

Midwest Region
Systemwide Archeological Inventory Program Plan

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Part I Introduction

Since its inception, the National Park Service (NPS) has had an important role in preserving and protecting the nation's cultural heritage. Archeological resources, which are an important part of this cultural heritage, are present in most units of the National Park System, and many units have been created specifically to interpret and preserve archeological resources.

Like all federal agencies, the NPS is obligated by the National Historic Preservation Act [Section 110 (a)(2)], Executive Order 11593, and Section 14 of the Archeological Resources Protection Act to identify, evaluate, preserve, and protect historic properties, including archeological sites. However, a 1991 Management Control Review of the NPS archeological program identified a critical high-risk material weakness in the basic inventory accountability of archeological resources on park lands. In short, the review indicated that the NPS simply does not know what its archeological resources consist of—their numbers, their locations, their significance—and consequently, NPS personnel cannot make informed judgments about their proper management.

Under the National Archeological Survey Initiative, an NPS task force created SAIP, the Systemwide Archeological Inventory Program (Aubry et al. 1992), a long-term approach to the objective of inventorying archeological resources on park lands. The program is intended to provide a framework for systematic, scientific research that locates, evaluates, and documents archeological resources. The importance of the SAIP is that it emphasizes research within a cultural resources management framework. The purpose, structure, and requirements of the SAIP have been published (Aubry et al. 1992), and each NPS region is required to develop a regional plan to implement this program. This document represents the plan for the Midwest Region.

The Midwest Region

The Midwest Region includes the states of Arkansas, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North and South Dakota, Ohio, and Wisconsin. The concept of the Midwest as a region is based on geographic, social, cultural, and economic patterns that have deep roots in the history and development of the United States. The thirteen states which make up the Midwest Region were admitted to the United States between 1801 and 1889, with only Ohio granted statehood before the War of 1812, and Nebraska, South Dakota, and North Dakota granted statehood after the Civil War. Although the Midwest Region states vary substantially in population and population density, they are all approximately the same size. The region was settled by Euroamerican farmers who recognized its great agricultural potential, but the twentieth century has seen the development of diverse economic patterns.

The Midwest Region is part of the vast Great Plains and Central Lowlands. The climate in this region is temperate, with humidity decreasing from east to west. Much of the region was covered by glaciers during the Pleistocene. The advance and retreat of these ice sheets produced the relatively flat landscape and created the Great Lakes and the Mississippi, Missouri, and Ohio river drainage systems. The area is a mixture of forests and grasslands, which, combined with the fertile soils, provided all the resources necessary for Native American and Euroamerican occupation of the region.

Although it was the rich soils of the prairie-peninsula that attracted immigrant farmers and settlers in the early nineteenth century, it was the great northern forests that provided building materials, and the expansive inland waterways that served to move these materials from their source to markets at home and abroad. Euroamerican explorers and settlers recognized that without roads, the easiest

travel was on the rivers and lakes. Developers took these long-established transportation routes and built canals that made it possible to move people and goods faster. The relative ease of travel by boat on the rivers, canals, and lakes of the Midwest stimulated further immigration, and sustained the growing population until the advent of the railroad.

Prehistoric archeological resources abound in the region and range from humble campsites composed of lithic debitage to the more spectacular sites in the form of earthen mounds and earthworks, which were noted as early as the eighteenth century in the Midwest. Although these features were once plentiful throughout the region, widespread agriculture and urban development have destroyed the vast majority of them. Since archeological resources are present at almost all park units in the region, the NPS plays an important role in the preservation and interpretation of prehistoric culture in the Midwest. As agriculture and urban development continue to modify the surface of the earth throughout the Midwest, archeological resources will be further affected by their impact. It is therefore essential that the NPS continue to protect and preserve archeological resources to ensure that the valuable information they contain can be studied, interpreted, and enjoyed by future generations.

The important role of history in the development of this region is also reflected in the park units. The themes which are represented in units of the Midwest Region range from the fur trade and westward expansion, to civil rights and the Civil War. The importance of industry and transportation in the history of the Midwest is reflected in sites as diverse as copper and gold mines, canals, factories, mills, lumber camps, lighthouses, and fisheries and a health spa. The importance that this region played in American history is further reflected in the presence of seven units which commemorate the lives of six past presidents. Archeological resources are associated with most of these historic sites, and in some cases they represent the only record of historic places and activities which remain.

There are 53 National Park System units in the Midwest Region, exclusive of “affiliated” areas that are neither federally owned nor directly administered by the NPS, as well as national trails and wild and scenic rivers. The affiliated areas, trails, and wild and scenic rivers are explicitly excluded from the SAIP (Aubry et al. 1992:5).

National Park System units in the Midwest Region include seven national parks, sixteen national historic sites, eight national monuments, four national lakeshores, three national memorials, four national historical parks, three national scenic riverways, one national expansion memorial, one national battlefield, one national military park, one national river, one national recreational river, one national river and recreation area, an international peace memorial, and a national preserve. Many of these units are relatively new additions to the National Park System, and some are so new that boundaries have just been established. Archeological resources are known to be present in most of these units, and it is likely that some archeological remains are present in all of them.

Table I-1 lists the park units in the Midwest Region. It shows the dates when the parks were authorized for establishment, and it shows the present acreage figures for the parks, both in their entirety and for those portions that are actually federally owned.

Midwest Region SAIP Plan

The 1999 Midwest Region SAIP Plan was initiated by former Regional Archeologist Mark J. Lynott and was completed with assistance from many Midwest Archeological Center staff members, including Caven Clark, Forest Frost, Vergil Noble, Rose Pennington, Jeffrey Richner, Douglas Scott, Tom Thiessen, William Hunt, and Bruce Jones. Former Park Archeologists Bret Ruby and David Hayes originally prepared the sections on Hopewell Culture and Buffalo River, respectively. The present document started with the 1999 SAIP Plan as the baseline information and added and revised it from information on file at the Midwest Archeological Center, Lincoln, Nebraska. Participants in

the revision included William Hunt, Bruce Jones, Jeffery Richner, Douglas Scott, Thomas Thiessen, and Anne Vawser. The plan is divided into six sections.

- I. Introduction
- II. Description of Midwest Region park lands
- III. Regional overview of archeology in the Midwest
- IV. Strategies to locate, identify, evaluate, and document archeological resources
- V. Criteria for prioritizing archeological projects in the Midwest Region, project statements, and a five-year schedule for proposed research
- VI. Summaries of previous research in Midwest Region parks

The purpose of this plan is to provide an overall framework for the study and wise management of the archeological resources of the Midwest Region.

The National Park Service's SAIP plan (Aubry et al. 1992:5–7) defines what are appropriate projects for SAIP funds. This document also defines proscriptions for the use of SAIP funds. Projects that do *not* qualify for SAIP funding include archeological collection studies; archeological data recovery projects; compliance-related archeological studies undertaken in connection with planned construction or development activities; and research undertaken in connection with maintenance, stabilization, preservation, rehabilitation, restoration, reconstruction, or other treatments of archeological resources.

SAIP funds are targeted for developing and implementing comprehensive archeological inventory projects. Funds may be expended on SAIP projects that include the following elements: Archeological Overviews and Assessments, developing research designs, conducting inventory and site evaluations, preserving and cataloging collections made during the project, preparing National Register of Historic Places Nomination Forms, and preparing reports for both professional and public audiences. The SAIP plan also has a series of priorities or selecting factors listed that are to be used in developing each region's inventory priorities. Each region may develop its own priority selecting system but the following seven factors must also be employed in determining those priorities for SAIP funds.

1. The inventory project must be identified in a park planning document such as a General Management Plan, a Resource Management Plan, a Development Concept Plan, an Interpretive Prospectus, or an Outline of Planning Requirements and must be listed in the Program Management Information System (PMIS) as a specific project.
2. High priority is given to park areas that are suffering or likely to be threatened by destructive effects of natural or human processes on the archeological record.
3. Development zones in parks or special-use zones should be assigned a high priority for inventory.
4. A high priority is assigned to historic zones in parks, or to entire park units on the National Register of Historic Places because of their archeological or historic significance.
5. High priority is given to projects where research questions, or problems or topics of importance to state, regional, or national archeological issues can be addressed.
6. Priority is given to park areas lacking virtually any information about the presence or absence of archeological resources.

7. Those park areas likely to have archeological resources or resources that can be located using available techniques and technology are given priority over park areas having a low probability of containing archeological sites.

This revised document, the 2003 Midwest Region SAIP Plan, is not intended to serve as a research design or work plan for any specific project, instead it is intended to help identify and prioritize regional research needs. It was developed with the full understanding that regular and continuing revisions will be necessary at least every five years.

Aubry, Michele C., Dana C. Link, Mark J. Lynott, Robert R. Mierendorf, and K. M. Schoenberg
1992 *Systemwide Archeological Inventory Program*. Anthropology Division, National Park Service, Washington, D.C.

Table I-1. Midwest Region park authorization dates and sizes.

Park	Year Authorized	Size (acres)	Land Area ¹	Acres in NPS Ownership
Agate Fossil Beds NM	1965	3,055		2,738
Apostle Islands NL	1970	69,372	16,322	42,161
Arkansas Post N MEM	1960	389		389
Badlands NP	1929	242,756		232,822
Brown v. Board of Education NHS	1992	2		2
Buffalo NR	1972	94,309		91,827
Central High School NHS	1998	17.95		0
Cuyahoga Valley NP	1974	32,525		18,575
Dayton Aviation Heritage NHP	1992	86		84
Effigy Mounds NM	1949	1,481		1,481
First Ladies NHS	2000	undet. ²		0
Fort Larned NHS	1964	718		680
Fort Scott NHS	1978	17		17
Fort Smith NHS	1961	70		35
Fort Union Trading Post NHS	1966	442		392
George Rogers Clark NHP	1966	26		26
George Washington Carver NM	1943	210		210
Grand Portage NM	1951	710		710
Harry S Truman NHS	1983	7		7
Herbert Hoover NHS	1965	187		181
Homestead NM of America	1936	195		189
Hopewell Culture NHP	1923	1,130		413
Hot Springs NP	1921	5,549		4,869
Indiana Dunes NL	1966	15,058		10,253
Isle Royale NP	1931	571,790	133,782	539,282
James A. Garfield NHS	1980	8		8
Jefferson NEM	1935	91		91
Jewel Cave NM	1933	1,274		1,274
Keweenaw NHP	1992	1,870		0
Knife River Indian Villages NHS	1974	1,758		1,594

Table I-1. Continued.

Park	Year Authorized	Size (acres)	Land Area ¹	Acres in NPS Ownership
Lincoln Boyhood N MEM	1962	200		181
Lincoln Home NHS	1971	12		12
Minuteman Missile NHS	1999	17		17
Mississippi NRR	1988	53,775		43
Missouri NRR	1978/1991	35,425		0
Mount Rushmore NM	1925	1,278		1,238
Nicodemus NHS	1996	0		0
Niobrara NSR	1991	21,074		790
Ozark NSR	1964	80,790		61,368
Pea Ridge NMP	1956	4,300		4,279
Perry's Victory IPM	1936	25		25
Pictured Rocks NL	1966	73,228	63,122	35,726
Pipestone NM	1937	282		282
Saint Croix NSR	1968	92,735		39,267
Scotts Bluff NM	1919	3,003		2,936
Sleeping Bear Dunes NL	1970	71,189	58,473	57,070
Tallgrass Prairie N PRES	1996	10,894		0
Theodore Roosevelt NP	1947	70,447		69,702
Ulysses S. Grant NHS	1989	10		10
Voyageurs NP	1971	218,035	138,266	132,459
William Howard Taft NHS	1969	3		2
Wilson's Creek NB	1960	1,750		1,750
Wind Cave NP	1903	28,295		28,295
Totals ³		1,300,976		1,384,974

Note: Acreage figures are taken from *The National Parks: Index 1995* and *National Park Service Summary of Acreage by Park Area as of September 30, 1995*; the acreage figures above have been rounded to the nearest whole number. Where discrepancies occur, the higher numbers have been used.

¹ Land in parks that include substantial lake areas. No entry in this column indicates that the park is entirely land.

² Size is not yet determined; this is a new unit of the National Park Service.

³ Totals include land area figures, or federal ownership figures if less than the land area figure, where appropriate.

Part II Description of Park Lands

Number of Park Areas

There are 53 parks in the Midwest Region. These include six in Arkansas, one in Illinois, three in Indiana, two in Iowa, five in Kansas, four in Michigan, four in Minnesota, six in Missouri, five in Nebraska, three in North Dakota, seven in Ohio, five in South Dakota, and two in Wisconsin. The locations of these parks are given on the map facing page I-1.

Park Size and Type

The 53 parks in Midwest Region are comprised of six National Parks, sixteen National Historic Sites, eight National Monuments, four National Lakeshores, three National Memorials, four National Historical Parks, three National Scenic Riverways, one National Expansion Memorial, one National Battlefield, one National Military Park, one National River, one National Recreation Area, one National Recreational River, one National River and Recreation Area, one International Peace Memorial, and one National Preserve. Many of these units are relatively new additions to the National Park System, and some are so new that boundaries have yet to be established. The units range in size from two acres at Brown v. Board of Education, Topeka, Kansas, to 571,790 acres at Isle Royale in Michigan. The sizes of the individual parks in Midwest Region are presented in Table I-1.

History of Midwest Region Parks

Of the 53 parks in the Midwest Region, nineteen have been established since 1970. The oldest is Wind Cave National Park, which was proclaimed in 1903. Seventeen of the parks in the Midwest Region were established prior to 1960. The greatest Midwest Region growth period started in the mid-1960s and continued for a decade. NPS regional boundary changes in the mid-1970s removed many parks from the Midwest Region for twenty years. Another NPS regional boundary adjustment in 1995 returned North and South Dakota to the Midwest Region and added Arkansas. These boundary changes created a fluidity of park unit affiliation and administrative reporting that has meaning only within the NPS itself.

During this same period the National Park System experienced substantial growth with the addition of numerous new park units. The number of relatively new parks in Midwest Region has placed increased demands for planning information on limited archeological resource management and research funds. To some extent this trend continues. Ten new park units have been established in the Midwest Region since 1985, and several existing parks have had their boundaries expanded. Archeological research has simply not kept pace with the establishment of new parks in this region.

Park Locations and Accessibility Problems

The midwestern United States is a mosaic that includes areas of extremely high population density (e.g., metropolitan Chicago) and relatively low population density (e.g., Sioux County, Nebraska). Midwest Region park units are present in a variety of settings, including urban, suburban, rural /small town, and remote/wilderness. These are summarized in Table II-1.

Systematic archeological survey in these areas is accomplished mainly by individuals walking over the subject area at predetermined intervals. Since vegetative cover and soil accumulation frequently obscure the ground surface in the Midwest Region, systematic shovel probes are routinely used to locate sites. This technique has become accepted throughout the Midwest, and it appears to be effective. However, individual states often have guidelines regarding the intervals to be used between shovel probes. These are not always consistent between states, and can be a problem when a park unit lies in more than one state.

Access to areas that are to be surveyed is generally possible without any problems at most parks in Midwest Region (Table II-2). However, wilderness designations, for all or parts of some parks, can inhibit access and the types archeological survey methods employed. In other areas of the Midwest Region, survey zones may be in remote areas, or areas that require special transportation. This can increase archeological project costs, and influence the size of field crews for projects. Finally, because many park areas in Midwest Region have been created relatively recently, some of these include substantial private/non-NPS landholdings, and some have undefined boundaries. Access for archeological investigations is possible for all classes of lands in Midwest Region. However, specific conditions in these parks can, and do, influence survey methods, crew size, quality of research, and project costs. For example, at Isle Royale the most efficient means of surveying the shorelines of the park required access by a small boat. Since the area was remote, the crew had to transport food, fuel, and equipment along with the staff. Since small boats are most effective for landing along the rocky shores of the island, the crew size is effectively limited to four for most situations.

Land Ownership

Implementation of this program requires that the Service either own the land to be surveyed or obtain permission from the legal owners to carry out the survey. With the exception of four recently authorized parks, for which there are no established boundaries, the Service has acquired 79.4% (1,384,974 acres) of the lands in Midwest Region parks. The remaining 20.6% (359,473 acres) is held by private individuals, corporate groups, and other government agencies. Time associated with obtaining permission to conduct survey and testing on non-Federal lands must be factored into these projects. This will be particularly true of newly authorized park units.

Nature of the Physical Environment

The thirteen states which comprise the Midwest Region are part of the vast Interior Plains of North America. The Midwest Region is located partly in the Great Plains and partly in the Central Lowlands. These are bounded on the north by the Superior Upland, which is a southern extension of the Canadian Shield. On the south, the region is bounded by the Ozark Highlands. Most of the area within this region was visibly impacted by the southern advance of vast glaciers during the Pleistocene. Much of the Midwest Region was actually covered by ice, while the southern and western parts of the region were indirectly affected by glacial loess and the meltwaters of the large ice sheets.

The drainage systems of the Midwest Region are a product of the last glaciation. The Great Lakes were carved by the advancing ice, and the numerous kettle lakes of that area are the product of the retreating ice sheet. Water from the Great Lakes basin flows generally east through the St. Lawrence River into the Atlantic Ocean. The Ohio, Mississippi, and Missouri Rivers flow into the Gulf of Mexico, and provide drainage for the rest of the region.

The Midwest Region is a mixture of Temperate Deciduous Forest, Temperate Grasslands, and Coniferous Forest. The summary which follows was developed from Shelford (1963). Within each of these broader ecosystems, there is extensive local ecological variation. Particularly notable in this

region is the presence of extensive floodplain habitats. These habitats may be many miles wide along the Mississippi River, or only a few feet wide along a creek on the Great Plains. The habitats are important because they provided the resources valued by Native Americans and early Euroamerican immigrants.

Northern Great Lakes

The northern parts of Michigan, Wisconsin, and Minnesota represent the southern extent of the Boreal Coniferous Forest. The climate in this area is cool, and may include substantial winter snowfall. Evergreen trees such as pine, spruce, hemlock, and fir occur in association with tamarack, willow, birch, alder, and poplar. Mammals in this area include timber wolf, black bear, woodland caribou, elk, moose, white-tailed deer, snowshoe rabbit, and red squirrel. Aquatic resources, in the form of fish, and migratory waterfowl were important food sources for native peoples.

Southern Great Lakes

The northern parts of Ohio and the southern parts of Michigan, Wisconsin, and Minnesota represent the northernmost extension of the Temperate Deciduous Forest. The main characteristic of this region is the presence of broad-leaf trees that shed their leaves in autumn. White oak, white-tailed deer, and raccoon are present throughout this area. Maple–beech forest is dominant in Michigan, Indiana, and Ohio, with maple–basswood being dominant in Wisconsin and Minnesota.

Ohio River Valley

The southern parts of Ohio and Indiana are covered by tulip–oak forest. The climax vegetation in this area consists of tulip, white oak, beech, white basswood, buckeye, sugar maple, American chestnut, and red oak. This vegetation and the associated fauna represent a blending of the northern and southern Temperate Deciduous Forests.

Central Mississippi River Valley

The meandering river has created a complex series of microenvironments that support a wide range of plant and animal species. Some of the old meanders are now represented as oxbow lakes, with substantial fish populations. The annual flooding that occurred before flood-control measures were implemented built rich soils that supported a dense biomass. Willow, cottonwood, hackberry, sweetgum, oak, hickory, tulip, and cypress were common. In addition to a wide range of resident animals, this ecozone supports a large number of migratory waterfowl during the spring and fall.

Upper Mississippi River Valley

This area is a mixture of floodplain microenvironments and the northern Temperate Deciduous forest. Maple–basswood forests are abundant with basswood–red oak forests along the ecotone with the prairie grasslands. Animals in this area include the white-tailed deer, raccoon, bear, wolf, fox, squirrel, and a variety of woodland birds. Some grassland animals are also present in this area.

Ozarks

This karst area is well known for its numerous caves, free-flowing rivers, and giant springs. The rugged hills and steep valleys are in stark contrast to the prairie–plains to the west. The forest is largely an oak–hickory forest, with some pockets of southern deciduous forest species like cypress in specific microenvironments.

Pine was abundant on ridges throughout the area before logging. Animals in this region include some prairie species, but are mostly a westward extension of those found in the Appalachian region.

Prairie–Plains

This vast grassland covered most of the states of Nebraska, Kansas, North and South Dakota, and Iowa, and parts of Missouri, Minnesota, Illinois, and Wisconsin. Small pocket prairies were once present as far east as Ohio. Buffalo were common on the plains, but elk, pronghorn, badger, jackrabbit, ground squirrel, and grasshoppers were also common. Along the prairie margins, a blending of woodland and prairie animals and plants are common.

Neighboring Government Landholdings

Many of the National Park units in the Midwest Region are bounded by National Forest Lands. Several of the urban parks in this region share common boundaries with state, city, or county parks, and several parks in Michigan, Wisconsin, and Minnesota have boundaries in common with Native American lands. Over one-half of Badlands is located on the Pine Ridge Indian Reservation.

Cultural Themes

Evidence of indigenous American populations are present throughout the Midwest. Early European explorers and settlers used the Great Lakes and the Ohio and Mississippi Rivers to penetrate the vast roadless wilderness. The rich fur trade in these regions encouraged exploration, and eventually settlement. The rich agricultural soils encouraged European settlers. Mining and lumbering booms also encouraged immigration and settlement of some areas of the Midwest. Westward expansion trends resulted in the development of numerous trails (e.g., Oregon, Santa Fe) that further encouraged western settlement, including ranching on the plains.

The primary mission of the National Park Service is to preserve and protect lands and sites of consequence to the nation. In addition to the environmental protection long associated with the National Park Service, sites of historic and archeological significance are also preserved in the Midwest Region park units. The National Park Service recognizes a number of themes of national historic or cultural interest. The states of the Midwest Region form a bridge between the early history of the United States as embodied in the eastern states, and the history of a developing and expanding nation as exemplified by the western states. As such, the NPS units of the Midwest Region represent several of the historic themes recognized by the National Park Service in the 1987 *History and Prehistory: Parks and Landmarks* and subsequently in the 1996 *National Park Service Thematic Framework*.

Prehistoric and historic archeological resources in the region have the potential to be used in addressing one or more of the subsets of the main themes of the Thematic Framework, which include:

- Peopling places, creating social institutions and movements
- Expressing cultural values
- Shaping the political landscape
- Developing the American economy
- Expanding science and technology
- Transforming the environment
- The changing role of the United States in the world community

The states of the Midwest Region also share in the rich prehistoric legacy left by America's aboriginal inhabitants, the significance of which is recognized by the National Park Service. Prehistoric resources are present in nearly every Midwest Region park unit, but are well known in Agate Fossil Beds National Monument, Scotts Bluff National Monument, Badlands National Park, Theodore Roosevelt National Park, Jewel Cave National Monument, Wind Cave National Park, Apostle Islands National Lakeshore, Effigy Mounds National Monument, Hopewell Culture National Historical Park, Mississippi National River and Recreation Area, Pictured Rocks National Lakeshore, St. Croix National Scenic Riverway, Ozarks National Scenic Riverway, and Buffalo National River.

Eight park units demonstrate strong historic aboriginal or ethnographic associations. One of these, Pipestone National Monument, remains central to the ceremonial practices of many Native Americans, and Badlands National Park's Stronghold District was the scene of the last Ghost Dances of 1890. Knife River Indian Villages commemorates the long human occupation of the Great Plains and early historic contact with fur traders and explorers like Lewis and Clark. Trade with, and assistance from—and, occasionally, resistance from—Native Americans figured prominently in the early European occupation of the region. This was especially true of the fur trade, as represented historically and archeologically at Grand Portage National Monument, Voyageurs National Park, St. Croix National Scenic Riverway, and Apostle Islands National Lakeshore. Modern Chippewa maintain strong ties to the lands and waters associated with Voyageurs National Park and St. Croix National Scenic Riverways, and Buffalo National River is also acknowledged by the NPS for its ethnographic association.

The fur trade provided the impetus for the exploration and mapping of much of the northern portion of the region. And the contributions toward westward expansion made by the Spanish trade, as represented by Arkansas Post, and the early French fur traders and explorers, the voyageurs, and those who followed them should not be underestimated. Eight Midwest Region National Park units demonstrate strong historic or archeological associations with the fur trade: Arkansas Post, Indiana Dunes National Lakeshore, Fort Union Trading Post National Historic Site, Grand Portage National Monument, Jefferson National Expansion Memorial, Knife River Indian Villages National Historic Site, St. Croix National Scenic Riverway, and Voyageurs National Park.

Early exploration by the fur traders paved the way for the nation's mid-nineteenth-century westward expansion. Six Midwest Region park units commemorate this expansion and interpret the hardships faced by those who "opened the west." Fort Larned, Fort Scott, and Fort Smith National Historic Sites preserve the military outposts which protected westward expansion. Scotts Bluff National Monument served as a landmark and resting spot for weary travelers along the Oregon Trail. Homestead National Monument commemorates the homesteaders whose tenacity and cultivation of the land helped to make the Midwest "America's breadbasket." Jefferson National Expansion Memorial, as its name suggests, celebrates the role Thomas Jefferson and others played in the westward expansion of the United States. Its arch is known as the "Gateway to the West," and sits, appropriately, within the confines of the original settlement of St. Louis, one of the West's first great cities.

Westward expansion could not have been effected, nor an expanding nation maintained, without a strong and effective transportation system. In the nineteenth-century Midwest, this took the form of the great canals. Two park units preserve or commemorate the canals and the towns that grew up around them: Cuyahoga Valley National Recreation Area (the Ohio and Erie Canal), and the Illinois and Michigan Canal National Heritage Corridor. Additionally, two park units, Fort Larned National Historic Site and Scotts Bluff National Monument, are associated with the great overland stage and wagon routes of the Santa Fe and Oregon Trails, respectively.

Midwest Region National Park Service units also commemorate the wars fought by Americans to achieve and maintain their nationhood. The George Rogers Clark National Historical Park celebrates Clark's seizure of British-held Fort Sackville during the American Revolution. Perry's Victory

and International Peace Memorial commemorates Perry's victory over the British at the Battle of Lake Erie during the War of 1812, as well as the enduring peace between the U.S. and Canada that has resulted from the resolution of that conflict.

The American Civil War is also represented by Midwest parks. Arkansas Post National Memorial, Pea Ridge National Military Park, and Wilson's Creek National Battlefield commemorate engagements of the Civil War that were fought west of the Mississippi River. The Battle of Wilson's Creek also proved to be a turning-point in the battle for Missouri. The region contains the homes of two of the war's most compelling participants, Abraham Lincoln and Ulysses S. Grant. Both National Historic Sites, Lincoln Home and Ulysses S. Grant, were home to these great men on the eve of the war, and their experiences at these locations helped to shape the way each approached the war.

The Lincoln and Grant homes are not the only presidential homes preserved in the Midwest Region. There are six—seven if the Lincoln Boyhood National Memorial is counted. Lincoln Boyhood National Memorial only interprets the place where Lincoln spent his formative years, since the Lincoln family cabin is no longer standing. In addition to the aforementioned Lincoln Home and Ulysses S. Grant National Historic Sites, the other Midwest Region presidential homes are the Harry S Truman, Herbert Hoover, James A. Garfield, and William Howard Taft National Historic Sites.

Shelford, Victor E.

1963 *The Ecology of North America*. University of Illinois Press, Urbana.

Table II-1. Park locations.

Location	Number	Park Units
Urban	10	BRVB, CHSC, DAAV, FILA, GERO, JEFF, LIHO, MISS, ULSG, WIHO
Suburban	5	CUVA, FOSM, HSTR, JAGA, SCBL
Rural	25	ARPO, BUFF, EFMO, FOLS, FOSC, GRPO, GWCA, HEHO, HOCU, HOME, HOSP, INDU, KEWE, KNRI, LIBO, MIMI, MORU, NICO, NIOB, MNRR, PERI, PIPE, TAPR, THRO, WICR
Rural-Remote	9	BADL, FOUS, JECA, OZAR, PEVI, PIRO, SACN, SLBE, WICA
Remote	4	AGFO, APIS, ISRO, VOYA

Table II-2. Access issues.

Category	Number	Park Units
No Access Problems	32	AGFO, ARPO, BRVB, CHSC, DAAV, EFMO, FILA, FOLS, FOSC, FOSM, FOUS, GERO, GWCA, HEHO, HOME, HOSP, HSTR, INDU, JAGA, JECA, JEFF, KNRI, LIBO, LIHO, MIMI, PERI, PIPE, SCBL, ULSG, WICA, WIHO, WICR
Wilderness or Partial Wilderness Designation	3	BADL, BUFF, ISRO
Remote; Special Transportation Required	12	APIS, BUFF, GRPO, MORU, PEVI, PIRO, OZAR, SACN, SLBE, THRO, VOYA, WICA
Substantial Private Ownership and/or Other Non-NPS Land	11	CHSC, CUVA, FILA, HOCU, MISS, NIOB, MNRR, PIRO, SLBE, TAPR, VOYA
Boundaries Not Fully Defined	3	KEWE, NICO, PIRO

Note: Some park units qualify for more than one category, including BUFF, CHSC, FILA, PIRO, SLBE, and VOYA.

Part III

Regional Overview and Status of Archeological Inventory

Geographically, the Midwest Region encompasses the greater part of the Midwest, the central and northern Great Plains, and portions of the Ozark Highlands. It is not a single culture area made coherent by a unifying cultural tradition—rather, the region is as culturally diverse as it is geographically diverse. For some purposes, the Midwest Region can be divided into two large culture areas: the Eastern Woodlands and the Great Plains. These two areas are not easily and sharply separable in either culture or landscape. They share common cultural traditions that are manifested in each cultural subarea in different material culture complexes and at different times.

The Midwest Region's two primary areas, the Eastern Woodlands and the Great Plains, can be divided into cultural or archeological subareas for descriptive purposes. The Eastern Woodlands consist of the Upper Mississippi Valley, which comprises all or parts of Minnesota, Iowa, Illinois, Missouri, and western Wisconsin; the Lower Mississippi Valley, of which Arkansas in the Midwest Region is a part; the Ozark Highlands, which includes southern Missouri and northern Arkansas; the Ohio Valley, which includes Ohio, Indiana, and eastern Illinois; and the Great Lakes subarea, which includes Michigan and eastern Wisconsin.

The two Great Plains subareas are the Central Plains, which consists of Nebraska, Kansas, portions of western Missouri, and Iowa; and the Middle Missouri subarea, which consists of North Dakota, South Dakota, and portions of western Minnesota.

Eastern Woodlands Cultural Sequence

The Eastern Woodlands culture area includes all of the eastern North American continent from southern Canada to the Gulf of Mexico. It is rather arbitrarily divided from the Plains by a line drawn through the western portions of Minnesota, Iowa, and Missouri and the eastern edges of Oklahoma and Texas. As its name implies, it is, or was, an area of forests. The Appalachian and Ozark Highlands are dominated by oak and oak-pine stands; the Ohio Valley and the northern Middle West are regions of deciduous trees. From Illinois, where they are interspersed with wooded river valleys, prairie grasslands stretch westward. The soils are generally fertile and adequate for plant cultivation. The presence of deer, small game, fish, shellfish, nuts, and wild seed and root foods afforded an ample diet for human groups prior to cultivation.

The four cultural traditions of the Eastern Woodlands are: (1) the Big Game Hunting; (2) the Archaic; (3) the Woodland; and (4) the Mississippian. The Big Game Hunting tradition was a pattern of life that probably arose on the North American Plains and spread from there to the Eastern Woodlands (Faulkner 1970; Griffin 1961; Kellar 1983; Quimby 1966).

The Archaic tradition, which succeeded the Big Game Hunting tradition, appears to have evolved locally during the early post-Pleistocene, with its economic foundations based on hunting, fishing, shell fishing, and plant collecting. It is the first major pattern to distinguish the Eastern Woodlands as a culture area, and it had a profound formative influence on the later traditions of the area, both in elements of technology and, apparently, ceremonialism. The tradition was characterized by large and broad-bladed dart points and ground- and polished-stone tools and ornaments.

The Woodland tradition appeared in the east around 1000 BC. Although its roots are in the Archaic, it displayed new elements: Woodland pottery, ceramic figurines, mortuary mounds and earthworks, and plant cultivation, including maize. The places and times of origin of these new elements are debatable. The most intensive expressions of the tradition were in the Ohio and Mississippi valleys, and from these two drainages it appears to have fanned outward, replacing or modifying the cultures of the Archaic tradition.

During the latter half of the first millennium AD, the fourth tradition, the Mississippian, appeared somewhere in the lower and central Mississippi Valley regions. This tradition was derived in part from Archaic and Woodland heritages, but there were significant innovations: the intensification of maize agriculture, the development of large permanent villages and towns, the construction of platform mounds to serve as bases for temples or palace-type buildings, and the arrangement of these mounds around rectangular open plazas. Mississippian culture spread in all directions from its early river centers, so that by AD 1400 its influences were felt throughout much of the Eastern Woodlands area.

The four cultural traditions of the Eastern Woodlands are chronologically sequential, but they also overlap from place to place. The chronology is divided into periods: Paleoindian, Archaic, and Formative. The Formative is also known as the Burial Mound and Temple Mound periods. It is important to bear in mind the differences between the concepts of traditions and periods. Cultural traditions are cultural patterns persisting through time. The time-period names are intended as horizontal time bands.

The Paleoindian period, which is the earliest, dates from before 8000 BC. It was the time of the Big Game Hunting tradition in the Eastern Woodlands.

The Archaic period is set at 8000 to 1000 BC and is divided into three subperiods: Early (8000–5000 BC), Middle (5000–2000 BC), and Late (2000–1000 BC). The Early Archaic was the time of transition between the Big Game Hunting and Archaic cultural traditions. The latter was replacing the former, but elements of both traditions mingled in the area during this period. During the Middle and Late Archaic subperiods, only the Archaic tradition appears to have survived.

The Burial Mound period, which lasted from 1000 BC to AD 700, succeeded the Archaic period. Its two subperiods, Burial Mound I and Burial Mound II, lasted from 1000 to 300 BC and from 300 BC to AD 700, respectively. The former was another time of transition, in this instance between the cultures of the Archaic tradition and those of the Woodland tradition. During the Burial Mound II subperiod, the area was largely dominated by the Woodland tradition, although some marginal Archaic tradition cultures still survived.

The Temple Mound period dates from AD 700 to 1700. It saw the first establishment of the Mississippian cultural tradition in the Eastern Woodlands area and the beginnings of the spread of this tradition throughout the area. These events characterized the Temple Mound I subperiod (AD 700–1200). In Temple Mound II (AD 1200–1700), the Mississippian tradition had spread widely, and its impact on the older resident Woodland tradition cultures resulted in numerous regional fusions of the two traditions. In some subareas and regions, Woodland cultures, not radically modified by the new influences, continued through both Temple Mound I and II periods.

The absolute dates assigned to the several periods and their divisions are broad estimates. They are based on radiocarbon determinations and on extensions of these findings by archeological cross-dating.

The Great Plains Area and Its Cultural Sequence

The culture history of the Great Plains area is closely bound up with the culture history of the Eastern Woodlands. The Great Plains area extends from southern Alberta, Saskatchewan, and Manitoba to central Texas. Its eastern border follows the western edges of Minnesota, Iowa, and Missouri. This boundary is not sharp, either environmentally or culturally. The western border is the Rocky Mountains. Terrain throughout the region is almost uniformly flat, with elevation generally rising gradually from east to west. Tall prairie grasses cover the eastern part of the Great Plains, and here the river valleys, which flow south and east into the Mississippi system, are wooded. To the west the prairie grasses give way to the shorter plains grasses, and rainfall becomes progressively less. Natural food resources were less varied on the Great Plains than in the Eastern Woodlands, but the lack of variety was compensated for by the quantity and quality of the big herd animals of the grasslands, the mammoth and now-extinct species of bison in the Pleistocene and early post-Pleistocene, the modern bison (*Bison bison*) in later times.

There are four cultural traditions associated with the Great Plains area, and these succeeded one another, although in overlapping fashion. The earliest was the Big Game Hunting tradition. This long-dominant pattern of aboriginal life changed dramatically in the Plains about 4000 BC. It was replaced by a variant of the Archaic tradition called the Plains Archaic. This Plains Archaic or broad-spectrum hunter-gatherer-forager adaptation type (Hoffman 1996; Frison 1996) tradition developed locally from the Big Game Hunting tradition as the latter was modified by environmental pressures and was exposed to diffusion and interchange with the Archaic of the Eastern Woodlands area. Considerably later, the Woodland tradition penetrated the Plains from the east, bringing pottery and some agricultural techniques.

In the traditional view of Great Plains cultural chronology, the Archaic period is followed by the Plains Woodland, which was succeeded by the Plains Village tradition. Current thinking recognizes that an essentially hunter-forager lifestyle continued, particularly in the western and northern Plains areas, until historic times. Hoffman (1996:210–220) posits a Late Aboriginal Hunter-Gatherer-Trader culture that existed up to the time of resettlement of the nomadic Plains tribes on reservations. Co-existing with the nomadic or transhumance groups were Incipient Horticulturalists followed by Developed Village Agriculturalists (Hoffman 1996:215–220). These modern subdivisions reflect a rethinking of the older, established view of sedentary village life based on river-valley farming and the more ancient tradition of buffalo hunting that characterized the Plains Village tradition.

In the seventeenth and eighteenth centuries, the horse was introduced to Great Plains tribes with significant modifying results on both the Plains Village and the more strictly buffalo-hunting cultures of the West. During the nineteenth century such tribes as Mandan (Siouan) and the Arikara and Pawnee (Caddoan) represented the Plains Village tradition or Developed Village Agriculturalists in its fullest form, while to the west the Dakotas (Siouan) and Cheyenne (Algonquian) represent the Late Aboriginal Hunter-Gatherer-Trader survival that ended in resettlement on government defined reservations. In many instances these ethnic groups can be identified with the late prehistoric or protohistoric archeological cultures of their particular regions.

The general archeological chronology of the Great Plains area consists of four parts. The Paleoindian or Big Game Hunting period, prior to 4000 BC, was the time of the Big Game Hunting tradition on the Plains. The Archaic or Broad-Spectrum Hunter-Gatherer-Forager period, from 4000 BC to 0, is equivalent to the Plains Archaic tradition. The Woodland period has given way to the Late Hunter-Gatherer-Trader and Incipient Horticulturalist concept dating from AD 1 to AD 1000. The final aboriginal period, the Plains Village period, from AD 1000 to 1800, is now divided into the Late Hunter-Gatherer-Trader continuum, which co-existed with the Developed Village Agriculturalists.

Although the exact lines of descent from these protohistoric Middle Missouri archeological complexes cannot yet be traced in detail, it is fairly certain that the later Mandan, Hidatsa, and Arikara tribes relate back to them. The eighteenth century was a time of gathering together of Indian populations in large fortified village sites of as many as 200 houses, probably for mutual protection. Although cultural conflict or war was only one reason for the development of such large villages, there is little question that warfare was increasing in this period, and this is archeologically recognized in sites dating to the 15th century.

After European contact, horses were acquired from the south and west, and guns and other European manufactured items from the east. For over a hundred years these nomadic groups and villagers enjoyed prosperity as traders, farmers, and buffalo hunters, even in the midst of increasing conflict and warfare with their neighbors and Euroamericans. Eventually, however, the Indians gave way to the encroachments and diseases of the Euroamerican explorers, traders, and settlers.

Faulkner, Charles H.

1970 *The Late Prehistoric Occupation of Northwestern Indiana: A Study of the Upper Mississippi Cultures of the Kankakee Valley*. Ph.D. dissertation, Indiana University, University Microfilms, Ann Arbor.

Frison, George, editor

1996 *Archeological and Bioarcheological Resources of the Northern Plains*. Arkansas Archeological Survey Research Series No. 47. Fayetteville.

Griffin, James B., editor

1961 *Lake Superior Copper and the Indians, Miscellaneous Studies of Great Lakes Prehistory*. Anthropological Papers 17. Museum of Anthropology, University of Michigan, Ann Arbor.

Hoffman, Jack L., editor

1996 *Archeology and Paleoecology of the Central Great Plains*. Arkansas Archeological Survey Research Series No. 48. Fayetteville.

Kellar, James H.

1983 *An Introduction to the Prehistory of Indiana*. Indiana Historical Society, Indianapolis.

Quimby, G. I.

1966 *Indian Life and European Trade Goods*. The University of Wisconsin Press, Madison.

Table III-1. Status of archeological inventory in park units in the Midwest Region.

Park	Overview and Assessment	CSI Data	Acres Surveyed	Percent of Park Surveyed	Total Sites Recorded	National Register
AGFO	In process	Yes	1885	62	98 Terrestrial	1 Site
APIS	In process	—	2140	5	52 Terrestrial 1 Submerged	14 Historic 1 Prehistoric
ARPO	Yes	—	100	13	1 Terrestrial	1 District
BADL	—	Yes	9402	4	283 Terrestrial	1 Site
BRVB	—	In process	0	—	1 Terrestrial	1 Site
BUFF	—	Yes	5000	6	483 Terrestrial	48 Sites
CHSC	—	—	0	0	0 Terrestrial	1 District
CUVA	Yes	Yes	482	1	295 Terrestrial	75 (Including Several Districts)
DAAV	—	—	0	0	1 Terrestrial	1 District
EFMO	In process	—	740	50	58 Terrestrial, (1) Submerged	1 District
FILA	—	—	0	0	0 Terrestrial	1 Site
FOLS	—	—	0	0	2 Terrestrial	1 District
FOSC	—	In process	4	24	1 Terrestrial	1 District
FOSM	Yes	In process	4	11	1 Terrestrial	1 District
FOUS	—	Yes	117	30	3 Terrestrial	1 Site
GERO	Yes	—	23	23	3 Terrestrial	1 District
GRPO	In process	Yes	40	6	105 Terrestrial 1 Submerged	1 District
GWCA	—	—	207	100	10 Terrestrial	1 District
HEHO	—	—	45	25	1 Terrestrial, 1 Submerged	1 District
HOME	—	Yes	120	62	6 Terrestrial	2 Sites
HOCU	—	—	—	40	9 Terrestrial	1 District
HOSP	—	—	240	5	11 Terrestrial	1 Site
HSTR	—	—	7	100	2 Terrestrial	2 Sites

Table III-1. Continued.

Park	Overview and Assessment	CSI Data	Acres Surveyed	Percent of Park Surveyed	Total Sites Recorded	National Register
INDU	In process	—	795	5	224 Terrestrial 1 Submerged	4 Districts and Sites
ISRO	—	—	5300	4	196 Terrestrial 28 Submerged	8 Districts and Sites
JAGA	—	—	4	50	3 Terrestrial	1 District
JECA	—	Yes	1274	100	6 Terrestrial	0 —
JEFF	—	—	0	0	1 Terrestrial	1 District
KEWE	—	—	0	0	0	1 District
KNRI	—	Yes	1208	69	68 Terrestrial	46 Sites
LIBO	Yes	Yes	200	100	23 Terrestrial	1 District
LIHO	Yes	Yes	6	50	23 Terrestrial	1 District
MIMI	—	—	0	0	0 Terrestrial	1 Site
MISS	Yes	—	—	0	0	0 —
MNRR	—	—	10	26	0	0 —
MORU	—	—	15	1	3 Terrestrial	1 Site
NICO	—	—	0	0	0	1 Site
NIOB	—	—	0	0	47 Terrestrial	0 —
OZAR	In process	Yes	610	1	431 Terrestrial	26 Sites
PERI	In process	—	1500	35	3 Terrestrial	1 District
PEVI	—	—	12.5	50	2 Terrestrial	1 Site
PIPE	In process	In process	282	100	41 Terrestrial	1 District
PIRO	In process	—	350	1	40 Terrestrial 16 Submerged	3 Sites
SACN	In process	Yes	4500	5	333 Terrestrial 1 Submerged	12 Sites
SCBL	In process	Yes	2333	80	57 Terrestrial	1 District
SLBE	In process	In process	1051	2	116 Terrestrial	8 Sites 1 District
TAPR	Yes	—	170	0.15	12 Terrestrial	1 Sites

Table III-1. Concluded.

Park	Overview and Assessment	CSI Data	Acres Surveyed	Percent of Park Surveyed	Total Sites Recorded	National Register
THRO	—	Yes	21871	31	337 Terrestrial	0 —
ULSG	Yes	—	10	100	1 Terrestrial	1 Site
VOYA	In process	—	6000	4	94 Terrestrial 1 Submerged	6 Sites 3 Districts
WICA	—	Yes	3667	13	62 Terrestrial	1 District
WICR	Yes	—	1400	80	49 Terrestrial, (1) Submerged	1 District
WIHO	—	—	1	33	1 Terrestrial	1 District

Part IV

Regionwide Strategies for Archeological Survey

The park units of the Midwest Region contain a variety of archeological resources within a variety of ecological and depositional settings. These include parks with terrestrial and submerged archeological resources. Some of the parks are remote and managed largely as wilderness, making access for archeological survey more difficult. Since many parks are relatively new additions to the National Park System, substantial parts of some parks are still in private ownership or managed by state or local park systems. All of these factors must be considered in planning and implementing archeological surveys in the Midwest Region.

Identification of 100 percent of the archeological resources in all of these park units is physically impossible. In some areas—such as Badlands National Park, Theodore Roosevelt National Park, and Scotts Bluff National Monument—it is likely that prehistoric archeological resources are buried under a meter or more of alluvium. At Isle Royale National Park it is possible that archeological resources are submerged in waters too deep to permit reasonable and safe identification. In many areas, archeological resources are sealed under modern features such as parking lots and roads. Throughout most of the Midwest Region, vegetation covers the surface and obscures any evidence of archeological resources. Consequently, archeological methods and survey strategies must be adopted that account for these factors and the fiscal reality of archeological survey costs.

The discovery of archeological sites obscured by vegetation or soil represents one of the largest problems in archeological survey activities in the midwestern United States. In areas devoid of vegetation or regularly cultivated, archeological resources can be identified by pedestrian surface examination. However, since farming is usually limited within areas managed by the National Park Service, some form of subsurface excavation is usually needed to discover sites. Although a wide variety of methods are available, interval shovel testing has become the standard survey method in the Midwest Region (e.g., Lovis 1976; McManamon 1984; Nance and Ball 1986).

Shovel testing has proven to be effective in discovering unseen sites in Midwest Region, but the probability of locating a site is related to the interval between shovel tests, the size of each shovel test excavation, and the density and size of the archeological deposit. Shovel testing is far more labor-intensive and significantly more expensive than pedestrian surface examination. Most states recommend a specific interval (e.g., 10 m in Indiana), with the goal of standardizing site discovery methods and making site density information comparable.

Due to the laws of probability and the nature of interval shovel testing, it is not possible, nor fiscally prudent, to plan to locate and record all archeological resources in parks of the Midwest Region. Consequently, the following objectives are established:

1. 100 percent survey coverage of:
 - a. small parks, i.e., <10,000 acres,
 - b. development areas, and
 - c. historic areas, exclusive of units and areas with no federal ownership.

2. Sampling survey with the inclusion of geoarcheology, where appropriate, of all medium and large parks with the objective to identify factors that affect site locations, and thereby developing a model to predict high-, medium-, and low-probability areas for sites. Conduct differing levels of survey intensity within each of the following probability areas.
 - a. low-probability area: reconnaissance-level survey of entire area.
 - b. medium-probability area: 50 percent survey of entire area.
 - c. high-probability area: 100 percent survey of entire area.

Thirty-two Midwest Region units consist of less than 10,000 acres each (Table I-1), excluding consideration of those with no federal ownership. Reasonably complete surveys have been performed to contemporary standards at Agate Fossil Beds, George Washington Carver, Homestead, Jewel Cave, Knife River Indian Villages, Lincoln Boyhood, Perry's Victory, Pipestone, Scotts Bluff, Ulysses S. Grant, and William Howard Taft. Less complete but contemporary surveys have been conducted at Fort Scott, Lincoln Home, James A. Garfield, Fort Larned, Herbert Hoover, Grand Portage, Wilson's Creek, Effigy Mounds, and Hopewell Culture. Inventory and evaluation efforts are in progress at Buffalo National River, Jewel Cave, Pea Ridge National Military Park, and Wilson's Creek National Battlefield. At the remaining small parks, archeological research has been limited to specific excavations, construction monitoring, and surface survey.

Ten areas in the Midwest Region include between 10,000 and 100,000 acres. During the last fifteen years, interval shovel testing surveys have been conducted in eight of these areas (excluding Buffalo River, Theodore Roosevelt, and Wind Cave) to some degree. Theodore Roosevelt has about 33 percent of the park inventoried and there is a geoarcheologically based site location model for the park. Most of these parks probably include archeological resources that may be submerged in streams, springs, lakes, or ponds. Although each of these parks has received only limited survey, research has been sufficient to develop models of site locations. Some of the park models are more sophisticated and formalized, while others are more intuitive. All of these models need to be clearly articulated. This can best be accomplished through the development of overviews and assessments. Surveys in these medium-sized parks should be focused on areas that have a moderate to high probability of archeological sites being present.

Three parks in the Midwest Region consist of more than 100,000 acres. Isle Royale and Voyageurs National Parks are located at the northern border of the United States and are part of the Southern Boreal Forest ecosystem. Both parks consist of substantial areas of land and lakes, and both areas have received some systematic terrestrial archeological survey. At Isle Royale, there has been some effort to inventory submerged archeological resources, but this has focused largely on major shipwrecks (Murphy et al. 1982). Badlands was the subject of a five-year SAIP inventory that was completed in 2002. Archeological research in these parks has produced models of site locations that should serve to focus future investigations on areas of moderate to high probable site density. Like the medium-sized parks, the models of probable site locations should be clearly articulated in overviews and assessments.

Research Designs and Work Plans

Updated research designs need to be developed for all parks. These will be completed as components of the overviews and assessments. Research designs will place park research in a regional context and integrate NPS research with studies conducted by non-NPS archeologists. Once the research designs are completed, individual projects will be planned and implemented through work plans. Work plans will be consistent with research designs.

Consultation with State Historic Preservation Officers

Development of this plan and all significant future research will be planned in consultation with the State Historic Preservation Officers of the Midwest Region.

Consultation with Indian Tribal Groups and Other Appropriate Ethnic Groups

Development of this plan and all significant future research will be planned in consultation with the appropriate Native American tribal groups and other ethnic groups of the Midwest Region. Consultation will be effected through appropriate park superintendents.

Research on Lands That Are Not NPS-Owned

Many of the park units in Midwest Region include areas which are not owned by the National Park Service. Any area that is included within the authorized boundaries of a National Park Service unit is part of this program. Archeological research on lands not owned by the National Park Service must be approved by the landowners.

Curatorial Issues

All archeological projects will be conducted in a manner that is consistent with NPS curatorial policies. Archeologists will consult with responsible curatorial personnel to insure that appropriate accession numbers, loan forms, treatment forms, etc., are prepared for each project.

Cooperation with Non-NPS Scholars

It is in the best interests of archeological research and resource preservation to encourage non-NPS archeologists to develop research interests that relate to NPS units. Wherever possible, efforts will be made to incorporate the work and research interests of non-NPS archeologists working in the Midwest Region. These studies may be incorporated into this program through cooperative agreements, Archeological Resources Protection Act permits, contracts and purchase orders, and other agreements and permits as appropriate.

Interdisciplinary Research

Much of the data preserved in the archeological record is of value to other scientific disciplines, and archeological research frequently benefits from the participation of other professionals. Whenever appropriate, archeological investigations should be planned to incorporate the research interests of non-archeologists. Data from archeological contexts that relate to other scientific disciplines should be made available to those professions in a reasonable and timely manner.

Interpretation

It is important that appropriate information about the archeological record be shared with the public. Whenever it is possible and appropriate, archeologists will work with interpreters to provide the public with current information about archeology and archeological resources. This cooperation may include press releases, lectures, pamphlets, exhibits, books, training, etc.

Overviews and Assessments

Overviews and assessments are summaries and syntheses of archeological work that has been accomplished and present what is known about the archeology of parks in the Midwest Region. Overviews and assessments provide direction to future research efforts. Updated research designs are developed as components of these documents.

State Standards

Most of the states in the Midwest Region have identified some standards for archeological investigations. These standards will be consulted during development of research designs and work plans for archeological investigations.

State Site Forms

In accordance with the Programmatic Memorandum of Agreement, appropriate state site forms will be completed and submitted for each newly discovered archeological site in park units of the National Park System, Midwest Region.

Submerged Lands

Many of the parks in the Midwest Region include submerged lands. Some of these are owned by the National Park Service. In others, the waters are owned by the National Park Service and the bottoms are owned by the states. Wherever it is appropriate, surveys of submerged lands will be coordinated with the states. The National Park Service Submerged Cultural Resource Unit will provide technical assistance as needed in designing and implementing archeological research on submerged lands.

Summary

The recommendations for survey coverage of Midwest Region park units varies from 100 percent survey in 24 small parks, to sampling survey in 14 medium to large parks. Survey should include coverage of areas where archeological resources may be submerged, such as lakes, rivers, and springs. Development of overview and assessments are recommended for all parks in Midwest Region.

Lovis, William A.

1976 Quarter-Sections and Forests: An Example of Probability Sampling in the Northeastern Woodlands. *American Antiquity* 41:365–372.

McManamon, Francis P.

1984 Discovering Sites Unseen. In *Advances in Archaeological Method and Theory*, Vol. 7, edited by Michael B. Schiffer, pp. 223–292. Academic Press, New York.

Murphy, Larry, Dan Lenihan, and Toni Carrell

1982 *Underwater Archeology of Isle Royale*. National Park Service, US Department of the Interior, Submerged Cultural Resources Center, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Nance, Jack D., and Bruce F. Ball

1986 No Surprises? The Reliability and Validity of Test Pit Sampling. *American Antiquity* 51:457–483.

Table IV-1. Status of park inventory and proposed inventory coverage, in percent.

Acres	Park	Actual Survey Coverage	Proposed Survey Coverage
<100	BRVB	100	100
	CHSC	0	100
	DAAV	0	100
	FILA	0	100
	FOSC	24	100
	FOSM	11	100
	HSTR	100	100
	JAGA	50	100
	JEFF	2	100
	LIHO	50	100
	MIMI	0	100
	PEVI	50	100
	ULSG	10	100
WIHO	33	100	
100–1,000	ARPO	13	100
	FOLS	0	100
	FOUS	30	100
	GRPO	6	100
	GERO	23	100
	GWCA	100	100
	HEHO	25	100
	HOCU	In progress	100
	HOME	62	100
	JECA	100	100
	LIBO	100	100
	NICO	0	100
	PIPE	100	100

Table IV-1. Concluded.

Acres	Park	Actual Survey Coverage	Proposed Survey Coverage
1,000–10,000	AGFO	62	100
	EFMO	50	100
	HOSP	0	100
	KEWE	0	100
	KNRI	69	100
	MORU	1	100
	PERI	35	100
	SCBL	80	100
	WICR	80	100
10,000–100,000	APIS	5	unknown
	BUFF	6	unknown
	CUVA	1	unknown
	INDU	5	unknown
	MISS	0	unknown
	MNRR	10	unknown
	NIOB	0	unknown
	OZAR	1	unknown
	PIRO	1	unknown
	SACN	5	unknown
	SLBE	2	unknown
	TAPR	0.15	100
	THRO	31	unknown
WICA	13	unknown	
>100,000	BADL	3.6	25
	ISRO	4	unknown
	VOYA	4	unknown

Part V

Proposed Projects and Regional Priorities

This section summarizes the inventory needs and priorities of the Midwest Region as of the end of Fiscal Year 2003. Table V-1 is a complete listing of project statements for each park as taken from Program Management Information System statements for each cluster.

As mentioned in Part IV, the overall survey goals in the Midwest Region are to: (1) survey small parks at 100 percent; (2) survey development areas at 100 percent; and (3) survey a sufficient sample at large parks to be able to describe the time period and culture groups relative to the different environmental zones in each park. Obviously, these are desired goals that will be affected by available funding and management needs.

SAIP Priority Factors

These are the seven priority factors for the Midwest Region as determined by the intent of SAIP and by recognized needs in the region. These factors, listed below, are not necessarily in priority order.

1. Schedules for inventory are coordinated with schedules for development or revision of park planning documents (GMP, RMP, DCP, Interpretive Prospectus).
2. Park areas that have suffered from or are likely to be threatened by the destructive effects of natural processes or human activities are assigned a high priority for archeological inventory.
3. Development zones and special-use zones within a park should be assigned a high priority for archeological inventory.
4. Historic zones within parks and entire park units that, by statute, are automatically listed on the National Register of Historic Places because of their archeological or historical importance should be assigned a high priority for archeological inventory.
5. Archeological inventory projects that address research questions, problems, topics, or priorities of state, regional, or national importance should be assigned a high priority.
6. Park areas lacking virtually any information about the presence or absence of archeological resources should be assigned a high priority.
7. The priority of an archeological inventory project should consider the potential for archeological resources being present and the likelihood of being able to locate (or discover) archeological resources.

In addition to these priority factors, the regional priorities consider the importance of funding ongoing SAIP projects, and the funding of projects in parks where there is a significant lack of baseline information. Finally, project priority is, candidly, affected by issues that are politically or strategically sensitive.

The Project Statements

At the present time there are 164 project statements found in the PMIS that appear to be eligible for SAIP funding constituting nearly \$16,000,000 in costs in FY 2002 dollars. It is, of course, important that all projects meet the criteria of this funding source as outlined in this document.

The project statements are presented in Table V-1, listed alphabetically by park acronym. The applicable PMIS statement number is noted. These project statements represent the needs of 41 of the 53 park units in the Midwest Region.

It is important to note which SAIP Priority Factors apply to the region's project statements. The numbers of projects applicable to each priority factor are summarized below (please note that some projects apply to more than one SAIP category; thus the total numbers are larger than the total projects). Thirteen project statements concern threatened resources (SAIP Priority Factor 2). Seventeen projects are proposed for developed or special-use areas (SAIP Priority Factor 3). Parks or districts on the National Register that have not been inventoried or evaluated are the focus of twelve project statements (SAIP Priority Factor 4). Fifty-four project statements propose to address research questions of state, regional, or national importance (SAIP Priority Factor 5). Ninety-four projects are proposed in parks lacking baseline archeological inventory data under SAIP (SAIP Priority Factor 6).

Classifying Midwest Region Projects

Priority setting for cultural resource project funding in the Midwest Region is based on a number of factors related to both archeological and management issues. Priorities within each park are set by the parks themselves when project statements are sent to the regional office for consideration. Projects may rise to the top of the regional priority list because of threats to cultural resources, because of new park or land acquisitions, or because of other strategic or management concerns.

Prioritization will be a dynamic process over the life of SAIP funding cycles. The priority factors listed above can indicate the importance of specific projects. On the other hand these factors cannot tell us which projects are the most important for the Midwest Region. Rather than try to prioritize the entire current list of project statements according to the circumstances and politics of today, this plan categorizes projects into three priority classes. Projects may fit into more than one class or may change class as time passes and priorities are realigned, as management decisions affect priorities, or as funding becomes available. Project statements themselves may be rewritten and take on a new focus over time. New project statements will be added to the list and prioritized as they are developed as part of the park planning process.

We have devised a rank classification to prioritize the SAIP funding allocations and other funding sources that may become available such as other CRPP funds or donated funds.

Class 1 Priority

Class 1 projects are those that are ongoing SAIP projects as of FY 2003. These projects will receive funding priority until their scheduled completion.

Class 2 Priority

Class 2 priority is given to survey in park areas with little or no archeological data that meet current standards and to projects where cultural resources are threatened by natural or human-

induced factors. Parks that lack good baseline data will be given priority to collect basic data that may help identify the unique value of previously unknown resources or may identify threats to entire classes of sites within a park area.

Class 2 priority also includes park units identified in Part IV as needing 100-percent-level inventories, excluding those ongoing projects. This includes those parks with partial survey coverage at present. SAIP Priority Factors 2 and 7 apply to the projects in this category. In addition there are several parks in the large- and medium-size categories that need some type of sampling inventory to define a baseline set of archeological data for inclusion in management decisions and actions affecting resource management.

Class 3 Priority

Archeological resources in developed areas and areas that receive high visitor impacts are among the most threatened resources in the park system (SAIP Priority Factors 2 and 3). There are some projects proposed for developed and high-use areas. Unless these projects are in areas slated for new construction or development they will have to be inventoried with SAIP or CRPP funds. Examples are projects identified in park planning documents to deal with shoreline erosion of archeological sites at Apostle Islands, protection of terrestrial and underwater sites at Sleeping Bear, identifying sites exposed by low water at Voyageurs, and river erosion of and natural impacts to sites at Knife River Indian Villages.

Summary Of Midwest Region Priorities

The process for establishing priorities for cultural resource projects in the Midwest Region is reasonably complex and subject to change from year to year. The traditional sources of funding for cultural resources projects have been the Cultural Resources Preservation Program (CRPP) and the construction program. The influx of money from the Systemwide Archeological Inventory Program should provide the region with the opportunity to fund more cultural resource survey projects which, in turn, will help correct the material weakness identified during the 1991 Management Control Review of the NPS archeology program.

The project statements presented in the Midwest Region Survey Plan are a good indication of our present survey needs but are by no means the only survey projects needed to meet legal requirements.

The purpose of this revised document has not been to set out a strict schedule that must be followed for the next 20 to 30 years, but is, rather, to update and outline the status of archeological inventory in the Midwest Region and to assess its continuing survey needs. In addition, a framework for summarizing the data that can be updated as surveys are completed and new project statements are developed. The identification and protection of archeological resources can proceed from here.

Table V-1. Archeological Statements in the Midwest Region's Program Management Information System.

Park	PMIS No.	Project Title	Est. Cost	Comments
AGFO	61308	Archeological Site Condition Assessment	3,000	
AGFO	40238	Kelly Homestead Evaluation	3,000	
AGFO	62900	Hoffman Flat Cultural Inventory	6,005	
AGFO	40220	Cultural Resource Remote Sensing Location	10,000	
AGFO	40330	Cultural Resources Remote Sensing Documentation	10,000	
AGFO	40231	Phipps Site Test Excavation	15,000	
APIS	37160	Archeological Evaluation of 4 Island Quarries	60,000	
APIS	37180	Submerged Cultural Resource Study	160,000	Three-year project: Year 1 at 40,000; Years 2 and 3 60,000 each
APIS	72622	Evaluation of Selected Archeological Sites	227,000	Five-year project: Year 1 at 40,000; Years 2-4 at 60,000 each; Year 5 at 7,000
APIS	36976	Parkwide Archeological Survey	250,000	Five-year project at 50,000 per year
ARPO	72089	Non-Invasive Below-Ground Cultural Resource Inventory of the Memorial	161,000	
BADL	23389	Prepare National Register Nomination for Archeological Sites in Badlands	90,000	Two-year project at 45,000 each year
BADL	71445	Conduct Five-Year Project, Archeological Inventory of South Unit	453,000	Five-year project: Years 1-3 at 100,000 each; Year 4 at 121,500; Year 5 at 31,500
BRVB	50915	Conduct Archeological Investigation of Monroe School Grounds	150,000	
BUFF	84419	Publish BUFF Prehistoric Textile Report	9,750	
BUFF	24610	Develop Stabilization Plan	121,400	Two-year project: 60,700 each
BUFF	96099	Inventory Bluff Shelters to Stop Looting	69,300	
BUFF	36809	Nominate BUFF Prehistoric Archeological Sites to National Register	37,450	
BUFF	35461	Assess BUFF Repatriation Related Archeological Sites	68,600	

Park	PMIS No.	Project Title	Est. Cost	Comments
BUFF	23937	Inventory BUFF Caves for Archeological Sites	216,000	In progress, funded in Year 1 at 55,000
BUFF	50150	Survey Prescribed Burn Areas	91,800	
BUFF	24589	Inventory BUFF Prehistoric Cultural Resources	261,150	Three-year project: Year 1 at 95,450; Year 2 at 76,700; Year 3 at 38,900
CHSC	None	—	0	
CUVA	36118	Conduct Archeological Overview and Assessment of Threatened Sites Adjacent to Cuyahoga River	60,000	
DAAV	50207	Archeological Assessment of P. L. Dunbar State Memorial	20,000	
DAAV	50196	Archeological Assessment of the Wright Cycle Property	20,000	
DAAV	50204	Archeological Assessment of Huffman Prairie Flying Field	75,000	
EFMO	62785	Develop Archeological Sites Management Information System	29,080	
EFMO	41759	Stablize and Rehabilitate Sny Magill Burial Mound and Terrace, Phase I	130,000	
EFMO	41780	Deliniation of Indistinct Mounds	17,500	
EFMO	41760	Finalize Archeological Overview and Assessment	25,310	In progress
EFMO	41781	Evaluate Rockshelter Sites, Phase I	60,000	
EFMO	63070	Evaluate Rockshelter Sites, Phase II	60,000	
EFMO	63086	Evaluate Rockshelter Sites, Phase III	60,000	
EFMO	41767	Inventory Archeological Resources, Phase 1	80,000	
EFMO	41775	Inventory Archeological Resources, Phase 2	80,000	
EFMO	41777	Inventory Archeological Resources, Phase 3	80,000	
EFMO	63032	Inventory Archeological Resources, Phase 4	80,000	
EFMO	63033	Inventory Archeological Resources, Phase 5	80,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
FILA	None	—	0	
FOLS	38523	Complete Archeological Basemap	90,000	
FOSC	70440	Conduct Archeological Overview and Assessment	20,000	
FOSM	37390	Update Park Archeological Assessment	20,000	In progress
FOSM	21156	Conduct Geophysical Survey of Hidden Park Archeological Features	50,000	
FOSM	50507	Investigate Prehistoric Native American Occupation, Phase I	50,000	
FOSM	50512	Investigate Prehistoric Native American Occupation, Phase II	50,000	
FOSM	50802	Investigate Prehistoric Native American Occupation, Phase III	50,000	
FOUS	73021	Conduct Geophysical Inventory of Garden Coulee Archeological Site	100,000	
FOUS	73008	Conduct Geophysical Inventory of Fort William	100,000	
FOUS	50867	Evaluation and Map of Archeological Resources	250,000	Five-year project at 50,000 per year
GERO	25477	Conduct an Archeological Survey and Assessment	20,000	
GWCA	None	—	0	
GRPO	35465	Survey Grand Portage Archeological Resources	47,000	
GRPO	35473	Conduct Systematic Archeological Inventory of Stockade Area	150,268	
GRPO	25507	Survey Fort Charlotte Archeological Resources	60,000	
GRPO	90362	Report of Underwater Archeological Investigations at Fort Charlotte	50,500	
GRPO	37540	Identify Historic Maritime Activity Areas	80,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
HSTR	38301	Archeological Inventory and Evaluation of Truman Home Grounds	70,000	Two-year project: Year 1 at 40,000; Year 2 at 30,000
HSTR	38198	Archeological Inventory and Evaluation of Wallace/Noland Homes	90,000	Two-year project: Year 1 at 55,000; Year 2 at 35,000
HSTR	38126	Archeological Inventory and Evaluation of Truman Farm	150,000	Three-year project: Years 1 and 2 at 55,000 each; Year 3 at 40,000
HEHO	39664	Conduct Archeological Survey and Testing of Site	250,040	
HEHO	39662	Conduct Archeological Survey and Evaluation of Sites	190,000	Three-year project: Year 1 at 70,000; Years 2-3 at 60,000 each
HOME	93460	Geophysical Remote Sensing of Archeological Features	35,000	
HOME	93523	Reevaluation and Assessment of 1948 Archeological Investigations	50,000	
HOCU	38679	Archeological Overview and Assessment of World War I Camp Sherman	25,000	
HOCU	38391	Archeological Overview and Assessment of High Bank Works	25,000	In progress
HOCU	38617	Archeological Overview and Assessment of Hopewell Mound Group	25,000	
HOCU	36658	Document Park Artifacts and Records Housed Elsewhere	40,000	
HOCU	38729	Archeological Inventory of High Banks Works	50,000	
HOCU	38322	Archeological Inventory of High Banks Works Development Zone	50,000	
HOCU	38694	Archeological Inventory of Buried Sites, Hopeton Earthworks Unit	50,000	
HOCU	38324	Archeological Inventory of Hopeton Earthworks Development Zone	60,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
HOCU	38320	Archeological Inventory of Hopewell Mound Group Development Zone	60,000	
HOCU	38017	Archeological Inventory of Mound City Development Zone	60,000	
HOCU	7840	Archeological Survey and Mapping	450,000	
HOSP	35868	Complete Cultural Resources Base Map	65,800	
HOSP	35804	Inventory Park Archeological Resources	500,000	Five-year project at 50,000 per year
INDU	41656	Archeological Inventory of Select Landforms	300,000	
INDU	41654	Prepare Archeological Overview and Assessment	60,000	In progress
INDU	41655	Evaluation of Prehistoric Sites for Content, Context, and Condition; Year 1 of 4	50,000	
INDU	62661	Evaluation of Prehistoric Sites for Content, Context, and Condition; Year 2 of 4	50,000	
INDU	62677	Evaluation of Prehistoric Sites for Content, Context, and Condition; Year 3 of 4	50,000	
INDU	62707	Evaluation of Prehistoric Sites for Content, Context, and Condition; Year 4 of 4	50,000	
ISRO	35969	Archeological Survey of Windigo Area	56,000	
ISRO	35975	Archeological Inventory of Historic Mining Sites	75,000	
ISRO	35979	Archeological Inventory of Historic Light Stations	180,000	Three-year project at 60,000 per year
ISRO	35980	Archeological Inventory of Interior Lakes and Portage Trails	225,000	Three-year project at 75,000 per year
ISRO	35978	Archeological Inventory of Aboriginal Copper Mining Sites	225,000	Three-year project at 75,000 per year
ISRO	35971	Archeological Inventory of Historic Fishing Sites	300,000	Five-year project at 60,000 per year
ISRO	35645	Inventory of Archeological Sites on Relict Beach Ridges	300,000	Five-year project at 60,000 per year

Park	PMIS No.	Project Title	Est. Cost	Comments
ISRO	35970	Archeological Inventory of Submerged Components of Terrestrial Sites	500,000	Five-year project at 75,000 per year
JAGA	36468	Complete Archeological Inventory of Park	130,000	
JEFF	None	—	0	
JECA	73015	Parkwide Archeological Testing and Evaluation	50,000	Final year of an in-progress project — Year 4 of 4
KEWE	None	—	0	
LIBO	None	—	0	
LIHO	19643	Archeological Identification of Historic Properties	300,000	
LIHO	19648	Archeological Evaluation of Historic Properties	340,000	
MIMI	71555	Conduct Archeological Inventory (New Area)	60,500	
MISS	73113	Prepare Archeological Identification and Evaluation Report	32,000	
MISS	97618	Archeological Planning and Management Study for Meeker Island Lock and Dam Ruins	30,000	
MNRR	None	—	0	
MORU	None	—	0	
NICO	90474	Geophysical Inventory of AME Church	90,000	Two-year project: Year 1 at 60,000; Year 2 at 30,000
NIOB	None	—	0	
OZAR	48697	Produce Archeological Base Map of Development Areas, Phase I	86,361	
OZAR	62799	Produce Archeological Base Map of Development Areas, Phase II	67,075.5	
OZAR	62086	Produce Archeological Base Map of Development Areas, Phase III	67,075.5	
OZAR	48849	Open Fields Archeological Survey, North District, Phase I	75,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
OZAR	48854	Update CSI and Document GIS Databse	6,500	
OZAR	50105	Conduct Archeological Survey of Tributary Valleys, South District, Phase I	95,000	
OZAR	50104	Conduct Archeological Survey of North District, Phase I	95,000	
OZAR	50105	Conduct Archeological Survey of Tributary Valleys, South District, Phase I	95,000	
OZAR	48853	Conduct Archeological Survey of South District, Phase I	75,000	
OZAR	48687	Conduct Archeological Survey of Caves, North District, Phase I	95,000	
OZAR	48693	Conduct Archeological Cave Evaluation, South District, Phase I	95,000	
PIPE	73979	Evaluate and Assess Condition of Archeological Resources	10,000	
PIRO	42926	Evaluative Testing of Pictured Rocks Shoreline	300,000	
PIRO	42928	Map Old Munising and Related Features	25,000	
PIRO	42911	Develop Geoarcheological Inventory of Logging Sites	70,000	
SACN	74158	Conduct Archeological Cave Inventory	75,000	
SACN	72192	Investigation and Evaluation of Shell Midden	20,000	
SACN	35865	Nominate Archeological Sites to National Register	64,000	
SACN	35880	Site Condition Assessment of Archeological Sites	125,000	Four-year project: Years 1–3 at 30,000 each; Year 4 at 35,000
SCBL	None	—	0	
SLBE	25481	Archeological Overview and Assessment	60,000	In progress
SLBE	25460	Archeological Inventory of Historic Farms, North and South Manitou Island	75,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
SLBE	25469	Conduct Archeological Mapping and Evaluation of Former Townsite of Aral	90,000	
SLBE	25429	Archeological Inventory of Specific Topographic Settings on South Manitou Island	185,000	
SLBE	25406	Archeological Inventory of Specific Topographic Settings on North Manitou Island	300,000	
SLBE	25440	Archeological Inventory of Historic Sites	300,000	
TAPR	73858	Conduct Archeological Inventory of Fox Creek Corridor, Year 1 of 2	64,000	
TAPR	74232	Conduct Archeological Inventory of Fox Creek Corridor, Year 2 of 2	64,000	
TAPR	61890	Tallgrass Archeological Inventory, Year 1 of 5	70,000	
TAPR	61916	Tallgrass Archeological Inventory, Year 2 of 5	70,000	
TAPR	61917	Tallgrass Archeological Inventory, Year 3 of 5	70,000	
TAPR	61919	Tallgrass Archeological Inventory, Year 4 of 5	70,000	
TAPR	61920	Tallgrass Archeological Inventory, Year 5 of 5	70,000	
TAPR	61903	Evaluate Archeological Resources, Spring Hill Ranch Complex	70,000	
THRO	39387	Evaluate Known Archeological Resources for National Register	225,000	Three-year project at 75,000 per year
ULSG	90472	Geophysical Remote Sensing, Archeological Feature Identification	65,000	
VOYA	41983	Monitor Impacts on Archeological Resources	72,000	
VOYA	41925	Document Historic Logging Camps	130,000	
VOYA	41938	Inventory Paleosol Archeological Sites	120,000	Two-year project at 60,000 per year
VOYA	41930	Complete Archeological Inventory of Shoreline	180,000	Three-year project at 60,000 per year

Park	PMIS No.	Project Title	Est. Cost	Comments
VOYA	41931	Inventory and Evaluate Historic Ojibwe Sites	200,000	Four-year project: Years 1–3 at 65,000 each; Year 4 at 5,000
VOYA	41978	Evaluation of Archeological Resources	225,000	Three-year project at 75,000 per year
WIHO	None	—	0	
WICR	62402	Archeological Inventory for Entire Park, Years 4 and 5	160,000	Years 4 and 5 of a five-year project at 80,000 per year
WICR	90538	Ground Truthing Subsurface Archeological Resources, Ray House	32,760	
WICA	50687	Inventory Archeological Resources, Year 5 of 5	48,000	
WICA	82495	Inventory Archeological Resources, Phase II, FYs 2004–2008	275,000	Five-year project at 55,000 per year
MWAC	50592	Prepare Great Plains Overview and Assessment, Year 5 of 9	50,000	
MWAC	62489	Prepare Great Plains Overview and Assessment, Year 6 of 9	50,000	
MWAC	62491	Prepare Great Plains Overview and Assessment, Year 7 of 9	50,000	
MWAC	62493	Prepare Great Plains Overview and Assessment, Year 8 of 9	50,000	
MWAC	74433	Prepare Great Plains Overview and Assessment, Year 9 of 9	50,000	
MWAC	50522	Archeological Overview and Assesemnt, Great Lakes, Year 5 of 9	50,000	
MWAC	50533	Archeological Overview and Assesemnt, Great Lakes, Year 6 of 9	50,000	
MWAC	50537	Archeological Overview and Assesemnt, Great Lakes, Year 7 of 9	50,000	
MWAC	62495	Archeological Overview and Assesemnt, Great Lakes, Year 8 of 9	50,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
MWAC	62497	Archeological Overview and Assesemnt, Great Lakes, Year 9 of 9	50,000	
MWAC	37060	Conduct Ceramic Source Identification Study for Great Lakes, Year 1 of 5	50,000	
MWAC	63076	Conduct Ceramic Source Identification Study for Great Lakes, Year 2 of 5	50,000	
MWAC	74222	Conduct Ceramic Source Identification Study for Great Lakes, Year 3 of 5	50,000	
MWAC	74229	Conduct Ceramic Source Identification Study for Great Lakes, Year 4 of 5	50,000	
MWAC	74233	Conduct Ceramic Source Identification Study for Great Lakes, Year 5 of 5	50,000	
MWAC	37066	Conduct Lithic Source Identification Study for Upper Great Lakes, Year 1 of 5	50,000	
MWAC	63081	Conduct Lithic Source Identification Study for Upper Great Lakes, Year 2 of 5	50,000	
MWAC	74320	Conduct Lithic Source Identification Study for Upper Great Lakes, Year 3 of 5	50,000	
MWAC	74224	Conduct Lithic Source Identification Study for Upper Great Lakes, Year 4 of 5	50,000	
MWAC	74227	Conduct Lithic Source Identification Study for Upper Great Lakes, Year 5 of 5	50,000	
MWAC	37181	Develop Historic Ceramic Type Collection	50,000	
MWAC	37185	Prepare Archeological Project Summaries	50,000	
MWAC	37030	Archeological Inventory of Logging Resources in Upper Great Lakes, Year 1 of 5	60,000	
MWAC	63085	Archeological Inventory of Logging Resources in Upper Great Lakes, Year 2 of 5	60,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
MWAC	74506	Archeological Inventory of Logging Resources in Upper Great Lakes, Year 3 of 5	60,000	
MWAC	74516	Archeological Inventory of Logging Resources in Upper Great Lakes, Year 4 of 5	60,000	
MWAC	74519	Archeological Inventory of Logging Resources in Upper Great Lakes, Year 5 of 5	60,000	
MWAC	37325	Geomorphological Study of Midwest Region Parks, Year 1 of 5	65,000	
MWAC	63066	Geomorphological Study of Midwest Region Parks, Year 2 of 5	65,000	
MWAC	72976	Geomorphological Study of Midwest Region Parks, Year 3 of 5	65,000	
MWAC	73204	Geomorphological Study of Midwest Region Parks, Year 4 of 5	65,000	
MWAC	73253	Geomorphological Study of Midwest Region Parks, Year 5 of 5	65,000	
MWAC	37038	Archeological Inventory of Fossil Great Lakes Beaches, Year 1 of 5	75,000	
MWAC	63061	Archeological Inventory of Fossil Great Lakes Beaches, Year 2 of 5	75,000	
MWAC	74525	Archeological Inventory of Fossil Great Lakes Beaches, Year 3 of 5	75,000	
MWAC	74529	Archeological Inventory of Fossil Great Lakes Beaches, Year 4 of 5	75,000	
MWAC	74532	Archeological Inventory of Fossil Great Lakes Beaches, Year 5 of 5	75,000	
MWAC	37335	Great Plains Park Settlement and Homestead Studies, Year 1 of 3	80,000	

Park	PMIS No.	Project Title	Est. Cost	Comments
MWAC	63071	Great Plains Park Settlement and Homestead Studies, Year 2 of 3	80,000	
MWAC	74401	Great Plains Park Settlement and Homestead Studies, Year 3 of 3	80,000	

Part VI Individual Park Summaries

Various Midwest Region national park units lie within each of the previously described cultural and geographic subareas. In this chapter, brief overviews of previous archeological research in each park and of each park's archeological resources are presented in alphabetical order by park name. Table III-1 summarizes the available archeological information on each park and the current status of park inventory.

Agate Fossil Beds National Monument

There has been considerable archeological research within what is now Agate Fossil Beds National Monument, summarily demonstrating that the evidence of prehistoric human occupation here is as remarkable and important as the much earlier fossil evidence of 20 million years ago. Initial survey efforts, however, were limited in scope and not always organized in systematic fashion. Although understandable in light of the monument mission, it is unfortunate that until recently the prehistoric and historic cultural resources at Agate Fossil Beds have not had the same degree of scientific attention and public visibility enjoyed by paleontological and other natural resources in the park.

Early in the 1970s, Kay (1975) conducted limited archeological survey projects at both Scotts Bluff and Agate Fossil Beds National Monuments, which lie approximately 55 miles apart. Work at Agate focused mainly on lands north of the Niobrara River, which nearly bisects the park along its east-west axis, with little if any attention paid to the larger expanse on the south side. Efforts were limited entirely to surface examinations made by Kay and one associate. Accordingly, they were able to record numerous sites, but few of them have well-defined boundaries. Indeed, it appears that some are defined simply on the basis of supporting landforms.

Subsequent research in the park for the most part has been limited to archeological testing at known sites threatened by approved facility developments, such as road improvements and construction of the new visitor center and housing units. The most extensive and intensive projects of that sort are Danny Olinger's 1976 and Caven Clark's 1991 investigations of the visitor center complex, as well as the latter's 1992 survey and testing prior to improvement of Marsland (River) Road (Clark 1993, 1994; Olinger 1980). In addition, William Hunt (1990) monitored the 1990 modifications to parking facilities at the visitor center and examined an eroding archeological site (25SX89) in the park.

In 1994, the Midwest Archeological Center entered into a master cooperative agreement with the University of Nebraska, Lincoln, to initiate a parkwide archeological survey of Agate Fossil Beds. The 1994 investigations involved systematic survey of approximately 12.5 sq km (4.7 sq mi) or 1,250 ha (3,100 ac), all south of the Niobrara. Excluding several apparent cairns on butte tops, which were already known to be present, and one previously recorded prehistoric site (25SX152) off the fossil hills trail south of the visitor center, analysis of surface collection clustering revealed 24 new localities sufficient for registry as archeological sites (25SX251–274). Most of those sites are concentrated along level terraces overlooking the Niobrara River, which is the only natural water source in this general vicinity (Noble 1994).

During 1995, the second year of research under this cooperative agreement, the team conducted limited evaluative testing at four select sites (MacDonell 1995, 1996; Wandsnider and MacDonell 1997). The site of 25SX152, however, was shown to contain lithic artifacts representing a long span of time, perhaps ranging from 8000 BC to AD 900 (Noble 1995). Supervisory Archeologist Robert K. Nickel (2002) directed the final stage of the field survey, which completed the parkwide archeological inventory.

Specific problems associated with archeological survey at Agate Fossil Beds relate to the relationship between surface observations and subsurface realities. Trenching and observation of eroding riverbank profiles indicate that the occupational history of the park is complex and will require intensive subsurface evaluation to illuminate all but the most recent prehistoric deposits.

Clark, Caven P.

1993 *Archeological Survey and Testing at Agate Fossil Beds National Monument, Sioux County, Nebraska*. Technical Report No. 22. National Park Service, Midwest Archeological Center, Lincoln.

1994 *Archeological Investigations on Marsland Road, Agate Fossil Beds National Monument, Sioux County, Nebraska*. Technical Report No. 31. National Park Service, Midwest Archeological Center, Lincoln.

Hunt, William

1990 Memorandum to Regional Archeologist, Midwest Region, dated July 11. Subject: Trip Report—Archeological monitoring of Scotts Bluff parking lot; documentation of site at Agate Fossil Beds; comments regarding 25SX163 and future construction of new Visitor Center. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Kay, Marvin

1975 *Archeological Surveys in Scotts Bluff and Agate Fossil Beds National Monuments, Nebraska*. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

MacDonell, George

1995 *Archaeological Investigations at Agate Fossil Beds National Monument*. Paper presented at the 53rd Annual Plains Anthropological Conference, Laramie, Wyoming.

1996 *Hunter–Gatherer Mobility along the Western Niobrara River: An Analysis of Chipped Stone from Agate Fossil Beds National Monument, Nebraska*. Master's thesis, Department of Anthropology, University of Nebraska, Lincoln.

Nickel, Robert K.

2002 *The 1996 Archeological Survey at Agate Fossil Beds National Monument*. Technical Report No. 80. National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1994 Memorandum to Assistant Regional Director, Anthropology/Archeology, dated August 23. Subject: Trip Report, August 3–18, Agate Fossil Beds. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1995 Memorandum to Manager, Midwest Archeological Center, dated August 1. Subject: Trip Report, Agate Fossil Beds, July 26–August 7, 1995. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Olinger, Danny E.

1980 *Agate Fossil Beds National Monument: Archeological Investigations at Site 25SX163*. Occasional Studies in Anthropology No. 6. National Park Service, Midwest Archeological Center, Lincoln.

Wandsnider, LuAnn, and George H. MacDonell, editors

1997 *Agate Fossil Beds Prehistoric Archaeological Landscapes, 1994–1995*. Department of Anthropology, University of Nebraska, Lincoln. Report submitted to National Park Service, Midwest Archeological Center, Lincoln.

Apostle Islands National Lakeshore

Much of the early attention to cultural resources in the Apostles Islands was paid to Madeline Island, which is the only island in the group that is not part of the national lakeshore. For example, the first archeological survey was reported by Phillip A. Means (1917) some 80 years ago and dealt with several historic Chippewa villages on that island. Even as late as the 1960s, the work of George Quimby (1966), who studied the so-called Galazen Collection now housed at the island's historical museum, and Leland Cooper, who excavated parts of the Cadotte site on Grant's Point with students from Hamline University (Birmingham 1988), still focused on Madeline Island's many fur trade era sites known from the historic record. Since the mid-1970s, and establishment of Apostle Islands National Lakeshore, survey of the other islands has increased dramatically along with more generalized research on Madeline Island (Salzer and Overstreet 1974).

Known insular sites are primarily clustered on Stockton, Michigan, York, and Oak Islands, as the major survey effort moved on to those islands after Madeline. Several island surveys carried out for the National Park Service took place during 1974 and 1975 under joint direction of Robert Salzer and David Overstreet, both with Beloit College (Salzer and Overstreet 1976). Beloit students and faculty later surveyed parts of Oak Island in 1977 (Bogin 1977). Their varied methods, however, produced dissimilar results from island to island. As might be expected, where areal coverage of an island was greater, site inventories are substantially higher. Relative numbers, therefore, do not necessarily reflect true differences in site density among the islands investigated to date.

Students from Beloit College subsequently made test excavations in 1975 on five of the islands they had surveyed; namely, Sand, York, Hermit, Stockton, and Michigan (Salzer 1980a). One important early late Woodland site recorded during their work on Stockton Island, the Morty site, received the attention of Beloit excavation crews in 1977 (Salzer 1980b). Jeffrey Richner (1987) of the Midwest Archeological Center performed evaluative testing in 1979 and 1980 on 11 other sites previously inventoried by the Beloit College survey.

The most recent general survey to inventory archeological sites took place in 1992 on Long Island (Noble 1996). The only sites recorded under direction of MWAC Supervisory Archeologist Vergil Noble were previously known historic sites, primarily navigation light complexes, and none were tested. The same crew also undertook a survey of several campground improvements proposed at Quarry Bay on Stockton Island that year. Those investigations, however, gave up no new archeological information (Noble 1992).

The only site afforded sustained attention in the Apostle Islands is the P-Flat site, 47AS47, which lies on Manitou Island. Recorded by the Beloit crew as part of its 1974–1975 inventory (Salzer and Overstreet 1976), and tested initially in 1977 (Birmingham 1979; Birmingham and Salzer 1980), the site was subject to more extensive testing as part of the 1979–1980 MWAC evaluative testing program (Richner 1987). Owing to the impacts of erosion, further excavation took place in 1984 (Richner 1989). The multi-component archeological site is now listed in the National Register of Historic Places.

More recent studies have examined late historic sites associated with extractive industries, commercial fishing, homesteading, and aids to navigation. In 1980, Patrick Martin (1981) of Michigan Technological University performed preliminary investigations at a 19th-century homestead on Basswood Island and at the site of Schroeder Logging Company Camp 5 on Oak Island. Richner (1986) directed test excavations at the Trout Point Logging Camp on the north side of Stockton Island during 1982 and at the Manitou Fish Camp on Manitou Island in 1983 (Richner 1991). Furthermore, Noble directed a crew from MWAC in the investigations of 1988 groundwater control developments at four island lighthouse locations: Sand, Michigan, Outer, and Devils. He also returned to the park in 1990 to monitor minor ground-disturbing investigations

carried out by a firm contracted to prepare architectural plans for restoration of the Raspberry Island lighthouse (Noble 1990).

There have also been occasional investigations in recent years that focused on minor proposed development projects. The year prior to Noble's (1992) examination of a campground improvement at Quarry Bay on Stockton Island, for example, a USFS archeologist examined a proposed ranger station and residence location at East Bay on Sand Island. That 1991 study showed no evidence of cultural resources in the project area other than that left by the removal of a modern summer cabin (Ver Plank 1991).

More recent small-scale inventories of proposed development projects on the mainland unit include examination of proposed access and parking improvements near Myer's Beach and a new road alignment and parking area at Little Sand Bay (Richner 1999). The projects at Little Sand Bay are part of a larger, multi-phased improvement plan for that primary park facility. At Myer's Beach, a modern trash deposit was discovered and mapped. While not considered an archeological resource due to its recent age, the park planned to leave it in place and cover it with fill. This would mask the unsightly dump and protect visitors from injury due to contact with its numerous broken glass and rusted metal items. No archeological resources were recorded elsewhere within the proposed development zone. No archeological sites were recorded within the proposed access road or parking components of the Little Sand Bay development zone (Richner 1999). In 2001, additional inventory was accomplished at Little Sand Bay in support of plans for future utility improvement and housing construction. Near a proposed filter bed location, a historic dump was discovered (Richner 2001). This feature is positioned outside of the direct project impact zone, but was marked so that it could be protected and avoided during utility development. The deposit, dating to the early 1900s, appears to be associated with a nearby log cabin that the park has stabilized and preserved. No other sites were recorded at Little Sand Bay in 2001.

In addition to development-related inventory, two other projects were undertaken at the park in 2001. The first is part of a WASO initiative to assess the condition of a sample of archeological sites across all NPS areas. This Site Condition Data Quality Project attempts to determine the accuracy of site condition data now contained within the Archeological Site Management and Information System database. Sites 47BA10 and 47BA11 on the Mainland Unit were revisited for the first time since 1974 as part of the site sampling component for the park. While no artifacts were exposed on the ground surface at either site, the archeological team noted that 47BA11 is threatened by ongoing, unauthorized use of all-terrain vehicles in the area around the site (Richner 2001). Additional site visits were made to site locations where damage from erosion had first been reported to occur in the middle 1970s. This study was conducted at the request of the park superintendent to provide data for ongoing park planning purposes. Sites 47AS47, 47AS48, 47AS49, and 47AS38 were revisited (Richner 2001). Shoreline erosion at site 47AS48 on Otter Island was similar in scope to that recorded in 1979 (Richner 1987), with lithic artifacts exposed along a segment of cut bank and beach in two specific areas. No erosional damage was noted at site 47AS49 on Bear Island. National Register site 47AS47 on Manitou Island also was found to be in good condition with very minimal shoreline erosion since it was last studied in 1984 (Richner 1989). Erosional and visitor-use damage was found to be relatively severe at site 47AS38 on Stockton Island. Cutbank erosion and ground compaction has exposed prehistoric artifacts on the ground surface, and a relatively large portion of the western edge of the site has been lost to erosion. In addition, nearly all surface artifacts formerly present at a historic component of the site have been removed. Recommendations were made for devising a plan to protect that potentially significant multi-component site from further damage (Richner 2001).

Finally, it bears noting that in 1984 a team of divers from the NPS Submerged Cultural Resource Unit (SCRU), Santa Fe, New Mexico, conducted underwater archeological investigations on a sunken historic vessel off Stockton Island assumed to be the schooner barge *Noquebay*. Loaded with lumber, the barge left nearby Bayfield, Wisconsin, for Bay City, Michigan, on Octo-

ber 6, 1905, only to catch fire and go down in shallow water soon after departure. The SCRU team recorded and evaluated what remains of the shipwreck, which is well known and easily accessible to sport divers. Their report includes a summary of more than 20 other submerged vessels believed to lie in the immediate vicinity of the national lakeshore (Carrell 1985).

Birmingham, Robert A.

1979 Preliminary Report on Testing Operations at the P-Flat Site, 47As47, Manitou Island. Manuscript, Logan Museum of Anthropology, Beloit College, Beloit Wisconsin.

Birmingham, Robert A., and Robert J. Salzer

1980 Test Excavations at the P-Flat Site. Manuscript, Logan Museum of Anthropology, Beloit College, Beloit, Wisconsin.

Bogin, J. M.

1977 An Archeological Survey of Oak Island. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Carrell, T.

1985 *Submerged Cultural Resources Site Report: NOQUEBAY, Apostle Islands National Lakeshore*. Southwest Cultural Resources Center Professional Papers No. 7. National Park Service, Submerged Cultural Resources Unit, Santa Fe, New Mexico.

Martin, Patrick E.

1981 An Archaeological Evaluation of Two Sites in the Apostle Islands National Lakeshore. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Means, Phillip A.

1917 *Preliminary Survey of the Remains of the Chippewa Settlement at La Pointe*. Smithsonian Miscellaneous Collections Volume 6, Number 14. Smithsonian Institution, Washington, D.C.

Noble, Vergil E.

1990 Memorandum to Chief, Midwest Archeological Center, dated October 1. Subject: Trip Report — Apostle Islands, September 24–28, 1990. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1992 Memorandum to Chief, Midwest Archeological Center, dated September 2. Subject: Trip Report — Apostle Islands, August 8–28, 1992. File Code A2623 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1993 *The Archeological Investigation of Four Lighthouse Complexes at the Western End of Lake Superior: The 1988 Testing Program within Apostle Islands National Lakeshore*. Technical Report No. 8. National Park Service, Midwest Archeological Center, Lincoln.

1996 *The 1992 Archeological Survey of Long Island, Lake Superior, Apostle Islands National Lakeshore*. Technical Report No. 47. National Park Service, Midwest Archeological Center, Lincoln.

Quimby, George I.

1966 *Indian Life and European Trade Goods*. The University of Wisconsin Press, Madison.

Richner, Jeffrey J.

1986 *An Archeological Evaluation of the Trout Point Logging Camp*. Occasional Studies in Anthropology No. 17. National Park Service, Midwest Archeological Center, Lincoln.

1987 *Archeological Investigations at Apostle Islands National Lakeshore, 1979–1980*. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J., continued

1989 *1984 Excavations at Site 47AS47, A Fishing Camp on Manitou Island*. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

1991 *Archeological Excavations at the Manitou Fish Camp, Apostle Islands National Lakeshore, 1983*. Technical Report No. 4. National Park Service, Midwest Archeological Center, Lincoln.

1999 Trip Report, Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

2002 Trip Report, Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Salzer, Robert J.

1980a Archaeological Testing in the Apostle Islands National Lakeshore. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

1980b The Morty Site. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Salzer, Robert J., and David F. Overstreet

1975 Summary Report: Archeological Survey of Madeline Island. Report submitted to the Wisconsin State Historical Society, Madison.

1976 Summary Report: Apostle Islands Project, Inventory and Evaluation of Cultural Resources within Apostle Islands National Lakeshore, Wisconsin. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Ver Plank, C. S.

1991 Archaeological Investigations, Sand Island. Letter report dated May 16, 1991. Submitted to National Park Service, Midwest Archeological Center, Lincoln.

Arkansas Post National Memorial

All cultural resources within the boundaries of Arkansas Post National Memorial are considered parts of a single archeological site (3AR47), since the Arkansas Archeological Survey first assigned it that designation in 1971. The entire memorial also was nominated successfully to the National Register of Historic Places as a single property in 1988. In reality, however, the 389-acre site probably comprises numerous discrete archeological sites and components, at least spanning the years ca. 1750–1930, including many that might relate to the Confederate Fort Hindman and the Battle of Arkansas Post. The number and locations of individual sites within the larger entity are still unknown.

Some 40 years ago the National Park Service supported several research projects roughly equivalent to a new area study for the lower Mississippi Valley. Their purpose was to evaluate the significance of places associated with early European occupation in the region as a basis for deciding which of those sites might be appropriate for inclusion in the National Park System. A critical aspect of the studies, therefore, was their attempt to determine precise locations of sites recognized as having national significance.

NPS Historian Ray Mattison (1957) specifically dealt with the records relating to Arkansas Post and reported that there were, in fact, nine 17th- and 18th-century posts near the strategic mouth of the Arkansas River, with Henry de Tonti's 1686 trading post the first. Arkansas Post National Memorial relates to the third French fortification on the river, built by De La Houssaye, which saw use ca. 1751–1756.

The earliest investigations that touched upon the location of European fortifications of the Arkansas River were those of Edward Palmer, who explored this region between 1881 and 1884 to record mounds and other ancient curiosities (Jeter 1990). Palmer used the town of Arkansas Post, which had been used as a base for Confederate forces late in the war, as his base of operations for work at the nearby Menard Mounds. While at Arkansas Post, he made observations and notes about surface features representing an old fortification he called "Fort Desha," which has been concluded by others to be the 1756–1779 incarnation of Arkansas Post downstream from the memorial site in Desha County. That particular post was the fourth in this general area, immediately following the one that stood where the memorial now is located.

Various archaeologists performed excavations in the 1950s, 1960s, and 1970s in hopes of confirming the locations of several pre-1804 posts suggested by Mattison and others. Preston Holder contracted with the National Park Service to carry out field investigations in 1956–1957, concentrating on an area just south of what was then Arkansas Post State Park. Holder suggests that he found the remains of the 18th-century French and Spanish forts at Arkansas Post, namely the De La Houssaye fort of 1751 and all three Spanish forts bearing the name San Carlos, built between 1779 and 1787 (Holder 1957a, 1957b). Subsequent researchers, however, have called into question his conclusions concerning Hispanic remains (Martin 1977; Westbury 1976). James A. Ford (1961) also delved into Arkansas Post a few years later, though his major field interest was the Menard Mounds.

Rex L. Wilson (1966) of the National Park Service directed the next round of archeological research in 1966. Wilson located four structures, three of them identified as Frederic Notrbe's cotton gin, his warehouse, and his combined residence and store. Also located was a brick building identified as the Arkansas Post Branch of the Bank of the State of Arkansas. In 1968, another NPS archeologist, John Walker, expanded upon Wilson's excavation of the bank site. He found that the final function of this structure was as a hospital for the Confederate garrison, before its ultimate destruction by Union artillery fire in April 1863 (Walker 1971).

In 1971, the University of Arkansas and the Arkansas Archeological Survey, under contract to the National Park Service, carried out excavations directed by Michael Hoffman and Patrick E. Martin. The intent of that joint archeological field school was to search for remains of a commer-

cial house used in the Indian trade by Jacob Bright during the period 1804–1807 and for evidence of a tavern operated in the years 1819–1821 by William Montgomery (Martin 1977). Their excavations, however, failed to determine the precise locations or essential parameters of individual cultural resources, nor were they able to determine where the principal roads, such as Main Street, once passed. Discoveries were instead limited to several artifact concentrations that seemed to have been surrounded by palisade lines.

Three years later, a crew from Southern Methodist University under the direction of William Westbury returned to Arkansas Post. The contracted research was intended to examine through limited test excavations an area proposed for a new visitor center (Westbury 1975). In addition, Westbury (1976) prepared a synthesis of all research conducted at the site up to that time. Very little new research has been conducted at Arkansas Post in the years since submission of his archeological overview and assessment.

Within the historic townsite, several other sites known from historic documents have not been located. For example, field research has not established the location of individual town homes, the Arkansas Gazette cabin, the brick factory, and key roadways or streets. In addition, archeologists have not located farmhouse outbuilding sites, stores, and cemeteries that once were in outlying sections of the present park.

An important locality now within the official boundaries of Arkansas Post is the Menard-Hodges site (also known simply as the Menard site or Menard Mounds), a national historic landmark mound group investigated by Ford (1961) nearly 40 years earlier (House 1994a). It was also the subject of a special study for the National Park Service performed by Phillips (1941) on behalf of the Central Mississippi Valley Archaeological Survey. The Arkansas Archaeological Society, in collaboration with the Arkansas Archaeological Survey, conducted its summer training program for amateurs at this site in 1997 (Lynott and Noble 1997) and again in 1998. John House (University of Arkansas, Pine Bluff) directed investigations at the site, which was then owned by the Archaeological Conservancy though in the process of being Congressionally authorized as a remote unit of the park.

Simultaneously, Leslie Stewart-Abertnathy (University of Arkansas, Russellville) directed investigations at the nearby Lake Dumond site, 3AR110, presumed by some authorities to be the location of Tonti's original post (Lynott and Noble 1997; Stewart-Abernathy and House 2000). Physicist John Weymouth (1998) also conducted various geophysical surveys of the site in conjunction with the archeological project. The property remains in protected private ownership, but may yet be acquired by the NPS.

There is also the possibility that submerged cultural resources are present at or near Arkansas Post National Memorial. Fort Hindman, for example, is believed to be located at Post Bend on the Arkansas River, the shoreline having meandered west since the 18th and 19th centuries. Historic maps show the general location of Fort Hindman, its access road, and various structures inside, which are presumably inundated if traces survive at all. No underwater investigations have been conducted, however, and despite occasional low water stages of the river in drought, there still has been no confirmation as to whether any remains are present.

Ford, James A.

1961 *The Menard Site: The Quapaw Village of Osotouy on the Arkansas River*. Anthropological Papers of the American Museum of Natural History 48(2). New York.

Holder, Preston

1957a Archeological Field Research on the Problem of the Locations of Arkansas Post, 1686–1803, a Preliminary Report on work in Progress at the Menard Mounds Site, Field Season: Fall, 1956–Spring, 1957. Report submitted to National Park Service, Region One, Richmond.

- Holder, Preston, continued
1957b Archeological Field Research on the Problem of the Locations of Arkansas Post, 1686–1803. Report submitted to National Park Service, Region One, Richmond.
- House, John H.
1994a Quapaw Archaeology Since Ford. Paper presented at the Mid-South Conference, Memphis, Tennessee, June 11, 1994.
1994b Protohistoric Archaeology on the Lower Arkansas River. Paper presented at the Joint Meeting, 51st Southeast Archaeological Conference and 39th Midwest Archaeological Conference, Lexington, Kentucky, November 10, 1994.
- Jeter, Marvin D.
1990 *Edward Palmer's Arkansaw Mounds*. The University of Arkansas Press, Fayetteville.
- Kniffen, Fred
1971 *The Lower Mississippi Valley: European Settlement, Utilization, and Modification*. Report submitted to National Park Service, Southeast Region, Atlanta.
- Lynott, Mark J., and Vergil E. Noble
1997 Memorandum to Regional Director, Midwest Region, dated July 11. Subject: Archeological Investigation of Sites Near Arkansas Post National Memorial. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- Martin, Patrick E.
1977 *An Inquiry into the Locations and Characteristics of Jacob Bright's Trading House and William Montgomery's Tavern*. Publications on Archeology, Research Series No. 11. Arkansas Archeological Survey, Fayetteville.
- Mattison, Ray H.
1957 Historical Investigations of Arkansas Post Spanish and American Periods. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- McClurkan, Burney B.
1971a Fort Desha: The Location of Arkansas Post, ca. 1735–1750. *Conference on Historic Site Archaeology Papers* 6:32.
1971b The Search for Fort Desha. *Arkansas Archeological Society Field Notes* 77:5–6.
- Phillips, Philip
1941 *The Menard Site on the Lower Arkansas River*. Special Report to the National Park Service on behalf of the Central Mississippi Valley Archaeological Survey. National Park Service, Midwest Archeological Center, Lincoln.
- Stewart-Abernathy, Leslie C., and John H. House
2000 Looking for Arkansas Post at Lake Dumond in the Menard-Hodges Locality, Arkansas County, Arkansas. Paper presented at the 33rd Conference on Historical and Underwater Archaeology, Quebec City, January 4–9, 2000.
- Walker, John W.
1971 *Excavation of the Arkansas Post Branch of the Bank of the State of Arkansas*. Report submitted to Southeast Archeological Center, Macon, Georgia.
- Westbury, William A.
1975 *Investigations at Arkansas Post National Memorial, Arkansas*. Report submitted by Archeology Research Program, Southern Methodist University, to National Park Service, Southwest Region, Santa Fe.

1976 *Archeological Assessment of Arkansas Post*. Report submitted by Archeology Research Program, Southern Methodist University, to National Park Service, Southwest Region, Santa Fe.

Weymouth, John W.

2000 *Final Report on Geophysical Surveys of the Lake Dumond Site (3AR110)*. Report submitted to National Park Service, Midwest Archeological Center, Lincoln.

Wilson, Rex L.

1966 *Archeological Explorations at Arkansas Post, 1966*. Report submitted to Southwest Archeological Center, Globe, Arizona.

Badlands National Park

Badlands National Park covers 244,000 acres of land along the White River in western South Dakota. The primary emphases of the park are natural and paleontological resources of the central Great Plains physiographic area. Badlands is divided into a North Unit, a South Unit, and a smaller isolated Palmer Creek Unit. Both of the latter units lie within the Pine Ridge Reservation and represent Oglala Sioux lands held in trust by the National Park Service. The North Unit shares boundaries with the Buffalo Gap National Grassland, a unit of the U.S. Forest Service.

Three hundred and thirty-nine prehistoric and historic archeological sites have thus far been recorded in Badlands, most of which lie in the North Unit. This is primarily a reflection of the greater amount of research that has been undertaken in the North Unit, which formed the original Badlands National Monument. Much less work has been conducted in the South Unit, which was acquired in trust in 1976.

The first professional archeological investigations in Badlands occurred in the early 1950s and represented expeditious recording of 30 sites, some of which had been found by paleontologists working in the area (Beaubien 1953). Subsequent limited testing was conducted at several of Beaubien's sites by then-Montana State University archeologist Dee Taylor (Taylor 1961) as part of the Mission 66 program.

Archeological research has continued in the park on an intermittent basis. Work in the North Unit, primarily conducted by Midwest Archeological Center personnel, has largely been project-driven, involving examination of small parcels of land. More recently, Center archeologists conducted inventory along the Loop Road that extends through the North Unit (Jones 1993, 1995), recording 13 sites were recorded along a 200-m-wide corridor. Subsequent Center research has occurred at the Johnny site, a Late Prehistoric/Plains Village occupation along the Loop Road on Cedar Pass (Jones 2002).

Considerably less work has occurred in the South Unit. In 1976, block inventory was undertaken by the University of Nebraska along the White River (Falk et al. 1978), resulting in the identification of 23 sites. The remaining South Unit research has focused upon prehistoric features and materials eroding from cutbanks along the Fog Creek drainage (Johnson 1988; Jones 1990), a north bank tributary to the White River. The Fog Creek research was primarily conducted as a series of paraprofessional training sessions hosted by the archeological staff of the Rocky Mountain Regional Office.

In 1997, the park acquired SAIP funding to begin a multi-year inventory, which—at the request of park staff—was to focus on the cultural resources of the North Unit. Due to the large size of the area in question and the considerable amount of erosion occurring there, the Badlands SAIP project began with a geomorphological overview of landforms in the study area in order to determine which locales had potential for intact archeological deposits (Kuehn 2003). Subsequent fieldwork followed development of a research design and was conducted under a cooperative agreement between the Midwest Archeological Center and the Archeology Laboratory of Augustana College in Sioux Falls, South Dakota.

More than 6,500 acres of park land were inventoried during the 1998 and 1999 fieldwork, and more than 160 archeological sites were either identified or re-recorded (Hannus 1998, 1999). Augustana College personnel concluded their fieldwork with intensive evaluative testing at 39PN9, the Pinnacles site, in 2000. The synthetic report of the multi-year inventory and evaluation is due shortly. However, most of the sites identified in the block surveys appear to postdate 2,500–2,000 years BP. Older isolated artifacts were recovered in the surveyed areas, but the greatest potential for Early Holocene human deposits might lie in remnant soils that cap tablelands in the South Unit, like those at Sheep Mountain Table (Kuehn 2003).

The 283 archeological sites recorded thus far in the park largely consist of scattered secondary deposits of bison bone, burned rock, lithic debitage, and occasional pottery. Most of this material is found on the eroded toes of the dissected sod tables that form much of the Badlands physiography. The dense grassy caps that cover the sod tables and much of the rest of the park make observation of surface artifacts difficult, and many sites are identified only after they begin to erode from these features. Testing atop the tables has typically produced only small quantities of artifactual material, suggesting that the original archeological deposits themselves were fairly small and probably reflect short-term-use episodes. The large quantities of bison bone reported at some of the Badlands sites suggest primary butchering activity, and these sites might be related to nearby kill sites. Quarry sites are also known in the area and reflect locations where cherts, chalcodanites, or gravels were exploited.

While archeological resources are now known to be plentiful in certain areas of Badlands National Park, the culture history of the area must still be extrapolated from adjacent areas of the Great Plains, many of which are themselves not well known. However, based upon research elsewhere along the White River Badlands (Hannus et al. 1983; Lueck and Butterbrodt 1984; Sundstrom and Malone 1982), there is clear evidence of Native American occupation and/or use of the area beginning as early as 11,000 BP, and probably continuing through the Plains Archaic and the Plains Woodland until at least AD 500. Much of this material has been found either in spatially small components or as isolated culture-diagnostic artifacts.

Within the suite of park sites, the Paleoindian and Early and Middle Plains Archaic traditions are poorly represented, almost certainly a reflection of the degree to which post-Pleistocene erosion has removed most of the early deposits. Evidence of post-Archaic occupation is somewhat more abundant. Charcoal from buried hearths/roasting pits along Fog Creek produced radiocarbon ages of 1590 to 750 BP (Jones 1990), while multiple ages from the charcoal lenses at the Pinnacles site, 39PN9, in the North Unit ranged from 2305 to 1000 BP. Repeated examination of the Johnny site, 39JK4, in the North Unit (Johnson 1989; Jones 1995, 2002) produced Late Plains Woodland/Initial Middle Missouri projectile points and pottery and suggested repeated short-term occupation along the Badlands Wall, the escarpment that overlooks the White River. A single radiocarbon assay from 39JK4 generated an age of 1000 BP (Jones 1995). These latter ages indicate utilization of the area by groups from the settled villages along the Missouri Trench. Whether the area supported indigenous Plains Village groups is unknown. Ethnographic data have indicated that the Badlands area was avoided by historic Native American populations, but this, too, needs further documentation.

Historic Euroamerican occupation and use of the Badlands area primarily consists of the remains of early homesteads and farms dating to the late 19th or early 20th century. Most of these sites have little surface expression and have been scavenged and/or cleaned up.

Badlands National Park is still in need of multi-year geoarcheological research that can more precisely determine the rates and physical extent of post-Pleistocene erosion in the park. Recent buried hearth data recovered from the pediment at the foot of the escarpment at Cedar Pass clearly indicates that even in these redeposited soils there is intact evidence of Plains Village occupation and/or use.

A draft multiple property nomination was begun for sites in the Fog Creek drainage by Ann Johnson of the Rocky Mountain Regional Office. The status of this nomination is unknown.

Beaubien, Paul L.

1953 Preliminary Report of Archeological Reconnaissance, Badlands National Monument, 1953. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

- Falk, Carl R., Steve Holen, and Robert Pepperl
1978 *A Preliminary Assessment of Archeological Resources in the Vicinity of the Proposed White River Development, Badlands National Monument, South Dakota*. Occasional Studies in Anthropology No. 5. National Park Service, Midwest Archeological Center, Lincoln.
- Hannus, L. Adrien, John M. Butterbrodt, Edward J. Lueck, Timothy R. Nowak, and Everett M. White
1983 *An Archeological Survey of Selected Areas Within Fog Creek, Babby Butte Canyon, and Lower Cain Creek in Shannon and Pennington Counties, South Dakota*. Publications in Anthropology No. 4. Archeological Laboratory, Department of Rural Sociology. South Dakota State University, Brookings, South Dakota.
1989 An Initial Middle Missouri Campsite in Badlands National Park. *South Dakota Archaeology* 13:1–28.
- Hannus, L. Adrien, and R. Peter Winham
1998 Year 2 Summary Report - 1998 - Investigation of the Archeological Resources in the Badlands National Park, South Dakota. Midwest Archeological Center, Lincoln.
1999 Year 3 Summary Report - 1999 - Investigation of the Archeological Resources in Badlands National Park, South Dakota. Midwest Archeological Center, Lincoln.
- Jones, Bruce A.
1990 *Miscellaneous Archeological Investigations in Badlands National Park, South Dakota*. Rocky Mountain Region Archeological Project Report. National Park Service, Midwest Archeological Center, Lincoln.
1993 *1991 Archeological Inventory and Evaluation Along Loop Road Segment 10-2, Badlands National Park, South Dakota*. Rocky Mountain Region Archeological Project Report. National Park Service, Midwest Archeological Center, Lincoln.
1995 *Archeological Inventory and Evaluation Along the Loop Road, Badlands National Park, South Dakota, 1993*. Technical Report No. 39. National Park Service, Midwest Archeological Center, Lincoln.
2002 *Archeological Investigations on the Cedar Pass Slide, Badlands National Park*. Technical Report No. 75. National Park Service, Midwest Archeological Center, Lincoln.
- Kuehn, David D.
2003 *Preliminary Geoarcheological Reconnaissance in Badlands National Park, South Dakota*. Technical Report No. 88. National Park Service, Midwest Archeological Center, Lincoln.
- Lueck, Edward J., and John M. Butterbrodt
1984 *Cultural Resources Surveys at Pass Creek, Nelson Butte, Babby Butte, Squaw-Humper Creek and Cuny Table in Jackson (Washabaugh) and Shannon Counties, South Dakota*. White River Badlands Regional Research Project Report Vol. 3. Archeological Laboratory of the Center for Western Studies, Augustana College, Sioux Falls, South Dakota.
- Sundstrom, Linea, and Patricia Malone
1982 *Archeological, Historic, and Paleontological Resources in the Proposed Highway 44 Right-of-Way between Scenic and Interior, South Dakota*. Contract Investigation Series No. 57. South Dakota Department of Transportation and South Dakota Archeological Research Center, Fort Meade, South Dakota.
- Taylor, Dee C.
1961 Salvage Archaeology in Badlands National Monument, South Dakota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Brown v. Board of Education National Historic Site

The park was established in 1992 to commemorate the struggle of Black Americans to achieve an education without racial discrimination. The site, situated in Topeka, Kansas, consists of two acres of land upon which sits the historic Monroe School. The Monroe School was the segregated school attended by the daughter of Oliver Brown, the lead plaintiff in a lawsuit aimed at ending segregation in public schools was filed in 1951 against the Topeka Board of Education. This case was eventually taken to the Supreme Court which unanimously declared on May 17, 1954, that “separate educational facilities are inherently unequal” and, as such, violate the 14th Amendment to the United States Constitution, which guarantees all citizens “equal protection of the laws” (Weekley 1999)

The archeological site around the school is recorded as 14SH113. Since 1997 (Hunt 1997), there have been a number of onsite archeological projects associated with and in response to the transformation of Monroe School to the park visitor center and headquarters. The most important of these projects incorporated documentary research and an associated geophysical inventory of the Monroe School property (Hunt 1999; Nickel and Hunt 2002). This combined effort located the position of the 1880s Monroe School and provided some information as to its structural evolution over the building’s 40 year history.

Documentary research also demonstrated that, prior to the construction of the “new” school in the 1920s, the location was occupied by several residences and associated outbuildings. A minimum of 18 buildings have been demonstrated to exist on the immediate school property west of Monroe Street between 1889 and 1913. The playground on the east side appears not to have been occupied. A subsequent records search sought to gather information about property owners and residents (Sturdevant 2001). The geophysical inventory demonstrated that some of these structures and others not identified during the documentary research remain as buried archeological ruins. It also suggested the possibility of variations in land use from one residential lot to another.

Archeological testing and monitoring of construction ground disturbances demonstrated that culturally modified fill is up to 1 m deep in some locations around Monroe School (Stadler 2000). It has also resulted in the identification of many significant buried structures associated with the first Monroe School (Stadler 2000, 2001), the current school (Hunt 1997; Stadler 2000), the 19th century residential community (Stadler 2000; Chidley 2002), and outbuildings (Hunt 2002). Only one very restricted monitoring project focusing on the replacement of a power pole failed to identify structural remains (Connor 2001).

In sum, the historic research and archeological investigations have considerable potential to provide information about the 19th-century and early-20th-century African American school and surrounding community in Topeka. There is currently little information about these subjects. Nevertheless, such information will be useful when future improvements to the Monroe School site are considered. The locations of archeological resources have been demonstrated to exist in abundance at the site. Future ground disturbing actions will require consideration of avoidance or resource preservation through archeological mitigation. Information derived from historical archeological research around Monroe School can also provide insights into the patterns of everyday life experienced by the school children, school faculty, and neighbors around the school—information that can extend the park’s ability to expand its interpretation beyond its current focus to a consideration of the broader history of Topeka’s, Kansas’, and the Great Plains’ African American communities.

Chidley, Michael

2002 Monitoring Sidewalk Removal and Waterline Excavation, Brown v. Board of Education National Historic Site, Monroe School, April 29–May 3, 2002, and May 6–7, 2002. Trip report, National Park Service, Midwest Archeological Center, Lincoln.

Connor, Melissa

2001 Memorandum to Tom Thiessen. Subject: Monitoring Brown v. Board Construction. National Park Service, Midwest Archeological Center, Lincoln.

Hunt, William J., Jr.

1997 Archeological Monitoring at Monroe School Site, Brown vs. Board of Education (BRVB). Trip report, National Park Service, Midwest Archeological Center, Lincoln.

1999 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip Report, Geophysical Survey at Monroe School, Brown v. Board of Education National Historic Site (BRVB). National Park Service, Midwest Archeological Center, Lincoln.

2002 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip Report, Archeological Monitoring of Sewer Line Trench Excavation, Monroe School site (14SH113), Brown v. Board of Education National Historic Site (BRVB). National Park Service, Midwest Archeological Center, Lincoln.

Nickel, Robert K., and William J. Hunt, Jr.

2002 1999 Archeological Geophysical Survey Tests at Monroe School, Brown v. Board of Education National Historic Site, Topeka, Kansas. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott

2000 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip Report—Test Excavations of Geophysical Anomalies, Brown v. Board of Education National Historic Site, June 19–30, 2000. National Park Service, Midwest Archeological Center, Lincoln.

2001 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center through Park Archeology Program Manager, Midwest Archeological Center. Subject: Monitoring Trenching Along North Foundation of Monroe School, BRVB. National Park Service, Midwest Archeological Center, Lincoln.

Sturdevant, Jay

2002 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Travel to Topeka, Kansas for archival research at the Kansas State Historical Society and visit to Brown vs. Board of Education National Historic Site, July 31–August 2, 2002. National Park Service, Midwest Archeological Center, Lincoln.

Weekley, Rachel F.

1999 *“A Strong Pull, A Long Pull, and a Pull Together:” Topeka’s Contribution to the Campaign for School Desegregation.* U.S. Department of the Interior, Historic Resource Study, Brown v. Board of Education National Historic Site, Topeka, Kansas. Draft document, National Park Service, Midwest Archeological Center, Lincoln.

Buffalo National River

Buffalo National River was established on March 1, 1972. Prior to its establishment, approximately 2,000 acres was a state park administered by the State of Arkansas. Scientific excavations within the park boundaries were first undertaken in the 1920s and 1930s by Winslow M. Walker, M. R. Harrington, and S. C. Dellinger, archeologists from the Smithsonian Institution and the University of Arkansas, Fayetteville. Their research interests defined the occupants of the bluffshelters as the “Ozark Bluff-Dweller Culture.” The dry shelters preserved organic material to the point of species identification. It was this dry organic material that first interested the archeologists, and very little material was analyzed except for the burial items associated with the shelter burials.

Much has happened since those early days of expeditions, pith helmets, and horseback. Nothing was recorded or documented until the 1960s when the State Archeologist Hester Davis directed her interests into the Ozarks, and specifically the Buffalo River, “No systematic survey has ever been made to locate and record the sites of the aboriginal occupation along the Buffalo, but local collectors have artifacts from open sites and rock shelters which indicate that the area was occupied by Early Archaic times and possibly earlier” (Davis 1972). Also in the 1960s was the beginning of site recording by local enthusiasts. Most of these first site records described the site as undisturbed. The “undisturbed” notation changed dramatically after the Buffalo National River was established in 1972. By 1975 when there was another influx of site recording by local amateurs, and the majority of the site descriptions mentioned “looter pits and screens” at almost every bluffshelter or cave site. The 1960s focused on excavations at Indian Rockhouse (now part of the interpretive trail at Buffalo Point), Peccary Cave, and Saltpeter Cave.

The 1970s witnessed scientific testing and surveying of selected areas as well as the first and only archeological overview and assessment of the Buffalo River valley. In 1974 the Arkansas Archeological Survey was contracted to compile the Archeological Inventory of the Buffalo National River, by Daniel Wolfman. The report provided the following:

- A review of the published references relevant to the archeology of the Buffalo National River.
- A summary of reports by amateur and professional archeologists of the 254 known sites.
- Recommendations for future archeological work, with the following four overlapping objectives:
 - (1) an adequate assessment of the archeological resources;
 - (2) mitigation of the impact of the greatly increased number of tourists and of facility development;
 - (3) adequate scientific understanding of the total archeological resources;
 - (4) the need to interpret these resources to the public.

The Wolfman report has become a historically significant document. It created a baseline from which the park documents its successes and deficiencies. According to Wolfman, an intensive field survey is most critical so that we can “evaluate the impact of the park on the archeological resources.” Wolfman designed a survey program that would require three years with a survey crew of three, surveying 160 acres per day. The budget for the project was estimated at \$343,601 over three years. The intense survey has not been done, but many selected areas have been surveyed and tested—as documented throughout the 1970s, 1980s, and 1990s.

The middle to late 1970s saw the beginning of the selected surveys. The surveys were conducted by Texas Technical University, Lubbock, the Arkansas Archeological Survey, and Southwest Regional Office staff. The first report addressed previously developed areas within the park and three severance tracts (Kitchen 1975). The developed areas were impacted during the state park era at Buffalo Point. Surveys of a campground, a road, a boat launch, picnic grounds, utili-

ties, and trails resulted in the following recommendation: “due to the confusion rendered by the redeposition of extraneous gravels among the prehistoric materials and from developments which obliterated any possible stratigraphy and features, it is not recommended that this site be given any further consideration” and “no further investigation of the site is recommended.” It appears that Kitchen was overwhelmed by the breadth and extent of unrecorded ground disturbance.

The next five reports were from the National Park Service Southwest Regional Office in Santa Fe, New Mexico (Bradford 1979a, 1979b, 1979c; Coleman 1978; Lenihan 1974.) The reports were surveys for development areas and special-use areas, specifically grazing pastures. Methodologies applied called for ambulatory transects of 15 meters or 50 feet in a zigzag pattern that had no width of coverage. The reports made recommendations for the proposed development areas, some of which had already been constructed and impacted. Other areas have been avoided as per the recommendations. The last report written by Jones and Stewart-Abernathy in 1979 was contracted to the Arkansas Archeological Survey. It addressed the creation of a trail and its impact on a historic “Granny Henderson” farmstead. This is the first of the limited examples of historic archeology within the Buffalo National River. It was recommended that the trail be moved away from the 1840s farmstead, but it was not.

In the 1970s surface surveying covered approximately 2,600 acres with shovel testing every 15 meters along the proposed trail through the Henderson Farmstead. All the reports in the 1970s were motivated by mitigation processes and documented the increasing density of sites along the bottomlands and in the blufflines. Some of the proposed development areas have not been constructed due to budget restraints and the lack of need for primitive campsites. The archeological surveys have helped mold the development areas while still expanding the archeological knowledge of the Buffalo River Valley.

The 1980s saw the continuation of project-driven surface surveys for trails, land transfers, and park developments (Coleman 1986, 1987, 1989; Earth Search, Inc. 1988; Klinger 1982, 1984, 1986, 1987; Spears 1985, 1989, 1990). The 1980s also saw Phase Three excavations at specific sites throughout Buffalo National River and archeological assessments for national register nominations (Klinger 1987, 1988, 1989). Between 1983 and 1990, Buffalo National River staff compiled data to nominate 47 archeological sites to the “Big Buffalo Valley Historic District” on the National Register of Historic Places. The 47 sites were approved on August 6, 1990, and are now the archeological component of the Big Buffalo Valley National Historic District in Boxley Valley. There are over 50 prehistoric sites listed on the National Register of Historic Places.

In 1989 a contract was awarded to Southern Archeological Consultants, Inc., to mitigate impacts associated with the transfer of 502 acres in Richland Valley. Shovel testing on a 30-m grid, metal detection, and auger testing were conducted throughout the survey area. Richland Valley is reported to have had Civil War skirmishes with recorded casualties. The Civil War burials with stone markers are along the valley walls. This survey did not locate any Civil War artifacts; however, 7 new sites were discovered, along with a revisit to three sites. All the sites were heavily disturbed by looters and agricultural activity. The majority of the sites were thin lithic scatters. One site at the Richland Creek and Buffalo River confluence exhibited a “very dark clay silt stratum at 45 cmbs. This extremely compact stratum gives the impression of a buried living surface”(Keller 1989:38).

Three sites within the park were excavated between 1988 and 1990. Two of the sites were open sites on river terraces (Lafferty et al. 1988; Sabo et al. 1990; Williams 1986), and the third was a blufftop site (Spears 1989). These reports brought new information about the prehistory settlement patterns along the Buffalo River. The open terrace sites and blufftop sites were overlooked until now. The occupations at the terrace sites (3MR80 and 3NW205) suggest greater Mississippian presence in the region. Both sites had clear post molds similar to dwellings further east along the Mississippi River. Artifact assemblages at 3MR80 and 3NW205 also reflect a strong Mississippian influence.

At 3NW205, the Elk Tract site, three questions arose from the artifact assemblages and house design. (1) Why is there such diversity in projectile points (nine point types)? (2) The flaring rim sherds were still being used, while further east “the flaring rims were almost passé by this time.” Was the flaring rim maintained because of inferior materials? (3) House design appears to be unique to the Ozarks with characteristics similar to house structures in the Mississippi River valley, the Loftin site along the White River, and the Shell Lake site in Missouri. Because of the atypical house design, the large variety of projectile points, and the ceramic rim sherds, Lafferty designated an Erbie phase somewhere between AD 1000 and AD 1600. The Erbie phase is contemporaneous with the War Eagle phase in the Upper White River valley and the Spiro phase in the Arkansas River valley.

At the Fred Dirst site, 3MR80, two conclusions shed new light on the previous “moribund backwater portrayal of the Ozarks.” The first was that “grog-tempered pottery found in organically enriched midden ... is the earliest documentation of the use of pottery in the Ozarks” (Sabo 1990:329). The associated carbon date for the pottery is much earlier than previously thought for grog-tempered pottery in the Ozarks. The second groundbreaking conclusion was that “comparing 3MR80 to the Woodland/Mississippian transition with the Emergent Mississippian developments revealed that the prehistoric inhabitants participated in the broad pattern of cultural development that their neighbors participated in” (Sabo 1990:330). The prehistoric Ozark inhabitants were not “behind the times,” only conservative.

The third site to be excavated was unique because of its geographic location on a blufftop overlooking the Buffalo River. The Dry Ford site (3NW307) was a multicomponent occupation from the Dalton to the Mississippi period. Blufftops sites are certainly more common than previously believed. The Spears report demonstrated good preservation of organic material that was believed to be only well preserved in the dry bluffshelters. The site is small compared to the open terrace sites and many of the bluffshelters, but no less significant.

It was in the 1980s that geomorphological studies (Spears 1986) were incorporated into the archeological reports. We were beginning to understand the complex evolution of the river channel and how the earliest inhabitants along it related to the river and utilized it as a source of food, clothing, construction, and transportation.

The 1990s have seen a reduction in developments along the river. All the archeological surveys were generated by trail developments or excavations from previous preliminary reports. Over 30 miles of trail were cleared for construction and recorded over 38 historic and prehistoric sites. The one project that expanded previous mitigation was conducted at the Dry Ford site, 3NW507 (Klinger, Timothy et al. 1993). The Klinger report incorporated an extensive study and analysis of lithic material distribution, site activity percentages per archeological period, along with intersite and regional comparisons. Klinger made several noteworthy conclusions: (1) nearly all the cherts used at Dry Ford were either in bluff outcrops, on talus slopes, or in stream deposits ... cortex was not present on any specimens from the southern Missouri varieties; (2) throughout every occupation period the site was utilized as a hunting party campsite; (3) flake size does not increase with depth; and (4) an absence of cultigens suggests extensive agriculture was not practiced even by Mississippian peoples.

In 1994 The Arkansas Archeological Survey compiled a GIS and statistical summary of the archeology of the Buffalo National River (Stewart et al. 1994) The report is presented in a visual format using slides created by Geographic Information Systems (GIS). Sites from specific periods are placed on the landscape showing slope direction, elevation, and water sources. The report also created such data lists as named sites, National Register sites, surface scatters, site size, and period sites. By this time the park had recorded over 480 sites.

In October 1994 the park hired its first staff archeologist, David Dixon Hayes. His first experience in the Ozarks had him testing five open terrace sites that were eroding away and were

consequently planned for streambank stabilization reconstruction. None of the sites had Mississippian occupation but were all multicomponent sites. The terraces had been frequently plowed in the past 100 years. The sites were all known by local people and had been frequently surface collected after the plowing. The staff archeologist is continuing to survey for trail developments and shovel testing the last land transfer scheduled in Boxley Valley. Sites continue to be discovered by visitors, park staff, and occasionally the archeologist. The park has almost 500 recorded sites, with another 18 identified but not recorded. Two looted cave sites have been mitigated and restored along with one looted open terrace site. The looting is a local hobby dating back to 1839.

In 2000 Dr. Charolette Hunter transferred to Buffalo National River after Hayes moved to another park. Hunter has continued to work with a variety of compliance related issues in the park, particularly the effect of fire on the park's historic and prehistoric archeological components. She provided overall supervision for an inventory of the park's caves to ascertain if they hold any archeological deposits. William Volf of the Midwest Archeological Center spearheads the team whose challenging work began in the spring of 2002 and will continue through 2003.

Bradford, James E.

1979a Archeological Investigations of Selected Proposed Primitive Campgrounds, Buffalo National River, Arkansas. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

1979b Archeological Investigations of the Lost Valley, Steel Creek, and Buffalo Point Development Areas, Buffalo National River, Arkansas. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

1979c Archeological Investigations of the Proposed Pruitt & Tyler Bend Development Areas, Buffalo National River, Arkansas. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Coleman, Roger

1986 Archeological Reconnaissance of the Casey Clark Tract and Survey of the Proposed Trail Segments, Buffalo National River, Arkansas. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

1987 Archeological Survey of the Proposed Tyler Bend Access Road, Buffalo National River, Arkansas. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

1989 Archeological Investigation of the Gilbert Trailhead. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Coleman, Roger E., and Myra Dec

1978 Archeological Investigations for Construction of Proposed Skip Emmett Access Road and Survey of Proposed Trailheads and Trail Sections. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Davis, Hester

1972 Prehistory in the Buffalo River Area. *Ozark Society Bulletin*, Summer: 5-6.

Dellinger, S.C.

1936 Baby Cradles of the Ozark Bluff Dwellers. *American Antiquity* 1(3):197-213.

Earth Search, Inc.

1988 *Archeological Survey of 649 Acres in the Boxley Valley, Buffalo National River, Arkansas: Final Report*. Earth Search, Inc., New Orleans, Louisiana.

- Harrington, M. R.
 1924 Ozark Bluff-Dweller Culture. *American Anthropologist*: Jan.-Mar.:1-2, 4-14, 16, 17.
- 1960 *Ozark Bluff-Dwellers*. Indian Notes & Monographs Vol. XII. Museum of the American Indian, Heye Foundation, New York, New York.
- Jones, Robert D., and Skip Stewart-Abernathy
 1979 *Archeological Survey of the Proposed BNR Trail, Hemmed-in-Hollow, Ponca, Area Newton County, AR and a Reconnaissance of the Henderson Farm Historic Site*. Arkansas Archeological Survey Project Number 336. Fayetteville, Arkansas
- Keller, John E.
 1988 *Cultural Resources Survey of Certain Tracts in the Vicinity of Erbie, Newton County, Arkansas*. Southern Archeological Consultants, Inc., Pineville, Louisiana.
- 1989 *Cultural Resources Survey of Portions of the Richland Creek Valley*. Southern Archeological Consultants, Inc., Pineville, Louisiana.
- Kitchen, James W.
 1975 *Survey of Prehistoric Cultural Materials of Certain Areas within Buffalo National River, Arkansas*. Texas Tech University, Lubbock, Texas.
- Klinger, Timothy
 1982 *VanDeven Exchange Tract: A Cultural Resources Survey and Assessment of the 40 Acre Tract*. Historic Preservation Associates Reports 82-3. Fayetteville, Arkansas.
- Klinger, Timothy, et al.
 1993 *Analysis and Summary of Data Collected at Dry Ford (3NW07), a Prehistoric Site Located near Erbie, Buffalo National River, Newton County, Arkansas*. Historic Preservation Associates Reports 93-02. Fayetteville, Arkansas.
- Klinger, Timothy C., and Lawrence L. Ayers
 1987 *Tyler Bend National Register Assessment of 3SE64, 3SE95, 3SE150, and 3SE188 within the Proposed Tyler Bend Development Area*. Historic Preservation Associates Reports 87-6. Fayetteville, Arkansas.
- 1987 *Tyler Bend II*. Historic Preservation Associates Reports 87-21. Fayetteville, Arkansas.
- 1988 *National Register Assessment of 3NW611 within the Casey Clark Land Exchange Tract No. 63-112, Buffalo National River, Arkansas*. Historic Preservation Associates Reports 88-12. Fayetteville, Arkansas.
- 1989 *North Maumee Put-In: National Register Assessment of 3SE211, 3SE212, and 3SE213 within the Proposed North Maumee Put-In Development Area*. Historic Preservation Associates. Fayetteville, Arkansas.
- Klinger, Timothy, and Robert F. Cande
 1984 *Rush Road Realignment*. Historic Preservation Associates Reports 84-2. Fayetteville, Arkansas.
- Klinger, Timothy, and Kathleen A. Hinkle
 1986 *Carver Bridge*. Historic Preservation Associates Reports 86-2. Fayetteville, Arkansas.
- Lafferty III/Lopinot/Guccione et al.
 1988 *Tracks in Time: Archeology at the Elk Track Site (3NW205) and the Webb Branch Site (3NW206), Erbie Campground Project, Buffalo National River, Arkansas*. Mid-Continental Research Associates Report 88-1. Lowell, Arkansas.

Lenihan, Daniel

1974 *Underwater Archeological Reconnaissance at Buffalo National River, Arkansas*. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Sabo, George III

1990 *Archeological Investigations at 3MR80 – Area D in the Rush Development Area, Buffalo National River, Arkansas*. Professional Papers No. 38. National Park Service, Southwest Cultural Resources Center, Santa Fe, New Mexico.

Spears, Carol, and Michael H. Lafferty III

1985 *Archeological Survey of 13 Acres and Testing in the Boxley Area of the Buffalo National River, Arkansas*. Mid-Continental Research Associates Report No. 85-9. Lowell, Arkansas.

Spears, Carol, and Robert A. Taylor

1989 *Significance Testing of Dry Ford (3NW507): A Blufftop Site on the Buffalo National River, Arkansas*. Spears Professional Environmental & Archeological Research Service Report 89-7. West Fork, Arkansas.

Spears, Taylor, Dixon, and Rogers

1986 *Archeological Testing, Geomorphic Interpretations & History of the Rush Development Area of the Buffalo National River, Arkansas*. Spears Professional Environmental & Archeological Research Service Report 86-3. West Fork, Arkansas.

Spears, Taylor, and Margaret J. Guccione,

1989 *Significance Testing of Prehistoric Components at the Edgmon (3NW661), the Luallen (3NW662), and the Sattler Sites (3NW663) in the Boxley Valley, Buffalo National River, Arkansas*. Spears Professional Environmental & Archeological Research Service Report 89-6. West Fork, Arkansas

Spears, Carol, and Teresa A. Turk

1990 *Archeological Survey of 18 Miles of Buffalo River Trail, a Parking Lot, and a Ditch Clean-Out*. Spears Professional Environmental & Archeological Research Service Report 90-13. West Fork, Arkansas.

Stewart, Jack, et. al.

1994 *Archeology of the Buffalo National River*, Volumes 1 and 2. Arkansas Archeological Survey Project 912. Fayetteville, Arkansas.

Walker, Winslow M.

1932 *Cave Culture of Arkansas*. Smithsonian Publication No. 3134, pp. 159–168. Smithsonian Institution, Washington, D.C.

Williams, Ishmael, Randall L. Guending and W. Fredrick Limp

1986 *Archeological Testing of the Elk Track Site (3NW205) & the Webb Branch Site (3NW206), Buffalo National River, Arkansas*. Arkansas Archeological Survey Project 604. Fayetteville, Arkansas.

Wolfman, Daniel

1974 *Archeological Inventory of the Buffalo National River, Arkansas*. Arkansas Archeological Survey, Fayetteville, Arkansas.

Central High School National Historic Site

Little Rock Central High School, now Central High School National Historic Site, is a national emblem of the often violent struggle over school desegregation. It was designated a unit of the National Park Service on November 6, 1998. It is located at the intersection of Daisy L. Gatsion Bates Drive and Park Street in Little Rock, Arkansas. The site is currently used for educational purposes by the Little Rock, Arkansas school system and the National Park Service has only an interpretive interest in the park. No archeological investigations have taken place to date.

Cuyahoga Valley National Park

Cuyahoga Valley National Recreation Area was created only about 25 years ago; it was designated a national park in 2000. The area has a long and rather complex history of archeological investigations. The park has one of the largest and most significant arrays of archeological sites in the Midwest Region, despite destruction of many sites prior to NPS ownership through suburban development and soil stripping activities. Given the large amount of work accomplished in the area, it will not be possible to describe, or even list, all the archeological projects that have occurred in the park in this brief summary. The history of archeological investigations up to 2001 is summarized in the recently published archeological overview and assessment (Finney 2002), which is an important National Park Service planning document. That report provides much greater detail than this brief narrative, on park-related project history as well as individual site information on both recorded and unrecorded sites. An extensive bibliography is also included in the report. Readers requiring additional information on the archeology at Cuyahoga Valley National Park should consult Finney's report.

During the middle and late 19th century, Colonel Charles Whittlesey recorded and described various earthworks and mounds in the area (Whittlesey 1871, 1877). Several of these are within the current boundary of the recreation area. In 1856, workmen building a road opened a mound at what is now known as the Everett Knoll site (Anonymous 1876). Over a century later, this site was professionally excavated by a Case Western Reserve University team (Brose 1974). A rockshelter site in the Boston Ledges area was also an early focus for archeological investigation (Read 1880). Other rockshelters have subsequently been investigated (Brose and Scarry 1976). In the early 20th century, Mills (1914) recorded additional sites in the vicinity of the park. Brose et al. (1981) provide a thorough synthesis of the history of archeological investigations to 1980, and readers who seek detailed information should consult that report.

Modern archeological studies have been numerous in the park. The South Park site, one of the bluff-edge earthwork sites recorded by Whittlesey in the 19th century, was professionally excavated (and extensively looted) over a period of many years. The huge artifact inventory from this Whittlesey tradition village serves as an excellent comparative base for regional archeological studies (Brose 1992). Although several of the bluff-edge earthwork sites or "forts" described by Whittlesey have subsequently been destroyed, others have survived largely intact into the modern era. One of these, the Greenwood Village site, has been subject to evaluative testing and was found to be largely intact and significant (Belovich 1985; Belovich and Brose 1983).

Archeologists from the Cleveland Museum of Natural History have investigated numerous other prehistoric sites in the park through field schools and contractual arrangements. Brose et al. (1981) synthesized knowledge of the park's archeological resources in a detailed report that compiled all the data available at the Cleveland Museum of Natural History and provided a predictive model of site location. Among the more notable sites of the several hundred reported by the Cleveland Museum are the Riverview Road (Belovich and Brose 1982) and Stanford Knoll (Lee 1986b) sites. The discovery and investigation of the Stanford Knoll site provides an excellent example of the significance of prehistoric archeological resources in the park, and the striking overlap of prehistoric and historic occupations. During survey in advance of installation of a water holding tank at the historic George Stanford Farm, where a mid-19th-century Euroamerican farmstead and associated archeological site had previously been investigated (Lee 1983; Rossillon 1985), a Cleveland Museum of Natural History team recorded a highly significant Early Woodland village site in the front yard of the farm house. Data collection yielded dozens of features, and a very early, partially reconstructable ceramic vessel. The discovery of this site exemplifies the archeological potential and the character of archeological resources of the park.

Other significant archeological sites have been studied in areas of the park that were highly modified by floodplain soil-stripping activities in the years just prior to NPS ownership (Brose et al. 1981; McKenzie et al. n.d.). Unfortunately, many sites in the rich soils of portions of the

Cuyahoga River floodplain and on low terrace remnants were destroyed as extensive acreage was stripped in topsoil operations. Despite this large-scale disturbance, at least a few significant sites in these settings remain partially intact (Zalesky 1986).

Although archeological study of the historic resources of the park does not have the long history of prehistoric site investigations, a large number of projects have focused on historic sites in recent years. Like the historic component at the George Stanford Farm mentioned above, most of these studies have been associated with the ambitious historic structure restoration program underway at the park. Survey, test excavation, and, occasionally, data recovery projects have been undertaken at numerous standing historic structures which were built from 1818 to circa 1880. Archeological work has occurred at the George Stanford Farm (Lee 1983; Rossillon 1985), the Coonrad Farm (Lee and Brose 1984), the Hammond and Wetmore properties (Lee 1986a), numerous structures in the community of Everett (Hunt 1986, Richner 1993a, 1993b, Frye and Church 1994), the Canal Visitor Center (better known as the Locktender's House) (Hsu 1984; Richner 1992a), the Wallace House and associated Brandywine Area (Brose and Lee 1984), the Boston Store (Richner 1996a, 1997a; Richner and Volf n.d.) the Frazee/Hynton House (Richner 1993c), and the Brown/Bender and Hammond/Cranz Houses (Richner 1997b, 1999, 2000). Similar archeological investigations have taken place at over a dozen additional historic properties (Finney 2002). Furthermore, smaller scale projects have occurred at other historic properties in anticipation of special lease or sale arrangements and work continues to be underway at numerous other historic structure locales.

Restoration of a different kind of historic structure, the towpath of the Ohio and Erie Canal, resulted in a multi-phased archeological survey and evaluation project (Noble 1992). This work provided data for restoring the towpath to an approximation of its former condition for adaptive use as a multi-purpose trail. Several previously unknown prehistoric and historic sites were recorded immediately adjacent to the towpath through this survey.

The rather extensive archeological work at the park's historic structures reflects the wealth of early structures preserved within the park, and the unique settlement system that resulted from the sale and settling of this portion of Connecticut's Western Reserve after 1796. The historic archeological resource base at the park is no less impressive than the remaining prehistoric sites. The park is now incorporating archeological findings into onsite displays at select restored structures.

Since 1990, the expiration of Reservation of Use and Occupancy (ROU) tracts has afforded archeologists the opportunity to inventory numerous parcels throughout the park. In fact over 200 properties have been inventoried, and as a result at least 24 new sites were recorded (Hunt 1991a, 1991b; Noble 1991a, 1991b; Richner 1991, 1992b, 1993a, 1993b, 1995, 1996b, 1998, 1999, 2000; Bauermeister 2001, 2002a; Midwest Archeological Center 1998:18-20). Management of these properties typically involves removing modern and/or nonsignificant structures and allowing natural succession. The inventories focus on the immediate areas around the structures, as well as any part of the parcel that might be impacted during the removal process. The park has carefully considered the archeological findings when managing subsequent demolitions, and all associated sites have been protected and preserved.

Several agricultural fields under Special Use Permits (SUPs) have been inventoried as part of an ongoing project to monitor and record surface finds in active fields. Pedestrian surveys have been conducted regularly since 1999 with considerable yields of prehistoric material (Richner 1999, Bauermeister 2001). At least five new prehistoric sites, spanning Archaic through Late Prehistoric time periods, have been recorded from these surveys, and previously recorded sites have been included in the monitoring efforts as well. In 2002, results from a geophysical survey at 33SU31 aided archeologists in locating a subsurface thermal feature, dating to the Middle Woodland period. The discovery of a sub-plowzone feature in an actively cultivated field confirms that intact cultural deposits can exist in these settings, a fact that is very important for future management of park land, particularly parcels associated with ongoing or proposed farming activities.

A recent land management program that has, and will continue to reopen currently fallow agricultural fields and expose the ground surface for archeological inventory, is the Countryside Initiative (CI). The CI leases farm properties in the park to private entrepreneurs to conduct sustainable agricultural enterprises in an effort to reestablish a working agricultural landscape in the park. Initiative farms may be leased for up to 50 years. Ultimately, the park plans to rehabilitate and revitalize between 30 and 35 farms, encompassing some 1,500 acres. Types of farming that have been emphasized include fruit and vegetable production, grazing operations, and integrated crop and livestock enterprises, all of which would utilize formerly fallow fields. Archeological inventories and site evaluations have been conducted at several of the initial farmstead properties, including the Duffy Farm (Bauermeister 2002b), the Point Farm (Richner 1996b, Richner et al. n.d.), the Vaughn Farm (Richner 1999), the Gleeson House (Bauermeister 2002c, 2002d), The Welton Farm (Bauermeister 2001), the Hopkins House (Bauermeister 2002a), the Parry Farm (Richner 1999; Bauermeister 2002a), and the Botzum Farm (Richner 1996b; Bauermeister 2002a). Significant historic deposits were discovered at Point, Welton, and Hopkins and significant prehistoric sites were recorded at Point and Botzum. Archeological inventory at these, and the numerous properties to be added to the CI, will certainly continue to add to our knowledge of both prehistoric and historic sites throughout Cuyahoga Valley.

Another archeological undertaking that has proven very effective in locating sites, and understanding prehistoric occupation of the park, is the use of geophysical survey. Since 1999, the incorporation of geophysics has led to the positive identification of prehistoric features at the Szalay House site, and at sites 33SU121, 1997-2, and 33SU31. The Szalay site represents a Hopewellian occupation (Volf 2000), site 33SU121 has dates ranging from Archaic through Late Prehistoric, including Hopewell (Bauermeister 2002e), and 1997-2 has been assigned to the Late Woodland period. These findings have been particularly interesting in focusing on the distribution of Hopewell sites in northeastern Ohio (Richner and Volf 2000). Geophysical survey also has the potential to be useful at historic sites.

From the discussion above, it should be apparent that, although the Cuyahoga Valley was set aside as a national recreation area primarily to provide green space and recreation opportunities for the urban residents of nearby Cleveland and Akron, the park contains an irreplaceable and diverse set of archeological resources. Occupation of the park spans the Paleoindian period through modern era, and hundreds of sites of widely diverse function and cultural affiliation are present. As urban and suburban development and sprawl continue to destroy archeological sites in Cuyahoga and Summit Counties at an alarming rate, the park archeological resource base becomes ever more significant.

Anonymous

1876 *Some Curious Works in Northern Parts of Summit County: 1875*. Minutes of the Archeological Convention, Mansfield, Ohio. Tract 7(1). Western Reserve and Northern Ohio Historical Society, Cleveland.

Bauermeister, Ann C.

2001 Trip Report August 22, 2001, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

2002a Trip Report December 20, 2002, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

2002b Archeological Inventory for Proposed Utility Installations at the Duffy Property, Tract 115-35, Cuyahoga Valley National Park, Summit County, Ohio. Discussion Report, Midwest Archeological Center, Lincoln.

Bauermeister, Ann C., continued

2002c Archeological Inventory for Proposed Projects at the Edmund Gleason House (HS-403), Cuyahoga County, Ohio. Discussion Report, National Park Service, Midwest Archeological Center, Lincoln.

2002d Archeological Inventory for the Proposed Removal and Replacement of the Rear Addition at the Edmund Gleason House, Cuyahoga County, Ohio. Discussion Report, National Park Service, Midwest Archeological Center, Lincoln.

2002e Archeological Inventory and Evaluative Testing for Proposed Developments at 33SU121, Cuyahoga Valley National Park, Summit County, Ohio. Discussion Report, National Park Service, Midwest Archeological Center, Lincoln.

Belovich, Stephanie J.

1985 *Evaluative Testing at the Greenwood Village Site (33Su92): 1984 Season*. Archaeological Research Report No. 56. Cleveland Museum of Natural History.

Belovich, Stephanie J., and David S. Brose

1982 *Survey and Evaluative Testing Within the Cuyahoga Valley National Recreation Area: Sites 33Su87 and 33Su102*. Archaeological Research Report No. 40. Cleveland Museum of Natural History.

1983 *Evaluative Testing at the Greenwood Village Site, 33Su92, Cuyahoga Valley National Recreation Area*. Archaeological Research Report No. 47. Cleveland Museum of Natural History.

Brose, David S.

1974 The Everett Knoll: A Late Hopewellian Site in Northeastern Ohio. *The Ohio Journal of Science* 74(1):36–46.

1992 The South Park Site and the Whittlesey Tradition of Northeast Ohio. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Brose, David S., and Alfred M. Lee

1984 *Archaeological Testing in the Brandywine Falls Vicinity, Cuyahoga Valley National Recreation Area, Summit County, Ohio*. Archaeological Research Report No. 51. Cleveland Museum of Natural History.

Brose, David S., and John F. Scarry

1976 Boston Ledges: Spatial Analysis of an Early Late Woodland Rockshelter in Summit County, Ohio. *Midcontinental Journal of Archaeology* 1(2):115–156.

Brose, David S., S. Belovich, M. Brooslin, R. Burns, J. Hall, H. Haller, C. Pierce, and C. Ubbelohde

1981 *Archaeological Investigations in Cuyahoga Valley National Recreation Area, Summit and Cuyahoga Counties, Ohio*. Archaeology Research Report No. 30. Cleveland Museum of Natural History. Submitted to the National Park Service in fulfillment of Contract CX-6000-9-R056.

Finney, Fred A.

2002 *Calumet, Canal, and Cuyahoga: An Archaeological Overview and Assessment of the Cuyahoga Valley National Park, Ohio*. Contract Completion Report 22. Upper Midwest Archaeology, St. Paul, Minnesota, and St. Joseph, Illinois. Submitted to National Park Service, Midwest Archeological Center, Lincoln.

- Frye, Lori Ann, with contributions by Flora Church
 1994 *Archeological Survey and Evaluation of the Duncan House Lot (33 Su 216) in the Proposed Everett Historic District, Everett, Summit County, Ohio*. Archæological Services Consultants, Inc., Columbus, Ohio. Submitted to National Park Service, Midwest Archeological Center, Lincoln, Purchase Order No. PX-6115-94-042.
- Hsu, Dick Ping
 1984 Prestabilization Testing at the Locktender's House, Historic Structure #125, Cuyahoga Valley N. R. A. In *Historic Structure Report: Adaptive Restoration, Historic Structure 125 (Package 128) [and] Lock 38, Ohio and Erie Canal, Cuyahoga Valley National Recreation Area, Valley View, Ohio*. by Ronald W. Johnson and Paul Newman [final section]. U.S. Department of the Interior, National Park Service, Denver.
- Hunt, William J.
 1986 *An Assessment of Archeological Resources Associated with Several Structures in Historic Everett Village, Cuyahoga Valley National Recreation Area*. Report on file, National Park Service, Midwest Archeological Center, Lincoln.
 1991a Trip Report July 8, 1991, Cuyahoga Valley National Park. Memorandum, Midwest Archeological Center, Lincoln.
 1991b Trip Report August 28, 1991, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Lee, Alfred M.
 1983 Test Excavations at the Stanford House, A Preliminary Report. Report on file, National Park Service, Midwest Archeological Center, Lincoln.
 1986a Phase I and Phase II Cultural Resource Survey, Hammond and Wetmore Properties, Summit County, Ohio. Report on file, National Park Service, Midwest Archeological Center, Lincoln.
 1986b *Excavations at the Stanford Knoll Site, Cuyahoga Valley National Recreation Area*. Archaeological Research Report No. 65. Cleveland Museum of Natural History.
- Lee, Alfred M., and David S. Brose
 1984 *Archaeological Testing at the Coonrad Farm*. Archaeological Research Report No. 48. Cleveland Museum of Natural History.
- McKenzie, D. D. Bier, D. Iannone, and S. Verba
 n.d. The Riverview Site—A Late Woodland Occupation on the Banks of the Cuyahoga River. Manuscript, Cleveland State University, Department of Anthropology.
- Midwest Archeological Center
 1998 *Midwest Archeological Center Programs and Activities for Fiscal Year 1997*. National Park Service, Midwest Archeological Center, Lincoln.
- Mills, W. C.
 1914 *Archaeological Atlas of Ohio*. Ohio State Archaeological and Historical Society, Columbus.
- Noble, Vergil E.
 1991a Trip Report March 11, 1991, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
 1991b Trip Report October 31, 1991, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E., continued

1992 *Final Report on a Phased Archeological Survey Along the Ohio and Erie Canal Towpath in Cuyahoga Valley National Recreation Area*. Technical Report No. 13. National Park Service, Midwest Archeological Center, Lincoln.

Read, M. C.

1880 Exploration of a Rockshelter in Boston, Summit County, Ohio. *American Antiquarian* 2:203–206.

Richner, Jeffrey J.

1991 Trip Report December 10, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1992a *Archeological Excavation at Site 33-Cu-314: A Mid-Nineteenth Century Structure on the Ohio and Erie Canal*. Technical Report No. 14. National Park Service, Midwest Archeological Center, Lincoln.

1992b Trip Report June 19, 1992, Cuyahoga Valley National Park. Memorandum on file, National Park Service, Midwest Archeological Center, Lincoln.

1993a Trip Report May 17, 1993, Cuyahoga Valley National Recreation Area. Memorandum on file, National Park Service, Midwest Archeological Center, Lincoln.

1993b Trip Report August 5, 1993, Cuyahoga Valley National Recreation Area. Memorandum on file, National Park Service, Midwest Archeological Center, Lincoln.

1993c Archeological Investigations At The Frazee-Hynton House (33-Cu-341) Cuyahoga Valley National Recreation Area. Draft report on file, National Park Service, Midwest Archeological Center, Lincoln.

1995 Trip Report August 24, 1995, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1996a *Archeological Investigations at Boston Village, Boston Township, Summit County, Ohio, Part I: Inventory and Evaluation at the Boston General Store, 1991*. Technical Report No. 53. National Park Service, Midwest Archeological Center, Lincoln.

1996b Trip Report August 13, 1996, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1997a *Archeological Investigations at Boston Village, Boston Township, Summit County, Ohio, Part II: Inventory and Evaluation of the Grounds Surrounding the Boston General Store, 1993*. Technical Report No. 54. National Park Service, Midwest Archeological Center, Lincoln.

1997b *Archeological Inventory at Two Historic Farms at Cuyahoga Valley National Recreation Area, Bath and Northampton Townships, Summit County, Ohio*. Technical Report No. 56. National Park Service, Midwest Archeological Center, Lincoln.

1998 Trip Report August 27, 1998, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1999 Trip Report September 7, 1999, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

2000 Trip Report August 24, 2000, Cuyahoga Valley National Park. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J., and William J. Volf

2000 Front Yard Archeology: Hopewellian Occupation at the Szalay Site. *Hopewell Archeology* 4(1):10–1. Copy on file, National Park Service, Midwest Archeological Center, Lincoln.

n.d. Archeological Investigations at Boston Village, Boston Township, Summit County, Ohio, Part III: Excavations at the Boston General Store, 1995. Draft manuscript version of a technical report. National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J., William J. Volf, and Ann C. Bauermeister

n.d. Archeological Inventory and Evaluative Test Excavations at the Historic Point Farm, Cuyahoga Valley National Park, Boston Township, Summit County, Ohio. Draft manuscript version of a technical report. National Park Service, Midwest Archeological Center, Lincoln.

Rossillon, Mitzi

1985 The Archeology of the Stanford House. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Volf, William J.

2000 *The Szalay Site: Hopewellian Occupation in Northeastern Ohio*. Unpublished Master's Thesis, Department of Anthropology, University of Nebraska, Lincoln.

Whittlesey, Charles

1871 *Ancient Earth Forts of the Cuyahoga Valley, Ohio*. Tract No. 5. Western Reserve and Northern Ohio Historical Society, Cleveland.

1877 *Ancient Earthworks — Northern Ohio*. Tract No. 41(2):33–39. Western Reserve and Northern Ohio Historical Society, Cleveland.

Zalesky, J. M.

1986 *Archeological Investigation at the Vaughn Site (33CU65) Cuyahoga Valley National Recreation Area*. Occasional Studies in Anthropology No. 18. National Park Service, Midwest Archeological Center, Lincoln.

Dayton Aviation Heritage National Historical Park

The organization of the park was authorized on October 16th, 1992. The park was formed in partnership with the United States Air Force and the State of Ohio. The National Park Service owns the bicycle shop and print shop of Orville and Wilber Wright. The State of Ohio owns a second print shop and also incorporates the Dunbar House State Memorial, the house of poet Paul Laurence Dunbar. Huffman Prairie, the 84-acre flying field of the Wright Brothers, is owned by the Air Force.

The focus of the park is the preservation of the area's heritage associated with the early development of aviation. Portions of the Huffman Prairie hanger complex have been reconstructed for public interpretation of the site.

The urban nature of the park's buildings suggests any prehistoric sites would be highly disturbed. Historic features such as cisterns, privies, and remains of demolished outbuildings might exist in an undisturbed state. Wright State University conducted investigations of the Print Shop yard in 1995 or 1996, but the results are unpublished at this time.

The Huffman Prairie unit represents the area of greatest potential for undisturbed prehistoric sites. Features associated with the development of the Wright brothers flying school were uncovered during a 1994 shovel test survey and subsequent excavation of the area. The Corp of Engineers, under agreement with the Air Force, discovered remains of the 1910 hangar and searched unsuccessfully for remains of the 1904 and 1905 hangars. Investigations encompassed the entire Huffman Prairie. No evidence of prehistoric sites were found during the survey.

Inventory information was supplied by Bob Peterson of the National Park Service staff and Dave Duell of the Air Force.

Effigy Mounds National Monument

Effigy Mounds was established to preserve significant prehistoric earthen mounds found in northeastern Iowa. Along the high bluffs and lowlands in the Upper Mississippi River valley are numerous prehistoric Indian burial mounds that are unique in North America. Although different groups of prehistoric Americans built burial mounds at various times and places, in southern Wisconsin and adjacent areas in Illinois, Minnesota, and Iowa, some were constructed in the shape of birds and other animal effigies. The mounds represent a number of Woodland cultures, including the Red Ocher, Hopewell, and Effigy Mound Builders. Archeological investigations of mounds and specifically at Effigy Mounds has a long history (Lewis 1885; Logan 1955, 1976; Mallam 1976; Petersen 1983). The first known mention of the Effigy Mounds area appears in Jonathan Carver's *Travels Through the Interior Parts of North America in the Years 1766, 1767, 1768*. In 1881 Theodore H. Lewis and Alfred J. Hill surveyed the mound groups of the Mississippi River valley (Lewis and Hill 1991). The mounds they mapped in 1892 include the Marching Bears mound group and a number of other mounds that were destroyed before the monument was established. Approximately 10 percent of the monument's mounds have been excavated, with the artifacts stored or displayed in the visitor center (Logan 1955; Petersen 1983; O'Bright 1989). Future excavations are not planned; the current emphasis is on preservation and nondisruptive mound study.

There are about 200 known prehistoric mound sites in the monument, 26 in the form of visible bear and bird effigies. The remainder are conical (dome-shaped), linear, or compound (a combination of conical and linear) shapes. Some mounds are monumental in size. The Great Bear mound is 70 feet across the shoulders and fore legs, 137 feet long, and 3½ feet high. The Marching Bears mound group is a unique cluster of 10 bear, three bird, and two linear mounds in the monument's south unit. The more than 100 mounds in the Sny Magill unit represent the largest concentration of mounds in one compact group (Henning 1989; Dial-Jones 1996). The majority of the remaining mounds are on the ridgetops in the north and south units. A number of the mounds that were once in the Yellow River floodplain and open field areas were obliterated or partially destroyed by early farming activities.

There are 18 rockshelters in the north and south units (Petersen 1983, 1985). These small rockshelters were used as either permanent or temporary habitations. Complete studies of these areas have not been conducted. A study of the rockshelters may lead to further information on the hunting and gathering lifestyle of the some of the prehistoric American Indians.

There are also small mound groups in areas adjacent to the monument. These include conical, linear, and a few small effigy mounds. They occur on the Ferguson property west of the headquarters area, on the McCormick property north of the monument, and on the Elwick property west of the Sny Magill unit. The significance of these adjacent resources has not been determined. Some of these mounds have been adversely affected by farming, logging, and pothunting.

The oldest mounds in the Mississippi Valley belong to the Red Ocher culture of the early Woodland period. One mound excavated in the monument is about 2,500 years old. The next major cultural division is Hopewell, a culture dating from about 100 BC to AD 600. Several mounds excavated in the monument are of the Hopewellian period. Three of these conical-shaped Hopewellian mounds are adjacent to the visitor center. The Effigy Mound Builders occupied the land in the monument area from a time overlapping the Hopewellian period until near historic times. Archeological excavations indicate the Effigy Mound Builders were probably replaced by the Oneota culture about AD 1300 or 1400. Their cultural remains indicate they constructed mounds in effigy forms, used copper for tools rather than ornaments, and buried their dead with few if any intentional offerings of a lasting nature. These Oneota people placed a strong emphasis on agriculture and on life in villages.

The monument's mounds have been dated from 500 BC to AD 1300. Built throughout this period, the earliest mounds are simple conical structures. The linear and compound mounds first appeared about 2,000 years ago. Effigy-shaped mounds first appeared about 1,500 years ago.

In addition to its archeological resources, the monument has several historic resources. It is across the Mississippi River from historic Prairie du Chien, Wisconsin, an important point in the exploration and settlement of the upper Mississippi Valley. Prairie du Chien is at a strategic site where the Wisconsin River joins the Mississippi. Louis Jolliet and Father Marquette were the first Europeans to document their visit to the northeastern Iowa region while exploring the Wisconsin and Mississippi rivers in 1673. Others followed—exploring, building forts, and developing Indian trade.

A number of historic sites are found in the monument. The military road built in 1840 by the U.S. Army between the Mississippi River and Fort Atkinson, Iowa, crosses the southern half of the south unit. Remnants of old roads can be found throughout the monument. Red House landing, a small settlement below Hanging Rock in the north unit, was a clamming town before the turn of the century. In the 1840s settlers harvested firewood for steamboats on the Mississippi River. The wood was cut on the ridgetops in the area that is now in the north unit overlooking the river. It was dumped down by chute to the riverbank at a steamboat stop called York landing. Other trees were felled from the area to furnish steamboat fuel to Red House and other landings. Adjacent to Red House landing, but outside the monument, is a prehistoric village site. Neither site has been archeologically studied.

Also historically important, but outside the monument, is the Jefferson Davis sawmill site. In 1829 the sawmill was constructed just west of the monument's current boundary. Timbers and planks from the mill were used to construct Fort Crawford at Prairie du Chien, Wisconsin. Jefferson Davis was later elected president of the Confederate States of America. About 1834 the sawmill was abandoned, and a few years later it burned to the ground.

Little in the way of archeological research has been done in the park in recent years. Perhaps the most significant recent work occurred in conjunction with the South Unit Trail Access Project. The main feature of the access project consists of an Americans with Disabilities Act walkway leading from the visitor center to a small group of mounds to the south. The trail runs through an area between the Yellow River and the Marching Bear Mound Group. The trail also provides pedestrian access across the Yellow River to the south unit of the park.

In 1999 and 2000, Scott Stadler conducted geophysical survey and shovel testing during Phases I and II of the South Unit Trail Access Project. The magnetometer survey revealed several anomalies in areas that also contained positive shovel tests. Several of the anomalies were tested using a soil corer, but no archeological source for the anomalies was detected. The magnetometer also was used on one suspected mound remnant located near a group of four existing mounds. It appears that the feature might be a fragment of a linear mound that was truncated by the old road (Stadler 2001; Stadler and Nickel 1999).

A parkwide archeological overview and assessment is currently underway. It is designed to identify the sequence of archeological investigations in the park and provide direction for future work, as well as provide directions for management and protection of the archeological resource.

Dial-Jones, Janis

1996 *Base Line Issues at the Sny Magill Mound Group: Mound Disturbance and Historical Cartography*. Technical Report No. 41. National Park Service, Midwest Archeological Center, Lincoln.

- Henning, Dale R.
1989 *Archeological Survey of the Sny Magill Unit and Testing of Four Rock Shelters, Effigy Mounds National Monument, Iowa*. Luther College Archeological Research Center, Decorah, Iowa.
- Lewis, Theodore H.
1885 Effigy Mounds in Iowa. *Science* 6(146):453–454.
- Lewis, Theodore H., and Alfred J. Hill
1991 Northwestern Archeological Survey, Field Notebooks and Related Volumes. Pre-1880, 1880-1895. Microfilm edition, Minnesota Historical Society, St. Paul.
- Logan, Wilfred D.
1955 A History of Effigy Mounds National Monument, Iowa. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
1976 *Woodland Complexes in Northeastern Iowa*. Publications in Archeology 15. U.S. Department of the Interior, National Park Service, Washington, D.C.
- Mallam, R. Clark
1976 *The Iowa Effigy Mound Manifestation: An Interpretive Model*. Report No. 9. Office of the State Archaeologist, University of Iowa, Iowa City.
- O'Bright, Jill York
1989 *The Perpetual March: An Administrative History of Effigy Mounds National Monument*. National Park Service, Midwest Regional Office, Omaha, Nebraska.
- Petersen, Robert W.
1983 A Summary of the Mounds in Effigy Mounds National Monument. Manuscript, National Park Service, Effigy Mounds National Monument, McGregor, Iowa.
1985 *Survey of Potential Rock Shelter Sites: Effigy Mounds National Monument*. Master's Thesis, Department of Anthropology, Luther College, Decorah, Iowa.
- Stadler, Scott
2000 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated March 30. Subject: Trip Report to Effigy Mounds National Monument, March 20-23, 2000. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
2001 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated August 3. Subject: Inventory of South Unit access trail, Little Bear handicap parking, and excavations near mound 73, EFMO. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- Stadler, Scott, and Robert K. Nickel
1999 Memorandum to Manager, Midwest Archeological Center, from Archeologists, Midwest Archeological Center, dated October 29. Subject: South Unit Access Project, Effigy Mounds National Monument. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

First Ladies National Historic Site

First Ladies National Historic Site in Canton, Ohio was designated on October 11, 2002. It is located at the Saxton McKinley House. The City National Bank Building is being renovated for use as the National First Ladies' Library Education and Research Center. The library functions as a national archive of the contributions of America's first ladies and other notable American women. To date no archeological investigations have been undertaken at the site since NPS land ownership has not been established.

Fort Larned National Historic Site

Fort Larned National Historic Site consists of 410 acres of federally owned lands, with an additional 269 acres of privately owned scenic easements. It is located in the central Great Plains in Pawnee County, Kansas. The park's implementing legislation identifies the purpose of the park as preservation, protection, and restoration of the historic military features that will enable visitors to obtain a clear impression of frontier and military life of the third quarter of the 19th century.

Fort Larned is considered a single historic and archeological site. Extensive historical research has identified the major interpretive themes of the park. A historic base map has been prepared based on historical research. It identifies the approximate or suggested location of over 50 historic structures dating from 1859 to 1878 when the fort was closed. Recent research and documentation does not recognize the post-military farm uses to which many buildings were put, nor the land modifications caused by nearly a century of intensive agricultural use.

Many archeological investigations have taken place at FOLS in support of gathering physical evidence for building and feature restoration and reconstruction. Nearly every extant structure has been the subject of some archeological investigation. At least 16 of the non-extant structures and features were also investigated to some degree. Many of the archeological investigations were undertaken in compliance with Section 106 of the National Historic Preservation Act, as amended.

Over 80,000 artifacts have been recovered, and many features and construction details have been recorded and reported. No prehistoric sites are known on the park, although isolated finds indicating prehistoric activity are present.

Although much archeological data has been collected and there is a significant amount of information on specific buildings and features, the park has not been the subject of a systematic inventory or testing program. The park could benefit from a combined systematic remote-sensing and physical-testing program to locate and map its non-extant buildings and features, as well as discover other archeological manifestations and features.

Cockrell, Ron, Alan W. O'Bright, and Janis L. Dial

1991 *Historic Structure Report, Blockhouse (HS-10), Fort Larned National Historic Site, Pawnee County, Kansas*. National Park Service, Midwest Regional Office, Omaha.

Scott, Douglas D.

1973 *The Archeology of Fort Larned National Historic Site, Kansas*. Master's Thesis, Department of Anthropology, University of Colorado, Boulder.

1974a *1973 Excavation at Fort Larned National Historic Site, Kansas*. Denver Service Center, Historic Preservation Team, Denver.

1974b *Archaeological Salvage During the Enlisted Barracks Restoration at Fort Larned National Historic Site*. Manuscript, Fort Larned National Historic Site, Kansas.

1975a *1974 Excavations at Fort Larned National Historic Site, Kansas*. Manuscript on file, Fort Larned National Historic Site, Kansas.

1975b *A Report on the Archaeological Salvage of the North Side of Historic Structure 1, Fort Larned National Historic Site*. Manuscript, Fort Larned National Historic Site, Kansas.

1977 *Historic Fact vs. Archaeological Reality—A Test in Environmental Reconstruction*. Ph.D. Dissertation, Department of Anthropology, University of Colorado, Boulder.

Scott, Douglas D., continued

1998 *Archeological Investigations at Fort Larned NHS Related to the Refrigerant Line Replacement and Officers' Cellars*. National Park Service, Midwest Archeological Center, Lincoln.

Spears, W. Steven

1978 *Archaeological Investigations of Historic Building 3, Fort Larned National Historic Site, Kansas*. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Fort Scott National Historic Site

Fort Scott was established on the Military Road between Fort Gibson and Fort Leavenworth as one of a series of forts designed to provide a military buffer between indigenous and removed Indian groups in the Indian Territory of the Louisiana Purchase, and white settlers on the then-permanent frontier. The site of the fort, near the confluence of the Marmaton River and Buck Run in eastern Kansas, was selected and temporary quarters established in 1842 with construction beginning the following year. The initial period of Fort Scott's history spans 1842–1853 when federal policy embraced the concept of a fast-moving mounted force that could respond quickly to disturbances in Indian Territory. Much of the garrison at Fort Scott was involved in the Mexican-American War (1846–1848). By 1853 it appeared that the frontier role for which the fort was conceived was obsolete, and the fort was abandoned. In 1855 the fort's buildings were sold in public auction. Reoccupation of the fort complex during the Civil War was by purchase or rental agreement with private citizens (Bacon 1992; Oliva 1984; Reynolds 1983; Thompson 1967, 1968).

Prior archeological work at Fort Scott between 1968 and 1972 by the Kansas State Historical Society (KSHS) and reported by Reynolds (1983) was concerned with the redefinition of the historic structure foundations and features attributable to the early period of construction and use of the fort between 1842 and 1853. There was little investigation of the areas intervening between structures.

The first project undertaken by the Midwest Archeological Center after establishment of Fort Scott National Historic Site was a small excavation in 1986 by Robert Nickel (1996). This work was designed to mitigate the impacts of a planned reconstruction of Historic Structure 34 and to determine its age and function. The investigation discovered that the structure had been built over a circa-1900 trash deposit, leading to the abandonment of reconstruction plans.

Archeological investigations since reconstruction of park buildings has primarily focused on compliance-related issues, particularly new utilities installation. Limited work was done by Midwest Archeological Center to monitor the installation of gas lines in trenches in the northwestern portion of the fort complex (Richner 1988). Monitoring of the installation of an underground security alarm system in 1992 revealed the presence of buried wall features (Clark 1993). Investigation of a subsidence near the restored hospital in February 1995 resulted in the identification an 1840s latrine associated with the post hospital (Clark 1995). In 1996, archeological monitoring was associated with the installation of a fire suppression water line from the southwest corner of the park, behind the western reconstructed structures to behind HS-1. This resulted in the identification of at least 15 foundations, 2 pits, concrete and brick floors, and an old road cut (Hunt 1996, 1997). Monitoring associated with additional portions of this line resulted in the identification of a stone wall remnant in 1997 and information on foundations of the ten existing structures at the park in 1998 (Stadler 1997, 1998a, 1998b). The most recent project has involved the monitoring of an electrical line trench excavation from HS-12 northeast to a transformer and between HS-8 and HS-9 (Scott 2002). This resulted in the identification of several 20th-century features (gas lines, water lines, and foundations associated with a jail and automobile repair shop).

Two field seasons of investigation, in 1993 and 1994, were designed to facilitate completion of the Cultural Landscape Report, with an objective of gaining a clearer understanding of the original appearance of the fort complex. In September 1993 an archeological investigation of the area behind Officer's Row revealed a number of previously documented and undocumented structural and architectural features. Walls, walkways, curbs, outbuildings, and cisterns were identified and documented (Clark n.d.). The last CLR-related project was in August 1994, when features associated with Officer's Row were exposed and documented.

One purely research oriented project was a geophysical and remote sensing inventory directed by Steven De Vore in conjunction with a non-destructive investigative techniques training workshop (Bevan 1997, Dalan 1997, De Vore 1997). Three areas of the park were investigated: a

strip on the edge of the parade ground in front of HS-10, HS-5, and HS-11; another on the opposite side of the parade ground; and the third in yards behind HS-30 to HS-2. The investigation utilized magnetometers, conductivity and resistance meters, ground-penetrating radar, as well as low-altitude large-scale and regular aerial photographs. Data collected indicated the presence of buried stone walks, stone-lined privies, and stone foundations of storage sheds and one of the officer's quarters. The data also supplied information concerning the Quartermaster's Quadrangle as well as the locations of walkways between the barracks and the parade ground well.

In sum, much of the research at Fort Scott thus far has been driven by compliance and/or structural restoration needs. As a consequence, there has been little of a comprehensive nature that deals with the fort complex in its entirety, nor has any analysis come to grips with the complex post-military occupational history. This is particularly evident in the general absence of artifact analysis which seeks to make comparisons between structures/areas of the fort complex of the late 19th century. The 1840s-1850s latrines and the cisterns which likely post-date the military period of the fort have, for the most part, been left undisturbed. These represent a resource of very high potential which should be carefully protected for future investigation.

Bacon, Allison

1992 *Fort Scott National Historic Site, Cultural Landscape Report: Historical Data Section*. A Report Submitted to the Midwest Regional Office of the National Park Service. Manuscript, National Park Service, Fort Scott National Historic Site, Fort Scott.

Bevan, Bruce W.

1997 A Test of Seismic Refraction at Fort Scott. Non-Destructive Techniques Training at Fort Scott National Historic Site, Kansas, by Steven L. De Vore. Prepared for Fort Scott National Historic Site by the National Park Service, Intermountain Support Office, Denver.

Clark, Caven P.

1993 *Archeological Investigations at Fort Scott National Historic Site, Bourbon County, Kansas: 1992*. Technical Report No. 28. National Park Service, Midwest Archeological Center, Lincoln.

1995 Memorandum to Superintendent, Fort Scott National Historic Site, through Regional Archeologist, Midwest Archeological Center, From Archeologist, Ozark National Scenic Riverways. Trip Report dated February 28. National Park Service, Midwest Archeological Center, Lincoln.

n.d. The Cultural Landscape and Archeological Investigations at Fort Scott National Historic Site, Bourbon County, Kansas. Technical Report Series, National Park Service, Midwest Archeological Center, Lincoln. In press.

Dalan, Rinita A.

1997 Geophysical Tests at Fort Scott National Historic Site, Kansas. In *Non-Destructive Techniques Training at Fort Scott National Historic Site, Kansas*, by Steven L. De Vore. Prepared for Fort Scott National Historic Site by the National Park Service, Intermountain Support Office, Denver.

De Vore, Steven L.

1997 Non-Destructive Techniques Training at Fort Scott National Historic Site, Kansas. Prepared for Fort Scott National Historic Site by the National Park Service, Intermountain Support Office, Denver.

Hunt, William J., Jr.

1996 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated August 14. Subject: Archeological Monitoring during excavation of a fire suppression waterline trench, FOOSC. File Code A2624. z National Park Service, Midwest Archeological Center, Lincoln.

1997 Archeological Monitoring During Excavation of a Fire Suppression Waterline Trench, Fort Scott National Historic Site, Bourbon County, Kansas. National Park Service, Midwest Archeological Center, Lincoln.

Nickel, Robert K.

1996 Untitled and informal trip report. National Park Service, Midwest Archeological Center, Lincoln.

1997a Memorandum to Ralph Hartley and Thomas D. Thiessen from Robert Nickel dated May 13. Subject: Trip Report—Fort Scott NHS Remote Sensing Training and Water Line Construction. National Park Service, Midwest Archeological Center, Lincoln.

1997b Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated May 20. Subject: Trip Report—Fort Scott NHS Remote Sensing Training and Water Line Construction. File Code A2624. National Park Service, Midwest Archeological Center, Lincoln.

Oliva, Leo E.

1984 *Fort Scott on the Indian Frontier*. Kansas State Historical Society, Topeka.

Reynolds, John D.

1983 *Archeological Investigations at Old Fort Scott, 14BO302, Fort Scott, Kansas 1968 to 1972*. Archeology Department, Kansas State Historical Society, Topeka.

Richner, Jeffrey J.

1988 Memorandum to Chief, Midwest Archeological Center, dated May 4. Subject: Trip Report, Fort Scott National Historic Site. Dates of visit: April 25–28, 1988. File Code A26. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas

2002 Archeological Monitoring of Electrical Line Trenches, Fort Scott National Historic Site, Kansas. Small Project Report, Midwest Archeological Center, National Park Service, Lincoln.

Stadler, Scott

1997 Memorandum to Manager, Midwest Archeological Center, through Park Archeology Program Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated November 14. Subject: Trip Report — Monitoring the installation of a fire suppression system, Fort Scott National Historic Site (FOOSC). File Code A2624. National Park Service, Midwest Archeological Center, Lincoln.

1998a Memorandum to Manager, Midwest Archeological Center, through Park Archeology Program Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated November 14. Subject: Trip Report -- Archeological monitoring of Phase III, installation of a fire suppression system, Fort Scott NHS, Fort Scott, Kansas. File Code A2624. National Park Service, Midwest Archeological Center, Lincoln.

1998b *Archeological Monitoring of Fire Suppression System, Fort Scott National Historic Site, Bourbon County, Kansas: 1997–1998*. Technical Report No. 57. National Park Service, Midwest Archeological Center, Lincoln.

Thompson, Edwin N.

1967 *Fort Scott, Kansas: Site Identification and Evaluation*. Division of History, Office of Archeology and Historic Preservation, National Park Service, Department of the Interior, Washington, D.C.

Fort Smith National Historic Site

Fort Smith National Historic Site is located at the confluence of the Poteau and Arkansas Rivers in northwestern Sebastian County, Arkansas. The park consists of 69.83 acres containing its primary resource, the sites of the first Fort Smith and the second Fort Smith. The fort was occupied in the historic period from 1817 to 1871 by the U.S. Army. In 1872, the site was taken over by the U.S. District Court of the Western District of Arkansas, and the site was used as a judicial seat up to the beginning of the 20th century.

Fort Smith NHS has one recorded multi-component prehistoric site (Dollar 1966). The site has not been formally investigated but it appears to be related to Early to Late Archaic and Woodland to Mississippian occupations (Coleman 1990). The prehistory of the area is not well known and comparatively little research has been undertaken in this area of Arkansas. The prehistory of Fort Smith must rely on extrapolation of sequences of occupation known for northwest Arkansas and eastern Oklahoma.

Fort Smith NHS is listed on the National Register of Historic Places by contributing to the historic themes of westward expansion and military–Indian interaction and conflict. Its archeological resources are generally considered contributing elements to those that qualify it for inclusion on the register.

In 1990, Roger Coleman completed an archeological assessment that reviewed at least 24 archeological compliance-type projects beginning in 1958 (Coleman 1990). He concludes that the site contains a rich and varied archeological data base, which is relatively unexplored as well as incompletely documented. Coleman (1990:55) recommended that Fort Smith be fully inventoried and archeological sites and features documented, a base map prepared, and that incomplete reports be finalized and published. He further recommended that a magnetometer survey should be undertaken of the fort grounds to non-intrusively document archeological features. In addition he suggested that limited formal testing and a program of auger testing would be appropriate to assist in documenting the buried resources and ascertaining historic grade and grade changes.

Beginning in 1997, there have been several compliance-related archeological investigations associated with the construction of the park's new visitor center (Hunt 1997, 1998, 1999a, 1999b, 1999c, 2000; Nickel and Hunt 2002; Scott and Hunt 2000). Excavations in the vicinity of the Courthouse and Jail revealed a complex historical stratigraphy on the east side of the structure, former porch floors on either side of the Army-era barracks, and the remnants of another barracks foundation that had never been completed. The work reconfirmed the presence of a well east of the barracks but found the guardhouse to have been destroyed by later construction. Excavations and geophysical surveys focusing on the perimeter fortifications identified and confirmed the presence a number of extant palisade and bastion elements. This information was used to aid in the construction of an interpretive perimeter walkway at the site.

Dollar, Clyde D.

1966 *The First Fort Smith Report*. Manuscript, Fort Smith National Historic Site, Fort Smith, Arkansas.

Coleman, Roger E.

1990 *Archeological Assessment for Fort Smith National Historic Site*. Fort Smith National Historic Site, Fort Smith, Arkansas.

Hunt, William J., Jr.

1997 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated November 7. Subject: Archeological investigations around the Courthouse, Fort Smith National Historic Site (FOSM). National Park Service, Midwest Archeological Center, Lincoln.

Hunt, William J., Jr., continued

1998 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center (MWAC) dated September 28. Subject: Documentation of Archeological Features in Courthouse Basement and east yard, Fort Smith National Historic Site (FOSM). National Park Service, Midwest Archeological Center, Lincoln.

1999a Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated March 12. Subject: Trip Report: Investigation of Archeological Discovery, Commissary Building, Fort Smith National Historic Site. National Park Service, Midwest Archeological Center, Lincoln.

1999b Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC) dated August 17. Subject: Trip Report — Archeological Monitoring, Fort Smith National Historic Site (FOSM), Sebastian County, Arkansas. National Park Service, Midwest Archeological Center, Lincoln.

1999c Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC) dated October 14. Subject: Trip Report, Geophysical Survey at Fort Smith National Historic Site (FOSM). National Park Service, Midwest Archeological Center, Lincoln.

2000 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center dated September 12. Subject: Planning and testing tree planting locations, Fort Smith National Historic Site (FOSM). National Park Service, Midwest Archeological Center, Lincoln.

Nickel, Robert K., and William J. Hunt, Jr.

2002 *Geophysical Surveys of the Perimeter Fortification System at the Site of the Second Fort Smith, Fort Smith National Historic Site, Fort Smith Arkansas*. Technical Report No. 85. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas D., and William J. Hunt, Jr.

2000 *Archeological Investigations Conducted in Support of the Fort Smith Barracks/Courthouse/Jail Rehabilitation*. Technical Report No. 68. National Park Service, Midwest Archeological Center, Lincoln.

Fort Union Trading Post National Historic Site

Archeological research at Fort Union Trading Post National Historic Site (32WI17) might date back to the late 1930s although there is little documentation for these investigations (Hunt 1986a:8). During the 1960s, plans for reconstruction of the fort required information on structural location and construction. Such information was only available through archeological investigations. To gather the necessary information, the Midwest Archeological Center conducted fieldwork from 1968 to 1970. In 1972, fieldwork was undertaken by the University of Colorado. These excavations succeeded in identifying many of the major structures in the trading post (bastions, palisades, bourgeois house, Indian and artisans' house, store range, blacksmith shop, dwelling range) and several minor structures and site features as well (flagpole, dairy house, gates, fences). None of the structures were completely excavated and few dating before the 1850s were identified. In addition, there were some prehistoric materials recovered, although none were clearly located in pre-fort deposits (Gillio 1973; Hunt 1986a; Husted 1969, 1971; Moore 1968)

Shortly after these investigations, the National Park Service reconsidered its position with regard to reconstruction at archeological sites. This led to a temporary abandonment of its reconstruction plans. No further large-scale archeological excavations were undertaken at the site for the next decade, and the data recovered during the 1968–1972 excavations remained largely unanalyzed. A number of small-scale investigations were undertaken, however, throughout the remainder of the 1970s and into the early 1980s. In 1973, a cultural resource survey examined portions of the terrace on which the fort is situated. No structures, features or artifacts related to the fort's occupation period were located (Anderson 1973). Elements of Mondak (24RV102), a turn-of-the-century town site located in and beyond the west end of the park, were surveyed at this time but the significance of this site was not determined. In 1976, a parkwide archeological inventory was undertaken in conjunction with archeological monitoring of excavations associated with a new well, water line, and power line for a visitor center (Anderson 1976; Anderson and Galley 1976). Several Euroamerican features were noted and mapped including a stratified trash dump that may be associated with Mondak.

In 1977, a number of small scale projects were initiated and completed. A magnetic survey concentrating on the fort's interior identified a large number of magnetic anomalies, many of which have no known structural counterparts (Weymouth 1979, 1991). As well, a number of cultural deposits west and north of the Fort Union site were recorded that may relate to the fur-trade era (Thiessen 1977). A remote sensing survey instituted primarily to aid construction of a topographic base map for the park identified twenty anomalies believed to be of cultural origin. Unfortunately, inclement weather in September prevented a thorough ground check of the anomalies and this work remains uncompleted to date (Anderson 1977; Snow 1978). Among cultural elements located and confirmed in the field this year were features possibly relating to Fort Union outbuildings, corrals, a historic Native American site (32WI18) believed to be associated with the circa 1870s village of the Crow-Flies-High Hidatsa band, and unidentified circular and rectangular features near Fort Union's palisades.

In 1978, Robert Nickel directed a field effort to locate the site of Fort William using a magnetometer survey and subsurface testing (Weymouth 1994). Although a report for this work was not completed at the time, a study examining the historical and archeological data associated with Fort William is underway as of FY2002.

Another magnetometer survey was undertaken at 32WI18 in 1981 as part of a master's thesis investigation focused on confirming and documenting the Crow-Flies-High village site (Fox 1982). The extent of the site was not determined, however, and its archeological resource content was only defined on a limited basis. Recently, work was initiated whose goal is to define the site boundaries and examine evaluate the significance of the subsurface resource. To this end, a combined detailed surface artifact and geophysical inventories were completed in 2002 (Maki 2002; Sturdevant 2002).

In 1981, the major portion of the Mondak townsite (24RV102) was documented (Greiser et al. 1982). The investigation identified significant intact historical deposits in that portion of the town north of the highway. Elements south of the road were believed to be largely destroyed through cultivation. The site was determined eligible for nomination to the National Register of Historic Places.

In 1985, MWAC Archeologist Douglas Scott excavated the site of the Fort Union flagpole re-exposing the pole's base and remnants of the picket fence which surrounded it (Scott 1986). That work provided information for a reconstructed flagpole, which was raised on site that same year. In December, Congress mandated reconstruction of Fort Union with initiation of that action in 1986. Accordingly, MWAC Archeologists William Hunt and Thomas Thiessen initiated a three-year field project to mitigate the destructive impact of reconstruction on the original foundations of the fort and its associated features as well as on those elements of the Mondak site that lay within the park boundaries. Surveys suggested that elements of the Mondak townsite remaining in the park retained no subsurface integrity. They did identify two fur trade era features, however, the remnants of the Fort Union to Fort Benton road and a lime kiln at the terrace edge (Hunt and Peterson 1988).

Excavations at Fort Union in 1986 focused on the bourgeois house, kitchen, mid-section of the north palisade, and a large area north of the palisade designated as a construction staging area. The original bourgeois house and sections of the first palisade were also identified (Hunt 1994a, 1994b). Additionally, a large concentration of secondary features (well, fences, gates, storage pits, trash pits, robe press) were encountered and documented. In 1987, the investigation focused on the east and north palisades including the northeast and southwest bastions (Peterson and Hunt 1988). Many secondary features were identified, including a large fenced area on the north palisade exterior, the location of a late 1850s lumber mill, a semi-subterranean structure at the northwest corner of the post, an unidentified early structure in the southeast corner, the dairy house, and portions of the bracing system supporting the palisades. Final pre-construction data recovery was completed in 1988. Major structures investigated that year included the west and south palisade, the main gate, three superimposed Indian and artisan houses, and the original south palisade and gate features. Secondary features of importance included a charcoal house associated with the blacksmith shop, drains, additional elements of the palisade bracing system, walkways, and a large number of prehistoric features (Groover and Cabak 2002; Peterson 2002a, 2002b; Sturdevant 2001; Thiel 2001, 2003). As a result of the archeological investigations at Fort Union Trading Post National Historic Site, the cultural chronology of the park is more clearly understood and its structural history elements are fairly well known.

Since completion of the reconstruction, a number of small archeological projects have taken place. Post-prescribed burn inventories demonstrated that the entire terrace on which the reconstruction sits has artifacts scattered across it. A number of artifact concentrations were identified associated with a pre-fort occupation, the fur-trade era, and post-fort historic Native American occupations and interments (Hunt 2000; Hunt and Bauermeister 2002; Klinner 1998b). Compliance-related projects associated with interpretive displays and the installation of a new water line and fire suppression system and road maintenance utilized both geophysical inventories and subsurface testing (Hunt 1999; Stadler 2000, 2002; Klinner 1998a). These have often identified buried archeological materials and features in the vicinity as well as some distance away from the reconstructed trading post.

Aside from the Garden Coulee site, other Native American components of the Fort Union site have been more securely identified in the last decade. Considerable numbers of lithics, ceramics, and small features were recovered and documented during the Fort Union excavations. While lithic materials appear to range from the Late Archaic Period (circa 3000–0 BC), ceramics and lithics associated with the primary occupation are most closely associated with the Mortlach complex. This artifact complex dates to circa AD 1525–1780 and is best known from a small re-

gion encompassing northeastern Montana, northwestern North Dakota and southern Saskatchewan. Some have attributed this material to protohistoric Assiniboin (Ahler 2000; Bauermeister 2000; Walde 1994). Little is known about the character of this tradition in the Yellowstone-Missouri River Confluence area.

In addition, a number of Native American burials were excavated at Fort Union in 1970 and 1986. Analysis of the remains, interment practices, and artifacts associated with the burials was undertaken. This occurred along with a review of site history and historic burial practices among tribes known to occupy the region. The analysis concluded the burials were likely Assiniboin or Hidatsa. Subsequent to completion of this report, the remains were returned to the Assiniboin for reburial (De Vore and Hunt 1994).

Ahler, Stanley

2000 Comments on a Collection of Native American Ceramics from Fort Union Trading Post National Historic Site. U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Anderson, Adrienne B.

1973 Archaeological Survey, Fort Union Trading Post National Historic Site. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1976 Trip Report, dated May 25. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1977 Trip Report, dated October 25. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Anderson, Adrienne B., and Denise Galley

1976 Cultural Resource Inventory and Evaluation, Fort Union Trading Post National Historic Site. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Bauermeister, Ann

2000 *Chipped Stone Use at Fort Union Trading Post National Historic Site, North Dakota*. Masters Thesis submitted in partial fulfillment of requirements for degree of Master of Arts from the University of Nebraska, Lincoln.

De Vore, Steven L., and William J. Hunt, Jr.

1994 *Fort Union Trading Post National Historic Site (32W117) Material Culture Reports, Part X: Native American Burials*. United States Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Fox, Gregory L.

1982 *The Garden Coulee Site (32W118): A Late Nineteenth Century Village of a Band of Dissident Hidatsa*. Unpublished Master's Thesis, Department of Anthropology, University of Missouri, Columbia.

Gillio, David 'A'

1973 *1972 Excavations at Fort Union Trading Post National Historic Site, North Dakota*. Department of Anthropology, University of Colorado, Boulder. Submitted to National Park Service, Midwest Archeological Center, Lincoln. Contract No. 4970B20155.

Greiser, T. Weber, Lynne B. MacDonald, and Daniel F. Gallacher

1982 *Testing and Evaluation of Cultural Resource Site 24RV102, the Mondak Townsite, Roosevelt County, Montana*. Historical Research Associates, Missoula, Montana. Submitted to the North Dakota State Highway Department, Bismarck, Contract Number NDSHD 35-0006-1081.

- Groover, Mark and Melanie A. Cabak
2002 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 18 Report, with a Foreword by William J. Hunt, Jr. National Park Service, Midwest Archeological Center, Lincoln.
- Hunt, William J., Jr.
1985 Bone Gaming Pieces, Ethnic Identity, and Trade: An Example from Fort Union Trading Post, North Dakota. *Archaeology in Montana* 26(1):44–51.
1986 *Fort Union Trading Post National Historic Site (32WI17) Material Culture Reports, Part I: A Critical Analysis of Archaeological Excavations*. National Park Service, Midwest Archeological Center, Lincoln.
1994a Origins of Fort Union: Archeology and History. In *The Fur Trade Revisited: Selected Papers of the Sixth North American Fur Trade Conference, Mackinac Island, 1991*, edited by Jennifer S. H. Brown, W. J. Eccles, and Donald P. Heldman, pp. 377–392. Michigan State University Press, East Lansing, Michigan.
1994b “At the Yellowstone ... to Build a Fort”: Fort Union Trading Post, 1828–1833. In *Fort Union Fur Trade Symposium Proceedings*, pp. 7–21. Friends of Fort Union, Williston, North Dakota.
1999 Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC) dated September 29. Subject: Trip Report — Geophysical survey of proposed waterline route through Fort Union Trading Post site (32WI17) and the Garden Coulee or Crow-Flies-High Village site (32WI18), Fort Union Trading Post National Historic Site, Williams County, North Dakota and Montana. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.
2000 Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center dated May 19. Subject: Post-burn inventory, Fort Union Trading Post National Historic Site (FOUS). Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.
2000 Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC) dated August 28. Subject: Trip Report for an Inventory of the Proposed Bodmer Overlook Trail and Bodmer Overlook Perimeter, Fort Union Trading Post National Historic Site (FOUS). Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.
2000 Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC), dated October 4. Subject: Pre-construction investigation to identify and mark the current waterline route, Fort Union Trading Post National Historic Site (FOUS). Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.
2002 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 19 Report. National Park Service, Midwest Archeological Center, Lincoln, Nebraska (in press).
- Hunt, William J., Jr., and Ann C. Bauermeister
2002 A Post-Burn Inventory of the West Terrace, Fort Union Trading Post National Historic Site (FOUS), Williams County, North Dakota/Roosevelt County, Montana. U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln, Nebraska
- Hunt, William J., Jr., and Lynelle A. Peterson
1988 *Fort Union Trading Post: Archeology and Architecture. The 1986 Excavations*. National Park Service, Midwest Archeological Center, Lincoln.

Husted, Wilfred M.

1970 1969 Excavations at Fort Union Trading Post National Historic Site, North Dakota: A Progress Summary. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1971 1970 Excavations at Fort Union Trading Post National Historic Site, North Dakota: A Progress Summary. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Klinner, Duane

1998a Fort Union Trading Post National Historic Site — Fur Press Testing Project. Report submitted as UNDAR-West Project Number 2051 to the National Park Service, Fort Union Trading Post National Historic Site, Williston, North Dakota, by UNDAR-West, Department of Anthropology, University of North Dakota, Belfield.

1998b Fort Union Trading Post National Historic Site — Survey of 64 Acres. Report submitted as UNDAR-West Project Number 2061 via TRNP Order no. PX1540-8-0041, Requisition/Reference No. FU071, to the National Park Service, Theodore Roosevelt National Park, Medora, North Dakota, by UNDAR-West, Department of Anthropology, University of North Dakota, Belfield.

Maki, David

2002 Email message to William Hunt and Jay Sturdevant dated October 22. Subject: Garden Coulee geophysical investigation. Park file, U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Moore, Jackson W., Jr.

1968 Summary of Archeological Investigations, Fort Union Trading Post National Historic Site, 9 October 1968. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Peterson, Lynelle A.

2002a 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 15 Report, with a Foreword by William J. Hunt, Jr. National Park Service, Midwest Archeological Center, Lincoln.

2002b 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 16 Report, with a Foreword by William J. Hunt, Jr. National Park Service, Midwest Archeological Center, Lincoln.

Peterson, Lynelle, and William J. Hunt, Jr.

1990 *The 1987 Investigations at Fort Union Trading Post: Archeology and Architecture*. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas D.

1986 “This Flag-Staff Is The Glory Of The Fort”: Archeological Investigations of the Fort Union Flagpole Remains. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Snow, Cordelia T.

1978 The Remote Sensing Project at Fort Union Trading Post National Historical Site. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott

2000 Memorandum to Manager, Midwest Archeological Center (MWAC), from Archeologist, Midwest Archeological Center (MWAC) dated December 5. Subject: Excavations related to waterline construction, Fort Union Trading Post National Historic Site (FOUS). Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott, continued

2002 Fort Union and the Garden Coulee Site: Excavations in Advance of Waterline Construction. U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Sturdevant, Jay

2001 *Stratigraphy, Chronology, and Architecture at a Historic Fur Trade Post: A Harris Matrix Application at Fort Union Trading Post National Historic Site, North Dakota*. Masters Thesis, Graduate College, University of Nebraska, Lincoln.

2002 Memorandum to Manager, Midwest Archeological Center (MWAC), through Park Archeology Program Coordinator, from Archeologist, Midwest Archeological Center (MWAC) dated September 30. Subject: Geophysical Grid Layout and Pedestrian Archeological Survey of Garden Coulee Site (32WI18), September 9–September 21, 2002, Fort Union Trading Post National Historic Site, Williams County, North Dakota. National Park Service, Midwest Archeological Center, Lincoln.

Thiel, J. Homer

2001 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 21 Report, with a Foreword by William J. Hunt, Jr. National Park Service, Midwest Archeological Center, Lincoln, Nebraska.

2003 1988 Archeological Investigations at Fort Union Trading Post National Historic Site, Montana-North Dakota, Block 20 Report, with a Foreword by William J. Hunt, Jr. National Park Service, Midwest Archeological Center, Lincoln, Nebraska.

Thiessen, Thomas D.

1977 Memorandum to Chief, Midwest Archeological Center, from Archeologist, Midwest Archeological Center. Subject: Archeological Investigations at Fort Union Trading Post National Historic Site, March–May 1977. National Park Service, Midwest Archeological Center, Lincoln.

1993 Early Explorations and the Fur Trade at Knife River. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site, Part II: Ethno-historical Studies*, edited by Thomas D. Thiessen, pp.29–46. Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archeological Center, Lincoln.

Walde, Dale A.

1994 *The Mortlach Phase (North Dakota, Saskatchewan, Manitoba, Montana) Middle Missouri Village Peoples, Assiniboine Peoples*. Ph.D. Dissertation, Department of Archaeology, University of Calgary, Alberta. Published by University Microfilms International, Ann Arbor, Michigan.

Weymouth, John W.

1979 An Analysis of a Magnetic Survey at Fort Union Trading Post National Historic Site, North Dakota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1991 *A Magnetic Survey of the Fort Union Trading Post National Historic Site: Correlations with Three Seasons of Excavations*. University of Nebraska, Lincoln. Submitted to the National Park Service, Midwest Archeological Center, Purchase Order No. PX-6115-7-0150.

1994 An Analysis of Magnetometer Data Gathered Over the Possible Site of Fort William, North Dakota. University of Nebraska, Lincoln. Submitted to the National Park Service, Midwest Archeological Center, Purchase Order No. 1443-PX-6115-94-0065.

George Rogers Clark National Historical Park

Archeological investigations at George Rogers Clark have been few, owing in part to the limited number of developments since its transfer to the National Park Service in 1966. Furthermore, recent construction-related investigations have shown that much of the park is covered with a thick layer of relatively modern fill, eliminating any critical need for investigation during many smaller projects.

The first controlled excavations were carried out in 1970 and 1971 by field archeologists from Indiana University (Nickel 2002). Curtis H. Tomak (1972) directed those efforts designed to locate remains of Fort Sackville, which were reputed to survive within the park boundaries. Little of the material recovered, however, could be attributed to that 18th-century fortification with confidence. In 1975, Tomak and colleague Van A. Reidhead supervised minor salvage excavations necessitated by the construction of a visitor center, recording a feature believed to be a wall or foundation remnant (Kellar 1975).

Since the 1970s, field research at the site has been almost nil. In 1988, MWAC Archeologist Forest Frost examined the small piece of ground where the Vincennes Monument would be erected later that year (Frost 1988). That investigation confirmed again the presence of deep fill, but indicated the possibility of discerning discrete depositional periods relating, for example, to the latter half of the 19th century. Frost also tested the parcel identified for construction of a new maintenance facility in 1990, finding that the proposed extent of disturbance would not exceed the depth of fill on the floodplain (Frost 1990).

In 1996, testing was undertaken near the Old Cathedral Complex in conjunction with installation of a new drainage system (Mann 1996). Three of the shovel tests exposed soil deposits that appeared to represent grave shafts. In one instance the top of a wooden coffin was encountered at a depth of ca. 170 cm, at which point excavations were halted. The area may have been used as a cemetery from the mid-1700s through the mid-1800s.

A comprehensive summary of previous investigations at George Rogers Clark National Historical Park is presented in Robert Nickel's (2002) recent archeological overview and assessment.

Frost, Forest

1988 Memorandum to Chief, Midwest Archeological Center, dated September 30. Subject: Trip Report, George Rogers Clark National Historic [*sic*] Park (GERO). File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1990 Memorandum to Chief, Midwest Archeological Center, dated October 22. Subject: Trip Report, George Rogers Clark. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Kellar, James H.

[1975] George Rogers Clark National Monument [*sic*] Interpretive Center Construction: Archaeological Report. Undated report, attributed to J. H. Kellar, submitted to National Park Service, Midwest Archeological Center, Lincoln.

Mann, Rob

1996 Systematic Shovel Test Investigation, The Old Cathedral Located in Vincennes, Knox County, Indiana: A Preliminary Report. Landmark Archeological and Environmental Services, Inc., Sheridan, Indiana.

Nickel, Robert K.

2002 *An Archeological Overview and Assessment of George Rogers Clark National Historical Park*. Technical Report No. 83. National Park Service, Midwest Archeological Center, Lincoln.

Tomak, Curtis H.

1972 Archaeological Investigations at the George Rogers Clark National Memorial [*sic*], Vincennes, Indiana. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

George Washington Carver National Monument

Archeological research was initiated at GWCA in 1953 when the slave and Moses Carver cabin sites and the original location of the Moses Carver frame house were investigated by the National Park Service (Beaubien 1954; Beaubien and Mattes 1954). Two other possible locations of the historic cabins were tested with negative results. A few prehistoric items in addition to a mixed scatter of historic artifacts were found during the study.

Testing was conducted at four areas in the monument in 1958 under joint sponsorship by the Missouri Basin Project, the Smithsonian Institution, and the National Park Service (Neuman 1958). Locations inside and outside the Moses Carver Cemetery and two reported locations of historic outbuildings were investigated.

A more extensive archeological program was initiated in 1975 and 1976. Magnetic survey and subsurface test excavation were conducted at the Gilmore (23NE120) and Williams (23NE121) farms (Garrison et al. 1976; Weymouth 1976). During resurvey of the Moses Carver Cabin site (23NE119), prehistoric and historic artifacts were found. Remains of an unidentified structure (23NE122) were also discovered along the north boundary of the monument.

Additional work at the monument by the University of Missouri included shovel testing along the waterways, a more detailed analysis of the previously collected magnetic data, soil chemistry analyses, restudy of the material collected by Beaubien in 1953, and cleaning and extensive stabilization of the artifacts recovered during the 1976 fieldwork (Garrison and Bray 1978; Garrison, Bray, and Denman 1979).

In 1981, a parkwide survey was accomplished (Benn 1982). George Washington Carver is one of the very few parks in the Midwest Region that has received an intensive level of survey coverage for essentially all its acreage. The 207 acre area was subject to pedestrian and shovel testing survey which resulted in better delineation of four known historic sites, and the initial recording of five prehistoric sites and a twentieth century house site.

That same year, Midwest Archeological Center conducted a geomagnetic survey of the Carver Cemetery supplemented with a survey of soil resistance in a smaller area of the cemetery. Unfortunately, analysis of the data from this work was unable to identify a consistent pattern of variation that could be associated with marked graves (Emery 1981).

No archeological actions were taken at GWCA until the 1990s when geophysical and geochemical data from 23NE120 and 121 were re-examined by Ervan Garrison (1996). This study demonstrated relationships between geomagnetic anomalies and soil chemistry with structure location and function, the nature of the refuse deposits, and supported Beaubien's interpretation of the assemblages and features.

In 1999, MWAC conducted geophysical tests in the Carver Cemetery in response to a request from the park manager. He was concerned with the possibility of burials occurring outside the reconstructed rock enclosure erected by the National Park Service in the early 1950s. That enclosure did not follow the original plan, however, in size or orientation (Hunt 1997). The goal of the MWAC inventory was to determine whether conditions in the tested area were suitable to identification of burial locations without excavation. Accordingly, three geophysical instruments were utilized to conduct magnetic, soil resistance and radar surveys in a corner of the cemetery where the graves were clearly marked. The subsequent analyses of magnetic and soil resistance data produced results similar to the 1981 survey; i.e., an inability to demonstrate an anomaly pattern which could be associated with the known locations of marked graves. Ground-penetrating radar (GPR), however, appeared to be partially successful at identifying grave locations and the potential for improvement of this method's grave prediction capabilities is great given the recent advancements in time-slice software (Nickel 2000).

- Beaubien, Paul L.
1954 *Report of Archeological Investigations, George Washington Carver National Monument, 1953*. National Park Service, Midwest Archeological Center, Lincoln.
- Beaubien, Paul L., and Merrill J. Mattes
1954 The Archaeological Search for the George Washington Carver's Birthplace. *Negro History Bulletin* 18(2):33–38.
- Benn, David W.
1982 *An Intensive Archeological Survey of George Washington Carver National Monument, Newton County, Missouri: 1981*. Project: CAR 490. Report prepared by the Center for Archeological Research, Southwest Missouri State University, Springfield. Submitted to the National Park Service, Midwest Archeological Center, Lincoln.
- Emery, Janis D.
1981 Field data, interpretive notes, and trip report memorandum. Midwest Archeological Center Accession 661, National Park Service, Midwest Archeological Center, Lincoln.
- Garrison, Ervan G.
1996 Archeogeophysical and Geochemical Studies at George Washington Carver National Monument, Diamond, Missouri. *Historical Archaeology* 30(2):22–40.
- Garrison, Ervan G., and Robert T. Bray
1978 *A Progress Report on Archeological Investigations at George Washington Carver National Monument, 1978*. Prepared by the American Archaeology Division, Department of Anthropology, University of Missouri, Columbia. Submitted to National Park Service, Midwest Archeological Center, Lincoln, pursuant to Purchase Order PX-6115-7-0146.
- Garrison, Ervan G., David D. Denman, and Robert T. Bray
1976 *Archeological Investigations at George Washington Carver National Monument: 1975–76*. Prepared by the American Archaeology Division, Department of Anthropology, University of Missouri, Columbia. Submitted to National Park Service, Midwest Archeological Center, Lincoln.
- Garrison, Ervan G., Robert T. Bray, and David D. Denman
1979 *Archeological Investigations at George Washington Carver National Monument, 1978*. Prepared by the American Archaeology Division, Department of Anthropology, University of Missouri, Columbia. Submitted to National Park Service, Midwest Archeological Center, Lincoln, pursuant to Purchase Order PX-6115-7-0146.
- Hunt, William J., Jr.
1997 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center dated November 14. Subject — Visit to George Washington Carver National Monument (GWCA) — Remote Sensing at the Cemetery. Trip report, National Park Service, Midwest Archeological Center, Lincoln.
- Neuman, Robert W.
1958 Archeological Investigations at the George Washington Carver National Monument, Missouri, 1958. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Nickel, Robert K.
2000 *Geophysical Surveys in the Carver Family Cemetery, George Washington Carver National Monument, Missouri*. National Park Service, Midwest Archeological Center, Lincoln.
- Weymouth, John W.
1976 A Magnetic Survey of Portions of the George Washington Carver National Monument. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Grand Portage National Monument

The first archeological excavations at what is now Grand Portage National Monument began in 1936 under auspices of the Minnesota Historical Society. Directed by Ralph D. Brown (1937a, 1937b, 1937c), that initial project employed exploratory trenches to delineate the depot stockade prior to its reconstruction. Numerous internal structures also were defined using a systematic grid system of excavation. Brown continued work in 1937, specifically in search of deposits representing the Great Hall and several watchtowers at intervals along the stockade. Those features and others were indeed discovered by that method and subsequently excavated (Woolworth 1963, n.d.).

Research resumed nearly 25 years later when Eldon Johnson (1961) directed a five-week field school for the University of Minnesota in 1961. Efforts concentrated on the area east of Grand Portage Creek and north of County Road 17, where they excavated 47 test units. James Stoltman excavated a series of exploratory trenches near the northeast monument boundary in August of that year, and Alan Woolworth continued work in the same area during September 1961 (Woolworth and Woolworth 1982). All the 1961 investigations sought to locate archeological resources to assist National Park Service management. Most of the deposits represented turn-of-the-century activities, though some fur trade materials also came to light.

Woolworth returned in 1962 to explore for remains for the XY Company post east of Grand Portage Creek and south of County Road 17 (Woolworth 1968). Although seriously considered as a possible location for construction of a visitor center, the discovery of several historic burials and other important structural features eliminated the area from further consideration. In 1963 and 1964 Woolworth directed larger-scale excavations at the depot to provide additional information to planners working on design of the reconstruction, including more precise data on palisade and gate locations (Woolworth 1969). Woolworth again worked within the enclosure in 1970 and 1971, excavating a separate kitchen structure immediately behind the Great Hall, the Great Hall itself, several drains, and an internal wall (Woolworth 1975a). He then conducted minor investigations in 1973 to assess the impacts of several new developments in or around the depot (Woolworth 1975b) and in 1975 to search for "Boucher's Little Fort" east of the creek (Woolworth and Woolworth 1982).

Since the mid-1970s there have been numerous small undertakings investigated by personnel from the Midwest Archeological Center, beginning in 1978 with Mark Lynott's examination of a proposed maintenance enclosure location and a place where the portage would be intersected by a new logging road (Lynott 1978). Archeologist Bruce Jones, Midwest Archeological Center, surveyed a proposed primitive campground north of Snow Creek in 1979 (Jones 1979a), as well as two alternative locations for a water reservoir at the eastern end of the monument (Jones 1979b).

Susan Monk, Midwest Archeological Center, surveyed several proposed road alignments in 1984, as well as alternate sites for facility developments (Monk 1984).

Midwest Archeological Center archeologists examined two more road alignments in 1985, as well as a possible employee housing location (Jones 1985). Monk returned in 1986 for investigations related to the stabilization of eroding creek banks east of the reconstructed depot (Monk 1986). In 1988, Midwest Regional Archeologist Lynott surveyed a road alignment in cooperation with the Bureau of Indian Affairs, since the alignment crossed both monument and reservation lands (Lynott 1988). Later that same year, Supervisory Archeologist Vergil E. Noble directed the survey of several proposed development parcels within the monument (Noble 1989), and in 1989 he returned to Grand Portage for limited evaluative testing and construction monitoring in conjunction with the installation of a drainage system within the depot (Noble 1990).

The latest work at Grand Portage has centered on several alternates under consideration for an employee housing initiative and a proposed maintenance facility to replace the one currently in use. Some areas at the eastern edge of the monument had been previously investigated as part of the 1988 surveys, and no new information was thereby acquired (Noble 1995). Other locations,

however, were in the vicinity of Mt. Rose and the existing Isle Royale overflow parking areas. In some cases, the areas under consideration were subject to routine shovel testing, whereas other potential development areas were given only a preliminary visual inspection before they were dismissed as possibilities for logistical reasons (Noble 1997, 1998, 1999, 2000).

Dewey Albinson and Alvan Eastman, Minnesota Historical Society, prepared a map in 1922 to document what appeared at that time to be surface indications of features relating to Fort Charlotte, which was the interior terminus of the Grand Portage (Albinson and Eastman 1922). MWAC personnel carried out a proton magnetometer survey of the site in 1978, which was extended by another team in 1979 (Huggins and Weymouth 1979). An effort also was made in that year to correlate features on the Albinson map with prevailing conditions (Jones 1980). Although Archaeologist Bruce Jones also addressed the remote sensing data through limited use of shovel probes, ground-truthing excavation of the magnetic anomalies has not yet been undertaken. In fact, the site of Fort Charlotte is still virtually untouched, either by illicit relic hunters or archeologists. It is also worth noting that underwater research along the Pigeon River, though outside the park boundaries, has yielded considerable fur trade materials associated with operations at Fort Charlotte (Wheeler et al. 1975).

Alan and Nancy Woolworth in 1982 submitted a two-volume historical overview and inventory of cultural resources at Grand Portage under contract to the National Park Service (Woolworth and Woolworth 1982). That summary document briefly describes all archeological field research carried out within the park through the 1975 and provides historical context for those investigations. In addition, Alan Woolworth (1993) produced a historical study of the Grand Portage with particular attention to archeological implications for the discovery of cultural features associated with the trail that linked the Lake Superior depot and Fort Charlotte. It proposes likely locales for certain classes of documented features, such as poses along the portage, but the project did not involve field checks of those potential locations. In recent years, archeologist Doug Birk and staff from Grand Portage have been attempting to confirm the presence of poses through systematic examinations at likely locales.

Prior to repatriation of disassociated funerary objects from Grand Portage under Minnesota state law, Supervisory Archeologist Noble traveled to St. Paul in 1994 to examine numerous artifacts transferred for eventual disposition to Hamline University by the Minnesota Historical Society, which had been curating them under terms of a Cooperative Agreement with the NPS. The result was a special collections study pertinent to Grand Portage archeology. Derived from the same four historic burials that Woolworth and a team of Grand Portage band members excavated in 1962, the collection consisted of various trade goods and early historic personal items; the skeletal remains apparently were destroyed when the reconstructed Great Hall in which they were stored was struck by lightning and burned to the ground in 1969. Noble's examination of the materials confirmed that most of the initial identifications had been correct and that all the burial furniture previously reported was still present in the collection. The single problematic class of artifacts was glass beads. Random checks of the nearly 11,000 seed beads showed that they were sorted and described much too generally or, in some instances, incorrectly (Noble 1994).

In 2001, MWAC personnel collected geophysical data from within the depot's stockade enclosure (Volf 2001, 2002). That remote sensing project had a two-fold purpose: (1) to test the ability of magnetic and resistance surveys to gather data about surviving remains of former structures inside the depot; and (2) to provide specific information about the presence or absence of subsurface features in the path of a proposed utility corridor for a fire suppression system. The study showed that conditions within the depot are not favorable for detecting subtle architectural features in the absence of traditional archeological excavations.

A comprehensive and detailed summary of investigations at Grand Portage will be presented in an archeological overview and assessment now nearing completion (Nickel and Finney n.d.).

- Albinson, E. Dewey, and Alvan C. Eastman
1922 Site of Fort Charlotte, August 10, 1922. Map, Minnesota Historical Society Archives, St. Paul.
- Brown, Ralph D.
1937a Journal of Grand Portage Excavations, 1937. Manuscript, Minnesota Historical Society Archives, St. Paul.
1937b Revised Report of the Archaeological Work on the Site of the North West Company Post, 1936–1937. Manuscript, Minnesota Historical Society Archives, St. Paul.
1937c Archaeological Excavations at Grand Portage, Minnesota, 1936–1937. Map, Minnesota Historical Society Archives, St. Paul.
- Calabrese, F. A.
1981 Memorandum to Superintendent, Grand Portage National Monument, dated September 22. Subject: 1980 Center Archeological Investigations at the Fort Charlotte Complex, Grand Portage National Monument, Minnesota. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- Huggins, Robert, and John W. Weymouth
1979 A Magnetic Survey of Fort Charlotte, Grand Portage National Monument. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Johnson, Eldon
1961 Interim Report on Excavations at the Grand Portage National Monument, June 12 – July 14, 1961. Manuscript in possession of Alan R. Woolworth, Minnesota Historical Society, St. Paul.
- Jones, Bruce A.
1979a Memorandum to Chief, Midwest Archeological Center, dated October 3. Subject: Travel to Fort Charlotte, Grand Portage National Monument, September 10–25, 1979. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
1979b Archaeological Investigations at Locations of Proposed Water Reservoir, Grand Portage National Monument. Memorandum to Chief, Midwest Archeological Center, dated October 3. National Park Service, Midwest Archeological Center, Lincoln.
1980 Historic Site Archeology at Fort Charlotte, Grand Portage National Monument, Minnesota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
1985 Memorandum to Chief, Midwest Archeological Center, dated October 15. Subject: Archeological Survey and Shovel Testing at Grand Portage National Monument, September 4–7, 1985. File Code A26. National Park Service, Midwest Archeological Center, Lincoln.
- Lynott, Mark
1978 Memorandum to Chief, Midwest Archeological Center, dated July 11. Subject: Trip to Grand Portage National Monument, June 27–30, 1978. File Code A26 - GRPO. National Park Service, Midwest Archeological Center, Lincoln.
1988 Archeological Survey of a Proposed Road Construction Locality at Grand Portage, Minnesota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Monk, Susan M.
1984 Archeological Survey at Grand Portage NM. Memorandum to Mark Lynott, Supervisory Archeologist, Midwest Archeological Center, dated November 5, 1984. National Park Service, Midwest Archeological Center, Lincoln.

Monk, Susan M., continued

1986 A Summary of Archeological Monitoring at Grand Portage National Monument during Creek Bank Stabilization, August 18–21. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Nickel, Robert, and Fred A. Finney

n.d. *Archeological Overview and Assessment of Grand Portage National Monument*. National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1989 *An Archeological Survey of Development Projects within Grand Portage National Monument, Cook County, Minnesota*. Midwest Archeological Center Reports, National Park Service, Lincoln.

1990 *A Report of Archeological Investigations within the Grand Portage Depot (21CK6), Grand Portage National Monument, Minnesota: The Kitchen Drainage Project*. National Park Service, Midwest Archeological Center, Lincoln.

1994 Memorandum to Assistant Regional Director, Archeology/Anthropology, Midwest Region, dated November 14. Subject: Trip Report - November 8–9, 1994. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1995 Memorandum to Acting Manager, Midwest Archeological Center, dated May 23. Subject: Trip Report, Grand Portage, May 15–19, 1995. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1997 Memorandum to Manager, Midwest Archeological Center, dated October 16. Subject: Trip Report, Grand Portage National Monument, October 6–10, 1997. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1998 Memorandum to Manager, Midwest Archeological Center, dated September 3. Subject: Trip Report, Grand Portage National Monument, August 10–14, 1998. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1999 Memorandum to Manager, Midwest Archeological Center, dated October 20. Subject: Trip Report, Grand Portage National Monument, October 12–14, 1999. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2000 Memorandum to Manager, Midwest Archeological Center, dated October 2. Subject: Trip Report, Grand Portage National Monument, September 18–24, 2000. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Volf, William J.

2001 Memorandum to Manager, Midwest Archeological Center, dated October 26. Subject: Geophysical Investigations at Grand Portage National Monument, October 1–20, 2001. National Park Service, Midwest Archeological Center, Lincoln.

2002 Magnetic Gradient and Resistance Surveys at Grand Portage National Monument, Grand Portage, Minnesota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Wheeler, R. C., W. A., Kenyon, Alan R. Woolworth, and D. A. Birk

1975 *Voices from the Rapids*. Publications of the Minnesota Historical Society, Minnesota Historical Archaeology Series No. 3. Minneapolis.

Woolworth, Alan R.

1963 Archaeological Excavations at the Northwest Company's Fur Trade Post, Grand Portage, Minnesota, in 1936–1937. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1968 Archaeological Excavations at Grand Portage National Monument, Minnesota, 1962 Field Season. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1969 Archaeological Excavations at Grand Portage National Monument, 1963–1964 Field Seasons. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1975 Archaeological Excavations at Grand Portage National Monument in 1973. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1993 An Historical Study of the Grand Portage, Grand Portage National Monument, Minnesota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Woolworth, Alan R., and Nancy L. Woolworth

1975 Archaeological Excavations at the North West Company's Depot, Grand Portage, Minnesota, in 1970–1971. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1982 Grand Portage National Monument: An Historical Overview and Inventory of Its Cultural Resources. 2 vols. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Harry S Truman National Historic Site

Archeological research at Harry S Truman National Historic Site thus far has been extremely limited, owing to the small size of the initial park area and the relatively modest ground-disturbing improvements undertaken to date. Most of the site developments have involved only minor trenching that could be monitored either by a paraprofessional or by a professional archeologist. Such projects have included the burial of electrical lines in 1983 and 1986, lightning protection grounding in 1984, and landscape and site drainage modifications in 1987 (Noble 1992). There was also substantial disturbance during 1987 construction activities about the Truman Home carriage house (HS-2), which resulted in a collection of various historic artifacts from fill south side of the structure (Calabrese 1988).

There have been two investigations of the Truman Home basement, though one was not archeological in the strict sense of that word. Personnel from MWAC twice traveled to the site in 1988, first to examine depositional contexts of a wine bottle cache in Room 005 of the basement and later to assist park curatorial staff in removing those bottles to secure storage and in identifying the wines represented (Noble 1988; Plumer 1989; Sudderth 1988). In 1993, MWAC Supervisory Archeologist Vergil Noble assisted historical architect Charles Masten with the partial excavation and evaluation of a turn-of-the-century gravity-feed furnace base buried beneath the current basement floor level (Masten 1993).

The most recent archeological investigations carried out at the Truman Home were related to restoration of its three porches. MWAC Archeologist Stadler (2001) examined the crawlspace areas under the front, south, and kitchen porches prior to the excavation of holes for receipt of new support posts. Efforts revealed several features consistent with the known structural evolution of the house, including an abandoned cistern and remnant retaining wall under the kitchen porch.

Addition of the Truman Farm unit in nearby Grandview, Missouri, expands the cultural resource obligations of the park many fold. It is known that historic archeological features associated with the farmstead are present on the grounds, and prehistoric resources also might occur within the approximate 5-acre parcel. Robert Bray (1983) conducted a limited archeological survey and testing project on the property for the Truman Farm Home Foundation in the summer of 1983, when the property was still in private hands. He recorded the locations of several cultural features relating to both extant and former farmstead structures, but Bray did not systematically survey the property nor specifically explore for prehistoric sites.

After National Park Service acquisition of the farm home, MWAC Archeologist Jeffrey Richner (1994) conducted field investigations of four small areas that would be disturbed for installation of an outdoor lighting system. Although nothing of consequence turned up while monitoring that work, Richner also made a cursory surface examination of the overall property and confirmed the presence of several relict foundations and other probable historic features. He recommended background historical research and a systematic archeological survey of the farm home tract.

Bray, Robert T.

1983 Archaeological Survey and Testing at the Truman Farm Home and Grounds, Grandview, Missouri. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Calabrese, F. A.

1988 Memorandum to Superintendent, Harry S. Truman National Historic Site, dated March 7. Subject: Depository for artifacts recovered from monitoring removal of fill at Harry S. Truman National Historic Site. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Masten, Charles H., Jr.

1993 Memorandum to Associate Regional Director, Planning and Resource Preservation, Midwest Region, dated May 27. Subject: Trip Report, Harry S Truman, May 4–5. File Code A26 (MWR-PC). National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1988 Memorandum to Chief, Midwest Archeological Center, dated April 13. Subject: Trip Report, April 4–10, Independence, MO, and Springfield, IL. File Code A26(MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1992 Memorandum to Acting Chief, Midwest Archeological Center, dated November 10. Subject: Trip Report—Harry S Truman, November 8–10. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Plumer, Mark

1989 Document entitled “Wine and Champagne Bottles from the Truman Cellar” attached to memorandum to Superintendent, Harry S Truman, dated March 8; File Code H20 HSTR. National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J.

1994 Memorandum to Assistant Regional Director, Anthropology and Archeology, Midwest Region. Subject: Trip Report, Truman Farm, Grandview Missouri. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott

2001 Memorandum to Manager, Midwest Archeological Center, dated November 6. Subject: Investigations under front, south, and kitchen porches at the Truman home, Harry S Truman National Historic Site. National Park Service, Midwest Archeological Center, Lincoln.

Sudderth, Ed

1988 Memorandum to Chief, Midwest Archeological Center, dated July 11. Subject: Trip Report, Harry S. Truman National Monument [*sic*], June 15–17, 1988. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Herbert Hoover National Historic Site

Archeological investigations at Herbert Hoover NHS have been rather limited in scope and have focused almost entirely on the historic “core area” of the park. The park has not received extensive survey coverage. Instead, work has focused on specific projects such as utility installation corridors and structural restoration impact zones.

The earliest archeological work is the 1970 excavation of a single exploratory trench to determine the location and condition of the archeological remains of the Jesse Hoover Blacksmith Shop and the historic Penn Street Road bed (Husted 1970). Archeological evidence for both features was identified in the test trench. Despite some disturbance from utility lines, the packed-clay floor of the blacksmith shop was found to be relatively well preserved. This was followed in 1971 with an extensive excavation of the blacksmith shop floor (Anderson 1973). The clay floor was exposed and numerous features were recorded. This work provided information on construction and configuration of the building. The clay floor was left intact at the conclusion of fieldwork and the excavation was backfilled. When a similar blacksmith shop was constructed in the park in 1957, it was placed off the archeological site and treated as an exhibit, rather than a reconstruction. No archeological work was undertaken at that location, however.

In 1983, limited archeological excavations and construction monitoring were undertaken in conjunction with restoration of the historic Mackey House. A cistern was recorded, and 19th- and early 20th-century artifact deposits were identified and studied (Sudderth 1992).

In 1986, in anticipation of future foundation repair efforts, Richner (1986) conducted evaluative testing through excavation of exploratory backhoe trenches at the L. Miles and E. S. Hayhurst houses. This work revealed that potentially significant archeological deposits and features were present at both sites. This was followed, in 1989, with archeological data collection at those structures in advance of major restoration actions (Richner 1997). Planned foundation replacement, utility installation, drainage improvement, and removal of “non-historic” additions shaped the location for the excavations with most work adjacent to the structures. Numerous features, including two cisterns, were recorded and a large inventory of late-19th- and early-20th-century cultural materials were collected. Subsequent monitoring during restoration (Frost 1989a, 1989b, 1989c) resulted in recording of an additional cistern, a well, and footings for an early porch.

In 1991, archeological testing and data recovery were undertaken in advance of proposed replacement of foundation, utilities, and drain lines to Hoover’s “Birthplace Cottage,” the key historic structure at the park, and in anticipation of the installation of a new water line to the Hoover Library addition through the Vista between the cottage and the Hoovers’ graves. The goal of the project was to determine whether archeological resources existed within the proposed construction zones. Despite a long history of grounds alterations, including moving the cottage on two occasions and constructing and removing the attached cellars residence, intact historic grades were identified discovered. Concentrations of features and materials were observed, particularly in the cottage back yard. Shovel testing of the proposed water line route indicated that few, if any, archeological resources could be expected to exist in the lower elevations of the Vista although the possibility of intact resources occurring increased as one approached the cottage yard at the upper elevations (Hunt 1996).

Other archeological projects at Herbert Hoover NHS have been of more limited scope, relying primarily on monitoring of trenching for installation of various utility and telecommunication lines and drainage systems (Frost 1988; Griffin 1988, 1989; Peterson 2000; Richner 1993). Several features, including brick cisterns, were recorded through these efforts.

Archeological project needs at this park include expansion of survey coverage to the grounds away from the historic core area and evaluation of the grounds adjacent to the remaining, unstudied historic structures. Survey of the park will be complicated by a land use history that includes

the development and subsequent removal of a fairgrounds, a rather complex history of structural removal and relocation, farming, and extensive landscaping.

Anderson, Adrienne

1973 The Jesse Hoover Blacksmith Shop. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Frost, Forest L.

1988 Trip Report, Herbert Hoover National Historic Site, Telecommunication System Survey, November 17. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1989a Trip Report, Herbert Hoover National Historic Site, September 14. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1989b Trip Report, Herbert Hoover National Historic Site, October 3. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1989c Trip Report, Herbert Hoover National Historic Site, December 11–16. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Griffin, Kristin L.

1988 Trip Report, Foundation Test at HS-11, October 19. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1989 Archeological Monitoring of the Installation of a Drainage System; Herbert Hoover National Historic Site, West Branch, Iowa. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Hunt, William J., Jr.

1996 *Archeological Tests at the Hoover Birthplace Cottage (HS-1) and a Shovel Test Survey Along the Route of a New Water Line to the Hoover Library Addition, Herbert Hoover National Historic Site, West Branch, Iowa.* Technical Report No. 48. National Park Service, Midwest Archeological Center, Lincoln.

Husted, Wilfred M.

1970 Archeological Test Excavations at Herbert Hoover National Historic Site, West Branch, Iowa: Jesse Hoover Blacksmith Shop and Original Penn Street. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Peterson, Cynthia L.

2000 *Phase I Intensive Archaeological Investigation of Proposed Access to Buried Utility Lines at Herbert Hoover National Historic Site, City of West Branch, Cedar County, Iowa.* Contract Completion Report 773. Office of the State Archaeologist, University of Iowa, Iowa City.

Richner, Jeffrey J.

1986 Trip Report, Herbert Hoover National Historic Site, April 21–24. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1993 Trip Report, Field Damage Assessment, Homestead National Monument of America (HOME) and Herbert Hoover National Historic Site (HEHO), September 27. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1997 *Archeology in Herbert Hoover's Neighborhood: 1989 Excavations at the L. Miles and E. S. Hayhurst Houses, West Branch, Iowa.* Technical Report No. 51. National Park Service, Midwest Archeological Center, Lincoln.

Sudderth, W. E.

1992 *Salvage Archeology at the Herbert Hoover National Historic Site: The Mackey House, 1983*. Technical Report No. 12. National Park Service, Midwest Archeological Center, Lincoln.

Homestead National Monument of America

Archeological investigations at Homestead NM of America include some of the earliest historic archeological research conducted at a Midwest Region park. In 1948, J. Bauxer conducted rather extensive trenching and excavation at several locales. The approximate former locations of the historic Freeman and Suiter cabins were determined, but exploratory trenching failed to provide evidence of a reported squatter's cabin or Freeman's kiln at the purported locations of these features. A possible kiln site was recorded in another area of the monument, and about 33 percent of the Brick House site was excavated. Robert Nickel conducted a magnetic survey of the Brick Kiln site in 1979 (Weymouth 1983). An anomaly was located on the edge of Cub Creek, but it was concluded that it was unlikely to be associated with the Brick Kiln. Weymouth (1983) conducted some magnetic work at 25GA90, the Freeman School in 1981. Several anomalies were noted, but no ground-truthing was done.

Two smaller projects were conducted in the small area around the Freeman School in 1977 and 1979. No significant cultural remains were recorded during restoration activities at the school in 1977 (Stiger 1977). Robert Nickel conducted a limited magnetic survey of the school grounds in 1979. Preliminary examination of the magnetic data indicated the feasibility of locating small features away from the school building.

The school was the focus of more intensive archeological study in 1984 and 1985 (Schoen 1986). A surprisingly large artifact assemblage was recovered during the work at the school in advance of limited grading activities to improve drainage and protect the soft brick structure.

Also in 1985, the monument was the focus of a parkwide archeological survey effort (Schoen and Bleed 1986). The survey took advantage of a prescribed burn of the monument's restored tallgrass prairie to provide a more complete inventory of the park's resources. Primary results included collecting new information regarding the Daniel Freeman Homestead and the recording a previously unknown prehistoric site on a terrace above Cub Creek. This site (25GA89) is a component of the Central Plains tradition.

Jeffery Richner undertook two projects in the park in 1993 and 1995. The first project was a flood damage assessment along Cub Creek (Richner 1993). No obvious cultural materials were noted. He also conducted an inventory of a proposed parking lot north of the Freeman School. A few historic artifacts were found on the surface (Richner 1995). No further on-ground archeological investigations have been undertaken at the monument, although three compliance related consultations or site visits have been done (Thiessen 1999, 2002a, 2002b)

Although the park has received a parkwide survey, the intensity of the survey varied relative to surface exposure, and certain segments of the park—notably the Cub Creek floodplain and creek banks—have not been inventoried to date.

Bauxer, J. J.

1948 Report of Excavations at the Daniel Freeman Homestead, Homestead National Monument of America. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffery J.

1993 Memorandum to the Manager, Midwest Archeological Center, from Supervisory Archeologist, Midwest Archeological Center, September 27, 1993. Subject: Flood Damage Assessment, Homestead National Monument of America (HOME) and Herbert Hoover National Historic Site (HEHO). On file National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffery J., continued

1995 Memorandum to the Manager, Midwest Archeological Center, from Supervisory Archeologist, Midwest Archeological Center, September 8, 1995. Subject: Trip Report, Homestead National Monument of America. National Park Service, Midwest Archeological Center, Lincoln.

Schoen, C. M.

1986 Excavations at the Freeman School (25GA90), Homestead National Monument of America. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Schoen, C. M., and Peter A. Bleed

1986 An Archeological Survey of the Homestead National Monument of America. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Stiger, M.

1977 Trip Report dated August 29, 1977. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Thiessen, Thomas D.

1999 Memorandum to the Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated May 19. Subject: Trip Report, visit to Homestead National Monument of America, May 17, 1999. National Park Service, Midwest Archeological Center, Lincoln.

2002a Memorandum to the Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated April 2. Subject: Trip Report, visit to Homestead National Monument of America, March 29, 2002. National Park Service, Midwest Archeological Center, Lincoln.

2002b Memorandum to the Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated June 5. Subject: Trip Report, visit to Homestead National Monument of America, June 5, 2002. National Park Service, Midwest Archeological Center, Lincoln.

Weymouth, John W.

1983 An Analysis of Magnetic Surveys on the Kiln Site and School Site at the Homestead National Monument, Nebraska. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Hopewell Culture National Historical Park

Hopewell Culture National Historical Park is one of three parks in the Midwest Region established for the primary purpose of protecting, preserving, and interpreting prehistoric archeological resources. The park was established in 1923 as Mound City Group National Monument in order to preserve and interpret the Mound City Group of prehistoric earthworks for future generations. Legislation enacted in 1980 and 1992 expanded the park to include four additional Hopewellian mound and earthwork complexes and resulted in a tenfold increase in the land area to be managed by the park. The 1992 legislation also changed the name of the park to Hopewell Culture National Historical Park to reflect this expansion.

As of mid-2003, only the Mound City Group and Hopeton Works are fully under federal ownership, but large parts of the Hopewell, High Bank, and Seip sites have also been purchased. Land acquisition efforts continue at these units. In addition, the 1992 legislation mandated that archeological surveys be conducted to ensure that the proposed boundaries of the park are adequate to protect significant resources, and to evaluate the desirability and feasibility of adding additional Hopewellian sites to the park. Despite a long and complex history of archeological investigation in the park, less than 20 percent of the authorized land area has been subjected to systematic archeological survey.

The authorized boundaries of the park include five Hopewellian mound and earthwork complexes: Mound City Group, Hopeton Works, Hopewell Mound Group, High Bank Works, and Seip Earthworks. These sites consist of various configurations of earthen mounds and earthwork enclosures, some built on a truly monumental scale. For example, the Hopewell Mound Group contains some 40 earthen mounds within an enclosure encompassing 111 acres and encircled by some 2 miles of earthen embankments once standing up to 12 feet high. One of the mounds at the Hopewell Mound Group is the largest Hopewell mound ever constructed, originally more than 500 feet long, 150 feet wide, and 30 feet high. These mound and earthwork complexes were built by Ohio Hopewell peoples between about 50 BC and AD 350. Although their functions are not well understood, they are believed to have served as ceremonial centers for communities living in scattered households and hamlets in the Scioto River valley.

Mound City, Hopewell, Hopeton, Seip, and High Bank, with their imposing scale and geometric precision, fired public and scientific imagination during the 19th century, and stood at the center of one of the most important questions of the day: “Who built the monumental mounds and earthworks of the Ohio Valley?” In large part, the beginnings of American archeology as a formal discipline can be traced to the efforts of various individuals and learned institutions to address this question. And each of these sites figured prominently in the pioneering and now classic works in American archeology: Caleb Atwater’s *Description of the Antiquities Discovered in the State of Ohio and Other Western States* (1820), Ephraim Squier and Edwin Davis’s *Ancient Monuments of the Mississippi Valley* (1848), and Cyrus Thomas’s *Report on the Mound Explorations of the Bureau of Ethnology* (1894). Squier and Davis produced the first accurate maps of each of these sites and conducted extensive excavations in the mounds at Mound City and Hopewell. The extensive and detailed study by the Bureau of Ethnology finally satisfied the scientific community that these ancient monuments had been built by ancestors of living Native Americans.

During the late 19th and early 20th centuries, large-scale excavations were undertaken at Hopewell (Moorehead 1922; Shetrone 1925), Seip (Mills 1909a, 1909b; Shetrone and Greenman 1931), and Mound City (Mills 1922). These investigations led to the initial definition of the Hopewell culture as one of three prehistoric mound-building cultures in the Ohio Valley. The mounds were found to mark the locations of wooden buildings that had been used for the display and disposal of the dead, often accompanied by elaborate grave goods, along with other civic and ceremonial functions evidenced by collections of artifacts deposited in their own right. The objects and their contexts documented a complex and differentiated social order, an elaborate ceremonialism, and an extensive network of trade and interaction encompassing all of eastern North America.

During the 1960s and 1970s, the National Park Service sponsored a series of excavations in the mounds and earthworks at Mound City intended to aid in the accurate reconstruction of the site, which had suffered from agriculture and the siting of a World War I training camp on and around the mounds and earthworks (Baby and Langlois 1976, 1977a; Baby et al. 1971; Baby et al. 1975; Brown 1994; Brown and Baby 1964; Drennen 1972, 1974; Faust 1965; Hanson 1965, 1966a, 1966b; Koleszar 1971a, 1971b; Otto 1980; Saurborn 1968). During the same period, the Ohio Historical Society conducted excavations of a similar nature at the Seip Earthworks (Baby and Langlois 1977b, 1977c, 1977d, 1979). No significant field investigations took place at Hopewell, Hopeton, or High Banks. During the 1970s and 1980s, sand and gravel mining adjacent to the Hopeton Works, a national historic landmark, prompted efforts to document and salvage threatened resources and ultimately led to legislation bringing the site into the National Park System (Blank 1986; Brose 1976a, 1991; Lynott 1987; National Park Service 1978a, 1978b; also see Advisory Council on Historic Preservation 1991). Also during this period, an area totaling some 50 acres at the Mound City Group was subjected to systematic inventory and evaluative testing, the first and only investigations of this type that had been conducted at any of the authorized sites (Brose 1976b; Lynott 1982; Lynott and Monk 1985; Richner 1989). Archeological surveys were conducted at the Hopewell site as well, with a primary emphasis on the resurvey and relocation of previously recorded features (Seeman 1981).

The increasing pace of site destruction due to industrial and residential development led the National Park Service to initiate efforts to identify and evaluate Hopewellian sites for possible inclusion in the National Park System (Blank 1985; National Park Service 1987). More than 30 sites were recommended for preservation by a panel of cultural resource specialists and professional archeologists (National Park Service 1987). Of these, Hopeton, Hopewell, Seip, and High Bank were recommended by the National Park Service for preservation, ultimately leading to the 1992 legislation creating Hopewell Culture National Historical Park. The National Park Service did not recommend the remaining sites for preservation due to a lack of adequate documentation of their nature, integrity, and significance.

Recent investigations in the park have focused on the synthesis and assessment of what is currently known about park resources, and efforts to identify future research needs. These studies include: an annotated bibliography of archeology in Ross County (Seeman 1995); a draft synthesis of previous research at Mound City (Brown 1994); a synthesis and commentary on previous research at the Hopewell site (Greber and Ruhl 1989); and a description and basemap of known archeological localities in the vicinity of the Seip Earthworks (Greber 1992, 1996) and Hopewell Earthworks (Greber 1999). Each of these studies identify a clear need for baseline inventories and evaluations of non-mound areas in and around the major earthwork centers.

Ongoing research in the park includes: archeological survey outside the earthwork walls at the Hopewell site in an effort to guide land acquisition efforts (Dancey 1996); archeological survey and evaluation of the Spruce Hill Works (Ruby 1997, 2003) for possible inclusion in the park as directed by the 1992 legislation; and archeological survey and evaluation of the Robert F. Steele Earthworks for possible inclusion in the park—another investigation prompted by the 1992 legislation. Research at the Hopeton Earthwork has included systematic surface surveys (Ruby 1997; Burks 2003), geophysical surveys, and strategic testing (Lynott 2001; Lynott and Weymouth 2002) aimed at generating and understanding of when the earthwork was built, how it was built, and why it was built. Similar research is ongoing at High Bank (Greber 2002) and Hopewell (Pederson 2003).

A new General Management Plan and a Long Range Interpretive Plan for Hopewell Culture National Historical Park were approved in 1997. The draft General Management Plan calls for significant new development to facilitate increased visitor use at the Mound City, Hopewell, and Seip units. These plans again underscore the need for systematic inventories of these areas so that adverse impacts to archeological resources may be efficiently avoided or mitigated. Furthermore,

the Long Range Interpretive Plan calls for a significant change in interpretive emphasis, away from a preoccupation with mortuary behavior, and toward a more comprehensive story that will include a focus on the secular and domestic spheres of Hopewellian life. In order to achieve this goal, it will be necessary to identify and evaluate relevant archeological contexts in the park so that new information may be integrated into interpretive programs.

To summarize, previous investigations in the park have been, with few exceptions, characterized by a narrow and exclusive focus on the excavation of mounds and specific earthwork features. Relatively little effort has been directed toward baseline inventories and evaluations of non-mound areas. Hence, despite this long history of archeological investigation, only a small fraction (20 percent or less) of the total land area within the authorized boundaries has been subjected to systematic archeological inventory.

Advisory Council on Historic Preservation

1991 Threat of Surface Mining to Hopeton Earthworks National Historic Landmark, Chillicothe, Ohio. October, 1991. Report on file, Hopewell Culture National Historical Park, Chillicothe.

Atwater, Caleb

1820 Description of the Antiquities Discovered in the State of Ohio and Other Western States. *Transactions and Collections of the American Antiquarian Society* 1:105–267. Worcester, Massachusetts.

Baby, Raymond S., Bert C. Drennen, III, and Suzanne M. Langlois

1975 Excavation of Section M1 and M2, Mound City Group National Monument. Report prepared for National Park Service, Purchase Order No. PX-4730-3-0119. Ohio Historical Society, Columbus.

Baby, Raymond S., and Suzanne M. Langlois

1976 Excavation of Sections 01 and 02 of Mound City Group National Monument. Report prepared for the National Park Service, Purchase Order No. PX-6000-4-0811. Ohio Historical Society, Columbus.

1977a Excavation of Sections 01 and 02, Mounds 8 and 9, Mound City Group National Monument. Report prepared for the National Park Service. Ohio Historical Society, Columbus.

1977b Archaeological Investigations at Seip Mound State Memorial, 1971–1974. Report prepared for the Ohio Office of Historic Preservation. Ohio Historical Society, Columbus.

1977c Archaeological Investigations at Seip Mound State Memorial, 1975. Report prepared for the Ohio Office of Historic Preservation. Ohio Historical Society, Columbus.

1977d Archaeological Investigations at Seip Mound State Memorial, 1976. Report prepared for the the Ohio Office of Historic Preservation. Ohio Historical Society, Columbus.

1979 Seip State Memorial: Nonmortuary Aspects of Hopewell. In *Hopewell Archaeology: The Chillicothe Conference*, edited by D. Brose and N. Greber, pp. 16–18. Kent State University Press, Kent, Ohio.

Baby, Raymond S., Martha A. Potter, and Stephen C. Koleszar

1971 Excavation of Sections I and J, Mound City Group National Monument. Report prepared for the National Park Service, Contracts P. O. NER 950-195 and 353-27. Ohio Historical Society, Columbus.

Blank, John E.

1985 *Results of an Intensive Study of Hopewellian Culture in Ross County, Ohio and Publicly [sic] Owned Hopewellian Sites in the Remainder of Southern Ohio*. Cultural Resources Research Laboratory, Department of Anthropology, Cleveland State University. Prepared for the National Park Service, Midwest Archeological Center, Lincoln.

1986 *An Aerial Photogrammetrical Analysis of the Hopeton National Historic Landmark, Ross County, Ohio*. Cultural Resources Research Laboratory, Department of Anthropology, Cleveland State University. Prepared for the Archæological Services Department, Ohio Historic Preservation Office, Columbus, and the National Park Service, Midwest Archeological Center, Lincoln.

Brose, David S.

1976a *An Historical and Archaeological Evaluation of the Hopeton Works, Ross County, Ohio*. Report prepared for the National Park Service, Contract PX-6115-6-0141.

1976b *An Archaeological Testing Beyond the Walls of the Mound City Group, Ross County, Ohio*. Report prepared for the the National Park Service.

1991 *Archaeological Monitoring of the Chillicothe Sand and Gravel Company Ground Stripping at the Hopeton Works, Ross County, Ohio. Spring of 1991*. Archaeological Report 9(1). Cleveland Museum of Natural History, Cleveland.

Brown, James A.

1994 *Inventory and Integrative Analysis: Excavations of Mound City, Ross County, Ohio. Overview of Archaeological Investigations of the Mound City Group National Monument*. Report prepared for the National Park Service, Midwest Archeological Center, Lincoln.

Brown, James A., and Raymond S. Baby

1964 Re-Examination of the Mound City Group. Paper presented at the 29th Annual Meeting of the Society for American Archaeology, Chapel Hill, North Carolina.

1966 Mound City Revisited. Manuscript, Department of Archaeology, Ohio Historical Society, Columbus.

Burks, Jarrod

2003 Hopewell Occupation at the Hopetwon Earthworks: Combining Surface Survey and Geophysical Data to Study Land Use. Paper presented at the 68th Annual Meeting of the Society for American Archæology, Milwaukee.

Dancey, William S.

1996 Hopewell Earthwork Catchment Survey: Interim Report. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Drennen, Bert C., III

1972a Mound City Group National Monument: Examination and Restoration of Embankment. Report prepared for the National Park Service, Contract No. 5950L20756. Ohio Historical Society, Columbus.

1974 Excavation of Section L, Mound 15, Mound City Group National Monument. Report prepared for the National Park Service, Purchase Order No. PX-4703-3-0120. Ohio Historical Society, Columbus.

Faust, Richard D.

1965 Investigations of the Site of Mound 4, Mound City Group National Monument. Report on file, National Park Service, Hopewell Culture National Historical Park, Chillicothe.

- Greber, N'omi B.
- 1992 The Seip Geometric Enclosure and Environs: An Estimate of Possible Changes in Community Patterns Through Time. Paper presented at the 57th Annual Meeting of the Society for American Archaeology, Pittsburgh.
 - 1996 Some Archeological Localities in the Vicinity of the Seip Earthworks and Dill Mounds Archaeological District. Report prepared for the National Park Service.
 - 1999 Correlating Maps of the Hopewell Site, 1820–1993. *Hopewell Archeology* 3(2):1–6.
 - 2002 A Preliminary Comparison of the 1997 and 2002 Limited Excavation in the Great Circle Wall, High Bank Works, Ross County, Ohio. *Hopewell Archeology* 5(2):1–6.
- Greber, N'omi B., and Katharine C. Ruhl
- 1989 *The Hopewell Site: A Contemporary Analysis Based on the Work of Charles C. Willoughby*. Westview Press, Boulder.
- Hanson, Lee H.
- 1965 Excavation of Section F, Mound City Group National Monument. Report prepared for the National Park Service, Contract No. P. O. NER 966. Ohio Historical Society, Columbus.
 - 1966a Excavation of the Borrow Pit, Section F, Mound City Group National Monument. Ohio Historical Society, Columbus.
 - 1966b Excavation of Section B, The East Gateway at Mound City Group National Monument. National Park Service, Northeast Region, Philadelphia.
- Koleszar, Stephen C.
- 1971a A Preliminary Report of the Excavation of Mound 12, Mound City Group National Monument. Report prepared for the National Park Service. Ohio Historical Society, Columbus.
 - 1971b Excavation at the Mound City Group, 1970, Mound Numbers 6, 20, 24. Report prepared for the National Park Service. Ohio Historical Society, Columbus.
- Lynott, Mark J.
- 1982 An Archaeological Investigation of an Area Adjacent to Mound City Group National Monument: A Preliminary Report. National Park Service, Midwest Archeological Center, Lincoln.
 - 1987 Observations Resulting from a Reconnaissance Survey of the Hopeton Earthworks on February 10, 1987. Report on file, Hopewell Culture National Historical Park, Chillicothe.
 - 2001 The Hopeton Earthworks: An Interim Report. *Hopewell Archeology* 4(2):1–5.
- Lynott, Mark J., and Susan M. Monk
- 1985 *Mound City, Ohio, Archeological Investigations*. Occasional Studies in Anthropology No. 12. National Park Service, Midwest Archeological Center, Lincoln.
- Lynott, Mark J., and John Weymouth
- 2002 Preliminary Report, 2001 Investigations, Hopeton Earthworks. *Hopewell Archeology* 5(1):1–7.
- Mills, William C.
- 1909a Explorations of the Seip Mound. *Ohio State Archaeological and Historical Quarterly* 18:268–321.
 - 1909b The Seip Mound. In *Putnam Anniversary Volume*, by Franz Boas et al., pp. 102–125. E. Stechert and Co., New York.

- Mills, William C., continued
1922 Explorations of the Mound City Group. *Ohio State Archaeological and Historical Quarterly* 31:423–584.
- Monk, Susan M.
1984 *A Summary of Identified Vertebrate Remains Recovered from Mound City Group National Monument, Ross County, Ohio*. National Park Service, Midwest Archeological Center, Lincoln.
- Moorehead, Warren K.
1922 The Hopewell Mound Group of Ohio. *Anthropological Series* 6(5):73–185. Publication 211. Field Museum of Natural History, Chicago.
- National Park Service
1978a An Evaluation of the Feasibility of Adding Hopeton Earthworks to Mound City National Monument. Report on file, National Park Service, Midwest Archeological Center, Lincoln.
1978b Mound City G, N, M, PKG #139, Hopeton Earthworks, Feasibility Study K3417-DSC-TWM. Manuscript, Mound City Group National Monument Library, Chillicothe, Ohio.
1987 *Environmental Assessment: Hopewell Sites Study*. National Park Service, Midwest Region, Omaha.
- Otto, Martha P.
1980 Excavation of Mounds 12, 11, and 16, Mound City Group National Monument, Chillicothe, Ohio. Report prepared for the National Park Service. Ohio Historical Society, Columbus.
- Pederson, Jennifer
2003 In the Space Between: Explaining Areas Inside the Hopewell Mound Group. Paper presented at the 68th Annual Meeting of the Society for American Archaeology, Milwaukee.
- Richner, Jeffrey J.
1989 An Archaeological Survey of a Proposed Sewer Line at Mound City National Monument. National Park Service, Midwest Archeological Center, Lincoln.
- Ruby, Bret
1997 Current Research at Hopewell Culture National Historical Park. *Hopewell Archeology* 2(2):1–6.
2003 The Hills Are Ablaze: Spruce Hill and the “Vitrified Forts” of Southern Ohio. Paper presented at the 68th Annual Meeting of the Society for American Archaeology, Milwaukee.
- Saurborn, Barbara S.
1968 A Re-Examination of Mounds 23 and 17, Unit H, Mound City Group National Monument. Report prepared for the National Park Service, Contract P. O. NER 950-755. Ohio Historical Society, Columbus, Ohio.
- Seeman, Mark F.
1981 An Archaeological Survey of the Hopewell Site (33Ro27) and Vicinity, Ross County, Ohio. Report prepared for the Ohio Office of Historic Preservation. Department of Sociology and Anthropology, Kent State University, Kent, Ohio.
1995 *Archeology in Ross County, Ohio: A Bibliography*. Publication 95-04. Cultural Resource Analysts, Inc., Lexington, Kentucky.

Shetrone, Henry C.

1926 Exploration of the Hopewell Group of Prehistoric Earthworks. *Ohio Archeological and Historical Quarterly* 35:1–227.

Shetrone, Henry C., and Emerson F. Greenman

1931 Exploration of the Seip Group of Prehistoric Earthworks. *Ohio State Archeological and Historical Quarterly* 40:343–509.

Squier, E. G., and E. H. Davis

1848 *Ancient Monuments of the Mississippi Valley*. Smithsonian Contributions to Knowledge No. 1. Smithsonian Institution, Washington, D.C.

Thomas, Cyrus

1894 Report on the Mound Explorations of the Bureau of Ethnology. In *12th Annual Report, 1890–1891*. Smithsonian Institution, Bureau of American Ethnology, Washington, D.C.

Hot Springs National Park

Hot Springs is the second area set aside by the U.S. Government for public benefit. It was set aside in 1832 as a public use area related to the purported therapeutic value of the springs. It became a unit of the National Park Service in 1921. There has been very little archeological research conducted in the park, although there are several reports that address the regional prehistory (Moore 1909; 1912; Harrington 1920; Davis 1967; Griffin 1967; 1978; Schambach 1970; Baker 1973; and Sabo III et al. 1988). There is limited but tantalizing archeological evidence in the park suggesting American Indian use of the springs during prehistoric and historic times. Some lithic materials were recovered during the Bath House Row renovation, but that area was extensively disturbed during its original 19th-century construction and renovation. Other nearby evidence, the novaculite quarries were mined prehistorically and historically by Native Americans.

Baker (1973) recorded eight prehistoric sites, but no further evaluation has taken place since then. Eight other archeological sites are known within the park boundary, but are not evaluated. In 1994, Charles Haecker (1994) documented several architectural features associated with the renovation of Bath House Row including a sauna cave apparently predating 1914.

Baker, C. M.

1973 *Archeological Inventory of Hot Springs National Park*. Arkansas Archeological Survey, University of Arkansas, Fayetteville.

Davis, Hester A.

1967 Paleo-Indian in Arkansas. *The Arkansas Archeologist* 8(1):1–3.

Griffin, J. B.

1967 Eastern North American Archaeology. *Science* 156:175–191.

1978 The Midlands and Northeastern United States. In *Ancient Native Americans*, edited by Jesse Jennings, pp. 221–279. W. H. Freeman, San Francisco.

Haecker, Charles

1994 *Documentation of the Hale Bathhouse Sauna Cave and South Room, Hot Springs National Park, Arkansas*. Park Papers HOSP-03. Division of Anthropology, Southwest Regional Office, Santa Fe.

Harrington, M. R.

1920 *Certain Caddo Sites in Arkansas*. Indian Notes and Monographs, Miscellaneous Series 10. Museum of the American Indian, Heye Foundation, New York.

Moore, C. B.

1909 Antiquities of the Ouachita Valley. *Journal of the Academy of Natural Sciences of Philadelphia* 14:5–170. Philadelphia.

1912 Some Aboriginal Sites on Red River. *Journal of the Academy of Natural Sciences of Philadelphia* 14 (2nd Series, Part 4):483–638. Philadelphia.

Sabo, G. III, A. M. Early, J. C. Rose, B. A. Burnett, L. Vogeles, Jr., and J. P. Harcourt

1988 *Human Adaptation in the Ozark and Ouachita Mountains*. U.S. Army Corps of Engineers, Southwestern Division, Dallas.

Schambach, F. F.

1970 *Pre-Caddoan Cultures in the Trans-Mississippi South: A Beginning Sequence*. Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge.

Indiana Dunes National Lakeshore

Indiana Dunes National Lakeshore was established to protect a “series of dunes and wet lands remaining from the actions of the great continental glaciers” (National Park Service 1969). The original legislation allowed the acquisition of 8,100 acres along the southern shore of Lake Michigan. Additional land purchases and donations increased the park size to about 12,800 acres.

The national lakeshore contains several classes of landforms including three glacial moraine formations and three prehistoric beach ridges associated with early forms of Lake Michigan. Between these formations are numerous interdunal lakes and marshes that account for a large percentage of the total acreage of the national lakeshore.

The position of the lakeshore at the southern tip of Lake Michigan has made it a focus for travelers in both the pre-historic and historic periods. Several major surface routes skirt the southern end of Lake Michigan. Early explorers used this area of Lake Michigan to their advantage by traveling to this area, changing from lake to river or land modes of transportation and continuing into the interior of the continent.

The earliest human occupation along the southern end of Lake Michigan occurred during the Paleoindian stage, dating between 10,000 BC and 8000 BC. No Early Paleoindian sites have been recorded within the lakeshore. In fact, Tankersley et al. (1990) report that few Early Paleoindian sites have been found anywhere in northwest Indiana, which is in direct contrast to southern Indiana and other areas. However, several unfluted Late Paleoindian lanceolate points have been found within the lakeshore. Forest Frost (2001:78–79) surface collected an Agate Basin projectile point at site 12PR505 at the Chellberg Farm. Limp (1974: Photo 2) has also illustrated an unfluted lanceolate projectile point base from the Bailly Homestead. Before the creation of the area as a National Park Service unit, private collectors (e.g., C. R. N. Bergendahl and Ted Weitzel) had removed several Late Paleoindian artifacts from the lakeshore and the surrounding area. Although these collections are not consistent with current professional standards, they continue to be another resource available for study (Bringelson and Sturdevant n.d.).

The Archaic Period in Indiana occurred between 8000 BC and 1000 BC. Most known Archaic Period sites within the national lakeshore boundaries are located on or near the Calumet Dune Ridge. The opening stage of this period, the Early Archaic, is represented in the national lakeshore by a series of sites recorded by Honerkamp (1968) and Stadler (2001b, 2002b). Limited testing of 12PR597 resulted in the collection of an Early Archaic Lecroy or Kanawha bifurcate-stemmed point, dating from ca. 6500 to 5800 BC, an Early Archaic Greenville Creek side notched, a reworked stemmed Archaic point, and numerous pieces of lithic debitage and fire-cracked rock (Stadler 2001b). Early Archaic materials, including a bifurcate (Lecroy) projectile point and over 2,500 pieces of lithic debitage have been recovered from 12PR611 (Stadler 2002b). Analysis and a final report preparation for test excavations at 12PR603 and 12PR611 is ongoing at the present time. Four sites (12PR360, 12PR361, 12PR363, and 12PR497) were reported by Frost (2001:91) as having projectile points that are similar to those described as Middle to Late Archaic in the surrounding Great Lakes area.

Numerous sites within the lakeshore contain Woodland Tradition components that date to between 1000 BC and AD 500 or later. The Early Woodland period is marked by the introduction of ceramics and burial mounds. The ceramics from this time period are thick and decorated with cord-marking. Several Early Woodland sites have been recorded in the Kankakee River drainage south of the lakeshore and in the southwestern counties of Michigan; however, very little is known about the transition from Late Archaic to Early Woodland in this area.

The Middle Woodland Period in northwest Indiana took place from 200 BC to 400–500 AD and is defined by the occurrence of Hopewell or Hopewell-like materials (Brown 1964; Mason 1981). These materials include the construction of burial mound groups and ceremonial mound complexes, very frequently located near running water, with relatively elaborate sets of exotic

mortuary goods accompanying burials. Middle Woodland ceramics in northern Indiana are defined by heavy corded decorations and distinct collared rims. Similar ceramic materials were recovered from sites in the East Unit Campground and Howe's Prairie. Frost (2001:131–132) illustrates numerous examples of Early to Late Woodland materials including a Middle Woodland/Hopewellian Green Point Rocker Stamped sherd (12PR394), Allegan Punctate rim sherd (12PR314), a collared Late Woodland sherd (12PR303), and numerous stemmed, side-notched and corner-notched Woodland projectile point forms. Honerkamp (1968) recorded two Middle Woodland sites, including a possible village site along the Little Calumet River. Middle Woodland or Hopewellian materials such as rocker-stamped pottery and corner-notched projectile points are also reported from 12PR295 and 12PR394 (Lynott et al. 1998:232–237). Along with these diagnostic materials, the Lynott et al. (1998:254) investigation of the East Unit Campground produced at least two sets of radiocarbon dates from between 389 BC to AD 35 (calibrated at 2σ) for sites 12PR288 and 12PR295.

The Late Woodland period of northwest Indiana began about AD 500 and lasted into the historic period. While ceramic and lithic forms varied from the earlier periods, the major technological change of this period was the widespread adoption of horticulture. Kellar (1983) describes the Late Woodland Period as the absence of Middle Woodland traits as opposed to the development of new traits. Both Lynott et al. (1998) and Frost (2001) documented Late Woodland components within the national lakeshore. Radiocarbon dates from the East Unit Campground indicate Late Woodland components starting at AD 645 and continuing up to AD 1455, calibrated at 2σ (Lynott et al. 1998:254).

Mississippian period sites are numerous west of the Calumet Region and several well documented sites are found in the Kankakee River drainage (Faulkner 1970). No Mississippian sites have been positively identified within the lakeshore boundaries.

The Historic period brought Europeans and the fur trade to the Calumet Region. The first fur trade post in the Calumet area was founded in the 1750s at Petit Fort. This post was at the mouth of Dunes Creek and this site is now in the Indiana Dunes State Park.

The first permanent European settler in what is now the national lakeshore, as well as the Calumet Area, was Joseph Bailly in 1822. Bailly built his homestead and fur trading post in a strategic location on the Little Calumet River. The homestead is located along one of the major foot trails of the area and along the major fur trade route between Detroit and Chicago.

In the 1830s a second wave of Euroamerican settlers moved to the region, and by 1840 the population of Porter County was over 2000 (Limp 1974). During the mid-1800s farmers began installing drainage ditches which changed the landscape drastically, and in 1852 the Michigan Southern and Central Railroads were completed. Both of these developments contributed to an increasing flow of people and goods through northwest Indiana, thereby opening the door for more use and increased settlement surrounding the national lakeshore area.

The second prominent family to reside along the Little Calumet drainage within the lakeshore was the Chellberg family. In 1874, Anders and Joanna Chellberg relocated to Porter County after coming to the United States from Goteburg, Sweden, nine years earlier (Riordan et al. 1983:12). The Chellbergs began a modest farm, growing wheat, rye, corn, oats, and hay, later turning to the production and shipment of dairy products and maple syrup to Chicago (Riordan et al. 1983:12). At the present, no significant archeological studies have been conducted at the Chellberg farm. However, the Chellberg occupation is reflective of a larger Swedish population that migrated into the lakeshore area during the late 19th century.

Despite the importance of the area to travel and transportation, northwestern Indiana was one of the last parts of Indiana to be settled by Europeans. The swamps of the Kankakee River and the interdunal ponds of the Calumet Region represented a barrier to movement from other part of Indiana and an impediment to agriculture until major drainage projects began. Drastic changes

occurred to the lakeshore area by the late 1800s. Ditching and draining of the wetlands altered the local vegetation patterns. The newly drained areas provided land for residential and industrial development. During the last century development has continued until the neighboring non-protected land has become a major center for industrial manufacturing.

Cyrus Thomas (1894) traveled through the area in the early 1890s and reported many mound sites in La Porte County. He gave only a general description and did not supply information on their locations.

McAllister (1932) reported on 36 sites in Porter County. Four of the sites are within the boundaries of the lakeshore, although one is in the Indiana Dunes State Park. McAllister describes an area known as "Mound Valley." This small valley supposedly contained many mounds as large as 50 feet in diameter and 10 feet high. McAllister describes excavations conducted by M. F. Greene and the material recovered from these excavations. McAllister does not appear to have conducted excavations in this area. Most of his information appears to be second hand and he states that no indication of the mound existed at the time of his survey.

The first formal inventory effort in the park occurred in 1967. Honerkamp (1968) reported 13 sites, including three in the Indiana Dunes State Park. Honerkamp revisited one of the sites reported earlier by McAllister. The survey consisted of the examination of surface exposures and areas reported by collectors. The majority of sites found during this survey occur in exposed surface settings. At the time of Honerkamp's inventory, much of the land was still in private holding. Shovel testing techniques were not yet a popular survey procedure and the vegetation of the area obscured much of the surface.

Johnson (1974) completed a similar reconnaissance of the West Beach area. This area has been subjected to extensive sand mining operations and occupies about 475 acres of the lakeshore. Johnson examined blowouts and other exposed surfaces for three and a half days without observing any sign of prehistoric occupation; she does not indicate the percentage investigated by surface examination.

Limp (1974) and Munson and Crouch (1976) investigated the Bailly Homestead. Limp excavated a series of backhoe trenches around the property to expose remains of early buildings. Munson and Crouch reported a masonry wall feature east of the main structure and a feature consisting of a masonry circle and cement trough in the basement of the main structure.

Doerschuck (1984) investigated areas of the West, Bailly, and East Units using intensive surface inspection and subsurface shovel testing. The surveys investigated construction sites for the Paul Douglas Environmental Center, the Bailly Unit Porter Sewer Line, and the East Unit Transit Center. Doerschuck surveyed about 80 acres and 9,500 feet of utility right-of-way. The survey recorded one site in the East Unit Transit Center area. The site covers about 2,100 m² and produced one hammerstone and 34 pieces of lithic debris from shovel tests and surface examination. No cultural affiliation was suggested for the site.

From 1989 through 1992, the Midwest Archeological Center undertook the first comprehensive survey and testing program within Indiana Dunes at the East Unit Campground (Lynott et al. 1993; Lynott et al. 1998). Focused on the Calumet Dune Ridge, the inventory and testing project covered the 182-acre campground area and resulted in the identification of fifteen new sites and testing of eight sites. Lynott et al. (1993) examined a 182-acre tract using 10-m shovel test intervals. The team recorded 15 sites. This results in a density of about 1 site for every 12 acres. Fourteen sites are of prehistoric origin and one is historic in nature. Site sizes range from 100 to 15,000 m². Artifact densities range from 12 to 150 artifacts per cubic meter. Diagnostic materials and radiocarbon dating of these sites indicate occupations beginning in the Late Archaic and continuing throughout the Woodland Tradition. The East Unit Campground survey demonstrated that cultural deposits and features were intact at the sites tested and that significant information concerning the prehistoric occupation of the southern Lake Michigan area lies within the lakeshore.

From 1992 to 1995, the Midwest Archeological Center conducted an inventory and evaluation of 730 acres (Frost 2001). Shovel testing and pedestrian survey recorded 177 new sites and revisited seven previously recorded sites. Limited testing was conducted at five sites. Temporal affiliations spanned the Late Paleoindian, Archaic, and Woodland traditions. This inventory also provided much needed information concerning the relationship between biophysical location and site temporal affiliation and function. Present archeological data suggest that significant use of the national lakeshore area occurred during the Woodland Tradition, but conclusions concerning the sociocultural and natural contexts of the Woodland occupation are still relatively incomplete and remain future topics for archeological research.

Recently, several projects related to Section 106 compliance have been conducted in advance of the related undertaking (Frost 1998; Stadler 2000, 2001a, 2001c, 2002b). As part of the lakeshore's Reservation of Use and Occupancy (ROU) program to remove non-historic structures and incorporate private land into the park, numerous inventory and limited testing projects have been undertaken since 1996 by numerous MWAC archeologists and Indiana Dunes staff with paraprofessional training (Ehn 1996, 1998; Frost 1998; Jones 1997; Stadler 1999, 2000; 2001a, 2001b, 2001c, 2002a, 2002b; Sturdevant and Bringelson 2003). Inventories have utilized shovel probes to determine site locations and approximate site boundaries. Evaluations of sites have been completed using the excavation of small numbers of 1-x-1-m and 1-x-2-m test units.

Currently, preparation of an archeological overview and assessment for Indiana Dunes is ongoing and will be completed in the near future (Bringelson and Sturdevant n.d.)

Bringelson, Dawn, and Jay T. Sturdevant

n.d. Archeological Overview and Assessment of Indiana Dunes National Lakeshore, Lake, Porter, and LaPorte Counties, Indiana. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Brown, James A.

1964 The Northeastern Extension of the Havana Tradition. In *Scientific Papers Vol. VII: Hopewellian Studies*, edited by Joseph R. Caldwell and Robert L. Hall, pp. 107–122. Illinois State Museum, Springfield, Illinois.

Doerschuk, John F.

1984 *Cultural Resources Investigations at Three Locations, Indiana Dunes National Lakeshore*. Department of Anthropology, Northwestern University, Evanston, Illinois.

Ehn, Eric H.

1996 Paraprofessional Survey, Tracts 27-184 and 92-118. Memorandum to Regional Archeologist, Midwest Archeological Center. National Park Service, Midwest Archeological Center, Lincoln.

1998 Paraprofessional Reconnaissance Tracts 11-117, 11-121, 11-139, 37-155, and Inventory at Tract 41-102. National Park Service, Midwest Archeological Center, Lincoln.

Faulkner, Charles H.

1970 *The Late Prehistoric Occupation of Northwestern Indiana: A Study of the Upper Mississippi Cultures of the Kankakee Valley*. Ph.D. dissertation, Indiana University, University Microfilms, Ann Arbor.

Frost, Forest

1998 Trip Report, Visit to Indiana Dunes National Lakeshore, July 28–31, 1998. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

- Frost, Forest, continued
 2001 Archeological Inventory and Evaluation of Selected Areas, Indiana Dunes National Lakeshore, Indiana: 1992–1995. National Park Service, Midwest Archeological Center, Lincoln.
- Honerkamp, Marjory
 1968 An Appraisal of the Archeological Resources and Ecological Context of the Proposed Indiana Dunes National Lakeshore. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Johnson, Ann
 1974 Archeological Assessment for the West Beach Area EIS. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Jones, Bruce A.
 1997 Trip Report: Travel to Indiana Dunes National Lakeshore, Indiana, September 16–22, 1997. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Kellar, James H.
 1983 *An Introduction to the Prehistory of Indiana*. Indiana Historical Society, Indianapolis.
- Limp, W. Frederick
 1974 The Bailey Site: An Archeological Study of an Early Historic Homestead in the Calumet. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Lynott, Mark J., Jeffrey J. Richner, and Kristin L. Griffin
 1993 *Archeological Survey and Site Testing, Proposed East Unit Campground, Indiana Dunes National Lakeshore, Northwest Indiana*. Technical Report No. 17. National Park Service, Midwest Archeological Center, Lincoln.
- Lynott, Mark J., Forest Frost, Hector Neff, James W. Cogswell, and Michael D. Glascock
 1998 Prehistoric Occupation of the Calumet Dune Ridge, Northwest Indiana. *Midcontinental Journal of Archaeology* 23:221–262.
- Mason, Ronald J.
 1981 *Great Lakes Archaeology*. Academic Press, New York.
- McAllister, J. Gilbert
 1932 *The Archaeology of Porter County*. Indiana History Bulletin 10(1). Indianapolis.
- Munson, Cheryl A., and Kelvin Crouch
 1976 *A Brief Archeological Investigation at the Bailly Homestead, Indiana Dunes National Lakeshore*. Glenn A. Black Laboratory of Archaeology, Indiana University, Bloomington. Submitted to National Park Service, Midwest Archeological Center, Lincoln.
- National Park Service
 1969 *Master Plan* [for Indian Dunes National Lakeshore]. Document on file, U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.
- Riordan, Timothy B., David F. Barton, and John T. Dorwin
 1983 Analysis of the Historical Artifact Study Collection, Indiana Dunes National Lakeshore. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- Stadler, Scott
 1999 Trip Report—Test Excavations at Tract 39-113, Indiana Dunes National Lakeshore. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
 2000 Test Excavations, ROU Investigations, and Chellberg Overflow Parking Area, Indiana Dunes National Lakeshore, July 10–22, 2000. National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott, continued

2001a Construction Projects and ROU Investigations, Indiana Dunes National Lakeshore, May 29 – June 9, 2001. National Park Service, Midwest Archeological Center, Lincoln.

2001b *Evaluative Archeological Excavations at 12PR597, an Early Archaic Site, Indiana Dunes National Lakeshore, Porter County, Indiana*. Technical Report No. 70. National Park Service, Midwest Archeological Center, Lincoln.

2001c Testing site 2001-1, Kemil Road/Highway 12 intersection, Indiana Dunes National Lakeshore. Trip report, National Park Service, Midwest Archeological Center, Lincoln.

2002a Final Report on the 2001 Investigation of Tract 36-104 (Sears House). Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

2002b Investigations at Indiana Dunes National Lakeshore, May 28 – June 28, 2002. Trip report, National Park Service, Midwest Archeological Center, Lincoln.

Sturdevant, Jay T., and Dawn Bringelson

2003 Archeological Reconnaissance and Testing at 12PR513, Indiana Dunes National Lakeshore, Porter County, Indiana. National Park Service, Midwest Archeological Center.

Tankersley, Kenneth B., Edward E. Smith, and Donald R. Cochran

1990 Early Paleoindian Land Use, Mobility, and Lithic Exploitation Patterns: An Updated Distribution of Fluted Points in Indiana. *North American Archaeologist* 11:301–320.

Thomas, Cyrus

1894 Report on the Mound Explorations of the Bureau of Ethnology. In *Twelfth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution 1890–1891*. Government Printing Office, Washington D.C.

Isle Royale National Park

Isle Royale is located in northwestern Lake Superior, 24 km southeast of the province of Ontario and 72 km northwest of Michigan's Keweenaw Peninsula. The main island is 72 km long and 14 km at its widest point. The total area of the island is 544 sq km (210 sq miles). Approximately 200 smaller islands occupy the periphery, and the interior of the main island has 83 lakes.

The cultural-historical sequence of Isle Royale begins about 4500 BC with evidence of Archaic stage copper mines and occupation sites. The Woodland stage, including Initial Woodland and Late Woodland substages, is well documented with evidence of continued copper mining and many shoreline occupation sites with diverse ceramics from around the Lake Superior Basin. Euroamerican interest begins with the presence of the American Fur Company fisheries in the 1840s, followed hotly by the development of the copper mining industry. The collapse of copper mining following the Civil War was supplanted by the private fisheries and an increasing interest in Isle Royale as a resort, culminating in its creation as a national park in 1931.

The advent of American mining on Isle Royale and in the Keweenaw and Ontonagon districts to the south stimulated awareness of and speculation about the identity and antiquity of the prehistoric copper miners of the region. From 1846 to about 1910 attention was focused on the identity of the miners and their relation to the mysterious "Mound Builders" (e.g., Ferguson 1923, 1924; Gillman 1873, 1874). The involvement of the Smithsonian Institution brought the first serious consideration of the historical accounts pertaining to copper in the Great Lakes region (e.g., Packard 1893; Whittlesey 1863; Winchell 1881).

Archeological studies at Isle Royale National Park began over one hundred years ago as evidence of prehistoric mining came to light. Formally structured surveys began in the early part of the 1900s with the McDonald-Massee Expedition (West 1929) and have continued to the present (Barrett 1925; Bastian 1963a, 1963b; Clark 1987, 1989, 1990, 1991; Cleland 1968; Drier and DuTemple 1961; Dustin 1929, 1931, 1957; Griffin 1961; Martin 1988). The most recent effort was by the Midwest Archeological Center, which conducted a survey and limited test excavation of archeological sites largely on the shoreline areas of the park (Clark 1995).

The first comprehensive survey and excavation of Isle Royale was by the University of Michigan Museum of Anthropology (UMMA) which firmly placed it in the broader context of Upper Great Lakes archeology. Survey and testing by Spaulding in 1959 was followed by three years of work under the leadership of Tyler Bastian. Bastian's unpublished survey report (1963a) and his masters thesis (1963b) give the first comprehensive descriptions of prehistoric and historic sites on the island and effectively provide the baseline for all subsequent archeological reconnaissance. The objective of the UMMA project was "to locate and sample as many archeological sites as possible, in order to provide a basis for a general reconstruction of the prehistory of the island, and to suggest problems for future research" (1963a:1). A total of 35 weeks over a three-year period (1960–1962) was spent on the project with crew size ranging from one to eight. Coverage must be inferred from the final report (Bastian 1963b) and from the unpublished field notes. Emphasis was placed on previously known sites (especially Indian Point, Chippewa Harbor, and the McCargoe Cove Minong Mine area), which were tested to explore specific research questions. The previously unrecorded archeological sites were located, primarily, on shorelines or were associated with documented historic sites. The interior of the island was left largely unsurveyed.

Since the University of Michigan survey in the early 1960s, archeological research on Isle Royale was limited to a small number of impact assessments for the National Park's visitor and staff facilities, largely undertaken by NPS personnel or by archeologists from Michigan Technological University in Houghton. Between 1981 and 1986 the National Park Service's Submerged Cultural Resources Unit conducted a submerged cultural site inventory on Isle Royale (Lenihan 1987). Shipwrecks and a number of selected historic sites with terrestrial associations were exam-

ined and documented. In the spring of 1986 Patrick Martin, Michigan Technological University, conducted an archeological field school on Isle Royale in which the location and mapping of historic features at Todd Harbor, McCargoe Cove, and Daisy Farm was the basis of instruction in archeological field techniques (P. Martin 1988).

In the fall of 1986 the area around the Rock Harbor channel was examined in an attempt to establish a terrestrial context for the submerged Juntunen phase pot found off the Siskowit Mine by divers (Lenihan 1987:453–456). The inventory of submerged sites by the Submerged Cultural Resource Unit (NPS) assessed all major wrecks and a few sites with terrestrial associations but left several significant areas unsurveyed. The area at the entrance to McCargoe Cove off of Indian Point and Birch Island are potentially significant. These areas are likely to contain a great deal of prehistoric material associated with the major occupation sites there. Furthermore, submerged resources may address the question of the use of this natural harbor over time. In particular, the ship *Recovery* might have been moored here during the War of 1812. Additional survey in Rock Harbor, Belle Harbor, and Washington Harbor would be beneficial. The Rock Harbor survey discovered a prehistoric occupation site at the Siskowit Mine, confirmed the presence of subsurface prehistoric deposits at the Rock Harbor Lighthouse and Cemetery Island, and identified a new site at West Caribou Island (Clark 1987).

The MWAC survey from 1987 to 1990 represents the most extensive effort since Bastian and the UMMA worked on Isle Royale in the early 1960s (Clark 1995). Although the focus was on shorelines and developed areas, the recent survey and site testing effort has more than doubled the number of recorded archeological sites, and has provided updated, and in many instances substantially modified assessments of previously recorded ones. The synthetic report resulting this work (Clark 1995) has provided a much-needed update on known sites as well as documenting the distribution of numerous previously unknown prehistoric and historic archeological resources.

Subsequent to the four-year MWAC inventory project, numerous small-scale, developed-area inventories and other projects have been accomplished at multiple locations across the park (Clark 1991, 1992, 1993b; Noble 1996; Hunt 2002). Most of these studies have focused on improvements at existing campgrounds, including relocating privies, campfire rings, and other visitor amenities. Limited site evaluation through test excavation, site condition assessments, and site stabilization efforts have also been accomplished. Several dozen specific project areas have been examined through these projects. While these fieldwork efforts do not necessarily contribute extensively to an overall inventory research design for the park, the potential for recording significant archeological information is very high, despite the often-limited project scopes. This is primarily due the fact that most of the park's campgrounds and developed areas coincide with cultural sites. Of a total of 36 campgrounds, only eleven do not coincide with a recorded cultural site. Of the 24 sites located in campgrounds, fifteen are potentially eligible for nomination to the National Register of Historic Places.

The Windigo Developed Area has been the location for numerous small-scale inventory efforts since MWAC's parkwide inventory was completed in 1990 through 1998 (Clark 1994; Richner 1995; Frost 1996; Hunt 1998; Stadler 1999a, 1999b, 1999c). Proposed housing unit construction, various structural removals, visitor center development, a recycling kiosk, utility repair areas, and other facilities have been the focus for multiple inventory efforts. Very little of archeological interest was recorded through these numerous inventory efforts. As this work continued, it became increasingly apparent that a broader, more extensive inventory of the shoreline zone at Windigo was needed. This is especially true since that area coincides with the historic copper mining community of Ghyllbank and subsequent use of the areas for early recreational purposes. This broader inventory was finally realized in 1999 when MWAC Archeologist Stadler completed a surface inventory and mapping effort at a portion of the old town site (Stadler 1999a, 1999b, 1999c). As a result of that inventory, numerous features from the community were recorded and mapped. Several could be matched with structures depicted in historic photos of the area.

Current patterns of site distribution on Isle Royale have been partially determined by: (a) the specific interests of the researcher, (b) strategies specifically designed to locate sites, and (c) highly focused compliance surveys. All have contributed to the present corpus of data on site location and content but still leave certain areas unaddressed. In particular, interior locations associated with relic Nipissing beach ridges and mining (both prehistoric and historic) remain largely unsurveyed and unevaluated. Additional survey of submerged resources, particularly in McCargoe Cove, would be highly beneficial.

Barrett, S. A.

1925 Aboriginal Copper Mines at McCargoe's Cove, Isle Royale. *Yearbook of the Public Museum of the City of Milwaukee* 4:25–31. Milwaukee, Wisconsin.

Bastian, Tyler J.

1963a Archeological Survey of Isle Royale National Park, Michigan, 1960–1962. Manuscript, University of Michigan Museum of Anthropology, Ann Arbor, and the Midwest Archeological Center, Lincoln.

1963b *Prehistoric Copper Mining in Isle Royale National Park, Michigan*. Master's thesis, Department of Anthropology, University of Utah, Salt Lake City.

Clark, Caven P.

1987 *Archaeological Survey of the Rock Harbor Area, Isle Royale National Park, 1986*. Cultural Resource Management Report No. 14. Michigan Technological University, Houghton.

1991 Trip Report, August 9, 1991. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1992 Trip Report, July 7, 1992. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1993a *Mott Sauna Beach Excavation and Site Survey at Isle Royale National Park*. Technical Report No. 27. National Park Service, Midwest Archeological Center, Lincoln.

1993b Trip Report, July 12, 1993. Memorandum, Midwest Archeological Center, National Park Service, Lincoln.

1994 Trip Report, May 31, 1994. Memorandum, Midwest Archeological Center, National Park Service, Lincoln.

1995 *Archeological Investigations at Isle Royale National Park, 1987–1990 Seasons*. Occasional Studies in Anthropology No. 32. National Park Service, Midwest Archeological Center, Lincoln.

Cleland, C. E.

1968 Analysis of the Fauna of the Indian Point Site on Isle Royale National Park in Lake Superior. *The Michigan Archaeologist* 14(3–4):143–146.

Drier, Roy W.

1961 The Michigan College of Mining and Technology Isle Royale Excavations, 1953–1954. In *Lake Superior Copper and the Indians, Miscellaneous Studies of Great Lakes Prehistory*, edited by James B. Griffin, pp. 1–7. Anthropological Papers 17. Museum of Anthropology, University of Michigan, Ann Arbor.

Drier, Roy W., and Octave DuTemple

1961 *Prehistoric Copper Mining in the Lake Superior Region: A Compilation of Reference Articles*. Privately published by the authors, Calumet, Michigan.

- Dustin, Fred
1929 Narrative Report of an Archaeological Reconnaissance of Isle Royale During July and August, 1929. Manuscript, University of Michigan, Museum of Anthropology.
1931 A Summary of the Archaeology of Isle Royale, Michigan. *Papers of the Michigan Academy of Science, Arts, and Letters* 16(1–16).
1957 An Archaeological Reconnaissance of Isle Royale. *Michigan History* 41(1):1–34.
- Ferguson, William P. F.
1923 Michigan's Most Ancient Industry: The Prehistoric Mines and Miners of Isle Royale. *Michigan History* 7:155–162.
1924 The Franklin Isle Royale Expedition. *Michigan History Magazine* 8:450–468.
- Frost, Forest
1996 Trip Report, September 9, 1996. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Gillman, Henry
1873 Ancient Works at Isle Royale, Michigan. *Appleton's Journal*, August 9, 1873.
1874 The Mound Builders and Platycnemism. In *Annual Report of the Board of Regents of the Smithsonian Institution for the Year 1873*. Government Printing Office, Washington, D.C.
- Griffin, James B., editor
1961 *Lake Superior Copper and the Indians, Miscellaneous Studies of Great Lakes Prehistory*. Anthropological Papers 17. Museum of Anthropology, University of Michigan, Ann Arbor.
- Guthe, Carl
1930 Unpublished field notes on file at the University of Michigan, Museum of Anthropology, Ann Arbor.
- Hunt, William J.
1998 Trip Report, October 5, 1998. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
2002 Trip Report, September 25, 2002. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Lenihan, Daniel J., editor
1987 *Submerged Cultural Resources Study: Isle Royale National Park*. Professional Papers No. 8. National Park Service, Southwest Cultural Resources Center, Santa Fe.
- Martin, Patrick E.
1988 *Technical Report on Archaeological Survey and Evaluation Isle Royale National Park During 1986*. Archaeology Laboratory, Department of Social Sciences, Michigan Technological University, Houghton.
- Noble, Vergil E.
1996 Trip Report, August 9, 1996. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Packard, R. L.
1893 Pre-Columbian Copper Mining in North America. In *Annual Report of the Board of Regents of the Smithsonian Institution, July 1892*. U.S. Government Printing Office, Washington, D.C.
- Quimby, George I.
1939 Aboriginal Camp Sites on Isle Royale, Michigan. *American Antiquity* 4(3):215–223.

Richner, Jeffrey J.

1995 Trip Report, September 29, 1995. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Stadler, Scott

1999a Trip Report, June 23, 1999. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1999b Trip Report, September 10, 1999. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1999c *Archeological Inventory of Ghyllbank, An 1890s Copper Mining Settlement, Isle Royale National Park*. Technical Report No. 63. National Park Service, Midwest Archeological Center, Lincoln.

West, George A.

1929 Copper: Its Mining and Use by the Aborigines of the Lake Superior Region, Report of the McDonald-Massee Isle Royale Expedition, 1928. *Bulletin of the Public Museum of the City of Milwaukee* 10(1):1–182.

Whittlesey, Charles

1863 *Ancient Mining on the Shores of Lake Superior*. Smithsonian Contributions to Knowledge Vol. 13, No. 155. Washington, D.C.

Winchell, N. H.

1881 Ancient Copper-Mines of Isle Royale. *Popular Science Monthly* 19(5):601–620.

James A. Garfield National Historic Site

The first archeological investigation of James A. Garfield National Historic Site was conducted in July of 1990 by the Cleveland Museum of Natural History under the terms of a cooperative agreement with the Midwest Archeological Center (Lee 1994). This investigation was prompted by the proposed renovation of the Garfield home and the relocation of the parking lot. These investigations focused on five general areas: the main house, the carriage house and gas works, the campaign office, the existing parking area, and the proposed parking area. Testing in the area of the main house revealed the presence of a builder's trench along the foundation. These preliminary excavations did not, however, lend any additional insights into the structural evolution of the house. Work behind the campaign office, on the other hand, demonstrated that the substantial remains of a former structure, most likely an ice house, lie just below the ground surface. Examination of the carriage house and gas works resulted in the discovery of a deep foundation adjacent to the frame carriage house. This suggests the possibility that an earlier version of the gas works was partially razed when the carriage house was built, using its more substantial foundation. Furthermore, significant archeological deposits were discovered beneath the stable floor. Prehistoric occupation of the area is represented by the discovery of a late Whittlesey tradition projectile point and several chert flakes in the area of the proposed parking lot.

During the summer of 1991, Archeologist William Hunt conducted excavations within the carriage house and gas works (Hunt 1999). These excavations were prompted by the proposed renovation of the carriage house for use as a visitor center. Although relatively few artifacts were recovered, Hunt's work did result in a number of important discoveries which clarify the evolution of the gas works and carriage house. Among the most important of these was the discovery of a massive stone foundation which encloses a basement, once part of the gas works. This suggests that the gas works, which predates the carriage house, once extended much further to the west than is evident today.

During the summer of 1993, Archeologist Rose Pennington conducted investigations which included shovel test surveys of the proposed access road and sanitary sewer line, and test excavations in the area of the proposed parking lot (Pennington 1993). Artifact yield was relatively low but included both prehistoric and historic artifacts. Historic artifacts were largely late, although several sherds of mid-19th-century handpainted and transfer-print pottery were recovered. Prehistoric artifacts included the tip of a Late Woodland Madison projectile point, a biface tool, and several pieces of chert debitage. The most important discovery of the 1993 investigations was the location of two segments of a brick and sandstone foundation northwest of the campaign office. This feature was uncovered late in the 1993 investigations, and further testing is planned for the future.

Monitoring of the 1994 grading of the access road and parking lot resulted in the discovery of a previously unrecorded hand-dug brick well just east of the pump house (Pennington 1994). This well apparently dates to the mid-1930s and was filled subsequent to its discovery to allow for the passage of the access road.

At present roughly three-quarters of the park has been surveyed. Remaining to be surveyed is the area north of the proposed parking lot and west of the current access road. It is possible that evidence for Garfield-era farm buildings might exist in this area.

Hunt, William J., Jr.

1999 *Archeological Investigation of the Carriage House, James A. Garfield National Historic Site, Mentor, Ohio*. Technical Report No. 62. National Park Service, Midwest Archeological Center, Lincoln.

Lee, Alfred M.

1994 *Locational Reconnaissance at the James A. Garfield National Historic Site, Mentor, Lake County, Ohio*. Technical Report No. 30. National Park Service, Midwest Archeological Center, National Park Service, Lincoln.

Pennington, Rose E.

1993 Trip Report, James A. Garfield National Historic Site, dated July 29. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

1994 Trip Report, James A. Garfield National Historic Site, dated April 20. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Jefferson National Expansion Memorial

Jefferson National Expansion Memorial was proclaimed by President Roosevelt in 1935 to commemorate St. Louis's pivotal role in the dynamic westward expansion of the United States in the 19th century. It was the first site established under the 1935 National Historic Sites Act. The park lands also include the original site of colonial St. Louis. The courthouse where the famed Dred Scott decision began and its associated city block are on the site of the French colonial village's common field (Moore 1994).

The area now occupied by the park and St. Louis has been used and inhabited by people for almost 10,000 years. American Indians have used the rich bottom lands of the Mississippi and Missouri Rivers for thousands of years, as is evidenced by the stately mounds and large villages of the Mississippian culture, and they were living in the area at the time of the first European contact.

There have been very limited archeological investigations in the park. The relatively modern developments of the 19th and 20th centuries have obscured and possibly obliterated much if not all of the evidence of prehistoric and early historic occupation. Archeological investigations were conducted on the Arch grounds in the 1960s and at the site of a parking garage site in the 1980s (Wells and Williams 1985). Although recent archeological evidence was present, the general conclusions as to the presence of earlier deposits was ambiguous. The general opinion is that the "modern" buildings and construction work have caused so much ground disturbance that the site has lost its integrity as an archeological resource (Wells and Williams 1985).

The most recent archeological investigations at Jefferson National Expansion Memorial involved monitoring the collection of soil data in preparation for the design of a new maintenance facility on the grounds (Noble 1999). Fourteen well points arrayed at 50-ft intervals, using a six-inch auger bit, provided data to an ideal depth of 20 to 40 ft below the surface. Although considerable brick rubble was encountered, there was no evidence of intact cultural remains related to the old warehouse district or earlier use of the riverfront.

Moore, Bob

1994 *An Administrative History of Jefferson National Expansion Memorial, 1980–1991*. National Park Service, Midwest Regional Office, Omaha.

Noble, Vergil E.

1999 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated January 7. Subject: Trip Report, Jefferson National Expansion Memorial; December 16–23, 1998. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Wells, Christy L., and Joyce A. Williams

1985 *A Report of Archeological Monitoring of Parking Facility Construction at Jefferson National Expansion Memorial, National Park Service, St. Louis*. Department of Anthropology, Southern Illinois University, Edwardsville, Illinois.

Jewel Cave National Monument

Jewel Cave National Monument consists of Paleozoic-age limestones and sandstones with a cave network. The park is located in the Black Hills of Custer County. Until 1992, Jewel Cave had seen only intermittent archeological investigations. Up to 1992, 24 sites were recorded in and near Jewel Cave. Glenna Sheveland, a USFS employee, undertook an approved volunteer inventory of the park in 1992. She identified two additional sites and several isolated finds while inventorying nearly 294 acres (Sheveland 1993). In 1993, she continued her efforts and inventoried an additional 501 acres, recording an additional eight sites (Sheveland 1994). By 1994, Sheveland had inventoried 60 percent of the park's 1,278.7 acres. Additional inventory was conducted in 1995 and a draft report filed (Sheveland 1996). The sites recorded to date are primarily undated lithic scatters, although one site may have an Early Archaic component. Several historic sites related to late-19th- and early-20th-century homesteading were also recorded, as was a possible CCC-related site dating to the mid 1930s.

Archeological resources are believed to be limited in the small area of Jewel Cave, and the culture history of the area must still be extrapolated from adjacent areas of the Great Plains, many of which themselves are not well known. However, based upon research elsewhere in the Black Hills and on the adjacent Great Plains, there is clear evidence of Native American occupation and/or use of the area beginning as early as 11,000 BP, and probably continuing through the Plains Archaic and the Plains Woodland periods and into the Late Prehistoric period. Aboriginal and Euroamerican sites are also known dating to the late 19th and early 20th centuries. Much of this material has been found either in spatially small components or as isolated culture-diagnostic artifacts.

Under the Systemwide Archeological Inventory Program, Bruce Jones began a four-year project to test and evaluate the sites found by Sheveland. Three prehistoric sites and one historic site were evaluated in 2000. Two of the prehistoric sites contained significant deposits and clearly warrant nomination to the National Register of Historic Places. The single historic site, that of the early-20th-century Jewel Cave Hotel, has been heavily impacted by highway construction. Personnel returned to Jewel Cave in 2001 to undertake the second year's investigation (Jones 2001). Three archeological sites were tested in the course of the three-week project. One yielded a McKean-like projectile point, corroborating the age of the more extensive deposits on adjacent USFS land. That part of the site on USFS land has been determined eligible for nomination to the National Register of Historic Places, and the park component will be contributing to that nomination.

Another site, situated on several small benches around Chokecherry Spring, was found to contain roughly 40 cm of *in situ* deposit that included flakes, charcoal, and animal bone. The site is judged eligible for nomination to the National Register of Historic Places in large part due to its excellent state of preservation. The third site worked on in 2001 was a multi-component prehistoric and historic site at the confluence of Hell and Lithograph Canyons. This locale has undergone considerable mechanical disturbance in the past 20 years, and testing confirmed that the cultural deposits are mixed. The site has not yet produced diagnostic artifactual materials.

The third-year assessment investigated four more archeological sites. A rockshelter in Lithograph Canyon was tested and found to be well preserved, with some evidence of human occupation extending back to the Middle Archaic period (Jones 2002). An open prehistoric and historic site in the same area was also tested. It had been impacted by the Jasper Fire of 2001 and resultant erosion. The site is more extensive than previously thought and is reasonably well preserved. A lithic scatter in the southeastern portion of the park was tested and found to lack any significant subsurface deposits. The fourth site tested was the Jewel Cave Hotel built in the early 1900s. The testing yielded evidence of a prehistoric occupation as well as the extensive historic use. Unfortunately, maintenance work by the South Dakota highway department had affected the site, and a more proactive site management plan needs to be implemented to protect this important site. In 2003 the analyses will be completed and a synthetic project report produced.

Jones, Bruce A.

2001 Memorandum dated June 6. Subject: Trip Report, Travel to Jewel Cave National Monument, South Dakota. National Park Service, Midwest Archeological Center, Lincoln.

2002 Memorandum dated June 3. Subject: Trip Report, Travel to Jewel Cave National Monument, South Dakota, 5/6/02–5/24/02. National Park Service, Midwest Archeological Center, Lincoln.

Sheveland, Glenna J.

1993 An Intensive Cultural Resource Survey of Jewel Cave National Monument. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1994 An Intensive Cultural Resource Survey of Jewel Cave National Monument. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1996 An Intensive Cultural Resource Survey of Jewel Cave National Monument. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Keweenaw National Historical Park

Keweenaw National Historical Park was authorized in 1992 and has no federal land base at present. The area is rich in mining and town development, and there are many archeological manifestations of the prehistoric and historic eras recorded in the region. There is little doubt that the private properties at the park boundary will have a variety of archeological manifestations.

Knife River Indian Villages National Historic Site

Knife River Indian Villages is one of the most systematically and thoroughly inventoried parks in the Midwest Region. When the park was authorized by Congress in 1974, only four archeological sites were known to exist within the authorized boundaries. Due to an extensive program of archeological field research carried out from 1976 through 1981, the park's archeological resource inventory was expanded to a total of 56 documented archeological and historical sites.

As defined by its authorizing legislation, the park encompassed 1,293.35 acres. Since 1974, several boundary changes have occurred, resulting in a total of 1,758.35 acres being within the present (1995) boundaries of the park. Not all of this land is owned in fee by the National Park Service, some of it remaining in private ownership. In 1992, additional land was added to the park, known as the "Krieger Parcel" (Tract 01-101; 300.3 acres). The Krieger Parcel has also been archeologically surveyed, with the result that four additional sites were recorded, two previously assigned site numbers were retired, and four previously recorded sites were further documented. Presently, a total of 60 archeological resources are documented within the park. Most of the archeological sites within the original 1,293.35-acre configuration of the park are included in a National Register of Historic Places district; all of the archeological properties on the Krieger Parcel have been recommended for the National Register, but have not yet been formally determined to be eligible.

The original lands of the park were inventoried by the University of North Dakota in accordance with contracts and cooperative agreements administered by the Midwest Archeological Center of the National Park Service (Calabrese 1993). All of the lands owned in fee (1,156.94 acres) were systematically examined by means of a variety of methods. Easement lands within the original park boundaries total 136.41 acres, most of which was not archeologically examined because of denial of access by landowners. Altogether, 93% of the park's original land has been systematically inventoried. Inventory methods employed were systematic pedestrian examination of the ground survey by means of transects (65 percent of the park land); two point-quarter sampling survey techniques (one used in cultivated areas, the other in uncultivated, pasture tracts) that resulted in detailed maps of surface artifact density (11 percent of the park land); and subsurface exploration with a mechanically powered auger (8 percent of the park land). Survey investigations were followed by systematic surface collections and controlled test excavations at selected sites. In conjunction with the survey techniques, a basemap of the park was photogrammetrically produced to a scale of 1:1,000 and a 50-cm contour interval, which was used to plot site boundaries and other identified archeological features. The results of the UND inventory program have been detailed by Lovick and Ahler (1982) and summarized by Ahler (1993a). The UND research program within KNRI and at other locations in the vicinity of the park has led to a major reformulation of the archeological taxonomy for the region, as well as the beginnings of a new understanding of the prehistory and early history of the Hidatsa and Mandan peoples (Ahler 1993c; Ahler et al. 1991).

The Krieger Parcel was surveyed in 1994 by Metcalf Archaeological Consultants, Inc., in accordance with a purchase order issued by the park. The survey covered 300.3 acres north of the previous northern boundary of the park (i.e., north of the boundary established in 1974). Pedestrian examination of the surface was the primary survey method employed, with 5-m transect intervals in wooded areas and 10-m intervals on cultivated lands. Hand-powered auger probes and shovel probes were used to delimit site sizes and boundaries when cultural evidence was encountered, and controlled test excavations were dug at two sites located during the survey. The Krieger Parcel survey has been described by Metcalf (1995).

A partially filled cache pit, or one with subsidized contents, was discovered during maintenance work at the Big Hidatsa Village in May 2000 and was documented by a crew from the Midwest Archeological Center (Scott 2000).

In September 2002, Midwest Archeological Center Archeologist Bill Volf directed a magnetic survey over the northern portion of the Elbee site in an effort to determine the extent of cultural deposits in that part of the site that is threatened with destruction as a result of ongoing erosion by the Knife River channel. The magnetic data will be used in 2003 to plan the location of test excavations to be dug by students from the University of North Dakota under the direction of Dr. Dennis Toom.

Presently uninventoried fee lands in the park are 6.16 acres in Tract 01-139.

Most of the archeological resources (45 sites) in the park contain components that relate to the Plains Village cultural tradition. This tradition is believed to date from approximately AD 1000 to 1886, although the many Plains Village components within the park date from about AD 1300 to 1845. The Plains Village tradition, as represented within the park, is comprised of the Nailati phase (AD 1300–1400), Scattered Village phase (AD 1400–1450), Hensler phase (AD 1525–1600), Willows phase (AD 1600–1700), Minnataree phase (AD 1700–1785), Roadmaker phase (AD 1785–1830), and Four Bears phase (AD 1830–1886). Other Plains Village phases, not represented by components within the park, are the Clark's Creek (AD 1200–1300) and Mandan Lake phases (AD 1450–1525), as well as the earlier Charred Body complex (AD ? to 1200). In North Dakota, the Plains Village tradition culminated in the historically known Hidatsa and Mandan tribes.

Eighteen sites in the park contain components that are pre-Plains Village in age (i.e., which date earlier than ca. AD 1000), although these Woodland or preceramic manifestations are much less well known than the much more abundant and visible Plains Village remains in the park (Ahler 1993b). The Woodland period is estimated to have lasted from approximately AD 1 to 1000, while most of the preceramic remains in the park probably are Archaic in age (ca. 1 BC–6000 BC).

Thirteen sites within the park exhibit evidence of Euroamerican occupation or use during late historic times (post-1880s to present), but are generally not considered significant resources. Six sites within the park contain components that are of unknown age and cultural affiliation.

In terms of descriptive and functional classifications, the park contains three highly visible and excellently preserved village sites occupied in late prehistoric and early historic times, primarily by the Hidatsas, although to a lesser extent Mandans also lived in at least one of them for a time. These are the focus of the park's interpretive program. A fourth major village site, though now nearly destroyed, is adjacent to the south boundary of the park within the town of Stanton. Other descriptive and functional classifications applied to the park's archeological resources include village periphery zones; off-village activity areas; less-prominent villages; debris scatters; cemeteries; trails; farmsteads or homesteads; and other kinds of historic sites (school site, corral, etc.). The Krieger Parcel also contains the partially preserved Stanton Mound Group, a putative eagle-trapping pit, and possible earthwork (Metcalf 1995).

Ahler, Stanley A.

1993a The KNRI Archeological Inventory Subprogram. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site*, edited by Thomas D. Thiessen, Part I: Objectives, Methods, and Summaries of Baseline Studies, pp. 47–69. Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archeological Center, Lincoln.

1993b Pre-Village Period Archeology in the KNRI. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site*, edited by Thomas D. Thiessen, Part IV: Interpretation of the Archeological Record, pp. 15–31. Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archeological Center, Lincoln.

Ahler, Stanley A., continued

1993c Plains Village Cultural Taxonomy for the Upper Knife-Heart Region. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site*, edited by Thomas D. Thiessen, Part IV: Interpretation of the Archeological Record, pp. 57–108. Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archeological Center, Lincoln.

Ahler, Stanley A., Thomas D. Thiessen, and Michael K. Trimble

1991 *People of the Willows: The Prehistory and Early History of the Hidatsa Indians*. University of North Dakota Press, Grand Forks.

Calabrese, F. A.

1993 A History and Overview of the Knife River Indian Villages National Historic Site Phase I Research Program. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site, Part I: Objectives, Methods, and Summaries of Baseline Studies*, edited by Thomas D. Thiessen, pp. 1–26. Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archeological Center, Lincoln.

Lovick, Steven K., and Stanley A. Ahler

1982 Cultural Resource Reconnaissance in the Knife River Indian Villages National Historic Site. Two volumes and a separate appendix. Report prepared for the National Park Service, Midwest Archeological Center, Lincoln.

Metcalf, Michael D.

1995 Knife River Indian Villages National Historic Site: Cultural Resource Inventory of the 300 Acre Krieger Parcel. Report prepared for the National Park Service, Knife River Indian Villages National Historic Site.

Scott, Douglas D.

2000 Documentation of an Exposed Cache Pit at Big Hidatsa Village (32ME12), Knife River Indian Villages National Historic Site, North Dakota. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Lincoln Boyhood National Memorial

Archeological investigations at Lincoln Boyhood National Memorial were limited to test excavations at the memorial cabin site and nearby components of the living farm (Larabee 1967; Larabee and Kardas 1968; Mauck 1996) and to small-scale survey and monitoring projects (Pennington 1993; Richner 1992) until 1997. The pre-1997 testing at the memorial cabin was aimed at determining the location and condition of three known Lincoln-era structures—two cabins and a “half faced camp” structure. Results were negative, due to post-Lincoln-era disturbances that included major landscaping by the CCC in the 1930s. Testing at a portion of the living farm revealed structural remains of 20th-century buildings from Lincoln City, but no Lincoln-era structures. Larabee concluded that additional excavation at the cabin memorial area would do little to clarify the situation (1967:41).

During the summer of 1990, Acting Superintendent Douglas Scott conducted a brief inventory of a house site that had been rehabilitated (Scott 1990). Then in September of 1992, Supervisory Archeologist Jeffrey Richner conducted a small shovel test survey of an abandoned segment of State Route 162 east of the visitor center preparatory to the proposed planting of 400 landscape trees (Richner 1992). No cultural materials were observed. In July of 1993, Archeologist Rose Pennington monitored trenching for buried utility lines along an abandoned road prism known as the Lincoln Trace (Pennington 1993). The Lincoln Trace formed a core road through the former Lincoln City townsite (1872–1929). A sparse scatter of largely post-1930 artifacts was observed as well as a small concentration of bricks, perhaps associated with the circa-1920s Lincoln Park Hotel. The scattered remains of former Lincoln City structures are still visible along paths surrounding the Trace.

Cultural resources at Lincoln Boyhood National Memorial are largely historical in nature and include historic traces and a cemetery. However, while no prehistoric sites have been formally defined within the park, evidence for prehistoric occupation has been recorded. Larabee recovered two chert scrapers and several flakes during 1967 testing at the memorial cabin site. In addition, he reported that a park staff member collected two projectile points from an unspecified area within the park’s boundaries.

A complete parkwide survey of cultural resources began in Fiscal Year 1997. Frost and Stadler (2000) conducted a three-year close-interval shovel testing program over the memorial’s entire 200 acres. They located and recorded 15 previously unknown prehistoric sites and 9 historic artifact scatters. The historic artifact scatters represent refuse dumps associated with the now defunct town of Lincoln City. No evidence was found in this inventory that derived from the period of Thomas Lincoln’s occupation of the site.

Frost, Forest, and Scott Stadler

2000 *Intensive Archeological Resource Inventory of Lincoln Boyhood National Memorial, Spencer County Indiana, 1997–1999: Results and Recommendations*. Technical Report No. 64. National Park Service, Midwest Archeological Center, Lincoln.

Larabee, Edward McM.

1967 Preliminary Excavations at the Cabin Site, Lincoln Boyhood National Memorial, Lincoln City, Indiana. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Larabee, Edward McM., and Susan Kardas

1968 Test Excavations for the Proposed Garden Area, Lincoln Boyhood National Memorial, Lincoln City, Indiana. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Mauck, Jeffery G.

1996 *An Archeological Overview and Assessment of Lincoln Boyhood National Memorial, Spencer County, Indiana*. Cultural Resources Analysts, Lexington, Kentucky.

Pennington, Rose E.

1993 Trip Report, Lincoln Boyhood National Memorial, dated July 28. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J.

1992 Trip Report, Lincoln Boyhood National Memorial, dated September 16. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas

1990 Trip Report, Archeological Compliance at Lincoln Boyhood National Memorial. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Lincoln Home National Historic Site

The earliest archeological investigations at what is now Lincoln Home National Historic Site took place in 1951. Richard S. Hagen in that year excavated about a third of the Lincoln House back yard to gather information bearing on the locations and configurations of the barn, woodshed, and privy prior to their reconstruction by the state of Illinois; other cultural features also were disclosed and excavated (Hagen 1951, 1955). No other investigations were carried out at the home itself, or in the general vicinity, until well after transfer to National Park Service stewardship in 1972.

Almost all NPS-sponsored excavations in the park have been done in conjunction with the restoration of standing structures since acquired as a buffer for the Lincoln House. The first such work in the four-block neighborhood took place at the Henson Robinson House in 1981, while exterior restoration efforts were under way. Those initial NPS investigations, however, were limited to shovel testing about the house and the controlled excavation of only three 1-m-x-1-m test units (Perry 1984). More extensive fieldwork would later be performed in the back yard during the early 1990s, revealing a turn-of-the-century brick walkway and a cistern in the back yard (Noble 1991, 1993b).

In 1984, a local consulting firm contracted to monitor burial of utility lines at various locations throughout the historic site (Claflin 1984). Also in that year, Lincoln Home NHS paraprofessional archeologist Robert Dunham excavated a small section of the south yard of the Lincoln House, with approval of the regional archeologist, to gather information useful for preparing a formal scope-of-work for archeological services to be contracted in 1985 (Dunham 1984).

The 1985 field project, carried out under contract to Northern Illinois University, actually dealt with four structures scheduled for restoration over the next few years (Mansberger 1987). The main task was an investigation of areas adjacent to the Lincoln House foundation perimeter, which would require major repair work. Additional research was performed that summer around the Solomon Allen Barn, the George W. Shutt House, and the Sarah Cook House.

Two years later MWAC Archeologist Vergil Noble was present during the 1987 demolition phase of the Lincoln House restoration (Noble 1988). He performed further study on several historic features recorded about the home in 1985 and ensured their protection during the construction work. Noble also discovered and documented other features relating to the structural evolution of the Lincoln House, particularly beneath the concrete basement floor after its removal and behind the front yard retaining wall.

In the summer 1989, Noble returned to the park as director of additional excavations behind the Sarah Cook House. Restoration of the structure required total removal and replacement of the foundation, and Mansberger's preliminary investigations showed potentially significant remains against the rear elevation (Noble 1989a). Data recovery in the affected area revealed the presence of three abandoned cisterns used sequentially over the period of occupation. During that same assignment, Noble directed an investigation of the former front entry to the Harriet Dean House and also monitored replacement of the Miller House front porch (Noble 1989a and 1989b).

The year 1991 saw excavations overseen by Noble at several other house lots in the neighborhood. The most extensive investigations took place at the Charles A. Arnold House in an attempt to ascertain whether foundations or other deposits still survive where the structure once stood on the lot and where it is to be returned. Excavations near the alley revealed the presence of several cultural features probably associated with the house at its original site (Noble 1991, 2001). Almost as involved were excavations about the Harriet Dean House, which sought to assess the potential impacts of a proposed restoration. Limited testing in the Henson Robinson back yard also took place in 1991, focusing on the remains of a laundry shed and a buried herringbone walkway. Finally, Noble monitored the planting of numerous shrubs and trees in a lot next to the George W. Shutt House (Noble 1991).

The three-week 1992 field season included limited excavations in the Julia Sprigg House back yard. Those investigations focused primarily on the rear quarter of the lot, revealing the locations of a former privy and two large refuse pits (Noble 1992, 2002). The team directed by MWAC Archeologist Noble also excavated three 50-cm-sq test units in the basement of the Harriet Dean House. It was impossible to perform that task the previous year, owing to an asbestos hazard. Supplementary excavations also took place about the Charles A. Arnold House in an unsuccessful attempt to gather additional data on two former outbuildings (Noble 1992, 2001).

Noble was at Lincoln Home NHS briefly in the spring of 1993 to monitor construction activities related to lifting the Harriet Dean House from its foundations for their replacement. A cistern was known to be present beneath one room (actually, an enclosed former porch) at the northwest corner of the structure. That abandoned feature was opened, observed to be empty of cultural materials, and documented with photographs and measured drawings. Other minor investigations also were performed under and around the structure at that same time (Noble 1993a).

Later in that spring of 1993, Noble returned with a field crew to expose the Henson Robinson herringbone walk first noted in 1991. At the time plans called for partial removal of this apparent late 19th-century feature in order to build a boardwalk from the house to the alley. After viewing the walkway in its entirety, however, park management decided to design around the brick walk. The team also excavated a test unit against the back porch, where a lift was to be installed for wheelchair access, and monitored the excavation of a short backhoe trench in the front yard for utility burial (Noble 1993b).

A third and final trip to Lincoln Home NHS in 1993 entailed the excavation of archeological test units in the back yards of the Julia Sprigg House and the Jesse Dubois House. The Sprigg House investigations sought evidence of a former outbuilding that appears on several early maps of the property. Excavations also focused on the back porch area, where paraprofessional monitoring in 1986 had observed two layers of brick paving (Noble 1993c, 2002). The Dubois House investigations confirmed the presence of an apparent privy in the back yard, but failed to find firm evidence of other former outbuildings associated with the house (Noble 1993c).

Remote-sensing survey data were collected from the vacant Corneau lot at the southwest corner of Eighth and Jackson in 1978, but the magnetometer detected no anomalies that could be interpreted as evidence of the structure that once stood there (Nickel 1978). MWAC Archeologist Forest Frost (1995, 1998) subsequently conducted a limited testing project on portions of the lot in 1995. Exploratory investigations designed to locate foundations or other evidence indicating the original Corneau House location assisted planners in their efforts to place the structure back on its original site, which was only partly successful. The Corneau House was moved to the rear of its lot in the late 19th century and then, earlier in this century, across Jackson Street to the former Carrigan lot, which lies immediately north of Lincoln's home.

Frost (1997) also conducted investigations in 1996 at the Charles Arnold House. His main purpose was to gather additional information on the size and configuration of an apparent barn, the partial remains of which originally indicated during Noble's (1991, 2001) excavations of 1991. Frost's secondary purpose was to examine areas exposed by demolition activities associated with the structure's relocation and restoration.

In addition to the investigations described above, several other minor monitoring projects have been undertaken at the park. Among those of greater scope and duration were projects prompted by the 1990 installation of a wheelchair lift behind the Lincoln House (Mansberger 1990), which was performed under contract, and by the 1991 repair of buried electrical lines at the Beedle House (Krupka 1991), which was monitored by one of the park paraprofessional archeologists.

It is worth noting that a series of historic plats, bird's-eye-view drawings, and Sanborn Insurance Company maps provides good coverage for the city of Springfield over a 100-year span

of time (1854–1952). Although depictions may not be drawn to great precision, and many features such as privies, wells, and cisterns, are not shown at all, the locations and changing configurations of major structures are documented for all lots in the subdivision. For all practical purposes, those combined sources form the equivalent of an archeological base map for the entire park area.

Clafin, John

1984 Archeological Monitoring of the New Electrical Facilities at the Lincoln Home National Historic Site. Letter report submitted to Chief, National Park Service, Midwest Archeological Center, Lincoln.

Dunham, Robert

1984 Pits No. 1 and 2. Notes on file, National Park Service, Midwest Archeological Center, Lincoln.

Frost, Forest

1995 Memorandum to Manager, Midwest Archeological Center, dated September 14. Subject: Trip Report, August 28 – September 2nd [*sic*], 1995, Lincoln Home National Historic Site. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1997 *Archeological Determination of the Configuration and Size of the Arnold Barn and Mitigation of Construction-Related Impacts*. Technical Report No. 55. National Park Service, Midwest Archeological Center, Lincoln.

1998 *Archeological Investigations of the Original Corneau House and Barn Location, Lincoln Home National Historic Site, Springfield, Illinois*. Technical Report No.58. National Park Service, Midwest Archeological Center, Lincoln.

Hagen, Richard S.

1951 Back-Yard Archaeology at Lincoln's Home. *Journal of the Illinois State Historical Society* 44(4):340–349.

1955 What a Pleasant Home Abe Lincoln Has. *Journal of the Illinois State Historical Society* 48(1):5–27.

Krupka, Francis O.

1991 Report of Emergency Electrical Repairs and Archeological Monitoring of Ground Disturbance at Beedle House (HS-12), Lincoln Home National Historic Site, Springfield, Illinois. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Mansberger, Floyd

1987 Archeological Investigations at the Lincoln National Historic Site. Report submitted to National Park Service, Midwest Archeological Center, Lincoln.

1990 Handicap Access Excavations, Lincoln Home National Historic Site. Letter report to Chief, Midwest Archeological Center, dated May 18, 1990. National Park Service, Midwest Archeological Center, Lincoln.

Nickel, Robert K.

1978 Memorandum to Chief, Midwest Archeological Center, dated June 12. Subject: Corneau House Magnetic Surveying, Lincoln Home. File Code H2215-LIHO. National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

- 1988 *Further Archeological Investigations at Lincoln Home National Historic Site, Springfield, Illinois: The 1987 Restoration Project*. Occasional Studies in Anthropology No. 22. National Park Service, Midwest Archeological Center, Lincoln.
- 1989a Memorandum to Chief, Midwest Archeological Center, dated August 23. Subject: Trip Report, June 26 – August 9, 1989. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1989b Preliminary Report on the 1989 Archeological Investigations at the Dean House, Lincoln Home National Historic Site, Springfield, Illinois. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- 1991 Memorandum to Chief, Midwest Archeological Center, dated September 6. Subject: Trip Report; July 8 – August 30, 1991. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1992 Memorandum to Chief, Midwest Archeological Center, dated August 4. Subject: Trip Report—Lincoln Home, July 13–31, 1992. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1993a Memorandum to Chief, Midwest Archeological Center, dated April 6. Subject: Trip Report, March 29 – April 3, 1993, Lincoln Home. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1993b Memorandum to Chief, Midwest Archeological Center, dated May 24. Subject: Trip Report, Lincoln Home, May 10–21, 1993. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1993c Memorandum to Chief, Midwest Archeological Center, dated August 4. Subject: Trip Report—Lincoln Home, July 13–30, 1993. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 2001 *Archeological Investigations Relating to Restoration of the Charles E. Arnold House, Lincoln Home National Historic Site, Sangamon County, Springfield, Illinois*. Technical Report No. 71. National Park Service, Midwest Archeological Center, Lincoln.
- 2002 *Results of Archeological Testing at the Julia Sprigg House, 1993–1993, Lincoln Home National Historic Site, Sangamon County, Springfield, Illinois*. Technical Report No. 74. National Park Service, Midwest Archeological Center, Lincoln.

Osborn, Alan J.

- 2001 *Archeological Overview and Assessment of Lincoln Home National Historic Site, Sangamon County, Springfield, Illinois*. Technical Report No. 72. National Park Service, Midwest Archeological Center, Lincoln.

Minuteman Missile National Historic Site

Minuteman Missile National Historic Site is located on the Interstate 90 travel corridor in western South Dakota. This Cold War commemoration was designated on December 2, 1999, and transferred from the Department of the Air Force to the National Park Service on October 11, 2002. Although the tangible resources protected at this site relate directly to the Minuteman Missile program, the site's story will include the larger issues of the Cold War era. The site consists of two separate components, Delta One and Delta Nine.

Delta One is a launch control facility that includes a barracks, garage, guard station, and an underground launch control capsule. Delta Nine is an underground missile silo meant to house a Minuteman II intercontinental ballistic missile. The site will be administered with Badlands National Park to conserve dollars and share human resources. The national historic site covers approximately 17.5 acres.

In 1996, Douglas Scott, Midwest Archeological Center, conducted the only archeological work done at the park. He mapped the surface features at Delta One and Delta Nine using a transit. Excellent maps of the site and features exist in USAF files, and copies are on file at Badlands National Park. However, there were numerous surface features and modifications that were not documented. The map was produced as an AutoCAD electronic map and forwarded to the park for use in the park planning process.

Mississippi National River and Recreation Area

Mississippi National River and Recreation Area has only 43 acres of national park land. The river corridor has a long and rich cultural heritage both in the prehistoric and historic eras. The park has program responsibility for assisting in the preservation of archeological and other cultural sites within the authorized boundary. The Native American occupation of the area spans some 12,000 years from the time of the first human occupation of North America until today. The archeological resources of the Mississippi Valley have been intensively studied for over 100 years and a great deal is known about the range, type, and diversity of cultures that once occupied the area (Forsberg 1998 [draft]; Schirmer 1998 [draft]).

Within the Mississippi National River and Recreation Area boundary are 143 properties that are listed on the National Register of Historic Places, most of which are historic buildings. At least 26 additional properties are eligible for—or considered eligible for—inclusion on the National Register. Again, these are historic buildings and properties. There are at least 111 archeological sites known in the area, but these are unevaluated for National Register eligibility status. There are undoubtedly thousands of archeological sites along the river that have not been identified and recorded or evaluated.

Finney, Fred A.

2000 *An Archaeological Overview and Assessment of the Mississippi National River and Recreation Area*. Contract Completion Report No. 21. Upper Midwest Archaeology, St. Paul, Minnesota.

Forsberg, Drew W.

1998 *Native American History of the Mississippi National River and Recreation Area*. Institute of Minnesota Archaeology Reports of Investigation Number 496. IMA Consulting, Minneapolis, Minnesota. Draft document.

Schirmer, Ronald

1998 *A Cultural Resource Inventory of the Mississippi National River and Recreation Area*. Institute of Minnesota Archaeology Reports of Investigation Number 492. IMA Consulting, Minneapolis, Minnesota. Draft document.

Missouri National Recreational River

Many archeological field projects have been conducted in the study area in the last decade, mostly in response to development activities such as reservoir construction, highway improvements, and utility facilities development (see references below). As a result of the larger reservoir projects and the 1978 Missouri National Recreational River designation, several overviews were written to summarize the extent of our knowledge of the archeological data for those areas.

The majority of the earlier projects were the result of research investigations by institutions such as the University of Nebraska and other universities, the Nebraska State Historical Society, and other similar grant-aided projects. Later on, during the 1940s and 1950s, the majority of the work in the area was driven by the Missouri River Basin Survey in relation to the extensive reservoir projects along the Missouri and Niobrara Rivers. Finally, beginning in the late 1960s and continuing to the present, the majority of archeological work in the area has been a result of compliance regulations relating to small projects such as city facilities improvements or utility lines.

The Missouri National Recreational River lies within an area that is defined as the Plains Culture Area and the Prairie Peninsula. A broad sequence of culture history has been defined for the area including Missouri National Recreational River that is divided into nine periods and/or cultural affiliations: Paleoindian, Archaic, Woodland, Great Oasis, Initial Middle Missouri, Central Plains Tradition, Coalescent Tradition, and Protohistoric. The riverway currently owns 33 acres in South Dakota and Nebraska near the Missouri River bridge on Highway 15. A decision is pending on acquisition on the 550-acre Goat Island. The island was evaluated for archeological resources (Thiessen 1999; Thiessen and Scott 1999) and none were located.

Adamczyk, Ted. J.

1975 *Archeological Inventory, Missouri River Reach Between Fort Benton, Montana, and Sioux City, Iowa*. Behavioral Systems Engineers, Peoria, Arizona. Submitted to the U.S. Army Corps of Engineers, Omaha District.

Angus, Carole, and Carl R. Falk

1978 *Cultural Resources Reconnaissance for Three Missouri River Bank Stabilization Projects in South Dakota and Nebraska: Sunshine Bottom, Goat Island, Ionia Bend*. Technical Report 78-13. Division of Archeological Research, Department of Anthropology, University of Nebraska, Lincoln.

Athern, R. G.

1967 *Forts of the Upper Missouri*. University of Nebraska Press, Lincoln.

Blakeslee, Donald. J., and John O'Shea

1983 *The Gorge of the Missouri: An Archeological Survey of the Lewis and Clark Lakes, Nebraska and South Dakota*. Archeology Laboratory, Wichita State University, Wichita, Kansas. Submitted to the U.S. Army Corps of Engineers, Omaha District.

Cooper, Paul. L.

1955 *The Archeological and Paleontological Salvage Program in the Missouri Basin, 1950-1951*. Smithsonian Miscellaneous Collections Volume 126, No. 2. Smithsonian Institution, Washington, D.C.

Hanenberger, Ned

1980 *The Springfield to Pickstown Survey, An Archeological Reconnaissance of the Missouri River Trench in Southeastern South Dakota*.

Jennings, Jesse. D., and Gordon C. Baldwin

1948 *An Atlas of Archeological Sites within the Reservoirs Located in the Missouri River Basin*. In Smithsonian Institution, Missouri Basin Project, Atlas.

- Lawson, Michael. L.
1982 *Damned Indians: The Pick-Sloan Plan and the Missouri River Indians, 1944–1980*. University of Oklahoma Press, Norman, Oklahoma.
- Lehmer, Donald. J.
1965 *Salvage Archeology in the Middle Missouri: A Summary and Evaluation*. Submitted to the National Park Service, Midwest Region, Omaha, Nebraska.
1971 *Introduction to Middle Missouri Archeology*. Anthropological Papers 1. National Park Service, Department of the Interior, Washington, D.C.
- Ludwickson, John, Donald Blakeslee, and John O’Shea
1981 *Missouri National Recreational River: Native American Cultural Resources*. Nebraska State Historical Society, Wichita State University, University of Iowa. Submitted to the Heritage Conservation and Recreation Service, Interagency Archeological Services, Denver, Colorado.
- Mattes, Merrill. J.
1954 *Historic Sites Archeology on the Upper Missouri*. Missouri River Basin Survey, Division of Interpretation, Region Two Office, National Park Service, Omaha, Nebraska
- Putz, Paul M.
1982 *Report on Riverboat Remains: Wreckage Downstream from the Community of Yankton*. South Dakota Historical Preservation Center, Vermillion.
- Thiessen, Thomas D.
1999 Trip Report: Visit to Goat Island, April 5–7, 1999. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
1999 *Emergency Archeology in the Missouri River Basin: The Role of the Missouri Basin Project and the Midwest Archeological Center in the Interagency Archeological Salvage Program, 1946–1975*. Special Report No. 2. National Park Service, Midwest Archeological Center, Lincoln.
- Thiessen, Thomas A., and Douglas D. Scott
1999 Trip Report: Visit to Goat Island, April 26–28, 1999. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.
- Wood, W. Raymond.
1974 *Observations on the Archeological Resources of the Missouri Valley Trench Between Yankton, South Dakota and Bismarck, North Dakota*. University of Missouri, Columbia, Missouri. Submitted to Ultrasystems, Inc., Phoenix, Arizona.
- Zimmerman, Larry. J.
1985 *Peoples of Prehistoric South Dakota*. University of Nebraska Press, Lincoln.

Mount Rushmore National Memorial

During the past two decades, the Black Hills area has received considerable archeological attention, primarily as a result of cultural resource management laws. Very little archeological work has been undertaken in Mount Rushmore National Memorial to date, however. Only three small-scale investigations have been undertaken in or immediately adjacent to the memorial since its inception in 1938 (Anderson 1974; Hunt 1989; Stiger 1977a, 1977b). This has established a situation where the general cultural history of the region has become fairly well known but nearly nothing is specifically known about the memorial's archeological resources.

Mount Rushmore lies within the Plains Culture Area, which has been defined by archeologists on the basis of the character of material remains found in regional prehistoric sites. Documentation of changes in the material culture in association with materials that can be dated using absolute dating techniques (e.g., radiocarbon) has allowed archeologists to assign a general time frame to variations in material culture. The regional culture history incorporates a long-term sequence of prehistoric manifestations (Buechler 1984; Cassells 1986) starting with the Paleoindian Period (11,500–8000 BP) and ending with the Protohistoric (post AD 1700). Jeff Buechler (1984:30) cites Adrienne B. Anderson (1974) as identifying a Protohistoric Period rockshelter in the memorial. A review of her report, however, indicates that the site is of modern origin and no prehistoric resources have been identified in the memorial to date.

Historically, a number of tribal groups are known to have occupied or utilized the Black Hills area. These include the Kiowa, Blackfoot, Crow, Cheyenne, Sioux, and Arapaho. The Black Hills were and are of special importance and considered sacred by many if not all of these groups with the Sioux being the most prominent and the last tribe to occupy the area. The sacred quality of the area for Native Americans is not readily apparent through archeological resources. Furthermore, despite the historical usage of the area for gathering lodge poles and for hunting, few historic sites have been identified in the Black Hills relating to these activities and none of these occur in or near the memorial itself.

Euroamericans entered the area in the mid-1800s, individuals and parties engaged in trapping, hunting, mining, exploration. Initial use by trappers was sporadic. More continuous occupations did not occur until after gold had been discovered in the Black Hills. Once the Black Hills Agreement of 1876 had been concluded with the Sioux, a rush for gold followed with all the developments associated with it. Hard rock mining was the primary economic venture in the region and this drove supporting industries such as transportation, lumbering, and food production. A few cultural features and sites related to these industries were identified in the memorial by Anderson (1974:21) during her 1973 survey. None were officially recorded as archeological resources at the time, however. Mining was represented by an abandoned mica quarry between the highway and the residential area. Twentieth-century lumbering appears to have been well represented in the memorial. Anderson noted four small dumps, old trace-ways, and piles of logs in level areas that apparently represent the remains of timbering actions on the part of Gutzon Borglum's work at the memorial.

Stiger's 1977 survey recorded one unexpected historic resource in the memorial representing another 20th-century commercial activity for which little information is readily available (Stiger 1977a, 1977b). His survey of a proposed water system right-of-way resulted in the identification of a historic wooden structure just outside the project area. This structure reportedly housed an illicit distillery operated during Prohibition.

The preponderance of cultural resources in the park are associated with the creation of the memorial and thus the commerce of tourism. Few archeological resources have been identified in association with this activity. The evidence for lumbering associated with Borglum's creation of the monumental figures on Mount Rushmore has already been mentioned. The only other resources identified in the memorial associated with tourism were two caches of plaster, one of

which contained several small plaster busts of George Washington. Borglum made such objects for sale to tourists as a means of raising money for his work (Hunt 1989).

Two additional historic sites were recorded by Anderson during her 1973 parkwide inventory (Anderson 1974). Both were relatively recent shelters (1974:20–21). One (39PN57), just outside the northern edge of the northeast memorial boundary arm was a temporary shelter of pine and poplar logs laid across two granite boulders to form a roof. No cultural material was associated with the shelter but Anderson suggested that it was no more than twenty years old based on the condition of the logs. The other (39PN58) is a rock shelter used by NPS staff as a lookout during the 1972–1973 American Indian Movement disturbances at Mount Rushmore. All cultural materials identified within the shelter were of modern derivation.

Next to nothing is known about the prehistoric and historic resources in the park. The three projects conducted in the park indicate there are archeological resources present, but their nature, type, and extent are wholly undocumented. The park lands should be inventoried.

Anderson, Adrienne B.

1974 Archeological Assessment, Mount Rushmore National Memorial 1973. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Buechler, Jeff

1984 Management Plan for Archaeological Resources in South Dakota. Part I: Study Units. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Cassells, E. Steve

1986 *Prehistoric Hunters of the Black Hills*. Johnson Books, Boulder, Colorado.

Hunt, William J. Jr.

1989 Inspect two plaster dumps near the original Borglum studio, Mount Rushmore National Memorial. Trip Report, August 8, 1989. Memorandum, U.S. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas

1996 Mount Rushmore talus slope inventory. Trip Report, August 7, 1996. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Stiger, Mark

1977a Memorandum to the Chief, Midwest Archeological Center, dated June 3. Subject: Archeological investigations along a proposed water system right-of-way. National Park Service, Midwest Archeological Center, Lincoln.

1977b Memorandum to the Chief, Midwest Archeological Center, dated June 3. An additional site from Mount Rushmore National Memorial. National Park Service, Midwest Archeological Center, Lincoln.

Nicodemus National Historic Site

Nicodemus was founded in 1871 as an African-American town and farming community at the end of the post-Civil War reconstruction era. The town has retained its African-American character since that date (Bahr Vermeer & Haecker 2001; National Park Service 1986; Painter 1976; Schwendemann 1968). The enabling legislation for Nicodemus National Historic Site authorizes the National Park Service to preserve, protect, and interpret the only remaining western town established by African Americans during the Reconstruction Period following the Civil War. The town of Nicodemus is symbolic of the pioneer spirit of African Americans who dared to leave the only region they had been familiar with to seek personal freedom and the opportunity to develop their talents and capabilities. Rather than acquiring the entire town, the legislation directs the National Park Service to cooperate with the people of Nicodemus to preserve its five remaining historic structures—the First Baptist Church, the African Methodist Episcopal (AME) Church, the St. Francis Hotel, the School, and Nicodemus Township Hall—and keep alive the memory of the many roles African Americans played throughout the American West (National Park Service 2000). In other words, and although the National Register District is 160 acres, no lands in the park area were to be owned by the NPS. This changed on December 21, 1998, when the AME Church was donated to the NPS. This remains the only property in the park directly managed by the NPS.

There have been no formal archeological inventories within Nicodemus and the lack of NPS ownership of properties in the park impedes this to some degree. Only two very small subsurface test projects have been undertaken at Nicodemus, both of which were related to NPS stabilization of the AME Church (Hunt 1996, 2000). This work revealed no archeological resources inside the church or immediately next to its foundations. There appear to be cultural depressions in the churchyard, however, that may be related to privies, wells, or other features. Despite the general lack of archeological research in the park, the rural nature of the occupation and the lack of modern development, as well as, field observation indicate there are substantial archeological components present related to the historic African-American occupation of the townsite. These include dugouts relating to the late 1870s establishment of the town, structural remains associated with the commercial center of the town, later frame residences, churches and schools, and outbuildings associated with all town structures.

Bahr Vermeer & Haecker, Architects

2001 *Nicodemus National Historic Site, Graham County, Kansas, Cultural Landscape Report* (95% draft submission). Report prepared by Bahr Vermeer & Haecker, Architects, Lincoln, Nebraska, for U.S. Department of the Interior, National Park Service, Midwest Regional Office, Omaha, Nebraska.

Hunt, William J., Jr.

1996 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated December 5. Subject: Archeological investigations at Nicodemus National Historic Site. National Park Service, Midwest Archeological Center, Lincoln.

2000 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated June 19. Subject: Trip Report: Test excavations at the AME Church, Nicodemus National Historic Site (NICO). National Park Service, Midwest Archeological Center, Lincoln.

National Park Service

1986 *Promised Land on the Solomon: Black Settlement at Nicodemus, Kansas*. U.S. Government Printing Office, Washington, D.C.

2000 "Nicodemus National Historic Site." Historic narrative accessed October 8, 2002, at <<http://www.nps.gov/nico/home.html>>. Site last updated on March 14, 2000.

Painter, Nell Irvin

1976 *Exodusters: Black Migration to Kansas after Reconstruction*. W. W. Norton & Company, New York.

Schwendemann, Glen

1968 "Nicodemus: Negro Haven on the Solomon." *The Kansas Historical Quarterly*, Spring, pp. 10–31.

Niobrara National Scenic Riverway

Many archeological field projects have been conducted in the study area, mostly in response to development activities such as a reservoir construction, highway improvements, and utility facilities; see references below. As a result of the larger reservoir projects, several overviews were written to summarize the extent of our knowledge of the archeological data for those areas.

A number of archeological projects have taken place within the study area over the last decade. The majority of the earlier projects were the result of research investigations by institutions such as the University of Nebraska or other universities, the Nebraska State Historical society, or other similar grant-added projects. Later on during the 1940s and 1950s the majority of the work in the area was driven by the Missouri River Basin Survey in relation to the extensive reservoir projects along the Missouri and Niobrara Rivers.

Early “systematic” archeological survey within the Niobrara River Basin was conducted by Richard P. Wheeler for the Missouri River Basin Survey, Smithsonian Institution, in 1950. The survey was carried out within 10 proposed reservoir areas within the western, central, and eastern portions of the basin. These reservoirs included the Colwell Reservoir (Dawes County); Eli, Kilgore, Merritt, Crookston, and Thatcher Reservoirs (Cherry County); Meadville Reservoir (Keya Paha/Brown counties); Long Pine Reservoir (Brown and Rock Counties); and Ponca Creek Reservoir on Ponca Creek (Holt County). Other archeological investigations that had been initiated within the Niobrara River Basin prior to this River Basin Survey include surveys by Shippee and Slattery in the Colwell Reservoir area in 1945 (Wheeler 1951:6) and a survey of 25RO1 on Long Pine Creek by D. Gunnerson, J. Gunnerson, A. Woolworth, and A. Wolfe in 1949. Niobrara National Scenic Riverway as yet has no NPS-owned lands.

Carlson, Gayle F.

1976 *Prehistoric and Early Historic Sites in North Central Nebraska. North Central Nebraska Resources, Conservation and Development*. Submitted to the U.S. Department of Agriculture.

Falk, Carl R, Alan J. Osborn, Robert E. Pepperl, and M. R. Voorhies

1980 *Cultural and Paleontological Investigations within the Proposed Norden Reservoir Area, Nebraska: An Interim Report*. Technical Report No. 80-05. Division of Archeological Research, Department of Anthropology, University of Nebraska, Lincoln.

Falk, Carl R, Robert E. Pepperl, and M. R. Voorhies.

1985 *Cultural and Paleontological Investigations within the Proposed Norden Unit, Nebraska: Final Report*. Technical Report 83-02. Division of Archeological Research, Department of Anthropology, University of Nebraska, Lincoln.

Franklin, Rachel, Michael Grant, and Martha Hunt

1994 *Historical Overview and Inventory of the Niobrara/Missouri National Scenic Riverways, Nebraska/South Dakota*. Division of Cultural Resources Management, Office of Planning and Resource Preservation, Midwest Regional Office, National Park Service, Omaha, Nebraska.

Hartley, Ralph J., and John Stephen Smith

1983 *Ethnohistorical and Historical Background Studies Norden Reservoir Area Nebraska*. Technical Report No. 82-07. Division of Archeological Research, Department of Anthropology, University of Nebraska, Lincoln.

Pepperl, Robert

1983 *Comprehensive Evaluation of the Cultural Resources Inventory and Preservation Planning Needs of the Niobrara River Basin, Nebraska*. Department of Anthropology, University of Nebraska, Lincoln. Submitted to the Nebraska State Historical Society, Lincoln.

Pepperl, R. E., and C. R. Falk

1983 *Native American Archeological Resources of the Central Niobrara River Valley: The Norden Study, North Central Nebraska*. Technical Report No. 82-10. Division of Archeological Research, Department of Anthropology, University of Nebraska, Lincoln.

Ritter, Beth R., Robert K. Hitchcock, Michelle L. Watson, Michele Voeltz, Rebecca Hautzinger, Judith Campbell Miller, Michele Moray, Leonard R. Bruguier, and Gloria Rail

1995 *A Cultural Anthropological Overview of the Niobrara/Missouri National Scenic Riverways*. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Vawser, Anne M. Wolley, and Alan J. Osborn

1994 *Archeological Overview and Assessment, Niobrara/Missouri National Scenic Riverways, Nebraska and South Dakota*. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Wheeler, Richard P., and G. Hubert Smith

1953 *The Prehistory and Early History of the Niobrara River Basin*. Missouri River Basin Project, Niobrara River Basin, Development Plan. Bureau of Reclamation, Region 7, Denver, Colorado.

Wheeler, Richard P., and T. E. White

1951 *Appraisal of the Archeological and Paleontological Resources of the Niobrara River Basin, Nebraska*. Missouri River Basin Survey, Smithsonian Institution.

Wood, W. Raymond

1998 *Archaeology on the Great Plains*. University of Nebraska Press, Lincoln.

Ozark National Scenic Riverways

In 1980, very little was known about the archeological resources in this area. Surveys of minor developments (Lynott 1981) and of small construction projects (Lynott 1979) provided documentation that prehistoric sites were numerous and often well preserved. Subsequently, knowledge about the archeological resources in this park has increased greatly through a five-year program of survey and site testing (Price, Price, and Saucier 1985, 1987), and through numerous development-driven research projects (e.g., Lynott 1989a; 1989b; Price 1996; Price et al. 1999) and through other research projects (Price and Hastings 1999).

The earliest evidence for prehistoric occupation in the park is associated with the Paleoindian stage. Fluted points have been recorded at several sites, and a Clovis point fragment was excavated at the Two Rivers site (Klinger et al. 1989). Later Paleoindian and Dalton points have been found throughout the Current River drainage. Excavations around Alley Mill yielded evidence of a buried Dalton camp associated with Alley Spring (Lynott and Price 1989). Dalton occupations have also been recorded from buried contexts at Akers Ferry (Lynott 1989b) and in ongoing excavations along Peavine Road (Price 1990). The Dalton culture seems to represent the first substantial and permanent human occupation of the Current River drainage.

The abundance of Archaic-stage projectile points indicates that populations continued to grow throughout this stage. Until recently, few intact Archaic-stage sites had been excavated in the park. Excavations at the Two Rivers site (Klinger et al. 1989) and the Chubb Hollow site (De Vore 1986) provided evidence for Late Archaic occupations, but little had been reported on the Middle and Early Archaic. Ongoing research along Peavine Road (Price 1990; Price et al. 1999), combined with testing data from the Akers Ferry site (Lynott 1989b), now better documents this aspect of the archeological record. Contrary to early models of prehistoric lifeways in the eastern Ozarks, the evidence for Archaic occupation in the Current River valley indicates significant changes in population densities and settlement patterns.

The transition from Late Archaic to Woodland is poorly understood in this area. Ceramics associated with the Meramec Springs and Barnes complexes are present in the park, but the beginning date for ceramic technology in this area is poorly understood. Elsewhere in Missouri, these Woodland ceramics seem to appear by about 300 BC, but they have not been dated earlier than AD 600 in the park. It is significant that at least three different Woodland ceramic technologies are reported in the area, and current evidence indicates that all three were present about 600 AD. Many of the Woodland sites in the park were previously occupied, indicating a continuity of settlement patterns. Unlike other parts of eastern North America, there is little evidence of mound building associated with the Woodland stage in the Ozarks. However, rock cairns containing burials on ridges overlooking major drainages are fairly common. It appears that gardening, particularly using native plants, started during the Woodland stage. Woodland-stage occupations are reported at Akers Ferry (Lynott 1989b), Round Spring (Lynott 1991), and near Alley Spring (Born and Chapman 1972).

About AD 600, shell-tempered ceramics appeared in the eastern Ozarks (Price and Price 1981). These represent the Emergent Mississippian substage. Emergent Mississippian sites are quite common in the park and seem to reflect a substantial population density. On the basis of ceramic styles, at least two different Emergent Mississippian groups were present. The Goose-neck site (Lynott 1980, 1989a) has been used to define the Naylor phase, while the Owls Bend site has served to define the Owls Bend phase (Lynott 1989a). Both sites were occupied by AD 800 and possibly one hundred years earlier. Subsistence was based upon hunting and gathering and the cultivation of native plants. Maize is present in small quantities at these sites, but stable-carbon isotope analysis of human bones from this period indicates that the residents were not eating very much corn (Lynott et al. 1986). The Emergent Mississippian substage represents the beginning of a transition to settled agricultural villages, which was complete throughout much of the southeastern United States by AD 1300. This transition never occurred in the Eastern Ozarks.

Archeological evidence indicates that the upper Current River drainage was abandoned about this time, which corresponds to a substantial population increase in the neighboring Mississippi River valley.

At the same time that the upper Current River valley was being abandoned, population was increasing in the Mississippi River valley in southeast Missouri and northeast Arkansas. The first Europeans to see this area with the DeSoto expedition found the Native Americans living in large fortified villages in the Mississippi River valley.

European settlement of the Eastern Ozarks started along the Mississippi River in places like St. Genevieve, Missouri. The first permanent settlers selected areas of the Current River valley where large alluvial terraces were present, such as the Kelley Tract south of Big Spring (Price 1981). In the more rugged areas, trappers and hunters built cabins and small farms. Other developments like roads, mills, stores, courthouses, and jails gradually appeared. The outbreak of the Civil War put an abrupt halt to these developments, and much of the region was significantly depopulated by the violence and civil unrest associated with the war.

In the second half of the 19th century, settlers slowly returned to the region. Late in the 19th century, the presence of abundant pine and hardwood trees fueled a lumber boom that brought temporary prosperity to the area. The timber boom brought railroads and jobs to the area. Unfortunately, the timber industry abandoned the area when the trees were cut, leaving the landscape severely scarred.

Archeological survey in Ozark National Scenic Riverways has focused on existing developments and areas used as wildlife foodplots (Lynott 1981; Price and Price 1981). A cave survey also documented archeological resources in caves throughout the park (Price and Hastings 1999). Less than one percent of the park area has been surveyed, but more than 430 archeological sites have been recorded. The area is rich with archeological resources that reflect on more than 12,000 years of human history.

Born, Phillip L., and Carl H. Chapman

1972 Reconnaissance, Testing, and Evaluation of Archaeological Resources in the Alley Spring Portion of the Ozark Scenic Riverways National Park. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

De Vore, Steven LeRoy

1986 Archeological Investigations Associated with the Federal Land Highway Program Ozark National Scenic Riverways, 1985. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Klinger, Timothy C., Richard P. Kandare, James E. Price, and Roger T. Saucier

1989 Two Rivers II: Archeological Excavations at Two Rivers (23SH101) Ozark National Scenic Riverways, Shannon County, Missouri. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Lynott, Mark J.

1979 Memorandum to Regional Director, Midwest Region, dated May 15. Subject: Archeological Investigations at Ozark National Scenic Riverways. National Park Service, Midwest Archeological Center, Lincoln.

1980 A Preliminary Report of Investigations at Gooseneck Site, Carter County, Missouri. Paper presented at the 45th Annual Meeting of the Society for American Archaeology, Philadelphia. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1981 Archeological Survey of Development Areas, Ozark National Scenic Riverways. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Lynott, Mark J., continued

1989a *An Archeological Evaluation of the Gooseneck and Owls Bend Sites, Ozark National Scenic Riverways, Southeast Missouri*. Occasional Studies in Anthropology No. 23. Midwest Archeological Center, National Park Service, Lincoln.

1989b Archeological Investigations at the Akers Ferry Site, 23SH23, Ozark National Scenic Riverways, Southeast Missouri. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1991 *Round Spring Archeology, Ozark National Scenic Riverways, Southeast Missouri*. Technical Report No. 2. National Park Service, Midwest Archeological Center, Lincoln.

Lynott, Mark J., Thomas W. Boutten, James E. Price, and Dwight E. Nelson

1986 Stable Carbon Isotope Evidence for Maize Agriculture in Southeast Missouri and Northeast Arkansas. *American Antiquity* 51(1):51–65.

Lynott, Mark J., and James E. Price.

1989 Shawnee Creek, An Eleventh Century, Emergent Mississippian Occupation in the Upper Current River Valley, Southeast Missouri. Manuscript on file, National Park Service, Midwest Archeological Center, Lincoln.

Price, Cynthia R.

1981 Report of Initial Investigations at the Isaac Kelley Site, 23CT111, in the Ozark National Scenic Riverways, Carter County, Missouri: 1980–1981. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1990 Testing of prehistoric archaeological sites, 23CT351 and 23CT354, Peavine Road, Big Springs area, Ozark National Scenic Riverways. Letter report to Dr. Mark Lynott, Supervisory Archeologist, dated April 9. National Park Service, Midwest Archeological Center, Lincoln.

Price, James E.

1996 *Investigations at Two Archeological Sites Near Akers Ferry, Ozark National Scenic Riverways, Shannon County, Missouri*. Technical Report No. 37. National Park Service, Midwest Archeological Center, Lincoln.

Price, James E., and Cynthia R. Price

1981 Changing Settlement Systems in the Fourche Creek Watershed in the Ozark Border Region of Southeast Missouri and Northeast Arkansas. 3 volumes. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Price, James E., Cynthia R. Price, and Roger Saucier

1985 Archeological Investigations in the Ozark National Scenic Riverways, 1983–1984. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1986 Archeological Investigations in the Ozark National Scenic Riverways, 1984–1986. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Price, James E., and Mary Jane Hastings

1999 *An Archeological Survey of Caves and Rockshelters in Ozark National Scenic Riverways, Carter, Shannon, and Dent Counties, Missouri*. Prepared by the American Archaeology Division, Department of Anthropology, University of Missouri, Columbia. Submitted to National Park Service, Midwest Archeological Center, Lincoln, pursuant to Cooperative Agreement No. 6115-4-8015.

Price, James E., Mary Jane Hastings, and Roger Saucier

1996 Prehistory Under the Peavine Road Pavement, Archeological Excavation at 23CT351, Ozark National Scenic Riverways, Carter County, Missouri.

Pea Ridge National Military Park

Pea Ridge's significance lies with its tie to the American Civil War. The Battle of Pea Ridge in March 1862 resulted in a Union victory over Confederate forces that secured northwestern Arkansas and the state of Missouri for the United States for the remainder of the war. The Pea Ridge area has a long land-use history. The Euroamerican occupation dates to the early 19th century, with typical site types of small farms and hamlets scattered over the countryside. The prehistory of the area is not well known, and comparatively little research has been undertaken in this area of Arkansas. The prehistory of Pea Ridge must rely on extrapolation of sequences of occupation known for northwest Arkansas and eastern Oklahoma.

Three prehistoric sites in the park have been formally recorded but not formally investigated. They appear to be temporary occupation sites of undetermined origin. However, they may be related to Early to Late Archaic and Woodland to Mississippian occupations (Coleman 1988).

There have been only limited archeological investigations of the park's historic components. Wilson (1965) conducted preliminary testing at several sites including the historic tanyard, Leetown, the Elkhorn Tavern, and the purported Union mass grave site. The tanyard location was positively identified, but the work at Leetown and the Elkhorn Tavern was not as successful. A portion of the Leetown Cemetery was identified, but relatively little of the hamlet or features related to the Elkhorn Tavern were located. The mass grave feature was discovered to be a modern intrusive pit.

Coleman (1988) conducted a small inventory for a trail corridor in the vicinity of the Elkhorn Tavern. He located two prehistoric sites, which appeared to be highly disturbed, and were recommended as not eligible to the National Register of Historic Places. He also found six historic-period artifacts. He did not believe these to be from the Civil War era, nor could they be definitively associated with the occupation of the Elkhorn Tavern.

In 2000 a parkwide inventory program began under the Systemwide Archeological Inventory Program. The first year of the project resulted in the development of a research design for systematically metal detecting the battlefield and recording battle-related artifacts and features. The research design also called for a parkwide inventory of prehistoric and historic archeological materials using a quadrat-based sampling procedure. This portion of the parkwide inventory is being done under cooperative agreement with the Department of Anthropology, University of Arkansas, Fayetteville.

The first year's field inventory began in 2001 and a second year's work in 2002. The metal detecting effort concentrated on the Elkhorn Tavern area and the Clemon's Field area in 2001 and the area of the Lee Town battlefield in 2002. Nearly 2,000 battle-related artifacts were discovered. Dr. Marvin Kay, the cooperator at the University of Arkansas, completed nearly 300 of the identified sample units and has identified several previously unknown prehistoric sites and re-documented several historic sites and features. The project is scheduled to be completed in Fiscal Year 2004.

Coleman, Roger E.

1988 Archeological Investigations of a Proposed Trail Corridor from the Tour Road to Two Stone Monuments, Pea Ridge National Military Park, Benton County, Arkansas. Manuscript, National Park Service, Southwest Regional Office, Santa Fe.

Wilson, Rex L.

1965 Archeological Investigations in Pea Ridge National Military Park. Manuscript, National Park Service, Southeast Region, Richmond.

Perry's Victory and International Peace Memorial

The first archeological investigation of Perry's Victory and International Peace Memorial occurred in May 1992 (Richner 1992). Supervisory Archeologist Jeffrey Richner and Archeological Technician Tim Meade conducted a preconstruction shovel test survey of the new housing and maintenance building area on the eastern edge of the park, covering just under 0.5 hectares. Shovel testing in this area produced only two pieces of chert debitage and no other cultural material. The entire project area was heavily disturbed; sources of disturbance included a gravel road and utility corridor, previous vineyard cultivation, and massive fills placed near the seawalls and below the 576-ft contour south and west of the project area. During a cursory visual examination of the remaining grounds at Perry's Victory, Richner and Meade identified a house depression 100 ft west of the northern edge of the housing and maintenance project area. This depression matches the location of a house depicted in photographs dating to the construction of the memorial column.

In May 1993, Midwest Archeological Center Archeologist Rose Pennington, accompanied by Supervisory Archeologist Jeffrey Richner and Archeological Technician Todd Ahlman, conducted a parkwide survey (Pennington 1993). Approximately 5.6 hectares were shovel tested, the remainder of the park's 10.15 hectares being deemed unsurveyable due to development or the presence of deep fill. Artifacts were sparse and largely late historic. No prehistoric material was observed. The possible presence of buried early 20th-century trash middens is suggested in the west end of the park. In addition to the shovel testing, a 2-x-0.5-m test unit was excavated to examine the house depression. This uncovered a thickly mortared dolomitic-limestone foundation associated with sparse early 20th-century artifacts. This foundation appears to be associated with the late-19th-century Mary Lockwood House, which is depicted in several early-20th-century photographs. An Ohio Site Inventory form was completed for this feature.

It is unlikely that many archeological resources remain to be discovered within the park, as much of the memorial lies on former swampland, which was extensively filled during the development of the park. The major portion of the remainder of the park has been heavily graded and developed.

Pennington, Rose E.

1993 Parkwide archeological survey of Perry's Victory and International Peace Memorial. Memorandum dated May 11. National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J.

1992 Archeological survey of proposed housing and maintenance building development area, Perry's Victory and International Peace Memorial. Memorandum dated May 22, National Park Service, Midwest Archeological Center, Lincoln.

Pictured Rocks National Lakeshore

Pictured Rocks National Lakeshore lies along 42 miles of the south shore of Lake Superior in Michigan's Upper Peninsula. It consists of striking cliffs, sandy shorelines with relic beach ridges, and a large area of sand plains supporting pine forest.

The earliest evidence of human occupation in the Upper Peninsula of Michigan dates to about 6000–5000 BC, although dates of 9000 BC have been offered for sites on the north shore of Lake Superior. While not yet identified within the boundaries of the lakeshore, there is a well-documented complex of sites near Marquette, Michigan, that are attributable to the Plano complex, which bridges the late Paleoindian and early Archaic stages (Buckmaster and Paquette 1988; Clark 1989). Sites attributable to the Late Archaic substage (ca. 3500–200 BC) have been identified at Miner's Beach (Clark 1993) and just outside the lakeshore on Grand Island (Benchley et al. 1988). Other Archaic-aged sites probably exist on relic beach ridges at Hurricane Beach and other similar localities. Like the Archaic, most of what can be said concerning the Woodland stage (ca. 200 BC–AD 1650) comes from sites outside the lakeshore. That Native Americans used the area is certain, but their sites remain either undiscovered or insufficiently documented. There is a wealth of historical data that describes the traditional use of the lakeshore by Ojibwa groups during periods of French, British, and American fur trade. Euroamerican sites include logging camps and railroads, lighthouses, and small dispersed hunting cabins.

The Upper Peninsula of Michigan has seen sporadic archeological research over the past three decades. According to the Michigan Comprehensive Historic Preservation Plan (Bureau of History 1990) the eastern Upper Peninsula, including the lakeshore, has been covered only by "windshield reconnaissance" amounting to less than five percent non-intensive coverage. A survey of the Lake Superior shoreline was conducted by the University of Michigan Museum of Anthropology (Bigony 1968) with negligible results.

Most systematic archeological survey work in the area has been conducted on Federal lands. In 1968, a survey of Pictured Rocks National Lakeshore failed to identify the presence of a single site (Briggs 1968) although a prehistoric site at Miner's Beach had been found by Fitting the previous year. Fortunately however, large tracts of the Hiawatha and Ottawa National Forests outside the lakeshore have provided important data regarding the cultural use of the interior portions of the Upper Peninsula (Franzen 1987; Gilbert/Commonwealth 1987, 1988; Lovis 1979; Martin and Martin 1979). Additionally, a great deal of recent research has been conducted on USFS lands on Grand Island, in Munising Bay at the western end of the lakeshore. The USFS investigations have enabled archeologists to predict the potential of certain types of topographical features for containing cultural sites. In general, prehistoric sites are most frequently found associated with riparian or other wetland features in interior settings. Historic logging features, on the other hand, are almost ubiquitous and may be associated with the multiple episodes of logging history in the region. Although widespread, these logging remains are usually ephemeral as a consequence of the short duration of the operations.

Within the lakeshore, major National Park Service research efforts have been undertaken at Old Munising, a 19th-century iron smelting industry and town (Richner 1992) and at Au Sable Light Station (Jones 1993). A multi-year survey which focused on developed areas within the lakeshore was later conducted by the Midwest Archeological Center with more substantial results, including several prehistoric sites as well as sites dating to historic mining, logging, and resort/recreational operations (Jones 1993). A survey of proposed road corridors around the Beaver Basin and some limited testing of prehistoric sites was accomplished in 1992 (Clark 1993). Prehistoric sites are now known near Hurricane Beach, at Miners Beach, on inland lakes in the Beaver Basin, and on the shoreline west of the mouth of Beaver Creek. However, evidence of the lengthy prehistoric occupation and use of the lakeshore is still greatly under-represented, due in part to the difficulty of identifying ephemeral sites in heavy biomass and surface duff, and to the resultant necessity of employing shovel-testing as an inventory methodology.

Pictured Rocks is a National Park Service unit in which known and potential archeological resources must be identified and interpreted within the context of data from USFS and state-owned lands outside the unit's boundaries. While sites have certainly been recorded within the lakeshore's boundaries, the level of available information on their content and significance relative to National Register nomination is poor overall. The considerable amount of research done on relict lake strands has not been utilized to its full capacity to locate Archaic-aged sites within the lakeshore. Geomorphological or geoarcheological studies in the lakeshore will greatly assist in dating both the active and relict beach lines, thereby refining the field strategy for any subsequent archeological inventory.

Benchley, E. D., D. Marcucci, C. Yuen, and K. Griffin

1988 *Final Report of Archaeological Investigations and Data Recovery at the Trout Point 1 Site, Alger County, Michigan*. Report of Investigations No. 89. Archaeological Research Laboratory, University of Wisconsin, Milwaukee.

Bigony, Beatrice

1968 *Archaeological Survey of the Southern Shore of Lake Superior*. Manuscript, Museum of Anthropology, University of Michigan, Ann Arbor.

Briggs, J. P.

1968 *An Archaeological Survey of Pictured Rocks National Lakeshore*. Manuscript, Midwest Archeological Center, Lincoln.

Buckmaster, M., and J. Paquette

1988 *The Gorto site: Preliminary Report on a Late Paleo-Indian Site in Marquette County, Michigan*. *The Wisconsin Archaeologist* 65(2):159–168.

Bureau of History

1990 *Michigan Comprehensive Historic Preservation Plan (1990)*. Bureau of History, Michigan Department of State, Lansing.

Clark, Caven P.

1989 *Plano Tradition Lithics from the Upper Peninsula of Michigan*. *The Michigan Archaeologist* 35(2):88–112.

1993 *Archeological Survey and Testing at Pictured Rocks National Lakeshore, Alger County, Michigan*. Technical Report No. 23. National Park Service, Midwest Archeological Center, Lincoln.

Franzen, John G.

1986 *Prehistoric Settlement on the Hiawatha National Forest, Michigan: A Preliminary Location Model*. Cultural Resource Management Report No. 4. Hiawatha National Forest, Escanaba.

1987 *Test Excavation and Locational Analysis of Prehistoric Sites in the Hiawatha National Forest, Michigan*. Cultural Resource Management Report No. 5. Hiawatha National Forest, Escanaba.

Gilbert/Commonwealth, Inc.

1987 *1986 Cultural Resource Survey, Hiawatha National Forest*. Submitted to the USDA, Forest Service, Milwaukee, Contract No. 53-53B0-5-01018.

1988 *1987 Cultural Resource Survey, Ottawa National Forest*. Submitted to the USDA, Forest Service, Ironwood, Contract No. 53-54A7-7-00100.

Jones, Bruce

1993 *Archeological Inventory and Evaluative Testing in Pictured Rocks National Lakeshore, Michigan*. Occasional Studies in Anthropology No. 30. National Park Service, Midwest Archeological Center, Lincoln.

Lovis, William A.

1979 *A Cultural Resource Management Study of the Hiawatha National Forest, Michigan: Phase II, the Hypothesis Tests*. Michigan State University Museum Archaeological Survey Reports No. 36.

Martin, Patrick E., and Susan R. Martin

1979 *Cultural Resource Overview of the Ottawa National Forest*. Cultural Resource Management Report No. 2. Michigan Technological University, Contract No. 01-3177.

Richner, Jeffrey J.

1992 *Archeological Investigations at Old Munising (20AR192): A Nineteenth-Century Company Town*. Occasional Studies in Anthropology No. 28. National Park Service, Midwest Archeological Center, Lincoln.

Pipestone National Monument

Archeological research within the park is conducted in response to the federally mandated obligation to inventory and assess cultural properties for purposes of management and conservation. Interest in Pipestone dates well into the last century when Catlin (1839) described the locale. Interest continued with the attention of Holmes (1919) and the Smithsonian Institution. National Park Service archeologist Paul Beaubien (1957) made extensive notes on the archeology of the monument but conducted only limited fieldwork himself.

In 1965 Sigstad conducted the first parkwide archeological survey of the monument (Sigstad 1965, 1970). He noted the dense vegetative cover and its limiting effects to survey efforts. Several sites were tested with a strong bias towards those with prehistoric ceramics. In his suggestions for future research Sigstad (1965:35–36) identifies the need to determine the antiquity of the catlinite industry, the age and authorship of individual quarries, and an analysis of the distribution of pipestone and chemical differentiation of pipestone sources on a regional basis. The latter objective was the subject of his doctoral dissertation (Sigstad 1973).

Morey (1983) presented the results of his evaluation of subsurface catlinite resources at the monument which identify potential mining areas. Following Sigstad's survey and dissertation research, recent efforts have been made to examine catlinite from a mineralogical perspective (Gundersen 1991, 1993, 2002; Weymouth 1981). The determination of mineral characteristics of catlinite has facilitated the analysis of catlinite use, distribution, and cultural context over a wide area of the Midwest.

A comparison of existing site maps and the observed distribution of artifacts on the ground pointed to the need to comprehensively resurvey and remap the archeological resources of the monument. Archeological "sites" as they are depicted on base maps (e.g., in Sigstad 1965, 1970) are, at least implicitly, discrete areas defined by distributions of artifacts and/or features. Due to a variety of factors, especially varying vegetative cover, erosion, and rodent activity, the perception of site distribution and content slowly but constantly changes and is differently perceived with each visit by archeologists.

Beginning in 1993, and continuing in 1994 and 1997–1998, various portions of the monument land were subjected to archeological examination following prescribed burns for vegetation management purposes (Clark 1996; Richner 1994, Scott and Thiessen n.d.). These and earlier inventory efforts have resulted in the recording of 41 archeological localities within the monument. The entire monument is listed on the National Register of Historic Places (NRHP) and is regarded by the Minnesota State Archaeologist as one archeological site (21PP2). In addition, the three rock art localities within the monument are part of a multiple property district listed on the NRHP under the theme of Native American rock art in the State of Minnesota. In Archeological Sites Management Information System terminology, the 41 localities are called sub-sites. In addition to pedestrian visual examination of the ground surface, limited test excavations were conducted in 1997 at localities 31 (the Richner site) and 32 (a stone circular alignment site). The last two years of the inventory investigations were funded with SAIP money.

In 1997 aerial overflight photographs were taken of the monument, a series of permanent reference points were established on the ground, and a photogrammetric base map of the entire monument was created to scales of 1:1000 and 1:3500, with a 50-cm contour interval. This map serves as the archeological resource base map of the monument, among other uses by monument staff.

The inventory efforts of the 1990s has expanded knowledge of the monument's archeological resources and has resulted in an overview of the monument's archeology (Scott and Thiessen n.d.). An important conclusion of these investigations is that the relatively thin soil mantle, which is generally less than three meters, overlying bedrock within the monument is subjected to continuous bioturbation by burrowing animals that tends to, at different times, both mask and reveal many of the monument's archeological resources, depending on which resources

many of the monument's archeological resources, depending on which resources are exposed at any given time. Continuing periodic resurvey of the entire monument scheduled to coincide with prescribed burns, whether or not they involve harrowing and planting, will increase baseline resource knowledge of the monument's archeological resources and enhance both the management and interpretation of those resources.

Beaubien, Paul L.

1957 Notes on the Archaeology of Pipestone National Monument. *The Minnesota Archaeologist* 21(3):1–22.

Catlin, George

1839 Account of a Journey to the Coteau des Prairies, with a Description of the Red Pipe Stone Quarry and Granite Boulders Found There. *The American Journal of Science and Arts* 38(1):138–146.

Clark, Caven P.

1996 *Archeological Survey of a Controlled Burn at Pipestone National Monument, Pipestone County, Minnesota*. Technical Report No. 40. National Park Service, Midwest Archeological Center, Lincoln.

Gunderson, James N.

1991 *The Mineralogical Characterization of Catlinite from its Sole Provenance, Pipestone National Monument, Minnesota*. Research/Resource Management Series MWR-17. National Park Service, Midwest Regional Office, Omaha.

1993 “Catlinite” and the Spread of the Calumet Ceremony. *American Antiquity* 58(3):560–562.

2002 The Mineralogical Characterization of Catlinite from Its Sole Provenance, Pipestone National Monument, Minnesota. *Central Plains Archeology* 9(1):35–60.

Holmes, William H.

1919 Part I. Introductory, The Lithic Industries. In *Handbook of Aboriginal American Antiquities*, pp. 253–265. Bulletin 60. Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.

Morey, G. B.

1983 *Evaluation of Catlinite Resources, Pipestone National Monument, Minnesota*. Research/Resource Management Series MWR-4. National Park Service, Midwest Regional Office, Omaha.

Richner, Jeffrey J.

1994 Memorandum to the Chief, Midwest Archeological Center, from Supervisory Archeologist, Midwest Archeological Center, dated June 3. Subject: Trip Report, Pipestone National Monument. Midwest Archeological Center. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas D., and Thomas D. Thiessen

n.d. An Archeological Inventory and Overview of Pipestone National Monument, Minnesota. Report in preparation, National Park Service, Midwest Archeological Center, Lincoln.

Sigstad, John S.

1965 A Report of the Archeological Investigations, Pipestone National Monument 1965. A Field Research Project, in accordance with the National Park Service, Midwest Region, Purchase Order No. 32-NPS-444. University of Colorado, Boulder.

1970 A Report of the Archeological Investigations, Pipestone National Monument, 1965 and 1966. *Journal of the Iowa Archaeological Society* 17:1–51.

Sigstad, John S., continued

1973 *Age and Distribution of Catlinite and Red Pipestone: 1966*. Ph.D. dissertation, Department of Anthropology, University of Missouri, Columbia.

Weymouth, John W.

1981 An X-Ray Florescence Study of Catlinite from Pipestone National Monument. Nebraska Center for Archaeophysical Research, Department of Physics and Astronomy, University of Nebraska, Lincoln. Submitted to the Midwest Archeological Center, National Park Service in fulfillment of Purchase Order PX-6115-9-061D.

Saint Croix National Scenic Riverway

The St. Croix National Scenic Riverway is located at the western margins of the Upper Great Lakes, between the states of Wisconsin and Minnesota where it forms a 255-mile (400-km) linear park from the southern Lake Superior basin to the Mississippi River. The riverway includes the St. Croix and the Namekagon rivers that form a transect through southern boreal forest, northern hardwood forest, central grassland prairie, and riparian communities. The cultural-historical sequence includes the Paleoindian stage (ca. 9500 to 8000 BC), the Archaic (ca. 8000 to 500 BC), the Woodland stage (ca. 500 BC to AD 1600), the Mississippian stage (ca. AD 800–1700), and the historic stage. For the riverway, virtually nothing is known about Paleoindian or Archaic cultures, although there are well-documented sites outside the riverway boundaries. The Woodland stage is, by contrast, well documented.

The Early Woodland substage (ca. 500 BC to AD 200) is known from its distinctive ceramics and an intensification of adaptive strategies using a wide range of locally obtainable resources. The Middle Woodland substage is recognized, materially, by its ceramic types, notched projectile points, elaborate mortuary sites, and by the presence of a high proportion of exotic raw materials. The Late Woodland substage, dating from ca. AD 600 to contact with Europeans around the middle of the 17th century, is made even more complex by the proliferation of stylistic variability reflecting an ongoing process of local group development. The Late Woodland archeological cultures represented on St. Croix sites indicate a widespread area of cultural interaction, encompassing the western Lake Superior basin, the western Lake Michigan basin, the rice district, and the upper Mississippi River. The basic subsistence pattern included a mixed strategy of deer hunting and foraging with increasing use of wild rice.

Mississippian culture, with its emphasis on maize horticulture, appears in the region by about AD 800. Oneota communities with distinctive plain surfaced ceramics decorated by trailing and incising, and tempered with shell occur on some of the major river systems in southern Minnesota. In the St. Croix Riverway there is but one documented Oneota site, the Sheffield site, located on the floodplain of the St. Croix River in the Lower St. Croix.

Three major tribal entities are recognized in the St. Croix area at contact and in the subsequent historic period: Sioux, Ojibwa, and Menomoni. Occasional visits by the Winnebago, Fox, Sauk, and other groups are also documented. Most of the fur trade activities were concentrated in the upper St. Croix, particularly around the Yellow River and Snake River areas. There is a wealth of historic records left by fur traders, explorers, and early settlers to the area. Subsequent economic development included logging, farming, mining, and recreation, none of which are particularly well represented in the archeological literature for the area.

Archeological sites have been explored in the riverway since long before it became a part of the National Park Service system. The area was known in the early part of this century for its groups of conical mounds perched along the bluffs overlooking the St. Croix River. Many of those features, however, have since been lost to development and agriculture. Rock art sites also were recorded in the Lower District (Harvey 1944), most of which are still believed to survive.

Prior to addition of the Lower St. Croix (now Stillwater District) to the riverway, a major site survey program was undertaken in the late 1970s to inventory archeological sites throughout the park. Accordingly, work was carried out in both the North (now Namekagon) and South (now Marshland) districts. The multi-year investigations began in 1976 through a contract with Commonwealth Associates, Inc., a private consulting firm based in Jackson, Michigan. Their initial efforts located, and gave preliminary evaluations of significance for, 77 distinct archeological sites (Commonwealth 1977). The survey continued in 1977, resulting in the addition of 60 more sites (Commonwealth 1978). The next and final year added 80 sites to the count (Commonwealth 1979). Thus, after three years of extensive site survey, the number of recorded archeological

properties in 1978 was 217, comprising 85 prehistoric components and 142 historic (10 sites having both components).

Midwest Archeological Center personnel followed up the Commonwealth recommendations on site testing to determine National Register eligibility and conducted limited test excavations at selected sites in 1981, 1982, (Perry 1982b, 1986a, 1986b), and 1983 (Connor et al. 1985). Since then, archeological investigations in the riverway north of St. Croix Falls, Wisconsin, have been limited entirely to surveys associated with relatively minor ground-disturbing projects, such as handicap access, parking areas, shoreline stabilization, vault toilets, and structure removals, under section 106 of the National Historic Preservation Act of 1966, as amended (Clark 1989, 1992a, 1992b, 1993a, 1993b, 1994a, 1994b, 1994c; Griffin 1988, 1989; Noble 1995, 1996, 1997, 1999a, 1999b, 2000, 2001a, 2001c, 2001c; Perry 1982a). One such survey, associated with the transfer of a day-use area from state to federal ownership, revealed the presence of a Middle to Late Woodland and early Historic period archeological site at Riverside Landing (Noble 2001b; Chidley 2001a and 2001b).

In the early 1990s, the Midwest Archeological Center embarked on a comprehensive survey of the Lower (Stillwater) District, which runs south from St. Croix Falls, Wisconsin, to Stillwater, Minnesota (Clark 1996). The project brought the total number of sites to 66 for that administrative district. Major obstacles to survey here are dense vegetation and a mosaic of property ownerships that makes access to federally owned tracts difficult.

The issue of land ownership and how it conditions our understanding of the cultural resources here is critical at St. Croix: quite apart from access to National Park Service parcels, numerous inholdings contain or may contain significant sites. One example is the Sheffield site in the Lower District (Gibbon 1971), a unique Oneota site without analog elsewhere in the riverway. The site is on private land and would not be included in a comprehensive survey design. Another problematic area is the mouth of the Apple River, which is owned and administered by the state of Wisconsin. This area is likely very significant in terms of local archeological resources, but is outside the defined park boundaries. Finally, since the riverway itself is a narrow corridor from north to south, the east-west dimensions of the region cannot be addressed through any type of survey strategy. As a consequence, the physical structure of the riverway precludes a truly comprehensive image of prehistoric or historic cultural patterns in the region.

Chidley, Michael

2001a Memorandum to Manager, Midwest Archeological Center, dated October 3. Subject: Trip Report, St. Croix National Scenic Riverway, September 10–21, 2001. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2001b Preliminary Inventory and Test Excavations at the Riverside Site, 47BT239, Saint Croix National Scenic Riverway, Burnett County, Wisconsin. Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln.

Clark, Caven P.

1989 1989 MWAC Survey of XXX Compliance Projects at Saint Croix National Scenic Riverway. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1992a Memorandum to Superintendent, St. Croix National Scenic Riverways, dated April 23. Subject: Trip Report. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1992b Memorandum to Chief, Midwest Archeological Center, dated September 8. Subject: Trip Report, Evaluation of proposed vault toilets at Nelson's and Norway Point Landings, SACN, and parkwide survey, LOSA. File Code A2623 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Clark, Caven P., continued

- 1993a Memorandum to Chief, Midwest Archeological Center, dated June 2. Subject: Compliance Surveys at St. Croix NSR (MN, WI). File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1993b Trip Report, excavation at Nelson's Landing and LOSA survey. Memorandum to Chief, Midwest Archeological Center, dated September 1. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1994a Memorandum to Superintendent, St. Croix National Scenic Riverway, from Archeologist, Midwest Archeological Center, dated April 18. Subject: Trip Report on Archeological Survey of Proposed Visitor Center and Seasonal Housing, Trego, Wisconsin. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1994b St. Croix National Scenic Riverway Trip Report. Memorandum [A2624(MWAC)] to Acting Chief, Midwest Archeological Center, dated May 16, 1994. National Park Service, Midwest Archeological Center, Lincoln.
- 1994c Trip Report on Archeological Survey of the Lower District, St. Croix National Scenic Riverway. Memorandum [A2624(MWAC)] to Assistant Regional Director, Anthropology/Archeology, dated July 18, 1994. National Park Service, Midwest Archeological Center, Lincoln.
- [1996] Parkwide Archeological Survey of Lower St. Croix National Scenic Riverway, Minnesota and Wisconsin. Draft report on file, National Park Service, Midwest Archeological Center, Lincoln.

Commonwealth Associates

- 1977 An Archeological Survey of the St. Croix National Scenic Riverway, Phase I Report. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- 1978 An Archeological Survey of the St. Croix National Scenic Riverway, Phase II Report. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.
- 1979 An Archeological Survey of the St. Croix National Scenic Riverway, Final Report (Phase III). Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Connor, Melissa

- 1983 St. Croix National Scenic Riverway: Preliminary Report of Archaeological Investigations, 1983. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Connor, Melissa, Christopher Shoen, James Zalesky, and John Bozell

- 1988 St. Croix National Scenic Riverway: Preliminary Report of Archaeological Investigations, 1983. National Park Service, Midwest Archeological Center, Lincoln.

Gibbon, Guy

- 1973 *The Sheffield Site: An Oneota Site on the St. Croix River*. Minnesota Prehistoric Archaeology Series No. 10. Minnesota Historical Society, St. Paul.

Griffin, Kristen

- 1988 Memorandum to Chief, Midwest Archeological Center, dated August 31. Subject: Trip Report, St. Croix National Scenic Riverway. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.
- 1989 Memorandum to Chief, Midwest Archeological Center, dated October 2. Subject: Trip Report. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Harvey, Helen M. Whittier

1944 Some Caves and Pictographs near the Harvey Rock Shelter. *The Minnesota Archaeologist*, pp. 124–129.

Hunt, William J., Jr.

2002 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated September 27. Subject: Trip Report, St. Croix National Scenic Riverway (SACN), Site Condition Assessments. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1995 Memorandum to Manager, Midwest Archeological Center, dated September 5. Subject: Trip Report, St. Croix, August 28–September 1, 1995. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1996 Memorandum to Manager, Midwest Archeological Center, dated May 21. Subject: Trip Report, April 29–May 7, 1996, St. Croix NSR. File Code A2623 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1997 Memorandum to Manager, Midwest Archeological Center, dated August 18. Subject: Trip Report, St. Croix National Scenic Riverway, July 28–August 2, 1997. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1998 Memorandum to Manager, Midwest Archeological Center, dated May 15. Subject: Trip Report, St. Croix National Scenic Riverway, May 4–8, 1998. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1999a Memorandum to Manager, Midwest Archeological Center, dated May 10. Subject: Trip Report, St. Croix NSR, April 12–24, 1999. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1999b Memorandum to Acting Manager, Midwest Archeological Center, dated August 20. Trip Report, St. Croix NSR, August 2–5, 1999. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2000 Memorandum to Manager, Midwest Archeological Center, dated October 10. Trip Report, St. Croix National Scenic Riverway, August 21–25, 2000. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2001a Memorandum to Manager, Midwest Archeological Center, dated June 18. Subject: Archeological Survey of Primitive Campsites in Wisconsin and Minnesota, St. Croix National Scenic Riverway [trip report]. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2001b Memorandum to Manager, Midwest Archeological Center, dated July 5. Subject: Trip Report, St. Croix NSR, June 11–16, 2001. File Code H2215 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

2001c Memorandum to Manager, Midwest Archeological Center, dated July 16. Subject: Addendum to SACN Trip Report dated July 5, 2001. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Perry, Leslie A.

1982a Memorandum to Superintendent, St. Croix, dated June 24. Subject: Archeological testing of PRIP projects in St. Croix National Scenic Riverway. File Code H2215. National Park Service, Midwest Archeological Center, Lincoln.

1982b Preliminary Report: Archeological Site Evaluation on St. Croix National Scenic Riverway. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Perry, Leslie A., continued

1986a Archeology Along the St. Croix Riverway, 1981. National Park Service, Midwest Archeological Center, Department of the Interior, Lincoln.

1986b Archeological Site Evaluation St. Croix National Scenic Riverway 1982. National Park Service, Midwest Archeological Center, Department of the Interior, Lincoln.

Scotts Bluff National Monument

Although archeological research within Scotts Bluff National Monument initially was rather sporadic and limited in scope, recent surveys and excavations within the park have yielded representative field data. Furthermore, some of the most important research on Plains prehistory has been performed in the region surrounding Scotts Bluff. Thus, information from within and without the monument provides us with a more complete picture of past human activities in the region, as well as critical baseline knowledge for management purposes.

The earliest systematic investigations in the area began in the 1930s with work at the Scotts Bluff Bison Quarry, the type site for which Scotts Bluff points are named, and Signal Butte.

These and other related sites excavated subsequently around the monument helped to establish the basic chronology and culture history of the Great Plains. Many are located within a mile or two of the park, whereas some, like Ash Hollow Cave, are nearly 100 miles distant. They are all parts of broad cultural complexes despite their wide spatial distribution, demonstrating the great inter-connectedness of the region in prehistory (Wedel 1983). In fact, research performed at Agate Fossil Beds National Monument, some 60 miles north, contributes in nearly equal measure to our understanding of Scotts Bluff.

The Scotts Bluff curatorial collections include ceramics, chipped stone, and animal bone believed to have been found within the present Park boundaries by A. L. Coffin in 1941. Records suggest the materials were excavated from a hearth feature, but the exact location of that excavation is not known. Archeologist Wendell Frantz (1966), however, argued that it may have been near a site (25SF11) he recorded in a 1965 contracted survey for the National Park Service. Site 25SF11, which was the first archeological site formally designated within the park, is atop Scotts Bluff just south of the summit road parking loop.

Ten years later, Marvin Kay (1975) of the University of Nebraska revisited the site and conducted additional archeological survey, recording three more sites in the state files (25SF50, -51, and -52). Site 25SF50, which contained chert flakes, rock-lined hearths, and burned animal bones, is in a buried soil horizon at the foot of the northwestern slope of Scotts Bluff. Another buried site of similar character, 25SF51, was found exposed in an arroyo on the lower slopes of Scotts Bluff, northeast of Scott's Spring and along an existing interpretive trail.

Kay recorded his third "site" (25SF52) solely on the basis of a single blue seed bead found resting upon an ant hill. Although a tantalizing suggestion of historic-period activity in the park, the isolated find would hardly provide sufficient cause for an archeological site number designation today. It should be noted, however, that 25SF52 has been indiscriminately lumped with the other three sites in several subsequent management documents, suggesting in at least one case (the Scotts Bluff National Register of Historic Places nomination form) that it represents a prehistoric campsite.

MWAC Archeologist Kristin Griffin (1991) directed limited test excavations at site 25SF50 in 1988 under the aegis of Scotts Bluff Development and Study Package 127. Their purpose was to salvage information from areas of marked erosion and to perform additional testing geared toward determining the site's potential eligibility to the National Register of Historic Places. Finds at 25SF50 strongly suggest that the site was associated with the prehistoric processing of bison kills and used sporadically between AD 1022 and AD 1635. Although Griffin considered the site to be potentially eligible to the National Register, a nomination has not yet been prepared.

The most recent archeological investigations in the park were also the most comprehensive. MWAC Archeologist Caven Clark (1994) initiated a parkwide survey of Scotts Bluff in the fall of 1991, which he completed the following spring. The survey teams recorded 49 additional prehistoric sites and two more historic sites, one of which may be associated with the 1866 Jackson Camp along the Oregon Trail. Clark's survey strategy focused entirely on surface manifestations,

however, and did not attempt to locate buried sites, which earlier studies have shown to occur at Scotts Bluff (e.g., 25SF50 and 25SF51). Evaluative testing at eight prehistoric sites in 1992, including one first noted by Kay at Scott's Spring (25SF51), shows that important field data bearing upon environmental reconstruction also are preserved within the monument boundaries.

The summary of research carried out at Scotts Bluff to date highlights several important points. Most basic is the fact that more than 50 archeological sites are known in this park of about 3,000 acres. That is only moderate site density, but the number is more impressive when one considers that much of the park has very steep terrain that would be uninhabitable. Furthermore, some of the sites are deeply buried under alluvium or aeolian sands and would not have been discovered were it not for their fortuitous exposure by natural agents. Many more sites are likely to lie undiscovered beneath the surface.

Clark, Caven P.

1994 *Archeological Survey of Scotts Bluff National Monument, Scotts Bluff County, Nebraska*. Occasional Studies in Anthropology No. 31. National Park Service, Midwest Archeological Center, Lincoln.

Frantz, Wendell

1966 *An Archeological Survey of the Scotts Bluff National Monument*. Report prepared by the Nebraska State Historical Society for the Department of the Interior, National Park Service. National Park Service, Midwest Archeological Center, Lincoln.

Griffin, Kristin

1991 *Test Excavation at Site 25SF50, Scotts Bluff National Monument, Nebraska*. Technical Report No. 5. National Park Service, Midwest Archeological Center, Lincoln.

Kay, Marvin

1975 *Archeological Surveys in Scotts Bluff and Agate Fossil Beds National Monuments, Nebraska*. Prepared by the University of Nebraska for the United States Department of the Interior, National Park Service. National Park Service, Midwest Archeological Center, Lincoln.

Wedel, Waldo R.

1983 The Prehistoric Plains. In *Ancient North Americans*, edited by Jesse D. Jennings, pp. 202–241. W. H. Freeman, San Francisco.

Sleeping Bear Dunes National Lakeshore

Although a few archeological sites currently within or near the boundaries of Sleeping Bear Dunes National Lakeshore are listed by Hinsdale (1931), very limited archeological work was accomplished in the area until after federal legislation created the national lakeshore. The only well-documented archeological study that predates creation of the lakeshore is a survey of portions of North Manitou Island (Cleland 1967). This work was undertaken for the Angel Foundation, which owned the island until recently.

To date the lakeshore has been subject to two multi-phased parkwide sampling survey efforts (Lovis, Mainfort, and Noble 1976, Richner 1991), and several smaller-scale, project-specific compliance-related investigations (Clark 1989; Cleland 1974; Emory 1982; Gilbert/Commonwealth, Inc. 1985a, 1985b, 1986; Hambacher and Branstner 1995; Hartley 1981; Richner 1982, 1995, 1997, 1998; Volf 2001a, 2001b, 2002).

Michigan State University conducted an initial sampling survey of the lakeshore in 1974 and 1975 (Lovis, Mainfort, and Noble 1976). While the survey was one of the early and innovative applications of the now widely used “shovel testing” site discovery methodology, intervals were widely spaced (50-yard intervals along 50-yard transects). Furthermore, shovel testing was unevenly applied due to private land inholdings and other concerns. Given the wide spacing of shovel tests, and the rather limited areal application of shovel testing within the entire project area, the survey resulted in reconnaissance-level rather than intensive and complete coverage of the lakeshore. The Michigan State team reported that the results of the survey were “generally disappointing” (Lovis, Mainfort, and Noble 1976:49). Seven prehistoric sites and a single historic site were discovered and/or relocated. The sites were located, as predicted by a model developed prior to survey, along old beach ridges and/or adjacent to a variety of coastal resources in raised, well-drained settings.

Not surprisingly, additional sites were discovered within the national lakeshore subsequent to the parkwide reconnaissance survey. One significant prehistoric site, 20BZ16, was recorded within the western portion of the Platte River campground during a preconstruction archeological survey in 1985 (Gilbert/Commonwealth, Inc. 1986). Since the site was to be impacted by a variety of road and campground modifications scheduled beginning in 1990, Midwest Archeological Center undertook large-scale excavations at the site in 1987 (Richner 1991). The combined 1985 and 1987 projects at this site yielded a data set far in excess of the combined previous projects from all other prehistoric sites within the national lakeshore. Intact features, midden deposits, crushed ceramic vessels, and a large chipped-stone assemblage have been recovered from the site. In addition, evidence for two distinct historic Euroamerican occupation sites dating to the late 19th and early 20th centuries was discovered. That this large and significant site was not discovered during the 1974 and 1975 reconnaissance survey efforts, despite its location in a “high-probability area,” clearly documents the limitations of data from reconnaissance-level surveys in heavily vegetated areas.

The results at 20BZ16 (NRHP 90000605) also revealed that historic sites were greatly underrepresented in the Michigan State survey. In fact, numerous historic sites have been discovered through various small-scale development and reconnaissance-level surveys at Sleeping Bear Dunes since 1976. In 1985, a Gilbert/Commonwealth team conducted a preconstruction archeological survey of an improvement and realignment project on Stocking Scenic Drive. This survey resulted in recording of eight late-19th- and/or early-20th-century historic sites.

In 1984, a survey on South Manitou Island in advance of maintenance facility development and utility installation revealed the presence of four historic scatters associated with the lighthouse complex (Gilbert/Commonwealth Inc. 1985b:18). These scatters are among a large number of late-19th- and early-20th-century farmsteads and other sites that occur on South Manitou Island and elsewhere across the lakeshore that have been noted in reconnaissance surveys, but not

officially recorded as archeological sites with the State of Michigan. Numerous reconnaissance surveys (i.e., Emory 1982; Hartley 1981; Richner 1982) have been undertaken at various small development areas and other study areas within the national lakeshore. While no prehistoric sites have been recorded, a rather wide variety of historic sites has been visited but not fully recorded. The sites range from special-use locales at Glen Haven to various homesteads and even abandoned townsites such as Aral, Port Oneida, and Good Harbor.

North Manitou Island has been subject to three inventory projects. The most extensive project to date is the above-mentioned inventory undertaken for the Angel foundation prior to the lakeshore's creation. Several potentially significant prehistoric sites were recorded on a flat lake terrace along the eastern side of the island during this reconnaissance survey and site testing effort. In 1995, an inventory for a photovoltaic array yielded prehistoric materials (Richner 1995). An inventory for a proposed vault toilet location identified a single historic refuse pit (Volf 2001a).

In 1990, the Midwest Archeological Center initiated a three-year intensive inventory of the national lakeshore. Focus was placed on high-probability zones as defined through previous research. The Platte and Good Harbor Embayments and a variety of interior lakeshore and swamp-edge settings were sampled. A total of about 1,000 acres of the 70,000-acre park were subject to intensive survey coverage through this project. Although most of the sites fit Lovis' model of small, seasonal encampments, two large, dense sites similar to 20BZ16 were also recorded.

In 1994, Great Lakes Research Associates, Inc. conducted archeological inventories at two Lake Michigan beach access areas. They recorded a small Late Woodland lithic scatter (20BZ58) along with features from the Aral townsite near Esch Beach. Also recorded during this survey was site 20LU126, a diffuse scatter of late-19th- and early-20th-century debris (Hambacher and Branstner 1995).

Since 2000, several historic homesteads within the lakeshore have been subject to archeological investigations. The projects were performed in anticipation of restoration and/or rehabilitation efforts at the properties. An intensive inventory of the Burfiend property yielded a diffuse scatter of historic and prehistoric artifacts (Richner, personal communication). Subsequent evaluative testing in 2001 (Volf 2001b) of the property resulted in recovery of few historical and no prehistoric artifacts. Intensive inventories and/or evaluative testing have been conducted at the Lawr and Thoreson farmsteads (Richner, personal communication), the Shalda Corners Log Cabin and Bertha Olsen House (Volf 2001a), the Tweedle School, Charles Olsen House, and Esch House (Volf 2002). None of these investigations yielded significant archeological deposits.

Several small, project-specific inventories have been conducted in the Glen Haven area of the lakeshore since 1995. Archeological inventory and evaluative testing at the Sleeping Bear Inn yielded a significant deposit of historic cultural materials associated with the Inn (Richner 1995). Inventory of a proposed driveway revealed a diffuse prehistoric pottery scatter (Volf 2001a, 2001b). Inventory has also been performed for two parking lot locations (Richner 1998, Richner, personal communication), an electric line (Richner 1998), and a proposed road realignment of Highway M-209. None of these projects resulted in the discovery of significant archeological resources.

In 2001, Sleeping Bear Dunes National Lakeshore initiated a program of restoring formerly developed areas within the lakeshore. Most of these areas are former modern house sites that were constructed prior to the lakeshore's creation. The program goal is to restore disturbed areas to a more natural setting by removing exotic plants and soils and recontouring the disturbed landscape. In 2001, numerous tracts in the Platte River and North Bar Lake areas were inventoried for the presence of archeological resources prior to restoration. The surveys recorded numerous prehistoric sites. In the Platte River area, site 2001-1 was recorded and through excavation of two 1-x-1-m test units, a significant amount of lithic debris, pottery, and most importantly, a large

amount of fauna was recovered from a midden deposit. In the North Bar Lake area, several scatters of prehistoric pottery were recorded. No other sites similar to those found in the North Bar Lake area are known to exist within the lakeshore. In 2002, most of tracts inventoried were within the Platte River area of the lakeshore. Several prehistoric sites were recorded ranging from isolated finds to a site exceeding 40,000 square meters in area. The results of the site restoration surveys indicate a general concurrence with the model developed by Lovis, Mainfort, and Noble (1976). The sites lie on raised, well-drained settings adjacent to either the Platte River or the Lake Michigan coast.

Clark, Caven

1989 Trip Report, September 5. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Cleland, Charles E.

[1967] *A Preliminary Report on the Prehistoric Resources of North Manitou Island*. Submitted to the William R. Angel Foundation, Detroit, by the Michigan State University Museum, East Lansing.

Emery, J.

1982 Trip Report, September 14. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Gilbert/Commonwealth, Inc.

1985a *Cultural Resource Assessment of Proposed Construction Activities, South Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan*. Report 2726 submitted to National Park Service, Midwest Archeological Center, Lincoln. Gilbert/Commonwealth, Inc., Jackson, Michigan.

1985b *Cultural Resource Assessment of Proposed Upgrade and Rehabilitation of the Stocking Scenic Drive, Sleeping Bear Dunes National Lakeshore, Michigan*. Report 2751 submitted to National Park Service, Midwest Archeological Center, Lincoln. Gilbert/Commonwealth, Inc., Jackson, Michigan.

1986 *Cultural Resources Assessment of Proposed Rehabilitation of the Platte River Campground and Limited Testing at Site 20BZ16 Benzie County, Michigan*. Report 2792 submitted to National Park Service, Midwest Archeological Center, Lincoln. Gilbert/Commonwealth, Inc., Jackson, Michigan.

Hambacher, M. J., and M. C. Branstner

1995 *Cultural Resource Inventory Survey: Two Proposed Parking Areas, Sleeping Bear Dunes National Lakeshore, Benzie and Leelanau Counties, Michigan*. Submitted to National Park Service, Midwest Archeological Center, Lincoln. Great Lakes Research Associates, Williamston, Michigan.

Hartley, R.

1981 Trip Report, October 28. Memorandum, National Park Service, Midwest Archeological Center, Lincoln.

Hinsdale, W. B.

1931 *Archeological Atlas of Michigan*. Michigan Handbook Series No. 4. University of Michigan, Ann Arbor.

Lovis, William A.

1984 *Sleeping Bear Dunes National Lakeshore, Archeological Summary*. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Lovis, William A., and Margaret B. Holman

1980 Regional Summary: Northern Michigan. In *Phase II Completion Report for the Council on Michigan Archaeology: Major Problem Orientation in Michigan Archaeology 1980–84*, pp 1–11. Report No. 2134. Commonwealth Associates, Inc., Jackson, Michigan.

Lovis, William A., Robert Mainfort, and Vergil E. Noble

1976 *An Archeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore*. Archaeological Survey Report No. 5. Michigan State University Museum, East Lansing.

Richner, Jeffrey J.

1982 Trip Report, June 11. National Park Service, Midwest Archeological Center, Lincoln.

1991 *Archeological Excavations at the Platte River Campground Site (20BZ16), Sleeping Bear Dunes National Lakeshore, 1987*. Technical Report No. 10. National Park Service, Midwest Archeological Center, Lincoln.

1995 Memorandum to Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated June 2. Subject: Trip to Sleeping Bear Dunes to Conduct Archeological Inventories. National Park Service, Midwest Archeological Center, Lincoln.

1997 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip Report to Sleeping Bear Dunes National Lakeshore, May 13–23, 1997. National Park Service, Midwest Archeological Center, Lincoln.

1998 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip to Sleeping Bear Dunes National Lakeshore (SLBE), May 4–13, 1998. National Park Service, Midwest Archeological Center, Lincoln.

Volf, William J.

2001a Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center, Dated September 28, 2001. Subject: Trip to Sleeping Bear Dunes National Lakeshore to Conduct Archeological Inventories. National Park Service, Midwest Archeological Center, Lincoln.

2001b Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Archeological Investigations at Sleeping Bear Dunes National Lakeshore, August 6–31, 2001. National Park Service, Midwest Archeological Center, Lincoln.

2002 Memorandum to Manager, Midwest Archeological Center from Archeologist, Midwest Archeological Center. Subject: Trip to Sleeping Bear Dunes National Lakeshore to Conduct Archeological Inventories, June 17–August 9, 2002. National Park Service, Midwest Archeological Center, Lincoln.

Tallgrass Prairie National Preserve

Tallgrass Prairie National Preserve lies in the Kansas Flint Hills, a prominent north-south landform formed by differential erosion of resistant limestones and softer shales. The preserve entered the National Park System on November 12, 1996, to preserve a remnant of the tallgrass prairie ecosystem and interpret the ranching industry. The majority of the preserve is in private ownership, the title held by the National Park Trust. On September 23, 2002, the Trust transferred title to 32 acres of the preserve, including the Spring Hill Ranch Complex and the Lower Fox Creek School, to the National Park Service, which might eventually own up to 150 acres.

The physiography at the preserve includes bottomlands along one major drainage, Fox Creek, a tributary of the Cottonwood River, as well as a side drainage, Palmer Creek. The remainder of the preserve is primarily represented by upland hills underlain by limestone. Upland soils are typically quite shallow, with bedrock outcrops exposed just below the crests of the hills. Soils along Fox Creek are considerably deeper, particularly in the lower reach of the stream near its confluence with the Cottonwood River.

Because the preserve is a relatively recent addition to the NPS system, it has yet to undergo any systematic large-scale archeological inventory. At this time, twelve prehistoric and historic sites have been identified on preserve lands, ten of which were recorded in 1998 during fieldwork conducted as part of the preserve's archeological overview and assessment (Jones 1999). The other two sites were recorded by Wade Parsons, then an avocational archeologist. However, Kansas State Historical Society files indicate that 150 prehistoric and historic sites have been formally recorded elsewhere in Chase County, while an additional 83 prehistoric and historic sites have been recorded in Morris County immediately to the north. The potential for sizeable numbers of unrecorded prehistoric and historic sites and features is clearly high within the area of the preserve.

Fortunately, there has been a considerable amount of archeological research conducted in the Flint Hills and areas adjacent to the preserve that might be drawn upon to predict what should be expected to occur in the preserve (Adair 1981; Grosser 1973; Hauray 1974; Jones and Witty 1980; Rohn and Emerson 1984; Witty 1980). Together, these investigations have documented a lengthy American Indian prehistory for the Flint Hills that begins with faint evidence of Early Holocene big game hunters and concludes with substantial remains of protohistoric Wichita farming villages and historic Kansa reservation activity. Prehistoric site types likely to be found within the preserve include quarries and knapping stations atop the hills and around the limestone outcrops where chert nodules are exposed. Actual occupation sites most likely lie along Fox and Palmer Creeks, but will also probably be identified around the springs and seeps that flow from the upland hillsides. The bottomland sites probably reflect small hamlet-sized occupations, either seasonal or semi-permanent occupations. One major factor that might influence prehistoric site preservation at the preserve is the effect of the Altithermal Climatic Interval, an episode of warmer, drier conditions between approximately 8,000 and 5,000 years ago. It has been found that elsewhere in the Flint Hills, increased erosion during and after this time period has effectively scoured out much of the evidence of Archaic-age human populations. The lower reaches of streams such as Fox Creek might in turn contain deeply buried cultural deposits of the same age.

The archeological evidence of historic human activity at the preserve is primarily that of mid- and late-1800s Euroamerican settlers, farmers, and ranchers. The Santa Fe Trail crossed the Flint Hills 20 miles north of the preserve near Council Grove, and Chase County was established in 1859. The railroad crossed the county immediately south of the preserve in 1871. The earliest land transactions in the area of the preserve date to the late 1860s, and Stephen Jones, who established the Spring Hill Ranch, began purchasing land in the area ten years later. Essentially all of the Euroamerican activity in the immediate vicinity of the Spring Hill Ranch reflects either ranching or farming activity. Site types represented away from the Spring Hill complex include miles of dry-laid stone fences, water-control devices such as spring boxes, and structural remains at the sites of several small farmsteads.

Archeological investigations in the area of the preserve began soon after its incorporation into the NPS system and have been limited to small-scale compliance inventories and monitoring related to such basic needs as removal of abandoned fuel tanks and installation of adequate septic systems, telephone service, etc. (Jones 1997, 2000a, 2000b). All of this work has occurred in the immediate vicinity of the Spring Hill Ranch complex, the present focus of visitor activity. More recently, Midwest Archeological Center personnel concluded inventory and testing along a proposed visitors trail along the bottomlands of Fox Creek (Jones 2002a), and also evaluated a stone cistern near the main ranch house (Jones 2002b). Future anticipated archeological research will include inventory and monitoring related to installation of a new water system from nearby Strong City to the Spring Hill Ranch. However, the need exists for large-scale block inventory of land away from the ranch complex in order to better understand the range of cultural resources represented within the preserve and to protect the most significant examples.

Adair, Mary J., editor

1981 *Prehistory and History of the El Dorado Lake Area, Kansas (Phase II)*. Project Report Series No. 47. University of Kansas Museum of Anthropology, Lawrence.

Grosser, Roger

1973 A Tentative Cultural Sequence for the Snyder Site, Kansas. *Plains Anthropologist* 18(61):228–238.

Haury, Cherie

1973 *Availability, Procurement, and Use of Chert Resources by Late Archaic Populations in the Southern Flint Hills of Kansas*. Master's Thesis, Department of Anthropology, University of Kansas, Lawrence.

Jones, Bruce A.

1997 Trip report: Travel to Tallgrass Prairie National Preserve, Kansas, November 7–9, 1997. National Park Service, Midwest Archeological Center, Lincoln.

1999 *Archeological Overview and Assessment for Tallgrass Prairie National Preserve, Chase County, Kansas*. Technical Report No. 61. National Park Service, Midwest Archeological Center, Lincoln.

2000a Trip report: Travel to Tallgrass Prairie National Preserve, Chase County, Kansas, June 14–15, 19, 2000. National Park Service, Midwest Archeological Center, Lincoln.

2000b Trip report: Travel to Tallgrass Prairie National Preserve, Chase County, Kansas, October 22–25, 29–31, 2000. National Park Service, Midwest Archeological Center, Lincoln.

2002a Trip report: Travel to Tallgrass Prairie National Preserve, Kansas, August 5–8, 2002. National Park Service, Midwest Archeological Center, Lincoln.

2002b Trip report: Travel to Tallgrass Prairie National Preserve, Kansas, September 8–13, 2002. National Park Service, Midwest Archeological Center, Lincoln.

Jones, Bruce A., and Thomas A. Witty, Jr.

1979 The Gilligan Site. In *Salvage Archeology of the John Redmond Lake, Kansas*, edited by Thomas A. Witty Jr., pp. 67–125. Publications in Anthropology No. 8. Kansas State Historical Society, Topeka.

Rohn, Arthur H., and Alice Emerson

1981 *Great Bend Sites at Marion, Kansas*. Publications in Anthropology No. 1. Wichita State University, Wichita, Kansas.

Witty, Thomas A., Jr.

1980 *Salvage Archeology of the John Redmond Lake, Kansas*. Anthropological Series No. 8. Kansas State Historical Society, Topeka.

Theodore Roosevelt National Park

Theodore Roosevelt National Park covers 70,000 acres in Billings and McKenzie Counties in western North Dakota. Situated in the Little Missouri River Badlands, the park is primarily a natural area for the Great Plains physiographic area. However, the park also contains historic resources related to late-19th-century Euroamerican occupation of the area. The park is divided into a South Unit, a North Unit, and a small intermediate acreage that includes the Elkhorn Ranch, once occupied by Theodore Roosevelt.

Three hundred thirty-three prehistoric and historic archeological sites were listed in the last Cultural Sites Inventory update (January 1993) for Theodore Roosevelt National Park. Forty-one of these sites were recorded in the late 1960s by James Sperry of the State Historical Society of North Dakota (Sperry 1981). An additional 269 sites were identified during a three-year inventory conducted within the park by the University of North Dakota (UND) between 1987 and 1989 (Kuehn 1988, 1989, 1990). Of that latter number, 214 sites were prehistoric or historic Native American, and 61 were historic Anglo-American. Six of the 269 sites contained both prehistoric and historic components.

The UND research was singularly important in that it involved examination of 46 large survey blocks that together represented most of the physiographic types found in the park. Undertaken by cooperative agreement between UND and the Midwest Archeological Center with SAIP funding, the 1987–1989 inventory ultimately covered 17,000 acres in the North and South Units, or roughly 25 percent of the total park area.

The distribution of prehistoric Native American cultures in the park is now known to be skewed, and the archeological record in the park presently does not contain any *in situ* evidence of Paleoindian occupation or use of the area. Based upon the UND research, this is believed to be an result of extensive but discontinuous erosion of Holocene deposits. However, intact Holocene soils are known to occur in limited areas of the park, and these have good potential to contain evidence relating to the early end of the park's chronology.

The Plains Archaic tradition, dating circa 7000–2000 BP, is fairly well represented in the park, although evidence of the early Plains Archaic, like that of the Paleoindian, is faint and might be lost to erosion. The Plains Archaic diversification of earlier game-hunting cultures is reflected in six sites in the park that contain Middle Archaic (5000–3000 BP) McKean-complex components, and five sites containing Late Archaic (3500–2200 BP) Pelican Lake complex materials. In the area of the park, the Plains Archaic is presently interpreted as a series of long-lived, successful hunting and gathering adaptations whose seasonal round included the Little Missouri Badlands. It is also possible that this region supported an indigenous Plains Archaic population.

The Plains Woodland tradition in the park is well represented by eleven sites that have produced Besant projectile points and cord-marked ceramics. Besant sites in adjacent areas on the Northern Plains date to roughly 2050–1200 BP and most likely were occupied during the same general time period within the park. There is as yet no hard evidence yet that Besant populations were horticultural like the eastern Plains Woodland groups, and they might represent a continuation of the Plains Archaic hunting and gathering adaptations.

Six sites identified thus far in the park contain evidence of horticultural Plains Village tradition groups from the sedentary communities along the Missouri Trench; these date between 950–100 BP based upon recovered ceramic data. In the park, the Plains Village sites include a bison-processing area and several possible winter hunting or eagle-trapping camps. They may also reflect Plains Village groups *en route* to resource areas further west.

The historic Native American occupation of the park area begins at AD 1742 (248 BP) and is best documented by several sites in the park that contain conical timbered lodges. These rare, fragile structures represent short-term campsites and are often associated with hunting or eagle-

trapping activities, but are also referred to as “war lodges” or “wickiups” in the ethnographic literature. Potential cultural affiliations with such structures are extensive and include Shoshone, Cheyenne, Plains Blackfoot, Plains Cree, Crow, Sioux, Gros Ventre, Assiniboin, and Mandan/Hidatsa. Several eagle-trapping pits have been recorded in the park, and these sites probably also reflect historic Native American activity.

Historic Euroamerican occupation is mostly concentrated around good water sources such as flowing springs or seeps. These sites often contain the remains of early farmsteads and typically reflect development of the water sources. Most of the surface and structural evidence of these sites has been removed. Other sites, such as the community of Medora, reflect expansion of the frontier through the area.

The multi-year archeological inventory work by UND suggests that a series of Native American site types are present in the park. These include probable base camps, which are sites of long-term occupation where a wide range of activities occurred; they are usually found in locations where an array of exploitable resources such as shelter, firewood, and water are available. However, the largest number of sites identified within the park represent short-term episodes of occupation or use. The Pleistocene gravel deposits atop several of the dissected plateaus along the Little Missouri River in the South Unit contain abundant evidence of raw material quarrying activity, testing, etc. Such short-term sites also include the probable eagle-trapping pits identified along the edges of the river bluffs.

The multi-year archeological inventory conducted by UND has identified the range of Native American site types that might be expected to occur, and archeological site locations may now be predicted with much greater probability than before. The basic range of cultural manifestations in the park is now documented, and the potential for seeking out the under-represented archeological time periods is better understood. Clearly, the enormous amount of archeological inventory has greatly resolved the basic issues of the park’s prehistory.

Many of the sites recorded by UND received tentative Determinations of Eligibility based upon surface evidence. However, very little subsurface excavation has thus far occurred in the park. Evaluative testing at the various site types would help to resolve basic questions of data preservation, seasonality of occupation, trade networks of lithic raw materials and other resources, and cultural affiliation.

A draft multiple property nomination for 50 prehistoric and historic Native American sites in the park was completed (Jones 1994) as part of the multi-year parkwide inventory. However, the former Rocky Mountain Region archeological staff did not forward the nomination to the Keeper of the National Register of Historic Places.

Jones, Bruce A.

1994 Historic Resources of Theodore Roosevelt National Park, North Dakota (Partial Inventory): Prehistoric and Historic Native American Archeological Sites. Draft multiple property nomination to the National Register of Historic Places. National Park Service, Rocky Mountain Regional Office, Denver.

Kuehn, David D.

1988 Final Report on the 1987 Archeological Survey in Theodore Roosevelt National Park. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1989 *Final Report on the 1988 Archeological Field Season in Theodore Roosevelt National Park, North Dakota*. Department of Anthropology Contribution No. 251. University of North Dakota, Grand Forks.

Kuehn, David D., continued

1990 *The Archeology of Theodore Roosevelt National Park North Dakota: Final Results of the 1987–1989 University of North Dakota Investigations*. Contribution No. 257. Department of Anthropology University of North Dakota, Grand Forks.

Sperry, James E.

1981 A Preliminary Archeological Survey of Theodore Roosevelt National Memorial Park. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Ulysses S. Grant National Historic Site

MWAC Supervisory Archeologist Vergil Noble directed the initial archeological investigations at Ulysses S. Grant National Historic Site in 1991, shortly after its addition to the National Park System (Noble 1991, 1997). Carried out in conjunction with preparation of a Historic Structure Report, the study involved excavation of test units placed to elicit information on the structural evolution of White Haven, the main house. The team also employed systematic shovel probing to examine two large areas tentatively identified as alternates for future visitor parking.

Early in 1992, Noble traveled to the park at the superintendent's request to examine an area where ceramic sherds and other debris had been noted near the north property line (Noble 1992a). The materials were eroding from a slope adjacent to the ephemeral stream that parallels the park boundary and drains into Gravois Creek. The surface materials proved to be a mixture of modern, late-19th-century and somewhat earlier specimens that represent common downslope refuse, probably redeposited and of no particular significance.

Noble supervised a remote sensing survey of certain sections of the site in 1992, employing a combination of magnetometry and soil resistivity devices (Noble 1992b). The next year, following analysis of the geophysical data (Weymouth 1993), he also directed archeological test excavations in an attempt to associate certain anomaly signatures with subsurface cultural features. That ground-truth verification program, however, failed to locate any cultural resources of significance in the areas examined. Most of the remote-sensing anomalies proved either to be natural or products of post-1940s activities associated with the last private occupants at the site (Noble 1993).

Under a Cooperative Agreement with the University of Missouri, Columbia, James E. Price directed additional investigations at Ulysses S. Grant in 1995. The excavations were intended to mitigate the adverse effects of proposed restoration efforts through data recovery. Focus fell upon exterior walls of the stone building, crawlspaces under the breezeway, where evidence of the Hunt Addition might survive, and the basement floor beneath the west wing, a room which is believed to have been used as a winter kitchen (Price 1996b).

Price returned in early September and again in October of that same year to complete the excavations he had begun in the west wing basement (Price 1995, 1996a). His crew also monitored backhoe trenching in front of and behind the main house and investigated areas west of the main house where water lines would later be installed. Five test units over the proposed utility alignment encountered what appeared to be an undisturbed sheet midden and apparent evidence of former gravel drive.

In 1997 personnel from MWAC joined James Price for another season of investigations at the park. The first area excavated was near the Main House and will be the site of a new water line serving the house. One-by-two-meter units were excavated in this area, and the artifacts discovered date primarily to the 1820s through the 1880s. The second area excavated is the site of a new waste line and was located near the Grant Barn. Shovel tests and a few 1-x-2-m units were excavated here. Fewer artifacts were found in this area than near the house, although some ceramics and glass were uncovered dating from the 1850s through the recent past. The third area focused upon is the site of a new maintenance building. Trenches were excavated within a 20-x-20-m block. Little cultural material was discovered in this area, although there were a few ceramic fragments and some modern plastic fragments uncovered. The final excavation area was located downslope from the Main House in an area thought to be the site of a driveway during Grant's occupation. Trenches were excavated in this area also, covering a 20-x-20-m block. This method proved successful in discovering the location of the driveway. A 5-x-5-m block was excavated to expose the gravel driveway surface. Other 1-x-2-m units were excavated on and near the driveway to determine its extent and direction. A variety of artifacts dating from the prehistoric era through the late 19th century were found in this area including a nearly complete mocha-ware bowl and two trade beads.

During 1998 Karin Roberts (1998) monitored restoration work at the Chicken House. There she discovered 19th- and 20th-century sheet trash scattered along the slope of the hill. The trash, including numerous late-19th-century bottles, suggests that the hillslope behind White Haven was used as a dumping ground by some of the site's occupants.

In 1999 restoration of the Summer Kitchen and Ice House began with mitigation archeological work of the two structures under the direction of Douglas Scott. The Summer Kitchen work recovered a large quantity of artifacts that demonstrated the domestic and culinary nature of the Summer Kitchen (Scott 2001a). Work in the Ice House suggested that it had been remodeled in the late 19th century and converted to a smokehouse on the south side and a storage area on the north. Evidence of earlier uses was nearly non-existent.

Sporadic work continued within the park in 2000, 2001, and 2002 under Scott's direction. Geophysical remote sensing and shovel testing of the new visitor center location detected a substantial foundation for a structure believed to be a cow barn that may date as early as 1818 (Scott 2002a). Test excavations and mechanical stripping to find physical evidence of fences surrounding the Main House were inconclusive. However, a few fence posts, probably from two or three fence building and rebuilding episodes, were discovered in 2001 as was the site of a circa-1940 shed or small summer cottage (Scott 2001b). A foundation, probably an unbuilt portion of a planned large fireplace, was found and documented during the Summer Kitchen foundation stabilization work in 2002 (Scott 2002b).

Noble, Vergil E.

1991 Memorandum to Chief, Midwest Archeological Center, dated July 5. Subject: Trip Report; June 5–28, 1991. File Code A26 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1992a Memorandum to Chief, Midwest Archeological Center, dated March 20. Subject: Trip Report—Ulysses S. Grant National Historic Site, March 18–19, 1992. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1992b Memorandum to Chief, Midwest Archeological Center, dated July 1. Subject: Trip Report—Ulysses S. Grant, June 8–17, 1992. File Code A2624 (MWAC) National Park Service, Midwest Archeological Center, Lincoln.

1993 Memorandum to Chief, Midwest Archeological Center, dated June 29. Subject: Trip Report, Ulysses S. Grant, June 7–25. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1997 *A Report on the 1991 Excavations at Ulysses S. Grant National Historic Site, St. Louis, Missouri*. Technical Report No. 49. National Park Service, Midwest Archeological Center, Lincoln.

Price, James E.

1995 Exit Memorandum in Lieu of Exit Conference. Memorandum to Jill O'Bright, Superintendent, Ulysses S. Grant National Historic Site, dated September 20. National Park Service, Midwest Archeological Center, Lincoln.

1996a Limited Archeological Investigations at the Ulysses S. Grant National Historic Site, 23SL857: A Brief Report on Subsurface Excavations Conducted October 10–13, 1995. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

1996b Description of the Artifactual and Ecofactual Archeological Specimens Recovered from the Winter Kitchen at the Ulysses S. Grant National Historic Site. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Roberts, Karin M.

1998 Memorandum to Manager of Midwest Archeological Center, dated August 20. Subject: Trip Report, Ulysses S. Grant NHS. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas D.

2001a *Archeological Investigations of the Ice House and the Summer Kitchen/Stone Building at Ulysses S. Grant National Historic Site, St. Louis, Missouri*. Technical Report 69. National Park Service, Midwest Archeological Center, Lincoln.

2001b Search for the Elusive Latrine: Archeological Investigations in the Backyard of the Summer Kitchen, Ulysses S. Grant National Historic Site. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

2002a *Archeological Investigations for the Barn Relocation at Ulysses S. Grant National Historic site, St. Louis, Missouri*. Technical Report No. 78. National Park Service, Midwest Archeological Center, Lincoln.

2002b *Documentation of a Foundation at the North End of the Summer Kitchen (HS2), Ulysses S. Grant National Historic Site, St. Louis, Missouri*. Small Project Report, National Park Service, Midwest Archeological Center, Lincoln.

Weymouth, John W.

1993 *An Analysis of Magnetic and Resistance Surveys on the Ulysses S. Grant National Historic Site*. Prepared by Department of Physics and Astronomy, University of Nebraska, Lincoln. Submitted to National Park Service, Midwest Archeological Center, Lincoln, Purchase Order No. PX-6115-93-057.

Voyageurs National Park

The initial archeological investigations in the area now encompassed by Voyageurs National Park were reconnaissance-level surveys (Birk 1972; George 1973). These brief investigations, undertaken after authorization but before establishment of the park, indicated that the new park might contain a considerable array of archeological sites. Later, more intensive, studies were to show that a surprisingly large number and range of sites are indeed present.

Soon after the formal establishment of the park, two archeological survey efforts were undertaken. The first focused on the historically important Kettle Falls area, and resulted in development of a considerable inventory of historic and prehistoric sites at the eastern tip of the Kabetogama Peninsula and on a few nearby islands in Rainy Lake (Watson, Oothoudt, and Birk 1976). A much broader sampling study of 4,000 acres in several transects, and a considerable amount of the active shorelines of Kabetogama, Namakan, and Sand Point Lakes was accomplished in 1976 (Gibbon 1977). This study documented a pattern of site distribution where all prehistoric, and most historic, sites are clustered in a narrow band along the shorelines of the major lakes in the park. It was believed that most of these sites were “destroyed,” or in secondary context, in the seasonally inundated zone of the lakes, owing to enlargement of the lakes by construction of dams in the 1910s. This conclusion was further reinforced through reconnaissance survey of seasonally inundated shorelines on Kabetogama and Namakan Lakes the following year (Gibbon 1978). However, a large number of sites were recorded during the two surveys, and at least a few seemed to contain materials in primary context.

In 1979 and 1980, Midwest Archeological Center teams expanded the survey coverage begun by the University of Minnesota, again emphasizing transect and shoreline surveys. No sites were recorded outside the shoreline zone, confirming the site distribution recorded by Gibbon. The discovery of many additional sites in inundated settings further documented the impact of the raised lake levels on archeological resources. However, the 1979–1980 projects also documented that several sites contained in situ deposits, occasionally extending over rather large areas. These sites yielded rather large artifact inventories, including ceramic, lithic, and faunal items.

Multi-year survey and evaluation efforts from 1985–1987 served to partially ameliorated the rather bleak predictions of site destruction posed by Gibbon (1977), showing that a minimum of 25 percent of the prehistoric sites maintain at least some degree of depositional integrity. Subsequent research has revealed that over 50 percent of park sites maintain at least some primary context deposits (Richner 2003). Many additional sites were recorded, and limited test excavations revealed that a large number of sites in the park contain important Middle and Late Woodland prehistoric, and historic aboriginal deposits (Richner 1992). The site distribution pattern documented by Gibbon was found to be highly accurate. Essentially all sites are located near the major lake shores. Numerous historic Ojibwa and logging-related sites were added to the growing inventory of prehistoric sites through the second Midwest Archeological Center survey and evaluation effort from 1985 to 1987.

Beginning in 1986 and extending through 2002, Midwest Archeological Center teams surveyed several hundred specific locations proposed for minor development through the park’s campsite management plan (Richner 1992, 2003). Over 300 sites will be minimally developed through this program for camping, day use, and houseboat activities. These surveys further expanded the site inventory at VOYA. Park management has used the survey data to avoid adverse impacts to sites as the campsite management program is developed. The surveys also revealed that numerous small sites are well preserved in rocky shoreline settings on all the major lakes of the park.

In 1993, a Midwest Archeological Center team surveyed a portion of the abandoned gold rush town of Rainy Lake City (Richner 1993). The park intends to develop an interpretive trail through a portion of the site, following the old road system. Historic documentation (plats, photo-

graphs, newspaper accounts, personal remembrances, census records, Village meeting notes, and other accounts) was combined with archeological survey and mapping to relocate portions of four roads and about a dozen structures dating from 1893 to 1898. Additional mapping and vegetation clearing was accomplished at the site in 2002 in anticipation of final trail installation efforts.

Since 1984, the Midwest Archeological Center has worked in conjunction with the park's Maintenance Division to stabilize the eroding shoreline of a few of the most significant archeological sites in the park (Lynott 1984, 1988, and 1989). This effort has repaired damage at select sites that occurred in the years following 1914 when the Kettle Falls dam was completed. Geotechnical fabrics have been applied along with large quantities of soil fill and rock "rip rap" to create natural-appearing, yet stable shorelines. To date sites 21SL35, 21SL52, 21SL82, and 21SL141 have been treated in this manner. The results have been highly successful, and the actions have arrested erosion at each of those sites, three of which are listed on the National Register of Historic Places.

In 1997, archeological data collection was undertaken at site 21KC13 at Black Bay Narrows on Rainy Lake (Richner 1999). This work was in support of restoration of an early-twentieth-century log structure located at the Rainy Lake City area. Extremely dense prehistoric deposits spanning perhaps 7,000 to 8,000 years of occupation were collected from a restoration-related impact zone flanking the structure. While artifacts related to use of the structure were also recovered, they were of secondary importance to the prehistoric and historic Native American materials preserved at the site. This work provides the most detailed information to date on any single site at the park. Of particular note was the recovery of diagnostic Archaic artifacts in a stratified depositional context. This long time period is little known in the park area.

Also in 1997, an Archeological Resources Protection Act site damage assessment was conducted at site 21SL44 (La Vassieur 1997). Unauthorized digging had damaged *in situ* Late Woodland (Blackduck) deposits at that locale. Although a suspect was identified and charged with an ARPA violation, no conviction was obtained.

Beginning in 1999, specific emphasis was placed upon archeological inventory of modern structures scattered across the park. While some inventory was conducted near certain structures in previous years, the program initiated in 1999 was specifically targeted to inventory the immediate areas around numerous structures. Most are properties where the occupants reserved certain use rights when they sold their parcels to the National Park Service. Now, most of these use and occupancy retentions are expiring and the park has developed plans for managing the structures. The archeological inventories are part of a broader program to assess the historical, architectural, and landscape history and significance of the properties. Most of the structures are of recent age, and have been determined to be not significant. Most will be removed. From 1999 to 2002, 97 tracts were archeologically inventoried (Richner 2003). Twenty-two archeological sites were previously known to occur, or were recently recorded at, these 97 inventory parcels. These sites are all unrelated to the structures that now occur on them. While similar inventories of Reservation of Use and Occupancy (ROU) tracts have been undertaken over several years at Cuyahoga Valley, Indiana Dunes, and Saint Croix; at Voyageurs National Park the numbers of sites recorded around or even under the structures is far greater than at the other parks. This results from the positioning of many of the structures on flat benches flanking the shoreline. This is the location of most of the known sites in the park. The ROU inventories have provided important new data on numerous sites, including several (e.g., 21SL901, 21SL893, 21SL898, 21KC13, and 21KC14) that are eligible for inclusion on the National Register of Historic Places.

In 2002, more than 15 years of research culminated in the publication of a synthesis on the occupation of Voyageurs by members of the Bois Forte Band of Ojibwe (Richner 2002). This report combines extensive historic and archeological research. It focuses primarily on the post-reservation-era occupation of the park by several Bois Forte residential bands. Ethnohistorical research is combined with archeological data in this report to document about 40 specific sites

and a broad range of historical records spanning about 1700–1940. Identification of the families, or even individuals, who occupied the sites, was achieved for many of the sites. One important finding of the study was that Bois Forte individuals formerly owned significant parcels of property within what is now the park and that several hundred Bois Forte occupied the area on a relatively permanent basis well into the twentieth century. These persons were then linked through genealogical research to develop a synthesis of tribal band structure and history.

The history of archeological investigations within Voyageurs National Park and the surrounding Border Lakes Region has recently been summarized in an NPS planning document known as an Archeological Overview and Assessment (Richner 2003). That report provides much greater detail on park-related project history than is presented here. In addition, it synthesizes available data on local culture history as well as a wide range of topics specifically related to the currently recorded site database at the park. Site age and affiliation, distribution, condition, content, and other topics are addressed in detail in that report. An extensive bibliography, both for park-specific and regional archeological projects, is also included. Numerous tables and maps support the report's narrative. Readers requiring additional information on any of these topics are advised to consult that report.

Over the past 30 years, archeological field efforts at Voyageurs National Park have been primarily geared toward site inventory, evaluation, and stabilization. Despite the damage wrought by the raised water levels, 408 sites have been recorded to date at the park. Many of these sites contain dense Woodland and historic deposits and have considerable potential to contribute to a wide variety of future archeological and interpretive efforts.

Birk, D. A.

1972 Preliminary Survey Notes on Sites in the Eastern Namakan, Sand Point, Crane Lakes Area of Northern Minnesota. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

George, D. C.

1973 A Preliminary Archeological Investigation of Gold Shores, Black Bay, State Point, and Sullivan Bay Areas in Voyageurs National Park. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Gibbon, G. E.

1977 An Archeological and Historic Sites Survey of Voyageurs National Park Minnesota. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

1978 Archeological and Historic Sites Survey of Submerged Beaches in Voyageurs National Park. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

La Vassieur, A.

1997 Damage Assessment at Site 21SL44, Voyageurs National Park. Report on file, National Park Service, Voyageurs National Park, International Falls, Minnesota.

Lynott, M. J.

1984 Stabilization of the Clyde Creek Site, 21SL35, Voyageurs National Park. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

1988 Stabilization of Shoreline Archeological Deposits at the Sweetnose Island Site, 21SL141, Voyageurs National Park. Report on File, National Park Service, Midwest Archeological Center, Lincoln.

1989 Stabilization of Shoreline Archeological Sites at Voyageurs National Park. *American Antiquity* 54(4):792–801.

Lynott, Mark J., Jeffrey J. Richner, and M. Thompson

1986 *Archeological Investigations at Voyageurs National Park: 1979 and 1980*. Occasional Studies in Anthropology No. 16. National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J.

1992 Archeological Survey and Testing at Voyageurs National Park 1985–1991. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1993 Memorandum to the Manager, Midwest Archeological Center, from Archeologist, Midwest Archeological Center, dated June 8. Subject: Trip Report, Voyageurs National Park, National Park Service. National Park Service, Midwest Archeological Center, Lincoln.

1999 Archeological Excavations at 21KC13: A Multicomponent Site on Rainy Lake, Minnesota. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

2002 *People of the Thick Fir Woods: Two Hundred Years of Bois Forte Chippewa Occupation of the Voyageurs National Park Area*. Special Report No. 3. National Park Service, Midwest Archeological Center, Lincoln.

2003 Expressions of the Past: A Summary of Archeological Research at Voyageurs National Park. Draft manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Watson, C. W., J. W. Ooothoudt, and D. A. Birk

1976 An Archeological Survey of the Kettle Falls Area and Adjacent Region. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

William Howard Taft National Historic Site

The first archeological investigations at William Howard Taft National Historic Site were performed by the Ohio Historical Society under contract to the National Park Service. Their 1971 excavation project examined several areas about the site grounds, including a carriage drive, a back yard cistern, and the retaining wall that borders the site (McCollough 1972).

In 1974, excavations were made along the building perimeter to reinforce the foundation, but apparently no archeological study was involved. The next year, however, personnel from the Denver Service Center formally examined a major cistern situated adjacent to the south wall of the 1851 addition as part of the structural analysis, making recommendations for more complete archeological study prior to its unavoidable demolition (Bauxer 1975).

MWAC Archeologist Leslie Perry directed extensive test excavations at various locations about the grounds in 1982 as part of the planning process for restoration of the house (Perry 1983). Although her study showed little evidence of significant cultural resources outside the structure, subsequent removal of flooring in the basement exposed archeological deposits. Accordingly, Jeffrey Richner of MWAC conducted salvage investigations in that part of the subfloor later that same year, recording a substantial refuse dump in the dirt floor and collecting other materials that had been removed from their depositional contexts (Richner 1982).

More recently, in 1987, MWAC Archeologist Vergil Noble monitored several minor demolition and trenching actions associated with the final phase of restoration work, but he encountered no significant remains in the process (Noble 1987). Noble also was present as an observer at the site in 1993 during investigation of the north retaining wall by a team of landscape architects working under contract to advise on its restoration and stabilization, though the project technically was not archeological.

Bauxer, Deborah K.

1975 William Howard Taft National Historic Site: Archeological Investigation of Foundation and Cistern. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

McCollough, Major Charles Ross

1972 William Howard Taft National Historic Site: Archaeological Investigation of Grounds. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1987 Report of the 1987 Archeological Monitoring at William Howard Taft National Historic Site, Cincinnati, Ohio. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Perry, Leslie A.

1983 Archeological Investigations at the Taft House Site (33HA431), William Howard Taft National Historic Site, Cincinnati, Ohio. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Richner, Jeffrey J.

1982 Memorandum to Chief, Midwest Archeological Center, dated July 22. Subject: Trip to WIHO, July 12–16. File Code A26. National Park Service, Midwest Archeological Center, Lincoln.

Wilson's Creek National Battlefield

Wilson's Creek National Battlefield exists to commemorate one of the more critical military actions of this region during the Civil War. Nevertheless, until 2000 there had been almost no archeological study relating to the battle itself, owing in part to the belief that intensive relic collecting over the past century had removed much of the battle's physical evidence. Attention had more often fallen on other historic cultural resources, such as the Ray House, as well as several prehistoric sites in the park.

The earliest archeological research performed within the present park boundaries is Robert Bray's (1967a) limited survey and testing program of 1966. Bray made several visits that year with small teams of researchers to investigate locales specified in a contract he had entered into with the National Park Service. Among the more important areas examined were Bloody Hill, the Sinkhole, the Gwinn House, Gibson's Mill and its associated house, and the E. B. Short House. Even where expectations for discovery were highest (Bloody Hill and the Sinkhole), their efforts produced relatively few artifacts related to the battle. Those also happened to be the only areas of the six named above that produced no prehistoric materials, five aboriginal campsites having been coincidentally discovered in the process.

Bray (1967b) performed additional investigations in the summer of 1967, under an extension of his previous contract. The focus that year was upon the Edwards Cabin, a small prehistoric site adjacent to Short Spring, completion of the Gibson House excavations, an exploration of the Millrace Crossing site, and supplementary work on Gibson's Mill.

In 1974 and 1975, Bray (1975) again returned to Wilson's Creek, where he performed additional inventory and evaluation studies. The projects sought to locate remains of the Joseph Sharp, T. B. Manley, and C. B. Manley Houses, investigate a well and a second sinkhole and mentioned in burial records, perform a general survey for both prehistoric and historic sites, and locate any additional outbuildings and features associated with the Ray House.

In part, the investigations were precipitated by the need to examine parcels identified for construction of a new visitor center and employee housing units. No historic or prehistoric cultural resources of significance were discovered in those particular development zones; however, nine more prehistoric sites were recorded elsewhere in the park. Efforts to locate the Sharp House and both Manley Houses were unsuccessful, as was the search for the second sinkhole and the "burial" well. Fieldwork at the Ray House, though, produced considerable data that would serve as a foundation for later work.

In 1978, the Midwest Archeological Center carried out rather minor supplementary investigations of the visitor center parcel. Carolyn Helm (1980) of Southwestern Missouri State University monitored the construction activities, which took place near site 23GR250. The primary site impact was caused by installation of a buried utility trench, from which an artifact collection resulted. Following those field investigations, Lynott (1981) described the collections associated with 23GR250, an early Middle Archaic occupation, in greater depth.

The Ray House, which is the oldest (circa 1852) extant structure within Wilson's Creek National Battlefield, received additional archeological attention in 1983 and 1984 in conjunction with its restoration. MWAC Archeologists Jack H. Ray and Christopher Schoen carried out excavations in December 1983 (Ray 1983; Sudderth 1992). A primary goal of those investigations was to gather architectural data in pursuit of historical accuracy. A similar intent was behind the follow-up excavations of Archeologist Susan M. Monk (1985a) in 1984, though some of the work was designed to provide guidance on the placement of modern improvements and amenities.

Late in 1984, Monk also conducted a directed search for evidence of the former Edwards Cabin location, which she flagged on the basis of earlier work in the area, and the Wire Road that passed by it in the 19th century, the path of which had to be interpolated from the historic record.

She also examined a proposed culvert location for the tour road and examined a “missing” second sinkhole described historically as being near Bloody Hill (Monk 1984b).

MWAC personnel also conducted a survey of parcels identified for the removal of exotic trees in 1983. They examined a total of four tracts of varying sizes and shapes, but collectively the area surveyed probably represents less than five percent of the park grounds. Systematic shovel testing revealed five archeological sites and eight isolated finds. Three sites and five of the isolated finds were prehistoric, the remainder being historic (Ray and Monk 1984).

Beginning in 1981 a major archeological survey was carried out within the park associated with development of the current tour road. Conducted in phases over several years, MWAC Archeologist Jeffrey Richner initiated the first phase in 1981. Supervisory Archeologist Mark Lynott performed additional survey and testing of three alternates in 1982 (Lynott et al. 1982), and Monk (1984a, 1985b, 1990) completed the second phase in 1983. Ten areas of possible concern were identified within the 40-m corridor, including site 23GR245. That large prehistoric site was expected to suffer considerable disturbance, given its proximity to a proposed bridge crossing Wilson’s Creek. Accordingly, it was subject to intensive testing.

In 1994, and again in 1995, MWAC Supervisory Archeologist Vergil E. Noble examined an area proposed for construction of a sanitation facility (Noble 1994, 1995). The development parcel was thought to overlap with site 23GR245, and shovel testing confirmed that belief. Since the new facility could not be constructed elsewhere, Noble returned in the fall of 1995 to monitor removal of the plowzone and search for deep features that might be undisturbed, but none were revealed in the small (100 x 200 ft) parcel.

Douglas Scott developed a park overview and assessment of Wilson’s Creek in 1999 (Scott 2000). This effort reviewed the previous archeological work in the park and developed recommendations for additional archeological investigations. In 2000 a parkwide inventory project began under the Systemwide Archeological Inventory Program. The first year of the project resulted in the development of a research design for systematically metal detecting the battlefield and recording battle-related artifacts and feature. The research design also called for a parkwide inventory of prehistoric and historic archeological materials using a quadrat-based sampling procedure. This portion of the parkwide inventory is being done under cooperative agreement with the Department of Anthropology, University of Arkansas, Fayetteville. The first year’s field inventory began in 2001 and a second year’s work in 2002. The metal detecting effort concentrated on the Sharp Cornfield and southern area in the park in 2001 and the area of Bloody Hill and Edwards Cabin in 2002. Nearly a thousand battle-related artifacts were discovered. Dr. Marvin Kay, the cooperator at the University of Arkansas completed nearly 175 of the identified sample units and has identified several previously unknown prehistoric sites and redocumented several historic sites and features. The project is scheduled to be completed in Fiscal Year 2004.

Bray, Robert T.

1967a An Archeological Survey and Excavations at Wilson’s Creek Battlefield National Park [*sic*], Missouri. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1967b Wilson’s Creek Revisited: An Account of the 1967 Excavations. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1975 Inventory and Evaluation of the Archeological Resources, Wilson’s Creek National Battlefield, Missouri. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Helm, Carolyn “Jeep”

1980 Construction Monitoring of Archeological Site 23GR250, Wilson’s Creek National Battlefield Park [*sic*], Greene County, Missouri. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Lynott, Mark J.

1981 23GR250: An Early Middle Archaic Site at Wilson's Creek National Battlefield. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

Lynott, Mark J., Susan M. Monk, Jeffrey J. Richner, and T. R. Chevance

1982 Archeological Survey and Testing at Wilson's Creek National Battlefield Tour Road Alternatives A, B, and C. Report on file, National Park Service, Midwest Archeological Center, Lincoln.

Monk, Susan M.

1983 Archeological Testing at the Ray House, Wilson's Creek National Battlefield. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1984a Survey Reconnaissance and Site Evaluation along the Proposed Phase II Tour Road, Wilson's Creek National Battlefield. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.

1984b Memorandum to Chief, Midwest Archeological Center, dated December 19. Subject: Trip Report, Wilson's Creek National Battlefield. File Code A26. National Park Service, Midwest Archeological Center, Lincoln.

1985a *Archeological Testing at the Ray House, Wilson's Creek National Battlefield, Missouri*. Occasional Studies in Anthropology No. 10. National Park Service, Midwest Archeological Center, Lincoln.

1985b *Archeological Survey and Testing of the Proposed Tour Road, Wilson's Creek National Battlefield, Missouri*. Occasional Studies in Anthropology No. 11. National Park Service, Midwest Archeological Center, Lincoln.

1990 Archeological Excavations at Eight Sites in Wilson's Creek National Battlefield. Report on file, Midwest Archeological Center. National Park Service, Midwest Archeological Center, Lincoln.

Noble, Vergil E.

1994 Memorandum to Assistant Regional Director, Anthropology/Archeology, dated December 8. Subject: Trip Report, November 29 - December 2, 1992. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

1995 Memorandum to Manager, Midwest Archeological Center, dated September 21. Subject: Trip Report, September 13-15, 1995, Wilson's Creek. File Code A2624 (MWAC). National Park Service, Midwest Archeological Center, Lincoln.

Ray, Jack H.

1983 Archeological Excavations at the Ray House, 23GR233, Wilson's Creek National Battlefield. Field notes on file, National Park Service, Midwest Archeological Center, Lincoln.

Ray, Jack H., and Susan M. Monk

1984 *Archeological Survey of Tree Removal Zones, Wilson's Creek National Battlefield*. Occasional Studies in Anthropology No. 15. National Park Service, Midwest Archeological Center, Lincoln.

Scott, Douglas D.

2000 *Archeological Overview and Assessment for Wilson's Creek National Battlefield, Greene and Christian Counties, Missouri*. Technical Report No. 66. Midwest Archeological Center, National Park Service, Lincoln.

Sudderth, W. E.

1992 *The 1983 Archeological Excavations at the Ray House, Wilson's Creek National Battlefield*. Technical Report No. 15. National Park Service, Midwest Archeological Center, Lincoln.

Wind Cave National Park

Wind Cave National Park covers 28,292 acres of the southern Black Hills and is located in Custer County in western South Dakota. The primary emphases of the park are preservation and protection of surface bison range and subsurface cave resources. The park shares boundaries with Black Hills National Forest, a unit of the USDA Forest Service.

Until 1999, the park's limited archeological inventory had only 38 sites on record, with less than one percent of the park area inventoried. Only two sites had been determined eligible for inclusion on the National Register of Historic Places. The major portion of the archeological work prior to 1999 had been in response to discovery situations or in compliance with Section 106 of the National Historic Preservation Act as amended. The most extensive work in the park was a reconnaissance-level survey conducted by W. E. Sudderth in 1963 (Sudderth 1964).

The most notable study to date began as a paleontological study of a stratified deposit in the Beaver Creek Rockshelter (39CU779). This paleontological investigation discovered cultural materials, and Robert Alex was called in to study the cultural remains. The multi-component shelter provides a tantalizing glimpse into the potential for stratified and buried cultural deposits within the park. A report of the investigations was completed by Lynn Alex (L. Alex 1991). Many of the archeological sites located and recorded to date within the park were found by geomorphologists and paleontologists during their studies of Pleistocene and early Holocene conditions in the Black Hills. Many of the sites are open lithic scatters that remain unevaluated, although several have stone "tipi" rings associated with other cultural debris.

A five-year parkwide inventory began in 1999 as part of the region's SAIP identified needs. The first year of the parkwide SAIP inventory was begun by Robert Nickel, Ralph Hartley, and William Hunt. The initial work included inventories of Lookout Flats, a 602-acre upland tract subjected to a prescribed burn; a small, 24.5-acre strip of land on either side of an unnamed tributary in Bison Flats; and an 11.86-acre area in Reeves Gulch. One new site was recorded and two previously recorded sites were relocated and re-recorded. Preparation of an archeological research design by Jennifer Galindo to guide investigations during SAIP inventory of park was also begun. The second year of the parkwide inventory was completed by Jennifer Galindo of Santa Gleska College and William Hunt. The archeological research design prepared by Jennifer Galindo to guide investigations during this inventory was put into operation this year, and approximately 1,000 acres were inventoried with several new sites were recorded. The third year focused on the testing and evaluation of four sites including a bison drive stone alignment, two stone circle sites, and a possible bison drive site.

The fourth year of the parkwide inventory covered over 1,375 acres. Thirteen new sites were recorded, 22 isolated finds documented, and 10 previously known sites redocumented. In addition, seven small compliance projects were completed for the park. The final year of the project is focused on completing analyses and writing a synthetic report of the investigations.

There is clear evidence of Native American occupation and/or use of the area beginning as early as 11,000 BP, and probably continuing through the Plains Archaic and the Plains Woodland and into the Late Prehistoric period. Aboriginal and Anglo-American sites are also known that date to the late 19th and early 20th centuries. Much of this material has been found either in spatially small components or as isolated culture-diagnostic artifacts.

Within the park, sites dating to the Paleoindian and Early and Middle Plains Archaic periods are very poorly represented. Known historic Euroamerican occupation and use of the Wind Cave area primarily consists of the recorded remains of two early homesteads and farms dating to the late 19th and early 20th centuries. Most of these sites have little surface expression, and they have been scavenged and/or cleaned up.

Alex, Lynn Marie

1991 *The Archeology of Beaver Creek Shelter (39CU779): A Preliminary Statement*. Selections from the Division of Cultural Resources No. 3. National Park Service, Rocky Mountain Region, Denver.

Galindo, Jennifer

2001 *Wind Cave National Park Archeological Inventory Fiscal Year 2001 Annual Summary*. Midwest Archeological Center, National Park Service, Lincoln.

2002a Trip Report dated June 13, 2002, for May 15–June 1 fieldwork, Year 4 of 5, Wind Cave National Park (WICA) SAIP Report. Memorandum, Midwest Archeological Center, National Park Service, Lincoln.

2002b Trip Report dated September 26, 2002: Archeological Fieldwork at Wind Cave National Park, September 19–31, 2002. Memorandum, Midwest Archeological Center, National Park Service, Lincoln.

Sudderth, W. E.

1964 Archeological Reconnaissance of Wind Cave National Park. Manuscript, National Park Service, Midwest Archeological Center, Lincoln.