wolf (*Canis latrans*) = coyote.

† Panther (*Felis concolor*) = mountain lion.

‡ Wild Cat (*Lynx rufus*) = bobcat.

¶ Both "field-mouse" and "meadow-mouse" might refer to voles or to any of a number of other small rodents.

§ Jumping-mouse (*Jaculus hudsonius*) = meadow jumping mouse.

** Tree-mouse = white-footed mouse.

. . . The squirrel family (*Sciuridae*) is represented here by the red (fox) squirrel (*Sciurus hudsonius*), * the gray squirrel (*Sciurus Carolinensis*), the flying squirrel (*Pteromys volucella*), the ground squirrel (*Tomias striaatus*), † the gopher (*Spermophilus*), ‡ the prairie squirrel [¶] and the woodchuck or groundhog (*Arctomys monax*) all of which are so common that they need not be described.

Of the hare family (*Leporidae*) the common gray rabbit (*Lepsus cuniculus*), § is the only representative now inhabiting this region. It is very prolific, and is destined to propagate its species long after some of the animals mentioned shall have become extinct.

Bats and moles . . . are still very numerous.

. . . REPTILIA OR REPTILES.

Under this class we find represented here the order *Testudinata*, or turtles, and including such individuals as the box turtle (*Cistudo virginica*), ** snapping-turtle (*Chelydra serpentina*), wood tortoise (*Glyptemys insculpta*), †† and soft-shelled turtles including mud turtles. Of the order *Lacertia* (lizards,) the common striped lizard (*Ameiva sexlineata*) ‡‡ is the only representative we have found here. Under the order (*Ophidia*) or serpents, we note the common black snake (*Bascanion constrictor*), ¶¶ water snake (*Serpens aquaticus*), §§ rattlesnake (*crotalus horridus*), *** moccasin (*Toxicophis atrapiscus*), ¶¶¶ copperhead (*Trigononcephalus contortrix*), garter-snake (*Euania sirtalis*), house snake, ¶¶¶

* The fox squirrel (*Sciurus ludovicianus*) is often called the red squirrel. The true red squirrel (*Sciurus hudsonicus*) does not occur in the Big Rivers Area.

† Ground squirrel (*Tomias striaatus*) = eastern chipmunk.

‡ Gopher (*Spermophilus*) = thirteen-lined ground squirrel.

¶ Prairie squirrel = Franklin's ground squirrel.

§ Common gray rabbit (*Lepsus cuniculus*) = eastern cottontail.

** Box turtle (*Cistudo virginica*) = eastern box turtle.

†† Wood tortoise (*Glyptemys insculpta*) = *Clemmys insculpta* (wood turtle), which has not been found in Illinois.

‡‡ Striped lizard (*Ameiva sexlineata*) = six-lined racerunner.

¶¶ Common black snake (*Bascanion constrictor*) = racer.

§§ *Serpens aquaticus* means "water snake" in Latin, but this is not the scientific name for any native water snake.

*** Rattlesnake (*crotalus horridus*) = timber rattlesnake.

¶¶¶ Moccasin (*Toxicophis atrapiscus*) = cottonmouth.

¶¶¶ The name "house snake" has been applied to garter snakes; but in this instance, its application is unclear.

joint snake, * blue racer, [†] and green snake. Of these the rattlesnake, copper-head, and moccasin are very poisonous, and therefore most to be dreaded. The blowing, or hissing adder, a venomous serpent, is rarely seen here. [‡]

The class *Batrachia*, or frogs, has as representatives, the leopard frog (*Rana halecin*), [¶] bull frog (*Rana pipiens*), [§] wood frog, tree frog ("tree toad") *Rana hyla*, ^{**} marsh frog (*Rana palustris*), ^{††} common toad (*Bufo vulgaris*), ^{‡‡} tadpole, salamander (*Ambystoma punctatum*), ^{¶¶} triton, or water newt (*Diemictylus viridescens*), ^{§§} and mud puppy (*Menobranchus lateralis*).

The class of *Pisces*, or fishes, is represented in the streams of the county, by the white, the black ^{***} and the striped bass, ^{†††} catfish, pike, sturgeon, (rare), gar, goggle-eyed perch, ^{‡‡‡} sunfish, chub, white perch ("croppie"?), white and black suckers, buffalo, and a few others of minor importance.

... RAPTORES, OR BIRDS OF PREY. ^{¶¶¶}

... Under this order and belonging to the hawk family (*Falconidae*), are the sparrow-hawk (*Tinnunculus alandarius*); ^{§§§} swallow-tailed hawk (*Nauclerus*

* Joint snake = slender glass lizard.

† Blue racer = racer.

‡ The blowing adder or hissing adder is the hog-nose snake, which was erroneously reputed to be venomous.

¶ Leopard frog (*Rana halecin*) = plains leopard frog or northern leopard frog.

§ Although the name *Rana pipiens* has been applied to the bullfrog, it is correctly applied to the northern leopard frog.

** *Rana hyla* is an obsolete name for an Old World species of treefrog.

†† Marsh frog (*Rana palustris*) = pickerel frog.

†† The common toad (*Bufo vulgaris*) is a Eurasian species.

¶¶ Salamander (*Ambystoma punctatum*) = spotted salamander.

§§ Triton or water newt (*Diemictylus viridescens*) = eastern newt.

*** Black bass = largemouth bass or smallmouth bass.

††† Striped bass = yellow bass or white bass.

‡‡‡ Goggle-eyed perch = ? warmouth or ? rock bass.

¶¶¶ W.R. Brink's enumeration of birds on the following pages is similar to the list of Pike County birds published two years earlier by Chas. C. Chapman (page 306). The two lists have similar arrangements (birds of prey, climbing birds, etc.), but there are enough differences in the species to indicate that Brink's list was not copied from Chapman's list.

§§§ Sparrow-hawk (*Tinnunculus alandarius*) = kestrel.

furcatus); * hen-harrier † (*Circus cyaneus*); ‡ goshawk (*Falco palambarius*); sharp-skinned hawk (*Buteo borealis*); ¶ red-shouldered hawk, pigeon-hawk (*Falco Columbarum*); § ring-tailed, or gold eagle (*Aquila chryaetos*).

To the owl family (*Strigidae*) belong the great horned owl (*Bubo Virginianus*); snowy owl (*Strix nisa*); barred owl (*Syrnium nebuloseum*, or "hoot-owl"); American barn or screech-owl (*Strix flammea*); ** spotted owl, †† marsh owl, ‡‡ Kennicott's (?) owl. ¶¶

Of the vulture family *Vulturidae*, the only representative is the turkey-buzzard (*Cathartes aura*). §§

SCANSORES, OR CLIMBING BIRDS.

. . . Under this order and indigenous to this county are the swift, or chimney-swallow (*Cypselus pelasgius*), red-headed woodpecker (*Melanerpes erythrocephalus*), golden-winged woodpecker (*Colaptes auratus*), *** Carolina paroquet; (*Conurus Carolinensis*), ¶¶¶ sap sucker (*Picus pubescens*). ¶¶¶

RASORES, OR SCRATCHING BIRDS.

. . . It includes the wild turkey (*Meleagris gallopavo*.) prairie-hen (*Tetrao cupido*.) ¶¶¶ ruffled grouse, or "partridge" (*Bonasa umbellus*.) §§§ quail (*Ortyx*

* Swallow-tailed hawk (*Nauclerus furcatus*) = swallow-tailed kite.

† At this point in the *History of Madison County*, the remainder of the list of raptors is replaced by part of the list of perching birds; the rest of the raptors appear at the end of the list of climbing birds. The birds have been rearranged here to put all of the species in the right order.

‡ Hen-harrier (*Circus cyaneus*) = northern harrier.

¶ Sharp-skinned hawk (*Buteo borealis*) = sharp-shinned hawk.

§ *Falco Columbarius* is the merlin or pigeon hawk—but see a footnote on page 257 for a discussion of the identity of this "pigeon hawk."

** American barn or screech-owl (*Strix flammea*) = common barn-owl.

†† Spotted owl = ?barred owl.

‡‡ Marsh owl = short-eared owl.

¶¶ Kennicott's owl is a subspecies of the screech-owl from the Pacific Northwest.

§§ Turkey-buzzard (*Cathartes aura*) = turkey vulture.

*** Golden-winged woodpecker (*Colaptes auratus*) = northern flicker.

¶¶¶ Carolina paroquet (*Conurus Carolinensis*) = Carolina parakeet.

¶¶¶ Sap sucker (*Picus pubescens*) = downy woodpecker.

¶¶¶ Prairie-hen (*Tetrao cupido*) = greater prairie-chicken.

§§§ Ruffed grouse or partridge (*Bonasa umbellus*) = ruffed grouse.

Virginianus,) * turtle-dove (*Turtur auritus*,) † wild or passenger pigeon (*Ectopistes migratoria*).

GRALLATRES OR WADING BIRDS.

. . . This order included the plover (*Charadrius*,) common snipe (*Scolopax gallinago*,) American woodcock (*Philohelo minor*,) Wilson's snipe (*Gallinago Wilsonii*,) ‡ mud-hen (*Fulica Americana*,) ¶ Kill-dee (*Aegialitis vociferus*,) red-breasted-snipe (*Gambetta melanoleuca*,) § tell-tale snipe (*Gambetta flavipes*,) ** water-rail (*Rallus Aquaticus*,) †† sand hill crane (*Grus Canadensis*,) blue crane (*Grus Americanus*,) §§ yellow-legged and upland plover, ¶¶ white crane (*Grus Albus*,) §§ and heron (*Ardea cinerea*). ***

NATATORES, OR SWIMMING BIRDS.

. . . Under this order are found the common wild goose (*Anser Americanus*,) ††† summer or wood duck (*Aix sponsa*,) Canada goose (*Bermicala Canadensis*,) American Swan (*Cygnus Americanus*,) ††† brand-goose, or ("brant" (*Anser Bernicla*,) ¶¶¶ butter ball (*Bucephala albeola*,) §§§ mallard (*Anas boschas*,) blue-winged teal (*Boschas crecca*,) American widgeon (*Mareca Americana*,) red-head duck (*Apthaya Americana*,) canvass-back duck (?) (*Aythaya vallisnerio*,)

* Quail (*Ortyx Virginianus*) = northern bobwhite.

† Turtle-dove (*Turtur auritus*) = mourning dove.

‡ Wilson's snipe (*Gallinago Wilsonii*) = common snipe, the same as *Scolopax (Scolopax) gallinago*, listed earlier in this paragraph.

¶ Mud-hen (*Fulica Americana*) = American coot.

§ Red-breasted-snipe = short-billed dowitcher; *Gambetta melanoleuca* = greater yellowlegs.

** Tell-tale snipe (*Gambetta flavipes*) = lesser yellowlegs.

†† The water rail (*Rallus aquaticus*) is a Eurasian species that resembles the Virginia rail.

†† "Blue crane" is another name for the great blue heron (*Ardea herodias*) as well as the sandhill crane (*Grus canadensis*). *Grus americana* is the scientific name for the whooping crane.

¶¶ A footnote on page 259 discusses the "yellow-legged and upland plover."

§§ White crane (*Grus Albus*) = ? great egret or ? whooping crane.

*** *Ardea cinerea* is the grey heron (European blue heron), which is closely related to the great blue heron.

††† *Anser Americanus* would be the "American goose," but the name is not legitimate. It does not appear in any of the early major American ornithological works.

††† American Swan (*Cygnus Americanus*) = tundra swan.

¶¶¶ Brand-goose or brant (*Anser Bernicla*) = brant.

§§§ Butter ball (*Bucephala albeola*) = bufflehead.

green-winged teal (*Nettion Carolidensis*), pintail duck (*Dafila acuta*), trumpeter swan (*Cygnus buccinator*).

INSESSORS OR PERCHING BIRDS.

. . . To this order belong . . . the wood thrush (*Turdus mustelinus*), mocking bird (*Mimus polyglottus*), blue-bird (*Sialis Wilsonii*), cat bird (*Mimus Carolinensis*), robin (*Turdus migratorius*), brown thrush, or "thrasher" (*Turdus rufus*), titmouse, or chickadee (*Parus atricappillus*), * brown creeper (*Certhia familiaris*), nuthatch (*Sitta Carolinensis*), † winter wren (*Troglodytes hyemalis*), cedar bird (*Ampelis cedrorum*), ‡ rose-breasted grosbeak (*Guiraca ludovicianana*), chewink (*Pipilo erythrophthalmus*), † meadow-lark (*Sturnella magna*), § blue jay (*Cyanura cristata*), wren, (*Troglodytes domestica*), ** warblers, barn swallow (*Hirundo hordeorum*) bank swallow (*Cotyle riparia*), blue martin *Progne purpurea*, †† cardinal red bird (*Cardinalis Virginianus*), ‡‡ field sparrow (*Spizella pusilla*), indigo bird (*Cyanospiza cyanea*), ¶¶ great northern shrike, or butcher bird (*Collurio borealis*), §§ yellow, or thistle bird (*Sylvatica aestiva*), *** swamp, or red winged black bird (*Sturnus predatorius*), cow blackbird "cowbird", blackbird (*Merula musica*), ¶¶¶ king bird, or bee martin (*Tyrannus Carolinensis*), Raven (*Corvus corax*), common crow (*Corvus Americanus*), Summer red bird (*Pyrangra aestiva*), ¶¶¶ scarlet tanager, Baltimore oriole (*Icterus Baltimore*), ¶¶¶ pewee, or Phoebe bird, (*Sayorius fuscus*), §§§ kingfisher (*Ceryle alcyon*), ruby

* Titmouse or chickadee (*Parus atricappillus*) = black-capped chickadee.

† Nuthatch (*Sitta Carolinensis*) = white-breasted nuthatch.

‡ Cedar bird (*Ampelis cedrorum*) = cedar waxwing.

† Chewink (*Pipilo erythrophthalmus*) = rufous-sided towhee.

§ Meadow-lark (*Sturnella magna*) = eastern meadowlark.

** Wren (*Troglodytes domestica*) = house wren.

†† Blue martin (*Progne purpurea*) = purple martin.

‡‡ Cardinal red bird (*Cardinalis Virginianus*) = northern cardinal.

¶¶ Indigo bird (*Cyanospiza cyanea*) = indigo bunting.

§§ Great northern shrike or butcher bird (*Collurio borealis*) = northern shrike.

*** The yellow bird or thistle bird is the American goldfinch. *Sylvatica (Sylvia) aestiva* is the yellow warbler, which has also been known as the yellow bird.

¶¶¶ The identity of the blackbird (*Merula musica*) is not known. *Merula migratoria* is another binomial for the American robin (*Turdus migratoria*). A related thrush, *Turdus merula*, is the blackbird of Europe. *Turdus musica* is the Eurasian song thrush.

¶¶¶ Summer red bird (*Pyrangra aestiva*) = summer tanager.

¶¶¶ Baltimore oriole (*Icterus Baltimore*) = northern oriole.

§§§ Pewee or Phoebe bird (*Sayorius fuscus*) = eastern phoebe.

throated humming-bird (*Trochilus colubris*), yellow-billed cuckoo (*Cuculus canorus*), ruby-crowned kinglet, golden-crowned kinglet, whippoorwill (*Antrostomus vociferus*), grass sparrow, or black throated bunting, * lark sparrow, or finch, snow bird (*Junco hyemalis*), † chipping sparrow (*Spizella socialis*), night hawk (*Chordeiles popetue*).³⁵⁷

In addition to the above enumeration, the *History of Madison County* includes the following account of the local fauna:

Many of the animals and birds common in early days have disappeared. Grey wolves were plentiful in the first settlement of the country, and there were also black and prairie wolves. Wild cats were also numerous. The wolves were a great trouble to the farmers, for the reason that they killed many of the young pigs and sheep, and sometimes colts and calves. A panther was occasionally met with, and often attacked men and the, larger animals. Ezra Gilman, in township six, range ten, ‡ killed a panther with a heavy stick as his only weapon. The panther had engaged in a fight with his dog Samuel P. Gillham [¶] was accustomed to tell of a neighbor of his, who, when riding through the timber at, night, was attacked by a panther

. . . The horns of the wild elk could still be seen, showing that they had once inhabited this country. A badger was occasionally killed, but not after 1830. Buffalo horns were scattered over the prairie, for years after the first settlement. Bears were not common. One was killed in the county after 1830. The Lynx was sometimes seen. Deer, of course, were plentiful in early days. There were four varieties of squirrels, the fox, grey, flying and ground squirrels.

The grey and bald eagle [§] were common in pioneer times. Paroquets were once plenty. They used to stay in the timber along the creeks, and when they came out the settlers regarded their appearance as a sure harbinger of a storm. There were several varieties of the wood-pecker the red head, the yellow-hammer, ** and the sap sucker. †† Partridges were scarce. ‡‡ The southern mocking bird

* Grass sparrow or black throated bunting = dickcissel.

† Snow bird (*Junco hyemalis*) = dark-eyed junco.

‡ Township 6 North, Range 10 West = Godfrey Township, north of Alton.

¶ Most of the Gillham family lived next to the Mississippi River in Chouteau Township, immediately south of the Big Rivers Area.

§ Both the bald eagle and the golden eagle have been called grey eagles.

** Yellow-hammer = northern flicker.

†† In addition to the yellow-bellied sapsucker, both the downy woodpecker and the hairy wood-pecker were called sapsuckers.

‡‡ Both the northern bobwhite and the ruffed grouse were called partridges. The bobwhite probably was not scarce, so this sentence probably is a reference to the ruffed grouse. The matter is

was seen in the country for a year or two, and then disappeared. The pheasant has come since the first settlement of the country. There were several varieties of owls, among which were the screech owl, * the large prairie owl, † and the large horned owl. ‡ Water hens § have come since the country was first settled. Wild ducks and geese were plentiful, and cranes, herons and swans were found about the lakes.

. . . The green-headed flies, § which infested the prairies in the summer, were a great annoyance. From the middle of June to the first of September it was almost impossible to cross the prairies in the day time. Wherever a fly lighted upon a horse a drop of blood started. In a journey of twelve miles horses were frequently killed. Travellers were accustomed to lie by in the timber during the day, and to cross the prairies at night.³⁵⁷

A few insights into the local environment and biota are provided by the history of early Alton. In 1811 a white farmer was killed by Indians near Hunter's Spring, at the northwest corner of Second and Spring Streets. The killers were chased "into the heavy timber in Wood River bottom," where they took refuge "under a large tree that had been blown down."³⁵⁷

Another spring was the source of Little Piasa Creek, which courses through a valley on the west side of downtown Alton. About 1817 a ferry was established at the entrance to this glen:

The landing place was at the mouth of the Little Piasa, or as the ferry-man called it, "Fountain Creek." It is likely that the name of "Fountain" was given to the creek and ferry on account of the well-known cave (or fountain) spring in which the cave has its source.³⁵⁷

The creek on the east side of downtown Alton is Shield's Branch. Two families built a cabin there in December of 1818: "On Christmas day the men found a fine bee tree on the branch, and the honey contributed greatly to the enjoyment of the festivities of the day."³⁵⁷

Downtown Alton still had a wild aspect in 1829:

Corn was growing on a portion of the land between the Little Piasa and the bluff, and on the north and east there was a heavy growth of timber. Along the

confused because pheasants are also mentioned in this paragraph: the "pheasant" of early Illinois is the ruffed grouse.

* In addition to the eastern screech-owl, the barn-owl was occasionally called a screech owl.

† Large prairie owl = short-eared owl.

‡ Large horned owl = great horned owl.

§ Members of the rail family, including the American coot, were called water hens.

§ Green-headed flies are in the family Tabanidae, which includes horse flies and deer flies.

slope of the bluff wild grape vines grew luxuriantly, while in the forest, east of the creek, the underbrush was so dense that the river could scarcely be seen ten rods distant.³⁵⁷

1882: William Henry Perrin and G.N. Berry

The Big Rivers Area extends into four townships of northern and western Montgomery County. A few remarks about the area's natural environment are preserved in the 1882 *History of Bond and Montgomery Counties*, edited by William Henry Perrin. The weather is one of the topics in Mr. Perrin's book:

The climate of Montgomery County, in common with Southern and Central Illinois, is variable. No one who has lived here long needs to be told this; it very soon becomes an established fact in his own personal experience.

... Autumn, with its slowly diminishing heat, terminates in the serene and beautiful season known as Indian Summer. Its mild and uniform temperature, soft and hazy atmosphere, and forests beautifully tinted with the hues of dying foliage, all conspire to render it the pleasant part of the year. ... The winter has its sudden change of temperature These sudden changes seem to increase both in number and in extremes, a fact doubtless attributable to natural causes—the settling-up and cultivation of the country. It is very common to hear old citizens who have lived in the State forty or fifty years, tell how different the seasons are now and when they first came here. There is more or less snow or rain, the seasons are less favorable for farming, the springs more backward, * etc., etc., just as their fancy happens to get the start of them.²⁵⁹

G.N. Berry, author of the chapter about Bois D'Arc Township, wrote, "At the time of its settlement by the whites, years ago, there were but a few dozen small, scrubby trees to be seen in the entire township, the prairie being then clothed by a rank covering of native grass"⁴¹

In neighboring Harvel Township, according to Mr. Berry . . .

This division of the county is almost entirely bare of native timber, † . . . while in the northern part of the township at the time of its settlement there was but one large tree standing alone on the wide prairie.

This tree still stands, and is known as the lone elm. It can be seen for several miles, and in former years was an object of almost veneration to the red men, who held their councils, concocted their hunting schemes, planned their forays

* A "backward" spring is a late spring.

† The 1918 *History of Montgomery County* says of Harvel Township, "At no time was there much timber, and now there is practically nothing left of the native growth."²²

against their enemies, and made their treaties while seated under its wide-spreading branches.⁴⁰

Regarding the adjacent township of Pitman, Mr. Berry observed, "But little native timber is left standing, although at one time there were several strips of woodland in the southern and southwestern parts."⁴²

1885: Continental Historical Co.

The *History of Greene and Jersey Counties* paints a word-picture of the ecological features and natural resources of Jersey County:

The central and eastern portions of this sub-division of the state, are mostly prairie, level or gently rolling, but the southern and western part becomes more broken and rough as it approaches the rivers, forming in bluffs and hills, separated from each other by narrow ravines, and with sharp declivities, crowned with a narrow, knifelike ridge, some towering some two or three hundred feet in the air. This portion of the county was heavily timbered at one time, but the hands of the busy woodman has wielded the axe so well that much of the land has been cleared of its leafy mantle, but enough remains to give to it the appearance of a wooded country, and with the outcrop of gigantic rock, deep shady ravines and purling springs, make as picturesque locality as any found in the state.

. . . The bottom along the Illinois river is a deep, sandy loam, differing somewhat in localities, by being formed wholly from the sediment deposited by the annual overflow of the river, or mainly formed from the wash from the highlands of the adjacent bluffs. . . . These lowlands are now gradually being elevated from year to year by the causes already referred to; the swampy portions are filling up or being drained, and the arable area constantly increasing. The alluvial lands of Jersey county will, at no distant day, be very valuable.

That portion of the county bordering on the rivers has, adjacent to the bottoms, a range of high bluffs, cut up by deep ravines and narrow ridges. These bluffs are covered with a heavy deposit of loess, varying from twenty to sixty feet in thickness. . . . Where the deposit of loess is well developed, the bluffs usually present a series of bald knobs, which form such a marked feature in the topography of the county along the rivers.

. . . Jacob Lurton, Sr., came to Jersey county, in the spring of 1817, and built a cabin near the east line of section 1, in what is now Elsah township. He remained here but a short time, when finding the water not very good in that locality, moved a short distance east of it to the neighborhood of a spring, but which still left him in Jersey county.

. . . In the year 1821, John L. Evans built a grist and saw mill on the Macoupin creek, on Sec. 33 or 34, T. 9, R. 13. This was a sash saw, and grist mill and had two run of five foot buhrs.

. . . Gregg McDaniel erected a grist mill run by water power, in the county, and also the first saw mill. The saw mill was built in 1828, and was located on section 7, Otter Creek township, on the south bank of Otter creek. The grist mill was erected in the spring of 1830, on the opposite bank of the creek. The dam afterwards washed away, and as steam mills were then being built in this vicinity, the damage was not repaired, and the mills were allowed to go to decay.

. . . Mr. Semple . . . laid out the town of Jersey Landing, * which was surveyed March 7, 1853. He opened a road up Askew Hollow, so called from Josiah T. Askew, who had an extensive sugar camp † in the hollow, about half a mile distant from the river.

. . . One of the leading industries of the town of Elsah, and, indeed, of this whole section of the country, is the fishery of Isaac Houpt. This gentleman commenced the business as early as 1866 He has some sixty or seventy nets, and two large seines and five fishing boats All kinds of edible fish, among which are white, black and calico bass, ‡ pike, pickerel, catfish, perch, buffalo and red-horse, are gathered from the bosom of the mighty "father of waters" and prepared for the market. Tons of the finny tribe are gathered in and forwarded to St. Louis and other points

. . . Two fine springs of living water are among the attractions of Elsah. One of them is known as Fountain Square spring. They were noticed at the time of the first settlement of the town, and since then have never, at any time, ceased to flow. Quite a respectable sized stream of water flows from each one, and the water is used by the people of their vicinity in preference to well water.⁷⁶

The *History of Greene and Jersey Counties* provides details about the natural character of three townships in Jersey County. First is Richwoods Township:

In the southwestern portion of the township is McFain's lake, which is of quite respectable proportion. It lies mainly in sections 20, 29, 30 and 32, with a projecting arm into sections 17 and 8. A small portion also lies in section 19. Long Pond is a small body of water, too small to be classed as a lake, which lies in section 18 and 19. There is also a small lake on section 5. The bluff in the west part of the township presents in summer a fine appearance, with its mossy

* Jersey Landing = Elsah.

† A *sugar camp* is a place where maples are tapped for their sweet sap.

‡ Black bass = smallmouth bass and largemouth bass; calico bass = crappie, especially black crappie.

There is probably no river in the United States of a length equal to the Illinois from La Salle to its mouth (222 miles) which would have its width and current so little affected by a succession of dams which would deepen the water for the whole distance, as this river.

— U.S. Army Corps of Engineers (1867).³⁷⁰

eminences, and tree-clad acclivities. . . . There is not much improved land west of the bluff, save that closely adjoining.⁷⁶

Rosedale Township:

The township is well watered, having the Illinois river on the west, besides Otter creek, Coon creek, Fowler's lake, Long lake, Deep lake, Coon lake, and Horse Shoe lake. . . . Coon lake is situated on sections 7, 8, 17 and 18. It is the largest lake in the township. Fowler's lake is long and narrow, and lies in sections 20 and 29. It is connected with Long lake, at the north end of the latter, which extends through the remainder of sections 29, through all of 32, and projects slightly into Quarry township, and from there is connected with the Illinois river by a narrow channel. Deep lake lies right alongside the river, on sections 29 and 32, its foot being in Quarry. Horse Shoe lake is almost entirely on sections 3 and 4. It is not, strictly speaking, a lake, being merely a projecting arm of Otter creek, which lies in the shape of a coil, whence its name—Horse Shoe—is derived.

. . . There is also a large amount of timber, more or less heavily wooded.

. . . About the year 1840, Thomas Barnett started a grist mill on the north side of Otter creek, on section 1. It stood a little over a mile down the creek from McDaniels' mill It was a stone mill when built, but had not been long constructed ere it was washed away by a rise in the creek.⁷⁶

Mississippi Township:

There is but little timber land in the township, and that is confined mostly to the banks of the streams. . . . There is very little uncultivated land in Mississippi township, its inhabitants being an industrious class of citizens, who take a pride in the proper improvement of their places and in tilling the soil in a careful and painstaking manner.⁷⁶

The Greene County section of the *History of Greene and Jersey Counties* touches on the region's natural resources:

Fine springs are abundant in the bluff country along the river, and where the limestone crops out, and water can be reached almost anywhere by wells of not over 40 feet. Several mineral springs have been discovered.

. . . In the matter of timber, Greene county is abundantly supplied with all the trees indigenous to this latitude, and in large quantities, there not being a single township without its liberal supply of well wooded land. Among the most common kinds are the bass, or linden, * red maple, † sugar maple, honey locust, persimmon, white ash, white and red elm, cottonwood, black and white walnut, shellbark hickory, and post, swamp, ‡ white, black, red, pin and shingle oaks with their numerous relatives, together with all the smaller varieties with which the American forests are so lavishly filled.

. . . In the western portion of the county, in the bottom land of the Illinois river, are numerous lakes of all sizes, shapes and forms, but none of them worthy of special mention. ⁷⁶

The chapter on Bluffdale Township states,

It contains about 45 sections, about one-half of which is the rich bottom land of the Illinois river, the rest being high rolling timber land. These bottoms are of the rich alluvial soil so characteristic of all the river bottoms of the western states, somewhat broken by lakes, ponds and marshy places, but if the annual overflow of the waters of the river can be restrained, will make the finest farming land in the world. Running in a nearly north and south line through the center of the township is a line of bluffs, some 300 feet in height, rough, abrupt and craggy, and on the summit of these, the elevated plateau, covered with timber originally, and mostly covered with its primeval growth. . . . Potato Prairie lake lies in the southwestern part of the township, Long lake in the western, and Halfway lake in the northwestern, all on the bottom land.

. . . One of the oldest mills in the county, is the Seeley mill, which stands on Sec. 1, T. 10, R. 13. [¶] . . . It is equipped with two sets of buhrs, one for flour and one for corn, and is run by water power, furnished by Apple creek. The dam is 130 feet wide, and has a fall of six feet. . . . This mill was built . . . about the year 1821. ⁷⁶

Patterson Township: "Schutz's mill. This mill stands on the site of one that burned down long ago. The old one was built away back in the thirties This mill was run by water power . . ." ⁷⁶

Walkerville Township:

* Bass or linden = eastern basswood (*Tilia americana*).

† The red maple (*Acer rubrum*) is not known to be native to Greene County. The closely related silver maple (*A. saccharinum*) is abundant.

‡ Swamp oak = ?swamp white oak (*Quercus bicolor*).

¶ Seeley's mill was indeed in Bluffdale Township, but it was in section 36, Township 11 North, Range 13 West (east of Haypress).

Here, as in the other river township, * the land is of two descriptions, the west half being the rich, fertile, river bottoms, that but for their being liable to overflow from annual freshets, would have no peer in the world, and the elevated plateau of land on the top of the bluffs. A large portion of the bottom, in this county is taken up by Grassy lake, a shallow body of water lying near the foot of the bluffs. . . . On the upland, the bulk of the land is covered by a fine growth of timber, except where the enterprising hand of man, has with vast labor, cleared up a farm.⁷⁶

John Hoots came to live along a small tributary of the Illinois River in northwestern Greene County. According to the 1885 history of Greene County,

John was reared mostly in Scott county, and he remembers well the first time he saw the site of the town of Winchester, there being only one log house where the town now stands, and there he has often hunted squirrel, and also killed rattlesnakes.

. . . Mr. Hoots is now the possessor of 80 acres of land on sections 3 and 10, Roodhouse township. On his farm are two springs, possessing medicinal properties, which are attracting general attention, and are known as Hoots' Golden Mineral Springs. The water contains soda, magnesia, carbonate of lime, sulphur and iron, with hydrogen gas arising from the bottom of the springs.⁷⁶

1889: Chapman Brothers

Thomas Wells was about six years old in 1822, when his family started a farm approximately two miles northeast of Winchester. According a sketch of his life in the *Portrait and Biographical Album of Morgan and Scott Counties*, "Wild beasts were plentiful in this region and often troubled the crops, and our subject has seen many a bear killed by his father lying in the door-yard."⁶⁶

The father of Thomas Coulter came to live about four miles east of Winchester in 1830:

That winter was a memorable one to the early settlers of this state as the "Winter of the Deep Snow," which fell to the depth of four feet on a level, and in contrast with that he can compare the mild winter of thirty-seven years later, when the weather was so warm that the corn actually sprouted in the fields an inch on Christmas Day † While the snow was lying on the ground to such great depth, Mr. Coulter and three others went out one day on a deer hunt, and by ten o'clock had killed fourteen of the wild animals, the deep snow having

* The other river township is Bluffdale.

† The peculiar winter of 1877 was recalled in neighboring Morgan County: "On the 19th of October, 1877, it commenced raining, and continued to rain, more or less, every day up to December 27th. On Christmas day fish worms were crawling on the sidewalks, and the streets of Jacksonville were almost impassable for teams."¹⁰¹

impeded their movements. The hunters stripped the hides off of their game, took the shoulders and hams and left the remains to a very large pack of wolves who had been hungrily eyeing them while they worked.⁶⁶

1890: W.L. Marshall

The U.S. Army Corps of Engineers issued a lengthy report in 1890, describing work which would be needed in order to improve the commercial waterway that linked Lake Michigan with the Illinois River. The report is titled "Survey of Water-way from Lake Michigan to the Illinois River at La Salle, Illinois," but the author, W.L. Marshall, also discussed the lowermost reaches of the river:

The Lower Illinois partakes more of the nature of an estuary than of a river. Its banks reach only to mid-stage, but are not annually overflowed. Its slope is only 0.15 foot per mile.

The bottom lands which are overflowed at stages above average high water vary in width from a few hundreds of feet to 5 miles, generally densely covered with timber, and cut up by numerous sloughs, lagoons, and ponds. A large area, however, of the higher part of the bottoms is cultivated whenever not submerged before seeding time, and this cultivated area is annually increasing.

. . . Throughout the valley of the Illinois it may be said, generally, that at about the 9-foot stage above the low-water mark the bayous and lagoons begin to fill, at 10 to 11 feet the lowest areas, worthless for cultivation, begin to be submerged, and at about the 12-foot stage the overflow begins to become widespread. At about the 16-foot stage probably eight-tenths of all lands submerged at extreme floods are covered with water.

. . . It may then be said that the channel of the Lower Illinois without overflow will not discharge one-third of its natural drainage at floods. The impracticability to prevent overflow, then, by such methods as enlarging the channel of the Lower Illinois by the removal of the dams therein * and dredging is apparent,

* When this report was prepared, the Illinois River had three dams, all with navigation locks: at Henry (between Marshall and Putnam Counties), below Copperas Creek (near Banner, between Fulton and Tazewell Counties), and at La Grange (between Brown and Cass Counties). A fourth dam was being built at Kampsville (between Calhoun and Greene Counties). Some persons argued that the dams should be removed; as W.L. Marshall put it, "A prejudice exists, however, which has been persistently fanned and cultivated during the past two or three years, against these dams, and the removal of the State dams at Henry and Copperas Creeks has been ordered by the State legislature of Illinois, in any event, after four years from July 1, 1889, and earlier, under certain conditions."²¹² Objections to the lock-and-dam system included arguments that the dams (a) impeded the passage of riverboats during some stages of water, (b) increased flooding on the adjacent bottomlands, and (c) increased sedimentation in the pool above the dam.

This bottom land is now under a high state of cultivation, and since the completion of the levee has become one of the richest farming districts of America.

— Pleasant Vale Township, described in the *History of Pike County* (1880).⁷²

when it involves the increase to three times its present capacity of a channel varying in width (not including Lake Peoria) from 600 feet to 1,400 feet, about 14 feet in depth below the crests of the banks, and 225 miles in length from La Salle to the Mississippi River: nor can this channel be increased by the scour of the current over such a gentle slope, this current not in any event exceeding three feet a second due any practicably attainable slope over that part of the river.

. . . Over the unimproved section of the Illinois River, *i.e.*, from Copperas Creek to within a few miles of the mouth of the Illinois, the low-water depths on bars do not exceed from 16 to 18 inches, as reported to this office by pilots and steam-boatmen navigating the river, as well as directly measured by employes of this office in 1887. These bars occupy but a comparatively small proportion of the 137 miles involved, but they establish the present navigable capacity of the stream.

The *natural* low-water volume of the Illinois is gradually diminishing, from various causes, among which may be mentioned the clearing of wooded areas, and almost universal tile drainage and ditching, by means of which the rain-fall is rapidly sent into the river during the wet season of the year, instead of being spread over longer periods, or going to sustain springs that would contribute to the low-water flow.

. . . The discharge of the Illinois River at low water is so small that it is impossible without locks and dams to secure satisfactory width and depth of channel by dredging and wing-dams under present conditions.

. . . Below La Grange the high-water stage is determined by the Mississippi floods, and to a less extent above that point also. *²¹²

1891: Biographical Publishing Company

The *Portrait and Biographical Album of Pike and Calhoun Counties* preserves the biographies of more than 500 men. Among those who subdued the wilds was Harlan P. Dodge, who carved out a farm in the Mississippi River floodplain southwest of Atlas, at the very northwest extremity of the Big Rivers Area: ". . . no man has done more than he

* High water in the Mississippi River raised the level of the Illinois River as far upstream as La Grange (79 miles from the mouth of the Illinois River) and beyond.

to change that once vast tract of worthless swamp into its present state of fertility and productiveness."

In 1874 he . . . came to Pike County and worked on the levee till its completion. He then bought up considerable bottom land and began farming. The land that he bought was originally a swamp, but he has since cleared it and drained it, and has placed it under such fine cultivation that it now blossoms like the rose. He now owns nine hundred acres of rich bottom land of which seven hundred acres are under a high state of cultivation.⁴³

Mr. Dodge's neighbor Samuel Taylor moved to northwest tip of the Big Rivers Area in 1858:

When he came here the bottom lands along the river were nearly useless swamps and he has been one of the enterprising farmers who energetically took hold of the work of redeeming them, and where the land was once uncultivated it is now the richest and most productive soil to be found in the county.

. . . When he came here wild game was plenty and he used to hunt the coon and chase the deer, of which he has seen as many as fifty together.⁴³

1896: Mary Hartwell Catherwood

In January of 1896 the Carrollton *Patriot* published a series of narratives about the lower Illinois River valley by Mary Hartwell Catherwood. Several of her stories center around the recollections of Rowell Honeycut. * Following are excerpts from Mrs. Catherwood's "An Old Man's Tales."

"This land was a paradise," says a gentle, kindly, old man of 83, known in this region as Uncle Rowell Honeycut, "when I could stand on the bluff and look down in the river bottom and count fifty deer in sight. White men hadn't spoiled the country and turned everything to dollars.

. . . "We came in 1817. My father moved his family first into a cave in the bluff, near a spring. The time of the year was May. It was pretty living. We built our fire against the back of the cave, and the smoke oozed along the roof and went out at the cave door without doing any damage. The mark of the smoke's on that cave roof yet. The country was full of game. Only six white men were here then.

"Once they had a mill raising up the river. The mill's standing yet. It ought to stand. It was built of timbers fifteen inches square.

". . . It was little Til Pruitt, my wife's sister, that got lost, and had all the men betwixt here and Alton out to hunt her.

* Rowell Honeycut's name was also spelled Hunnicutt. His activities are further described on page 300.

“ . . . Til slipped out after her cousins when they went into the woods to hunt greens. . . . It was the 9th day of April, 1820. She was gone two nights and two days. One night she slept in the bed of a dry run where leaves had drifted thick. . . . The folks out hunting found her little footprints, and a bear’s track close by. Til was about 4 years old. The men hunted down the bear and killed him, and cut him open, but he hadn’t got hold of the child. . . . The woods were full of wild cats and bears and painters and Indians.

. . . “But this was always the best of countries for game. And as for fish—” the narrator’s eyes with stout good humor repel your amusement as he tells his own fish story. “I have seined 400 fish at a draw in Long lake. I was part owner of a fish trap once. Hurricane creek, you know, runs through Long lake.”^{*} It was in the lake we fixed pointed dams in the water, with slits the fish could get through but they couldn’t get back. We made three of them and had fish in there so thick they could hardly stir. I’ve seen them bank themselves up and try to break the dam, and pile on each other’s backs a foot out of water. You’ve heard a dog could walk across Long lake on the fish in trap? Twenty dogs could have trotted across on that bridge of fish and never noticed the water! We kept 500 bushels of corn cribbed at one time to feed them with. I’ve seen them follow a canoe full of corn like a lot of steers. We shelled the grains and poured them out. Fish were worth three cents a pound then, and the trap brought a thousand dollars a year, and hardly took three month’s time. But a flood came and broke it, and then the legislature passed a law against such things, and it wasn’t as profitable as it had been anyhow. So we let it go.”⁸⁹

The region’s ecology can be glimpsed by reading another of Mrs. Catherwood’s stories. When she wrote “Calhoun County Homes” (some time before 1896, probably as late as the early 1890s), Catherwood remarked, “It is told that deer may yet be found in Calhoun county and two white deer were once shot upon the ridge.”[†] One of the homes she described is a trapper’s cabin: “On its outside are stretched black and white skunk skins and the thick covering of the coon” Livestock ranged free in Calhoun County until a law required that stock be kept behind fences. Catherwood parroted the opinion of a Dutch immigrant farmer: “De meanes’ t’ing vot vos in Calhoun is der sthock law, and all dot grass on der hills going to vaste. I dondt keep mools but mine cows need dot grass.”⁸⁹

1899: Illinois State Board of Fish Commissioners

The biennial report of the State Fish Commissioners provides information about the size of the commercial fishery at four points in the Big Rivers Area: Pearl, Kampsville, Hardin, and Grafton. For the year ending February 15, 1897, the following poundages

* Long Lake and Hurricane Creek, in the bottomland of the Illinois River in Greene County, have been replaced by White Ditch.

† “The ridge” is the great spine of Calhoun County that separates the Illinois River from the Mississippi.

were brought in and sold by members of the Illinois Fishermen's Association: German carp * (80,500 pounds), buffalo (360,400), white perch † (105,000), catfish (109,400), bull pouts ‡ (7,900), sunfish and red perch § (9,250), striped bass § (8,300), crappie ** (3,000), and black bass §§ (4,000). §§¹⁶⁹

For the year ending January 15, 1898, the total catch of the Illinois Fishermen's Association at these four towns was as follows: German carp (71,000 pounds), buffalo (486,500), white perch (96,700), catfish (79,000), bull pouts (10,000), sunfish and ring perch (8,550), striped bass (8,300), crappie (4,000), and black bass (4,000).¹⁶⁹

The State Fish Commissioners answered critics of an ongoing Federal-State cooperative effort to stock carp in Illinois waters:

We have frequently received severe criticism as to the practicability of the introduction of the German carp. . . . Carp are accused of driving out all of the game fish, and destroying the young of all other fish. The best argument to refute that theory will be a plain statement of the conditions that exist this season (1898).

On Illinois river carp are more plentiful than ever, growing to immense size and the increase in numbers wonderful. While there are more black bass and crappie on the Illinois river this season than for many years before, and we cite many instances in lakes along the Illinois river where very large hauls of carp have been made, one in particular aggregating 30,000 pounds, and yet that lake has furnished the best bass fishing on the Illinois river. This instance is not an exception, but repeated many hundreds of times in greater or less degree along the whole length of the river. Here it may be well to note one very particular and unusual phase of the fish business this season to show the relative supply:

* German carp = carp.

† White perch = freshwater drum.

‡ Bull pout = bullhead.

§ The identity of "sunfish and red perch" is uncertain. The name "red perch" might have been intended for various members of the sunfish genus *Lepomis*. In 1897-98 the category of "sunfish and ring perch" was used by the Fish Commissioners instead of "sunfish and red perch"—which suggests that "red perch" and "ring perch" are the same fish. The yellow perch is also known as the ring perch, but it is not likely to have been called a red perch.

§ The name "striped bass" could have been applied to the white bass or to the yellow bass, or to both.

** Crappie were formerly known as croppie.

§§ Black bass = largemouth bass and smallmouth bass.

†† These statistics were derived from reports by members of the Illinois Fishermen's Association. The State Fish Commissioners estimated that the total catch—including the harvest by commercial fishermen who are not members of the Fishermen's Association—might be 25% to 50% higher.

Carp at some times has brought a better price on the fish boats than the best table fish we have, viz: the black croppie or strawberry bass. Croppie were so plentiful that the local demand would not take them up. While carp, equally plentiful, found a quick market at 1 cent per pound higher price. Most of the carp being bought, however, for eastern markets.¹⁶⁹

1899: F. Henry Yorke

In *Our Ducks: A History of American Ducks*, Henry Yorke lamented the passing of America's glory days of duck hunting:

Probably one of the best examples of the effects of drainage, resulting from cultivation and settlement, can be found in the state of Illinois. During the early seventies the above state, with the adjoining one of Indiana, furnished the highways of all the large flights east of the Mississippi River, with the exception of the coast. These may be divided into the Mississippi, Illinois and Wabash river flights, all of which diverged and spread over the entire state, both spring and fall, in every conceivable direction.

. . . Passing Cairo the Mississippi flight extended over the big chain of lakes between Fountain Bluffs * (or Hat Island) and the Big Muddy River, stretching far inward and up to Landing 45, up past Chester, swinging west round St. Louis to St. Charles Flats, † over the swamps and sloughs upon the Carthage, Burlington & Quincy Railway, up to the Illinois River; then spreading over the northeast part of the state, passing into Wisconsin from the Winnebago swamps ‡ to the river westward.

The Illinois River flight commenced above St. Charles Flats, spreading all over the American Bottoms, working up over the lakes lying on both sides of the river until it reached Fox River, then over the Fox Lake Region north.³⁸³

Dr. Yorke also described a grand migration pathway that followed the Wabash valley, and a flyway that spanned the Grand Prairie of central and eastern Illinois. He then chronicled the drainage of upland marshes and bottomland lakes all across the state. This farmland drainage—coupled with development along Lake Michigan and in the Fox River valley—"practically destroyed" the flights:

Thus the glory of the shooting throughout the state of Illinois, once teeming with wildfowl the roar of whose wings could be heard for miles, has gone into history as a thing of the past; the only shooting of any account being above the

* Fountain Bluff is washed by the Mississippi River in southwestern Jackson County.

† St. Charles Flats are across the Mississippi River from the mouth of the Illinois River.

‡ Winnebago Swamp stretched along the Green River valley in northern Illinois.

We found the Illinois river admirably adapted to fish, and its waters well filled. The lakes and ponds along the river are, in our judgment, unequaled in the State as natural homes for the Bass, Croppie, Wall-eyed Pike, and in fact all native fish . . .

— Illinois State Fish Commissioners, after an inspection tour of the lower Illinois River in 1881.³¹⁵

St. Charles Flats, north of St. Louis, between the Mississippi and the Illinois rivers, or along the border counties of the Wabash flight. *³⁸³

1901: Illinois State Fish Commissioners

In their biennial report for the period October 1, 1898, to September 30, 1900, the State Fish Commissioners were gratified to report some evidence of success in their carp stocking program:

In the Sny Ecarte, [†] in Pike county, we are informed that some seine fishermen caught at one haul of the seine about 100 carp, averaging in weight about three pounds each. . . . We did not see the fish, and the statement may be erroneous, but enough has been learned in regard to the matter to demonstrate to our satisfaction that the carp can be successfully introduced into our rivers, and with that end in view we shall undertake to propagate a supply, which, together with those furnished from time to time by the United States fish commission, shall be adequate to people all the streams in the State with them.¹⁷⁰

The Fish Commissioners' report includes a tabulation of fish caught by members of the Illinois Fishermen's Association during the year ending January 1, 1900. The table includes the harvest landed at Pearl, Kampsville, Hardin, and Grafton. The combined catch (in pounds) at these four Big Rivers towns: German carp [‡] (181,000), buffalo (586,500), white perch [¶] (96,700), cat-fish (99,000), bull pouts [§] (17,400), sun-fish and red perch **

* Stephen Havera, author of *Waterfowl of Illinois*,¹⁵⁰ quoted Dr. Yorke's passage about the glory days of hunting "gone into history," but Havera remains optimistic: "Although its landscapes have changed dramatically in the past two centuries, Illinois still hosts significant numbers of waterfowl and other waterbirds, especially during fall and spring migrations, and will continue to do so."¹⁵¹

[†] Sny Ecarte = Snycarte Slough, which runs parallel to the Mississippi River along the entire west border of Pike County as well as part of Adams and Calhoun Counties.

[‡] German carp = carp.

[¶] White perch = freshwater drum.

[§] Bull pout = bullhead.

** The identity of the sun-fish and red perch is discussed in a footnote on page 366.

(11,450), striped bass * (17,800), crappie (7,300), and black bass † (5,400). Twenty-one thousand turtles were brought to these four shipping points.¹⁷⁰

1905: Ed. Miner

The Honorable Edward Miner, ex-secretary of Greene County's Old Settlers Society, authored the *Past and Present of Greene County*. Mr. Miner derived his information about the county's environment and natural resources from earlier publications, which are quoted elsewhere on these pages. One comment about the extraordinary flood of 1844 appears to be Miner's own composition:

Another event which was used as a base from which to calculate time was the "high water of 1844." In June of that year the Illinois river overflowed its banks and extended quite to the bluffs on the Greene county side, from the mouth of the Macoupin creek to the northern line of the county, higher than was ever known by the citizens of this county, before or since.²²⁶

1906–08: Illinois State Fish Commissioners

One function of the Illinois Fish Commission was to distribute fish for stocking in streams as well as in private lakes and ponds. Fish for this effort were taken from shallow spawning areas along the Illinois River and other waters. The State Fish Commissioners reported that their steamboat *Illinois* had proven "indispensable in the work of collecting young fish from the overflows of the Illinois river and tributary streams." The fish were kept in aerated tanks until they could be "delivered in cans to any point of the State from which an application has been made."¹⁷¹ Railroad companies volunteered to ship fish to their destinations at no cost.

The 1906–08 biennial report of the State Fish Commissioners proudly states, "This work has put the commission in close touch with the people of the inland towns, and the replenishing of our streams has received the warmest praise from these communities." The Big Rivers Area received a good share of the fish during this period. Two hundred fish were delivered to a Moro resident. One thousand fish were apportioned equally among two applicants at Macoupin and two at Carlinville. The Macoupin Club at Carlinville was given 250 fish. Two Alton residents received 250 fish each. At Palmyra 80 fish were distributed equally to four individuals. Two loads of 250 fish were delivered at Alton. Tanks with 250 fish were delivered at Modesto, Brighton, and Shipman.¹⁷¹

* The name "striped bass" could have been applied to the white bass or to the yellow bass, or to both.

† Black bass = largemouth bass and smallmouth bass.

1907: Otto Widmann

Otto Widmann's catalogue of Missouri birds contains a few records that pertain to the Big Rivers Area. Mr. Widmann mentioned that peregrine falcons nested between Alton and Grafton during the 1880s and early '90s. Regarding the great egret, Widmann related,

As late as 1900, small numbers were still breeding in colonies together with Great Blue Herons on islands in the Mississippi as far north as St. Charles and Lincoln Counties, * making the shallow lakes in the marshes their feeding grounds, but none have been seen here the last few years. † Twenty years ago hundreds congregated around these lakes in August and early September³⁶⁵

1908: Stephen Alfred Forbes and Robert Earl Richardson

The Fishes of Illinois by Forbes and Richardson is a landmark of modern science rather than a historical document, but its covers contain one remark particularly relevant to the early Big Rivers:

Lake sturgeon have of late years been steadily decreasing, and are now only rarely taken in the Mississippi on our own borders, and are seldom caught in the Illinois. Fishermen at Alton now see but five or six in a year that weigh over 10 lb, whereas fifteen years ago forty or fifty large ones, weighing from 50 to 100 lb, were taken each season.

. . . Previous to 1870 the flesh of the lake sturgeon was scarcely used. ‡ Fishermen generally made no use of them at all, and by many they were considered a nuisance and ruthlessly destroyed.¹¹⁹

1908: Charles W. Rolfe

The Fishes of Illinois contains a chapter by Charles W. Rolfe titled "The Topography and Hydrography of Illinois." Professor Rolfe's monograph contains the following remarks about the ecology of the Illinois River:

Its yield of fishery products is greater than that of all the other waters of the state combined,[¶] and it serves an indispensable purpose to the City of Chicago

* St. Charles and Lincoln Counties in Missouri border Jersey and Calhoun Counties in Illinois.

† Great egrets were nearly annihilated for their breeding plumage. Feathers were taken to decorate hats. Otto Widmann explained: "Until the early nineties, when the plume craze reached our country and every trapper became a plume hunter, the swamps of the southeast harbored large colonies with hundreds of breeding Egrets. After a few years of slaughter the birds had grown so scarce that the good men had to give up hunting cranes as an unprofitable occupation."³⁶⁵

‡ The lake sturgeon became commercially valuable for its smoked flesh and as a source of caviar.

¶ A footnote to Professor Rolfe's monograph states, "In 1899 the total value of the product of the fisheries of Illinois was \$616,452, and that of the fisheries of the Illinois River was \$382,372."²⁹¹

and to the principal towns upon its banks in conveying away their liquid wastes, which it renders harmless by decomposition and useful by converting them more or less directly into a food supply for fishes.*

The Illinois may be regarded as in many respects a typical stream of the central prairies of the Mississippi Valley, peculiar now, however, in the enormous amount of sewage which it carries—mainly received from Chicago by way of the drainage canal †—together with the large amounts of refuse from distilleries and cattle-yards along its course. It flows, in most of its length, down the bed of an ancient outlet of Lake Michigan Within this bed it has excavated its own present channel, with its present bottom-lands or “first bottoms,” subject to overflow at high water. Its second bottoms, above the reach of high water, are the flood-plain of the former outlet of the lake.

. . . The immediate banks of the stream are usually higher than the adjacent surfaces, and the same may be said of its tributary streams where they flow through the bottoms of the Illinois. Bayous, lagoons, marshes, and temporary ponds occur along the course of the river, especially in its central portion from Hennepin to Meredosia, all subject to invasion or obliteration by the river in times of flood, but filled, at low water, either from springs or from the general drainage of their basins. Spring-fed lakes are rather common along the eastern side of the river, from Pekin to its mouth, deriving their waters from the rainfall collected by the second bottoms, at whose margin they usually lie.

This large area of marshes, lagoons, and lakes affects the life of the river in many important ways. The flood-plain serves as a storage area for the waters of overflow, greatly delaying the run-off at times of flood. This delay is still further prolonged, in many years, by high water in the Mississippi, which often extends far up the Illinois—in a few instances as much as a hundred miles. As a result of these conditions the average volume of water in the stream throughout the year is greatly increased, and a wider range and breeding ground and a greater food supply are afforded to the fishes of the stream.

The fall in the Illinois River is but slight—an average of .267 of a foot per mile of its total length. Fifty and seven tenths feet of this fall occur in the first forty-two miles of its course, and from Utica to the mouth of the river the total fall is but 31 feet, or an average of .137 of a foot to the mile. The effect of this slight fall is seen in the sluggish current of the Illinois, which ranges from .4 of a mile

* Charles Rolfe's statement about the beneficial effects of sewage effluent reflects the opinion of Stephen A. Forbes, the principal author of *The Fishes of Illinois*. Rolfe's monograph is a chapter in this book. Professor Forbes' views about pollution of the Illinois River are presented on pages 407 and 409.

† The Chicago Drainage Canal began flushing the city's raw sewerage down the Illinois River in January 1900.

per hour at the lowest water to 1.737 miles when at twelve feet above low-water mark. The usual rate of flow for ordinary stages varies, however, from 1 ¼ to 2 ½ miles per hour. The difference between low-water and high-water conditions is immense in many ways, especially because of the great expansion of water surface resulting from slight changes in level.²⁹¹

1911: Charles A. Walker

The Honorable Charles Walker portrayed the local landscape in his *History of Macoupin County*:

In the south part of our county there was a beautiful mound of considerable dimensions, perhaps thirty or forty feet in height above the level of the prairie. . . . This place was a great resort . . . for wild animals . . . , especially wolves that denned on the mound and brought forth their young in great numbers.* From that fact it took its name "Wolf Mound," and on Wolf Mound stands today the beautiful town of Bunker Hill.[†]

Coop's Mound, eight miles east of Carlinville . . . rose in height to about forty feet above the surface of the adjoining land. It was covered by a magnificent forest, one tree of which became so noted that persons would travel several miles to examine it. It was a large, branching elm

. . . I had forgotten to say that at Wolf Mound there was a large spring of pure, cold water, that I presume still gives forth that beverage to the thirsty Bunker Hillites.³⁵⁸

In his review of Macoupin County's townships, Charles Walker said that Honey Point[‡] Township received its name from the discovery of "a number of bee trees filled with honey" in that section of the county.³⁵⁸

North Otter Township "took its name from Otter creek, which flows through the eastern part of the township, and it was so called from the fact that in early times large numbers of otters were found on the banks of this creek."³⁵⁸

South Otter Township: "In the eastern and southern portions the land is mostly prairie and is a rich, black soil, while in the northwestern portion some timber is to be found, including oak, hickory and cottonwood."³⁵⁸

Gillespie Township: "The township is drained by the Dry fork and its branches and along the streams in early times was found a heavy growth of timber, mostly oak."³⁵⁸

* Coyotes characteristically denned in prairie mounds. Most likely the residents of Wolf Mound were prairie wolves (coyotes).

† Bunker Hill was also known as Wolves' Run (page 282).

‡ In this context a *point* is an extension of woodland into prairie.

North Palmyra Township:

The first man to settle in this township was John Cummings The district in which he located was afterward known as Eagle's point and received its name from the following circumstance: When Judge Solomon came to the county to look for a location, he burned off several patches of prairie and as the fire neared the timber a large number of spotted eagles * flew around. These eagles are found only in new and unsettled country.³⁵⁸

Polk Township:

The soil is very rich and productive, being drained by Macoupin creek and its tributaries Along these streams was originally found timber, consisting of oak, maple, hickory, white and red elm, black and white walnut, sycamore, and cottonwood. There is still some timber to be found in this region.³⁵⁸

Western Mound Township:

It was originally covered with a heavy growth of timber but much of this has now been cleared off. . . . Sandstone is found outcropping on Hodges' creek and has been quarried for building purposes.³⁵⁸

Mr. Walker's accounting of wild mammals is nearly the same as that in Brink's 1882 *History of Madison County* (page 347), but Walker did make a few of his own remarks about the mammalian fauna. He reported that the white-tailed deer "still affords amusement and sport for the hunter in the more timbered portions of the county." He said that American otters "were quite numerous on Otter creek, in the northern part of the county." His review of fishes is as follows:

Of the fish, the most common are the cat, bass and the sun-fish. The perch, pike and buffalo are also occasionally seen. The common carp chub † is numerous. The bass is a game fish and affords fine sport.³⁵⁸

Regarding the American buffalo, Walker noted, "The heads, horns and bones of the slain animals were still numerous in 1830." ‡ He further stated,

. . . the exact time when they disappeared or left the country is unknown but from the best accounts that can be obtained it was about 1780 they were seen swimming the Illinois river in vast herds. As late as 1778, but a year or two later, ¶ there was a big snow storm that covered the ground to the depth of three feet, and upon the top was a thick crust of ice that would bear a man. The next

* Spotted eagle = ?

† Common carp chub = ? creek chub (*Semotilus atromaculatus*), or perhaps a species of chub in the genus *Hybopsis*, or perhaps a species of carpsucker (*Carpoides*).

‡ See a footnote on page 256 for a discussion of the accuracy of this statement.

¶ Evidently this phrase should read "a year or two earlier."

spring a few buffaloes, poor and emaciated, were seen going westward, but in many places hundreds of carcasses of the dead animals were to be found lying on the prairie. What few were left went across the Mississippi and it was seldom that one was seen east of that river after that time. * Forty years afterward the skulls and bones were to be seen in places extending for miles. †³⁵⁸

Walker attested that the wild turkey and prairie hen currently "afford excellent sport for the hunter and are quite plentiful." Perhaps prairie-chickens were still plentiful in Macoupin County in 1911, ‡ but Walker later pointed out in his book that turkeys had been "very, very scarce" since 1831. Walker listed the wild pigeon (passenger pigeon) and Carolina parrot (Carolina parakeet) as current members of the county's avifauna. By the time the *History of Macoupin County* was issued in 1911, the Carolina parakeet and the passenger pigeon had been extirpated from Illinois and were virtually extinct everywhere.

* Contrary to this statement, there are several reports of abundant bison east of the Mississippi during the decades following 1780. For example between Vincennes and Kaskaskia in 1787: "The country . . . abounds in buffalo, deer, bear, etc." ³¹¹ At the present site of Cairo in 1789: "In the woods the marks of Buffalos was like a Cow yard." ¹²⁰ On the Mississippi River in Alexander County in 1796: "We saw a great quantity of . . . roebucks, bears, and buffaloes; we killed one of the latter." ⁷⁵ Between Vincennes and Kaskaskia in 1796: "Five years ago, you could not fail of meeting . . . with herds of four or five hundred buffaloes . . ." ³⁵⁵

Donald Hoffmeister reported that 7,380 bison were found drowned on the shore of the Mississippi River in Mercer County on May 2, 1807 ¹⁵⁹—but the date, the count, and the location are in error. The statement is based on a May 18, 1795, report of 7,360 drowned bison on the Qu'Appelle River near the Saskatchewan-Manitoba border. ^{363, 82, 211}

† The annals of Illinois hold many such references to a legendary winter that killed off the buffalo some time during the late 1700s or early 1800s. Hiram Beckwith referred to this winter in his "Historic Notes on the Northwest":

The Indians had a tradition that the cold winter of 17__,—called by them "the *great cold*," on account of its severity,—destroyed them. "The snow was so deep, and lay upon the ground for such a length of time, that the buffalo became poor and too weak to resist the inclemency of the weather;" great numbers of them perished, singly and in groups, and their bones, either as isolated skeletons or in bleaching piles, remained and were found over the country for many years afterwards. ³³

Many county histories mention buffalo bones on the Illinois prairie, saying that the remains were from a severe winter "from fifty to seventy-five years before any white occupation" (or similar words to that effect). A footnote on page 153 lists several winters that are purported to have been exceptionally cold during the 1700s.

Various accounts range widely in their details about the deadly winter, and there appears to be no certain evidence to link buffalo bones with a die-off during one particular winter. Nor are there any known eyewitness reports to substantiate Walker's portrayal of buffalo bones "extending for miles."

‡ The State Game and Fish Commission said that prairie-chickens were "fairly plentiful, numbers increasing" in Macoupin County in 1904. But by 1914 the Commission admitted that there had been a statewide decrease in the species. ¹²⁷

The list of birds in the *History of Macoupin County* is almost identical to the list in the 1866 *Gazetteer of Madison County* (page 257). Mr. Walker also included a discussion about the county's flora in his book, but his treatment is of no value as an inventory of Macoupin County's plant life: this list of plants appears in a similar form in a number of earlier history books about other counties in southern and central Illinois.

This volume's treatment of the Winter of the Deep Snow relates,

During the fall of 1831 it commenced snowing in December and continued up to about the middle of March, 1832, covering the ground with from four to five feet of snow on a level. So great was the depth of the snow that very few of the wild animals, or feathered tribe, escaped, but starved to death for the want of food. Deer were killed by the pioneers, supposedly for food. They could not move with any speed, unless they were in a beaten path. Up to that time there had been thousands and thousands of wild turkeys in the forests of our state which perished during that deep snow, and, since then that grand bird has been very, very scarce in Macoupin county.³⁵⁸

Mr. Walker recounted an incident from the Sudden Change, which he dated to "the first part of January, 1836." * According to the story, William Anderson rode four miles across the Macoupin County prairie during the passage of this arctic front—but, "It grew so rapidly cold that within less than one-half hour the streams and prairies, which had been filled with water, froze over, and a heavy sleet was falling." When Colonel Anderson arrived at home, he "tried to dismount, but utterly failed to do so, as he was tightly frozen to the saddle."³⁵⁸

In its chronicles of the lives of immigrants to the county, the *History of Macoupin County* provides an occasional bit of information about the early environment. For instance, flow conditions on Macoupin Creek are indicated by the fact that John Harris built a water mill on the creek near Carlinville in 1830.

Jimmy Hall came to live near the junction of Hurricane Creek and Macoupin Creek in 1817. One day he scared a bear down from a tree and onto the prairie. He chased the bear on horseback and wore it down, then beat it to death with a stirrup. At the point where he killed the bear, they were "within a few hundred yards of 'bear rough.'"^{† 358}

* The Sudden Change occurred in December of 1836.

† In the parlance of the 1800s, a *bear rough* is a brushy area that shows signs of having been frequented by a bear. Such a retreat was described by F.M. Perryman, who was born near Assumption in 1836. In an essay titled "The Bear Chase," Mr. Perryman related how his father and neighbors killed a 300-pound bear. They tracked the bear to "where he had went into a patch of thick hazels, and had broke down a lot of the bushes with his teeth to lay on to keep him out of the snow."²⁶⁰ This hunt was held about 1831, roughly 50 miles to the east and north of the place where Jimmy Hall killed the bear near Carlinville.

In his 1885 history of Morgan County, Charles M. Eames testified, "The 'hazel roughs' that crept out on the dry prairie knolls near the timber, and the young timber skirting the prairies, had a hard strug-

Our admiration knew no bounds as we drew the rein and stopped to gaze over the beautiful scene to the north and to the south a gem of a lake, nestling in all its brilliant beauty with its emerald setting of green-leaved forest trees; far beyond towered the bare grim wall of the opposite bluff.

—A Jersey County resident, touring the Illinois River bottomland in the spring of 1866.²⁶⁸

Luther Palmer was among the first white people to live in the Macoupin Creek valley near the line between Greene and Macoupin Counties. Late in life he wrote an account of “Jersey Street,” the road from Rockbridge in southeastern Greene County southward to Piasa Creek. Mr. Palmer noted that the roadway went “along up the edge of the brush” south of Kemper. Then, “Going on farther south through the brush we come to Elder Mound, a very fine tract of land upon which the town of Fidelity was afterwards located.” To the south was Simmons prairie, “a fine belt of land.” Near Summerville (north and east of Medora) was “the old Cove Spring.” Luther Palmer’s son Lyman recalled a Sunday when they walked to church “down through the Coventry brush” (north of Medora): “Somewhere along the Elm branch we met Orin Palmer in the little open prairie on the bank of the stream.”³⁵⁸

Joseph Andrews came to the Big Rivers Area in 1830. He built his home about three miles north of Brighton. According to the *History of Macoupin County*,

gle for life with the autumnal fires, lighted by the Indians for hunting purposes, and, after the passage of such fires in the fall, presented a blackened and stunted appearance . . .”¹⁰¹

In an 1845 article, “Observations on the Botany of Illinois,” Dr. Charles W. Short wrote, “. . . on the margins of ‘sloughs,’ and along the courses of the small streams which occasionally meander through them, clumps of bushes and clusters of shrubbery are always to be found. These ‘roughs,’ as they are called, furnish welcome retreats to grazing cattle, and sometimes to the traveler’s horse, from that annoying pest of these regions—the prairie fly.”³⁰⁶ Dr. Short listed the following shrubs as “the more common productions” in the roughs (the nomenclature has been updated from Short’s monograph): American hazel (*Corylus americana*), “three species of sumach” (*Rhus glabra*, *R. copallina*, *R. aromatica*), “several dwarf kinds of plumb, (*Prunus*,) of which the species were not ascertained, two or three varieties of dogwood” (pale dogwood, *Cornus obliqua*; rough-leaved dogwood, *C. drummondii*; red-osier dogwood, *C. stolonifera*), and “several species of undetermined willows” (*Salix*).³⁰⁶

M.S. Bebb was a physician and botanist like Dr. Short. In 1860 Dr. Bebb wrote to the *Prairie Farmer* about oak groves in northern Illinois: “Beneath we find an abundant growth of shrubs, principally Hazel (*Corylus americana*) and *Cornus paniculata*—the Hazel often extending out into the prairie for a mile or more, forming what is called ‘Hazel ruff.’”²⁶

In an 1851 essay titled “Breaking Prairie,” J. Milton May alluded to the reason why shrubby areas are called “roughs”: “. . . in locations where adjacent improvements prescribe limits to the annual burning of the prairie and in the neighborhood of the groves, hazel bushes spring up, forming a thicket which are called ‘hazel roughs’ by those who break prairie.”²¹⁵

These bottoms . . . if the annual overflow of the waters of the river can be restrained, will make the finest farming land in the world: Bluffdale Township in the "History of Greene County" (1885).⁷⁶

When the Andrews came to this section, a deep, narrow valley of a large branch, a mile and a half southwest of Piasa, was covered with buffalo bones. How these bones got there was a mystery. It does not seem probable that a large herd of buffaloes could have been caught in such a place by a prairie fire or a blizzard. In a few years these bones all disappeared.³⁵⁸

J.E. Andrews, who lived two miles north of Brighton in the early 1900s, had "one of the best private collections of fossils, curios and relics of a former race who occupied the region of the Piasa years ago." The account continues,

The legend of the Piasa bird appears to be a very fair illustration of the growth and development of a tale through many repetitions of its telling. This story has, no doubt, lost every semblance of the incident upon which the legend got a start on its growth to its ludicrous maturity.

When the first settlers came to the Piasa they found a rough outline drawing of the bird on the bluff, where the Alton quarries now are. This drawing was made with red keel, a soft stone, by Indians. The figure was scarred and dotted with bullets and arrows supposed to have been fired against it by Indians passing in their canoes.³⁵⁸

J.A. Andrews of Shipman Township contributed a set of reminiscences to the *History of Macoupin County*, from which the following is excerpted:

Before the busy hand of man changed the face of nature by reducing it to his uses and purposes, the timber lines stood out in bold relief like promontories extending far out into the ocean, and they served the weary traveler as landmarks to guide him to his goal. In those old days, the hunters, rangers and Indians burned the prairies in the fall of the year, but the permanent settlers soon put a stop to that. It appears that the channels of the larger streams checked the progress of the fires and protected the forests along their courses, so that the timber along the creeks was good, there being white oak, black oak, red oak, post oak, hickory, elm, ash and some walnut. One of the attractions to the first settlers in this region was the abundance of limestone which cropped out in the streams in five places, first in the Piasa creek on the Jersey county line, one and a fourth miles west of Piasa, thence appearing on four branches nearly on a line south by west for a distance of about two and one-half miles in the same direction.

The fauna of the Piasa were in part deer and wolves in abundance, a few panthers, wild cats, and one Canada lynx was seen by a young man named

Andrews, who was driving an ox wagon on a road near a rail fence, when he saw crouched upon a top rail a strange animal. From his description of the animal it was a lynx.³⁵⁸

1912: W.T. Norton

W.T. Norton's *Centennial History of Madison County* has a chapter about the flora and fauna. Norton's list of the county's trees and shrubs was deemed complete—"with minor exceptions."

Pawpaw: Originally abundant * on American Bottom and along various creek and river bottoms.

Prickly ash and poison oak; † not common.

Summer and frost grapes and Virginia creeper; abundant.

Buckeye; scarce.

Sugar maple, white maple, ‡ box elder; abundant on bottom lands.

Red bud, dog wood, red and black haws; abundant.

Wild cherry, wild crab, black cap-raspberry, black berry, dew berry, elder berry, persimmon; common.

Gooseberry; once abundant, now scarce.

Honey locust and black locust; ¶ common.

Sassafras, white elm, red elm, red mulberry, white mulberry; § common.

White ash and black ash; ** common.

Sycamore, cotton wood, black walnut; common.

Butter nut, or white walnut; not abundant except in certain localities.

Linden; †† not abundant.

Pecan; not common throughout county, but abundant in township 4-9, and some still remaining in 6-10. †‡

* In this discussion the terms *abundant* and *common* "refer generally to indigenous conditions." The editor pointed out that "many of the indigenous trees and plants have become extinct."²³⁶

† Poison oak = poison ivy (*Toxicodendron radicans*).

‡ White maple = silver maple (*Acer saccharinum*).

¶ The black locust (*Robinia pseudoacacia*) probably is not native to Madison County. But as James Buckingham observed in 1840, ". . . now the locust is to be seen every where, and the farmers have planted that and many other descriptions of trees . . ." ²⁶⁹

§ The white mulberry (*Morus alba*) is not native to America. It was introduced to the Mississippi valley by the early French in an attempt to develop a silk industry by raising silkworms on mulberry leaves.

** "Black ash" is an old name for *Fraxinus pennsylvanica* (green ash and red ash). The other species known as the black ash, *F. nigra*, could not have been correctly characterized as common.

†† Linden = eastern basswood (*Tilia americana*).

†‡ Township 4 North, Range 9 West = Chouteau Township; Township 6 North, Range 10 West = Godfrey Township.

Overcup oak; * common on low lands. Post oak, white oak, black oak, red oak, water oak; † common. Yellow oak; ‡ scarce.
Hazel nut; once abundant in valleys and on low lands.
Willow, several varieties; common along creek and river courses.
Red cedar; scarce; found on river bluffs.²³⁶

The following remarks comprise Mr. Norton's commentary about herbaceous plants:

Water lily, May apple, pepper grass; ¶ common.
Ginseng and Indigo weed; § scarce; some ginseng roots still gathered in bluff forests.
Rag weed, cockle bur, Spanish needle, beggar ticks, ox-eye daisy; common.
Fire weed scarce. Common thistle, burdock; common.
Dandelion; introduced in early days of settlement; now disputing with blue grass for supremacy on lawns.
Plantain and mullein; common; the latter not as much so as formerly.
Horse mint and catnip; abundant.
Thoroughwort, hoarhound, nightshade and ground cherry; not common.
Jamestown weed, ** milk weed, poke weed, pig weed, yellow dock, †† sour dock, stinging nettle; common, but first named not as abundant as formerly.
Cat tail, Indian turnip, # arrow head, yellow and white lady slipper; abundant, except lady slipper now rarely found.
Bulrush, spear grass, ¶ crab grass, foxtail, iron weed; violets, daisies, buttercups, sweet william, golden rod, and various minor wild plants and flowers, still as abundant as ever.²³⁶

* Overcup oak = burr oak (*Quercus macrocarpa*)—not *Q. lyrata*, which is now commonly called overcup oak.

† Water oak = ?pin oak (*Quercus palustris*).

‡ Yellow oak = ?yellow chestnut oak (*Quercus muehlenbergii*).

¶ Pepper grass = *Lepidium*.

§ Indigo weed = ?*Baptisia*.

** Jamestown weed = jimson weed (*Datura stramonium*).

†† Yellow dock = curly dock (*Rumex crispus*).

Indian turnip = Jack-in-the-pulpit (*Arisaema triphyllum*).

¶ Kentucky bluegrass (*Poa pratensis*) and other members of the genus *Poa* are sometimes denoted as "spear grass" in early literature. The editor of this list mentions "blue grass" in lawns; this would be Kentucky bluegrass or (possibly Canada bluegrass, *P. compressa*). Assuming that the editor did not refer to *P. pratensis* or *P. compressa* as both spear grass and blue grass, "spear grass" might refer to any of a number of other bluegrasses or perhaps other species that resemble bluegrass.

... never did the poet's dream image scenery more enchanting than is sometimes unfolded upon this beautiful stream: the lower Illinois River in 1836.³⁴⁵

Here are selections from the *Centennial History*'s discussion of wildlife: *

The American elk once roamed through the land and herds of deer were numerous The deer were so numerous that they did not become extinct until the county was thickly settled. They were still occasionally seen as late as 1860.

The American buffalo were once common here and were mentioned by the early French explorers, but before the first permanent settlements had been made, the bison, through some strange instinct, migrated beyond the Mississippi. † The heads, horns and bones of these animals were found in abundance as late as 1820, throughout the county, mute evidence of their former occupancy.

. . . The black bear was occasionally seen by the early settlers, but soon became extinct. The panther and wild cat were also frequently encountered. The grey wolf and prairie wolf were common and it was long before they became entirely extinct. They were, for a time, a serious menace to the pioneers. Foxes were also common and a nuisance to the farmers. . . . They were especially numerous along the river bluffs, where the caves and crevices in the cliffs gave them secure hiding places. Grey wolves have been seen along the bluffs, within five miles of Alton, within the last decade, and a few foxes still have their habitat there.

The weasels, minks, skunks, raccoons, opossums and wood chucks are still abundant. The badger and beaver have disappeared.

Of the squirrel family the fox and grey squirrel are still numerous in the forests, but the flying, ground and prairie varieties ‡ are less in evidence.

Hares, or rabbits, not only hold their own against the advance of civilization, but are, probably, as numerous as in primeval days.

Of minor fauna, bats, shrews, moles and water rats, there seems to have been little diminution outside of the cities and towns.

* Norton's discussion of mammals appears to have been largely paraphrased from J.T. Hair's 1866 discussion of Madison County mammals (page 255).

† Norton repeated a common conception from the era by stating that bison instinctively emigrated from the region rather than being killed off. In truth the species was heavily hunted in Illinois—although some of the animals probably did indeed flee beyond the Mississippi River.

‡ Ground squirrel = thirteen-lined ground squirrel; prairie squirrel = Franklin's ground squirrel.

. . . Madison county must once have been a paradise for the ornithologist.*
. . . The turkey buzzard,[†] pigeon hawk,[‡] swallow-tailed hawk,[¶] night hawk,
Mississippi kite, red tailed hawk still remain with us; the great horned owl,
barred owl, snowy and screech owl, the bald eagle and ring-tailed eagle,[§] once
common, are now seldom seen with the exception of the screech owl, which still
makes night melodious sometimes even in the cities.

. . . The Carolina parrot^{**} was found in the county at an early day.

. . . Other birds were numerous: Wood peckers of the hairy, downy, red-headed,
golden-winged^{††} varieties. The ruby-throated humming bird (always
scarce), the chimney swallow, cliff swallow, whippoorwill, belted king fisher,
pewee,^{‡‡} scarlet tangier,^{¶¶} summer red bird,^{§§} barn swallow, blue martin,^{***}
cedar bird,^{†††} mocking bird, brown thrush,^{††††} house wren, yellow bird,^{¶¶¶}
oriole, snow bird,^{§§§} chipping sparrow, swamp sparrow, indigo bird,^{****}
cardinal, bobolink, red-winged black bird, meadow lark, American raven,
common crow, red bird^{††††} and blue jay, are among those that are now or
have been with us.

* W.T. Norton stated that he prepared his enumeration of birds primarily from "a list prepared some forty years ago by the late Hon. W.C. Flagg." Norton's list appears to have been copied largely from the Madison County list published by James T. Hair (page 257).

[†] Turkey buzzard = turkey vulture.

[‡] This "pigeon hawk" might be the merlin, sharp-shinned hawk, or Cooper's hawk—as discussed in a footnote on page 257.

[¶] Swallow-tailed hawk = swallow-tailed kite.

[§] Ring-tailed eagle = golden eagle.

^{**} Carolina parrot = Carolina parakeet.

^{††} Golden-winged wood pecker = northern flicker.

^{‡‡} Both the eastern wood-pewee and the eastern phoebe have been called pewees.

^{¶¶} Scarlet tangier = scarlet tanager.

^{§§} Summer red bird = summer tanager.

^{***} Blue martin = purple martin.

^{†††} Cedar bird = cedar waxwing.

^{††††} Brown thrush = brown thrasher.

^{¶¶¶¶} Both the American goldfinch and the yellow warbler have been called yellow birds.

^{§§§} Snow bird = dark-eyed junco.

^{****} Indigo bird = indigo bunting.

^{††††} There are two species of "red bird" in Madison County: the summer red bird (summer tanager) and the northern cardinal. Both of these species are listed in the same paragraph with this third "red bird."

Of what are usually denominated game birds we have, or have had, the wild pigeon, * common mourning dove, wild turkey, prairie chicken, pinnated grouse, † ruffled grouse, ‡ kildee, bald head, ¶ yellow legged and upland plover, § wood cock, English snipe, ** red-breasted snipe, †† curlew, Virginia rail, American swan, ‡‡ trumpeter swan, snow goose, Canada goose, brant, ¶¶ mallard, black duck, pin-tail duck, green-winged teal, shoveler, wood duck; red head, canvass back, butter ball §§ and merganser ducks.

We have also had the sand hill crane, white heron, *** great blue heron, bittern, pelican and the loon. The wood ibis ††† was here in the summer of 1854–5. ‡‡‡

. . . The wild pigeons that once darkened the sky in their flight and roosted in countless thousands in our forests, have utterly disappeared—not only from this section but from the country at large. The spring and fall flights of geese and ducks still continue, with several weeks spent twice a year in our lakes and rivers, but in constantly decreasing numbers.

There is no compensation for the loss of these early denizens of our county in the arrival and vast multiplication of the belligerent English sparrow, ¶¶¶ whose good qualities, if any, are not yet revealed, while its pestiferous traits are self-evident.

It is a curious fact that such birds as we have left have, by an instinct of self-

Spare the birds, good friends, and provide fitting homes for them, and grudge them not a morsel of food from the stores they help to save from insect enemies. ¹⁹⁰

— *Prairie Farmer*, May 1853.

* Wild pigeon = passenger pigeon.

† The prairie chicken and the pinnated grouse are the same species (greater prairie-chicken).

‡ Ruffed grouse = ruffed grouse.

¶ This “bald head” appears to have resulted from mis-copying “Ball Head” from James Hair’s list of Madison County birds. A footnote on page 259 discusses the identity of the Ball Head.

§ See a footnote on page 259 for a discussion of the “yellow legged and upland plover.”

** English snipe = common snipe.

†† Red-breasted snipe = short-billed dowitcher.

‡‡ American swan = tundra swan.

¶¶ A footnote on page 259 discusses the identity of the brant.

§§ Butter ball = bufflehead.

*** White heron = great egret.

††† Wood ibis = wood stork.

‡‡‡ James T. Hair stated the time less ambiguously as “the summer of 1854 and 1855.” ¹³⁸

¶¶¶ English sparrow = house sparrow.

preservation, largely adopted urban life, and dwell more in the parks, towns and cities than in the open country. This is because of the fact that they are safer in town than in the country. Municipal ordinances, generally, forbid the discharge of fire arms within corporate limits, while in the rural districts the pot hunter ranges at large, killing the farmers' and orchardists' best friends, without mercy, thus depriving them of nature's safeguard against the ravages of worms and insects.²³⁶

The family of Gaius Paddock contributed a series of recollections about wildlife and vegetation in the first half of the 19th century:

Paroquets * used to be plentiful in this (Fort Russell) † neighborhood until about 1833, the year Dr. Lathy came here.

Gershom Flagg killed a bear about the time we came here. Panthers were also here when we came. One with four young killed by L. Jackson and Solomon Pruitt. One jumped at Volney Richmond about 1830. Wild cats were common: used to carry off pigs. One was killed on Paddock's creek about 1840 by Tom Buck. Spear killed a very large one on same creek. Case and others killed one about same time and place. There were wolves, black, grey and prairie ‡—black not so common. One followed Mrs. Jane Flagg from Flagg cabin to the Paddock home. One gray wolf was killed by dogs in yard; animals fought on gallery.¹ Lou. Jackson had dogs attacked by them on Indian creek—one dog killed.

Buffalo remains were picked up about here at time of settlement. Horn of elk found by Gershom Flagg.

First foxes were brought here by Nimrod Dorsey of Kentucky.

Robins came about 1842 or 43, W.C.F. § thinks. Gershom Flagg killed partridge ** about same time. Orioles came after 1820.

. . . Charles Tindall found skeleton of rattlesnake whose ribs were as long as a man could span with thumb and forefinger. Killed another rattlesnake of enormous proportions.

* Paroquet = Carolina parakeet.

† Fort Russell was across Cahokia Creek from Edwardsville.

‡ The black wolf might be a timber wolf. Both the timber wolf and the coyote have been called grey wolves. The prairie wolf is the same as a coyote.

¹ A *gallery* is a porch.

§ W.C.F. is W.C. Flagg, who recorded these comments by the Paddock family.

** Partridge = ruffed grouse. Grouse populations increased after wildfires were generally suppressed and brushy areas expanded, providing the species with more habitat.

The army worm first appeared here in 1843. Green devil horns * not here at first. Locusts † first appeared in 18__ and then in 1843.

Indians used to come from Ft. Clark (Peoria) on way to St. Louis. Their trail was under our (Paddock's) gallery and through G. Flagg's orchard, keeping on ridge. Ninian Edwards used to point out trail when going to Springfield.

. . . Jimson, parsley, catnip, burdock and mayweed were not indigenous, but came in after several years.

. . . Wild fruits were about the same as now. Three kinds of wild plums.

. . . Wild hogs in the woods were dangerous. They would get among farmers' hogs when driven in fall and would hurt men and kill dogs.²³⁶

Calvin Tunnell was "a hunter of great repute." He told of once being "out alone on the prairie," where he encountered and killed a 10-foot panther.[‡] One of his relatives was "attacked by two fierce prairie wolves."²³⁶

W.T. Norton's *Centennial History* further states, "Almost the entire area of Madison county may be said to be under cultivation. There is very little waste or swamp land, and of the native forest there is but little remaining, and that is mainly skirting the banks of streams." The book goes on to say, "The finest water melons, nutmegs [¶] and musk melons raised in the west are grown on a section of the American Bottom called the Sand Ridge, lying five miles east of Alton." And "This Sand Ridge is very porous and rapidly absorbs the heaviest rains. Water of the highest percentage of purity is found anywhere on the Ridge, a few feet below the surface."²³⁶

For many years after 1850, peach and pear orchards were a big business near Alton. But a series of severe winters and late frosts caused frequent failures of the fruit crop. And then . . .

. . . came hordes of insect pests which destroyed or damaged the fruit. This was owing mainly to the extermination of the birds by sportsmen and pot hunters.[§] As the birds decreased the insects increased, and the game laws of the state

* The "green devil horn" is the larva of a sphinx moth, probably either the tomato hornworm (*Manduca quinquemaculata*) or the tobacco hornworm (*M. sexta*).

† This "locust" is a periodical cicada, probably the seventeen-year cicada (*Magicicada septendecim*).

‡ Tunnell's encounter with a mountain lion is recounted on page 110. Ten feet is a stretch.

¶ A "nutmeg" is a cantaloupe.

§ A *pot hunter* is a market hunter, a person who kills and sells wild game. Pot hunters were disdained by sportsmen who hunted for recreation. The reason: "Market gunning has been responsible in many instances for utter destruction of game, and the high prices paid in the East for varieties of ducks most excellent for the table have made it possible for the pot-hunter to thrive. . . . With market gunning go hand in hand all the illegal methods of killing,—shooting at night, the use of large-bore guns, in short, any possible means to destroy game."²⁹³

served rather to exterminate the birds than to protect them as was their ostensible object.²³⁶

Comments about the weather and floods can be found between the covers of Madison County's *Centennial History*:

On the 24th and 25th of April, 1910, destructive frosts visited this county, killing the leaves on the forest trees and utterly destroying the fruit crop. . . . this was not unprecedented . . . *

. . . The lowest summer temperature known in this county since 1836 was August 30, 1863, when the thermometer registered 45 degrees above zero.

. . . The first destructive hurricane of which there is any mention in history is that which occurred June 5, 1803. The storm moved from the southwest to the northeast across what is now Madison county. It swept over the American Bottom, cutting a swath about three quarters of a mile in width, demolishing houses, tearing up trees, destroying stock and everything movable in its tempestuous pathway. It swept the water out of the lakes, scattering the fish therein far out on the prairies. It carried in its wrathful embrace tops of pine trees from fifty miles out in Missouri. There were but few inhabitants then in the county and no one was killed, but several were severely wounded by flying rails and timbers.

On May 17, 1838, a violent hurricane crossed the county, which prostrated fences, trees and insecure buildings. It was accompanied by a heavy fall of rain.

A heavy hail storm visited townships 3 and 4, range 7 west,[†] on July 24, 1854. Some hailstones were picked up after the storm which, it was declared, weighed a pound. Roofs were greatly injured, window panes shattered and the fruit and foliage stripped from trees. Many turkeys, chickens and geese were killed by the hailstones.

. . . In June, 1844, a terrible and destructive flood from the Mississippi and Missouri rivers swept over the American Bottom causing immense property loss though not as much as if the country had been more thickly settled. The river rose higher than ever recorded before or since. The American Bottom was flooded over its entire area from Alton to Kaskaskia, and steamboats were able to sail over it from St. Louis to the bluffs six miles from the river channel.

. . . Other floods occurred in 1851 and 1858 but were of less extent.

* W.T. Norton then quoted James T. Hair's account of a destructive frost on April 26, 1834 (page 261).

† Township 3 North, Range 7 West = Jarvis Township; Township 4 North, Range 7 West = Pin Oak Township.

The most destructive flood of later years was that of 1903 which was only a foot or so lower than that of 1844. . . . Missouri Point * was completely inundated from St. Charles down, the flood extending from bluff to bluff of the rivers.

. . . This flood of 1903 marked 31.45 feet above the low water mark of 1866, which is the standard, and 32.25 feet above the low water mark of 1909.

The following year the river again rose to flood height but the inundation was not as serious as that of the previous year. Late in the summer of 1907 another disastrous flood occurred which inundated Missouri Point and destroyed all the growing crops and did as much damage on the American Bottom. The remarkable thing about this flood was its late occurrence. River floods are usually expected in June, but this occurred in August when the corn was in tassel, and all crops on the river bottoms were lost.

These destructive floods are liable to occur whenever the high waters in the Mississippi and the Missouri come down simultaneously. The immense losses they involve are now, however, being greatly reduced by systems of dikes and embankments from Alton to East St. Louis and by raising the tracks of the railroads beyond flood height.

. . . In both the destructive inundations of 1844 and 1903 the Mississippi and the Missouri were one great stream entirely submerging Missouri point for a distance of thirty miles and extending from the bluffs on the Mississippi to the range on the further side of the Missouri. †²³⁶

The *Centennial History* describes an ice jam on the Mississippi River and a flood that caused the mouth of the Missouri River to shift:

In Marquette's time it joined the Mississippi about where it did when Alton was first founded—that is, about four miles below the city opposite the mouth of Wood river. It now comes in ten miles below Alton. The shifting occurred in this way: The winter of 1874–75 was extremely severe. The river was frozen

* Missouri Point is the neck of land between the Mississippi and Missouri Rivers.

† A great rise in the Missouri River can cause flooding along the Mississippi River above the mouth of the Missouri. High water pouring from the Missouri River acts as a dam and causes the upper Mississippi to back up. William Bradford alluded to this process in his 1846 geography of the upper Mississippi valley:

The Missouri, rising in a mountain region, flows with a rapid current, about four miles an hour, is very turbid and muddy, and is subject to a great rise. Three times, since the country was known to the whites, it has risen thirty or forty feet above the usual high-water mark. The last rise was in the summer of 1844, and was very disastrous, overwhelming the whole bottom country between the bluffs. The Mississippi, rising from lakes in the midst of a champaign, and flowing through a similar region, and over a wide bed, from bluff to bluff, has a slower current generally from two to two and a half miles an hour, is a clear, limpid stream, and is rarely known to rise more than ten feet. In the spring of 1844, however, it had a rise of fifteen feet.⁵⁰

over for nearly three months. When the ice broke up in the spring, or late winter, the gorge * in the Missouri gave way first, while that in the Mississippi held firm. The fields of floating ice in the Missouri piled up against the ice in the Mississippi, which still held fast thus forming a great dam across the mouth. The water in the Missouri piled up against the ice dam and flowed backward a short distance finally reaching an old bayou. The angry waters tore through this depression to the Mississippi, six miles further down, where the ice had broken in the latter stream. The ice dam held firm long enough for the mad Missouri to cut a new channel through the bayou, where it has since remained, resuming its old business of tearing away the rich bottom lands of Madison county against which it debouches.²³⁶

This book mentions the natural resources of several townships. Regarding Godfrey Township, the volume says, "It has abundance of fine timber. In its southwestern sections and along Piasa creek it has limitless deposits of limestone, sandstone and cement rock."²³⁶

Wood River Township was "all heavily timbered originally." The village of Milton (now extinct) was founded on the banks of the Wood River where it flows out of its valley and enters the Mississippi River floodplain. The Wood River was dammed there to provide water power: "William and John Whiteside attempted to build a water power mill on Wood river, as early as 1806, but their effort was not successful." But by 1818, ". . . two saw mills and a grist mill were in operation at Milton on Wood river." †²³⁶

Chouteau Township:

It is interspersed by a number of lakes and sloughs—the most important of which are Grassy lake, in sections 2, 3 and 11, embracing some four hundred acres, and Long lake, which begins in section 4 and ranges in a southeasterly direction entirely through the southwestern part of Chouteau and continues into Nameoki township.

Long lake is about five miles long and has an average width of some four hundred feet. It was probably at one time the channel of Wood river. Chouteau slough, in the southwestern part of the township, has an average width of some two hundred feet and parallels the Mississippi a distance of about four miles.

Grassy lake has long been a favorite resort for sportsmen in quest of wild geese, ducks and other water fowl, while Long lake and Chouteau slough have been equally famous as pleasure resorts for fishing and boating parties. As late as the seventies, at times, in the spring of the year, wild geese and ducks fairly swarmed in the vicinity, nor was it an uncommon sight to see a number of

* A gorge is an ice jam.

† Other water mills in the vicinity: "Governor Coles reports seeing a water mill on Cahokia creek, west of Edwardsville, when he first visited the country in 1815. . . . William Rabb built a four story water mill in Collinsville township."²³⁶

This portion of the county was heavily timbered at one time, but the hands of the busy woodman has wielded the axe so well that much of the land has been cleared of its leafy mantle, but enough remains to give to it the appearance of a wooded country, and with the outcrop of gigantic rock, deep shady ravines and purling springs, make as picturesque locality as any found in the state.

— Southern and western Jersey County in 1885.⁷⁶

beautiful snow-white swans flying over it or floating gracefully and peacefully on Grassy lake—peacefully, for at that time there were no rapid-fire shot guns and few hunters in that locality.

. . . With the exception of a tract in the southeastern part, very appropriately termed the Wet Prairie, Chouteau was originally covered with a heavy growth of timber, consisting of walnut, oak, ash, hickory, elm and cotton wood—the latter growing to giant proportions along Chouteau slough.

. . . Deer and wild turkeys abounded in great numbers, and bee trees were so common that they were found without an effort.

. . . The articles of barter were mainly deer skins, honey and bees wax.

. . . Uncle Ben Wood, late of Nameoki township, . . . informed the writer that, during the flood of "44," when the greater part of Chouteau township was under water, he landed his boat at the largest of the Indian mounds, near Mitchell, and killed several deer which were marooned thereon.²³⁶

Nameoki Township:

Horseshoe lake, so-called from its configuration, covers some 2,000 acres in the central part of the township. It is a popular summer resort for fishermen and pleasure seekers. Long Lake lies in the northeastern part of the township in sections 2, 11 and 12.

. . . In 1844 three fourths of its surface was overflowed. In 1851 it likewise suffered severely. Later floods have done less damage owing to partial levee protection, still that of 1903, owing to the vastly increased amount of property exposed, caused the greatest financial loss, the water lacking only two or three feet of being as high as in 1844. With the completion of the great levee system of the East St. Louis Drainage District, now in progress . . . it is believed no farther disastrous overflows will be possible.²³⁶

Venice Township: "The topography of the township is low and flat. It has been visited by various destructive inundations, those of 1844 and 1851 being the most serious." Otis Simms came to the area in 1808, settling in "the heavily timbered bottoms . . . in Venice township." In 1847-48 his son Oliver "witnessed the wholesale clearing of the rich bottom

lands when two thousand wood-choppers were engaged in making cord-wood out of the timber." During one of the great floods, Oliver Simms and other boys "rowed a skiff from Venice across to Horseshoe lake." ²³⁶

1904: Game and Fish Conservation Commission of Illinois

An annual report of the State Game and Fish Conservation Commission contains a tabulation of the "Status of Prairie Chickens in Illinois Counties in 1904." Two counties in the Big Rivers Area are represented. Macoupin: "Fairly plentiful, numbers increasing." Madison: "Very scarce." * ¹²⁷

1914: A.W. Horton

A.W. Horton's *Water Resources of Illinois* is a major repository of information about water levels in streams. This monograph summarizes measurements from several gauging stations in the Big Rivers Area.

At Alton during the period 1891–1911, the maximum range of water levels on the Mississippi River (*i.e.*, the difference between the highest river gauge reading and the lowest) was 31.2 feet. At Grafton during 1880–1911, the difference was 39.1 feet. At the upstream extremity of the Big Rivers Area (Louisiana, Missouri) during 1878–1911, the maximum range was 20.8 feet. ^{† 160}

During the periods 1879–1892 and 1894–1911, the maximum range in water levels on the Illinois River at Grafton was 34.0 feet. At Hardin during 1878–1880, the Illinois River fluctuated a maximum of 26.3 feet. During the same period at Kampsville, the maximum range was 24.9 feet downstream from the dam, and 16.9 feet upstream from the dam. ¹⁶⁰

1915: John W. Alvord and Charles B. Burdick

Messrs. Alvord and Burdick authored the *Report of the Rivers and Lakes Commission on the Illinois River and Its Bottom Lands*. A preface by the Rivers and Lakes Commission provides background about this major work:

* This survey was published in 1914, a decade after it was conducted. The Game and Fish Conservation Commission allowed a hopeful note when it issued the statistics:

Since this data was compiled there has been a decrease in the prairie chicken supply as well as in the supply of other game birds. Under the present system of game reservations, it is confidently expected that there will be a marked increase in the number of prairie chickens in the near future. ¹²⁷

† The gauge readings at Alton and Louisiana are for the navigable season only. The readings at Grafton were recorded year-around.

On March 14, 1914, the Rivers and Lakes Commission was called into a conference with Governor Edward F. Dunne, the Fish and Game Conservation Commission, representatives of the State Water Survey, Biological Department of the State University, and the Agricultural Department of the State University, to discuss the importance of problems growing out of the varied and conflicting interests in and to the Illinois River and its valley. The matters under consideration at this conference were the preservation of the public waters of the State, the reclamation of submerged lands, the preservation of fish, and future flood control.

As a result of this conference the Rivers and Lakes Commission employed Messrs. Alvord and Burdick, civil engineers, to make a survey and study of the Illinois River and Valley, compile the facts and report to this commission. This report has been put in printed form for circulation. We believe it contains such necessary information as will enable the Executive and Legislative departments of the State to adopt a policy that will prevent conflict between public interests and private interests and at the same time protect both.

The Illinois River furnishes from 10,000,000 to 24,000,000 pounds of fish per annum, or 10 per cent of the entire fresh water fish caught in the United States. After the opening of the Chicago Drainage Canal in 1900, due to the increased area of overflowed lands, the fish crop increased annually until the year 1908. Since then the yield has been falling off. This has been due to the reclamation of large areas of lakes and overflowed land by drainage and levee districts. The effect of this reclamation work is to confine the flood cross sections of the river and materially raise the flood heights. Messrs. Alvord and Burdick have presented in the report comprehensive and accurate investigations which show the effect of reclamation upon future flood heights and the value of conserving the lakes in the river valley for fish breeding and flood storage reservoirs.

Attempts are made by private parties to appropriate meandered or navigable lakes in the Illinois Valley which are the public property of the State. Acting on the policy outlined by the Legislative Committee on Submerged and Shore Lands, which led to the creation of the Rivers and Lakes Commission, this commission is now actively engaged in preventing such illegal seizure of the lakes in the Illinois Valley and conserving them for the use of flood storage, fish production, and the recreation of the public.⁷

Part I comprises Alvord and Burdick's "Findings and Recommendations":

The Honorable Rivers and Lakes Commission, State of Illinois.

Gentlemen: At your request we have made a careful study of the somewhat complex problems of the Illinois River relating to the control of floods with particular reference to the effect of the extensive reclamation of farm land within the past ten years and the rise and recent rapid decline of the very important inland fishery upon this stream. This report concerns principally that part of the

river below LaSalle; above this place the river is of a different character and the problems considered do not exist.

We take pleasure in reporting to you the result of our study and findings as follows:

THE OBJECT OF THE REPORT.

It is the object of this report to answer the following general questions:

1. What future flood rates may reasonably be expected on the Illinois River?
2. Is the present waterway sufficient to accommodate the future floods?
3. What interests are affected by the past and probable future improvements in the valley? How is each interest affected and what is the relative importance of each?
4. What plan can be followed to correct the deficient waterway and to produce a maximum benefit to the local interests and to the public?

SUMMARIZED CONCLUSIONS AND FINDINGS.

Hereinafter will be found much of the data upon which the answers to these questions must be based. Before, however, proceeding to discuss these matters at length, we would briefly acquaint you with our principal findings and recommendations as follows:

1. PAST FLOODS. We conclude that the flood of 1904, which at most places upon the river is the greatest flood of recent years reached the rate of about 80,000 cubic feet per second at Peoria and 125,000 cubic feet per second at the mouth of the river. These rates are equivalent respectively to 5.94 and 4.48 cubic feet per second per square mile of drainage area.

At nearly all places upon the river the flood of 1844 reached a greater height than any flood of record before or since. This flood occurred during the maximum flood upon the Mississippi and the water passed through a river valley entirely unimproved, very likely a veritable jungle. Under all these circumstances, it is questionable if the flow rates in the 1844 flood very much exceeded those in 1904.

2. FUTURE FLOODS. The stream records of the Illinois River, although a few records cover 40 to 50 years, are not sufficiently extensive to permit the formation of conclusions as to probable future maximum flood rates. So far as they are available they would appear to indicate that in the course of centuries the flood of 1904 might reasonably be expected about once in 50 years.

. . . It appears that such great floods are due to peculiar combinations of circumstances, such as, although infrequent, are likely to happen at any time, any place in central North America.

. . . It is our conclusion that the average flood expectancy, about once in 50 years, is a flood about 35 per cent greater in rate than the flood of 1904.

We further conclude that it is wise to protect the valley lands against the flood occurring upon the average of once in 50 years, namely, a flood about 35 per cent greater in rate than the flood of 1904.

3. PRESENT WATERWAY. In a state of nature the river in flood occupied its entire valley from hills to hills. For many miles in the lower river this flood plain averaged 3 miles in width and in the great floods from 7 to 9 feet in depth.

In the lower one-third of the river, farm land levees have reduced the width of the flood plain by about 80 per cent and have reduced the cross section of the flowing stream in a great flood to about 25 per cent of the available cross section of the 1904 flood.

Although a large part of the flood flow has always passed by way of the channel, the velocity being comparatively slow upon the land, it is our conclusion that the farm land levees are a menace to themselves, in that they have so restricted the flood water channel and are lacking in height, generally speaking, to such an extent that they are likely to be overtapped in a great flood. As the protection afforded to different districts is quite variable, it is evident that the lowest levees will suffer first and will tend to protect the higher levees. If all the districts are to be protected, however, a greater available flood cross section must be provided which may be accomplished in several ways, or the flood rates must be reduced through storage.

4. INTERESTS AFFECTED. Although many interests are affected to a minor degree, we find that the predominant interests in the river valley are agriculture and fishing. There are other important interests at Peoria and at a few of the other cities bordering the stream. These cities, however, without important exceptions are well above the ordinary floods and the municipalities in general are not greatly concerned with flood abatement.

5. FLOODED LANDS. We estimate the total water acreage below LaSalle in the flood of 1844 at 397,980 acres. Of this acreage 320,150 acres was flooded land. The first total includes 28,490 acres of river surface and 49,340 acres of lakes adjoining the river, the river and lakes surface being measured at the low water plane in 1901.

6. LEVEE DISTRICTS. Since 1904 the construction of levees for the protection of the bottom lands has proceeded at a rapid rate. At the present time nearly all the bottom land below Beardstown has been reclaimed. The total leveed lands are estimated at 171,725 acres. These lands have been protected from floods at an estimated cost of \$5,350,000 or about \$30.00 per acre. The estimated full value of these lands is about \$19,000,000, an average of about \$112 per acre. Much of this land is valued at from \$125 to \$150 per acre.

Projected levee districts, so far as we can learn, aggregate about 49,250 acres.

It is estimated that the leveed lands produce crops to the value of \$3,000,000 per annum and that when these districts are fully cultivated they will be capable of producing \$5,000,000 per annum. These figures are based upon the crops of recent years at the prices that generally prevailed prior to 1913. At recent prices, the yield would be much greater.

It is estimated that with the projected districts completed and fully cultivated together with a small acreage upon the higher ground, now successfully cropped without levees, the total yield from agriculture will be approximately \$6,500,000 per year.

7. FISHERIES. Statistics indicate that the fishery of the Illinois River is more valuable than any other fresh water river fishery in the United States. It is exceeded only by the Great Lakes and the salmon industry of the Pacific Coast.* The value of the catch to the fishermen amounts to 62 per cent of the fish product of the State and 10 per cent of the production of the United States.

The principal statistics of the fishery for the year 1908, according to U.S. Census, were as follows:

Total value of catch	\$860,000
Value excluding mussel products	\$721,000
Persons employed exclusive of shoremen	2,497
Capital employed	\$557,000

8. GAME FISH AND GAME. The statistics of fisheries do not include the fish taken for private use, either by the professional fishermen or sportsmen. The Illinois River and its adjacent lakes have long been known as the rendezvous for the sportsman in the taking of game fish and the shooting of water fowl. Competent local observers estimate that the money spent in the local river communities by sportsmen is fully equal to that derived from the commercial fishery. While the benefit to the State could hardly be measured by this expenditure, it indicates a certain value, greater or less in amount, that must be attributed to the preservation of the aquatic life of the stream. This use of the stream will doubtless increase as the value becomes better known through the improved water transportation facilities now shortly to be secured.

9. FISH PRICES. The statistics above quoted are based upon the average price of about 3 cents per pound to the fishermen. About two-thirds of the catch at present is German carp, which sells for 2 to 2½ cents per pound. Other varieties sell from 5 to 10 cents per pound.

* The Pacific Coast fishery is not strictly a freshwater fishery: salmon taken from the coastal rivers have grown to maturity in the Pacific Ocean. The yield of fish from the thin thread of the Illinois River and its backwaters was surpassed only by the vast Great Lakes.

Statistics indicate that the fishery of the Illinois River is more valuable than any other fresh water river fishery in the United States. It is exceeded only by the Great Lakes and the salmon industry of the Pacific Coast.

— Rivers and Lakes Commission (1915).⁷

. . . 10. RISE AND DECLINE OF FISHERY. We find that the annual catch upon the Illinois River has gradually increased from about 6,000,000 pounds in 1894 to 12,000,000 pounds in 1900 and 24,000,000 in 1908.

No complete statistics are available since 1908, but it is well known that the catch has very rapidly decreased within the past five years. The statistics at Havana would seem to indicate that the yield at present is only about one-third of the banner yield of 1908.

The great increase is probably largely accounted for by the rapid increase of the German carp, which first began to appear in the catch of the Illinois River at about the date of the earliest statistics above mentioned. All fish life was undoubtedly stimulated by the increased stages of water that have prevailed since 1900.

The decline since 1908 is probably due to a number of causes including the lesser flood stages prevailing in recent years and the large number of lakes excluded from the river through the construction of agricultural levees shutting off the breeding and feeding grounds of fish and the places where the larger part of the seining has been done. About 17,740 acres in lakes have been enclosed by levees amounting to about 36 per cent of the original lake acreage. Most of these lakes have been enclosed since 1908.

11. INCREASED FISH YIELDS.

. . . It is our conclusion that at the present prices of fish and labor, a commercial fishery, that is, one in which the fish are bred, fed and sold as a distinct business, could not be profitable.

It would seem, however, that there is prospect of a good profit by intelligent fish culture in the ponds and water courses remaining within the levee districts, providing that the industry is carried on as an adjunct to farming in much the same way that poultry is ordinarily raised upon the farm. This would utilize a water acreage that otherwise could produce no revenue and could serve no useful purpose except to store the flood waters in the course of passage to the drainage ditches.

12. PERMANENCY OF THE FISHERY. If the fishery is to remain commercially important, means must be provided to take the place of the breeding grounds

formerly furnished by the shallow waters of the lakes and sloughs which have been reclaimed.

13. PREDOMINANT INTEREST. In the light of the figures before us we must conclude that agriculture is the predominant interest of the valley, that it now furnishes and will hereafter furnish a much greater addition to the wealth of the State than is produced or can probably be hereafter produced by the fisheries. In so far as possible, however, both interests should be promoted in harmony.

14. RESERVOIRS AND FISH CULTURE. In Europe, where the flood problems and the fisheries have been studied for a longer time than in America, the suggestion has been made to promote the fisheries and reduce the floods upon the diked rivers by admitting water to certain of the leveed districts in rotation during each spring season and allowing the water to return to the stream during the low water season. All this with the object of reducing the spring freshets, artificially providing overflowed land for the breeding and rearing of young fish and the periodical enrichment of the land by the sediments of the flood waters.

. . . 15. FUTURE FLOODS AND PRESENT LEVEES. No great flood has occurred upon the river since the occupation of the valley by levees approaching the present scale of development.

The nearest approach to a great flood was the freshet of 1913. Although this flood is estimated to have been slightly less in volume than the flood of 1904, its elevation in the vicinity of the La Grange Dam, near the head of the most extensive levee system, was 3 feet greater than the flood of 1904 and substantially the same as the extremely high water of 1844. The levee districts completed since 1913, including those now in process of construction, will still further restrict the flood water passage.

16. GREAT FLOODS IN LEVEED VALLEY. It is estimated that if the 1904 flood should be repeated under the same conditions of water level in the Mississippi, a number of levee districts would be overtopped.

If this flood should be repeated under the high water conditions in the Mississippi that prevailed during the flood of 1844, a large number of the agricultural levee districts would be flooded.

It has been previously concluded that a flood 35 per cent greater in rate than the flood of 1904 may reasonably be expected to occur. If such a flood should enter the Mississippi at the height of water prevailing in 1844, more than half of the levee districts would be flooded, and under the conditions of levee construction likely to prevail in the future nearly all the levee districts would be flooded, and the water would reach a height about 5 feet above the high water mark in 1844 in the vicinity of the La Grange Dam, with lesser differences up-stream and down-stream.

In reference to the flooding of levee districts it should be noted that the lowest levees will be flooded first and to a certain extent will serve as safety valves to

protect the districts having higher levees. The flooding of a large number of districts near the apex of the flood will probably arrest the further rise of the water unless the flood is greatly prolonged. Therefore, to increase the elevation of the lower levees serves to decrease the safety of the high levees until all have been increased to such height that a great flood may pass away between the levees.

17. LEVEES AND FLOOD RATES. There is no question but that the exclusion of the flood waters from the bottom lands through the construction of levees has a tendency to increase the flood run-off rates of a stream. We have investigated this matter quite carefully as applied to the Illinois River particularly in the measured flood of 1904, assuming it to pass through the present levee system. It is estimated, however, that the net effect of all the levee districts so far constructed would probably increase the maximum flow rate only about 5 per cent and when the bottoms are fully leveed about 10 per cent. This rather unexpected result is accounted for by the fact that in an excessive flood, such as the flood of 1904, the valley is practically filled with water several days before the apex of the flood and the maximum flood rate occurs at a time when the gage height is nearly stationary for several days both before and after the apex. A smaller stream or a more flashy stream would doubtless make a better utilization of the storage in its valley.

18. APEX STORAGE. A much greater effect can be produced in mitigating the floods if certain large reservoirs could be held empty and the flood waters only admitted when the flood is approaching maximum rates and the water passing into the reservoirs could be regulated so that all surplus water above a pre-determined rate could be accommodated.

We have investigated this proposition and find that in the lower river at Kamps-ville for instance, the flood heights are most largely governed by the Mississippi River. In this vicinity storage on the Illinois River could accomplish nothing material. The present levee districts are not adapted to flooding, but if we should assume that all future levee districts, which would be substantially equal in storage volume to the districts at present constructed, should be so built and so operated that they could be flooded without great damage except the loss of crop when flooded, then we estimate that there would be about 850,000 acre-feet of storage above the La Grange Dam, which if used to the best advantage, would reduce the flood flow rate about 25 per cent at Beardstown, making a difference in the height of the water of about 3.4 feet.

A similar estimate at Peoria indicates that through storage it would be theoretically possible to reduce a great flood about 2½ feet.

It is our conclusion that storage as above outlined would be effective in reducing the flood heights in amounts varying from practically zero at the Kamps-ville Dam to about 3½ feet at Beardstown and 2½ feet at Peoria.

19. INCREASED FLOODWAY. In general there are three ways to increase the available prism for the passage of flood waters.

The width of the flood stream may be increased by setting the levees back a greater distance from the river bank. We find that this remedy is impracticable on account of cost except where new levees are to be built. We recommend, where levees are built upon both sides of the river at any place above the junction of the Sangamon, that the distance from center to center of levees, measured across the river, be not less than 1,200 feet and where reasonably possible 2,000 feet. Below the Sangamon the land is nearly all leveed.

The flood water prism might also be increased by lowering the bed of the river, as might be accomplished in the construction of a deep waterway. In our opinion, dredging operations undertaken especially for this purpose would be too costly as compared to other remedies. So far as we can determine, none of the projects for improved navigation would affect the flood water levels any sufficient amount to be of material benefit.

20. HIGHER LEVEES. It is our opinion that the available cross section for flood waters can be most economically enlarged by increasing the height of the levees. It seems to us that the circumstances warrant the building of levees to a height about 3 feet above a great flood, assuming it to enter the Mississippi River at about the height of the flood of 1844. The excess height of levees is recommended to provide for wave wash and in emergency as a small factor of safety to prevent disaster in case of a greater flood. It is believed that in the protection of these farm lands, the danger from loss of life is small and, therefore, that it is not wise to provide against a flood of extremely rare occurrence or to provide a factor of safety that would be justified in the protection of a city where great loss of life might result from the unexpected.

To comply with the above recommendation, the higher levees at present would be increased from 2 to 3 feet. The lowest of the levees lie about 6 feet below what we regard as a desirable elevation.

. . . 21. LEVEE HEIGHTS WITH STORAGE. If all future levee districts should be so built that they might be utilized for storage of the apex flood waters, the necessary levee heights in the upper three-quarters of the river could be reduced from 2 to 3 feet, but this would still require that nearly all the levees should be increased in height

. . . 22. REVENUES COMPARED. We have carefully considered the relative merits of the above suggested means for relieving the flood situation and the promoting of fisheries, particularly as to the practicability of using storage reservoirs for these purposes.

Giving the storage proposition the benefit of all the doubts including the practicability of manipulating the reservoirs during the flood and the benefit accrued

to the fisheries, we estimated that the largest financial return to the community will be effected through the utilization of the bottom-lands for agriculture and increasing the height of levees such an amount as is necessary to protect the lands.

23. MEANS OF ACCOMPLISHMENT. It would seem proper that the additional levee protection should be affected by private enterprise.

It is believed to be the duty of the State, however, to advise the land owners as to conditions and through the Rivers and Lakes Commission to regulate future constructions or alterations in present levees, so far as the powers of the commission extend. Advice to the land owners is the proper function of the State, for no individual land owner is in a position to determine these facts for himself.

It is not probable that all the districts can profitably increase their levees to the recommended height, for some of the small districts, particularly those not equipped with farm improvements and public improvements, would be injured in case of flood only to the extent of a lost crop and repairs to the levee system. Such districts might better suffer the loss from the occasional flood than to protect against the indefinite future. The proper course in this matter will be determined by the value of the crops and improvements and the frequency of the floods. The decision of a particular district will not affect the community outside the district except where there might be danger to life.

24. PROMOTION OF FISHERIES. The predominance of the agricultural interest does not require that the fisheries of the Illinois River should be abandoned.

It is believed, notwithstanding the levee districts present and future, that a scientific utilization of the remaining public waters, including the river and twenty or more meandered lakes * together with the best use of the remaining undiked bottoms and the spaces between the river banks and levee toes, will result in the maintenance of a valuable fishery.

We recommend that the State Laboratory of Natural History be empowered to investigate and determine the best means for promoting the fishery interests in the public waters and the adjacent undiked lands. We should hope that a practicable program might be worked out that would permit of great help to the fisheries and at the same time provide game and fish preserves, usable by the public under proper restriction.

We understand that the damage claims, filed against the Sanitary District up to December 31, 1912, for flowage damage to land below Utica, amounts to

* A *meandered* lake is one whose boundaries have been surveyed by the U.S. Public Land Survey.

The Illinois River bottoms are today, and have long been considered, the best game fishing grounds of the State, and also the best hunting grounds for water fowl

— Report of the Rivers and Lakes Commission on the Illinois River and Its Bottom Lands (1915).⁷

\$4,539,980, and that additional claims not yet filed will raise this total to about eight million dollars. The last named figure is equivalent to about fifty-four dollars per acre of land outside of the levees, and below the flood plane of 1844.

Although these claims are no doubt excessive, it would seem, as has been suggested, that if a working arrangement could be devised, the State might profitably combine with the Sanitary District in the purchase of some of these lands.

In view of the large expenditures made by our cities for park purposes and the expenditures of the national government in the preservation of the national parks, it would seem that there is a field for profitable investments by the State, which wisely administered would accrue to the great benefit of the commercial fishery and to the people of the State.⁷

Part II of the *Report of the Rivers and Lakes Commission* is titled “Description of Illinois River—Its Watershed and Hydro-geology”:

In many respects the Illinois River is one of the most remarkable streams in the United States. Its past importance as an avenue of water commerce, the possibilities of its future in this respect, its fresh water fisheries, its use as the main sewer, so to speak, of the second city in the country, and more recently, the agricultural development on its bottom lands through the construction of levees, all have led to perhaps more thorough studies, with various objects in view than has been received by any other of our rivers.

. . . From the head of the river, to La Salle, a distance of 50 miles, the fall of the stream is comparatively rapid, dropping about 53 feet. The stream is flanked on either side by bluffs or sharply rising ground nowhere more than two miles apart, and narrowing to about one-quarter of a mile near Seneca. The bottom lands are comparatively high, and in general rise toward the base of the bluffs. High water is of comparatively short duration, and it does not prove advisable to dike the farm land.

Below La Salle the conditions are quite different. In 223 miles, the fall is only 33 feet, and for the first 80 miles only 6 feet. As in the upper river, the bottoms are flanked by bluffs or hills, but the flood plain is wider, ranging from 1½ to 3 miles above Peoria, 3 to 5 miles near Havana, and 6 to 7 miles near Beardstown, at the mouth of the Sangamon River. In the lower 60 miles, the bottom

lands are generally 3 to 4 miles in width. From La Salle to the Mississippi, the bottom land subject to flood aggregates about 400,000 acres or 620 square miles. The immediate banks of the stream are nearly everywhere higher than the bottoms further inland, gradually falling away to lakes, ponds, and marshes near the foot of the bluffs. Some exceptions to this rule are found at the deltas of the larger tributaries.

In the upper river as far south as Beardstown, the river banks lie generally from 7 to 12 feet above low water, averaging about 10 feet. The lakes, many of them quite large, are connected with the river at low or medium stages of water and lie at approximately the same elevation as the river, rising and falling with it. The low water connection is always at the foot of the lake. At moderate stages of flood they are connected with the river at their upper ends also, the lakes receiving and carrying a portion of the flood flow in its passage down the valley, and also acting as storage reservoirs, tending to reduce the maximum flow rate of the flood. In the lower river below Beardstown, the immediate banks of the stream are higher, the filling of the bottom lands has progressed further, and the lakes are smaller, many of them lying 10 feet or more above low water in the main stream. They are thus only invaded by river stages considerably above normal.

The course of the river is unusually direct, the filling of the flood plain having been insufficient to induce the tortuous course of the Mississippi and like streams. Throughout the greater part of its length, particularly in the lower 60 miles, the stream follows the base of the western hills, with occasional diversions toward the center of the valley where the stream has been pushed outward by the deposit at the mouth of an important tributary.

Throughout its course the low water banks of the stream are thickly overgrown with trees and brush, and in the lower reaches of the river particularly, the bottoms are veritable jungles of trees, shrubs and climbing vines. In its natural state all ground within a few feet of the low water line in river and lakes was thus thickly overgrown, the only open places being the lakes and ponds and their low lying borders submerged for a large part of the year, and during the low water season covered with swamp grass and rushes.

. . . in Illinois, Iowa and in northern Indiana, . . . nearly all the streams drain regions where clay largely predominates, and although clay will absorb a large amount of water, it does so only slowly and gives it up with such reluctance that even the larger streams cease to flow in the dry seasons. The surface, although for the most part well drained, is relatively flat. The water remains for a long time upon the surface; the absorption is high and as it cannot be drained to the streams, is largely absorbed by luxuriant vegetation. The flood rate is mitigated by the storage in the wide, flat bottom lands, over which although the water is in transit and ultimately drains away, it moves but slowly. All this results in

streams that naturally deliver not more than 25 or 30 per cent of the rainfall, or 7 to 15 inches per year.

The Illinois and its tributaries are of this character. The flat prairie lands are thoroughly saturated in the spring and give up the water stored only to the roots of vegetation. The immediate run-off in great storms is high, but is slow in its passage through the principal arteries of drainage. Thus, we have streams of small annual run-offs, extremely small summer flows, and flood flows intermediate between those of the sand and gravel watersheds of Wisconsin and Michigan, and the unglaciated or slightly glaciated regions of Kentucky, southern Indiana, Ohio, Pennsylvania and generally in the southeastern states.⁷

Part III addresses streamflow, gauge heights, dams, and submerged lands along the Illinois River. This part of the report includes many tables and graphs which depict water levels at different time periods and at various points along the river. The topic is introduced thus:

As would be expected from the topography and geology of the drainage basin, the Illinois River is a stream of extremely small natural flow in drouth, and on account of its wide bottom lands and the great opportunity for flood water storage, the maximum flood discharge is relatively small, and the duration of flood conditions is relatively long.

. . . Gage records of water stage are recorded at numerous places throughout the length of the river, particularly the records of headwater and tailwater at the two U.S. dams at Kampsville and LaGrange, the two State dams at Copperas Creek and Henry, the observations of the Weather Bureau at Beardstown and Peoria, and several other gages maintained by municipalities and the railroads which cross the stream.

. . . At the present time during dry seasons, the flow of the Illinois River is largely artificial by reason of the Lake Michigan water diverted to the river through the Chicago Drainage Canal. Prior to January 17, 1900, the conditions were natural except for the small amount of water pumped through the Illinois-Michigan Canal.⁷

Jacob A. Harman, a civil engineer, estimated the flow of the Illinois River at Peoria during each month from 1890 through 1900. His estimates are presented in a table in Part II of Alvord and Burdick's report. Mr. Harman summarized his findings for the first ten years:

The period under discussion (1890-1899) has been one of low rainfall During that time the rainfall exceeded the normal only two years, namely, 1892 and 1898, the intervening years being regarded as the greatest period of severe drouth that has been experienced in this region since it has been settled.

. . . The actual low water flow at Peoria during the last ten years has for days and sometimes weeks been as low as 1,000 to 1,200 cubic feet per second, approximately 600 cubic feet of which has been furnished to the Illinois-

Michigan Canal by the pumps at Bridgeport. . . . The natural flow of the Illinois River at Peoria has apparently been as low as 200 to 300 cubic feet per second.⁷

Alvord and Burdick further discussed the hydrologic effects of two projects—the Illinois and Michigan Canal, and the Chicago Drainage Canal:

Since 1848 the natural flow of the Illinois River has received some artificial replenishment by Lake Michigan water at Chicago—prior to January 17, 1900, through the operation of pumps at Chicago, for the water supply of the Illinois-Michigan Canal, and in the later years of that period, to promote the cleanliness of the Chicago River. Although the supply thus pumped was nearly or quite equal to the extreme low water flow of the Illinois River so far south as Peoria, the accession of water from this source was small compared to the aggregate annual flow of the river. Mr. Harman estimates the flow from the Illinois-Michigan Canal at 600 cubic feet per second for the 10-year period previous to 1900. This is equivalent to .6 of an inch per year on the watershed above Peoria, or about 7 per cent of the average flow of the river at that place during the decade stated.

Since January 17, 1900, the previous water conditions have been greatly changed through the flow of the Chicago Drainage Canal, which has averaged from 3,136 second-feet in 1900 to 7,185 second-feet in 1913. The flow in the last named year is equivalent to 7.1" on the drainage area tributary to Peoria, which is about 87 per cent of the estimated average flow at that place during the decade immediately prior to the opening of the canal. It is equivalent to about 3.4" upon the watershed tributary to the mouth of the river; probably equivalent to about 40 per cent of the run-off of the prior decade at that place.

. . . The natural run-off of the Illinois Basin occurs principally in the spring and early summer, whereas the water of the Drainage Canal is nearly uniformly distributed throughout the year. As would be expected, therefore, the low water conditions are the ones most markedly changed through the accession of the Lake Michigan water. It has been estimated that prior to 1900, there were periods when the flow at Peoria was as low as 1,000 to 1,200 second-feet. The flows less than 2,000 second-feet were the rule rather than the exception for periods of from one to three months during the summer and fall. . . . Where gage heights at Peoria as low as 3 feet, frequently occurred prior to 1900, the lowest gage height since 1901 have been 7 or 8 feet, and within the past three years, not less than 9 feet. A part of this increase may have been due to greater natural flow.

The additional water further shows its effect in less degree at other gages downstream, but has apparently practically lost its effect when Grafton is reached, for the lower water stages at Grafton have been substantially the same of late years as previously.

. . . The State law under which the Sanitary District was organized requires that the sewage of the district shall be diluted with lake water at a rate equivalent to 3,333 second-feet for each million of population in the district.⁷

The following two paragraphs are excerpted from a lengthy discussion of navigation dams:

The Illinois River has been a highway of commerce from the earliest settlement of the country. For the purpose of maintaining low water, navigation dams and locks have been constructed at Kampsrville, LaGrange, Copperas Creek and Henry in the early days producing slack water navigation as far up the river as LaSalle, the terminus of the Illinois-Michigan Canal. The dams at Henry and Copperas Creek were completed in 18711 and 1877, respectively, and were constructed by the State of Illinois. The dam at LaGrange was completed in 1899, and the dam at Kampsrville in 1893. These two dams were built by the U.S. Government.

. . . It will be observed that in the high water season of the year generally, the dams have practically no effect upon the water levels of the stream. During the low water season, the Kampsrville and La Grange dams increase the water level immediately above same by the amount of 2 to 4 feet. At Copperas Creek and at Henry, the low water effect is less than 1 foot.⁷

Part IV is titled "Agriculture in the Illinois River Valley":

Agriculture in the bottom lands has been of comparatively recent development. Mr. Lyman E. Cooley, C.E., who has given much study to the river, describes it as follows:

"The character of these bottoms was described in the first official examination by Capt. Howard Stansbury in 1838.* He describes the valley as from 1 to 5 miles wide, deeply overflowed in every freshet, filled with bayous, ponds and swamps, and infested with wild beasts; clothed with dense vegetation, and said it was 'a forbidden wilderness ever incapable of inhabitation by man.' General Wilson[†] in 1867 gives his own description and quotes Stansbury, and he says, 'It may be true in part, but already cultivation has begun to encroach upon the higher bottom lands.' General Marshall in 1890[‡] also described the bottom lands, their character, and says that 'cultivation has extended over the higher bottoms; in fact, it extends everywhere they can get in seed before the floods begin.' He says, 'At about the 12-foot stage, the sloughs, ponds, the lakes and the lower part of the bottoms are filled; at a 16-foot stage, 80 per cent of all the lands that are ever flooded, are already covered.'"

* Stansbury's report begins on page 209.

† Wilson's report begins on page 263.

‡ Marshall's report begins on page 362. Alvord and Burdick paraphrased Captain Marshall's report rather than quoting it exactly.

The bottom lands on the lower reaches of the river are higher than those further north, and were cultivated earlier, but until the construction of levees was begun, the cultivation was largely confined to the higher ground covered with water for only a short time, or in some years not at all.

Although a few levees were built at an earlier date, the construction of levee districts as now existing, began only shortly prior to 1900. In 1904, at the time of the survey of the U.S. Engineers, less than half a dozen districts had been built. These being widely scattered, and most of them of small size, the interference to flood flow was not material. At the present time more than 40 per cent of the river valley has been reclaimed, and most of this work has been done since 1908.*

. . . With but few local exceptions, the river follows the foot of the hills forming the west bank, the low bottoms lying to the eastward of the stream. The eastern bank is higher than the general level of the bottoms on account of the quick deposit of the sediment carried by the main stream in flood, as the rising waters pass landward. This provision of nature has been utilized to protect the farm lands from inundation by levees which border the low water edge of the stream 300 or 400 feet landward therefrom, and usually following the stream until an important tributary is reached, thence following the bank of the tributary to the eastern highlands. At some places where the thread of the river is in transit between the eastern and western highlands of the valley, levee districts have thus been formed on both sides of the main stream, but the greater number of districts lie to the east thereof.

. . . It need hardly be stated that the restriction in the flood plain through the construction of levees must tend to produce greater flood heights under like flood flows. The reclamation of this land, and particularly the lakes, has been detrimental also to the breeding and taking of fish, an important industry upon this stream.⁷

Part V is "The Fishery of the Illinois River":

It is a fact not generally known that the fishery of the Illinois River is the most important river fishery of the country, excepting only the salmon industry of the Pacific Coast, and this is not, strictly speaking, a river fish.

In the last U.S. Census, which covered the calendar year 1908, the fish taken commercially from the Illinois River totaled 23,896,000 pounds, returning \$721,000 to the fishermen, at about three cents per pound. The river produced 62 per cent of the fish taken in this State, and over 10 per cent of the fresh water fish of the United States.

* Most of the floodplain of the Illinois River in the Big Rivers Area has been leveed for farmland. The history of development of drainage and levee districts along the lower Illinois River has been documented by John Thompson.³³⁰

The industry has grown from about 6,000,000 pounds taken in 1894, to the maximum of nearly 24,000,000 pounds in 1908, since which time the catch has declined very rapidly. This growth and decline is attributable to a number of causes, among which may be mentioned the introduction of the German carp, the increase in waters brought about by the Chicago Drainage Canal, the effect of the accompanying sewage thereof, and the closing and reclaiming of the lakes which has taken place very rapidly since 1900 through the leveeing of lands and the isolation of such waters by hunting and fishing clubs. These causes, some tending toward increase and others toward decrease, are so interrelated and their combined effects are so important to the permanency of the fish industry as to warrant careful study to the end that, so far as possible, the beneficial conditions may be promoted, and the detrimental conditions relieved in so far as this is consistent with the public welfare. It will be our endeavor to throw such light upon these matters as is possible with the existing data.

. . . The Illinois River bottoms are today, and have long been considered, the best game fishing grounds of the State, and also the best hunting grounds for water fowl, and while retention of these recreation grounds is warranted in so far as consistent with the development of the country and its citizens, the commercial importance of the fishery is concerned with the so-called game fishes to a relatively minor degree, for although they bring the highest price, the weight taken is relatively small. The game fishery, however, is of great importance to the sportsmen of the State, and is an important source of revenue to the towns along the river. Experienced observers estimate that the local communities receive approximately as much money by reason of the visiting fishermen as they do from the commercial fisheries.

. . . The principal value of the catch is in the German carp, and until recently, the buffalo fish, neither of which is extensively used at present by American born people, but which furnish an important and cheap food to people principally of foreign birth in the larger cities. Most of the Illinois River fish is shipped to Chicago and New York.

. . . It will be observed that up to 1908, the increase in the yield of the river is largely accounted for by the increase of the carp. The yield of buffalo fish, which was formerly the principal food fish of the Illinois River, gradually decreased up to 1908. Since 1908 the buffalo fish has almost wholly disappeared above the lower dam.

It will be observed that the yield of varieties other than buffalo and carp also gradually increased up to 1908. No later statistics are available, but the subsequent yield is known to have greatly decreased . . .

. . . The statistics hereinbefore given do not include mussel shells or pearls. During the past ten years this has been an important industry on the Illinois, but has rapidly decreased of late, and is of relatively small importance at this

time. It is regarded as an industry that attained large proportions through draft on the accumulation of mussels of past years. The accumulation has been largely exhausted and the industry promises to be relatively unimportant henceforward.⁷

The report quotes Dr. Stephen A. Forbes of the State Laboratory of Natural History regarding the importance of the river's backwaters for fish reproduction:

We learned a good many years ago—and this fact was first established in Illinois—that virtually all our young fishes, whatever their adult habits may be, lived at first on the same kind of food; all which hatch in like situations and at approximately the same time, consequently, compete with each other when they first begin to feed. We have learned that this first food—the minute plant and animal life of the water, called its plankton—is produced almost wholly in the backwaters. Although flowing streams often carry an enormous quantity of it, this mainly perishes presently in our great silt laden rivers. When, as in very low water in midsummer, the contributions from the backwaters are reduced to a minimum, or perhaps wholly cut off, the plankton of the streams also falls off to little or nothing. Left to itself, indeed, even so slow a river as the Illinois, would virtually empty itself of plankton in a little while. The fish producing capacity of the stream is thus proportionate, other things being equal, to the extent and fertility of the backwaters accessible from it and contributing to it at the hatching time of fishes. The plankton content of a stream at that time is in fact an excellent index to the productive capacity of the waters as a whole.

There is a notable harmony between time of highest flood in our great rivers, the spawning time of the bulk of our fishes, and the climax period in the development of the plankton. All coming together or following one another in quick succession as they normally do, conditions are as favorable as possible for a large stock of young fishes. The longer the period and the larger the scale of the spring overflow, the better is the prospect for a heavy annual contribution to the population of the stream. To this, no doubt, is due the fact, clearly indicated by our recent river work, that the plankton product of the Illinois system has been greatly increased by the opening of the drainage canal from Lake Michigan and the consequent raising of the average level of the river by about three feet, this rise of river level, of course, resulting in a very widespread and longer continued overflow.⁷

After quoting Dr. Forbes, the report continues:

The welfare of fish life further requires the deeper water, not less than four or five feet, and perhaps deeper, well below the reach of ice, in which fish may lie, particularly during the winter. . . . Doubtless the deep places in the river may be utilized for this refuge where the current is sufficiently slow, but to make such refuge fully useful, the lakes would necessarily be connected with the river at all or most seasons of the year. In the main channel of the river, excepting its shallow borders, seems to be principally a road of travel from place to

place. With the lakes reclaimed, the stream would be much less productive of fish life. The feeding and breeding grounds would be too small as compared to the deep water acreage.

The commercial fishes are caught in nets and seines . . .

. . . There are practical difficulties in the way of fishing the main channel of the Illinois River. This is especially true since the opening of the Chicago Drainage Canal, through the increased water levels occasioned thereby, and the flooding of trees and brush upon the banks. At present there are few places to land nets. The taking of fish is done principally within the lakes, although large quantities are caught in the river, using so called "nets," that is, fykes or hoop nets.

. . . it will be useful for our purpose to enumerate in so far as they may be measured, the causes that have been operating recently, tending toward the growth and decline of the Illinois River fishery. Among these factors may be mentioned the introduction and growth of the German carp, the probable increase in fish food occasioned by the Chicago sewage, and the increased water levels and water acreages occasioned by the added flow from Lake Michigan. The factors tending toward reduced yields include the decreased breeding and feeding grounds brought about through the reclamation of the lakes and swamps, the decreased fishing grounds from the same cause, and the lakes owned and controlled by fishing clubs, and in the upper river, the only partly decomposed Chicago sewage which has driven the fish from the places where it is most objectionable.

Doubtless the most important factor in the increased fish yield prior to 1908, has been the German carp . . .⁷

Alvord and Burdick then quoted at length from a discussion of the economic and ecological impacts of carp, prepared by Stephen A. Forbes and Robert E. Richardson for *The Fishes of Illinois*.¹¹⁹ Forbes and Richardson concluded,

. . . it would seem to be that the competition of the carp as spawn-eater and water-soiler has not seriously affected many of our Illinois River species. It is by no means improbable that causes entirely apart from depredations and competition of carp may have had a large influence in producing the recent decrease of buffalo and drum. Among such causes may be mentioned increased contamination of waters from municipal and industrial sources; the obliteration, by drainage and diking, of backwaters used as spawning grounds; and the increased rapidity of runoff from the prairie and upland, as a result of tiling and the cutting of the forests, affecting the extent and duration of the spawning havens afforded by both swampy areas and small streams. To these causes is to be assigned the decrease and approximate disappearance of such minor species as pickerel and lake sturgeon, which were never very abundant in the rivers in question, and which began to fall off in numbers long before the carp entered the field.

In many respects the Illinois River is one of the most remarkable streams in the United States. Its past importance as an avenue of water commerce . . . , its fresh water fisheries, its use as the main sewer, so to speak, of the second city in the country, and more recently, the agricultural development on its bottom lands through the construction of levees

— The Rivers and Lakes Commission's report on the Illinois River and its bottomlands (1915). ⁷

It is not denied that carp will eat fish spawn; but it has not yet been shown that they seek out spawn for the purpose of consuming it. Black bass, crappie, and sunfish are doubtless able to defend their nests against carp in any case.

Certainly the devouring of spawn has not affected the multiplication, as shown by the output, of any of these three species, or of suckers or catfishes. That even a favorable effect of the multiplication of the carp is not impossible is evident when it is remembered that the myriads of young carp offer an almost inexhaustible supply of food to the growing bass, crappies and sunfish. The drum and buffalo, which have decreased, are in their food habits more directly in competition with the carp, being chiefly bottom feeders, utilizing mollusks, crustaceans, and insect larvae.

. . . While it is admitted by all competent to judge that carp do uproot vegetation in large quantities, no means are at hand for comparing the effects of this destruction on the decrease of water birds with the effects of the operations of the hunters themselves. Since 1900 the problem has been complicated in the case of the Illinois River by the effect of the increased flow from Lake Michigan, which has diminished vegetation in many areas.⁷

Dr. Forbes further told the Rivers and Lakes Commission,

The cause of this notable decrease in several of our most important native fishes I am strongly disposed to find in excessive fishing due to the enormous multiplication of carp, which is now more important as a fisherman's fish than all the other fishes of the stream put together. This has necessarily stimulated fishing operations until they have become too active for many of our common native species. If we want to keep these valuable fishes up to the normal standard, we must evidently take special measures to that end. Indeed, we have found some remarkable evidence of over-fishing at certain local points, especially in Meredosia Bay. This has been seined so steadily and generally that fish resorting there have been pretty well cleared out, and the animal life of the bottom, upon which fish depend largely for their food, has also been very largely destroyed.

Another cause of the failure of many of our native fishes is believed by my field assistants to be a lack of practicable fish-ways in the dams at La Grange and Kampsville. As our fishes migrate as a rule upstream for their breeding opera-

tions and downstream as the water falls in summer, any barrier to their upstream movement necessarily diminishes the stock above it. These lower Illinois dams are under the control of the War Department, over which your commission has, of course, no control.⁷

The balance of Part V reviews commercial fish yields and the impacts of water pollution, increased river levels, and the drainage of backwaters. The discussion of "Contamination and Fish Food" quotes Professor Forbes, who asserted,

Indeed, I believe we have never seen a dead fish in the Illinois River, evidently killed by foul water. . . . fishes offended by the pollution of the waters simply withdraw into streams, sloughs, and lakes connected with the main river until this becomes tolerable to them again.⁷

Dr. Forbes hypothesized that organic matter in Chicago's sewage effluent provided nutrients to support a burgeoning fish population:

The Chicago sewage comes into the river at its upper end in a raw state It is rapidly decomposed . . . and becomes itself converted . . . into nitrates, in which latter stage it becomes available food for plants and indirectly for animals, and these in turn are food for our river fishes. . . . I am undertaking right now to test the correctness of this supposition If I am right in this matter, the central section of the river and the waters connected with it may be regarded as a huge stomach in which the organic matter contained in the Chicago sewage is digested, assimilated and worked up, in considerable measure, into the flesh of fishes for our consumption.⁷

Part V documents the annual harvest by commercial fishing operations at various locations along the river. The yield at the lowermost three shipping points along the Illinois River (Grafton, Hardin, and Kampsville) totaled 497,750 pounds in 1896, 477,050 pounds in 1897, 795,150 pounds in 1899, 1,020,730 pounds in 1900, 747,000 pounds in 1907, and 905,000 pounds in 1908.

In Part VI under the heading of "Artificial Conditions Affecting Flood Rates," Alvord and Burdick stated,

The drainage of low land has affected flood flows in two ways. By draining the swamps which naturally were more or less covered with standing water, these natural flood water storage reservoirs have been destroyed. This would have a tendency to increase flood rates particularly on the adjacent streams. Upon the other hand, the reclamation of swamp land has permitted the soil to act as a receptacle for storage that was not available when the land was flooded with water. This tends to counteract the direct effect of the drainage. The tiling of rolling farm land, an extensive practice in Illinois, has probably had very little effect on floods one way or the other; if anything, the tendency is to reduce the effects of the flood delivered to the streams.

The question of deforestation recently much discussed, is of small concern on the watershed of the Illinois. The majority of the acreage has always been prairie land.

The reclamation of bottom lands on the tributaries of the Illinois, is a more important effect. Considerable work has already been done on the Sangamon in the way of straightening the channel for the purpose of decreasing the frequency of overflow, and in case of flooding, removing the water from the bottom lands more quickly. This practice tends to rob the bottom lands of their ability to store flood waters; to increase the delivery rate of the tributaries, and hence if the practice is extensively pursued, to materially increase the rate at which flood water is delivered in the valley of the Illinois River. As the Illinois River is a great stream, and most of the tributaries are comparatively small, the dangers arising from this work will depend upon the extent to which such reclamation works are built. There are a number of tributaries of the Illinois on which works of this kind are suggested, but the matter has not been sufficiently investigated as yet to form an intelligent opinion as to how extensive these works will ultimately be, and of the effect they may produce upon the flood deliveries of the Illinois River.⁷

Part VII, "Future Flood Heights and the Effect on Agricultural Levees," estimates that about 70% of the Illinois River bottomland below La Grange was free of trees and shrubs at the time of a survey in 1902–04. Only half of the bottomland between Beardstown and Peoria was "cleared of trees and brush." *

Part VIII is a "Discussion of Remedies"—that is, possible methods for reducing floods along the Illinois River. Most of the discussion focuses on constructing levees or relying on storage reservoirs. Aside from these engineering solutions, the report addresses "Other Considerations":

It is true that if the flood waters are excluded from the bottom lands, the farmers must ultimately resort to fertilizers to take the place of the benefit arising from the natural flood. Experience upon the uplands of Illinois, land that was very rich when first broken, indicates that within fifty or sixty years serious deterioration will have taken place. It is estimated that an annual flood would be worth about one dollar per acre per year over a long period of years, to keep the bottom land up to standard indefinitely. It is believed that this sum is not sufficiently large to make it an object to flood the bottom lands for the purpose of enriching them, even if done only in occasional years. It is believed that the damage to structures other than land would make this practice undesirable.

It would be possible to equip all levee districts with pumping plants, agricultural drainage, as well as flood gates, using a part of the districts each year to store

* These statements appear to be based on the assumption that the floodplain was forested before it was converted to farm fields. A large part of this area was once prairie.

flood waters and promote fishing. They will be necessary for flood storage only in exceptional years, but if they are to promote the fisheries, there must be a large acreage flooded each year. No gain can come from this procedure except to benefit the land for agricultural purposes or to enrich the waters for the propagation of fish. It is believed that the gain from this procedure would not be sufficient to overcome the damages involved in flooding the farm lands, for the benefit to the farm lands would probably not exceed one dollar per acre per annum, and it is questionable how much the alternate farming and fishing would benefit the yield of fish. It seems probable that a large amount of vegetation might be grown in the flood storage reservoirs in the latter part of the summer and early fall—perhaps sufficient to answer all the purposes of enriching the fish waters.⁷

Under the heading of "Clean Banks":

Competent observers state that under present conditions a great amount of the fish spawn is being destroyed through the growth of fungi, occasioned by decaying land vegetation, such as trees and brush that have been permanently inundated and killed through the increased water stages since 1910. We have heretofore pointed out the great desirability of clearing the bottoms, except for a narrow wave break in those sections of the river where both sides of the stream are leveed, in order that a clear waterway for the flood may be provided. The keeping of these lands cleared will not only serve to provide a practicable channel for flood waters but will best serve the needs of the fishes. With the levees placed well back from the river banks, as recommended in districts to be built hereafter, the grounds between the levees and the river bank, properly cleared, will be of great benefit to the aquatic life of the stream.⁷

And "Game Fishing and Hunting":

The waters of the Illinois River have been the rendezvous of the sportsman—both the hunter and the fisherman—for many years. It is too much to expect that the entire river bottoms will be retained in the original state of nature in order to furnish recreation grounds for those capable of benefitting by them. In general, the fate of these bottoms will doubtless be ultimately decided by financial considerations, which, as we have shown, point towards agriculture as the most profitable use of the bottoms, commercially.

. . . Large expenditures are being made by cities, and the U.S. Government is not only setting aside unused lands wherever possible for playgrounds for the people, but is spending considerable sums annually for their maintenance. It is not beyond reason that the State of Illinois should obtain such bottom lands by purchase as may be necessary to augment the most favorable meandered lake holdings, for the double purpose of studying, and, if possible, increasing the aquatic life of the stream, and furnishing state parks or preserves, in which, under proper restrictions, hunting and game fishing may be pursued, and which

will serve as nurseries for augmenting the commercial fishery of the stream generally.⁷

1918: A.T. Strange

Editor A.T. Strange prepared this information about Bois D'Arc Township for the *History of Montgomery County*:

The fertility of its soil is excelled in no other part of the county, being formed of the decaying vegetation of the past ages which grew in luxuriosness. It took men of courage to reclaim its wonderful richness from its aforetime swappiness and uninviting aspect. And hence its "Old Settlers" were strong men and courageous women who dared the marshes, the wild growths, the prairie sod, the miasma, the annoying insects, the "rattlers," and the many other opposing obstacles²²

Pitman Township:

Very little timber was found here originally, and practically all of it has been cleared away, although there is some artificial timber which settlers have planted.

. . . As far as the records show the first settler . . . located here in 1822 While there were no more important settlements until in 1829, there were evidences that for years a number of people had spent short periods here, before pushing further west. Probably the swampy character of the land at that time seemed too great an obstacle to overcome, hence the small developments were abandoned.²²

John White was born in Pitman Township in 1867. His parents had "settled on a farm in Pitman Township when it was principally swamp land, and drained it and placed it under cultivation."²²

1919: Oscar B. Hamilton

In his *History of Jersey County*, Oscar Hamilton painted a word-picture of the landscape he loved:

The bluffs on the west and south sides of Jersey County form the most magnificent and picturesque scenery of the entire 2,000 miles of the course of the Mississippi River. For twenty miles east from the mouth of the Illinois River, the bluffs rise from the river bank to a height of three or four hundred feet, with hollows or valleys between, in which are found numerous springs of cool and refreshing water. The valleys and the tops of these bluffs are covered with original forest trees of great height and size, which at the time that Marquette

Its yield of fishery products is greater than that of all the other waters of the state combined: the Illinois River in 1908. ²⁹¹

was viewing this wonderful landscape had been unseen and untouched by civilized man.¹⁴⁷

Summoning memories from a bygone era, Judge Hamilton related,

There was an abundance of wild game such as deer, turkey, pheasant, prairie chicken, quail, and in the spring and fall seasons, goose, brant, duck and pigeon. The streams were well stocked with fish. In the forest, oak trees supplied acorns called mast, upon which hogs were fed and fattened; and there were hickory nuts, walnuts, pecans, hazelnuts, cherries, plums, grapes, persimmons, red and black haws, paw paws, blackberries, raspberries, dewberries, strawberries, crabapples, mayapples. The hazelnuts and smaller berries grew in the open prairies, or on the skirts of the forests.

. . . While there were springs of clear, cool water, the prairie land was covered with a blue stem grass that grew to great height, the burning off of which in the fall of the year made an intense heat and often destroyed everything in its course, the young timber, settlers' improvements, and all animals or persons in its way. The only safety was in backfiring as it was called, that is, the person in danger, before the fire reached him, had to start a fire where he was, and after it had burned a sufficient distance, he would go over the burned tract, and thus escape from the main fire. Then there was also danger from the forest fires, started by hunters, campers or other careless persons, among the forest leaves, and in case of a heavy wind, or even a strong breeze, the fire would spread, and be as dangerous as the prairie fires. Whole neighborhoods of settlers, men, women and children of sufficient size, would be called out to fight the fire, and continue the contest day and night until it was headed off, usually by clearing the ground of its coat of leaves, and backfiring, and then watching for flying branches or burning leaves which would be carried by the wind beyond this backfire barrier. These would be attacked with wet sacks, or other means would be taken to extinguish the fire before it could get another start.

. . . These were strenuous and dangerous emergencies, taxing the courage and physical endurance of the early settlers, whose farms were along the skirt of timber, and extending out into the prairie, where this was possible. Many of the pioneers went into the timber because they had to get wood for their buildings, all of their other improvements, and for their fires. Many were born and bred woodsmen, and found security and safety in the timber, and were afraid of the open prairie with its annual fires, insecurity from attacks from the Indians, and supposed hardships and impossibility of hauling sufficient timber to improve and maintain the rude appliances then possessed by them. There in the timberland,

which skirted the streams, springs were to be found which supplied them with cool water for both the family and livestock.

. . . One of the very early settlers was Jehu Brown, who took 880 acres of land, in what is now English Township, prior to 1830. . . . His lands were along the edge of the timber, and extending into the prairie on the east, where that was possible. Otherwise his land was wholly in the timber. This rule was followed by many of the early settlers. Their training had made woodsmen of them, and they were as a rule timid about going into the prairie any distance from the timber, first on account of the disastrous prairie fires and secondly on account of the difficulty in securing sufficient timber for building purposes and fuel. These reasons were regarded as very important ones in determining the settlers upon their location in opening up a new farm.

. . . The country abounded in wild game, such as deer, turkeys, prairie chicken, quail and rabbits, which were suitable for food; and panthers, catamounts, wild cats, the fox, coon, opossum, * groundhog, and numerous wolves. The otter, beaver and muskrat were also found. Swarms of wild bees made honey plentiful.

. . . The flood of 1844, which was the highest and most disastrous overflow of water that has ever been known on the Mississippi River since the original settlement of the Mississippi River, flooded all of the lower bottoms, drove all of the merchants and residents from that portion of the town, † tore up the pier for the shipment of freight and produce, and compelled most of the business interests to leave the town and seek other locations.

. . . In front of the bluffs east of Grafton there were large caves in the early days, with an arched entrance, and vaulted room running from 150 to 200 feet, and another entrance where several people could congregate, or where a large number of cattle or other live stock could find shelter from the inclemency of the weather. There were also similar caves farther east in the same bluff, one particularly where the entrance was very low, and a person had to enter through a small opening, which enlarged on the inside, and was filled with bones of persons and animals supposed to have been aborigines of the country; but by reason of the development of the rock quarry interests, the front of this bluff has been entirely removed, and, of course, those caves were quarried out.¹⁴⁷

The *History of Jersey County* informs the reader about Rosedale Township,

It has an average width from east to west of about five miles; the bottom lands between the bluff and the river being from a mile to a mile and a half in width;

* Mr. Hamilton averred, "Lamps were unheard of" in times past. Cabins were lit by burning "coon or opossum oil, or hog lard" in a teacup or a hollowed-out turnip.¹⁴⁷

† The town is Grafton.

of very rich alluvial soil, but to a considerable extent subject to overflow from the river in extreme high water; except a strip next to the bluff of one quarter to one-half a mile in width. . . . The eastern part is broken and hilly, and was originally covered with immense forests of hardwood timber; as time passed these forests were cleared, and much of this land has been made into farms.¹⁴⁷

The chapter about Otter Creek Township states, ". . . in 1828, Greg McDaniel built a water grist-mill for grinding grain, on Otter Creek, in the western part of Otter Creek Township."¹⁴⁷

Under the heading of HOG WAR . . .

At the time of the first settlement of this county, livestock of all kinds was permitted to run at large. Farms were small and were fenced for protection of their livestock. The livestock was all marked, and the marks of the owners were registered in the county clerk's office, and trespassers upon this livestock were classed in the same grade as horse-thieves and pickpockets.

In 1853 there was a short corn crop on the prairies, and several farmers joined and drove their hogs into the forest south of Otter Creek to fatten upon the acorns, or mast, as it was called in that locality. The most of those lands were what was called "Congress" or "Government Lands," the intruders claimed the right to the feed produced by nature. On the other hand, the settlers in that locality claimed the right to the crop for their own herds, and promptly armed themselves to protect their rights, to the last extremity. The intruders also armed themselves to protect their property and their rights. Luckily, a suit for trespass was instituted before a justice of the peace, and a change of venue gave time for wiser counsel to prevail, and the intruders withdrew and took their hogs home, which ended, what, at the beginning, promised to result in much bloodshed.¹⁴⁷

Oscar B. Hamilton's own biography appears in his *History of Jersey County*. He was born in Greene County in 1839, and he moved to Grafton in his ninth year. The account of his life states in part,

Among his earliest recollections of the natural productions of the forests and prairie lands of this county, were its blackberries, raspberries, strawberries, grapes, plums, cherries, black and red haw, persimmons, pawpaw, mulberries, crab apples and May apples; of nuts there were hazel, pecan, hickory, in great variety, walnuts black and white, and acorns from oak trees in great variety and abundance used for the fattening of swine; and grasses and other herbage for live stock; of game, consisting of deer, squirrels, rabbits, turkeys, pheasants, prairie chickens, quails, very plentiful; with fish in the streams and rivers, for the taking, and in the spring and fall of each year, great flocks of geese, ducks, and pigeons gave abundant employment for the sportsman. In addition were the bees of the forest, storing large quantities of honey in hollow trees. Bee hunters

became very skillful in tracing bees in their hives, by putting out bait and watching the direction taken by the laden bees, then following the bee line and marking the tree for cutting in late fall or winter. Then there was the maple sugar camp The main camps in this county were those of Col. Josiah Askew in 6-11, * and Henry Noble in Sugar Hollow southwest of Otterville, 7-12. † Sixty years ago maple sugar was a staple article of trade at the stores, as were also three and four-foot oak clapboards and pickets, staves and heading, hoop-poles and ten-foot rails.¹⁴⁷

Chapter III, "Evidences of Great Antiquity," was prepared by William McAdams:

Reared in the Miami Valley in the state of Ohio, we had from boyhood been familiar with the mounds and earthworks of the moundbuilders, and made a considerable collection of their relics. Upon coming to Illinois, we were not a little puzzled and bewildered by the great diversity of the mounds and relics in this vicinity. Having a passion for research in this direction, twenty years of investigation in the mounds of Jersey and adjoining counties, have not cleared away the mystery of their origin.

Within a radius of fifty miles from the mouth of the Illinois River, there are perhaps 5,000 mounds. Over 1,000 of this number are in the little county of Jersey. They are most numerous in the vicinity of springs and water courses, and are found in great numbers in that portion of the county bordering on the Mississippi and Illinois rivers, and along the Macoupin, Piasa and Otter creeks, which form the drainage system not only of Jersey, but a portion of the adjoining counties. These mounds are from two to twenty feet in height, and generally conical or oval in shape. A common shape resembles the half of an egg divided lengthwise. The mounds are evidently of different ages, built for different purposes, and doubtless by different nations, or perhaps different races of people.

. . . The limestone bluffs along the Mississippi and Illinois rivers, which form the southern and western boundary of the county, are capped with fifty or sixty feet of loess, a formation of marly sand and clay, which is intersected by deep ravines, separated by narrow ridges, which terminate in bald knobs, hundreds of feet above the river, forming a prominent feature of the landscape. Nearly every one of these high, bald knobs are ancient burial places and contain human bones. Many of these natural elevations were made artificially higher to form a mound over the remains of the dead.

. . . There is a remaining class of relics in this county and vicinity, which, though but little known, are of great interest to the antiquarian. These evidences

* Township 6 North, Range 11 West = Elsah Township.

† Township 7 North, Range 12 West = Otter Creek Township.

of the presence of ancient men are found in caverns and rocky recesses about the limestone bluffs of the rivers and streams.

In these rocky bluffs are numerous small caves and recesses under the overhanging cliffs that contain ancient fireplaces, on which are great quantities of ashes, mingled with curious implements, and the bones of animals and fishes used as food. These piles of ashes are evidently the result of fire kept burning for ages by a peculiar people, who made their abode in these rocky recesses.

A number of years' investigation of these caverns has led me to believe that there was a peculiar race of savages who lived along the streams and subsisted principally on fish, mostly shell fish, as is evidenced in vast piles of shells, mostly *Unios*, * half buried in debris about their habitations.¹⁴⁷

Mr. McAdams also discovered an ancient bison skull:

I recovered from a large mound in the American bottom between Alton and St. Louis, the remains of the head of a buffalo, with the teeth entire and in good state of preservation by being in contact with a number of copper implements and ornaments, associated with others of stone, that are peculiar to the mound builder.¹⁴⁷

1921: Charles Bradshaw

In an essay commemorating Greene County's centennial, Charles Bradshaw related an anecdote about the time when Abraham Lincoln accepted the challenge to a duel. In September of 1842 on the evening before the duel, Lincoln stopped overnight in Carrollton. According to the story, he practiced for the next day's event:

. . . during the evening Lincoln took a broadsword, walked out to the edge of town, where a luxuriant patch of tall "jimpsons" † were growing, and practiced sword exercise for a half hour or so, to the almost utter destruction of the "jimpson" patch.^{‡ 52}

1934: George W. Carpenter

George W. Carpenter's *History of Calhoun County* quotes an early resident who spoke of the lumbering industry during the Civil War:

Then nearly every man was in some way connected with or interested in the 'lumber business' as it was called. He was either buying, selling, cutting, or

* *Unio* is a genus of fresh-water mussel.

† Jimpson = jimson weed (*Datura stramonium*).

‡ Charles Bradshaw admitted, "None of Lincoln's biographers seem to have heard of . . . the story."⁵²

The bluffs on the west and south sides of Jersey County form the most magnificent and picturesque scenery of the entire 2,000 miles of the course of the Mississippi River.

— Judge Oscar Hamilton of Jersey County in 1919.¹⁴⁷

boating staves or cordwood or engaged in getting out and rafting logs. Even the well-to-do farmers would make some staves or cord wood during the winter to haul and sell during the summer and fall. By doing this he killed two birds with one stone; cleared the land and raised some money. Stores along the river usually had a sign reading thus: ‘Cordwood on the Bank a Legal Tender.’⁶³

Mr. Carpenter’s volume continues,

Most of the farmers and early settlers had little money so they would take cordwood, poles, or staves to the merchants who would accept them and give the settler goods and wares in exchange. Thousands of cords of wood could be seen piled along the river bank, together with millions of staves and hoop poles. Sometimes the steamboats would take the cordwood and staves to the market, and sometimes smaller boats or barges would transport them to St. Louis or other centers.⁶³

This book highlights the economic importance of Calhoun County’s springs during the 1800s:

Near Gilead is located what is now known as the Great Salt Spring. In 1835, R.S. Quigley took possession of the spring with a view of utilizing it in the manufacture of salt. He erected a huge frame building and brought machinery from Ohio. In order to get a greater water supply, he bored to a depth of 250 feet.

. . . At the depth of 250 feet, Quigley struck water that contained little salt but much sulphur. This made the whole affair useless, and Quigley abandoned the place and moved away.

. . . In 1829, Jacob Crader, Sr., built a water power mill at Cave Spring Hollow, near the present site of Oak Grove. The Indian Creek mill was built in the same year by Samuel Crader and was also operated by waterpower.*

The importance of the mills to the settler is told by C.C. Squiers, a pioneer settler:

* George Carpenter’s information about the enterprises of Mr. Quigley and the Craders appears to have been derived largely from John Lammy’s 1876 oration (beginning on page 278).

"There were two or three corn crackers (sometimes called grist mills) and most of them were run by water power, if the ponds did not dry up, which, however they did in the late summer and fall. Then the settlers had some disagreeable experiences." ⁶³

1935-39: Jess M. Thompson

During the late '30s Jess Thompson, a newspaperman in Pittsfield, wrote a column about Pike County's past. The 108th article in the series is headlined "Philips Ferry Crossing Was at Site of Buffalo Ford Over Illinois River." This article describes a river crossing at the very north end of the Big Rivers Area:

At the Illinois river, near present Valley City, a ferry crossing was established in very early times, at the place where the buffaloes had forded the stream in wilderness days. The ferry road had followed a trail marked centuries earlier by the bison herds. ³³¹

In an article titled "Pike Roads Followed Ancient Buffalo Trails," Thompson amplified his thoughts about the bison-roadway relationship. He asserted that the road from river to river across the north side of the Big Rivers Area had been blazed by bison—from Valley City on the east to Atlas on the west:

Atlas, standing so utterly askew with the world, doubtless followed a pattern set in prehistoric times by some bull leader of the bison hordes that came that way, blazing a trail between the two great rivers that was furrowed through ensuing centuries by the vast herds that once roamed these prairies. Centuries passed and upon the path of the buffaloes were the footsteps of the redskins, gliding single file upon the trail to war or to the chase. Centuries before the first white men came, the trail that in 1823 was to become the base line for the platting of Atlas became an artery of the western wilderness, along which pulsated its rich and varied life.

As the centuries passed, the trail broadened. Upon it in time were the feet of the early traders, trappers, hunters and courreurs de bois. French, English and Americans succeeded one another upon the trail as the nations followed each other in dominion over the great inland valley. The trail widened into a cart-way, then into a wagon road over which flowed the life of the early settlements. Then came the engineers and surveyors of modern times, following the trail of the ancient bison leader with ribbons of concrete, mute testimony to the cunning of the prehistoric brute that first blazed the line of least resistance from river to river in the vast movement of the shaggy hordes between the plains of the southwest and the buffalo grounds near modern Peoria.

Many famous Illinois roads grew from the ancient buffalo and Indian trails.

. . . The ancient bisons' fording place on the Mississippi was succeeded in 1821 by James McDonald's Ferry, as their fording place on the Illinois was followed

in the same year by Garret Van Dusen's Ferry, later known as Phillips' Ferry Thus the path of the buffaloes became the road that led from ferry to ferry as the earlier trail had led from ford to ford. This road became known as the McDonald's Ferry road, leading from the Mississippi river at a point opposite Louisiana, to . . . Phillips Ferry, . . . now Valley City, on the Illinois river.³³¹

Jess Thompson's romantic poesy joins a large body of lore about bison and early roads. The false premise: humans followed trails that had been established by bison. The actual fact: humans inhabited the region for many thousands of years before bison arrived.* Archaeological and paleontological evidence indicates that bison may not have migrated into Illinois until about a thousand years ago, and the bison population may have been quite low until about the year 1600 or later—after humans had been living in the region for millennia. † 135, 271, 301

Nor do Thompson's "vast herds" and "vast movement of the shaggy hordes" invoke an accurate image of the likely number of bison in the region. The earliest records by French explorers and missionaries count bison in the hundreds or few thousands. ‡

1949: Leonard Hall

Leonard Hall wrote a chapter for the book *Wildfowling in the Mississippi Flyway*. He recalled a story "told years ago by a middle-aged acquaintance, of how he used to go with his father each autumn to shoot ducks for the St. Louis market."

Just above St. Louis the Mississippi is joined by the Illinois flowing in from the east and the Missouri from the west. . . . They would attach their houseboat and skiff to an up-river steamer, after provisioning with food and kegs of shot and powder, and be towed up to the Illinois–Mississippi junction. Here they would tie up in a slough and hunt from early September until April when the spring flight had passed on its way north. Once every week or so, a down-river

* For spirited assertions that bison trails were precursors of major modern highways, see writings by Bradsby,⁵¹ Hulbert,¹⁶⁷ and Garretson.¹²⁸ Frank Roe provided a skeptic's view of the "buffalo trail–highway link." 289, 290

† Bison bones were found at the Slim Lake Site, about a mile from the former site of Phillips' Ferry. These bones were radiocarbon dated to 330 ± 70 years B.P. (Before Present, or before the base year of 1950). Other archaeological remains at this site have been analyzed: they date from a time span that extends from 5140 ± 70 years B.P. to 5350 ± 70 years B.P. These earlier deposits include no evidence of bison.³¹³

‡ The earliest counts of bison in the region were made by Marquette and Jolliet in 1673, after they had descended the Mississippi River and ascended the Illinois River. Marquette reported seeing "a band of 400."³³⁵ Jolliet reported as many as 400 but usually groups of 30 to 40.³¹⁷ Hennepin reported "herds of two and even four hundred" after visiting the Illinois valley in 1679–80.¹⁵⁴ Perhaps the highest estimate is from Rasles, who wrote of herds of 4,000 and 5,000 bison in the Illinois Country in 1690–91.³³⁹

streamer would stop to pick up their barrels of ducks to be sold in the city. At this time, my reporter stated, ducks of many species and Canada Geese as well still nested in the marshlands on both sides of the river, while Canadas from farther north would sometimes winter there along the sand bars and in the sloughs, living on bark of the willows.¹⁴⁴

Mr. Hall added, "Although the marshland on the Missouri side in Lincoln and St. Charles Counties * had too high a farming potential to remain undrained, it was well after the turn of the century before the decline in waterfowl populations was considered serious."¹⁴⁴

1965: Martha A. Bentley

Wood-burning locomotives of the Chicago, Alton and St. Louis Railway ran through Brighton. During the financial panic of 1857, the tracks were blockaded by immigrant woodcutters who had not been paid for cordwood that they had supplied to the railroad company:

. . . immigrants got contracts to supply fuel, which they cut, hauled and stacked in long ranks alongside the tracks. The engines would stop just anywhere when they ran out of fuel, and the engineer and fireman would pitch on a supply. The farmers saw to it that the supply was there. The price was 75c a cord at the trackside. They also sold ties to the railroad company . . .³⁸

Another note about Brighton:

The first dandelion grown in this village was started by a few seeds sent to Mrs. W.W. Reed, at her request, from Keene, New Hampshire. She longed for the "greens" of her native state.³⁸

1969: April Allison Zawacki and Glenn Hausfater

Early Vegetation of the Illinois Valley is the title of a report from the Illinois Valley Archaeological Program by Zawacki and Hausfater. These two researchers analyzed the flora of a 14-mile-wide strip along the Illinois River, extending about 11 miles north and 10 miles south from the mouth of Apple Creek in Greene County. The following paragraphs are excerpted from the conclusions of this report:

The major objective of this study has been a qualitative, quantitative, and spatial analysis of potential plant foods characteristic of the lower Illinois River Valley during the early 19th century.

. . . Ecological studies by Turner (1930;³⁴⁹ 1931;³⁵⁰ 1934³⁵¹) combined with data from the logs and maps of the original U.S. Government Land Surveys . . . , enabled us to define ten plant associations. The geographic expres-

* Lincoln and St. Charles Counties, Missouri, border Calhoun and Jersey Counties in Illinois.

Madison county must once have been a paradise for the ornithologist.

— *Centennial History of Madison County* (1912).²³⁶

sion of these associations and their relationships to physiographic and hydrographic features are the basis for defining ten vegetation or vegetal resource zones.* The potential food-bearing plants of each zone are described in terms of several attributes relevant to interpretations of prehistoric subsistence-settlement practices. These attributes include: frequency of occurrence, season of availability, plant parts used, etc.

The second problem, that of determining to what degree the vegetation of the early 19th century was similar to that of the Woodland period,[†] was touched on briefly. This problem requires further investigation.

. . . Evidence was presented supporting the hypothesis that the vegetation of the 19th century was similar to that of the Woodland period.

Finally, it was suggested that the comparability of the historic and prehistoric floras could be determined by learning the nature and magnitude of climatic changes that would have resulted in specifiable changes in the early 19th century floral makeup of the lower Illinois Valley region as documented here.³⁸⁴

1972: Nancy B. Asch, Richard I. Ford, and David L. Asch

In *Paleoethnobotany of the Koster Site*, three scientists from the Illinois Valley Archaeological Program presented the results of investigations at the Koster Site[‡] in southwestern

* The following ten vegetal resource zones were identified: upland prairie; oak-hickory barrens; upland forest; limestone bluffs; hillside-talus slope; floodplain prairie; floodplain forest; floodplain lakes, ponds and sloughs; river shoreline; and islands.

† The Woodland Period has been delimited variously. A recently publication about the Big Rivers region states that the Woodland Period extended from about 500 B.C. to about 800 A.D.²⁴⁵

‡ This major archaeological site—on the farm of Mary and Theodore Koster—is described in a 1971 *Report of Investigations* from the Illinois State Museum:

Koster is an unusual site for several reasons. The midden deposits are deep and span a long period of time, bone and plant preservation is unusually good, and the various Archaic and Woodland components are well stratified. For these reasons, Koster offers the rare opportunity of observing culture change over a long period of time within a single site. Specifically, we should be able to trace the changing adaptations within the Archaic period as well as the transition from Archaic to Woodland periods.

. . . The multicomponent nature of this deep, well-stratified site, which allows clear delineation of each occupation; the excellent bone and plant preservation; and the large amounts of

Greene County. The researchers studied plant materials from buried Archaic horizons (extending from approximately 1000 B.C. to roughly 5000 B.C.). They concluded that the plants in Koster's ancient archaeological deposits are quite similar to the native vegetation of the area at present:

The similarity between the modern vegetation and that identified in the sample of wood charcoal from Koster is pronounced. Every category of wood identified in the archaeological sample is present in the modern flora of the area. The percentage distribution of the different wood charcoals could easily be duplicated today (or at least just prior to the major historic occupation) in a collection of firewood taken from the range of forest types near the site.

. . . Butternut (*Juglans cinerea*) is the only nut tree native to the lower Illinois Valley whose nut shells were not identified in the archaeological sample.¹²

A total of 230 ancient seeds were recovered from samples of earth taken from the Koster Site. These seeds comprise at least 20 genera or families. As noted in the report . . .

. . . every one of the 20 identified kinds of seeds could have grown in the disturbed soil of the prehistoric village or in the surrounding talus slope forest. These include plants which thrive on disturbed soil: *Iva* (marsh-elder), *Chenopodium* (goosefoot), *Polygonum* (smartweed), *Galium* (bedstraw), *Ambrosia* (ragweed), and *Phytolacca americana* (pokeweed).¹²

The conclusion of this study includes the following statement, which is consistent with the zoological findings of Frederick C. Hill (quoted in the next section):

Investigation of botanical remains from the Archaic occupation at Koster has given us a view of human adaptation to what appears to have been a relatively stable environment for a period of about 3000 years, beginning at 5000 B.C. Taking into account the sample sizes involved, there is almost complete replication of the wood charcoal, nut, and seed spectra from horizon to horizon. Nothing has been identified which would be out of place in the early historic floral composition of the area, and the charcoal percentages could easily be obtained today by gathering wood from all nearby vegetation zones. . . . evidence suggests that environmental conditions during Archaic times were rather like those prevailing now.¹²

1972: Frederick C. Hill

An archaeological dig during the summer of 1970 made a rare discovery along the Illinois River bluff in southwestern Greene County. The 7,000-year-old skeleton of a domestic dog was unearthed on the Koster farm in Woodville Township. The remains of at least 43

debris from at least six cultural horizons: All contribute to making Koster one of the more important sites in the midwestern region.¹⁶¹

other animals appear have been part of the refuse that was thrown into a pit to bury this dog. These associated animals comprise at least 23 species: 13 mussels, six fishes, one turtle, and three mammals.

In his report about this burial, Frederick C. Hill noted that the associated fishes are species typical of the streams and backwater lakes that once existed nearby. Most of the mussels are species typical of small to large rivers. The mammals (gray squirrel, eastern cottontail, and white-tailed deer) are representative of forest, brush, and edge habitats. Mr. Hill concluded, "It is . . . clear from the ecological requirements of the 43 animals found with the dog burial that the lower Illinois River Valley 7,000 years ago provided the same habitats to hunters that were available in the late 1800's before man's alteration of the valley." And ". . . the associated animal remains demonstrate that the ecological niches of the valley 7,000 years ago were not markedly different from those of the present."¹⁵⁶

1972: Paul W. Parmalee, Andreas A. Paloumpis, and Nancy Wilson

Staff from the Illinois State Museum studied bones and other animal remains that were recovered from the site of a former village along Apple Creek, north of Eldred in Greene County. People lived at the Apple Creek Site primarily during a 500-year period, extending from about 200 A.D. to 700 A.D. The following paragraphs are from the "Summary and Discussion" of the State Museum's report about these investigations:

A sample of mollusk and vertebrate remains totaling approximately 6,480 freshwater mussel valves, 248 snail shells and 105,640 bone pieces was recovered at the Apple Creek Site . . .

. . . On the basis of individual species identifications and by considering the total faunal complex as a whole, the following observations may be made:

1. Valves of freshwater mussels were common throughout the midden deposits, and the nearly 6,500 identified valves represented at least 35 species. These mollusks contributed an estimated 411 pounds of meat; numerous valves had been drilled, cut, and/or polished for use as pendants, spoons, scrapers, and the like. Most mussels were small stream forms.
2. Fish, as a group, probably contributed most of the supplemental meat for the daily food intake. Bones of bowfins, catfishes and suckers comprised most of the fish remains.
3. Turtles accounted for less than two percent of the total meat poundage; they may have been considered of more value for the manufacture of carapace bowls, cups and/or plates, than for food. Of the nine species recorded from Apple Creek, remains of the box turtles were the most numerous.
4. There were more species of birds represented in the sample (at least 34) than species of any other class of vertebrates, yet they contributed less than three percent of the total pounds of meat.

5. The majority of birds were aquatic or semiaquatic forms, and the numerous species of ducks and geese (combined) contributed over half of the pounds of meat obtained from birds.
6. The turkey was perhaps the singly most important bird taken by these people, not only as a food species but also because it provided the type of element most often fashioned into bone tools and other implements.
7. As a group, mammals (at least 25 species) were the most significant to these Woodland peoples * as a source of meat and by-products.
8. The white-tailed deer was singly the most valued animal; based on the faunal sample studied, approximately one-half of all meat (an estimated 24,700 pounds) obtained from the various species came from the deer. The majority of awls and other bone implements recovered at Apple Creek were fashioned from deer bone and/or antler.
9. With regard to the variety of smaller furbearers, raccoons, dogs, beaver, muskrats and cottontails provided most of the supplemental meat obtained from mammals other than the deer.
10. Dogs were apparently not uncommon in the Apple Creek village; some individuals were eaten, and at least six had been purposely buried.
- ... 11. The abundance of fish remains and species composition, and the predominance of aquatic and/or semiaquatic species of turtles, birds and mammals, reflect intensive hunting and utilization of varied water habitats, especially backwater sloughs and ponds.
12. There is some evidence, including deer skull sections with attached antlers and some with the antlers shed, to indicate that the Apple Creek village may have been occupied throughout the year.²⁴⁴

1978: Kenneth B. Farnsworth

The Foundation for Illinois Archeology conducted an intensive archaeological reconnaissance of the land surface at 28 sites on the banks of the Mississippi River between Grafton and Quincy in 1977. [†] The 28 areas extended 200 feet back from the riverbank and covered a total of 7.7 miles of shoreline. The archaeologists found no evidence of historic or prehistoric occupation on the surface or in thousands of shallow test pits at these sites, which covered an aggregate area of 190 acres. A 1976 survey of 8.8 miles of shoreline south of Quincy also revealed no archaeological sites.

* The Woodland culture existed for approximately 1300 years, beginning about 2500 years ago.

[†] The sites were on both the Missouri and Illinois shores as well as on islands.

Kenneth Farnsworth, who completed reports for both the 1976 and 1977 surveys, wrote, ". . . it can be strongly assumed that numerous settlements *were* established, throughout prehistory, in the interior floodplain and shoreline zones."¹¹¹ He concluded that sedimentation and shifting channels had buried or destroyed any evidence of past human occupation along the 16.5 miles of Mississippi River shoreline surveyed in 1976 and 1977. In contrast, archaeological surveys of the lower Illinois River shoreline have revealed an average of one site for every two miles of shoreline surveyed.

The tremendous difference in the number of archaeological sites bordering the two rivers is most likely a reflection of the relative stability of the channel of the lower Illinois River. Artifacts along the Mississippi River are apt to be deeply buried or washed away, but much of the archaeological debris on the banks of the Illinois River is bound to remain in place for a long time.

1979: Carlinville and Macoupin County Sesquicentennial

The Carlinville and Macoupin County Sesquicentennial Historic Committee produced *The Story of Macoupin County*. Several local residents contributed chapters to the book. In their history of Brushy Mound Township, Morrell and Melba Eichen described the landscape after people had begun to wholesale felling and clearing of timber:

The "cut over" land was an indescribable tangle of stumps, fallen trees, pawpaw and hazel thickets, grape vines and squirrel briars to tear the hands and vex the souls of the rugged farmer folk who were trying to plow it. . . . there were walnut stumps that were plowed around and sworn at for 20 years after the rich soil was stirred for the first time by a "jumping shovel" plow.¹⁰⁴

James Frank and Alfred Ruyle described Bullard Lake in Polk Township:

Bullard Lake, in section 20, has been referred to as Meyers Lake and before that as Halliday Lake.

. . . The lake is shallow and easily affected by prolonged drouth. In one dry period, believed to have been about 1911, a corn crop was grown in a part of the dry bed of the lake. It is not known to have been this dry ever again, but in the drouth of 1932, it dried over much of its area, and many people came to the lake to catch fish trapped in the shallow pools.

The low-lying lake was attractive to wildlife. For several years, individuals bought hunting and fishing rights around the lake from the owner . . .¹²³

Frank and Ruyle also described nearby Beaver Dam Lake:

At one time, Hurricane Creek flowed into the Macoupin Creek west of Beaver Dam Lake. Sometime in the past, probably during a flood, the creek cut a new channel and now empties into the Macoupin Creek northeast of Macoupin Station. Late in time, water flowed from a spring on each side of a point that stretches into the middle of Beaver Dam Lake from the north side. The water

from the spring on the east side of this point flowed towards the Hurricane Creek, and water from the west side towards the Macoupin Creek. Beavers built a dam across the stream flowing westward towards the Macoupin Creek and created a small shallow lake. In the early 1890's, eighteen influential men from Carlinville leased the grounds from the owner, Henry Brayford, and formed the Beaver Dam Lake Club. They spent \$2600 to build an earthen dam on each end of the lake, raising the water level to form a larger lake.¹²³

In her chapter about Barr Township, Velma Sonneborn stated, "Joe's Creek received its name from a circumstance related to a bear killing by Joseph Elliott and Joseph Hodges many years ago."³¹²

1989: Warren Howdeshell

The *History of the Carrollton, Illinois Area* has an article by Warren Howdeshell about Jim Morain, who ran a commercial fishing business on the Illinois River near Kampsville:

Jim Morain, aged Illinois River hermit who had not worn a pair of shoes for 28 years, had been fishing in one small stretch of the Illinois River since 1889. . . . regular catches of three hundred to a thousand pounds of marketable fish in his fifty nets were not unusual for a day.

. . . At one time, Jim had fifty nets in the river and employed several helpers. His daily catch was over 300 pounds, dependent upon river conditions. . . . one time he hauled in 14,000 pounds of buffalo in a single day. That sounds like a lot of fish, but the explanation is that in certain seasons of the year, especially during the winter, the fish school up and are easily caught.¹⁶²

In 1913 Mr. Morain sold a 110-pound catfish for \$2.50.

1994: John C. Nelson, Anjela Redmond, and Richard E. Sparks

The above three authors prepared a report titled "Impacts of Settlement on Floodplain Vegetation at the Confluence of the Illinois and Mississippi Rivers." The 8,371-acre study area embraced Calhoun Point and Swan Lake at the very tip of Calhoun County. Following is the abstract of this paper:

Government Land Office (GLO) survey records were used to reconstruct the presettlement floodplain landscape at the confluence of the Illinois and Mississippi rivers. Presettlement prairie and forest land covers were determined by digitizing GLO plat maps using a computerized geographic information system (GIS). A case history of land cover change was determined by comparing this presettlement map to GIS land cover maps for 1903, 1935, and 1975. Data from witness trees and current forest samples were used to compare presettlement and present forest composition and structure. Results indicate that approximately 56% of the presettlement floodplain was forested, while 41% was

These rocks, which have been given the name Paillissa, attain in several places heights of 130 to 140 feet above the river. Their walls are almost always rounded, and they often appear as a succession of pointed towers that from a distance might be taken for some old, redoubtable fortress. This shape piques the curiosity of the traveler, who is compelled to find a reason for the configuration's uniformity. Undulating hillocks surmount these rocks, sometimes rising thirty to forty feet above their summits. Some of these have massive, ancient trees; others are covered only with grass five or six feet high.

— Nicolas de Finiels, describing the bluffs bordering the Mississippi River in Madison and Jersey Counties in 1803.¹¹³

prairie. The presettlement forests were generally open (86.8 stems/ha)^{*} and consisted of several dominant tree species. In contrast, the present forest is more dense (489 stems/ha) and is dominated by silver maple (*Acer saccharinum*). Early settlement had little affect on the spatial distribution of forest cover, but river impoundment in 1938 reduced forests to approximately 35% of the floodplain. Prairies were converted to agriculture during the middle 1800s and now occupy only 6% of the floodplain.[†] Overall, the floodplain landscape and vegetation patterns present today are very different from their presettlement conditions. The major activities responsible for these changes were timber harvesting, agriculture, and river impoundment.²³²

This article has a brief but good discussion about the felling of trees along the riverbank in the early 1800s, especially to supply fuel for steamboats. This discussion is based principally on the notes of Federal land surveyors. For instance in 1826 a surveyor wrote regarding one point along his survey line, “Timber mostly all cut down near the river bank by the settlers living here, but find a black oak stump said to be the former bearing tree by the present settlers.”²³²

1996: Richard B. Brugam and Mary James Patterson

The *Transactions of the Illinois State Academy of Science* carries an article by the above-named authors, titled “Application of a Geographic Information System to Mapping Presettlement Vegetation in Southwestern Illinois.” This project analyzed the U.S. Public Land Survey’s field notes and township plats of Madison and St. Clair Counties. Here is the article’s abstract:

* Ha = hectare (2.47 acres).

† This acreage is not limited to native prairie vegetation. It includes other grasslands such as grassy road rights-of-way and former cropland.

Presettlement tree distributions from two Southwestern Illinois counties were compared with physiographic regions using maps created on MAPINFO, a Geographic Information System. The ecotone^{*} between the forests of the Mississippi Borderland bluffs and the Illinoian Till Plains[†] is clearly shown on the GIS maps. The ecotone follows a creek valley that divides the sharply dissected bluffs from the flat till plains. Fire intolerant taxa[‡] such as *Ulmus* spp., *Celtis* spp., *Populus deltoides*, *Acer negundo*, and *Fraxinus* spp.[¶] grew in the complex of wetlands nearest to the Mississippi River. The bluffs along the river had a moderately fire tolerant forest of *Quercus alba*, *Q. velutina/Q. rubra*, and *Carya* spp.[§] The Illinoian-aged till plains of the eastern part of the study area supported a mixture of prairie, *Quercus palustris*, and *Q. stellata*^{**} on soils that were occasionally waterlogged.[¶]

1997: John C. Nelson, Larry Robinson, Lynne DeHaan, and Mel Bower

The Upper Mississippi River Long Term Resource Monitoring Program of the U.S. Geological Survey issued a *Project Status Report* in June of 1997, titled, "Using Historical Data to Evaluate the Ecological Integrity of the Upper Mississippi River System." The project examined the vegetation of the bottomlands and adjacent uplands along the Mississippi River and the lowermost Illinois River in Jersey and Calhoun Counties. Following are two excerpts from this report:

Almost 200 years of modern human activity has dramatically changed the floodplain ecosystem of the Upper Mississippi River System (UMRS). We have no actual picture of what the UMRS and its floodplain looked like before major settlement of the region, but history and science can create a reasonably accurate picture for us. Combining pre-steamboat era records of the U.S. General Land Office (GLO) surveys with the technology of geographic information systems (GIS), researchers of the Long Term Resource Monitoring Program have produced pictures of what selected reaches of the floodplain looked like 200 or more years ago. The pictures help us understand the landscape and plant community characteristics that made the UMRS so biologically rich and help determine how much change has taken place.

* An ecotone is a boundary or transition between adjacent ecological communities.

† This till plain is a relatively level upland region.

‡ A taxon (plural *taxa*) is a unit of classification, in this case a species or a genus.

¶ *Ulmus* spp. = elm species; *Celtis* spp. = hackberry species; *Populus deltoides* = eastern cottonwood; *Acer negundo* = box elder; *Fraxinus* spp. = ash species.

§ *Quercus alba* = white oak; *Q. velutina* = black oak; *Q. rubra* = red oak; *Carya* spp. = hickory species.

** *Quercus palustris* = pin oak; *Q. stellata* = post oak.

. . . According to GLO surveys performed in 1816, prairie communities dominated the floodplain along Mississippi River Reaches 25 and 26 * This finding contradicts many other small-scale presettlement maps that indicate forest as the dominant vegetation type along most rivers within the prairie peninsula. † While the GLO surveyors did not identify any of the prairie plants they encountered, they did apply the terms “wet” and “dry” to their descriptions of the prairies. Some groves of timber were also recorded in field notes within the predominantly open floodplain prairies. The distances measured to witness trees indicate these groves had the appearance of savanna and woodland communities. Ecologists studying presettlement vegetation patterns in the uplands of the midwest have long attributed the development and maintenance of prairies, oak savannas, and oak woodlands to disturbance by fire. On the floodplain in 1816, pin oak was the dominant tree species, followed by elm, cottonwood, hackberry, silver maple, white oak, and hickory. The dominance of prairie and the high importance of oak and hickory during the presettlement may indicate that fires swept down from the uplands and onto and across the floodplain. In contrast, dense forest communities dominated the islands and other low-lying areas where flooding was presumably the primary disturbance mechanism.²³³

1998: John C. Nelson and Richard E. Sparks

In an article titled “Forest Compositional Change at the Confluence of the Illinois and Mississippi Rivers,” John Nelson and Richard Sparks presented the results of their study of Calhoun Point, a 2,200-acre area at the juncture of the Illinois and Mississippi Rivers. The abstract of their report states,

Historic and current forest survey data were used to chronicle forest compositional change at a study site located between the Illinois and Mississippi rivers. Tree species importance values (IV)[‡] indicate silver maple (*Acer saccharinum* L.) was a co-dominant species in 1817 (IV = 16.1). However, by the time another forest survey was conducted just prior to river impoundment in 1938, silver maple had already become the most dominant species (IV = 84.7).

* Mississippi River Reaches 25 and 26 extend from Lock and Dam 26 at Alton to Lock and Dam 24 at Clarksville, Missouri, which is opposite the northwest corner of Calhoun County.

† The Prairie Peninsula is the region where tall-grass prairie extended eastward across the Mississippi River as a broad wedge of grassland in a landscape that was otherwise predominantly wooded. The Prairie Peninsula covers much of Illinois, southern Wisconsin, and western Indiana, with outliers of former prairie farther east and south.

‡ An *importance value* is a forest ecologist’s measure of the importance of a tree species relative to other tree species in a wooded area. This measurement is based on the size and density of trees of each species. If the trees of a certain species are large or abundant, the species has a high importance value. This index of dominance and density is calculated so that the sum of importance values for all species in an area adds up to 200.

Silver maple also increased in IV during the decades following river impoundment (IV = 98.2) and again following the great flood of 1993 (IV = 110.0). The very successful growth and establishment of silver maple since the arrival of early Euro-American settlers is a strong indication that humans have altered one or more of the key natural processes that once favored a more biologically rich forest community. The diversion of Lake Michigan water into the Illinois River valley in the early 1900s and river impoundment in 1938 have probably favored more water tolerant species such as silver maple. Likewise, fire was an important disturbance mechanism affecting some presettlement floodplain plant communities, but today fire is a rare occurrence along the Illinois and Mississippi rivers. Silver maple dominance will likely continue well into the 21st century unless flooding and fire regimes are used to promote a more diverse plant community.²³⁴

Under the heading “Presettlement Forest Community”:

According to survey records of the General Land Office (GLO), the presettlement forest composition at Calhoun Point can be described as a mixture of several codominant taxa Hackberry (*Celtis occidentalis*) had the highest IV at 30.4, followed by pecan (*Carya illinoensis*) at 30.0, American elm (*Ulmus americana*) at 22.1, willow (*Salix* spp.) at 20.7, cottonwood (*Populus deltoides*) at 20.4, silver maple at 16.1, pin oak (*Quercus palustris*) at 11.5, and other oaks at 10.8. Plat maps and tree density estimates indicate that prairie, savanna and open woodland communities were also common to the presettlement floodplains of the lower Illinois River valley (Turner, 1934; ³⁵¹ Zawacki and Hausfater, 1969; ³⁸⁴ Nelson, et al., 1994 ²³²). Fire has long been recognized as an important disturbance mechanism affecting prairies, savannas, and open woodlands throughout the uplands of the midwest. Fire, however, is not generally considered to have been important along large river floodplains because conditions were presumably too wet. We speculate that fire was an important disturbance mechanism affecting presettlement plant communities along the floodplains of the lower Illinois River valley—particularly on the higher elevation sites. We have no reason to believe that fires moving across upland landscapes would be easily extinguished upon arriving at the edge of the Mississippi and Illinois river floodplains. This would be especially true during periods of drought when the floodplains became extremely dry and susceptible to fire. Conversely, flood regime was probably the principal disturbance mechanism affecting plant communities on the lower elevations.²³⁴

On the Illinois side, we now behold a range of tall bluffs, rising perpendicularly from the water's edge, to the height of from one to two hundred feet, and faced with a solid bed of limestone. . . . After passing a few miles further, these vertical declivities are no longer presented to the eye. We now see the chrystal stream beating against a bank of gravel, from which the shores rise with a gradual slope.

. . . The prairie, for the most part, extends to the water, and no pen can describe the singular and captivating effect of such scenery. Imagine a stream of a mile in width, whose waters are as transparent as those of the mountain spring, flowing over beds of rock or gravel. Fancy the prairie commencing at the water's edge—a natural meadow covered with grass and flowers, rising with a gentle slope, for miles, so that in the vast panorama, thousands of acres are exposed to the eye.

. . . The timber is scattered in groves and strips, the whole country being one vast illimitable prairie, ornamented by small collections of trees. Sometimes the woodland extends along the river for several miles continuously—sometimes it is seen stretching in a wide belt far off into the country, and marking the course of some tributary stream and sometimes in vast groves, of several miles in extent, standing alone like islands, in this wilderness of grass and flowers. But more often we see the single tree without a companion near, or the little clump composed of a few dozen oaks or elms; and not unfrequently, hundreds of acres embellished with a kind of open woodland, and exhibiting the appearance of a splendid park, decorated with skill and care by the hand of taste. Here we behold the beautiful lawn enriched with flowers, and studded with trees, which are so dispersed about as not to intercept the prospect—standing singly, so as not to shade the ground, and occasionally collected in clusters, while now and then the shade deepens into the gloom of the forest, or opens into long vistas and spacious plains, destitute of tree or shrub.

We doubt whether there can be found, on the globe, a tract of country to compare with this.

— James Hall's Notes on Illinois, portraying the view from the Mississippi River above the mouth of the Illinois River in 1830.¹⁴¹

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