

**A Phase I Archaeological Survey of 16 Acres Within the University of Wisconsin –
Madison's Picnic Point, City of Madison, Dane County, Wisconsin**

Prepared For:

University of Wisconsin – Madison
Division of Facilities Planning and Management
Physical Plant/Environmental Management

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July 9, 2001

Archaeological Research, Inc. Reports of Investigations Number 64

Executive Summary

In September of 2000, Mr. Daniel Einstein, acting on behalf of the University of Wisconsin – Madison, contacted the offices of Archaeological Research, Inc. regarding the need for a Phase I archaeological survey of a 16-acre parcel of land on Picnic Point. University land managers were concerned that current road alignments on Picnic Point might be causing damage to a prehistoric cemetery (47DA121). This report will help campus planners with appropriate design strategies for improved site preservation.

Personnel from Archaeological Research, Inc. conducted fieldwork on Picnic Point between May 7 and 11, 2001. Exposed portions of earth in paths, along the shoreline and near trees were surface collected and the remaining portion of the project area was shovel tested at 10-meter intervals.

Investigations revealed the presence of a light scatter of prehistoric and historic artifacts throughout the peninsula with several clusters of dense scatters that have been identified as archaeological sites. A total three previously identified archaeological sites were re-defined and two new sites were discovered. ARI is making the following recommendations:

1. The segment of the main east/west access road adjacent to Picnic Point Mound Group (47DA121) be limited to pedestrian traffic.
2. Maintenance on or around mounds be limited to methods that avoid soil disturbance or compaction.
3. Shoreline stabilization should be attempted along portions of Picnic Point to protect endangered archaeological sites.
4. Facilities development in areas designated as archaeological sites be preceded by archaeological survey.
5. Archaeological sites identified in 2001 undergo Determinations of Eligibility.
6. A campus wide archaeological survey is needed for the University of Wisconsin – Madison campus.
7. Finally, that the University of Wisconsin form an advisory group to create and implement a cultural resource management plan.

Table of Contents

Executive Summary	2
Table of Contents	3
List of Figures.....	4
1.0 Introduction	5
1.1 Purpose	5
1.2 Location/Legal Description	5
1.3 Project Information	9
2.0 Environmental Setting	9
2.1 Geology	9
2.2 Vegetation	11
3.0 Cultural Context	14
4.0 Literature Search Results	28
4.1 Literature Search Methods	28
4.2 Archaeological Sites On Picnic Point	28
47 DA 121 – Picnic Point Mound Group.....	28
47 DA 122 – Stevens.....	35
47 DA 123.....	37
47 DA 501 – Picnic Point.....	38
4.3 Archaeological Sites Within One Mile Of Picnic Point.....	38
5.0 Archaeological Field Work	39
5.1 Archaeological Field Methods	39
5.2 Results of Survey	40
5.3 Previously Identified Archaeological Sites	40
Picnic Point Mound Group (47DA121).....	40
Stevens Site (47DA122)	42
(47DA123).....	46
Picnic Point (47DA501).....	49
5.4 Newly Reported Archaeological Sites	50
(47DA1168).....	50
(47DA1169).....	51
6.0 Summary and Recommendations.....	52
References Cited	56
Appendix A: Artifact Catalogs	62
Table 2: 47DA122 Stevens site Historic Artifact Catalog	63
Table 3: 47DA122 Stevens site Prehistoric Artifact Catalog	64
Table 4: Artifact Catalog Picnic Point Site (47DA501)	65
Table 5: Artifact Catalog 47DA1169.....	65
Table 6: Artifact Catalog 47DA1168.....	65
Table 7: Artifact Master Catalog – Lithics.....	65
Table 8: Artifact Master Catalog – Historic Artifacts.....	67
Table 9: Master Artifact Catalog – Faunal Remains	69
Table 10: Master Artifact Catalog – Ceramics	71
Appendix B: Permits.....	73

List of Figures

Figure 1: Location of Survey Area	6
Figure 2: Location of Survey Area on Madison West 7.5' Quadrangle (not to scale).....	7
Figure 3: Portion of Picnic Point Surveyed in 2001 (not to scale).....	8
Figure 4: Location of Survey Area Relative to Paull and Paull's Geologic Provinces	10
Figure 5: Picnic Point circa AD 1900	12
Figure 6: Picnic Point circa 1911 (Nolen 1911).....	13
Figure 7: Archaeological Sites within 1 mile of Picnic Point (prior to the 2001 survey).....	29
Figure 8: 1909 Plat of Picnic Point Mound Group (C.E. Brown unpublished manuscripts).....	30
Figure 9: 1939 Plat Map of Picnic Point Mound Group (C.E. Brown unpublished manuscripts).....	33
Figure 10: Artifacts recovered in 1939 from Mound 3 (from Baerreis 1966)	34
Figure 11: Sites Located on Picnic Point (After 2001 survey)	41
Figure 12: Durst Projectile Point from 47DA122 Stevens site	44
Figure 13: Celt from 47DA122 Stevens site.....	45
Figure 14: Dane Incised Pottery from 47DA123	48

1.0 Introduction

In early 2001, Mr. Daniel Einstein from Environmental Management (Facilities Planning and Management) at the University of Wisconsin – Madison approached Archaeological Research, Inc. (ARI) to conduct a Phase I archaeological survey of approximately 16 acres of Picnic Point (part of the Campus Natural Areas) on the campus of University of Wisconsin – Madison within the City of Madison, Dane County, Wisconsin. University land managers were concerned that current road alignments on Picnic Point might be causing damage to a prehistoric cemetery (47DA121). This report will help campus planners with appropriate design strategies for improved site preservation. In addition, the University of Wisconsin expressed an interest in developing an in-depth understanding and inventory of the archaeological resources on Picnic Point for the purposes of future planning.

1.1 Purpose

Archaeological Research, Incorporated was contracted to conduct a Phase I archaeological survey of 16 acres of Picnic Point on the campus of University of Wisconsin – Madison to provide an inventory of prehistoric sites for future facilities development and management.

1.2 Location/Legal Description

Picnic Point is located on the campus of the University of Wisconsin – Madison in the City of Madison, Dane County, Wisconsin (Figure 1). More specifically, Picnic Point is located in the NW $\frac{1}{4}$ of Section 15 and the E $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Section 16, Township 7 North, Range 9 East (Figure 2). The 2001 Picnic Point Survey was limited to only a portion of Picnic Point (Figure 3). The western boundary was

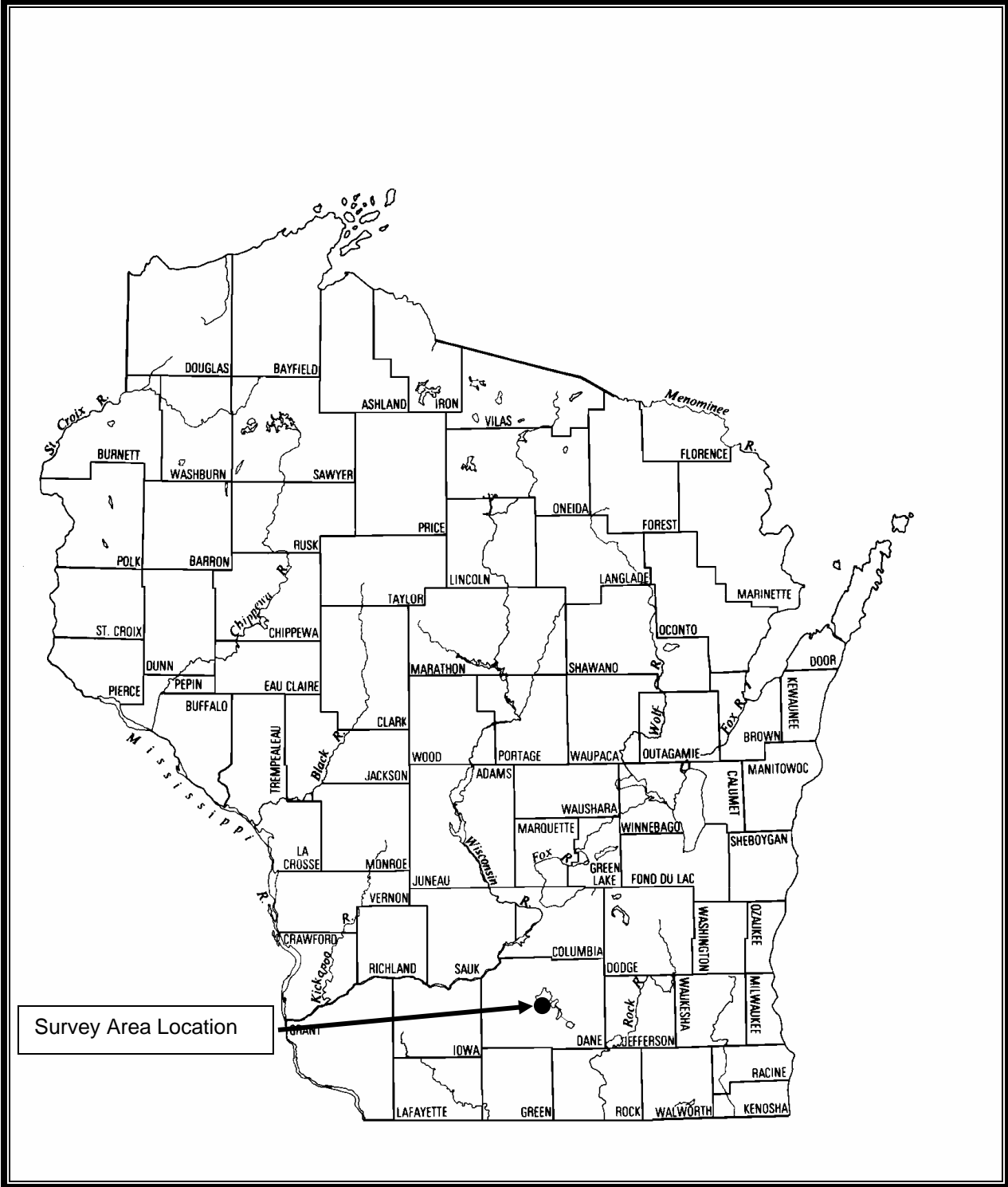


Figure 1: Location of Survey Area

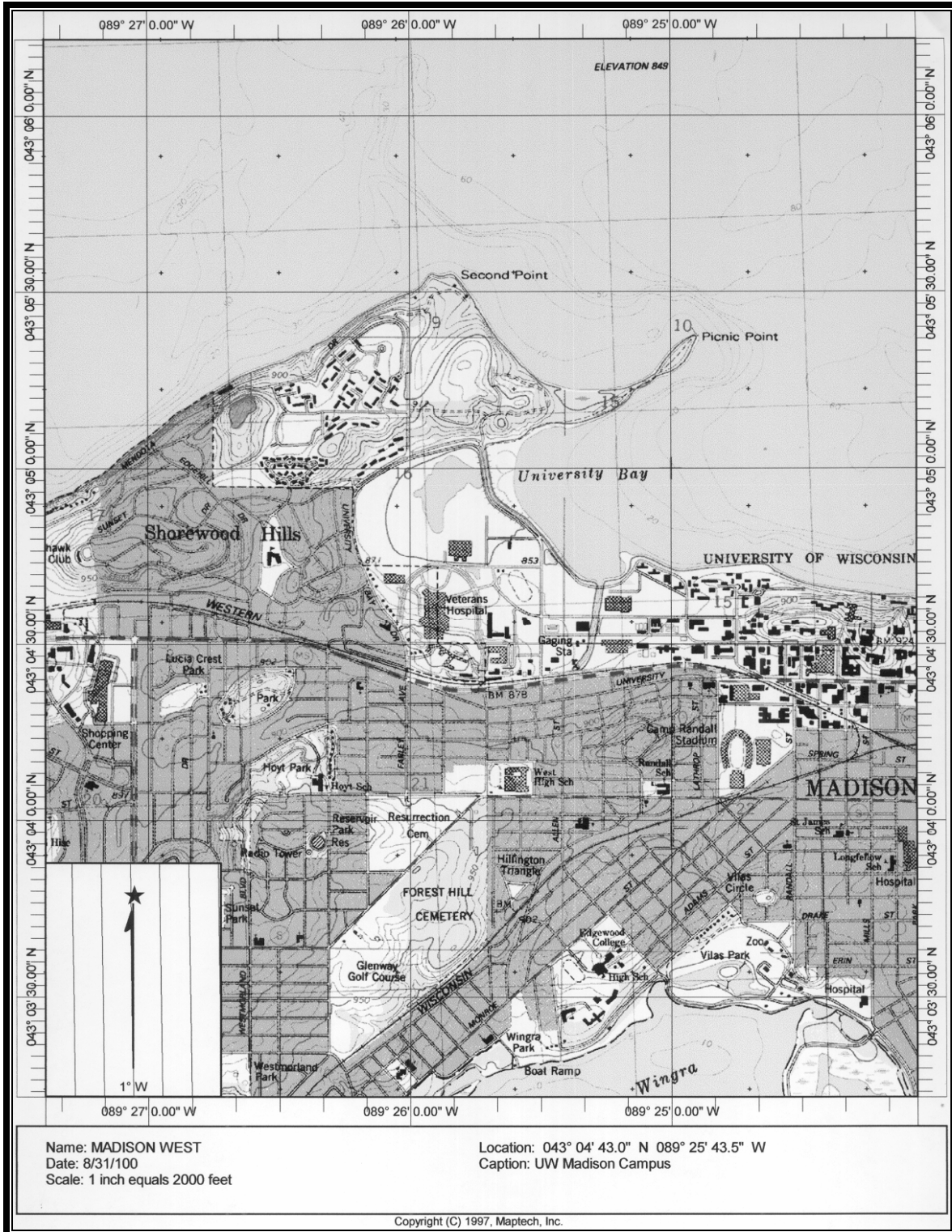


Figure 2: Location of Survey Area on Madison West 7.5' Quadrangle (not to scale)

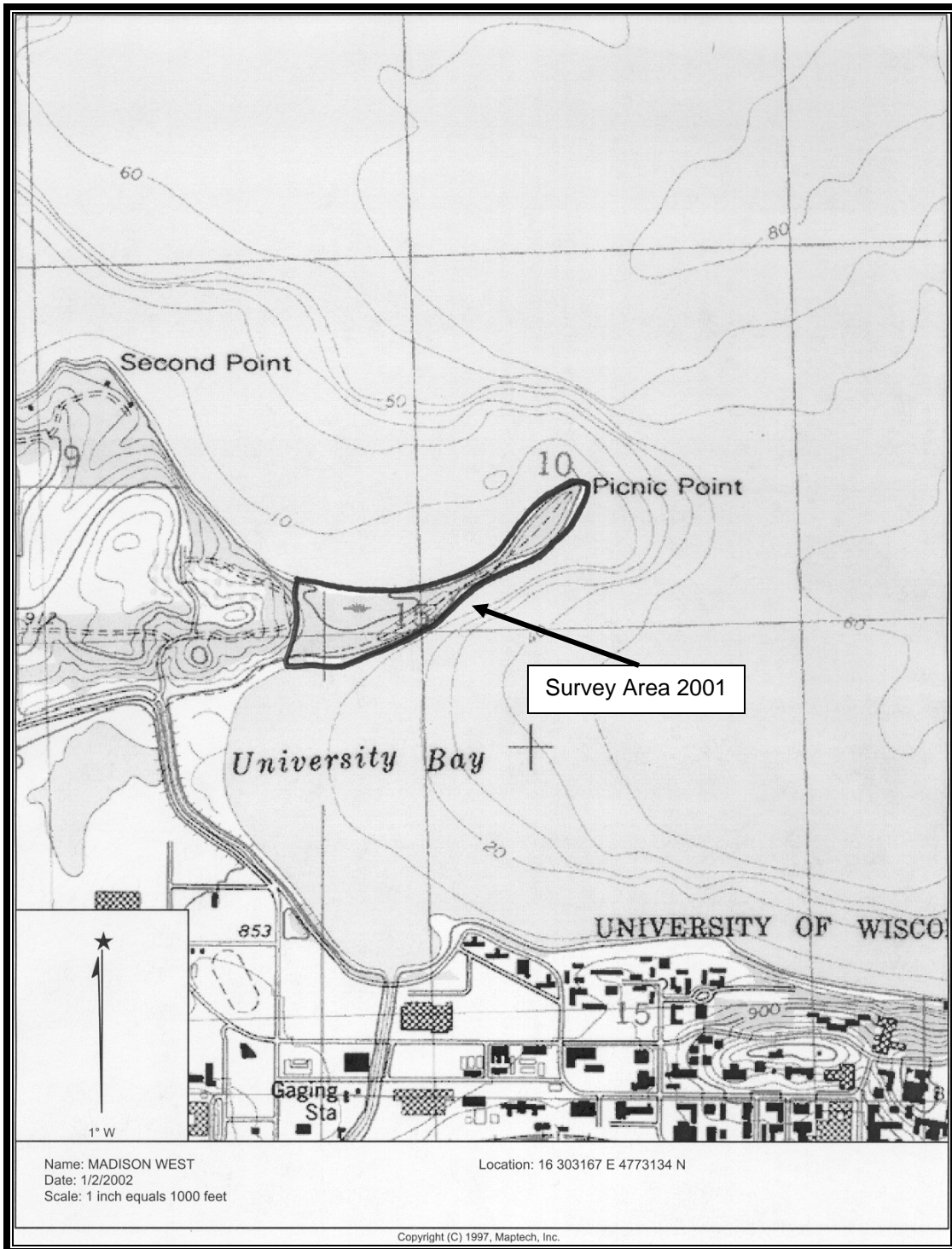


Figure 3: Portion of Picnic Point Surveyed in 2001 (not to scale)

formed by the Bath House Trail that runs roughly north/south off of the main Picnic Point Trail to a maintenance shed on the northern shore of Picnic Point. The eastern boundary was the easternmost point of the peninsula. More specifically, the parcel that was surveyed in 2001 is located in the N ½ of the NW ¼ and the SW ¼ of the NW ¼ of Section 15 and the SE ¼ of the NE ¼ of the NE ¼ and the NE ¼ of the SE ¼ of the NE ¼ of Section 16, Township 7 North, Range 9 East.

1.3 Project Information

Survey Dates: May 7 – 11, 2001

Surveyors: George W. Christiansen III
Daniel Cain
Aaron Keene
Karen Poulson

Project Contact: Daniel Einstein
Environmental Management, University of Wisconsin - Madison

Total Acres Surveyed: Approximately 16 acres

2.0 Environmental Setting

2.1 Geology

The proposed project area is located on the western margin of the Eastern Ridges and Lowlands province defined by Martin (1965) and Paull and Paull (1977), within the Black River and Magnesian cuesta (Figure 4). The portion of the cuesta in the Four Lakes area is composed of alternating limestones and sandstones. The Lower Magnesian limestone caps the highest hills, Madison sandstone/St. Peter sandstone is present in steep short slopes, Mendota limestone caps the lower hills, and Potsdam sandstone/Cambria sandstone forms the broad valley bottoms (Martin 1965:223). The original bedrock-controlled topography of the region has been substantially altered by recent glaciations moving in from

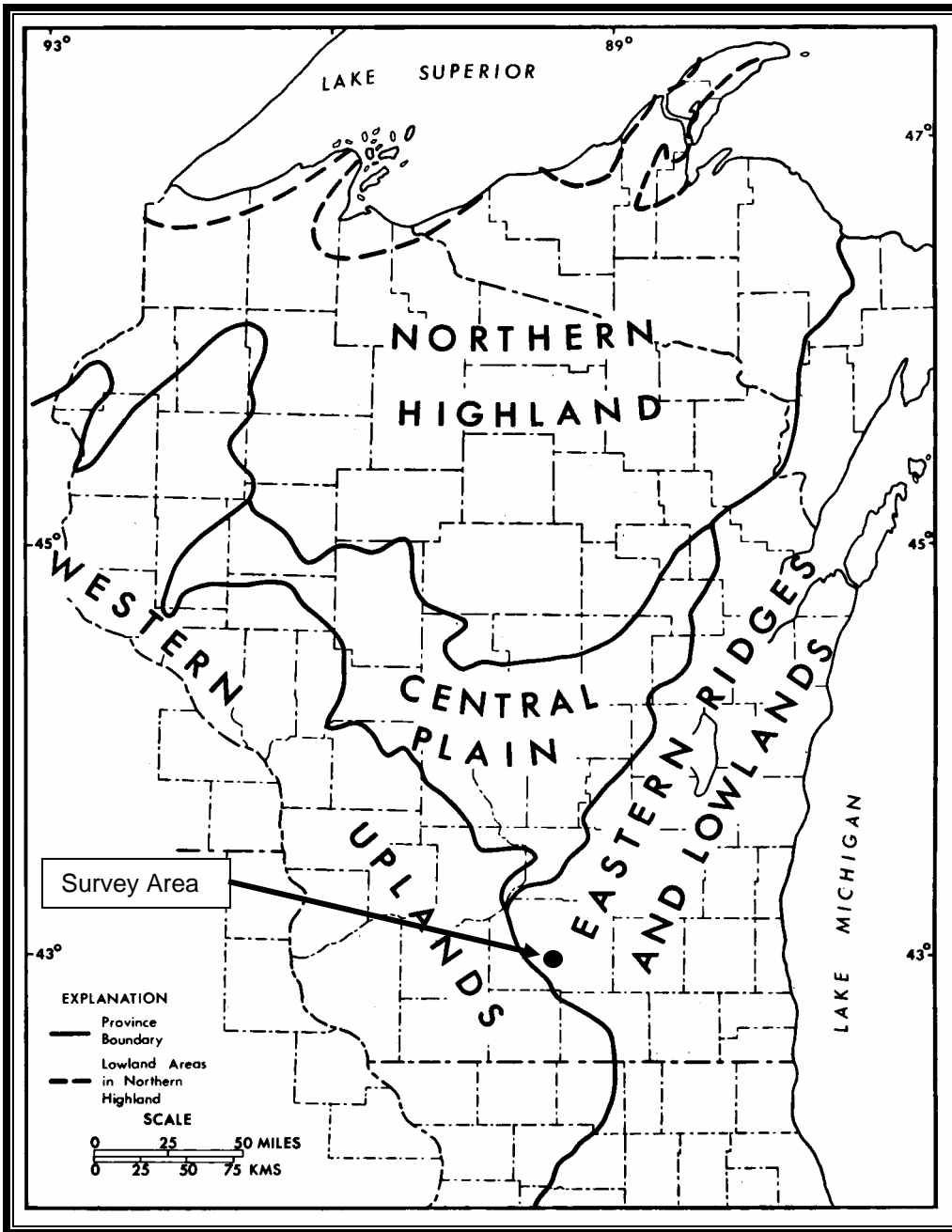


Figure 4: Location of Survey Area Relative to Paull and Paull's Geologic Provinces

the northeast resulting in rolling terrain with numerous drumlins, moraines, kettles, marshes, lakes and relict shorelines.

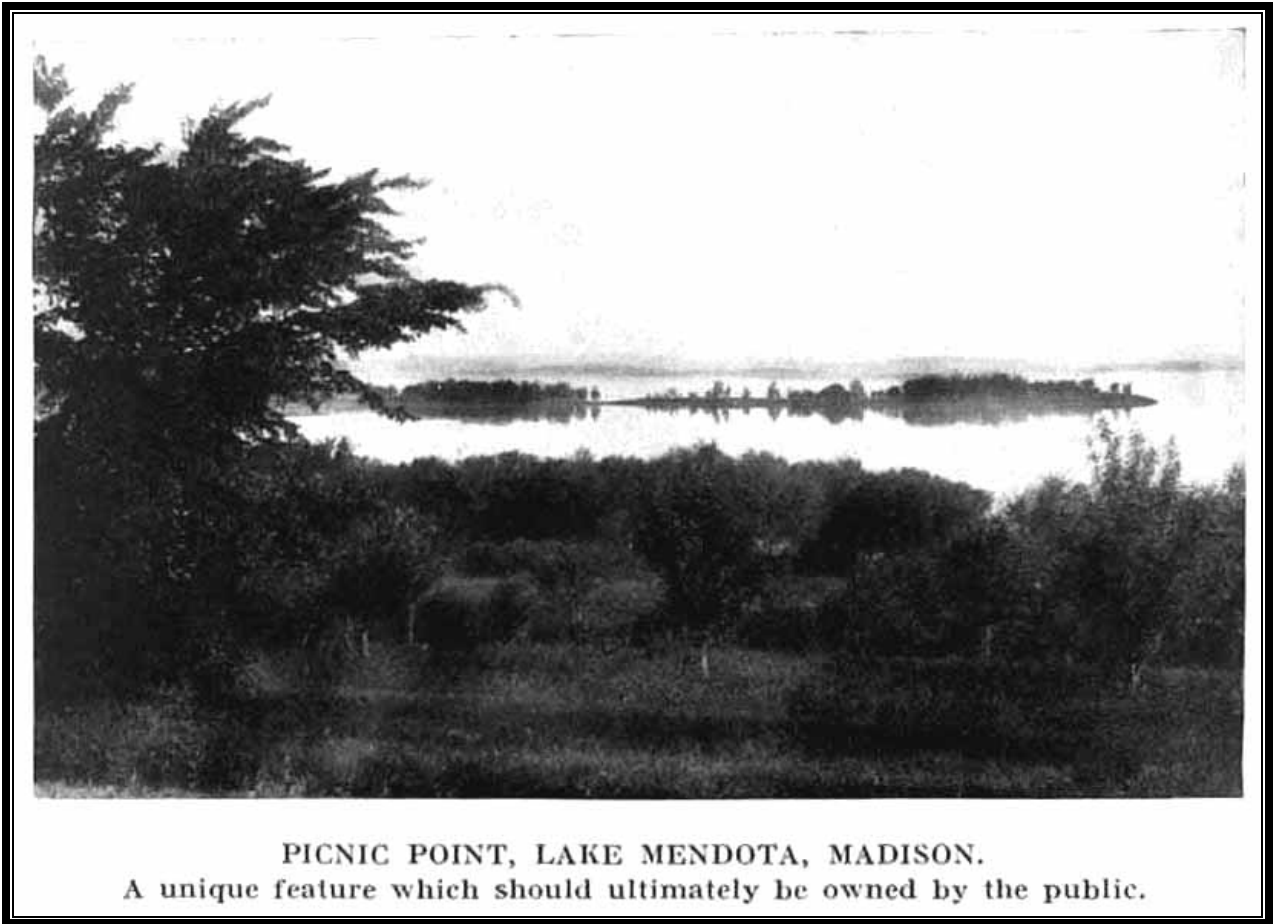
Before the last glaciation created Lake Mendota, Picnic Point stood as a high Cambrian sandstone ridge between two stream valleys, Pre-Glacial Middleton River and its tributary University Bay Creek (Baum 2001:11). The lake formed following the last ice age, surrounding the peninsula with meltwater blocked by glacial drift (Baum 2001:11). Variations in Lake Mendota's water levels over the last several thousand years have been the result of various natural environmental phenomenon as well as the damming of Lake Mendota in 1847 which raised the lake levels approximately 1.5-meters (Baum 2001:13).

2.2 Vegetation

The earliest references to the vegetation on Picnic Point are the General Land Office field surveyor's notes for "T7N R9E of the 4th Meridian of the Northwest Territory, North between Sections 15 and 16" (Wisconsin Board of Commissioners of Public Lands 1834) and are dated to December 10, 1834. These notes indicate that the vegetation on Picnic Point in the early 19th century was one of marsh and wet prairie vegetation with scattered oaks (two are listed in the notes, white and bur oaks). By the turn of the century, the area around Picnic Point (as well as Picnic Point itself) was cultivated with some wooded corridors (Baum 2001:15). Picnic Point was used for grazing and logging. Photographs from this period depict Picnic Point as being virtually wide open with just a few trees and almost no understory (see Figures 5 and 6). A map dated 1922 (campus Planning Department files) depicts several wooded corridors throughout Picnic Point. The Wisconsin Land Economic Inventory of 1958 classified the cover density on most of Picnic Point as a "poor stand" of oak-hickory, 12 – 18 inches in diameter (Baum 2001:16). Baum makes the argument that in the last several hundred years, Picnic Point was a savanna that was perhaps originally maintained by fire and then kept open by grazing. When these two forces ceased to be a factor, the present day vegetation took hold of the area.



Figure 5: Picnic Point circa AD 1900



PICNIC POINT, LAKE MENDOTA, MADISON.
A unique feature which should ultimately be owned by the public.

Figure 6: Picnic Point circa 1911 (Nolen 1911)

In the Campus Natural Areas description of Picnic Point, the middle section of the point is described as having very large red oak, white oak, and shagbark hickory dominating the canopy along with some American elm. Hackberry, green ash, basswood and sugar maple are prominent in the subcanopy along with black cherry, silver maple, box elder, black locust, and black willow. The shrub layer is dominated by honeysuckle and buckthorn. The ground layer contains white avens, virginia creeper, enchanter's nightshade, false Solomon's seal, violet and trout lily. The tip of Picnic Point is dominated by sugar maple, basswood, and hackberry. There are a few hackberry and oak trees that emerge above the other canopy trees. Sugar maple and basswood saplings and seedlings are also listed as being abundant.

3.0 Cultural Context

Paleo-Indian Tradition

Overstreet (1991, 1994) has suggested that the earliest occupation of southern Wisconsin may date as early as 13,000 BP. The **Chesrow Complex** was originally defined as falling late within the Early Paleo-Indian stage on the basis of excavations at the **Chesrow** site and surface collections at nearby sites in Kenosha County in southeastern Wisconsin. Though the complex has not been securely dated, Overstreet has argued for an early date based on the recovery of mammoth and mastodon remains bearing butchery marks, dated to 12,100-12,600 BP, on the same landforms and within the same geographic constraints as Chesrow complex material (Mason 1986a, Overstreet 1991, 1993).

The early Paleo-Indian Fluted Point complexes (**Clovis**, **Gainey** and **Folsom**) have been securely dated to the period between 11,500 BP and 10,000 BP. The fluted point complexes are distinguished by the presence of lanceolate projectile points, commonly manufactured of fine and exotic materials, which have been carefully thinned at the base by the removal of long, deep flakes which extend for varying lengths along the point and produce a distinctive, fluted appearance. Points belonging to the Clovis complex, dating 11,500-11,000 BP, have flute scars that extend less than one-third of their

length. Folsom points (produced ca. 10,000 BP) have broad flute scars that extend nearly the entire length of the point. Gainey points fall between the two both morphologically and temporally (Stoltman 1991).

Evidence for early Paleo-Indian occupation of Dane County is abundant, though confined for the most part to surface finds of isolated projectile points. The majority of fluted points in the county have been found at the **Skare** and **Havey** sites southeast of the project area (Mason 1997). Early Paleo-Indian peoples have been stereotyped as big-game hunters specializing in mammoth and mastodon. While there is abundant evidence that these animals were hunted by humans in Wisconsin, the repeated use of lacustrine or marsh environments for occupation by early Paleo-Indian people suggests a concern for the availability of small game and aquatic resources.

The late Paleo-Indian stage is characterized by the use of long, slender, lanceolate and stemmed projectile points that were carefully fashioned of fine chert. The quality of flaking on some late Paleo-Indian points has been described by some researchers as high art. Most examples in east central Wisconsin were manufactured of orthoquartzite and fall within the **Agate Basin, Alberta, Eden** and **Scottsbluff** types. Basal grinding on those points is frequent and usually heavy (Mason 1997).

While late Paleo-Indian life ways have consistently been described as focused on a continuance of earlier big-game hunting strategies, evidence suggests that late Paleo-Indian peoples practiced a broad range of subsistence activities (Kuehn 1998). As in the early Paleo-Indian stage, social structure was probably based on small groups of related individuals, who moved frequently on the landscape and preferably occupied lakeshores and stream banks near the outlets of lakes (Mason 1997).

Archaic Tradition

Early and Middle Archaic Stages (9,000 BP to 3,500 BP)

The Early Archaic is characterized by the presence of formally diverse diagnostic projectile types such as **Hardin Barbed, St.Charles**, a variety of **Bifurcated Base** points and **Thebes**. Subsistence practices and social organization appear to have been similar to those during the Paleo-Indian period,

and it appears likely that there is no clear line between the Early Archaic stage and the late Paleo-Indian stage other than that based on lithic typologies (Stoltman 1986, 1997).

The Middle Archaic stage in Wisconsin saw a number of technological innovations, including the first use of ground stone technology and copper metallurgy. The stage is primarily identified with cultural developments that culminated in the **Old Copper Complex**. The Old Copper Complex is known primarily from the excavation of several spectacular cemeteries (Freeman 1966, Ritzenthaler 1957). Identifying habitation sites contemporary with Old Copper Complex mortuary sites has depended mainly on projectile point morphology. A convincing argument has been made that the cluster of side-notched points diagnostic of the Middle Woodland stage (**Raddatz, Godar, Madison, Matanzas, Reigh**) are “everyday” variations on the ceremonial Osceola points accompanying Old Copper burials (Stoltman 1997).

Most Old Copper Complex artifacts have been recovered as surface finds in the east-central portion of the state, centering on Lake Winnebago (Wittry 1957). It was with the emergence of the Old Copper Complex that long-range trade networks between territorial groups were first established. The establishment of formal cemeteries hints that group mobility was at a fairly low level and cultural boundaries between groups were beginning to form. The eastern Old Copper burial assemblages contain goods that may have signaled individual status—copper headdresses and jewelry of exotic marine shell (Stoltman 1997). If so, Wisconsin was home to one of the earliest socially complex societies in the Upper Great Lakes.

Late Archaic Stage (3,500 BP – 2,500 BP)

The arrival of the Late Archaic stage in southwestern Wisconsin is signaled by the appearance of new projectile point types, a decline in the use of copper and a lack of identifiable cemeteries (Stoltman 1997). Late Archaic projectile points are generally small, stemmed, side or corner-notched dart points. Few other artifacts diagnostic of this phase have been identified. The beginning of the stage seems to coincide with changes in the climate and environment. Starting around 3500 BP, oak savanna seems to have partially given way to closed oak forest, as weather grew cooler and wetter. The impact of this

environmental shift on Late Archaic populations is not well understood, as few well-stratified or single component Late Archaic sites have been scientifically excavated in Wisconsin.

The Late Archaic stage is the first to be well represented in south-central Wisconsin. Sites have been located over a broad range of environmental and topographical zones. Based on excavations to date, it would appear that the Late Archaic stage represents a transition between the extremely mobile, small band strategies of the Paleo-Indian, Early Archaic and Middle Archaic stages and the less-mobile, seasonally dispersed populations of the Woodland Tradition.

Woodland Tradition

Early Woodland Stage (5,000 - 2,300 BP)

The Early Woodland stage in south-central Wisconsin encompasses two distinct cultural regimes. Residents of the area during the Early Woodland stage practiced a variant of the Marion culture, a widespread phenomenon with participants across the northern Eastern Woodlands (Esarey 1986, Green and Schermer 1988, Munson 1982). In many areas, the Marion culture is associated with Red Ochre ceremonialism. Red Ochre mortuary sites represent a leap in cultural complexity. The quantity and quality of grave goods is far greater than that found in Old Copper cemeteries. Burials were typically in-the-flesh internments placed in a flexed posture with pits in natural ridges, knolls and occasionally within artificially constructed mounds. Some bundle burials, cremations and extended in-the-flesh inhumations are known. Red ochre (powdered hematite), sometimes mixed with red sand, was liberally sprinkled over corpses and their associated grave goods during the course of burial ceremonies. Large caches of exotic and finely fashioned burial goods were placed with the remains of both adults and children—a pattern usually associated with the emergence of hereditary status differences (Stevenson et al 1997).

The Marion culture is responsible for the introduction of ceramic technology into Wisconsin. **Marion Thick** pottery was grit-tempered, cord-paddled inside and out, and took a distinctive conical or “flowerpot” form. **Kramer Stemmed** projectile points are the only other artifact diagnostic of early Early Woodland habitation sites.

The latter part of the Early Woodland saw an evolution in pottery technology and a minor switch from square stemmed projectile points to **Waubesa Contracting Stem** points, diagnostic of the **Lake Farms phase** in the Madison area. Lake Farms phase ceramics are sand or grit-tempered, cord-marked jars with relatively thin walls and slightly everted upper rim profiles. Decoration is applied directly over cord-marking in the form of bosses, incising, fingernail impressions and cord-wrapped-stick impressions. This material is closely related to that produced by the **Black Sand culture** in Illinois.

Excavations of Lake Farms phase sites in south-central and southeastern Wisconsin indicate that late Early Woodland peoples may have lived in large warm-season camps surrounded by specialized resource processing and extraction sites. The large camps would have broken up in the winter, as individual families spread out across the landscape. Though many Lake Farms phase sites are located near shallow lakes and marshes, recovered faunal remains are curiously lacking in aquatic species (Stevenson et al 1997).

Middle Woodland Stage (2,300 B.P. – 1,500 B.P.)

The Middle Woodland Stage in southern Wisconsin is generally equated with the Hopewell Interaction Sphere, a widespread exchange system famous for its exotic raw materials, spectacular artwork, elaborate mortuary facilities and fine ceramics. The core areas of the Hopewell interaction were located to the south of Wisconsin, in Illinois and Ohio. The Middle Woodland Stage in the Four Lakes Area has been incorporated into the **Waukesha phase**. Waukesha phase pottery is characterized by grit tempering and smooth exterior surfaces decorated using a wide variety of techniques. Ceramic types include **Kegonsa Stamped**, **Shorewood Cord Roughened**, **Havana Zoned**, **Naples Stamped**, **Neteler Crescent Stamped** and classic **Hopewell ware** (Goldstein 1992). Projectile point types dating to the Waukesha phase are commonly either corner notched or stemmed and include the **Snyders**, **Steuben**, **Monona Stemmed** and **Norton** types.

Waukesha phase peoples practiced mound burial, and interred their dead in rectangular pits covered by large conical mounds. Waukesha phase burials were extended; flexed or bundled, and rarely

incorporated the elaborate Hopewellian grave goods found in contemporary mounds in southwestern Wisconsin and Illinois.

Waukesha phase habitation sites indicate a continued emphasis on hunting and gathering, with increased use of aquatic resources. Lippold (1973) has suggested that Waukesha phase peoples had begun to live in semi-sedentary communities supported in part by shellfish harvesting.

Late Woodland Stage (1,500 B.P.- 1,000 B.P.)

The Late Woodland stage in the eastern United States has often been viewed as a transitional phenomenon by a number of researchers. This, however, is not the case for Wisconsin where even the earliest archaeological researchers were aware of, and intrigued by, monumental earthworks that dotted the landscape (ex. Lapham 1855, McKern 1928, 1929, 1930, Peet 1890). As research on the Late Woodland has progressed, it has become clear that while the Late Woodland stage is transitional in some aspects, others indicate a unique and well-developed stage with a complexity that is expressed not in material goods, but in ceremonialism and ritual. In other words, it does not represent a decline between two climaxes, but rather reorganization and consolidation of regional and macroregional networks that laid the groundwork for larger sociopolitical units. The early portion of the Late Woodland was, in essence, a continuation of the lifeways that had been gradually developing over the last thousand years. People continued to hunt, gather and fish, live in small groups and practice a seasonal round (Arzigian 1987, Theler 1987, Storck 1974).

Some transitional aspects of the Late Woodland stage relate to changes in subsistence strategies, settlement patterns and technology. It has become increasingly clear in the last 10 years that sometime around AD 850 maize began to play a more significant role in the diet of some Late Woodland groups (Arzigian 1987). Certainly by 1000 BP, maize had become a mainstay for a number of contemporaneous peoples who occupied the Wisconsin landscape. The adoption of more intensive horticultural economies apparently had profound effects on settlement patterns as sedentism became more prevalent among prehistoric peoples (Dirst 1988, 1995, Richards 1992, Salkin 1987, 1993). The establishment of permanent villages at a number of locations in the eastern portion of Wisconsin confirms

the impact that the rigors of maintaining a maize-based diet had. Population appears to have increased during the Late Woodland, presumably as a result of changes in diet and settlement patterns.

Several major changes in material culture and ceremonial practices mark the **Horicon Phase**. Cord and fabric impressed ceramics (**Madison Cord-Impressed, Madison-Fabric-Impressed**) dominate Horicon phase ceramic assemblages. Madison ware ceramics are generally globular in form grit-tempered and almost always in the form of large jars, although several smaller bowl-like vessels are known from a number of sites. Exteriors are cordmarked with decoration being confined to the inner lip, outer lip, lip surface, and the exterior rim to the neck of the vessel. Rims may be incurving, flared or straight. When decoration is present, it is usually in the form of single or multiple cord impressions in linear bands or geometric patterns.

The primary technological innovation of the stage was the widespread adoption of the bow and arrow. The bow and arrow were introduced into Wisconsin circa 1,300 BP, and small arrow points are the most abundant projectile points found in archaeological sites occupied after that date. Lithics from Effigy Mound culture sites are often made from local Prairie du Chien and Galena cherts as well as any of the silicified sandstones found in northwestern Wisconsin. The lithic tool kit appears to be generalized with a high proportion of utilized and retouched flakes relative to more formal patterned tools. Drills, endscrapers and spokeshaves are known from rockshelter and open-air sites. Projectile points seem to be present in three forms: triangular, small corner-notched and small, stemmed points. It seems likely that the triangular points (**Madison Triangular points**) and small corner-notched points (**Klunk points**) are part of a bow and arrow delivery system, while the small stemmed points may represent spear or atlatl points.

Prior to 1987, the Late Woodland stage was synonymous with the **Effigy Mound culture**. As it is recognized today in Wisconsin, the Effigy Mound culture is used as an umbrella term that incorporates at least two phases, the Horicon phase in south-central Wisconsin (Salkin 1987, 1993), the Eastman phase in southwestern Wisconsin (Stoltman 1990), and several phases not yet completely defined in northwestern and north-central Wisconsin.

The distribution of Effigy Mound culture sites is predominantly in the southern three-quarters of Wisconsin with additional sites in northern Illinois, northeastern Iowa and southeastern Minnesota. Site types include rock shelters, caves, multi-seasonal open-air villages, short-term encampments, seasonal resource exploitation camps and the highly visible effigy mound mortuary complexes typically located on elevated terraces near waterways, marshes and lakes. Very little is known of Effigy Mound domestic architecture, although three shallow oval basins excavated at the Sanders site (47Wp26) (Hurley 1975) suggest that small oval wigwam type houses were utilized. In addition, several "keyhole" shaped structures with associated Madison ware ceramics were recently excavated at the **Statz** site in Dane County (Meinholz and Kolb 1997).

Salkin has argued that Horicon phase peoples utilized large habitation sites for socializing and ceremonial purposes and then occupied small sites at other times of the year (Salkin 1993). The size and distribution of sites has been used as support for a band-level hunting and gathering lifestyle for the Effigy Mound peoples (Mallam 1976).

Analysis of faunal and floral remains from rock shelters, caves and open-air sites indicate that a variety of local resources were consumed by Effigy Mound builders, including deer, small mammals, fish, fowl, mollusks, nuts, as well as starchy and oily seed bearing plants (Arzigian 1987, Benn 1980, Berwick 1975, Emerson 1979, Lippold 1973, Parmalee 1959, Stork 1974, Theler 1987). Though there is evidence that maize was utilized in the Driftless Area to some extent (Arzigian 1987, Gartner 2000, Stoltman 1990), no maize has yet been reported from Horicon phase sites (Salkin 1987, 1993).

By definition, Effigy Mound culture mortuary sites contain one or more earthen, animal-shaped effigy mounds. Mound shapes include "panthers", birds, waterfowl, bears, canines, deer, buffalo, "turtles" and humans (Birmingham and Rosebrough 2000, Christiansen n.d, McKern and Ritzenthaler 1949, Rowe 1956). Effigy Mound peoples also constructed long "linear" mounds and small conical mounds. Unlike earlier Red Ochre and Hopewellian mounds, these mounds were generally low, contained few, if any, grave goods and contained the remains of only a single individual, though some mounds with multiple interments, (and some with none at all), are known. Articulated and bundle burials, cremations, pit burials, primary mound floor and primary mound fill burials were all common. The only consistency in

burial regime was the placement of the corpse near the “heart” of the effigy (Stevenson et. al. 1997).

Though many excavated Late Woodland mounds contain burial features, not all do. This has led several researchers to suggest that the importance of the mounds lay in the process and ceremonies accompanying their construction, and not only in their use as burial markers (Mallam 1976).

Recent research suggests that there are patterns to the distributions of certain types of mounds that indicate an east to west geographical division (Christiansen n.d.; Rosebrough, n.d.). This division seems to reflect differing terrain, resource bases, and perhaps social affiliations and cosmologies. As an example, bear-shaped mounds are more frequently found in the western portion of the state, while the east is dominated by “panther” and “turtle”-shaped mounds (forms similar to historic iconography depicting water spirits). Bird mounds, while found throughout the area occupied by Effigy Mound builders, are most abundant in the higher elevations of the Driftless Area. The association of specific animals with high and low elevations fits within a pan-eastern Native American tradition concerning a tripartite division of the world into the “Upper World” (order, fire, lightning/thunder, warfare, birds), “Middle World” (this world, balance) and “Lower World” (chaos, water, springs and caves, healing and fertility, bears and water spirits) (Birmingham and Rosebrough 2000, Hall 1997; Hudson 1992). Local landscape features also appear to have played a role in the structure of individual mound groups. “Panther” or Water Spirit mounds are often found near springs and deep lakes, features identified as portals to the underworld in the cosmology of eastern Native Americans (Birmingham and Rosebrough 2000). It appears that the Native Americans who built the effigy mounds were creating a symbolic landscape through the construction of various types of mounds.

Terminal Late Woodland (1,100 BP- 800 BP)

Sometime around 1,100 BP, significant changes took place on the landscape of southern Wisconsin. A few ceramic vessels in east central Wisconsin were produced with a distinctive folded rim, which produced the appearance of a “collar” around the pot. Though used in small amounts at first, collared pottery became more popular and replaced the earlier Madison ware entirely by 950 B.P. The resulting **Point Sauble** and **Aztalan Collared** types are the diagnostic hallmarks of the terminal Late

Woodland stage. At the same time that this ceramic transition was taking place, maize was introduced into the Late Woodland diet in increasing amounts. By 1,000 B.P. fully horticultural societies had arisen and the first sedentary villages in Wisconsin were occupied (Stevenson et al 1997). Some of these early villages were fortified with post palisades (Salkin 1993). This set of changes signaled the onset of the Terminal Late Woodland in southern Wisconsin. In the eastern part of the state (east of the Driftless Area), the terminal Woodland has been called the **Kekoskee Phase** (Salkin 1987, 1993).

There are strong indications that the socio-political dynamics of southern Wisconsin became more complicated as sedentism took hold and diverse cultural groups either developed within, or moved into, southern Wisconsin. By AD 1050, the terminal Late Woodland town of **Aztalan** was occupied by a group of Cahokian **Middle Mississippians** and **Oneota** settlements were springing up in northwestern, northeastern and southeastern Wisconsin.

Mississippian Tradition

Middle Mississippian (1000 BP to 750 BP)

Evidence of a Middle Mississippian presence in southern Wisconsin is confined to only a handful of sites, which has led researchers to the conclusion that it is largely an intrusive presence. Middle Mississippian peoples were different from surrounding Late Woodland groups in a number of ways. First, they were a fully sedentary agricultural people depending on maize, beans and squash. Second, they appear to have had a ranked society that was organized around chiefly authority. Third, they constructed monumental architecture that included platform temple mounds, large bastioned palisades and specialized public buildings. Fourth, they utilized a very specialized ceramic technology that included the use of crushed freshwater clamshell as a tempering agent. In addition to this new temper, they also made a wider variety of vessel forms that included jars, water bottles, plates, and bowls that were occasionally slipped with red, black, white or brown pigments. The diagnostic Middle Mississippian ceramic types are **Powell Plain** and **Ramey Incised**. Lithic technology was based around a generalized

core reduction strategy and the typical projectile point was a small, thin, notched or multi-notched triangular point (Christiansen 2000).

Middle Mississippian peoples, or at the very least, ideas, were present in southern Wisconsin sometime between A.D. 1000 and A.D. 1050. It is thought that Middle Mississippian people took at least two routes north, one to the west along the Mississippi River trench and a second from Illinois via the Rock River. The eastern route brought Middle Mississippian peoples into contact with Late Woodland Kekoskee Phase people who had already settled at several locations. It appears that some type of relationship was established with these people and the small village of **Aztalan** metamorphosed into a 22-acre mixed Kekoskee/Middle Mississippian village with three platform mounds. Middle Mississippian presence is seen at several other sites in the form of trade goods and locally made imitations of Powell Plain and/or Ramey Incised. Evidence for a Middle Mississippian presence in Wisconsin ceases shortly after A.D. 1250 when portions of Aztalan were apparently burnt (Christiansen 2000).

Oneota (1000 B.P. to 400 B.P.)

Some Late Woodland communities appear to have adopted elements of Mississippian material culture and ideology, and evolved into a group of related cultures termed the **Oneota**. Oneota peoples adopted many elements of Mississippian material culture, including the manufacture of smooth surfaced, shell-tempered pottery decorated with trailed geometric and curvilinear motifs, and a heavy reliance on maize horticulture. Like the terminal Late Woodland peoples of eastern Wisconsin, they inhabited large, sometimes fortified, sedentary villages. Oneota material culture was variable, due in part to the differing responses of local groups to Mississippian ideology and technology. The geographic distribution of Oneota villages was discontinuous, as not every Late Woodland stage group accepted new ideas (Christiansen 1999, Overstreet 1997).

The sudden pre-occupation with fortification systems that developed with the emergence of sedentary societies may be due in part to the close proximity that the culturally dissimilar terminal Late Woodland, emergent Oneota and Middle Mississippians found themselves in. However, while terminal

Late Woodland and Middle Mississippian sites in the area are frequently fortified, only a single fortified Emergent Oneota site has been noted to date.

Subsistence revolved around fishing, shellfish harvesting, hunting and trapping of aquatic mammals and a horticultural system involving corn, beans and squash. Shell middens, shellfish processing areas, garden beds and rock piles produced during field clearance are common both near and within habitation areas. Wild mast crops, such as hickory, walnut, butternut, acorn and hazelnut were collected, and there is evidence that deer and elk were hunted (Overstreet 1997).

Historic Period

Historic Native Americans (400 BP- present)

Oneota culture appears to have persisted into the Historic period, based on excavations at the **Astor site** in modern Green Bay. Items of European manufacture were found there in association with Oneota shell-tempered ceramics. Fragments of brass kettles, a glass bead and a clasp knife were recovered from the site, along with a grit-tempered **Bell Type I** pot (Wittry 1963, Mason 1986b). Bell Type I pottery has been associated with the historic Potawatomi and Mesquakie. The ethnic affiliations of the Oneota communities have not yet been established, but their geographic location and material culture of the eastern Classic Oneota matches early European descriptions of the “**Ouinipigou**” (Winnebago/Ho-Chunk). It appears that Oneota populations had declined by historic contact (presumably due to epidemic disease and an increase in regional conflict) and contact had been established with the Mesquakie, Potawatomi and other groups being pushed westward by disturbances resulting from Euro-American colonization (Hall 1962, Overstreet 1997).

These disturbances, coupled with an increasing reliance on items of European manufacture, resulted in a cessation of pottery and stone tool manufacture. As a result, it is very difficult in most cases to link historic residents of Wisconsin to prehistoric cultural complexes. The association of the Ho-Chunk with the eastern Oneota, though tentative, still remains the strongest to date.

The early Historic period, in a formal sense, is traditionally said to begin in 1634, when Jean Nicolet is believed to have landed at Red Banks on the shore of Green Bay (though Hall and other researchers have questioned whether this location is correct [Hall 1993]). Nicolet had been sent as an envoy to the Ho-Chunk nation with the intent of establishing a peace treaty between their nation and the Ottawa, in order to facilitate the flow of furs into French territory. As competition for those furs between native tribes and European groups increased, warfare and population movement accelerated. War parties from eastern fur-trading tribes began to attack the Ho-Chunk, whom Nicolet had failed to convince of the benefits of trade with the French. These parties carried epidemic diseases with them, and the resulting outbreaks killed nearly two-thirds of the Ho-Chunk (Lurie 1980).

In 1649 the Huron abandoned their traditional lands, opening a passage along the northern shore of Lake Huron and along the islands spanning the straits between Lakes Superior and Michigan and into Green Bay. Pressure supplied by Iroquois raiders pushed refugees such as the Mesquakie, Sauk, Kickapoo, Mascouten, Illinois and Miami eastward into Wisconsin (Mason 1988). Other groups, including the Chippewa and the Huron themselves, moved along the southern shore of Lake Superior on their way eastward.

The Ho-Chunk began a push westward during this period, moving from Green Bay to the Lake Winnebago area. Though their major villages were located in eastern Wisconsin, the Ho-Chunk traveled regularly into the Driftless Area, and across the Mississippi for buffalo hunts. The following decades were witness to the partial recovery of the Ho-Chunk population. By the 1800's, villages and campsites were established across southern Wisconsin. During their period of expansion, the Ho-Chunk successfully adopted elements of the more mobile Algonquian life style and became prosperous participants in the fur trade (Lurie 1960, 1978). They also began to mine lead in the Driftless Area, putting themselves at the center of a developing regional trade network of raw lead and ammunition (Kay 1977, Spector 1974)). This activity, though economically advantageous in the short-term, inevitably drew the attention of white settlers and led to conflict between the Ho-Chunk and Euro-Americans who wished to claim the lead district for themselves.

In 1829 and 1832, treaties were drawn up calling for the Ho-Chunk to abandon title to the lead district and relocate west of the Mississippi. A third treaty, drafted in 1837, stipulated removal of the Ho-Chunk to Iowa from their remaining territory in Wisconsin. The Ho-Chunk, suffering through another round of catastrophic epidemic disease, largely ignored these treaties, and the U.S. government began a series of forced relocations in the 1840's (Lurie 1980). Many of the deported Ho-Chunk returned to Wisconsin at the first opportunity (settling in the Wisconsin, Baraboo and Fox River valleys) (Lawson 1907). In 1875, the Indian Homestead Act was passed, allowing the Ho-Chunk to remain in Wisconsin by purchasing homesteads. These homesteads, located in the poorest areas of the state, served as "home bases" while the Ho-Chunk traveled to seasonal gatherings on the Mississippi River near La Crosse and served as itinerant workers in cranberry bogs, cherry groves and blueberry fields (Lurie 1966, Wyatt 1986).

By the late 1880's, Ho-Chunk settlement was concentrated around Black River Falls, Stevens Point, Tomah and Hatfield, and many homesteaders had lost their lands at the expiration of the 20 year tax-free period on their property. Despite these hardships and upheavals, many Ho-Chunk retained the practice of traveling on a seasonal round, periodically moving to favored winter fishing and hunting grounds. The following years saw a diminishment of this custom, as the Ho-Chunk began to participate in the tourism industry, seek factory jobs and practice commercial agriculture (Wyatt 1986).

Ho-Chunk villages in the Four Lakes region are not documented prior to the 1830's. Prior to that time, Ho-Chunk settlement was concentrated between Portage and Green Bay, and down the Rock River. By 1830, five villages had been established in the Four Lakes area: Old Turtle's village on the north shore of Lake Mendota, the Four Lakes village in the area of modern Tenny Park on the Isthmus, Broken Arm's village on the south shore of Lake Monona, Spotted Arm's village on the south shore of Lake Waubesa and Mammothe's village on the south shore of Lake Kegonsa. By the time of Black Hawk's retreat along the Isthmus in 1832, only the two northernmost villages were still occupied, and a smallpox epidemic had spread through the Yahara and lower Rock River valleys (Brown Mss, Tanner 1987).

4.0 Literature Search Results

4.1 Literature Search Methods

The initial literature search for this archaeological survey utilized a number of archival and database sources. Initial searches were conducted using the Wisconsin Archaeological Sites Inventory (ASI) located in the office of the Wisconsin State Archaeologist at the State Historical Society of Wisconsin. Site locations and numbers were transferred from Office of the State Archaeologist (OSA) topographic maps, and information concerning precise location, cultural affiliation and prior fieldwork was then recorded for each site within a mile of the project area. An archival search was then conducted using a variety of sources including the Charles E. Brown Manuscripts and Atlas. These two sources were particularly helpful in obtaining information on prehistoric and early historic sites within the project area and within one mile of the project area (Figure 7).

4.2 Archaeological Sites On Picnic Point

47 DA 121 – Picnic Point Mound Group

Location: Southern ½, of the NW ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 East, Town of Madison, Dane County, Wisconsin.

Description: The cemetery was originally reported as consisting of five hemispherical mounds and two linear mounds arranged in a linear fashion along the south shore of Picnic Point. Six of the seven mounds are intact, surficial remains of one of the westernmost hemispherical mounds has been destroyed.

History: Charles E. Brown platted the cemetery on Picnic Point on August 21, 1909 and published the first report of the site in Volume 8, Number 4 of the Wisconsin Archaeologist (1909b) (Figure 8). His

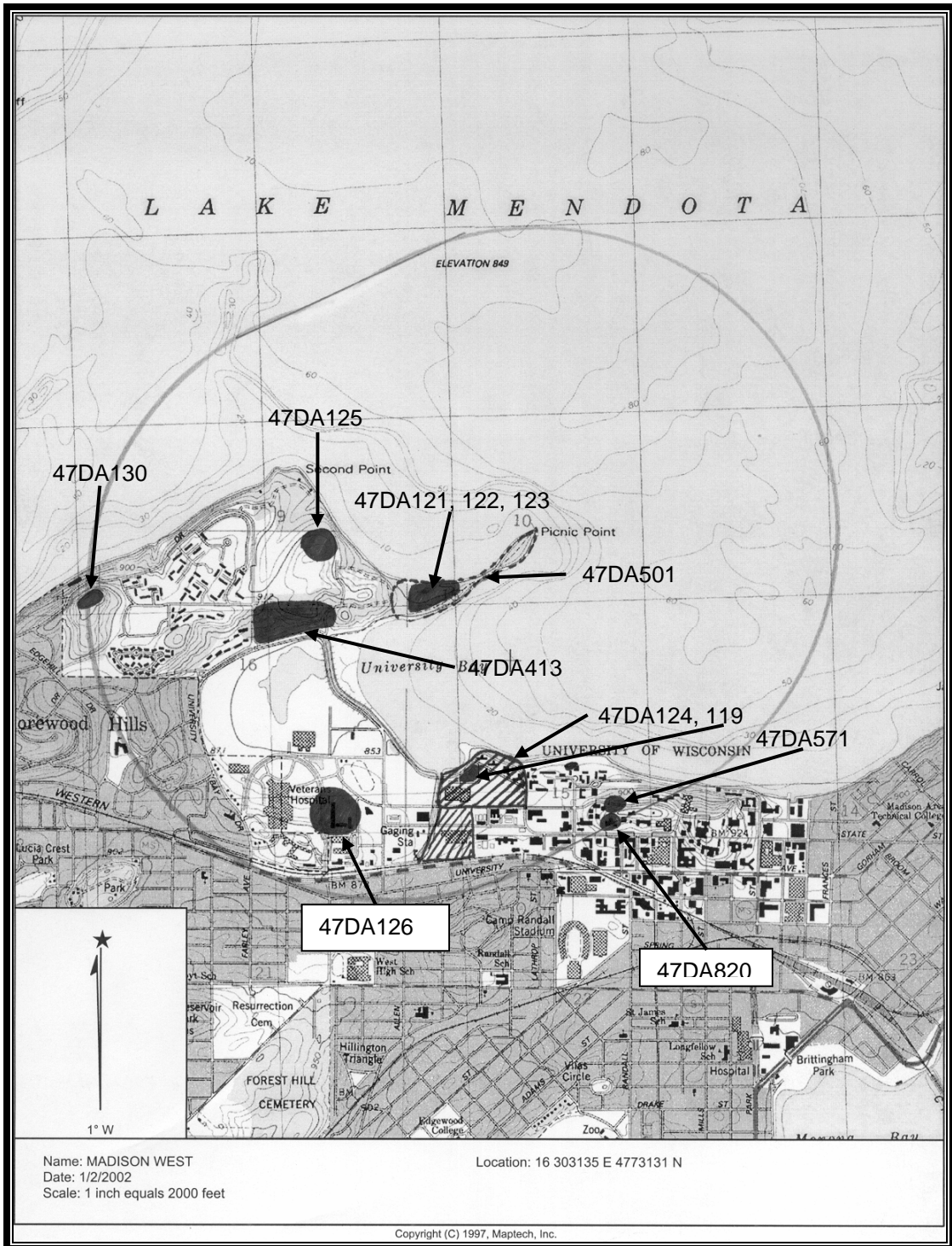


Figure 7: Archaeological Sites within 1 mile of Picnic Point (prior to the 2001 survey)

report was brief and did not include the plat. Brown reported the mound group as consisting of "...five conical and two oval mounds on Picnic Point on the south shore of Lake Mendota, Fract. Sec. 15. Indications of camp and workshop site. Winnebago camped here in early days of settlement." (Brown 1909b120). In 1912, Brown made more formal descriptions of a number of mound groups around Lake Mendota that had been previously undescribed, including the "Picnic Point Mounds" (Brown 1912:13-14).

On the narrow tongue of land commonly known as Picnic Point is a group of seven mounds. Five of these are located among trees at the base of a hill at the west end of the point. This part of the point was at one time under cultivation and it is probable that the height of the mounds has been somewhat reduced thereby. The old furrows made by the plow can still be seen on the greensward between and passing over several of the mounds. The mounds are now from a foot to 1 ½ feet high. Of these mounds three are conical, one oval and the other a linear mound. Of the conical mounds two are now about 25 feet and the other 20 feet in diameter. The oval mound measures 52 by 28 feet, and the linear mound 70 feet in length and about 25 in width.

Some hundreds of feet east of these mounds on a gradually rising slope are two conical mounds, separated from one another by about 150 feet. The first of these was at one time rifled by relic hunters. Only the rim now remains. It appears to have been originally about 30 feet in diameter. The other mound is on the most prominent part of the elevation. There are no trees about it and although only a few feet high it can be seen for a considerable distance. It is of the same diameter as the mound just mentioned. It lies within about 200 feet of the canoe portage.

(Brown 1912:13-14)

In 1939, after Picnic Point had been purchased by the University of Wisconsin, a Works Project Administration (WPA) crew under the direction of Burl Briggs and Charles E. Brown began repairing and uncovering the mounds in the Picnic Point Mound Group. Brown recorded the activities in a note for the Wisconsin Archaeological Survey on August 25, 1939. He stated that:

On Thursday August 14, 1939 our mound repair crew (WPA), in repairing round mound No. 3 in the mound group located on the base of the Point encountered a burial on the floor of this mound at a distance of 18 inches from the top of the mound. This was 8 feet 8 inches from the western and 8 feet from the northern edge of the mound. This bundle re-burial consisted of an upturned skull with a number of leg and arm bones and other bones lying by its side and under it (western side). A photograph was taken of this burial by the photographer of the Department of Visual Instruction, University of Wisconsin. Also of two linear and another round mound of this group.

In the black soil of which this mound was constructed flint chips, a broken hammerstone, burned and cracked stones, three potsherds (one cord-marked), a piece of broken flint point and a lump of red ochre were found.

(CEB unpublished manuscripts)

Brown included with this note an updated plat that included evidence of what he called "Garden Beds" (Figure 9). The reference to garden beds was further expounded upon in a 1939 newspaper article that stated:

Near the mounds are faint vestiges of the garden beds in which the villagers grew their corn, mellons, beans, and squash, Brown said. Each bed is about 30 feet long and four feet wide, and separated by a narrow pathway.

(CEB unpublished manuscripts)

While this reference is intriguing, it seems at odds with his initial description of the mounds in 1909 that made mention of the modern agricultural indications over and around the mounds. It is possible that during the process of cleaning around the mounds those more distinct pre-European agricultural features became more obvious. Unfortunately, Brown does not make any more definitive statements about the garden beds, nor did anyone else who has had occasion to work upon the cultural resources of Picnic Point.

In 1966, David Baerreis, then on faculty at the Department of Anthropology at the University of Wisconsin – Madison, published an article in *The Wisconsin Archaeologist* detailing cultural resources in the Madison area. Included in this article was a description of the WPA excavations on Picnic Point along with an analysis of the materials that were recovered (Figure 10). Baerreis describes the lithic assemblage from the mound reconstruction activities as consisting of 449 waste flakes of chert, 8 projectile points or fragments of points (1 **Madison Side-Notched**, 1 **Waubesa Contracting Stem**, 2 blade fragments, and 4 **Madison Triangular** points), 3 scrapers, 4 bifacial blade segments, and a single ground and polished stone celt. Ceramics were also recovered and the assemblage consisted of 55 sherds, 48 of these are body sherds (11 smooth surfaced, 37 cord marked, all grit-tempered). Seven rim sherds were also recovered (5 **Madison Cord Impressed**, 1 **Aztalan Collared**, 1 Unidentified). The Madison Side-Notched point has a Middle Archaic affiliation (6000/4000 B.C. – 1500/1200 B.C.), the Waubesa Contracting Stem has an Early Woodland affiliation (250 B.C. – A.D. 100) and the triangular points date to sometime after A.D. 600. The identifiable pottery has Late Woodland origins with Madison

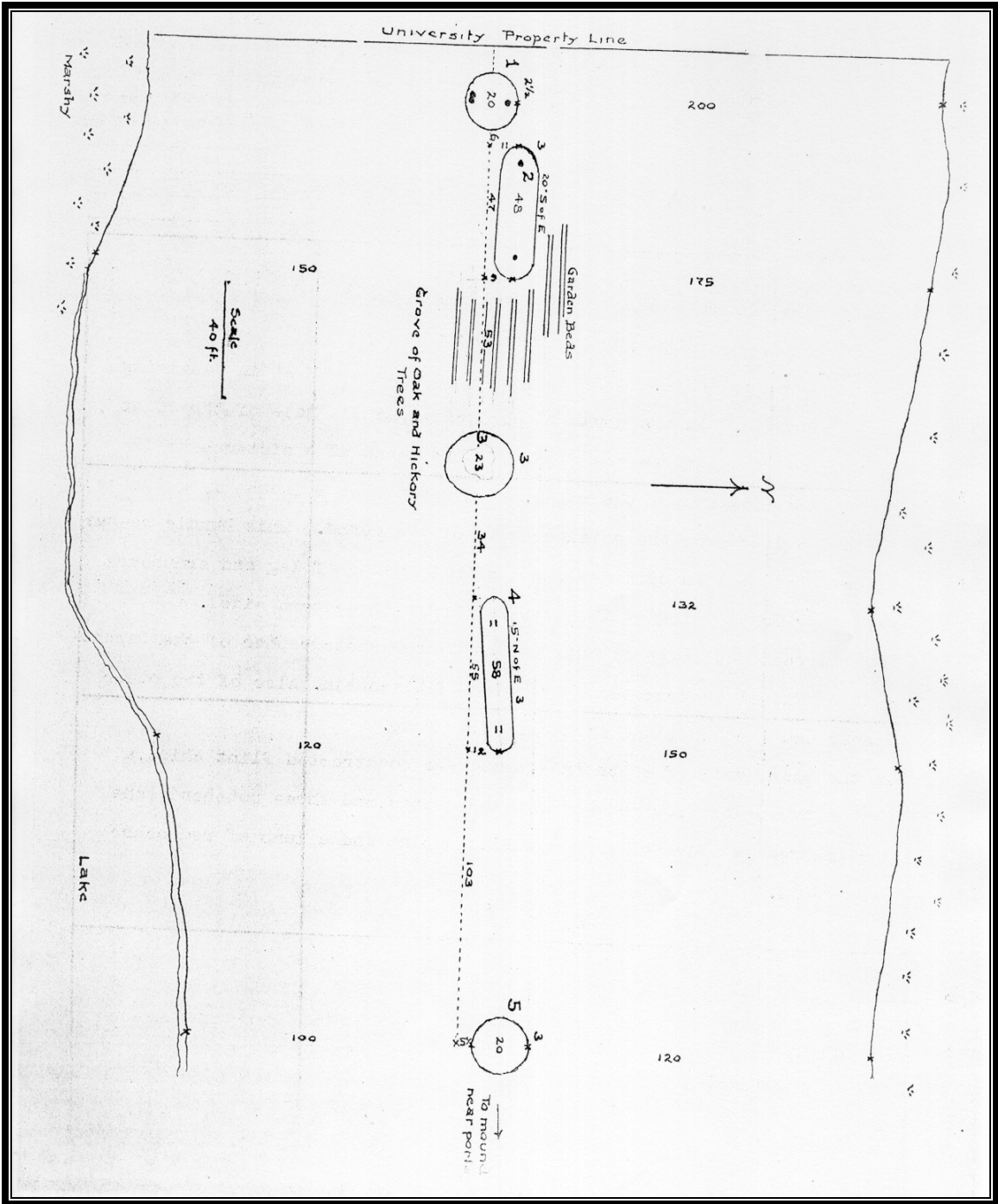


Figure 9: 1939 Plat Map of Picnic Point Mound Group (C.E. Brown unpublished manuscripts)

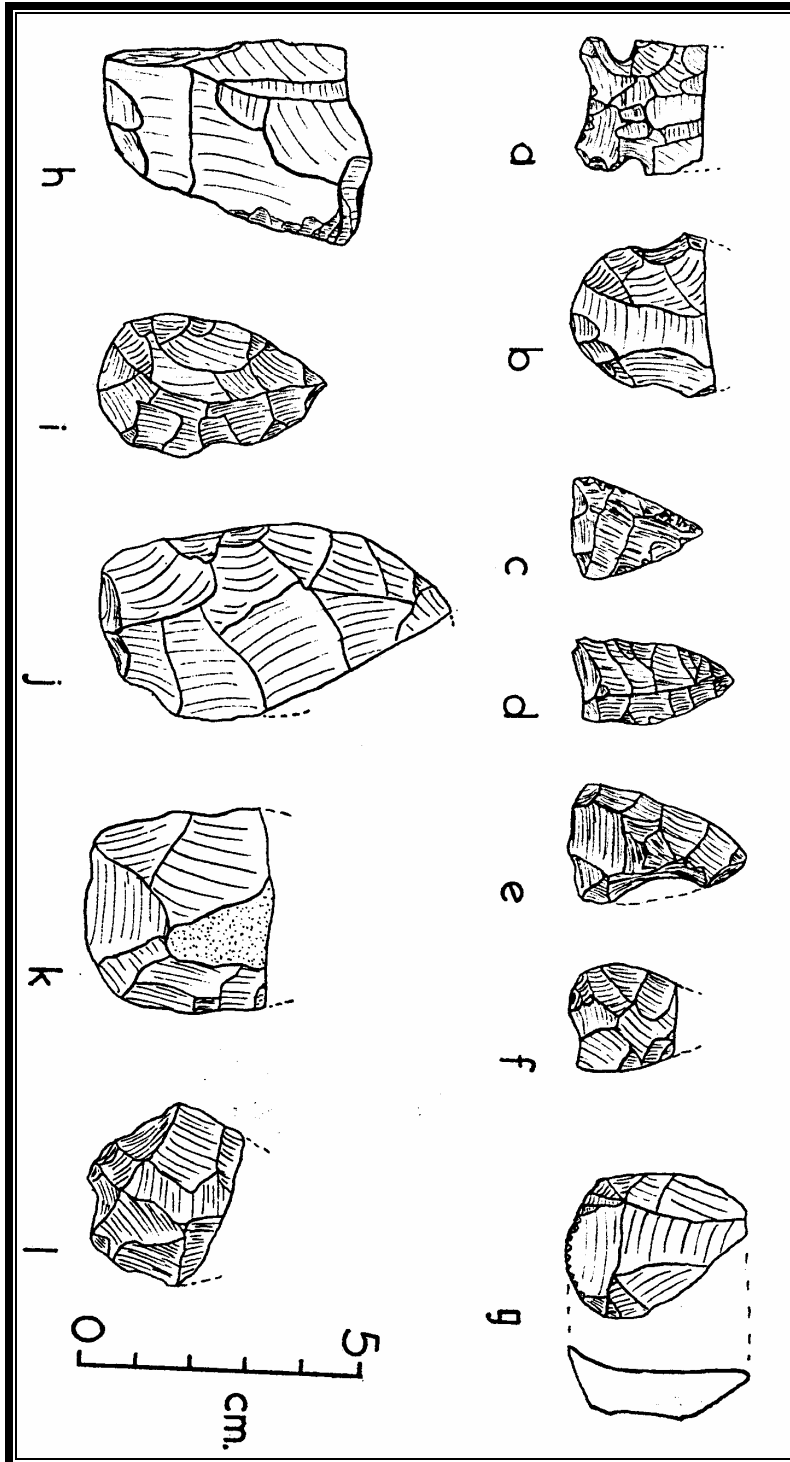


Figure 10: Artifacts recovered in 1939 from Mound 3 (from Baerreis 1966)

Cord Impressed varieties dating to AD 700 – 1000 and Aztalan Collared from AD 800 – 1250. In summary, the artifact assemblage recovered from the mound reconstruction earthmoving activities indicates habitation on and off over as many as 8,000 years. **It is important to note that these materials were recovered from the mound fill of the mounds and under the mounds themselves.** This means that the age and cultural affiliation of the mounds themselves may or may not be reflected in this assemblage. It is far more likely that these materials relate to a nearby habitation area such as 47DA123.

Charles F. Merbs analyzed the skeletal material that was recovered in the WPA excavations as well as two additional bodies that were apparently removed at an unspecified earlier date (Merbs 1966). In his 1966 study he designated the three individuals as UW – 3, UW – 4 and UW – 5). UW – 3 is the individual removed during the 1939 excavations. The UW – 3 remains consisted of fragmentary cranium, several postcranial bones, all in poor condition. UW – 4 consisted of a fragmentary skull and a nearly complete postcranial skeleton in poor condition. UW – 5 consisted of fragments of cranium and a pelvis. Merbs identified UW – 3 as being a young adult female aged approximately 21 years, UW – 4 as a young adult female aged approximately 25 and UW – 5 as a middle to old adult male aged 40 – 55 years. UW – 5 suffered from osteoarthritis and UW –4 or 5 had a healed fracture of the right clavicle.

47 DA 122 – Stevens

Location: NW ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 East, Town of Madison, Dane County, Wisconsin.

Description: Brown (1925:36) describes the site as "Camp site on Picnic point. Evidences most numerous beyond the canoe portage and on the Stevens farm at the base of the point."

History: The Stevens site has a somewhat complicated history that has led to erroneous placement of the site on the Office of the State Archaeologist's (OSA) USGS topographic maps (see Figure 7). Brown

became aware of archaeological materials on Picnic Point as early as 1908 when he made a record of "The existence of an Indian camp site and chipping sites on Picnic Point, Lake Mendota, Dane County" on July 30, 1908. Brown added some specifics such as "Indications of a former camp and workshop site are to be seen in some of the cultivated fields at the western end of the point. Many specimens dug out of lake banks on University Bay side of Point by myself and Marion Ceaufield. Some cordmarked sherds." (Charles E. Brown unpublished manuscripts). In 1912, Brown published his report in *The Wisconsin Archaeologist*.

On the end of the point beyond the portage a large number of flint implements have been found at different times within the past few years. By the continual erosion of the high lake banks on either side of the point large numbers of flint chips, flakes and fragments, pieces of pottery vessels and hearth stones are exposed every year. At the extreme end of the point and at the portage a large number of flint arrowpoints have been found by boys.

(Brown 1912:13-14)

By 1925, Brown had refined his description to the one cited above. No mention is made of the Stevens site until 1979 when Dan Wendt reported two site areas on the eastern most portion of Picnic Point. At that time, Wendt recovered a variety of artifacts from two locations, one immediately to the east of the canoe portage/beach (he called this site Picnic Point 2) and the other on the south shore of Picnic Point (he called this site Picnic Point 1). The OSA gave the two site areas, along with another farther to the west, the site number 47DA501. No reference was made to Brown's earlier reports. At Picnic Point 2, Wendt reported finding "1 basal fragment of a side notched point, 1 tip of point, 2 point fragments, 117 refuse flakes, 28 pot sherds; grit tempered, cord marked 2 charred bone fragments." (State Historical Society of Wisconsin Field Sheet – Wisconsin Archaeological Site Survey dated 5/9/79). He also remarked that "A feature, refuse pit, seems to be eroding into the lake. All artifacts in a small concentrated area of shoreline." (State Historical Society of Wisconsin Field Sheet – Wisconsin Archaeological Site Survey dated 5/9/79).

Maps at the OSA place the Stevens site to the west of the canoe portage, in the vicinity of the Picnic Point Mound Group. This placement is clearly problematical given Brown's and Wendt's information.

47 DA 123

Location: NW ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 East, Town of Madison, Dane County, Wisconsin.

Description: The Archaeological Site Inventory (ASI) describes this site as being "On Picnic Point on south shore of Lake Mendota; near DA-121 and DA-122." It also gives this site description:

Camp and workshop site. Excavations by WPA crews in 1939 yielded a celt, cordmarked sherds, lithics and a fluted clay pipe bowl at this camp. Artifacts from the SHSW collections that may related to this site include several small triangular points (Late Woodland), a copper knife (Late Archaic), and a Madison Side-Notched Point (Late Archaic). A white clay trade pipe was also found (cat. # 1960.120, 127-2). The Winnebago were also reported in the area until 1889 for muskrat trapping. Additional comments: ¼ sections are from Salkin 1983.

(ASI form for 47DA123, ASI # 012116)

History: Clearly this site number was meant to designate a habitation site under the Picnic Point Mounds or wherever mound fill was taken to create the mounds. The bibliographic references used to generate the ASI form are two C.E. Brown references, one from 1909 and the other from 1912. The 1909 reference is part of a description of the Picnic Point Mound Group and consists simply of "Indications of camp and workshop site." (Brown 1909b:120). The second reference is to Brown's article on Lake Mendota archaeological sites (Brown 1912). The page number on the ASI form is incorrect so it is difficult to use the second reference to understand the history of 47DA123. The primary description used on the ASI form refers to the 1939 WPA excavations in and around the Picnic Point Mound Group. It can be assumed then that 47DA123 was intended to represent a habitation area in direct association with the Picnic Point Mound Group (see the discussion of 47DA121 Picnic Point Mound Group above).

47 DA 501 – Picnic Point

Location: Center of the NE ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 East, Town of Madison, Dane County, Wisconsin.

Description: The site description on the ASI form for 47DA501 is as follows:

The site is eroding from the west bank of (Picnic Point) near a grassy opening and a water pump near the single conical mound; it is also eroding from the east shore about ½ way out on the east bank; and it is also eroding on the east shore near the series of linear and conical mounds (DA-121). The three areas of erosion are marked on fieldmaps, concentration area 1, 2, and 3. It was not determined whether these represent several distinct sites or not. Projectile points, cores, potsherds, refuse flakes, charred bone and bifaces were found at the areas of exposure. All areas seem to have a Woodland affiliation. Northern area on the East side of Peninsula may be a separate site.

Additional comments: Site revisited 02/90. Erosion severe near three campsites. Flakes of Prairie du Chien chert exposed due to runoff and human disturbance. Reseeding of dirt and relocation of campsites may alleviate problems.

(Archaeological Site Inventory form 47DA501)

History: 47DA501 was assigned to all of the sites on Picnic Point that did not have site numbers already assigned. The motivation for the assignment came from fieldwork carried out by Dan Wendt in May of 1979. His survey outlined three specific site areas on Picnic Point, however, their exact locations were not specified. It is likely that the site number DA501 is a gross oversimplification of the cultural resources present on Picnic Point.

4.3 Archaeological Sites Within One Mile Of Picnic Point

A total of nine previously reported archaeological sites are reported to be within 1 mile of Picnic Point. The results of the literature search are presented below in table form (see Figure 7).

Site Number	Site Name	T/R/Sec	Quarter Sections	Site Type	Affiliation	Site Condition
BDA-0125	Bascom Hall Burial Mounds	7N/9E/15		Isolated Burial	Euro-American	Destroyed
DA-119	Willow Drive Mounds	7N/9E/15	SW, NE, SW, SW	Cemetery	Effigy Mound Culture	Portions extant
DA-120	Picnic Grove Mounds	7N/9E/15	S, SW	Cemetery	Effigy Mound Culture	Destroyed
DA-124		7N/9E/15	S, SW	Workshop, Campsite/Village	Late Woodland	Extant
DA-125	Picnic Point Bay Mounds	7N/9E/16	NE, SW	Cemetery	Effigy Mound Culture	Destroyed
DA-126	University Ridge Mound Group	7N/9E/16		Cemetery	Effigy Mound Culture	Destroyed
DA-130	Eagle Heights Group	7N/9E/17	NE, SE, NE	Cemetery	Effigy Mound Culture	Extant
DA-413	Eagle Heights Field	7N/9E/16	W, NE	Campsite/Village	Early Paleo-Indian	Extant
DA-571	Observatory Hill Mound Group	7N/9E/15	SW, NE, SE, SW, SE	Cemetery	Effigy Mound Culture	Extant, but excavated
DA-820	Agricultural Hall Mounds	7N/9E/15	S, SE, SW, SE	Cemetery	Woodland Tradition	Destroyed

5.0 Archaeological Field Work

5.1 Archaeological Field Methods

Two primary archaeological methods were used in the course of fieldwork: pedestrian survey and shovel probing. Pedestrian survey involved a physical walkover of the project areas where the ground surface was visible. Where multiple transects were required, 5-meter intervals were used. Areas subjected to disturbance by modern construction activities and areas with slopes greater than 15% were visually inspected. The second method involved the excavation of small tests 30 centimeters in diameter to a depth of 50 centimeters. These tests were excavated at 10-meter intervals where conditions warranted. Proveniences were kept through a process of designated shovel test transects and numbered tests within those transects. Transect 1 was placed at the eastern end of Picnic Point and consecutive transects were numbered in ascending order to the west to the end of the project area (Transect 92, representing 920 meters from transect 1). A second set of transects was needed in the vicinity of the 47DA121 Picnic Point Mound Group and began with transect 100. These transects ran from the eastern end of the main cluster of mounds to the Bath House Trail that provides access to the Picnic Point Bath

House. All site and artifact proveniences (including the surface collections along the shorelines) are based on the placement of these transects (see Figure 11 pullout).

5.2 Results of Survey

During the process of conducting the fieldwork on Picnic Point, a total of 417 shovel tests were excavated of which 42 were positive. The entire shoreline of Picnic Point from the Picnic Point Bath House on the north shore to the tip of the point to the location of the Bath House Trail meets the Main Picnic Point Trail was also surface collected. In general, it appears from the distribution of positive shovel tests and surface collection that there is a thin scatter of artifacts over the majority of Picnic Point. However, there are areas where higher densities of artifactual materials are concentrated. These clusters represent archaeological sites, some of which have been previously identified, others that have not. Due to the previous assignment of archaeological site numbers, three site numbers were "recycled" and given more exact proveniences, better descriptions, and added information regarding cultural affiliation. Two new sites were also recorded and given new site numbers. The survey results for individual sites are presented below (see Figure 11 for updated site locations). All artifacts will be curated at the University of Wisconsin – Madison Department of Anthropology.

5.3 Previously Identified Archaeological Sites

Picnic Point Mound Group (47DA121)

The Picnic Point Mound Group has changed very little since Brown first platted it in 1909 with the exception that one of the easternmost conical mounds has ceased to be visible on the surface. Based on Brown's plat, there were the remains of a conical mound between Mound 7 and Mound 5. Brown describes it as having been "...rifled by relic hunters. Only the rim now remains." (Brown 1912:13). This "rim" is no longer visible, but based on Brown's plat, it may have been destroyed with the construction of the Main Picnic Point Trail. There has been some recent damage to the mounds and this has been reported in detail to Dr. Leslie Eisenberg (Burial Sites Office, State Historical Society of Wisconsin). In a

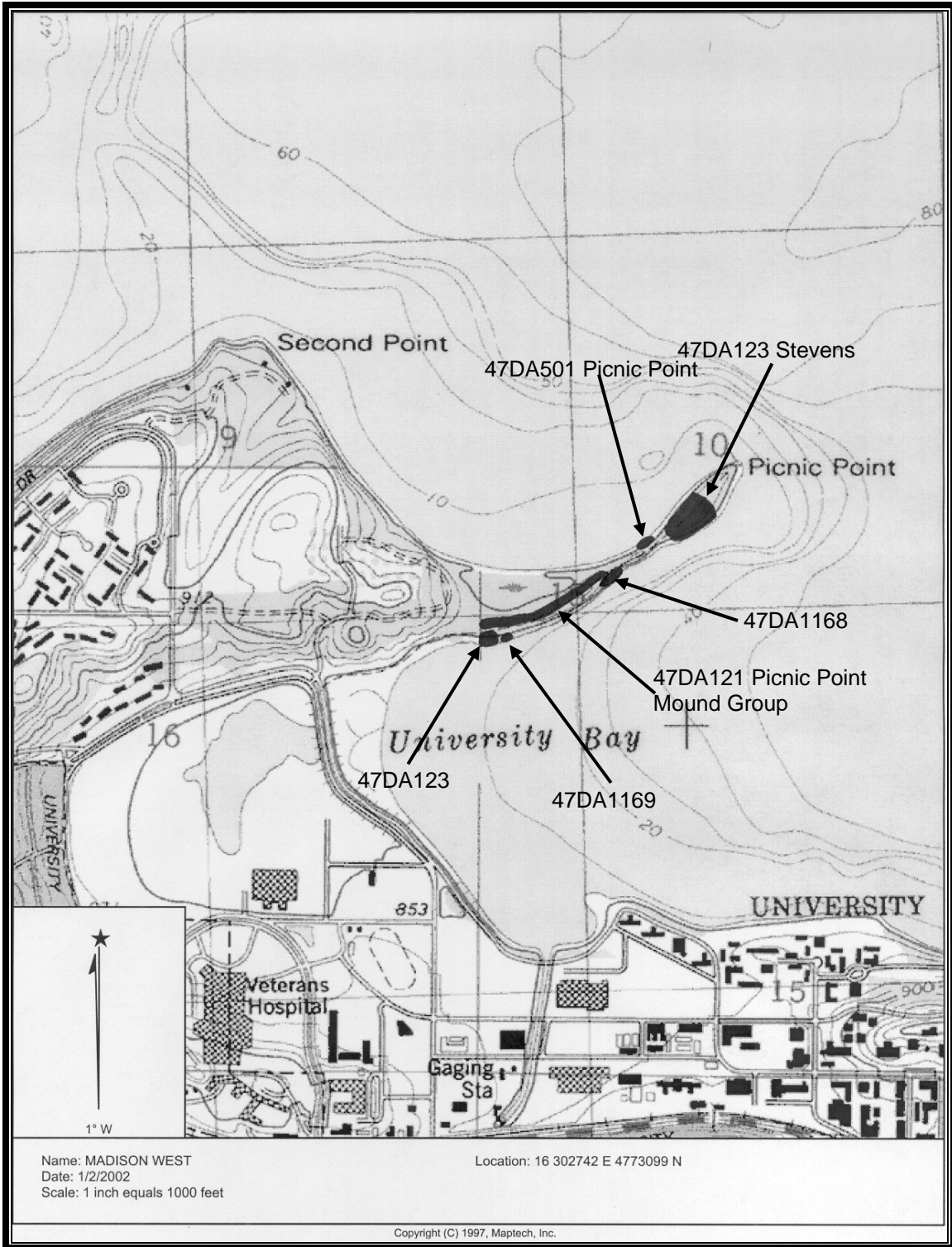


Figure 11: Sites Located on Picnic Point (After 2001 survey)

letter dated April 5, 2001, Mr. Daniel Einstein (Environmental Management – Facilities Planning and Management, University of Wisconsin) reported that Mound 1 (conical mound) had a large diameter oak tree growing from it and that approximately 80% of the tree trunk had been hollowed out. Mound 2 (linear mound) had been impacted by an unauthorized trail that had been placed directly over the mound by bikers and hikers. Einstein reported that brush had been once again situated to block off both ends of the trail on August 8, 2000, but that efforts of a similar nature had been attempted before and had failed in the past. Einstein reported that Mound 3 (a conical mound) had been damaged sometime in the past by a single truck tire rut approximately 18 feet long and several inches deep. Linear Mound 4 has suffered a similar fate to Mound 3 as it exhibited two tire track depressions (one 15 and the other 25 feet long and 4" – 8" deep). Picnic Point users had also damaged mound 5 in a similar fashion to Mound 2 with a bicycle/hiking trail having developed over the years. Finally, Mound 7 (a conical mound, labeled by Einstein as Mound 6 because of the disappearance of Brown's Mound 6) was reported as being in danger from erosion along its southern edge.

To rectify some of the problems listed above, the University of Wisconsin has implemented a series of solutions. Unauthorized trails over mounds have been blocked by brush. Permission was obtained to remove the hollowed tree stump from Mound 1. Finally, a series of boulders were placed on the Main Picnic Point Trail in 2001 to keep vehicles from coming too close to Mounds 3, 4, and 5. The potential erosion that Mound 7 will suffer in the future is the only remaining problem and should be attended to. Despite the efforts made by the University to protect the mounds, it is likely that inadvertent damage will continue to be incurred by the mounds if the Main Picnic Point Trail segment adjacent to the mounds is to continue to be used. We recommend that this segment of the trail be closed to vehicular traffic and that a new alignment for the Main Picnic Point Trail system be designed.

Stevens Site (47DA122)

Due to the fact that Brown perceived all of Picnic Point as one archaeological site (with the exception of the Picnic Point Mound Group), the original placement of the Stevens site by the OSA as being adjacent to 47DA121 and DA123 is fraught with inconsistencies both with the historical records and

with the spatial data obtained in the 2001 survey. As a consequence, consultation with John Broihahn at the OSA has led to the refinement of the location of the Stevens Site. Based on C.E. Brown's original description of archaeological sites on Picnic Point, the location (Brown 1925:36, see discussion above) has been changed to the high ground to the east of the canoe portage/beach. A more accurate location is the SW ¼ of the NE ¼ of the NE ¼ of the NW ¼, the SE ¼ of the NW ¼ of the NE ¼ of the NW ¼ and the NE ¼ of the SW ¼ of the NE ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 East (see Figure 11).

Subsurface testing and surface collection within the legal description above in an area of 150 meters northeast/southwest by 70 meters northwest/southeast produced indications of an archaeological site that stretched from the south shore to the north shore of Picnic Point. Portions of the site were actively eroding from the south shore where numerous archaeological materials were recovered on the surface. In addition to the collection made by Wendt in 1979 (see discussion above), ARI's testing recovered 30 flakes, 6 pieces of shatter, 1 core, 1 utilized flake, 1 Durst projectile point, 1 ground-stone adze, 4 grit-tempered ceramic body sherds, 7 cord-marked grit-tempered ceramic body sherds, 1 piece of fire cracked rock, 5 pieces of calcined bone, and 1 piece of bone, 10 pieces of clear bottle glass, 1 piece of brown bottle glass, 1 bottle cap, 1 "klinker" (slag from coal burning), 1 bullet, 3 .22 caliber shell casings, 1 .22 long caliber shell casing, and 1 wire nail, (see Appendix A Tables 2 and 3).

The artifacts recovered from this site are largely non-diagnostic (i.e. not useful for dating), but several artifacts or artifact classes deserve additional attention. The Durst projectile point was recovered from the eroding surface of the south shore and is made of heat-treated Prairie du Chien chert (Figure 12). This point undoubtedly served as part of a spear thrower (or atlatl) projectile system and stylistically/typologically dates to the Durst Phase (1000 – 500 BC).

The adze (a woodworking tool frequently associated with tasks involving gauging such as the creation of dugout canoes) was also recovered on an eroding surface overlooking University Bay (Figure 13). While it is, in and of itself non-diagnostic, it does reflect the types of behavior that probably occurred on a regular basis on Picnic Point over the last 3,000 years. In fact, a newspaper clipping from the C.E. Brown manuscripts dated to November 1, 1939 makes reference to a Madison resident that as a child



Figure 12: Durst Projectile Point from 47DA122 Stevens site



Figure 13: Celt from 47DA122 Stevens site

once watched Ho-Chunk men carving out a log canoe near the old portage on Picnic Point (unpublished C.E. Brown manuscripts, State Historical Society of Wisconsin archives).

The pottery recovered from the Stevens site are all thin walled, grit-tempered cord-marked ceramics. Although no diagnostic rim sherds were recovered, it is highly likely that these pieces were part of vessels crafted by Late Woodland Effigy Mound Culture potters 1000 to 1300 years ago. Given the proximity of the Stevens site to numerous Effigy Mound Culture cemeteries and other documented Late Woodland habitation sites, the assignment of these body sherds to the Madison ware series of ceramics does not require a great leap of faith.

Some particularly important remains that were recovered are the bone fragments. While the bones themselves are non-diagnostic, they suggest the presence of intact subsurface features at the Stevens site. It is common in archaeological sites in the Midwestern United States where bone is present on the surface that features such as garbage pits and sheet middens are present below the surface. The bone, taken in conjunction with the ceramics suggests strongly that the Stevens site has the potential to answer in whole or in part important research questions about human history (Criterion D, National Register of Historic Places).

The materials from this site (including those collected by Wendt) indicate that the Stevens Site has a long history of occupation with components dating to the Late Archaic Durst Phase (1000 – 500 BC), the Late Woodland Effigy Mound Culture (AD 700 – 1000) and more recently, the historic occupation of the point in the late 19th and 20th centuries. Furthermore, it is highly likely that the Stevens Site is eligible for inclusion on the National Register of Historic Places.

(47DA123)

47DA123 was originally reported as a site on the basis of excavations and repair work conducted by the WPA in 1939. The archaeological materials associated with this site came from the mound fill (soil and artifacts removed from a separate habitation site and used to construct the mounds) and the areas immediately adjacent to the westernmost cluster of mounds in 47DA121 Picnic Point Mound Group (see Figure 11). The exact nature of the excavations conducted by the WPA and Charles E. Brown is

unknown, however, a variety of material is associated with the 1939 testing that was discussed by Brown in unpublished notes and further described by Baerreis in 1965 (see discussion in the Literature Search Results section above). Neither Brown nor Baerreis presented a discussion of the location or boundaries of a site, but it was assumed that the materials had come from nearby. The 2001 testing enabled ARI to identify a site location and approximate boundaries.

The site is located immediately adjacent to the Picnic Point Mound Group in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 15, Township 7 North, Range 9 East. Subsurface probing indicates that the site is approximately 60 meters west/east by 30 meters north/south and is located immediately south of the Picnic Point Mound Group. Materials were recovered in positive shovel tests from the waters edge on the south shore of Picnic Point to the Main Picnic Point Trail that runs south of the mounds.

A total of 80 artifacts were recovered in 10 positive shovel tests. Artifacts included 29 waste flakes, 3 pieces of shatter, 1 core, 1 utilized flake, 15 exfoliated grit-tempered ceramic sherds, 22 smooth surface grit-tempered body sherds, 3 incised grit-tempered decorated body sherds, 1 Dane Incised rim sherd, 2 smooth surfaced rim sherds (representing a single ceramic vessel), 1 piece of fire cracked rock, 1 piece of sandstone and 1 piece of clear bottle glass.

While none of the lithic artifacts are diagnostic of a time period or archaeological culture, the ceramics recovered in our testing are diagnostic of the late Early Woodland Lake Farms Phase (250 BC – AD 100) (Salkin 1986). The Dane Incised rim consists of 2 sherds with deep incising over a cord-marked surface (Figure 14). Although the rim is relatively small, a series of left to right oblique incised lines over vertical cordmarking can be observed. There is also a horizontal band of what appear to be reed punctates. The second vessel has a smooth surfaced exterior with a folded over lip. The lip is decorated with a series of parallel tool impressions. While no type designation has been given to vessels with these traits, Salkin reports finding numerous rims with this description at the Beach Site, located just south of Madison on Lake Waubesa in Dane County (Salkin 1986).

ARI's testing did not recover Late Woodland Madison wares or Aztalan Collared types like those reported by Baerreis in his 1965 description of materials from DA123, nor did we recover diagnostic



Figure 14: Dane Incised Pottery from 47DA123

projectile points or ground stone. While this is somewhat confusing, it must be acknowledged that shovel probing is not a completely reliable method for determining the extent or content of an archaeological site. However, based on the density of materials from this site and the presence of ceramics, it is likely that there are subsurface deposits that remain intact at 47DA123. The presence of intact deposits makes 47DA123 a possible candidate for the National Register of Historic Places under Criterion D.

Picnic Point (47DA501)

47DA501 Picnic Point has a complicated history that stems from the assignment of a single site number to three sites reported in 1979 by Dan Wendt (see Figure 11). The 2001 Picnic Point survey suggests that Wendt's original reports were relatively accurate in depicting three separate site areas. As has been demonstrated above, one of Wendt's sites was undoubtedly a part of the Stevens Site (47DA122) as we have currently defined it. The other two sites reported by Wendt have also proven to be discrete entities on Picnic Point. One of the sites, designated Picnic Point 2 by Wendt, is located east of the beach/canoe portage and forms the basis for a new description for 47DA501. The decision to re-assign and refine DA501 was reached in conjunction with John Broihahn at the OSA to minimize the number of new site numbers allotted to previously identified site areas on Picnic Point.

As it now stands, 47DA501 represents a single, discrete archaeological site located in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 15, Township 7 North, Range 9 East. Archaeological testing at this location was limited to surface collection of the eroding north shore of Picnic Point between the waters edge and the main access road that extends to the easternmost tip of the Point. The topographical situation at that location did not allow for shovel testing as the only level ground in this area is occupied by the Main Picnic Point trail. The surface collection indicated the presence of a site 40 meters northeast/southwest by 10 meters northwest/southeast. It is likely that the site extends under the trail, however, we were unable to test this hypothesis.

A total of 14 artifacts were recovered from an area of 400 square meters. This relatively low density does not reflect the numbers of artifacts that Wendt reports (39 in the same area). Wendt reported finding 1 trianguloid biface, 1 small "rough" core, 1 shoulder of a Madison Cord-Imprinted

ceramic vessel, 7 grit-tempered cord-marked sherds and 29 refuse flakes. The 2001 survey produced 9 waste flakes, 4 pieces of shatter and 1 exfoliated grit-tempered ceramic body sherd. Some of these materials were recovered in Lake Mendota, so it is reasonable to assume that at least a portion of the site has eroded into the lake.

Although the ARI collection does not contain any diagnostic artifacts, Wendt's collection seems to indicate that 47DA501 Picnic Point site has a Late Woodland Stage Effigy Mound Culture affiliation (AD 700 – 1000). If the site was intact, it would likely have produced intact subsurface features. However, it appears that a good portion has eroded into Lake Mendota and the remainder is under a hard packed gravel road. It is possible that this site has potential for inclusion on the National Register of Historic Places, however it seems unlikely given its current condition.

5.4 Newly Reported Archaeological Sites

(47DA1168)

47DA1168 is the third site that was reported by Wendt in 1979. Having recycled all of the available previously assigned site numbers, a new site number, 47DA1168 was recorded in the Archaeological Site Inventory (see Figure 11). Wendt originally designated this site "Picnic Point" and reported it simply as being in the NW $\frac{1}{4}$ of Section 15, Township 7 North, Range 9 East. The 2001 survey indicates that a more accurate legal description is the SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 15, Township 7 North, Range 9 East.

Survey was confined to surface collection along the eroding south bank of Picnic Point overlooking University Bay. Materials were collected in an area 90 meters northeast/southwest by 10 meters northwest/southeast. Dan Wendt collected 1 thin triangular projectile point, 1 fragment of a side notched projectile point, 2 "crude" cores, 40 refuse flakes, and 7 grit-tempered ceramic body sherds (3 cordmarked, 1 net impressed). The 2001 survey produced 13 artifacts in 900 square meters. A total of 10 waste flakes, 1 piece of shatter, 1 core and 1 utilized flake were recovered.

47DA1168 has been actively eroding into University Bay for a considerable period of time. Artifacts were not recovered from the surface above the eroding surface; however, shovel testing was

limited to areas currently not under the Main Picnic Point Trail. It is also possible that this is a relatively sparse site yielding very few materials. It is unlikely that this site would be eligible for inclusion on the National Register of Historic Places, however; only further testing could verify this speculation.

(47DA1169)

47DA1169 was discovered in the process of shovel testing and surface collecting an area that is currently being used as two picnic sites with accompanying fire pits. A more accurate description would be the NW ¼ of the NW ¼ of the SW ¼ of the NW ¼ of Section 15, Township 7 North, Range 9 West (see Figure 11). The site is located 50 meters to the east of 47DA123 on the south shore of Picnic Point between the Main Picnic Point trail and the shoreline in an area with dimensions of 30 meters by 45 meters.

Approximately half of the site has been graded for the construction of the fire pits and associated seating structures. Archaeological materials were recovered in this graded area while shovel tests produced materials in what appears to be a relatively undisturbed context. A total of 30 artifacts were recovered including 19 flakes, 10 pieces of shatter and 1 end scraper. The end scraper is made from Moline chert and appears to have started its life as a stemmed or lanceolate projectile point. Both lateral sides exhibit grinding and/or polishing while the working edge has been shaped to perform scraping tasks. The overall impression given from the piece is one of pre-Woodland Tradition manufacture, perhaps as early as the Paleo-Indian.

While the site has suffered some damage from agriculture and then by the construction of the fire pits, the northern half of the site appears to be intact. It is possible that this site is potentially eligible for inclusion on the National Register of Historic Places. Further testing is recommended if the recreational facilities at this location are moved, added to, or maintained in such a way that would involve earth moving.

6.0 Summary and Recommendations

The entirety of Picnic Point from the Picnic Point Bath House Trail to the tip was shovel tested and surface collected. A total of 417 shovel tests were excavated of which 42 tests were positive. The shoreline survey and shovel testing produced 225 artifacts from five different archaeological sites. The 2001 survey recovered evidence from 3 previously reported sites (the Stevens site [47DA122], 47DA123, and Picnic Point [47DA501]) and 2 previously unreported sites (47DA1168 and 47DA1169).

Based on the distribution of artifacts on Picnic Point recovered in the 2001 survey, it is clear that there is a thin scatter of historic and prehistoric debris across the entire Point. There are areas in which there are higher densities of materials and these have been identified as loci of human behavior (i.e. archaeological sites). In general, these sites have been protected from long-term high impact disturbing activities such as agriculture and urban development since the University of Wisconsin purchased Picnic Point in 1939. Currently erosion, Picnic Point facilities development and maintenance are the only threats to these sites. It is highly likely that the Stevens Site, 47DA123, 47DA1168, and 47DA1169 will produce information that will shed light on problems that can only be answered with archaeological materials. As such, they are most likely potentially eligible for inclusion on the National Register of Historic Places.

The Picnic Point site (47DA501) has been heavily impacted by erosion, beach maintenance and the access road. Although the site is still producing artifacts on the surface, it is unlikely that there is enough of the site left to warrant further archaeological testing. In the event that there is future earth moving in the vicinity, it would be in the best interest of the resource that an archaeologist be present to monitor any construction activities.

The last site on Picnic Point to be discussed is the Picnic Point Mound Group (47DA121). It is clear that excavations have been conducted on conical mound number 3. It is also clear from Baerreis and Merbs treatment of skeletal remains from the University of Wisconsin campus that additional remains were recovered from mound 3 or another from the group. Unfortunately, it is impossible to determine when that might have occurred and from which mound. Therefore, it is difficult to ascertain which

mounds are still intact and which are not. If any of the mounds were still intact, they would be considered significant and eligible for inclusion on the National Register of Historic Places.

The primary reason for the 2001 Picnic Point survey was to allow facilities planners to design new path/road network that would eliminate inadvertent damage to the mounds of 47DA121 Picnic Point Mound Group as well as other potentially significant archaeological sites on Picnic Point. With the completion of the 2001 survey, it is possible at this point to make some recommendations regarding the current alignment of access roads and foot/bicycle paths on the Point as well as how the cultural resources that have been discovered or defined should be treated with in the future. The following recommendations are proposed.

1. **Mound Protection**. The segment of the Main Picnic Point Trail that runs along Mounds 1 – 5 (the 5 westernmost mounds) of the Picnic Point Mound Group should be closed to vehicle traffic. Due to the presence of a potentially significant Early Woodland habitation immediately to the south of the mound group (47DA123), it will be impossible to shift the alignment of the Main Picnic Point Trail in this direction without damaging a potentially significant site. We recommend that the Main Picnic Point Trail be reduced in size to a footpath no less than 5 feet from the nearest mound. This footpath would allow access to locations within a reasonable viewshed of the mounds and could be used for supervised or non-supervised educational experiences.
2. **Mound Maintenance**. Maintenance conducted around the mound group should be performed with methods that avoid soil disturbance and compaction. ARI neither recommends nor condemns clearing vegetation on or immediately adjacent to mounds or mound groups. We do recognize that wind damage and the death of trees pose threats to pedestrians and bicyclists. In the event that turf maintenance is required near the mound group, we strongly recommend that it be done by hand rather than with heavy vehicles. If the vegetation on mounds is to be cleared, it should be done by hand and/or with push mowers, without the use of riding mowers. It has been

our experience that damage to mounds is inadvertent and usually the result of careless use of large motorized vehicles.

3. **Shoreline Stabilization.** Four archaeological sites on Picnic Point are being directly impacted by severe erosion. The Stevens Site (47DA122), Picnic Point (47DA501), 47DA1168, and the easternmost mound of the Picnic Point Mound Group (47DA121) are in locations that are rapidly being threatened by erosion. The south side of the Stevens site is actively eroding and artifacts were recovered along the slope leading to the waters edge indicating that portions of the site are being destroyed. Both Picnic Point (47DA501) and 47DA1168 are both also actively eroding into Lake Mendota. The southern margin of Mound 7 of the Picnic Point Mound Group is immediately adjacent to the slope leading to the waters edge. Efforts should be undertaken to stabilize the shorelines in the areas of these sites to prevent further and future damage.

4. **Facilities Development.** Further development of Picnic Point facilities in designated archaeological site areas such as the installation of new park benches that require excavation, maintenance of existing fire pits and installation of new fire pits or development of any facilities that involve clearing landscapes or excavation below the current surface be preceded with archaeological testing before installation. Although the 2001 survey was conducted using standard sampling archaeological techniques, the shovel test interval (10 meters) does not allow for the kind of testing that would find specific features that could yield significant materials.

5. **Archaeological sites identified in the 2001 survey should undergo Determinations of Eligibility.** The University of Wisconsin – Madison campus has an exceptional number of archaeological resources present within its bounds. The inclusion of archaeological sites on University property on the National Register of Historic Places would help protect these culturally valuable resources as well as bring prestige to the University of Wisconsin. Making

Determinations of Eligibility would also aid in facilities development in the sense that it would be possible to determine which areas might be further developed for recreational facilities as well as those that might be selected for outdoor educational opportunities.

6. **A campus wide archaeological survey is needed for the UW-Madison.** Based on the results of the three 2001 archaeological surveys on University property (Picnic Point survey, Eagle Heights Woods survey, the Howard Temin Lakeshore Path), as well as the 2000 survey of the Wingra Woods in the Arboretum, and the extensive literature searches conducted for these four surveys, it has become obvious that there are numerous archaeological resources on University of Wisconsin property, many of which have not yet been discovered. Of the sites that are known, many are poorly documented with inadequate legal descriptions and poorly defined boundaries. It is grievous to note that many of these sites have been damaged, destroyed or otherwise mutilated by unchecked and unsympathetic developments since the founding of the University. A campus wide survey would aid in responsible facilities development, provide numerous educational opportunities for the student body and the general public and foster better relationships between the University of Wisconsin and both local (Native American tribes, concerned student groups such as *Wankshiek*) and global academic communities.

7. **Cultural Resource Management and Stewardship.** Based on the volume of archaeological and historic resources located on the Madison campus, we recommend that the University of Wisconsin seriously consider the formation of an advisory group or position to address and aid in prehistoric and historic cultural resource management and stewardship issues. Such an advisory group should have a composition that includes at least one qualified (qualified in the sense that they meet the Secretary of the Interiors standards and are familiar with cultural resource management laws, rules, guidelines etc.) archaeologist, a qualified architectural historian and personnel familiar with the needs of the University. This advisory group would be responsible for the creation and implementation of a management plan that would emphasize the protection of all

archaeological sites on University property and the development of selected resources for public outreach.

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Appendix A: Artifact Catalogs

Table 2: 47DA122 Stevens site Historic Artifact Catalog

Transect Test # Surface		bottle glass	Brown Glass	Bottle Cap	Klinker	Bullet .22 short	.22 long	Nail		
9	1	0	0	0	1	0	0	0	0	0
10	1	0	0	0	0	0	0	0	0	0
10	4	0	0	0	0	0	2	0	0	0
12	2	0	0	0	0	0	0	0	0	0
13	8	0	0	0	0	0	0	0	0	0
16	7	0	0	0	0	0	0	0	0	0
17	2	0	0	0	0	0	0	0	0	1
17	4	0	0	0	0	0	0	0	0	0
17	5	0	1	0	0	1	1	0	0	0
18	5	0	0	0	0	0	0	0	0	0
19	2	0	0	0	0	0	0	0	0	0
19	5	0	0	0	0	0	0	0	0	0
19	6	0	0	0	0	0	0	0	0	0
20	1	0	0	0	0	0	0	1	0	0
20	4	0	0	0	0	0	0	0	0	0
21	5	0	0	0	0	0	0	0	0	0
23	4	0	0	1	0	0	0	0	0	0
	13	14	0	0	0	0	0	0	0	0
	15	16	0	0	0	0	0	0	0	0
	16	17	8	0	0	0	0	0	0	0
	17	18	0	0	0	0	0	0	0	0
	18	19	0	0	0	0	0	0	0	0
	19	20	0	0	0	0	0	0	0	0
	20	21	0	0	0	0	0	0	0	0
	21	22	0	0	0	0	0	0	0	0
	22	23	0	0	0	0	0	0	0	0
	23	24	2	0	0	0	0	0	0	0
	Tip of Point		0	0	0	0	0	0	0	0
	Totals		10	1	1	1	1	3	1	1

Table 3: 47DA122 Stevens site Prehistoric Artifact Catalog

Trans	Test	Surf	Flake	Shatter	Core	Utilized	P.P.	Celt	CM GT		Calcined		Totals
									BS	FCR	Bone	Bone	
10	1		0	0	0	0	0	0	5	0	0	0	5
12	2		1	0	0	0	0	0	0	0	0	0	1
13	8		0	0	0	0	0	0	1	0	0	0	1
16	7		1	0	0	0	0	0	0	0	0	0	1
17	4		1	0	0	0	0	0	0	0	0	0	1
18	5		0	0	0	0	0	0	1	0	0	0	1
19	2		1	0	0	0	0	0	0	0	0	0	1
19	5		1	0	0	0	0	0	0	0	0	0	1
19	6		1	0	0	0	0	0	0	0	0	0	1
20	4		1	0	0	0	0	0	0	0	0	0	1
21	5		1	0	0	0	0	0	0	0	0	0	1
		13	14	0	0	0	0	0	1	0	0	0	1
		15	16	0	2	0	0	0	0	1	0	0	3
		16	17	1	0	0	0	0	0	0	0	0	1
		17	18	3	0	0	0	0	0	0	0	0	3
		18	19	1	0	0	0	0	0	0	0	0	1
		19	20	4	1	0	0	1	0	0	0	0	6
		20	21	0	0	0	0	0	0	0	0	1	1
		21	22	5	2	0	0	0	0	0	0	0	7
		22	23	3	1	1	0	0	0	0	5	0	10
		23	24	3	0	0	1	0	0	0	0	0	4
		Tip of Point		2	0	0	0	0	0	0	0	0	2
		Totals		30	6	1	1	1	7	1	5	1	54

Table 4: Artifact Catalog Picnic Point Site (47DA501)

<i>Transect</i>	<i>Test #</i>	<i>Surface 1</i>	<i>Surface 2</i>	<i>Flake</i>	<i>Shatter</i>	<i>Unid gt sherd</i>	<i>Totals</i>
		38	41	9	4	1	14
		Totals		9	4	1	14

Table 5: Artifact Catalog 47DA1169

<i>Transect</i>	<i>Test #</i>	<i>Surface</i>	<i>Flake</i>	<i>Shatter</i>	<i>Totals</i>
66	1		4	1	5
66	2		1	0	1
66	1 east		1	0	1
66	1 north		1	0	1
68	1		1	0	1
68	2		1	0	1
70	1 north		1	0	1
		66 69	10	9	19
		Totals	20	10	30

Table 6: Artifact Catalog 47DA1168

<i>Transect</i>	<i>Test #</i>	<i>Surface 1</i>	<i>Surface 2</i>	<i>Flake</i>	<i>Shatter</i>	<i>Core</i>	<i>Utilized</i>	<i>Totals</i>
		42	51	10	1	1	1	13
		Totals		10	1	1	1	13

Table 7: Artifact Master Catalog – Lithics

<i>Transect</i>	<i>Test #</i>	<i>Surface</i>	<i>Flake</i>	<i>Shatter</i>	<i>Core</i>	<i>Utilized</i>	<i>P.P.</i>	<i>Celt</i>	<i>Totals</i>
4	2		0	0	0	0	0	0	0
9	1		0	0	0	0	0	0	0
10	1		0	0	0	0	0	0	0
10	4		0	0	0	0	0	0	0
12	2		1	0	0	0	0	0	1
13	8		0	0	0	0	0	0	0
16	7		1	0	0	0	0	0	1
17	2		0	0	0	0	0	0	0
17	4		1	0	0	0	0	0	1
17	5		0	0	0	0	0	0	0
18	5		0	0	0	0	0	0	0
19	2		1	0	0	0	0	0	1
19	5		1	0	0	0	0	0	1

Transect	Test #	Surface	Flake	Shatter	Core	Utilized	P.P.	Celt	Totals
19	6		1	0	0	0	0	0	1
20	1		0	0	0	0	0	0	0
20	4		1	0	0	0	0	0	1
21	5		1	0	0	0	0	0	1
23	4		0	0	0	0	0	0	0
49	1		0	0	0	0	0	0	0
53	1		0	0	0	0	0	0	0
53	3		1	0	0	0	0	0	1
54	2		1	0	0	0	0	0	1
60	1		0	0	0	0	0	0	0
66	1		4	1	0	0	0	0	5
66	2		1	0	0	0	0	0	1
66	1 east		1	0	0	0	0	0	1
66	1 north		1	0	0	0	0	0	1
68	1		1	0	0	0	0	0	1
68	2		1	0	0	0	0	0	1
70	1 north		1	0	0	0	0	0	1
73	1		2	0	0	0	0	0	2
74	2		1	0	0	0	0	0	1
74	2		0	0	0	0	0	0	0
75	1		6	0	0	0	0	0	6
75	1 east		1	1	1	0	0	0	3
76	1		1	1	0	1	0	0	3
76	1 north		11	0	0	0	0	0	11
76	1 west		1	0	0	0	0	0	1
76	2 north		4	1	0	0	0	0	5
78	1		2	0	0	0	0	0	2
87	2		0	0	0	0	0	0	0
101	1		1	0	0	0	0	0	1
		66 to 69	10	9	0	0	0	0	19
		19 to 20	4	1	0	0	1	0	6
		T33T2	1	0	0	0	0	0	1
		38 to 41	9	4	0	0	0	0	13
		22 to 23	3	1	1	0	0	0	5
		23 to 24	3	0	0	1	0	0	4
		20 to 21	0	0	0	0	0	0	0
		22 to 21	5	2	0	0	0	0	7
		16 to 17	1	0	0	0	0	0	1
		15 to 16	0	2	0	0	0	0	2
		19 to 18	1	0	0	0	0	0	1
		17 to 18	3	0	0	0	0	0	3
		13 to 14	0	0	0	0	0	1	1
		Tip of Point	2	0	0	0	0	0	2
		Totals	92	23	2	2	1	1	121

Table 8: Artifact Master Catalog – Historic Artifacts

Transect	Test #	Surface	Clear Bottle Glass	Brown Bottle Glass	Bottle Cap	White Ware	Klinker	Bullet	.22 short	.22 long	Nail	Totals
4	2		0	0	0	0	0	0	1	0	0	1
9	1		0	0	0	0	1	0	0	0	0	1
10	1		0	0	0	0	0	0	0	0	0	0
10	4		0	0	0	0	0	0	2	0	0	2
12	2		0	0	0	0	0	0	0	0	0	0
13	8		0	0	0	0	0	0	0	0	0	0
16	7		0	0	0	0	0	0	0	0	0	0
17	2		0	0	0	0	0	0	0	0	1	1
17	4		0	0	0	0	0	0	0	0	0	0
17	5		0	1	0	0	0	1	1	0	0	3
18	5		0	0	0	0	0	0	0	0	0	0
19	2		0	0	0	0	0	0	0	0	0	0
19	5		0	0	0	0	0	0	0	0	0	0
19	6		0	0	0	0	0	0	0	0	0	0
20	1		0	0	0	0	0	0	0	1	0	1
20	4		0	0	0	0	0	0	0	0	0	0
21	5		0	0	0	0	0	0	0	0	0	0
23	4		0	0	1	0	0	0	0	0	0	1
49	1		0	0	1	0	0	0	0	0	0	1
53	1		0	0	0	0	0	0	0	0	0	0
53	3		0	0	0	0	0	0	0	0	0	0
54	2		0	0	0	0	0	0	0	0	0	0
60	1		0	0	0	0	0	0	1	0	0	1
66	1		0	0	0	0	0	0	0	0	0	0
66	2		0	0	0	0	0	0	0	0	0	0
66	1 east		0	0	0	0	0	0	0	0	0	0
66	1 north		0	0	0	0	0	0	0	0	0	0
68	1		0	0	0	0	0	0	0	0	0	0
68	2		0	0	0	0	0	0	0	0	0	0
70	1 north		0	0	0	0	0	0	0	0	0	0

Transect	Test #	Surface	Clear Bottle Glass	Brown Bottle Glass	Bottle Cap	White Ware	Klinker	Bullet	.22 short	.22 long	Nail	Totals
73	1		0	0	0	0	0	0	0	0	0	0
74	2		0	0	0	0	0	0	0	0	0	0
74	2		0	0	0	0	0	0	0	0	0	0
75	1		0	0	0	0	0	0	0	0	0	0
75	1 east		0	0	0	0	0	0	0	0	0	0
76	1		0	0	0	0	0	0	0	0	0	0
76	1 north		0	0	0	0	0	0	0	0	0	0
76	1 west		0	0	0	0	0	0	0	0	0	0
76	2 north		1	0	0	0	0	0	0	0	0	1
78	1		0	0	0	0	0	0	0	0	0	0
87	2		0	0	0	1	0	0	0	0	0	1
101	1		0	0	0	0	0	0	0	0	0	0
		66 to 69	0	0	0	0	0	0	0	0	0	0
		19 to 20	0	0	0	0	0	0	0	0	0	0
		T33T2	0	0	0	0	0	0	0	0	0	0
		38 to 41	0	0	0	0	0	0	0	0	0	0
		22 to 23	0	0	0	0	0	0	0	0	0	0
		23 to 24	2	0	0	0	0	0	0	0	0	2
		20 to 21	0	0	0	0	0	0	0	0	0	0
		22 to 21	0	0	0	0	0	0	0	0	0	0
		16 to 17	8	0	0	0	0	0	0	0	0	8
		15 to 16	0	0	0	0	0	0	0	0	0	0
		19 to 18	0	0	0	0	0	0	0	0	0	0
		17 to 18	0	0	0	0	0	0	0	0	0	0
		Totals	11	1	2	1	1	1	5	1	1	24

Table 9: Master Artifact Catalog – Faunal Remains

Transect	Test #	Surface	Calcined Bone	Bone	Totals
4	2		0	0	0
9	1		0	0	0
10	1		0	0	0
10	4		0	0	0
12	2		0	0	0
13	8		0	0	0
16	7		0	0	0
17	2		0	0	0
17	4		0	0	0
17	5		0	0	0
18	5		0	0	0
19	2		0	0	0
19	5		0	0	0
19	6		0	0	0
20	1		0	0	0
20	4		0	0	0
21	5		0	0	0
23	4		0	0	0
49	1		0	0	0
53	1		0	0	0
53	3		0	0	0
54	2		0	0	0
60	1		0	0	0
66	1		0	0	0
66	2		0	0	0
66	1 east		0	0	0
66	1 north		0	0	0
68	1		0	0	0
68	2		0	0	0
70	1 north		0	0	0
73	1		0	0	0
74	2		0	0	0
74	2		0	0	0
75	1		0	0	0
75	1 east		0	0	0
76	1		0	0	0
76	1 north		0	0	0
76	1 west		0	0	0
76	2 north		0	0	0
78	1		0	0	0
87	2		0	0	0
101	1		0	0	0
		66 to 69	0	0	0

Transect	Test #	Surface	Calcined Bone	Bone	Totals
	19 to 20		0	0	0
	T33T2		0	0	0
	38 to 41		0	0	0
	22 to 23		5	0	5
	23 to 24		0	0	0
	20 to 21		0	1	1
	22 to 21		0	0	0
	16 to 17		0	0	0
	15 to 16		0	0	0
	19 to 18		0	0	0
	17 to 18		0	0	0
	Totals		5	1	6

Table 10: Master Artifact Catalog – Ceramics

Transect	Test #	Surface	Unid	gt	sherd	CM	GT	BS	Sm	Gt	BS	Incised	BS	Gt	RS	Totals
4	2		0				0		0			0		0		0
9	1		2				0		0			0		0		2
10	1		0				5		0			0		0		5
10	4		0				0		0			0		0		0
12	2		0				0		0			0		0		0
13	8		0				1		0			0		0		1
16	7		0				0		0			0		0		0
17	2		0				0		0			0		0		0
17	4		0				0		0			0		0		0
17	5		0				0		0			0		0		0
18	5		0				1		0			0		0		1
19	2		0				0		0			0		0		0
19	5		0				0		0			0		0		0
19	6		0				0		0			0		0		0
20	1		0				0		0			0		0		0
20	4		1				0		0			0		0		1
21	5		0				0		0			0		0		0
23	4		0				0		0			0		0		0
49	1		0				0		0			0		0		0
53	1		0				0		0			0		0		0
53	3		0				0		0			0		0		0
54	2		0				0		0			0		0		0
60	1		0				0		0			0		0		0
66	1		0				0		0			0		0		0
66	2		0				0		0			0		0		0
66	1 east		0				0		0			0		0		0
66	1 north		0				0		0			0		0		0
68	1		0				0		0			0		0		0
68	2		0				0		0			0		0		0

Transect	Test #	Surface	Unid	gt	sherd	CM	GT	BS	Sm	Gt	BS	Incised	BS	Gt	RS	Totals
70	1 north		0			0			0			0		0		0
73	1		0			0			0			0		0		0
74	2		0			0			0			0		0		0
74	2		6			0			0			0		0		6
75	1		2			0			17			0		3		22
75	1 east		0			0			0			3		0		3
76	1		5			0			5			0		0		10
76	1 north		2			0			0			0		0		2
76	1 west		0			0			0			0		0		0
76	2 north		0			0			0			0		0		0
78	1		0			0			0			0		0		0
87	2		0			0			0			0		0		0
101	1		0			0			0			0		0		0
		66 to 69	0			0			0			0		0		0
		19 to 20	0			0			0			0		0		0
		T33T2	0			0			0			0		0		0
		38 to 41	1			0			0			0		0		1
		22 to 23	1			0			0			0		0		1
		23 to 24	0			0			0			0		0		0
		20 to 21	0			0			0			0		0		0
		22 to 21	0			0			0			0		0		0
		16 to 17	0			0			0			0		0		0
		15 to 16	0			0			0			0		0		0
		19 to 18	0			0			0			0		0		0
		17 to 18	0			0			0			0		0		0
		Totals	20			7			22			3		3		55

Appendix B: Permits

