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Lawrence G. Dorothy
Western Michigan University

Elizabeth B. Garland
Western Michigan University

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THE PORTAGE RIVER ARCHAEOLOGICAL SURVEY,
ST. JOSEPH COUNTY, MICHIGAN

#8

Lawrence G. Dorothy

Elizabeth B. Garland

Department of Anthropology
Western Michigan University

June, 1981

ABSTRACT

A 20-day field/informant type of archaeological survey was performed on a 13 section corridor in Park and Mendon townships in St. Joseph County and section 32 of Brady Township in Kalamazoo County, Michigan. This survey universe bordered on portions of the Portage River and its tributaries and along the shores of Portage and Fishers lakes. Twenty-nine prehistoric human occupation sites were located, described and recorded during the survey, five of which had been previously known (four unrecorded). Many of the sites were multicomponent but the majority of components are believed to represent Archaic period cultural manifestations. About 300 recognizable artifacts from these sites were cataloged and briefly described. This survey laid important ground for future archaeological investigation in this relatively unknown area of Michigan.

ACKNOWLEDGEMENTS

This project has been funded, in part, through a grant from the U.S. Department of Interior, Heritage Conservation and Recreation Service (under provisions of the National Historic Preservation Act of 1966), through the Michigan Department of State. Matching funds and services have been provided by Western Michigan University, the Project Director, Dr. Elizabeth Garland, and the Field Supervisor, Mr. Lawrence Dorothy. Field crew members Katie Parachini, Diane Goff and Michael Cohen are to be commended for the fine field research they performed under sometimes trying circumstances (tall corn, summer heat, deer and black flies and an occasional tornado). Members of the Kalamazoo Chapter of the Michigan Archaeological Society also contributed toward the results described herein, both with field work and archival research. Our thanks are also extended to Sue Gibson for typing the final report.

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SECTION I. THE SURVEY PROJECT; PURPOSE AND SCOPE

The Portage River archaeological survey of St. Joseph County, Michigan was conceived as a result of initial exploration outside the boundaries of a Kalamazoo River Basin survey conducted by the Western Michigan University archaeological field school in 1973, under the direction of E. Garland. The 1973 survey was an informant type survey which located sites both by field survey and by contacting collectors who directed us to sites known to them. It was one of these referrals which led us to sites in the Portage River drainage immediately to the south of the Kalamazoo, and subsequently to an awareness of the importance of this area. From the number, size and contents of collections of prehistoric material coming from this area, it was believed to be a significant key to the understanding of prehistoric cultural events in the whole southwestern Michigan region.

A valuable first step toward gaining this understanding would be an initial expansion of our previous contacts in the area and a fairly intensive field survey of a limited area of land on which, our previous efforts had led us to believe, prehistoric activity had been focussed. A straightforward attempt to locate and record all the sites in this small area would then provide a springboard for future, more detailed archaeological investigation. We established a survey universe of 12 sections for our crew of 4 people and 20 days in the field. This was rather an ambitious goal considering that meetings with informants, photographing collections, washing, labelling and cataloging of artifacts, etc. would also have to be squeezed into this time period. As a cost-effective measure, it was decided to limit the survey to areas of good visibility, which ruled out densely forested areas, low-lying swamps and fields planted to hay, wheat, oats or other dense-cover crops. No sub-surface testing was conducted. However, since in this area, probably 90%

of the land is cultivated and some 75% of that land is planted to row crops such as corn and soybeans, our actual ground coverage was approximately two-thirds of the total land area. Field work was conducted from June 30 through July 25, 1980.

We set a goal of 12 sections of land in a corridor extending along the Portage River from the Kalamazoo County line south around the shores of Portage Lake and on south to Fishers Lake. These were sections 4, 5, 6, 7, 8, 18 and 19 in Mendon township and sections 23, 24, 25, 26, and 27 in Park township, St. Joseph County (Map 1). Explorations beyond the boundaries of this universe would be carried out as time permitted and leads developed.

Fields were walked with crew members spaced roughly 10 feet or 3 or 4 corn rows apart. These distances were adjusted as conditions (height of corn, weedi-ness, etc.) varied. All site locations, topography, soil types, artifacts, etc. would be recorded on standard site report forms developed by the Department of Anthropology, Western Michigan University, where all such records and materials are stored. All crew members kept a daily journal which proved useful in report writing.

SECTION II. THE ENVIRONMENTAL SETTING

The St. Joseph River rises in Hillsdale County, flows north into and then south out of Calhoun County, crosses Branch County, cuts diagonally across St. Joseph County, crosses the southeast corner of Cass County into Indiana, and swings back north across Berrien County where it enters Lake Michigan at St. Joseph. The Portage River, one of the principal tributaries of the St. Joseph, rises in Kalamazoo County only a short distance south of the Kalamazoo River. The Portage River and its branches, principally Portage Creek, Little Portage River, and Brown Creek, connect a number of lakes and drain most of

southern Kalamazoo and northern St. Joseph counties. The survey area, as later extended to include accessible portions of section 34, Mendon township, and section 32 of Brady township in Kalamazoo County, covers a strip of land roughly 8 miles long. It extends along the Portage River from north of Portage Lake to south of Fishers Lake about 3 miles north of the Portage's confluence with the St. Joseph River (Map 1).

The Portage River occupies a former glacial spillway (Martin 1955) and in this area is a shallow, slow-moving stream, falling only 12 feet in a distance of 8 miles. It varies from about 20 to 40 feet in width and from 2 to 4 feet in depth. The low marshy banks in most places are covered with wetland vegetation, small trees and underbrush. The land on both sides of the stream rises in gentle slopes, sometimes topped by sandy ridges and knolls. Elevation overall varies only slightly, with a range between 850 feet above sea level in the north and 820 feet A.S.L. in the south. Portage Lake surface is 826 feet A.S.L. and Fishers Lake surface is 814 feet A.S.L.

Soils above the marshes and streams are usually in the Oshtemo or Spinks series (U.S. Soil Conservation Service Maps) and can be described generally as well-drained soils with a dark grey sandy loam surface layer 10 inches or so thick, underlain by a subsoil layer of clay loam. Stratified sand and gravel occurs at a depth of 4 to 5 feet. These soils have formed on glacial moraines, till plains, and outwash plains. The soil is fertile but the climate is apt at times to be droughty and crops benefit from irrigation in this area. Most of the land is cleared and planted to crops of corn, soybeans, wheat, oats and hay.

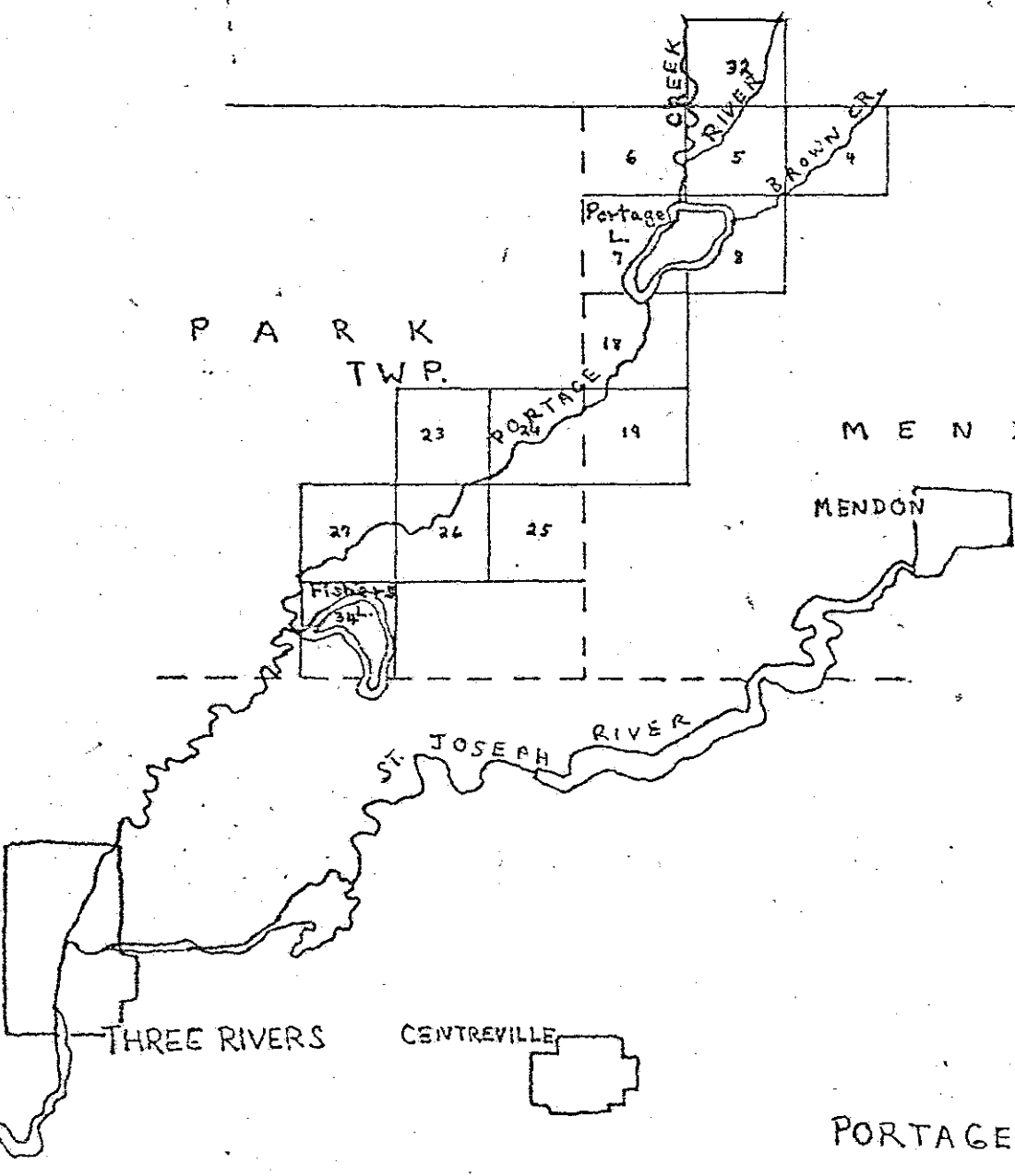
Southwestern Michigan is in the Carolinian biotic province as envisioned by Dice (1943) and Cleland (1966) but in the area under discussion certain sections may be more Illinoian in character, since "oak openings" and rich prairie land penetrates into the area, making it unique to Michigan. Presettlement

BRADY
TWP

KALAMAZOO CO.
ST. JOSEPH CO.

PARK
TWP.

MENDON
TWP.



PORTAGE RIVER SURVEY
1980

Map 1

forests of the Carolinian biotic province are classified as being of the oak-hickory types. Present varieties include these as well as sugar maple, beech, walnut, butternut, elm and sycamore.

SECTION III. HISTORICAL BACKGROUND

Although this survey concentrated primarily on prehistoric archaeological sites, some knowledge of historically recorded events in the area is useful to persons working here. Most of what we repeat here was extracted from various early historical accounts and diaries of early settlers. Tradition says that Father Hennepin, a companion of La Salle, in 1679 explored the St. Joseph River as far from the mouth as where the village of Mendon now stands. From that date forward the Indians of St. Joseph County were exposed to white men of various nationalities and persuasions: traders, missionaries, squatters, settlers and farmers. The first white settlers came to the Park-Mendon area in the early 1830s, initially locating on what was then part of the Notawaseepe Indian Reservation. This reservation covered all of Mendon township and all but the western 2 miles of Park township as well as sections of Kalamazoo County to the north. This reservation was created by treaties between the United States and the Ottawa, Chippewa and Potawatomi Indian tribes, signed at Chicago in 1821 and 1827, and finally ceded to the U.S. in September 1833 (Royce 1899).

The first white families built log huts among the dense oak groves and open parkland. The northern parts of the area were covered with heavy growths of oak, walnut, whitewood, ash, sycamore, elm and maple trees. The southern parts were penetrated by sections of the 2,000 acre Nottawa prairie which extended up from the south. Game was plentiful, one early settler reporting killing 105 deer and 3 bear his first year in residence. Toward the middle of

the century the log homes gave way to spacious brick and frame houses as materials became available. Saw mills, grist and woolen mills were built in the villages.

Several homes of this mid-century period still stand in Park and Mendon townships and should be recorded by the State if they are not already so noted. Regrettably, the Portage River survey lacked the time, personnel and funds to accomplish this.

SECTION IV. HISTORY OF PREVIOUS ARCHAEOLOGICAL RESEARCH IN THE AREA

Hinsdale's (1931) maps show three Indian villages located on Fishers Lake and two villages and a cemetery on Portage Lake. Attempts were made to locate these sites as well as mounds and enclosures mentioned in early historical accounts. Although some PRS sites do occur in general areas indicated by Hinsdale, no positive identification of his sites could be established.

A check of the State site files at the Michigan History Division and the University of Michigan indicated only one previously recorded site within our projected survey area: 20SJ19, Mendon Twp., Sec. 5; "Village or camp 15 feet above the river." This is our Haas II site, PRS-20.

Although it lies east of our survey area in section 23 of Mendon township we also visited 20SJ9 (PRS-29), the Coomer site (Drumm 1974), since Mr. Drumm informed us that he had additional information and had extended the original boundaries of the site.

Marantette (20SJ1), the Goodall Focus mound (Quimby 1941), although outside our survey area, was reported in Mendon township, and an effort was made to relocate it. We talked to Maurice Marantette, who informed us that the

mound no longer existed, having stood in their barnyard about where a grain storage building now stands. The Marantette home and farm is situated on the south bank of the St. Joseph River, across the river from the village of Mendon.

The only known previous archaeological work done in the survey area, as far as is known, has been done by members of the Kalamazoo Chapter of the Michigan Archaeological Society and by Western Michigan University crews, most of which is included in the following site descriptions.

SECTION V. DESCRIPTIONS OF PORTAGE RIVER SURVEY SITES

Eight of the sites listed here were located beyond the limits of the original projected survey universe, and were discovered as a result of expansion of our survey boundaries as time and leads presented themselves. Five of the sites listed were previously known to us, one of which already carries a State site number (20SJ9). All the sites were physically surveyed except PRS-10, which is represented by a collection important enough, in our opinion, to be assigned a site number and description. In future, we hope to be able to demonstrate this importance with a field survey.

PRS-1 (Berghuis), 20SJ23

Mendon twp., SW $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 4, T5S, R10W, Leonidas Quad. USGS.
 Owner: Ray Berghuis. Site is located in a cultivated field which slopes gently south to Brown Creek. Elevation is about 845 feet A.S.L. Soil is Oshtemo sandy loam. The owner-informant states that the site has been collected for years by friends and relatives, but no collection as such exists that he is aware of. The survey crew found only a light scatter of lithic debitage and one small thumbnail scraper. No ceramics were found. Very little fire-cracked rock was in evidence. Temporal placement was not attempted. In

view of the long cultivation and collection on this site, the value of future investigation is considered low.

PRS-2 (Haas I), 20SJ24

Mendon twp., SE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 4, T5S, R10W, Leonidas Quad. USGS.

Owner: Harold Haas. Site is located in a cultivated field a few rods north of Brown Creek at about 850 feet A.S.L. Soil is Oshtemo sandy loam. Site has undetermined limits, but an area approximately 200 x 200 m has a fairly thin scatter of FCR and lithic debitage over it. Found were one large bifacially chipped piece of chert; a hafted scraper of grey-tan chert; the tip of a finely worked drill or narrow projectile point of fine-grained almost translucent white flint; and lithic debitage. No ceramics were found. No temporally diagnostic artifacts were found although the material, shapes and sizes of the pieces are suggestive of Archaic material. Mr. Haas has other Archaic material from this site. Further investigation of this site and the general area along the north side of Brown Creek is warranted.

PRS-3 (Grubka), 20SJ25

Mendon twp., NW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 5, T5S, R10W, Vicksburg Quad. USGS.

Owner: Howard Grubka. This site has been known to us for some time, having been intermittently surface-collected by the Kalamazoo Chapter of the M.A.S. Some sub-surface testing has also been done by KVAS and by a crew from WMU but data from these excavations have not been compiled and are not included here. All surface-collected material however has been assembled, labelled and cataloged and is being used here for purposes of this report.

The main part of the site, in a cultivated field, covers about 20 acres but isolated finds are frequently made over all the 80 acres surrounding the site. The site slopes gently northward to the banks of the Portage River.

Elevation is 835 feet A.S.L. The soil is a light Oshtemo sandy loam. A hard rain usually uncovers up to a dozen artifacts in the sandy field, besides exposing a fairly heavy scatter of fire-cracked rock and charcoal bits. This is a multicomponent site with the following cultural periods indicated: Early Archaic (bifurcate base points); Middle(?) and Late Archaic (ground stone tools, argillite); and Late Woodland (cord-marked pottery and triangular arrow points).

Over 135 lithic artifacts from the site have been cataloged. A large amount of debitage, and cord-marked grit tempered Late Woodland sherds have also been recovered. About 30 projectile points have been found. Most appear to have been made of local cherts and range in shape from bifurcates (1) to triangular Madison-like points (7); corner-notched (13); side-notched (8); and contracting stemmed (1). Typologically, the points suggest site use throughout the Archaic, with possible Middle and definite Late Woodland components also present. Most range in size from 1 inch to 2 inches. Other items in the tool inventory include 4 drills, 12 to 15 hammer and anvil stones, scrapers and slate tools of unknown function, a handful of small body sherds, and 2 or 3 small non-diagnostic grit tempered, cord-marked rimsherds. As has been noted, some sub-surface testing of this site has been done but results to date have been rather disappointing. A few sub-plow zone features have been found however, one such extending as deep as 40 cm. Bones, believed to be those of elk, were recovered. So far we have been unable to classify these features temporally but enough carbonized material has been collected to date them if we decide the site warrants the expenditure.

Debitage from the site includes Upper Mercer, Flint Ridge, Indiana Green, Bayport, Norwood, Deer Lick Creek, and possibly Harrison County. Further testing of this site may prove to be valuable in understanding prehistoric cultural dynamics in this region.

PRS-4 (Donovan), 20SJ26

Mendon twp., SE $\frac{1}{2}$ of NW $\frac{1}{4}$, Section 5, T5S, R10W, Vicksburg Quad. USGS.
Owner: Ned Donovan. This site is on Bronson sandy loam, 0-3% slope, in a cultivated field lying between, and a short distance from, the confluence of Portage Creek and Portage River. Elevation is 840 feet A.S.L. A very light scatter of FCR and chippage occurs over an area of about 10 acres. One grit tempered body sherd with smooth interior and exterior, and one utilized flint chip were cataloged. Donovan has a small collection of points (about 25) and other bifaces. Most appear to be Archaic, with a few Late Woodland triangular points, and these indicators lead to a multicomponent classification. Further investigation between the two streams is warranted. The Donovan collection was photographed (PRSP-16).

PRS-5 (Dentler), 20SJ27

Mendon twp., SW $\frac{1}{2}$ of NE $\frac{1}{4}$ of Section 6, T5S, R10W, Vicksburg Quad. USGS.
Owner: David Dentler. Occupant: Engler. Site is located at 850 feet A.S.L. on the west bank of Portage Creek. The soil is Oshtemo sandy loam and the topography is one of gently rolling slopes, sandy ridges and knolls. The field was planted to corn at the time of survey. The productive area of the site covered about 20 acres, with a scatter of FCR and lithic debris over the area. Artifacts found consisted of a contracting stemmed projectile point; six corner- and side-notched points; a hafted scraper, a triangular point; three bifaces; and a quartzite flake unifacially retouched to serve as a scraper. Two small non-diagnostic potsherds were also found. Dentler also had a small collection which included two bifurcate base points and one large Snyders-like point of almost translucent white flint. His collection was photographed (PRSP-18). Three grooved axes belonging to a friend of Dentler,

Mr. Everson, was also photographed (PRSP-20) but the provenience of these axes is doubtful. Temporally, PRS-5 is believed to be Archaic and Late Woodland.

PRS-6 (White), 20SJ28

Mendon twp., NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 6, T5S, R10W, Vicksburg Quad. USGS. Owner: Lester White. Two isolated artifact finds in a 20-acre field on the west bank of Portage Creek. Topography and soil similar to PRS-5 which lies upstream one-half mile. A side-notched projectile point (similar to the Late Archaic Feeheley type) on granular purplish local chert about 2 inches long, and one scraper fragment were found.

PRS-7 (Kline I), 20SJ29

Mendon twp., SE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 8 and extending into other 3 quarter-sections of Section 8 where they meet in the center of the section. T5S, R10W, Leonidas Quad. USGS. Owner: Paul Kline. This site is well known to local collectors and many Archaic ground stone artifacts have been found here. One local informant, Mr. Maynard Harrison, stated that Michigan State University had taken "two leather-covered burials" from the site about 75-80 years ago. The present owner occasionally plows up charcoal-like material (storage pits?). At the time of our survey, part of the field closest to the lake was in oats and couldn't be surveyed. The elevation of the site is 845 feet A.S.L., the soil is Spinks loamy sand, and the land slopes slightly down to the low banks of Portage Lake. Recovered were 5 side- and corner-notched points, 1 argillite leaf-shaped point or blank 2 $\frac{1}{2}$ inches long, 2 or 3 scrapers and 2 slate chopper-like tools of unknown function. There was a fairly heavy scatter of chippage and FCR over an area of 15-20 acres. Since this is a well-settled area, highly visible, and has been intensively collected in the past, it is hard to evaluate the site by what can be found on the surface today. In this site as well as

many of the others found during the survey, undisturbed portions need to be found in order to properly interpret it. The site until now has produced no ceramics and is probably mostly Archaic.

PRS-8 (Kline II), 20SJ30

Mendon twp., NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 8, T5S, R10W, Leonidas Quad. USGS.
Owner: Paul Kline. Site is at an elevation of 845 feet A.S.L. on Oshtemo sandy loam on slopes to the south of Brown Creek. Isolated finds of one small Madison point and one larger side-notched point, both on local material. FCR was observed on most sandy ridges in limited amounts but other cultural remains were scarce. Probably a campsite area for Woodland and possibly Archaic people. Probably does not warrant further attention.

PRS-9 (Harrison), 20SJ31

Mendon twp., NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 8, T5S, R10W, Vicksburg Quad. USGS.
Owner: Maynard Harrison. Elevation 840 feet A.S.L. on Oshtemo sandy loam with 0-6% slopes. The site is on the south shore of Portage Lake adjacent to (and may be a part of) PRS-7. Sparse scatter of FCR and other cultural detritus. Two small projectile points of non-diagnostic character were recovered. Site covers an area of 2-3 acres. Unknown cultural affiliation.

PRS-10 (Huckendubler), 20SJ32

Mendon twp., W $\frac{1}{2}$ of E $\frac{1}{2}$ of Section 18, T5S, R10W, Vicksburg Quad. USGS.
Owner: Huckendubler. Site covers both sides of Portage River where it flows from Portage Lake south along both sides of the stream for one-half mile or so. This location is inexact for reason--it was the only farm to which we were denied access during the entire survey. However, a collection of artifacts from the Huckendubler farm was shown to us by Clarence Hamminga, a son-in-law

of Mr. Huckendubler. This collection, found on the farm over the past 20 years by Mr. Hamminga, was considered of sufficient significance by us to be assigned a PRS site number. Mr. Hamminga states that there used to be a family collection of much larger "showier" pieces, collected previous to his efforts, but they had become dispersed and lost. We were shown only part of the Hamminga collection, which included none of the broken pieces, utilized flakes, etc. We were shown approximately 500 or more artifacts, included among which were 3 Hi-Lo points; 22 bifurcate base points; 7 argillite expanding stem points; 16 contracting stem points; 34 large side- and corner-notched Archaic points; 40 Madison or Levanna-type points; 50 small corner- and side-notched Brewerton-like points; 8 argillite knives; 5 quartzite knives; 50 medium to large knives; 75-100 drills; 15 expanding stemmed points; 50 miscellaneous scrapers; 1 drilled stone pipe bowl fragment; 7 polished celts; 10 gorgets and 6 bannerstones. Mr. Hamminga believed that he had identified potsherds on the site but had not saved them. Apparently an early log home had stood somewhere on the farm, for a number of historic artifacts had been found, notable of which were an 1848 American large cent; an 1858 American large cent; a 1944 Bank of Montreal half-penny; and fragments of kaolin pipes, one with "Mont . . ." on a broken stem. If all this material was indeed found on this farm (and we believe Mr. Hamminga to be a credible informant) this may be one of the most important and definitive sites in the region. Hopefully, more favorable circumstances in the future will allow survey of the area from which this collection was derived.

Portions of the Hamminga collection were photographed: PRSP-1 through 15. Typologically, the collection represents paleo-Indian, Early Archaic, Middle to Late Archaic, Late Woodland and historic.

PRS-11 (Drewer), 20SJ33

Mendon twp., NW $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 19, T5S, R10W, Vicksburg Quad. USGS.
 Owner: Arthur Drewer. Elevation 835 feet A.S.L., on Oshtemo sandy loam, 0-6% slope. Site is 2-3 acres in size located on east bank of the Portage River in a field planted to corn. There is a thin scatter of FCR and chippage over the site. Artifacts recovered were one quartzite stemmed point; one small argillite axe or hand chopper; one large knife or spear point with missing tip. The base is Snyders-like in shape and the material is a lustrous white chert or flint. Cultural classification of the site is Archaic, and possibly Middle Woodland. Site warrants further investigation.

PRS-12 (Jones), 20SJ34

Mendon twp., NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 19, T5S, R10W, Vicksburg Quad. USGS.
 Owner: O. and V. Jones. Elevation 834 feet A.S.L. Lithic scatter of FCR and cultural debris over 2-acre area along Portage River. Recovered were one grit tempered cord-marked body sherd; one small triangular Madison point; fragments of three possibly Archaic points. Field is flat sandy Oshtemo loam planted to corn at the time. Site was very dry and dusty on the day of the survey, making visibility poor. Should be revisited after rain. Cultural classification Late Woodland and possibly Archaic.

RRS-13 (Bell), 20SJ35

. Park twp., S $\frac{1}{2}$ of SE $\frac{1}{4}$ of Section 24, T5S, R11W, Vicksburg Quad, USGS.
 Owner: Joel Bell. Elevation 830 feet A.S.L. on Bronson sandy loam occupying gentle slope south of the old channel of Little Portage Creek. Little Portage Creek sometime late in the last century was diverted from its channel which lay to the west into Portage River from just north of Mendon, southward into the Village of Mendon so that the water power could be used there to operate

a grist mill. The marshy bed of the old stream still exists in most places. On the site was a light scatter of FCR, flint and chert chipping debris, a scatter of small prehistoric potsherds and assorted historic material over a 20-30 acre field. Recognizable artifacts collected were the base of a small unfluted but possibly paleo-Indian point. The concave base had been thinned and the edges ground smooth. The material was a greyish-brown chert of unknown origin. Also found were one corner-notched bifurcate base point; mid-section of a point or knife; one unifacial corner-notched point; fragments of two large bifacial tools of unknown function; split rimsherd with stick-decorated lip, temper undetermined; about a handful of grit tempered cord-marked body sherds with smooth interiors; historic pottery and glass, probably dating to late nineteenth century. Cultural classification of site: paleo-Indian, Early and Late Archaic, Late Woodland and historic. Site should be further investigated.

PRS-14 (Henry I), 20SJ36

Park twp., NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 24, T5S, R11W, Vicksburg Quad. USGS.
 Owner: Ralph Henry (St. Joseph County platbook shows H. Dunn as owner).
 Elevation 830 feet A.S.L. Site covers about 2 acres north of Portage River and exhibits light lithic scatter on Spinks loamy sand. Topography is slightly rolling land. Recovered were two small non-diagnostic side-notched projectile points, chippage and historic glass. Site is of undetermined age or significance.

PRS-15 (Henry II), 20SJ37

Park twp., SE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 24, T5S, R11W, Vicksburg Quad. USGS.
 Owner: Ralph Henry. Elevation 832 feet A.S.L. South shore of Portage River across river from PRS-14, and may be related to it. Sparse lithic scatter and isolated find of one rough unnotched triangular projectile point of undetermined

cultural association. As it now stands, site has little cultural significance and probably rates little further attention.

PRS-16 (Dentler II), 20SJ38

Park twp., NE $\frac{1}{4}$ of Section 24, T5S, R11W, Vicksburg Quad. USGS.

Owner: David Dentler. Elevation 825 feet A.S.L. Site covers an area about one-fourth mile long on north side of the Portage River. The land is gentle rolling slopes of Spinks loamy sand planted to soybeans. Fairly heavy scatter of lithic debris from which were recovered seven recognizable artifacts. One was the broken base section of an unfluted Clovis-type spear point with ground edges; the base of a small straight-stemmed projectile point; a large corner-notched point which had been reworked from a larger broken point; one scraper; one pottery rimsherd of undetermined temper, cord-marked exterior and smooth interior with stick-decorated lip and having traces of a possible applique around the shoulder area. On this site is a fairly heavy concentration of historic debris, pottery, glass, etc. The owner informed us that an ancestor of his had lived here in a log cabin and traded with the local Indians early in the nineteenth century. The cultural classification of components at this site appear to be paleo-Indian, Archaic, Late Woodland and historic. This area deserves further investigation, being one of the more promising sites found during the survey.

PRS-17 (Dentler-White), 20SJ39

Mendon twp., NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 6, T5S, R10W, Vicksburg Quad. USGS.

Owners: David Dentler and Lester White. Elevation 850 feet A.S.L. Site is in an interesting area of high sand ridges overlooking Portage Lake to the southeast. Cultural material was found in adjoining fields belonging to the two owners above. The land, on Oshtemo sandy loam, slopes down to marshy areas

bordering Portage Lake near the inlet of the Portage River. In the fence line between two fields stands a massive oak tree which measures $18\frac{1}{2}$ feet in circumference at the base. The site covers 10-15 acres along high ridges in fields planted to corn. A thin scatter of lithic debris is found along these ridges. One large argillite boulder was found, probably a manuport, which appeared to have had flakes removed from its edges. It was left in place by the finder. Recovered for cataloging were a slender expanding stemmed point with a straight base which had been ground smooth; a finely-chipped corner-notched point of whitish chert; another finely-chipped ovate-shaped projectile point with missing base; a small broken biface which appears to have been used as a graver; two other worked pieces probably utilized as scrapers; and about 15 other pieces of miscellaneous lithic chippage. This site probably contains Archaic, and possibly Middle Woodland (from the shape and quality of the points) components, and should be further investigated.

PRS-18 (Kennedy) 20SJ40

Park twp., $NE\frac{1}{4}$ of $SW\frac{1}{4}$ of Section 27, T5S, R11W, Vicksburg Quad. USGS. Owner: Jack Kennedy, Jr. Elevation 825 feet A.S.L. Isolated finds of one small stone drill on white chert; a 1901 Indian-head cent; and historic glass. Undetermined prehistoric and historic cultural classification. The Kennedy house is reported to be the first frame house built in the township by an early settler named Huchinsin in the year of 1832. The house was photographed for our files (PRSP-21). Prehistorically, the site is not considered important. As an example of early nineteenth century architecture, the house may be historically important.

PRS-19 (Wagner), 20SJ41
 Outside survey area.

Park twp., NE $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 34, T5S, R11W, Three Rivers East Quad. USGS. Owner: Wagner (Platbook shows McMurroughs as owner). Elevation 825 feet A.S.L., on Oshtemo sandy loam. This site was isolated find of one small reddish flint projectile point with tip broken off and having a bifurcate base; and one possibly worked piece of argillite. This site is highly visible and accessible from the road and is reportedly a "hot" spot for collectors in the area. Some likely-appearing high knolls were planted to wheat and therefore could not be surveyed at this time. On the basis of the Early Archaic point and reports about the area, we feel it would be worthwhile to revisit the site after the wheat-land has been plowed.

PRS-20 (Haas II), 20SJ19

Mendon twp., SE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 5, T5S, R10W, Vicksburg Quad. USGS. Owner: Harold Haas. Elevation 850 feet A.S.L. Soil type Oshtemo sandy loam. This site has been known to members of the survey party for some time, and surface collections made in the past have been added to those found during the survey for purposes of this report. The site extends about one-fourth mile along the slopes above and parallel to the Portage River a short distance away from its banks. Fire-cracked rock is seen in fair amounts over the whole area. Concentrations of charcoal bits have been reported by the owner and a few of these have been excavated. Several "hearths" were uncovered and a few apparently were pits of some unknown function. No recognizable food remains have been identified in association with these pits. In one of these excavated pits, a small potsherd was found, although most of the surface-found artifacts appear to be of Archaic types. Artifacts cataloged from PRS-20 are one side-notched and two corner-notched points with ground basal edges; one unnotched pentagonally-

shaped point with a ground base; seven side- and corner-notched Brewerton-like points; one tiny (18 mm on a side) triangular point; one drill; three slate bifaces of unknown function; one argillite chipped stone axe; two small thumbnail scrapers; one larger uniface; eight bifacial knives or scrapers; one unfinished slate bannerstone. (Note: A collection from a nearby Kalamazoo County site, the Bullard site (20KZ60) on the Portage River, includes seven or eight similar bannerstones, all in various stages of completion. These are now in the hands of Joe Pahl, a collector from Centerville, Michigan.)

Most of the artifacts from PRS-20 appear to have been made of local materials but a few are exotic. Three points are made on Norwood chert, and the debitage includes one Kettle Point flake, one Bayport, and one Indiana Green. The owner also has a small collection from the site, and from his fields only, he states. The site appears to be principally Archaic, with a small Late Woodland component.

PRS-21 (Foster), 20SJ42

Mendon twp., SE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 19, T5S, R10W, Vicksburg Quad. USGS. Owner: Gilbert Foster. Elevation 837 feet A.S.L. Site is on Oshtemo sandy loam on a slope above what used to be the old stream bed of Little Portage Creek before its diversion south into Mendon village. A light scatter of FCR and lithic chippage occurs over a 10 acre area. One nicely-chipped corner-notched point with the base missing and one small thumbnail scraper were recovered. The cultural affiliation was undetermined, possibly Archaic. The site is not considered of great importance.

PRS-22 (Fitch), 20SJ43

Park twp., NW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 34 and extending slightly over into Section 33. T5S, R11W, Three Rivers East Quad. USGS. Owner: L. Fitch.

(Has small collection from site.) Elevation 820 feet A.S.L. on Oshtemo sandy loam planted to corn. Cultural remains found over 10-acre area. Artifacts cataloged were one argillite handaxe; one hafted scraper; two straight stemmed projectile points; one large triangular point with concave ground base; two unifacial scrapers; one knife or spokeshave; several utilized flakes. Artifacts appear to be mostly Archaic. A uniface of Harrison Co., Indiana, chert was noted, and the debitage includes Norwood, Indiana Green, and Bayport chert. Site definitely should be further investigated.

PRS-23 (Wright), 20SJ44
 • Outside survey area.

Flowerfield twp., SW $\frac{1}{4}$ of Section 21, T5S, R12W, Schoolcraft Quad. USGS.
 Owner: A. Wright. This site was located on the basis of a lead from Joe Pahl, a collector living in Centerville. Isolated finds over an 80-acre field were one small stone knife; a few utilized flakes and a thin scatter of historic pottery. Cultural classification was undetermined prehistoric and historic. The site, as it now stands, appears to be of little value for interpretive purposes.

PRS-24 (Russell), 20SJ45
 Outside survey area.

Florence twp., NE $\frac{1}{4}$ of Section 28, T7S, R11W, Klinger Lake Quad. USGS.
 Owner: Russell Farms, Inc. This is another site reported to us by a collector which, although being outside our projected area, was investigated. The artifacts found occurred as isolated finds over an area of about 80 acres. Among them were a large drill with point missing; a finely-chipped projectile point with missing base; a broken slate biface; and a few flint chips. No period was assigned and the site is assigned low priority.

PRS-25 (Eccles), 20SJ46

Mendon twp., SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 8, T5S, R10W. Vicksburg Quad. USGS.
Owner: Leo Eccles. This lead was also offered by Joe Pahl, who has a collection from this site including a copper awl. The site is located on the southeast shore of Portage Lake at an elevation of 840 feet A.S.L. not far from the important PRS-7 Kline site. The soil is Spinks loamy sand on a slight north slope to the lake. Cataloged from the site were one anvil or "nutting stone" with pits on both sides; 10 partial or whole notched projectile points; two knives; three scrapers; two bifaces; one slate tool or ornament, polished and with a worn notch or hole showing on the broken edge. There is a fairly heavy scatter of FCR, argillite, slate, quartzite and other cultural debris over an area exceeding 40 acres. Some historic pottery also is present. Another field, unplowed and now in wheat, lies closer to the lake and has a high knoll or ridge which we believe is the probable focus of the occupation. (Unfortunately this ridge was not plowed in Spring 1981, so we have been unable to verify this hypothesis.) This site and the general area along the southeast shores of Portage Lake are believed to be very important to an understanding of prehistoric cultural occupation in this region. Since it is so visible and accessible to amateur collectors, it has been heavily collected over the years. The fact that so much is still found speaks of the intensity of prehistoric activity which must have taken place here. The site appears to be largely Archaic, with the presence in limited amounts of possibly Woodland material. Mr. Eccles is very cooperative, and we feel he would not object to further investigation, of whatever nature.

PRS-26 (Bailey), 20KZ109

Kalamazoo County, Brady twp., NW $\frac{1}{4}$ of Section 32, T4S, R10W, Vicksburg

Quad. USGS. Owner: Bailey (platbook shows Cook). Elevation 850 feet A.S.L. This site is approximately one mile upstream on Portage Creek and was investigated mainly to "feel out" the limits to the activity areas around Portage Lake, if possible. The topography and soils are much the same as in the primary survey area, and much the same mix of artifact types and cultural debris was found. We recovered one anvil stone with pits on both sides and on opposing edges; six projectile points, five of which were side-notched and one unnotched; one broken slate tool or ornament; four knives or scrapers; debitage and historic pottery. The site is aceramic, probably Archaic, with a small historic component. It should be further investigated.

PRS-27 (Wiltse I), 20KZ110

Kalamazoo County, Brady twp., NE $\frac{1}{4}$ of Section 32, T4S, R10W, Leonidas Quad. USGS. Owner: L. Wiltse. This site also was found as a result of expanding the area of our research northward along the Portage River basin. PRS-27 was found along the east bank of the river at 850 feet A.S.L. There was a thin scatter of cultural remains almost the full length of the quarter-section along the stream bank. Recovered were the midsection of a projectile point; two scrapers or knives; one slate tool, probably a knife; utilized flakes and chips; and one historic spoon. Cultural period, undetermined prehistoric, and historic. The site should be more thoroughly investigated.

PRS-28 (Wiltse II), 20KZ111

Kalamazoo County, Brady twp., W $\frac{1}{2}$ of NE $\frac{1}{4}$ of Section 32, T4S, R10W, Leonidas Quad. USGS. Owner: L. Wiltse. This site is directly across the Portage River from PRS-27 and may be an extension of or related to it. Recovered were one polished greenstone fully grooved axe, 4 inches long by 2 $\frac{1}{2}$ inches wide by 1 $\frac{1}{2}$ inches thick; one large white chert scraper; and a few chips and FCR were

observed but not collected. The axe is probably Archaic. Site should further investigated.

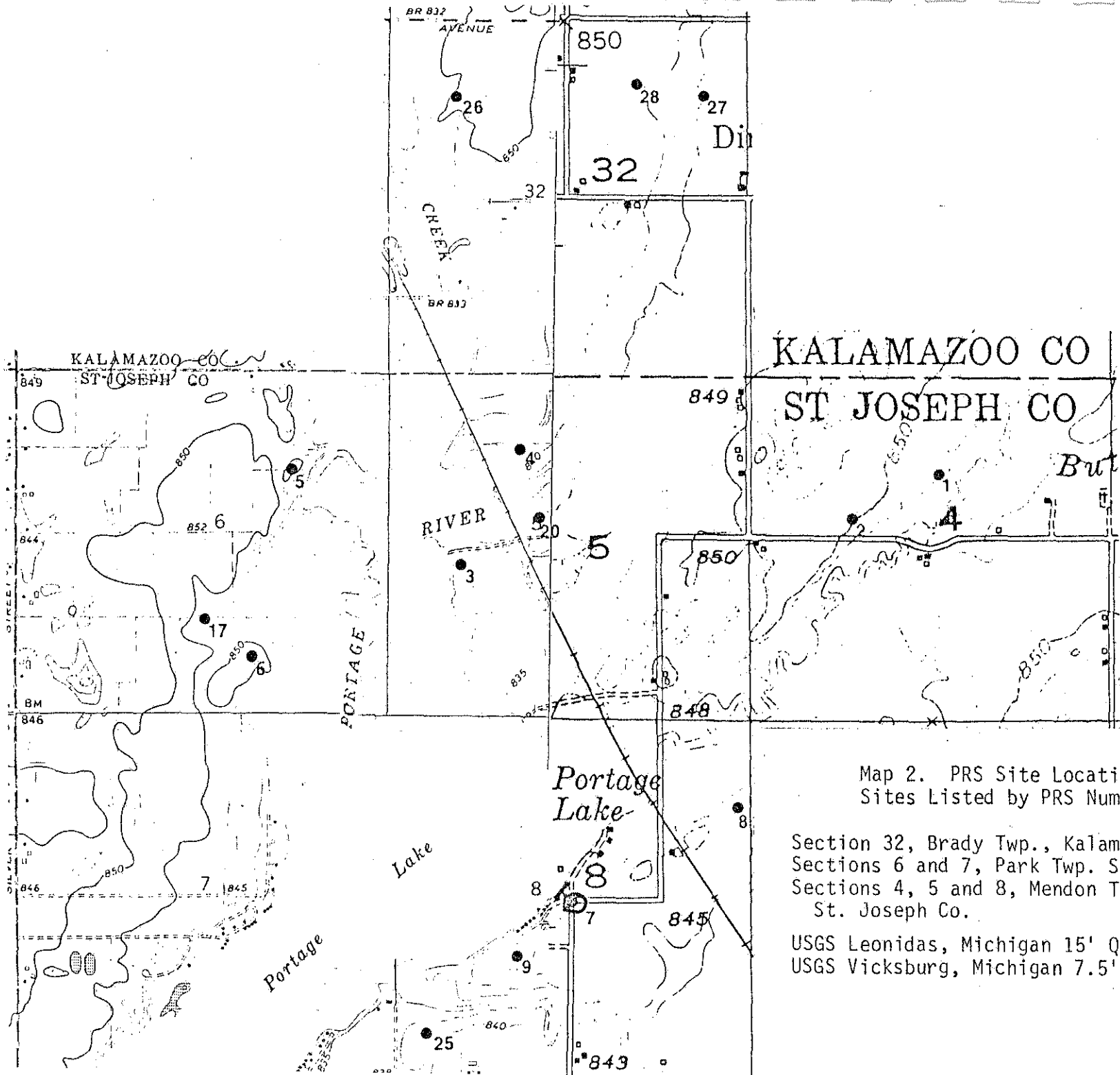
PRS-29 (Coomer), 20SJ9
Outside survey area.

St. Joseph County, Mendon twp., NE $\frac{1}{4}$ of Section 23, T5S, R10W, Leonidas Quad. USGS. Owner: Darrell Coomer. This previously reported site (Drumm 1974) consisted of a low circular mound with surrounding postmolds and a central firepit, all of which was destroyed by excavation and subsequent plowing of the site. At that time, Drumm reported finding only a broken hammerstone, one projectile point and one scraper in the surrounding area. Since that date, in newly plowed ground nearby, Drumm reports finding one turkey tail; various expanding stemmed and notched points; one celt, anvil and grinding stones; FCR and debitage. In all, he reports finding over 200 artifacts in an area of about 10 acres. The PRS crew surveyed the site, located on the banks of the Little Portage Creek. Our efforts were hampered by tall corn and an uncertainty of the exact location Drumm had described. Our efforts produced one graver-scraper; two broken point bases; three or four utilized chips. The cultural period appears to be mostly Archaic. The site should be further investigated.

SECTION VI. LIST OF OWNERS OF COLLECTIONS

The survey crew viewed, inventoried and photographed artifact collections in the area if they were considered important typologically or if the provenience was believed to be validly related to the area under research. The slides taken were given Portage River Survey Photo (PRSP) catalog numbers and entered in a PRSP catalog. The collection owners are:

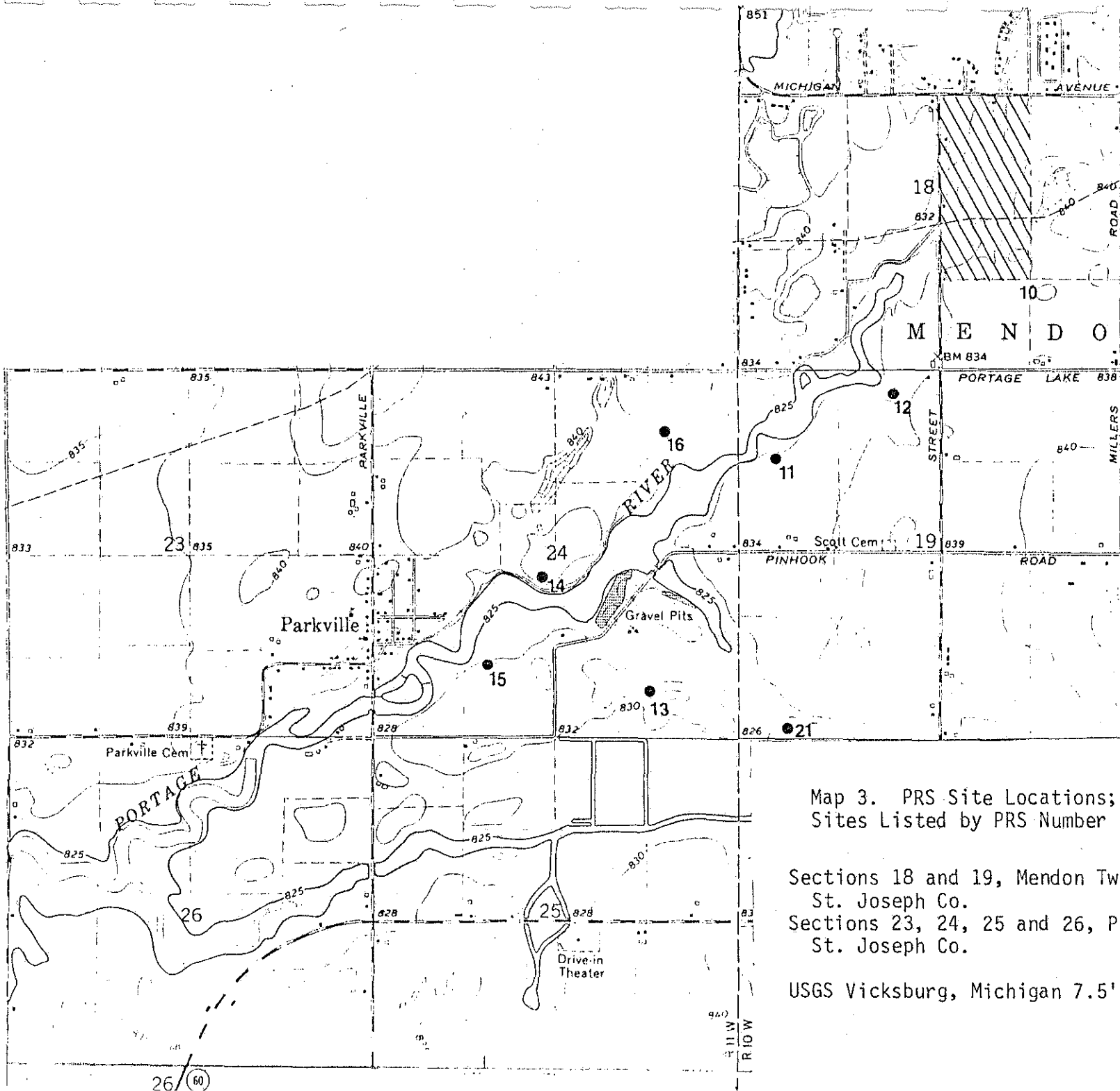
J. Stroud, 51630 Fishers Lake Road, Three Rivers, Michigan. Photo:
PRSP-26.



Map 2. PRS Site Locations;
Sites Listed by PRS Number

Section 32, Brady Twp., Kalamazoo Co.
Sections 6 and 7, Park Twp. St. Joseph Co.
Sections 4, 5 and 8, Mendon Twp.,
St. Joseph Co.

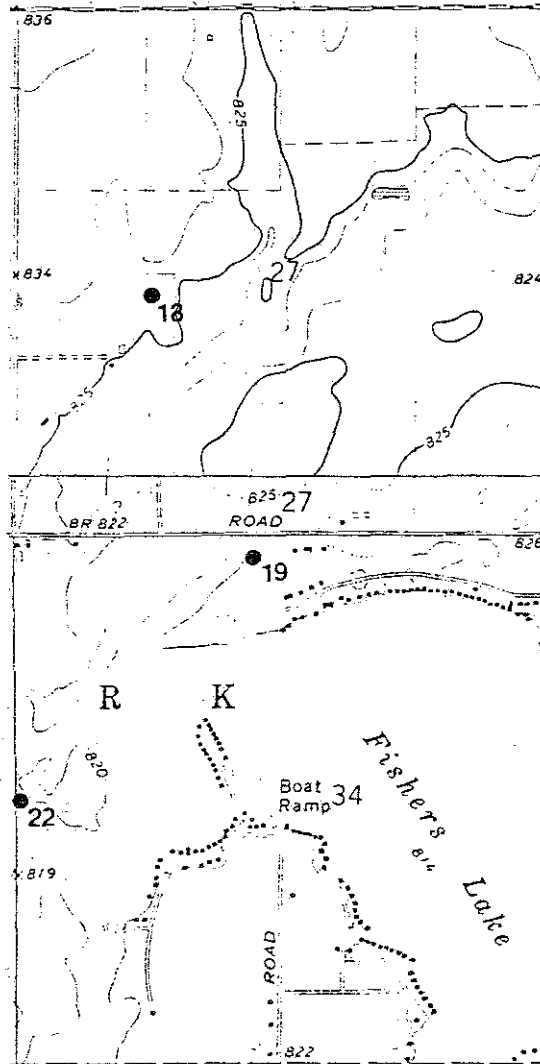
USGS Leonidas, Michigan 15' Quad.
USGS Vicksburg, Michigan 7.5' Quad.



Map 3. PRS Site Locations;
Sites Listed by PRS Number

Sections 18 and 19, Mendon Twp.,
St. Joseph Co.
Sections 23, 24, 25 and 26, Park Twp.,
St. Joseph Co.

USGS Vicksburg, Michigan 7.5' Quad.



Map 4. PRS Site Locations; Sites Listed by PRS Number

Sections 27 and 34, Park Twp., St. Joseph Co.
 USGS Vicksburg, Michigan 7.5' Quad.
 USGS Three Rivers East, Michigan, 7.5' Quad.

Ned Donovan, RR1, YZ Avenue, Vicksburg, Michigan. Photo: PRSP-16.

Don Everson, 25600 Michigan Avenue, Mendon, Michigan. Photo: PRSP-19, 20.

Joe Pahl, 364 W. Burr Oak, Centerville, Michigan. No Photos.

Richard Drumm, Parks and Recreation, City of Centerville, Michigan.
No Photos.

Mr. L. Fitch, 55742 Resert Road, Fishers Lake, Three Rivers, Michigan.
No Photos.

Harold Haas, 28th Street, Mendon, Michigan. Photos in WMU files.

Joe Grubka, Flach Road, Mendon, Michigan. Photo: PRSP-31.

David Dentler, Silver Street, Vicksburg, Michigan. Photos: PRSP-17, 18.

Clarence Hamminga, 52733 Silver Street, Vicksburg, Michigan. Photos:
PRSP-1 through 15.

SECTION VII. ELIGIBILITY OF PRS SITES FOR NOMINATION TO NATIONAL REGISTER

Insufficient data exists at this time, we feel, to justify nomination of any PRS site to the National Register of Historic Places, on the basis of surface inspection alone. However, further investigation in the way of sub-surface excavation, radiocarbon dating, etc., may lead to proper evaluation of these sites and to recommendation for their future nomination.

SECTION VIII. GENERAL REMARKS AND CONCLUSIONS

Timing of the Portage River survey was dictated by the availability of experienced personnel from the W.M.U. student labor pool. Other planned archaeological projects for the spring and early summer months left the month of July as the earliest in which qualified students would be available for this survey. Certain disadvantages present themselves for survey at this later date. Crops are well-advanced, some cornfields being above the heads of the crew members. Temperatures reach well above 90 degrees on some July days, and between the airless corn rows the atmosphere can be stifling. Deer flies and black flies

can be murderous, especially close to marshy areas. Vegetation is at its summer climax along the streams. Row crops such as soybeans are developed almost to the point of closing the space between rows. Lack of rain during the early part of July, 1980 made for dry, dusty conditions which impaired artifact visibility in the soil. The optimum time for survey in this area probably would be in late May or early June, after corn is up a few inches and has had a few spring rains on it. Weather and insects also would be less distracting at this time.

Despite these obstacles, morale of crew members remained high, mostly because results were productive and rewarding. Hardly a field we entered did not at least show traces of prehistoric occupation. As the survey progressed, site predictability became highly reliable. High sandy ridges and knolls close to streams or lakes almost invariably showed signs of prehistoric activity. As occupation sites, these areas would have been well-drained, airy, relatively insect-free places for camps or villages. They would provide good visibility of surrounding areas and close access to waterways and aquatic food resources. These points might argue for a warm weather occupation for most of the sites.

Mention should be made here of some of the confusion which exists about proper names of streams in this area. Some natives of the area and some local maps call Brown Creek "Bear Creek" and there is some confusion between Portage River and Portage Creek, and Little Portage River and Little Portage Creek. For purposes of this report, USGS topographic map names are used in all cases.

To sum up, a total of 29 sites were located and recorded in the course of the Portage River survey including the five which were previously known to some of us, four of which were unrecorded. Including those items which had already been collected from the previously known sites, a total of 298 artifacts were cataloged and briefly described. Samples of debitage were collected and bagged

by site but this material was not given individual catalog numbers. Amounts of fire-cracked rock and other non-specific cultural debris on a site was estimated and recorded but was not collected. Cultural period classification of components was attempted where typological indicators were strong, for instance, Clovis-type and/or Hi-Lo projectile points for paleo-Indian; bifurcate base points for Early Archaic; Brewerton-type points, ground stone tools, and ornaments, aceramic assemblages, argillite and quartzite, etc. for Middle-Late Archaic; cord-marked grit tempered pottery and triangular points for Late Woodland; and obviously historical material for historic components.

Landowners in the area were highly cooperative and in only one or two instances was this cooperation lacking. Collectors freely gave information on possible sites.

None of the PRS sites appear to be in imminent threat of destruction, other than through the progressive destruction of surface features by agriculture and through collection by amateurs.

SECTION IX. COMPARISON OF PRS AND LOWER KALAMAZOO RIVER SITES

Site survey data from the Lower Kalamazoo River in Allegan County (Garland and Kingsley 1979) affords some interesting comparisons between this region and the Portage River survey area. Table 1 summarizes certain site characteristics from these two surveys. Sixty-nine Allegan County sites in Saugatuck and Manlius townships located within 1 mile of the Kalamazoo River were selected for comparison with the PRS corridor sites.

Land use differences between the two survey areas may skew the comparative results to some extent. The Portage River survey examined only cultivated fields planted to row crops, which permitted adequate surface visibility for survey purposes. This criterion afforded about two-thirds coverage of the

Table 1
Comparison Between PRS and Lower Kalamazoo River Sites

	<u>Settlement Pattern Survey-1979</u>	<u>Portage River Survey</u>
No. of sites within 1 mile of river	69	25
No. of quarter-sections surveyed	20 (95% coverage)	52 (ca. 65% coverage)
Site density/ quarter-section	3.45	0.5
Site size	(n = 50)	(n = 19)
Average	5,904 m ²	47,845 m ²
Median	1,700 m ²	40,000 m ² (ca. 10 acres)
No. of sites with more than 5 artifacts	11 (15.9%)	11 (44%)
Artifacts/m ² surveyed	117/295,203 m ²	117/884,750 m ²

targeted PRS universe. In contrast about 60-70% of the Lower Kalamazoo sites considered here were located in non-cultivated contexts. A majority of the sites were discovered in areas of minor surface disturbance or erosion, with site size delineation assisted by shovel probing. A small percentage of sites (probably less than 5%) were initially discovered by shovel probing. The percentage of ground surveyed in each sampled unit, about 95%, is much higher in the Lower Kalamazoo survey.

These differences in surface condition and survey methods may tend to bias the SPS results toward a larger number of small sites. In some cases at least, small discontinuous scatters might have been perceived as one large site had uniform surface visibility, as in a cultivated field, been possible. But even allowing for some bias here the very large difference in average site size, and even more strikingly in median site size, between the two survey areas is certainly a reality. The size of the average PRS site is six times that of the SPS-79 average, and the median site size difference is much greater still, the PRS median being 23.5 times the SPS median. Very large, 10-20 acre, multi-component sites are exceptional in the SPS study area, whereas such sites are typical along the Portage River. This is illustrated by the fact that the second largest SPS site considered here is below the PRS median site size of 40,000 m² (ca. 10 acres).

Given the great differences in site size it might be expected that the PRS sites would produce more artifacts per site and this is indeed the case (Table 1). "Artifact" for this comparison refers to the standard morphological classes of bifacial and unifacial tools and ground stone artifacts; it does not include cores, bipolar items, or utilized debitage, since these categories may not have been systematically recovered in the less intensive Portage River survey.

When artifact density per meter square surveyed is compared however, a 2.5 times greater density is observed in the Lower Kalamazoo sites. There may be a bias here also, in that many of the PRS sites are regularly "swept" by area collectors (this happened occasionally just before our surveyors went onto a site), a situation which is much less prevalent in the Lower Kalamazoo. Had the Portage River survey been conducted earlier in the spring, with optimum surface visibility, we think this difference in artifact density would be much less, and might even be reversed. It should be noted here that SPS was conducted in May and June.

All debitage was not collected during the Portage River survey, and therefore there may be a bias toward exotic cherts in the debitage which was recovered from these sites. However even allowing for this factor, it is significant that nearly half the PRS sites (12 of 25 sites in the targeted survey area), and two of the three "out" sites produced debitage and/or artifacts on exotic cherts from Ohio and Indiana sources, with Bayport, Norwood and Kettle Point materials also represented. By comparison exotic cherts are extremely rare in the SPS collections.

A further point of contrast between the two survey areas is the relatively frequent occurrence of ceremonial ground stone artifacts in the PRS sites (seen very prominently in private collections), while such objects are less frequently encountered in the Lower Kalamazoo sites being compared here. Regional collections tend to support this conclusion. In fact we can probably assume a direct correlation between the long history (and current high rate) of collector activity and the presence of ceremonial objects in the PRS survey area.

The Allegan County sites compared here include a high percentage of sites which appear to reflect extractive tasks of limited scope and duration. Many of the smaller sites lack diagnostic artifacts and cultural affiliation is

unclear. Some are certainly Archaic, but a Woodland period affiliation for some of the small aceramic sites is a strong possibility. Larger campsites, both Woodland and Archaic, tend to occur in close proximity to the river. A warm season, riverine and riparian subsistence orientation is suggested by data from excavated Woodland sites. No data is available for the Archaic.

The very large multicomponent PRS sites containing exotic cherts and ceremonial objects may to some extent reflect greater stability of residence in this oak-hickory forested environment. It also suggests to us the long-term significance of the Portage River as a segment in a trade or exchange route linking the St. Joseph and Kalamazoo basins, which undoubtedly functioned as part of a larger system. Site excavation is planned in the Portage River area in order to address questions concerning subsistence-settlement and patterns of regional exchange.

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