

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Papers in Ornithology

Papers in the Biological Sciences

---

April 2004

## In Explorers' Footsteps: You can find nearly all the birds documented by Lewis and Clark in great refuges on the Great Plains

Paul A. Johnsgard

University of Nebraska-Lincoln, pajohnsgard@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/biosciornithology>



Part of the [Ornithology Commons](#)

---

Johnsgard, Paul A., "In Explorers' Footsteps: You can find nearly all the birds documented by Lewis and Clark in great refuges on the Great Plains" (2004). *Papers in Ornithology*. 2.

<https://digitalcommons.unl.edu/biosciornithology/2>

This Article is brought to you for free and open access by the Papers in the Biological Sciences at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Papers in Ornithology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



---



## BIRDING HOTSPOTS

# IN EXPLORERS' FOOTSTEPS

*You can find nearly all the birds documented by Lewis and Clark  
in great refuges on the Great Plains*

by Paul A. Johnsgard

**T**wo hundred years ago this May, Meriwether Lewis and William Clark, together with the three dozen army volunteers and hired hunter-interpreters who made up the Corps of Discovery, departed their winter camp at the mouth of the Missouri River, north of St. Louis, Missouri, and set out to make history.

President Thomas Jefferson had charged them with the monumental task of exploring the unknown lands of the Louisiana Territory, purchased from France the year before, and trying to find a navigable route to the Pacific Ocean via the Missouri River. The explorers were also asked to make extensive geological, geographic, anthropological, and biological observations. Their biological duties included the collection of both plant and animal materials, with special consideration to the discovery of possibly medicinally important plants and economically valuable animals. Congress had granted Lewis a budget of less than \$3,000, perhaps the equivalent of half a million dollars in modern currency. Today, such a scientific venture would represent a research project involving hundreds of scientists and costing taxpayers hundreds of millions of dollars.

After breaking winter camp, the group took five weeks to travel 300 miles to the mouth of the Kansas River, the future site of Kansas City. By then, they were in true wilderness and began to see many unfamiliar birds and mammals. Through the summer they gradually worked northward, and in late October they reached what is now western North Dakota. There they built Fort Mandan and prepared to endure a long winter prior to heading farther upstream, and farther west, in 1805.

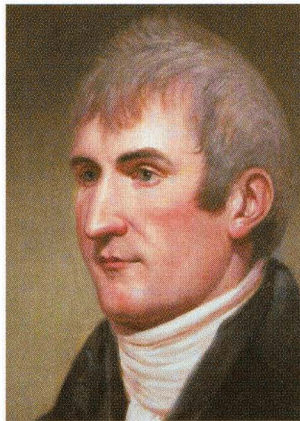
The five-month, 2,000-mile trip made by the Corps of Discovery in 1804 can now be made in a car in only a few days. Very few stretches of the middle Missouri River even remotely approach the ecological conditions

**Stars of an annual drama on the Great Plains, male Greater Prairie-Chickens fight during the spring mating season. Lewis and Clark observed the birds on their trip up the Missouri.**

that it exhibited two centuries ago, yet nearly all the birds and mammals that Lewis and Clark documented in 1804 still exist. The Carolina Parakeet and the Passenger Pigeon, seen later during the expedition in present-day Montana but now extinct, are the sad exceptions. Many refuges, state parks, and historic sites provide birding opportunities to tourists wanting to trace the explorers' steps two centuries later.

Between the mouth of the Missouri River and the site of Fort Mandan, there are now several national wildlife refuges directly along the river route, including Squaw Creek, DeSoto, Pocasse, and Audubon. Both Pocasse and Audubon are located around sub-impoundments of enormous flood-control reservoirs, while DeSoto is the isolated remnant of an oxbow lake that was once part of the Missouri's historic channel. Of this group, the only refuge that might look something like what Lewis and Clark observed is thus Squaw Creek, located near Mound City, Missouri.

The refuge is the afterthought stepchild of extensive river channel straightening and river deepening and associated "land-reclamation" efforts. These activities by federal agencies eliminated most of the Missouri's natural floodplain wetlands during the 1900s, but their destructive efforts are now being slowly reversed. A few of the Missouri River's historic floodplain wetlands have been partially re-established, through a system of dikes and diversions from creek-fed water sources. As such, the refuge probably approaches in its present-day appearance the pristine middle-Missouri environment as described by Lewis and Clark. Additionally, it lies at the base of a long ridge of tall hills that extend north to northern Iowa. These are the so-called "bald-



pated hills" that were formed from wind-blown silt and were described by the explorers. Here dense oak-hickory woodlands are interspersed with remnants of tallgrass prairies along their southern slopes and crests.

Because of Squaw Creek's unusually high habitat diversity, the 7,350-acre refuge has a very large bird list (273 species, plus 36 that visit only accidentally), and it boasts one of the largest wintering concentrations of Bald Eagles in the lower 48 states. There are also at least 31 species of wild mammals, including several that Lewis and Clark encountered along the middle Missouri Valley (coyote, beaver, badger, white-tailed deer). Eastern forest birds such as Whip-poor-wills, Carolina Parakeets, and Ruffed Grouse all occurred in this general area in the time of the explorers, and they documented them. The parakeets are long extinct, having last been seen in Missouri in 1905, but

efforts have been made to restore the extirpated Ruffed Grouse in nearby Nodaway County. The Whip-poor-will has thrived and, like the similar Chuck-will's-widow, has gradually expanded its range north into Nebraska and Iowa along the Missouri drainage.

**T**he bird checklist of DeSoto National Wildlife Refuge, near Missouri Valley, Iowa, includes 240 species plus 11 accidentals. Like Squaw Creek, it is an Important Bird Area, famous for its enormous fall congregations of Snow Geese, which sometimes exceed half a million birds during late October or early November. Lewis and Clark passed through this region earlier, in mid-summer, and judging from their accounts saw no Snow

**"With respect to the exertions and services rendered by this estimable man," Meriwether Lewis (top) wrote about William Clark (bottom), "I cannot say too much."**



Geese, but they may have encountered half a million or more mosquitoes. Wood Ducks, referred to as the “summer duck” in Lewis’s writings, were then commonly seen along this stretch of the river, as were Canada Geese.

South Dakota’s Pocasse National Wildlife Refuge, near Pollock, South Dakota, lacks a bird list, but there is one (of 263 species) for the nearby Sand Lake refuge. The Karl E. Mundt and Lake Andes National Wildlife Refuge Complex (213 species) is located downstream from the Army Corps of Engineers’ Fort Randall Dam. The 780-acre Karl E. Mundt refuge, America’s first national Bald Eagle sanctuary, comprises mostly lowland deciduous forest directly below the dam. The Lake Andes refuge is located around the marshy perimeter of Lake Andes, a nearby floodplain lake. The Lake Andes refuge has enough remaining native prairie to support

**“The scenery already rich, pleasing and beautiful was still further heightened by immense herds of Buffaloe,” noted Lewis and Clark. The Black-billed Magpie, American White Pelican, and Nelson’s Sharp-tailed Sparrow can still be found along the explorers’ 1804 route.**

Sharp-tailed Grouse and Greater Prairie-Chickens, both of which were mentioned (and eaten) by Lewis and Clark. It also has good numbers of summering but non-breeding American White Pelicans, which Lewis and Clark encountered by the thousands not far downstream in what is now Nebraska. There they shot a specimen and determined that its pouch could hold five gallons of water!

In central North Dakota near Bismarck, 14,739-acre Audubon National Wildlife Refuge has a checklist of 239 bird species and 37 mammals, some of which were discovered by Lewis and Clark, including the pronghorn and



Jay Smith

## How to Get There

**Squaw Creek National Wildlife Refuge** is located northwest of St. Joseph, in northwestern Missouri. To get there, drive north from St. Joseph on Interstate 29 to exit 79, then go west 2.5 miles on US Route 159.

**DeSoto National Wildlife Refuge** is north of Council Bluffs, in southwest Iowa. From Council Bluffs, drive north 25 miles on Interstate 29 to the Missouri Valley exit, then go west 5 miles on US Route 30.

**Lake Andes National Wildlife Refuge Complex** in southeastern South Dakota consists of the Lake Andes and Karl E. Mundt refuges and the Lake Andes Wetland Management District. To get to refuge headquarters from Ravinia, drive 2 miles north on the county gravel road and 1.5 miles east. From Lake Andes, travel north half a mile, then east 3.5 miles on a hard-surfaced county road, crossing Lake Andes.

**Cross Ranch State Park and Nature Preserve** is 12 miles southeast of Hensler, North Dakota, via paved roads, or 6

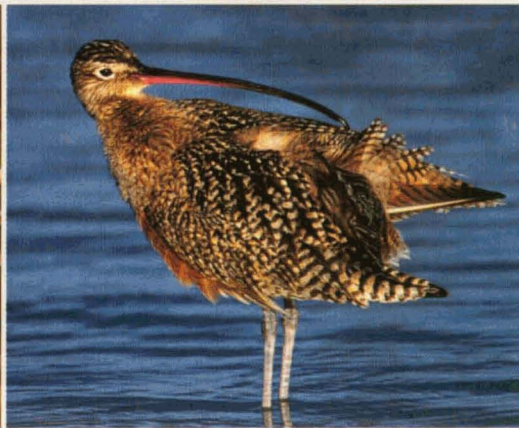
miles by gravel. For paved access roads, follow the brown park signs located on Highway 200 or Highway 25.

**Audubon National Wildlife Refuge** is between Minot and Bismarck, North Dakota. To get there, drive south from Minot 46 miles on US Route 83, then turn east at the refuge sign.

**Knife River Indian Villages National Historical Site** is one hour northwest of Bismarck, North Dakota. To get there from Stanton, drive half a mile north on County Road 37.

**Lake Ilo National Wildlife Refuge** is located north of Dickinson, in western North Dakota. Drive north 32 miles from Dickinson on State Route 22, then go east 5.5 miles on State Route 200.

**Lostwood National Wildlife Refuge** is located northwest of Minot, North Dakota. Drive northwest from Minot on US Route 52, then go west on US Route 2 to Stanley. From Stanley, drive north 21 miles on State Highway 8.



white-tailed jackrabbit. Bird lists are also available for the Knife River Indian Villages National Historical Site (212 bird species) and for Cross Ranch State Park and Nature Preserve (147 species). Both the historical site and the park are located along the Missouri River and are close to the Corps of Discovery's wintering site at Fort Mandan, which was built about eight miles below the mouth of the Knife River.

One day Lewis found a live Common Poorwill that was apparently in a comatose, near-hibernating state. He thereby not only discovered the species but also became the first person to observe this dormancy condition, nearly unique among North American birds. While in North Dakota, Lewis and Clark saw large white cranes that must have been Whooping Cranes. The Whooping Crane was eliminated from its

Lewis noted that the pronghorn, pictured above with a Bobolink, LeConte's Sparrow, and Long-billed Curlew, was "extremely shy and watchfull."

upper Missouri River breeding areas in the late 1800s and is now seen only as a rare migrant in North Dakota. The Long-billed Curlew, once common along the Missouri Valley and called the "brown curloo" by members of the expedition, is now limited as a breeder mostly to the southwestern corner of the state. The Bald Eagle was a common nester from Fort Mandan upstream to present-day Montana but was virtually extirpated from North Dakota within a century, as was the Common Raven.

The Knife River Indian Village National Historical Site preserves the location of the Mandan and Hidatsa villages where Lewis and Clark acquired the services of Touissaint Charbonneau and his Shoshone wife Sacagawea. (Sakakawea is the preferred Hidatsa-based



spelling in North Dakota.) Along the prairie-lined nature trail leading to the now-vanished earth lodges, Bobolinks perform spring territorial song-flights, and Clay-colored Sparrows buzz constantly from buffaloberry thickets. To stand where there had been hundreds of earth lodges and a thriving Native American community of about 4,000 people only two centuries ago, but which have now completely vanished, gave me a rather uncomfortable feeling about the transience of life and cultures.

**N**ot far west of the overwintering area is 4,032-acre Lake Ilo National Wildlife Refuge, where as at Lostwood National Wildlife Refuge to the north of the Missouri, many mixed-grass prairie birds and mammals can be seen. Of the two refuges, Lostwood, an Important Bird Area, is substantially larger (26,904 acres) and contains beautiful glacial till uplands sprinkled with hundreds

**Snow Geese settle in for the night as the sun sets over Squaw Creek National Wildlife Refuge in Missouri.**

of small wetlands. Both refuges support such wonderful northern prairie birds as Baird's, LeConte's, and Sharp-tailed Sparrows, Sprague's Pipit, and Marbled Godwits. At least one of these refuges should be visited.

To get a flavor of North Dakota's semi-wilderness, you can do no better than to camp at Cross Ranch State Park. It is possible to pitch your tent or rent a log cabin only a hundred yards or less from the Missouri River, and only a dozen miles or so from the explorers' wintering site. There, under massive cottonwood trees that tower overhead, you can fall asleep while listening to the ageless voice of the river, supplemented by the voices of wild Canada Geese, Common Nighthawks, and Great Horned Owls — all nocturnal sounds that were certainly familiar to Lewis and Clark.





With luck, you might also detect the yipping of coyotes or perhaps even imagine hearing the sounds of the hundreds of bison on the nearby Cross Ranch Nature Preserve.

I stayed at the John Colter cabin, where I discovered not only a wonderful wall hanging with original Lewis and Clark designs, but also a bookshelf of Lewis and Clark references. I found reprints of 1804 journals from the expedition, as well as a book on John Colter, a member of the expedition who later became famous as the mountain man who discovered the Yellowstone geyser basin. It is hard to imagine a better way to relive the 1804 exploration phase of America's first great team of field naturalists. I got up early one morning to watch the moon set and the sun rise, and to listen to the dawn serenade of Baltimore Orioles, House Wrens, and Least Flycatchers. It could have been 1804 all over again.

If you make this trip, you should take the time to spend some evening or early morning hours meditating alone beside the river — not so much bird-watching as letting yourself become lost in the majesty of the place and in the knowledge that a group of brave explorers risked their lives on a daily basis for more than two years 200 years ago. Their simple belief was that ours was a land worth exploring, and explore it they did for the future benefit of untold generations of Americans. We remain in their debt even today. ♣

*Paul A. Johnsgard is the Foundation Professor Emeritus of the School of Biological Sciences at the University of Nebraska-Lincoln and the author of 45 books, including Lewis & Clark on the Great Plains: A Natural History (University of Nebraska Press, 2003). His review of the Sibley Field Guide to Birds appeared in the December 2003 issue of Birder's World.*