1. NAME OF PROPERTY

Historic Name: Silver Mound Archeological District

Other Name/Site Number: 47 JA 21

2. LOCATION

Street & Number: Northeast of STH 95 Not for publication: N/A

City/Town: Alma Center and Hixton Vicinity: X

State: Wisconsin County: Jackson Code: 053 Zip Code: 54611

3. CLASSIFICATION

Ownership of Property		Category of Property	
Private:	X	Building(s):	___
Public-Local:	___	District:	X
Public-State:	___	Site:	___
Public-Federal:	___	Structure:	___
		Object:	___

Number of Resources within Property

Contributing	Noncontributing	
___	___	buildings
19	3	sites
___	___	structures
___	___	objects
___	___	Total

Number of Contributing Resources Previously Listed in the National Register: 19

Name of Related Multiple Property Listing: The Paleo-Indian Tradition in Wisconsin

4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria.

Signature of Certifying Official Date

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.

Signature of Commenting or Other Official Date

State or Federal Agency and Bureau

5. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

___ Entered in the National Register
___ Determined eligible for the National Register
___ Determined not eligible for the National Register
___ Removed from the National Register
___ Other (explain): _____

Signature of Keeper Date of Action

6. FUNCTION OR USE

Historic:	Industry / Processing / Extraction	Sub: extractive facility; processing site
	Domestic	Sub: multiple dwelling; camp
Current:	Landscape	Sub: natural feature
	Recreation and Culture	Sub: outdoor recreation

7. DESCRIPTION

Architectural Classification: N/A

MATERIALS:
Foundation:
Walls:
Roof:
Other:

Describe Present and Historic Physical Appearance.

Located near the northern edge of Jackson County, Wisconsin, the Silver Mound Archeological District contains 87 related prehistoric archeological localities organized around the extraction of Hixton Silicified Sandstone from Silver Mound (Figure 1). The Silver Mound Archaeological District was listed on the National Register in 1975 as an arbitrarily defined box that encompassed the bedrock outlier Silver Mound and some adjacent cultivated fields. Sites within the district and the more constricted proposed National Historic Landmark reflect a range of functions including; quarry areas, lithic workshops, and domestic sites (both open-air campsites and rock shelters). In addition, two separate areas within the district and proposed National Historic Landmark contain rock art.

The original National Register Silver Mound Archeological District encompasses a 700-acre section of land centered on Silver Mound with the proposed National Historic Landmark comprising a smaller portion of this area. Archeological sites are located both on the slopes of the hill, and scattered across the surrounding agricultural fields at its base. Twenty-one localities representing episodes of prehistoric activity are located on Silver Mound and in the proposed National Historic Landmark. In addition 66 prehistoric archeological sites have been identified within the fields immediately adjacent to Silver Mound. To date, 87 sites and localities are located within the Silver Mound Archeological District and represent an unknown portion of the total number of sites present, as sizable areas have yet to be systematically surveyed.

As a source of flint-stone, Silver Mound was used episodically during prehistory. It is most renowned for its use by Early and Late Paleoindians, which is the focus of this nomination. Later use is most apparent in the late prehistoric period (ca. A.D. 1150-1400) when Oneota groups along the Upper Mississippi River used smaller quantities of Hixton Silicified Sandstone to manufacture relatively small tools such as Madison triangular points and end scrapers (Boszhardt 1994). Just prior to Oneota, Hixton Silicified Sandstone was used in minor amounts by Middle Mississippian groups venturing up the Mississippi River from the American Bottom, and small quantities of this material have been found at Cahokia, representing exchange (Boszhardt 2004). Little study has been undertaken to quantify the presence of Hixton Silicified Sandstone in regional assemblages during the Archaic and Woodland Traditions. Relatively few Middle and Late Archaic projectile points are known to have been made of Hixton Silicified Sandstone, although some transitional Late Archaic/Early Woodland points (large contracting stemmed varieties) are recorded. It is also possible that a few large ceremonial bifaces Hopewellian mounds in western Wisconsin may have been manufactured out of Hixton Silicified Sandstone (Boszhardt 1998b).

Despite its use up to and including the historic period in North America, the national importance of the Silver Mound Archeological District stems from its intensive utilization as a tool stone source during the Paleoindian tradition, the earliest identified cultural group in North America. Nineteen of the 87 sites and localities found on Silver Mound represent the Paleoindian period. It is well documented that Paleoindians display an affinity toward high quality lithic raw material sources, which serve as important foci of Paleoindian land use patterns (e.g. Anderson D. G. 1990; Goodyear 1989; Gardner 1977). Because Silver Mound is a source of abundant, readily available, high quality tool stone it undoubtedly played an important role in the initial settlement of North America by Paleoindians. This is evident in the widespread transport of Hixton Silicified Sandstone by Paleoindians across the Midwest United States, and the presence of large numbers of Paleoindian materials recovered in the vicinity of Silver Mound (e.g. Mason 1997; Stoltman 1993; Tankersley 1988, 1989, 1991; see also Amick et al. 1999; Buckmaster and Pauquette 1988; Florin 1996; Hill 1994; Mason and Irwin 1980; Ross 1997; Stoltman and Workman 1989). When combined with the presence of a large number of interrelated sites, reflecting a range of functions on and around Silver Mound, the Silver Mound Archeological District has the potential to provide significant contributions to future research concerning the Paleoindian tradition.

Environmental Setting

Silver Mound is a 200-foot tall outlier hill of Cambrian age sandstone that has resisted weathering in part due to silica cementation (Figure 2). Colluvial slopes of this partially silicified sandstone outlier give the hill its 'mound' appearance. About 100 feet below its peak, a seam of sandstone has become completely silicified and is termed Hixton Silicified Sandstone (Porter 1961). The seam outcrops in several places around the mound at 1150' Above Sea Level (ASL), which is approximately equidistant from its top at 1250'Above Sea Level (ASL) and base at 1050' Above Sea Level (ASL) (Behm 1984; Boszhardt 1989). While Hixton Silicified Sandstone is similar to a variety of other quartzites and orthoquartzites found both in Wisconsin and other parts of the United States, it can be easily distinguished from other sources by petrographic (Porter 1961), instrumental neutron activation (Julig et al. 1987), oxygen isotope (Shaffer and Tankersley 1989), and cathidoluminescence (Boszhardt 1998a) analysis.

Regionally, Silver Mound is situated within the Western Uplands geographical province defined by Martin (1965). The majority of the province is contained within the "Driftless Area" of Wisconsin, a region that remained ice-free during the Pleistocene. Silver Mound is located near the northern edge of this unglaciated area and is an outlier of a heavily dissected bedrock peneplain to the west (Mickelson et al. 1982; Martin 1965). The former lakebed of Glacial Lake Wisconsin lies to the east. Its northern outlet, the Black River, passes just a few kilometers east of Silver Mound (Clayton and Attig 1989).

A northeast-southwest oriented marsh is situated immediately east of Silver Mound, which occupies a low saddle between the Trempealeau and Black River drainages. This marsh drains southward into the South Fork of the Trempealeau River. The mound is currently covered by a first growth, mixed deciduous forest except on the southeast slope, which is occupied by a KOA campground. The land surrounding the base of the mound is utilized primarily as agricultural fields.

The local vegetation at the time of European settlement (ca. 1850) was largely jack pine and scrub surrounded by a mix of oak species in lower areas (Finley 1976). Throughout the Holocene, Silver Mound, like much of the surrounding region, would have been subject to periodic burning which encouraged prairie-savanna environs while suppressing forest growth. Historic accounts refer to periodic burning of Silver Mound to facilitate wild blueberry bushes. The current forested nature of the mound is a reflection of historic fire suppression, a pattern experienced throughout the Driftless Area. General Land Office land surveys record Silver Mound as falling within a biotic "Tension Zone" between conifer and deciduous hardwood forests to the east and north and prairie-savanna to the west and south (Curtis 1959). This transition zone is considered an optimal location for subsistence activities because of its proximity to varied econiches (Benchley et al. 1997).

Around 8050 BC a spruce dominated boreal forest briefly replaced earlier tundra conditions that were present during the last glacial maximum (Delcourt and Delcourt 1981). According to FAUNMAP, a variety of large game animals would have been available throughout this sequence. Megafauna such as mastodon, mammoth, and extinct forms of bison along with species such as caribou, were available before 8050 BC (Boszhardt et al. 1993; West and Dallman 1980). In the intervening period between 8050 BC - 2050 BC, environmental conditions became warmer and drier during which prairie communities advanced eastward encompassing the area surrounding Silver Mound. Bison occidentalis would have been present on the prairie before ca. 4050 BC, with deer and elk becoming locally available as the prairie began retreating after 2050 BC.

Physical Characteristics

The proposed Silver Mound National Historic Landmark conforms with the bedrock outlier hill where intensive quarrying for Hixton Silicified Sandstone took place and entirely encompasses the area where the seam of Hixton Silicified Sandstone would have been accessible to prehistoric populations. On Silver Mound, Hixton Silicified Sandstone is more resistant than the underlying sandstone matrix, and weathering has formed several rock shelters capped with silicified sandstone. Surface exposures of Hixton Silicified Sandstone while still of high quality, have been subject to frost fracturing and are somewhat difficult to work. In response, quarry pits were dug into colluvial slopes to acquire "fresh" Hixton Silicified Sandstone that has had reduced exposure to freezing and thawing. Individual localities within the district represent a range of prehistoric activities. Prehistoric groups in need of fresh tools would come to Silver Mound to acquire the distinctive tool stone located there. Broken and expended tools were discarded at campsites and workshops near the base of the mound while quarrying activities were concentrated near Hixton Silicified Sandstone exposures and talus slopes beneath. Initial knapping to test for stone quality and reduce weight was performed adjacent to quarry pits where Hixton Silicified Sandstone was fashioned into transportable blanks at workshop areas. Final tool production was undertaken at campsites on the toe slopes of the mound.

The deposition of massive quantities of lithic debris resulting from quarrying and stone tool manufacture is readily apparent across the entire Silver Mound Archeological District, and is a common characteristic of quarry-workshop complexes. Because of this, quarry and workshop sites maintain a high level of archeological visibility. In addition to high archeological visibility these types of sites are frequently identified as Paleoindian in age because of distinctive lithic technologies employed by Paleoindians. Technological strategies for Paleoindian stone tool manufacture created a unique archeological signature (i.e. fluting, overshot flaking, etc.) that is discernable even with the absence of diagnostic finished artifacts (e.g. Callahan 1979; Ellis 1984; Lothrop 1988; J. Morrow 1996).

Hixton Silicified Sandstone

The tool stone that is the focus of prehistoric activity within the district is a distinctive form of a type I orthoquartzite also commonly referred to as silicified sandstone (Ebright 1987). Porter (1961) describes the petrography of Hixton Silicified Sandstone as sub-rounded quartz grains cemented with opal and chalcedony, which is a result of silica dissolved in groundwater cementing itself with the sandstone matrix (Figure 3). The range of color exhibited by Hixton Silicified Sandstone includes semi-translucent white, opaque white, opaque yellow of varying hues, and a semi-translucent to opaque red, also of varying hues with weathered surfaces occasionally developing a whitish patina (Tankersley 1989). Macroscopically Hixton Silicified Sandstone possesses a fine-grained texture and can be distinguished from a number of other sources based largely on texture, color, and mineral staining. Behm and Faulkner (1974) conducted heat-treating experiments on Hixton Silicified Sandstone and while some color changes were apparent, little improvement in knapping quality occurred and evidence for the intentional alteration of Hixton Silicified Sandstone by prehistoric populations is absent.

The microscopic structure of Hixton Silicified Sandstone is characterized by individual, rounded, monocrystaline quartz grains within an opal and chalcedony matrix (Porter 1961) and can be distinguished from quartzites based on the high percentage of monocrystaline quartz, easily visible rim cements, and general lack of mineral inclusions. Other quartzites will generally possesses differing quartz grain structure, little or no cement, and frequent inclusions of chert, feldspar, mica, and other minerals (Long et al. 2002). The visible rim cements on Hixton Silicified Sandstone also emit a red hue using Cathidoluminescence allowing it to be distinguished from other high quality silicified sandstones with similar petrography (Boszhardt 1998a; Julig et al. 1999).

The homogeneous nature of Hixton Silicified Sandstone and its availability in large slabs from the bedrock made it particularly desirable to Paleoindian groups that required such characteristics for the manufacture of large, well made, lanceolate projectile points and other forms of tool blanks. Unlike other high quality raw material sources which outcrop in several places in a region (Gardner 1977; Prufer and Wright 1970; Tankersley 1990) Hixton Silicified Sandstone can be acquired in only a single locality. This distinction is reflected in the intensive nature of prehistoric quarrying at Silver Mound. Broken or expended points made from exotic raw materials found in the vicinity (Hill 1994), and the far reaching distribution of Paleoindian points manufactured from Hixton Silicified Sandstone (Tankersley 1989, 1991) all suggest that Paleoindians were traveling considerable distances to access the resource.

Boundary Justifications

The proposed National Historic Landmark boundary for the Silver Mound Archeological District is the 1050' Above Sea Level (ASL) contour line encircling the base of Silver Mound (Figure 4). This boundary is selected because it defines the natural boundaries of a unique, geologic feature situated on the landscape, which serves as the *only* source of Hixton Silicified Sandstone available for Paleoindians. Three concerns must be discussed here to clarify the reasons behind restricting the National Historic Landmark boundaries to the actual hill where quarrying took place when there is clear association between Silver Mound and workshop areas scattered around its base outside the boundaries. These concerns are the integrity of archeological resources and Paleoindian association with the district.

Site Integrity

The first concern is the integrity of known archeological resources. On Silver Mound proper, site integrity remains high because sources of disturbance are restricted to the few modern (first cut) logging skid trails, cultivation of the extreme southern portion of the mound, excavation of ten historic silver prospecting pits, and the limited scope of prior archeological excavation. This leaves the vast majority (nearly 90%) of the hill located within the proposed National Historic Landmark boundaries remaining completely undisturbed. This undisturbed area also encompasses the largest quarry pit locality (Locality 11) on the north side of the hill.

The near pristine nature of archeological resources across most of Silver Mound has benefited from the lack of cultivation, which not only ensures that vertical integrity is maintained among the archeological deposits but has also prevented the wholesale loss of diagnostic artifacts from sites through collector activities. Furthermore, Silver Mound did not become forested until the early twentieth century. This is an important distinction because it means that tree falls that typically disturb ground in old growth forests, and can be confused for small quarry pits, are completely absent.

Unfortunately, the land surrounding Silver Mound has been subjected to intensive cultivation except within poorly drained areas along nearby streams. The integrity of archeological resources within this area, while unknown, is likely to range from low to medium although the potential remains for intact sub-surface features in those areas. It should be noted that because of the general lack of subsurface testing it is unknown which, if any, of these areas may contain intact cultural horizons. Until further testing is undertaken, these areas are assumed to lack the high integrity necessary for National Historic Landmark designation.

Preservation

The fields surrounding Silver Mound constitute one of the most actively collected areas in Wisconsin and surrounding states, and the impact of private collectors has been both positive and negative. While important information regarding the prehistoric occupation of the Silver Mound Archeological District has been gleaned from private collections (e.g. Hill 1994), countless numbers of undocumented artifacts have unfortunately been removed from the area over the years. Some collectors record the location of finds and allow their collections to be documented; however, many are secretive and information from their collections does not often make its way into the archeological record.

A major preservation advancement was initiated in 1992 when the Archaeological Conservancy began purchasing sections of the mound. To date, the Conservancy has acquired 144 acres in the Silver Mound Archeological District and has protected large portions of the area from development. The proposed National Historic Landmark boundaries encompass over 100 acres of the Conservancy land which ensures protection of the archeological resources within the proposed National Historic Landmark. Conservation policy also extends to future archeological excavations, which is necessary due to past problems associated with archeologists failing to publish results from surveys and excavations conducted at Silver Mound. More importantly the vegetated nature of the mound ensures that data loss due to the collecting of diagnostic artifacts is not an issue. The same could be said if the proposed National Historic Landmark boundaries were extended to include the adjacent cultivated agricultural fields below Silver Mound.

Paleoindian Association with Silver Mound

The last issue to be discussed in regard to National Historic Landmark boundary justification stems from the difficulty in associating known archeological resources on the mound directly with Paleoindians. Unfortunately, Paleoindian affiliation with individual sites in quarry complexes is difficult to establish outside of workshop areas where diagnostic artifacts or datable materials are more likely to be recovered (e.g. J. Morrow 1996; Pi-Sunyer et al. 1967; Prufer 1963; Prufer and Wright 1970; Root 1992). This problem is further confounded in the case of Silver Mound because controlled archeological testing within the proposed National Historic Landmark boundary has been limited. Even more problematic is that none of the four excavations that have been conducted to date have been subjected to cursory analysis let alone published. However, excavations in the Dweyer Rockshelter revealed nearly 1.5 meters of floor deposits and produced a radiocarbon date of ca. 7450 BC from charcoal beneath a roof fall near the base of the excavations (Bender, Baerreis, and Bryson 1976). The question that remains is how can the Paleoindian affiliation with Silver Mound be currently established?

The answer is not straightforward. For example, dozens of fluted (Early Paleoindian) and unfluted lanceolate (Late Paleoindian) made from Hixton Silicified sandstone have been documented throughout the Midwest, and the tool stone to manufacture these must have been procured from Silver Mound by Paleoindians. However, one resource that can be conclusively demonstrated as Paleoindian in age is the Cody site referred to here as Locality 19 to avoid being confused as the type site for the Plains Cody complex (Jepsen 1951). Locality 19 is an uncultivated workshop area at the base of Silver Mound that is affiliated with the Late Paleoindian Cody complex and remains one of the few intact Paleoindian sites excavated within the region. The only other diagnostic projectile points recovered on Silver Mound are a Late Paleoindian-aged Agate Basin and a variation of an Eden point recovered from logging trails outside of Locality 19 (Boszhardt 1993) and these suggest that Paleoindian workshops within the untested portions of the proposed National Historic Landmark may be relatively common.
Aside from Locality 19, the justification for designating the National Historic Landmark boundary of the 1050' contour line pertains to inferences gained through understanding the relationship between Silver Mound and known Paleoindian sites located outside of the proposed National Historic Landmark boundaries. This

inference is directly related to understanding the importance of Hixton Silicified Sandstone to Paleoindians. There is clear evidence that these populations were repeatedly traveling upwards of 200 kilometers to return to Silver Mound on a regular basis to procure Hixton Silicified Sandstone (Amick et al. 1999; D. Carr 2003; Amick and Loebel 2002; Stotman 1993). Furthermore, the importance of lithic raw material sources among Paleoindians extends beyond purely technological purposes with lithic raw materials themselves having served as important social and perhaps ideological markers (e.g. Ellis 1984, 1989; Gardner 1977; Hayden 1982; Kornfeld et al. 2001; Ruggles 2001).

In other words, it is Silver Mound itself as a unique landscape feature directly associated with a culturally valued resource (Hixton Silicified Sandstone) that can be affiliated with Paleoindians. This idea relates to the concept of landscape, which by definition is produced by a population through constructing meaning upon their physical surroundings (e.g. Ashmore and Knapp 1999; see also Tilley 1994). In the case of the Paleoindian use of Silver Mound two unique situations combine to provide a rare opportunity to define a physically and culturally bounded aspect of the prehistoric landscape.

The first situation is that Paleoindians represent a population colonizing an unfamiliar landscape that is previously unoccupied, meaning that the landscape learning process cannot be facilitated through cultural interaction with existing populations (Rockman 2003). Not only does the physical landscape need to be learned in terms of the distribution of critical resources (i.e. food and stone) but the cultural landscape does as well. What little we know about hunter-gatherer ideology from ethnographic sources suggests that they possess what Kornfeld et al. (2001:155) describe as a “topographically oriented” ideology. In other words these populations culturally inscribe meaning to specific locations on the landscape (i.e. create a sense of place) as is evidenced in Basso’s (1996) work among the Apache where narratives attached to landscape features serve as an important means of transmitting culturally defined morality and value systems between generations. Among Paleoindians, any prior attachment of ideas of place to the landscape is non-existent and has led to speculation that unique aspects of Paleoindian behavior, like large bifaces caches and fluting, may be a means of creating a mobile sense of place (Kornfeld et al. 2001:156-157). The restricted use of specific, high quality, lithic raw materials would also serve this purpose. This specialized use of lithic materials occurs within other colonizing populations such as the Arctic Small Tool tradition that extend recently deglaciated areas of the arctic (Ellis 1999; Roeboeks 2003; Tolan-Smith 2003). Because Paleoindians involved with this landscape learning process needed to both locate critical resources, such as lithic raw materials, and incorporate landscape features to ensure the transmission of cultural values between generations, the restricted, reoccurring use of specific lithic sources at Silver Mound can be reasonably viewed as having satisfied both functions.

The second situation results from the unique geological context of Hixton Silicified Sandstone, which was discussed earlier. In short, unlike other widespread lithic raw materials that were extensively utilized by Paleoindians, Hixton Silicified Sandstone is restricted to a single outcrop -- Silver Mound. If lithic sources served as a critical raw material and as culturally important features to a colonizing population within an otherwise unfamiliar landscape, then Silver Mound is the only such feature within the Paleoindian landscape of the upper Midwest that can be associated with certainty to a geographically bounded location.

In addition to concerns about the integrity of resources in the fields surrounding Silver Mound and issues relating to continued cultivation and collecting of associated workshop areas, it is felt that restricting the National Historic Landmark boundary to above the 1050’ contour line (the maximum extent of Hixton Silicified Sandstone) similarly bounds an important cultural feature within the Paleoindian landscape. In terms of Criterion 6, under which Silver Mound is being nominated, the proposed National Historic Landmark boundary encompasses the area within which Paleoindians unquestionably occupied in order to acquire Hixton Silicified

Sandstone, and it is likely that future testing will uncover evidence regarding strategies for the acquisition of Hixton Silicified Sandstone developed by Paleoindians.

Contributing Resources

All known archeological resources directly associated with the National Register Silver Mound Archeological District include 21 localities on Silver Mound itself (Figure 5) and an additional 66 site areas within the fields surrounding the hill. Known archeological resources located within proposed National Historic Landmark boundaries consist of 11 separate prehistoric quarry pit concentrations, six rock shelters (two of which contain rock art), and four workshop areas. It is probable that workshop debris covers nearly the entire mound surface, and this is counted as an individual locality. Of these 21 localities, 19 can be reasonably inferred as contributing to the National Historic Landmark at this time. These are Silver Mound as a feature of the landscape (counted as one), the 11 concentrations of quarry pits (counted as 11), the six rockshelters (counted as 6), and the Late Paleoindian aged Locality 19 workshop (counted as one).

Silver Mound

It has been argued above that Silver Mound itself (Figure 6), as an important feature among both the physical and cultural landscapes, and as such, contributes to the national importance of the district. Because the theoretical framework for this has been discussed above, and will be expanded upon later in discussing the significance of the property, it is not further described here.

The Cody Site: Locality 19

Of the four workshop localities currently identified on the mound, only the Cody Site (Locality 19) has been professionally excavated and included as a contributing resource. Locality 19 is located to the north side of a main ravine, and lies approximately 300 meters due east of the Dwyer Rockshelter along the eastward extending “arm” of Silver Mound. The site was tested in 1974 and 1976 by the UW-Oshkosh field school, and is interpreted as a Late Paleoindian campsite affiliated with the Plains Cody Complex. Test excavations produced Cody Complex artifacts from undisturbed soils (Faulkner 1974). A photograph of artifacts from the site depicts a heavily resharpened Agate Basin-like point, the base of an Eden point, and a Scottsbluff or Hardin Barbed point (Figure 7). Similar sites on the Plains have produced dates ranging from 7050 BC - 6050 BC (Hofman and Graham 1998). Unfortunately, nothing has been published regarding the excavations at the site, despite the fact that Locality 19 remains one of the few undisturbed Paleoindian sites within the region (Boszhardt 1991). It is also unclear if any analysis of recovered materials has been conducted.

Quarry Pit Concentrations: Localities 1-3, 8-9, 11, 15, 16, 18, 20-21

Eleven spatially separate quarry pit concentrations have been located on Silver Mound, the most recent of those being discovered in 1998. While no actual count has been made, the total number of quarry pits on and around Silver Mound is likely to number near 1000. Individual quarry pits vary in size with most excavated into the talus slopes though some were mined into bedrock. The UW-Oshkosh field schools in 1973 and 1974 investigated a series of quarry pits along the south side of the mound, and their excavations clarified differences between the prehistoric pits and those made by historic silver prospectors enabling pits excavated by prehistoric populations. These are easily distinguishable on the basis of general morphology. Prehistoric pits are generally circular and contain smaller rock, most of which exhibits flake scarring while historic pits are typically tunnels or trenches with large unmodified slabs of rock, some of which had been blasted (Behm 1984).

The vast majority of quarry pits are located on eastern slopes and a lobe projecting from the northwest side of Silver Mound. The largest individual concentration (Locality 11) is centered on a 1050' contour bedrock lobe (Figure 8). This cluster was only reported following a 1992 survey by the Mississippi Valley Archaeology Center (MVAC) and consists of well over 100 prehistoric quarry pits on both the top of the lobe and the adjoining talus slopes below. Some of these pits are nearly 10 meters across and 3-4 meters deep (not including unknown depths of infilling), with the largest and deepest found at ravine heads where the colluvial deposits are thickest. None of these pits have been archaeologically excavated. Two rockshelters (Rainy Day and Sunny Day) are associated with the Locality 11 quarry pit cluster.

Another major quarry pit area (Locality 3) is situated on the talus slopes below the 1050' contour on the east side of Silver Mound, just below the Steele Rockshelter (Locality 4). The Locality 3 cluster consists of well over one hundred pits, some of which are estimated to be 5 meters across, but most are smaller in appearance than those in Locality 11. Locality 3 has also never been formally investigated through excavation.

Two adjacent quarry pit areas (Localities 1 and 2) are situated at the 1050' contour on the northeast corner of Silver Mound. These follow a seam of Hixton Silicified sandstone. Like Locality 3, they were located in 1992 and have not been tested.

Several smaller quarry pit areas have been documented along the east side of Silver Mound. These include Localities 8 and 9, Locality 15, and Locality 18. Charles Brown investigated the Locality 8 and 9 pits in 1933 (Brown n.d.) and these were restudied by UW-Oshkosh in the 1970s (Behm 1984). The clusters consist of what appear to be relatively small, shallow pits that follow the 1050'contour and the corresponding semi-exposed seam of Hixton Silicified Sandstone. Together there are perhaps 50 quarry pits evident at these locals. Although shallow in appearance (generally less than one meter), Brown's excavation of at least one pit on the top of the seam found that it extends nearly 2 meters in depth and into the underlying bedrock. His removal of the debris that had infilled the pit since its abandonment produced a number of mauls.

Locality 15 is located along the north side of the main ravine leading to the Dwyer Rockshelter. It consists of a deep crevice at the 1050' contour, which was apparently investigated by UW-Oshkosh. This may represent a prehistoric pit that was expanded upon by nineteenth century silver prospectors. Around this notable pit, are several others, which extend down the slope of the ravine. Indeed, other quarry pits are evident on the opposite side of the ravine, but these have not been formally surveyed, nor given a locality designation.

Locality 18 consists of a series of six quarry pits found along the south side of a small ravine along the east side of the mound. This group was discovered in the 1990s and has never been investigated.

The only known quarry pits along the steeper southwest side of Silver Mound are two deep circular pits at the base of a ravine (approximately 1000' contour). These were also discovered in the 1990s and have not been further investigated. The lack of other known quarry pits along the south tip and southwest slopes may be a reflection of steeper slopes, less talus, and the fact that several nineteenth century prospecting explorations are evident at the 1050' contour there as large splays of blasted rock.

The quarry pits (Figures 9 and 10) represent an integral part of both the importance of Silver Mound and its integrity as an archeological resource. Their presence attests to the importance of Silver Mound, and the willingness of prehistoric populations to expend large amounts of effort to acquire suitable quantities of Hixton Silicified Sandstone. The high integrity of the proposed Silver Mound National Historic Landmark stems from the fact that almost all of the quarry pits remain undisturbed from historic actions including plowing, tree falls, or archeological investigation. It is currently difficult to definitively correlate Paleoindian acquisition of Hixton

Silicified Sandstone to any individual quarry pits or quarry pit concentrations in part due to the fact that quarrying is likely to produce few diagnostic artifacts and that so few have been formally investigated. However, the possibility that fire or wooden artifacts were used during the extraction process means that potential sources of traditional datable material exist. In addition, soil pedogenesis and newer dating techniques (e.g., organics in the soil developed since the abandonment) may allow chronological determination of individual quarry pits.

It seems reasonable to imply a degree of association between Paleoindians and quarry pit areas as a whole because of the high demand for Hixton Silicified Sandstone material by Paleoindians and the technological requirements of large tool blanks. For example, large preforms require tool stone that is homogeneous in quality and this may have provided motivation among Paleoindians to expend the energy needed to excavate quarry pits. It is reasonable to assume that Paleoindians are responsible for opening an unknown portion of the quarry pits within the proposed National Historic Landmark, so they are identified here as contributing resources.

Rock shelters and Rock art: Localities 4, 7, 12, 13, 14, 17

The six rock shelters and associated rock art localities are also important archeological resources within the proposed Silver Mound National Historic Landmark. Most of these rockshelters are located at or near the 1050' contour, and they are scattered around the mound. Some have formed through erosion of softer uncemented sandstone that is capped by silicified sandstone. Many exhibit battering on the silicified sandstone exposures, reflecting quarry actions that also served to enlarge the shelter area.

In general, North American caves and rockshelters have provided minimal evidence for use by Paleoindian populations (e.g. Kelly and Todd 1988:237). This may reflect to some extent deeper deposits of the oldest cultures, including more massive roof collapse associated with harsh terminal Pleistocene climatic conditions. Nonetheless, the rockshelters at Silver Mound may well contain Paleoindian cultural deposits, as evidenced by the only one thus far excavated and rock art glyphs at another.

Of the six rock shelters located on Silver Mound, only the Dwyer Rockshelter (Locality 12) has been formally investigated (Figure 11). This rock shelter is located at the northwest end of a large ravine that has cut southeast into the mound forming two "arms," and is the largest shelter on the mound. It was first noted on Charles E. Brown's (n.d.; 1984) map of Silver Mound, on the west side of the ravine head overlooking a spring. Excavations by Harris Palmer of UW-Platteville in 1964 were likely conducted at the Dwyer rock shelter. Field schools from UW-Oshkosh and UW-Milwaukee/Waukesha conducted investigations at the shelter in 1973 and 1976, however little has been published. The floor deposits extended at least 1.5 meters, and contained massive quantities of flaking debitage, some formal tools, animal bone, both Woodland and Oneota Tradition ceramics, and charcoal. The base of the shelter floor had been battered by mining for Silicified sandstone, and a radiocarbon date of 9400 $\pm$ 90 (Wis 720) was obtained from oak and pine charcoal at depths of 1.1 and 1.3 meters (Bender, Baerries, and Bryson 1976:32). This date suggests that Paleoindians did the initial mining within the Dwyer Rockshelter.

Five other rockshelters are located around Silver Mound, and none of these have been formally investigated. The Steele rock shelter (Locality 4) is located along the eastern edge of the mound just upslope from the large section of Locality 3 quarry pits. This shelter is a modest overhang, but one half of the silicified sandstone capstone has collapsed as a large slab so that it would have been substantially larger. The Steele rock shelter displays evidence of prehistoric habitation present on the surface (Boszhardt 1989). In addition, the collapsed roof will have served to seal underlying deposits.

The Geske Glyph rockshelter (Locality 7) is a small rough overhang situated along the east side of Silver Mound, south of the main ravine that leads to the Dwyer Shelter. It is located at the 1050' contour, near the Locality 8 and 9 quarry pit clusters. This shelter has a dirt floor and flaking debitage is evident on the surface, although no investigations have been conducted here. This shelter is distinguished by a series of red pictographs on the ceiling. These include an abstract "rake" design and at least three quadrupeds, which, while highly eroded from partial exfoliation of the silicified sandstone capstone, may depict bison. If so, these glyphs might date to the early Holocene when *bison occidentalis* roamed this region, and therefore, could represent Paleoindian art.

The Rainy Day (Locality 13) (Figure 12) and Sunny Day rock shelters (Locality 17) are located on either side of the Locality 11 quarry pit lobe. Rainy Day is a small shelter at the base of the lobe, which was exposed by prehistoric mining of the talus. Thus its entrance is via a large quarry pit. The back walls and ceiling consist of soft sandstone, that contains a series of probable late prehistoric petroglyphs (Boszhardt 2004), and the floor has infilled considerably. At the top of the loose fill, along the back wall of the shelter, is a seam of high quality Hixton Silicified Sandstone, which has been battered by quarry action.

The Sunny Day shelter (Locality 17) is located near the top of the Locality 11 lobe, and has a low but wide opening, requiring one to crawl for entering. The shelter extends in for about 5 meters, and the ceiling remains low to the floor, which drops gently to the rear. The floor deposits are very dry and may extend for a considerable depth. A large core of high quality Hixton Silicified Sandstone was observed on the surface. Although the walls and ceiling of this shelter are not truly silicified, no definitive rock art was seen during the survey.

The final known rockshelter on Silver Mound is the Locality 14 shelter along the southwest side of the mound. This small shelter also has a dirt floor, and debitage and a hammerstone were found on the surface during survey. It also has not been excavated.

Non-Contributing Resources

Workshops: Localities 5, 6, 10

The remaining three workshop areas identified within the proposed National Historic Landmark boundaries are all concentrated along the lower southeast edge of the National Historic Landmark. The integrity of these areas remains low due to disturbance from cultivation since at least the 1930s and the construction of modern residential buildings and grading associated with a KOA campground. These areas represent the most intensely disturbed portions of Silver Mound above the 1050' contour. It is undetermined if any diagnostic artifacts have been recovered from these areas, and Paleoindian association remains unknown. The low integrity is the primary reason they are excluded as contributing resources.

Associated Prehistoric Activity Areas

It is necessary to mention the presence of documented prehistoric activity areas in the fields surrounding Silver Mound (Figure 13). These contribute greatly to the research potential of the district as a whole and provide essential contextual information regarding Paleoindian activities within the district, despite being excluded from proposed National Historic Landmark boundaries. An unknown number of these areas have had Early and Late Paleoindian projectile points associated with them. The vast majority of these points are currently housed in private artifact collections. The reasons these areas are excluded from the proposed National Historic

Landmark include concerns about the integrity of the associated activity areas and the likelihood of continued data loss via collection and erosion. The 66 prehistoric activity areas surrounding the mound were identified in 1992 during an extensive series of pedestrian surface surveys conducted by the Mississippi Valley Archaeology Center (MVAC). Field crews identified concentrations of waste flakes that were separated by a light scattering of lithic debris. Each concentration is recorded as a separate site and each is referred to here as an activity area due to unknown site function. The surface collections recovered a number of tools, including a notable quantity of end scrapers (Boszhardt 1993:18). Both the UW-Waukesha and UW-Oshkosh field schools conducted similar surveys of nearby fields, however, neither institution has reported their findings and it remains unclear if recovered artifacts were separated by activity area or grouped together by modern field boundaries.

A total of 70 archeological sites are located within one mile of the base of Silver Mound. All but three of these were located through surface surveys. Phase I shovel testing identified these three areas as part of two separate projects (Boszhardt 1989; Penman 1977).

Previous Investigations

Silver Mound received its name from nineteenth century Euro-American misconceptions regarding the geology of the hill. Since the 1840s rumors about abandoned silver mines attracted various groups to stake claims. In 1867 David Webster published an article demonstrating an absence of silver at the mound. Webster's publication also mentioned several rock shelters on the mound associated with pottery and glyphs. This became the first recorded observation of the archeology at Silver Mound. Despite Webster's documentation, prospecting for silver continued at the mound until 1895 and resulted in the creation of approximately 10 historic mining pits (Brown 1984:167).

Charles E. Brown, of the State Historical Society, received reports by local informants detailing the prehistoric use of Silver Mound around 1900 and these reports continued through 1930. Brown first mentioned the use of quartzite as a raw material in 1907, however, did not specifically refer to Silver Mound as the source at that time (Brown 1907). A visit to the site in 1928 by Will C. McKern of the Milwaukee Public Museum served to bring continued attention to the site (Brown n.d.).

Brown conducted the first detailed investigation of Silver Mound in 1932 and 1933. His work involved mapping prehistoric and historic quarry pits and workshop sites on the mound. He tested two pits (Locality 8/9), finding them partially filled with soil and extending several feet below the surface. He also recovered a number of mauls, all of which were made of silicified sandstone. In addition, Brown identified several workshop areas in cultivated fields along the east and southeastern sides of the mound (Localities 5 and 10) as well as on the top, referring to a large quantity of "banks." Brown was invited back to the mound in 1937, but it is unknown if the trip was made (Boszhardt 1989:8).

Archeologists next visited the site in 1958 when Warren Wittry and James Porter of the Wisconsin Historical Society arrived in conjunction with the initial survey of the nearby Interstate Highway (94) corridor. Porter (1961) later described this visit, and subsequent thin-section analysis of samples collected from the mound. He documented petrographic distinction of Hixton Silicified Sandstone. More recent geochemical methods such as oxygen-18 isotope analysis and cathidoluminescence have reinforced Porter's pioneering efforts (Boszhardt 1998a, Shaffer and Tankersley 1989).

Harris Palmer, a geologist from the State University of Platteville, conducted a brief excavation at Silver Mound in 1964. Palmer's investigation of one rock shelter (likely the Dwyer Rockshelter-Locality 12) was

never published however, an unpublished manuscript mentions encountering Woodland pottery within the rock shelter (Boszhardt 1989).

More intensive excavations at Silver Mound were carried out in 1973, 1974, and 1976. These consisted of field schools from UW-Milwaukee / UW-Waukesha under the direction of David F. Overstreet, and UW-Oshkosh led by Alaric Faulkner. Neither Principal Investigator has prepared any detailed report describing their investigations. The 1973 combined UW-Milwaukee / UW – Waukesha field school spent two weeks excavating a trench in the Dwyer Rockshelter (Locality 12), and conducting surface collections in cultivated fields around the base of the mound (Boszhardt 1989).

Immediately thereafter, the UW – Oshkosh field school excavated a second trench at the Dwyer Rockshelter that paralleled the one opened by UW-Milwaukee/Waukesha. UWO also excavated several open quarry pits on the south arm of the mound in 1973 (Localities 8 and 9). The 1974 Oshkosh expedition began investigations at the Cody Site (Locality 19). The 1976 season concluded Oshkosh's work at Silver Mound with renewed excavations at Locality 19, and additional work at the Dwyer Rockshelter (Behm 1984; Boszhardt 1989). Oshkosh crews also conducted surface collections in fields at the base of the mound. Silver Mound was listed on the National Register of Historic Places as a result of the UW-Oshkosh field school. Originally, the National Register Silver Mound Archeological District was an arbitrarily selected block of land centered on the mound (Faulkner 1974).

In 1977 archeologists with the Museum Archaeology Program at the Wisconsin Historical Society conducted a phase I reconnaissance survey for the Wisconsin Department of Transportation in advance of a proposed wayside and historical marker situated just to the northeast of the mound at the top of a small drainage (Penman 1977). The Geske site (47Ja40) was located within the original project area, and the wayside was subsequently moved 1/2 mile north to avoid the site.

In 1989 the Mississippi Valley Archaeology Center conducted a phase I survey of two parcels of land near Silver Mound for the U.S.D.A Farmers Home Administration (Boszhardt 1989). Parcel A consisted of 40 acres along the northeast slope of the mound. Shovel testing and pedestrian survey encountered three additional areas of quarry pits (Localities 1, 2 and 3), the Steele rockshelter (Locality 4), several Hixton Silicified Sandstone outcrops, and a sheet midden of lithic debitage. Parcel B consists of 120 acres of a low, marshy area immediately southeast of the arbitrary boundary for the National Register Silver Mound Archeological District (not within the proposed National Historic Landmark boundaries). A raised portion of Parcel B to the northwest of the marshy area was surveyed and produced evidence for workshop activities in the area.

The last extensive archeological fieldwork at Silver Mound occurred in 1992 and 1993 when the Mississippi Valley Archaeology Center carried out additional investigations at the mound as part of a Survey and Planning grant sponsored by the Wisconsin Historical Society (Boszhardt 1993). An intensive, pedestrian survey of cultivated fields within the vicinity of the mound was undertaken in an attempt to better define the boundaries of the archeological district. Six hundred thirty-five acres were surveyed primarily to the northeast, north, and northwest of the mound. Sixty-one archeological site areas were identified within the surveyed parcels and include a previously unidentified locality of massive quarry pits (Locality 11) along the northwest slope of the mound.

Closer examination of the Locality 11 quarry pit area in 1994 resulted in the discovery of the Rainy Day and Sunny Day rock shelters. Rainy Day (Locality 13) is a small sandstone shelter, exposed by a prehistoric quarry pit, and contains a series of petroglyphs (Boszhardt 1996). Sunny Day (Locality 17) and the small Locality 14 rock shelters are located on the west edge of the mound. Also in 1994, Matt Hill, then a student at UW-La

Crosse, published a survey of Paleoindian projectile points from the Silver Mound vicinity. The study represents one of the only widely published research projects conducted at Silver Mound. Hill studied the Paleoindian points in the Gary Steele collection from the fields surrounding the mound. A total of 69 points were attributed to the Paleoindian tradition, five of which are Clovis points, the earliest firmly dated type in North America. Since then, the Mississippi Valley Archaeology Center has documented well over 20 Paleoindian points in private collections from fields adjacent to Silver Mound. These include fluted points and ten that are classified as Agate basin. Most of these are made of Hixton Silicified sandstone, but several are from non-local sources such as Cochrane Chert.

Visits to quarry pits located on the northwest side of Silver Mound as part of the Regional Archaeology program resulted in the discovery of two additional quarry pit areas in 1998. Localities 20 and 21 were identified in wooded areas to either side of the head of an intermittent drainage to Judkin Creek (Boszhardt 1998a).

8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties:
Nationally: X Statewide: _ Locally:

Applicable National Register Criteria:	A_ B_ C_ D X
Criteria Considerations (Exceptions):	A_ B_ C_ D_ E_ F_ G
NHL Criteria:	Criterion 6
NHL Theme(s):	I. Peopling Places 3. migration from outside and within II. Creating Social Institutions and Movements IV. Shaping the Political Landscape V. Developing the American Economy 1. extraction and production 2. distribution and consumption 6. exchange and trade 8. economic theory VI. Expanding Science and Technology 2. technological application
Areas of Significance:	Archeology – Prehistoric; Exploration / Settlement; Economics
Period(s) of Significance:	10,050 BC – 8050 BC
Significant Dates:	N/A
Significant Person(s):	N/A
Cultural Affiliation:	Paleoindian Tradition
Architect/Builder:	N/A
Applicable Theme Study:	The Earliest Americans (Paleoindian) Theme Study for the Eastern United States

State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

The extraction of Hixton Silicified Sandstone from Silver Mound began immediately upon the arrival of the first people migrating into the region roughly 11,500 years ago (around 9550 BC). Termed Paleoindians, these populations began utilizing Hixton Silicified Sandstone to the exclusion of other tool stone sources available locally and transported significant quantities of the material across a considerable geographic area. The use of Silver Mound continued during subsequent periods of occupation, but at no other time in prehistory does one observe such an overwhelming preference for Hixton Silicified Sandstone, or the widespread movement of the material, than during the Paleoindian tradition (ca. 9550 – 6050 BC).

While the continued use of Silver Mound throughout prehistory makes the site a regionally important lithic source, the national significance of the district relates directly to its role in the initial settlement of North America by prehistoric populations. These first Americans explored an expansive stretch of land with no prior knowledge of the landscape. Because of the need to locate resources within this unfamiliar landscape, Silver Mound quickly became a critical resource for a population reliant upon stone tools for their survival. Paleoindian use of Silver Mound in this context is consistent with the idea that sources of easily accessible, high quality, tool stone are of paramount importance to Paleoindians, a pattern long attributed to the tradition (e.g. Frison and Bradley 1980:14; Goodyear 1979; Wormington 1957:68; see also Hofman and Graham 1998:118).

The Silver Mound Archeological District was nominated and placed on the National Register of Historic Places under Criterion D, and a portion of that district is being nominated as a National Historic Landmark under Criterion 6. This Criterion states the importance of properties that "have yielded or may be likely to yield information of major scientific importance on new cultures and periods of occupation over large areas of the United States." This nomination falls within the context of the *Earliest Americans (Paleoindian) Theme Study for the Eastern United States* (Shott 2005), because Silver Mound possesses the ability to provide important information concerning the earliest period of occupation throughout the Midwest.

Cultural Context

The Early Paleoindian stage (9550-8850 BC) is the earliest unequivocal cultural tradition in North America and is primarily characterized by distinctive forms of fluted projectile points exhibiting a high degree of craftsmanship generally manufactured from high quality tool stone often obtained from sources upwards of 300 kilometers away. The Clovis point type is the hallmark of this stage, and is widely distributed across North America (Justice 1987; Sellards 1952; Wormington 1957). Other early fluted point forms such as Gainey (Simons et al. 1984), Enterline (Witthoft 1952), and Debert (MacDonald 1968) are related to Clovis, however it is unclear if they represent contemporaneous regional variations of the Clovis form or post-date Clovis. Projectile points manufactured from Hixton Silicified Sandstone have been attributed to both the Clovis and Gainey types (Hill 1994; Stoltman 1991).

Considerable debate in recent years has arisen regarding possible pre-Clovis occupations within North America. Sites such as Cactus Hill (McAvoy and McAvoy 1997), and Saltville (McDonald 2000) in Virginia have garnered much attention, however, widespread acceptance of those sites is absent (Haynes 2003). Regionally the Chesrow complex, located in southeastern Wisconsin, has also been suggested to represent a pre-Clovis occupation (Overstreet 1993). Despite this claim, point types associated with the complex only have inferred association with proboscideans, and possess morphological and technological similarities with later forms such as Hi-Lo and Quad (Mason 1997; Shott 2005).

Clovis and related point forms represent the initial colonizing populations within Eastern North America. The sequence of projectile point styles that follow represents increased regionalization of populations as they "settled in." While the timing and exact morphological characteristics differs by region, the general sequence remains the same; related fluted point forms (e.g. Gainey) immediately replace Clovis and are followed by unfluted lanceolate forms (e.g. Agate basin, Eden, Scottsbluff), which are eventually replaced by notched forms. Established regional chronologies exist for the Plains (Hofman and Graham 1998), the Eastern Great Lakes (Ellis and Deller 1990), and the Southeast (Anderson and Sassaman 1996). The Plains sequence is the traditional chronology, and was established through the excavation of numerous, stratified, kill sites. The sequence follows a general Clovis-Folsom-Plano-Cody pattern. The Great Lakes sequence, which follows a Gainey-Barnes-Crowfield-Holcombe-Hi-Lo pattern, covers a much smaller area and was established largely through association with extant beach ridges. The Southeast displays the largest range of variation among point styles, and was established from numerous radiocarbon dates and several deeply stratified alluvial sites. This sequence follows the general Clovis – Cumberland/Suwanee/Simpson – Dalton/Quad pattern with notched forms appearing earlier here than in the other regions.

Regional Context

Silver Mound is located near the western edge of the Midwest region and occupies a transitionary zone between the Plains and Eastern Woodlands. This has resulted in a diversity of point types occurring within the region. Clovis points represent the earliest occupation within the region. These populations made extensive use of Silver Mound as evidenced by Clovis points made from Hixton Silicified Sandstone recovered both locally (Hill 1994; Boszhardt 1991), and from a distance upwards of 800 kilometers away (Tankersely 1988, 1989, 1991).

Gainey points, while first being identified as part of the Eastern Great Lakes chronology, have recently been found to occur within the western half of the Midwest as well (Hill 1994; Lopinot et al. 1998; Shott 2005; Stoltman 1991). Hill (1994) identifies Gainey points manufactured from Hixton Silicified Sandstone from the vicinity of Silver Mound and fluted points manufactured from Hixton Silicified Sandstone found in other locales are now being considered Gainey rather than Clovis (Stoltman 1991). Technological characteristics concerning how Gainey points were fluted have been compared to Folsom points and are seen as an indication of a post-Clovis chronological placement for the type, however such an assertion is still being debated with other researchers viewing Gainey as a regional manifestation of Clovis (Amick and Loebel 2002; J. Morrow 1996; Morrow and Morrow 2002). Regardless of the ultimate chronological placement of Gainey, the occurrence of Folsom points can be viewed as intrusive into the region, which is supported by the infrequent occurrence of Folsom points, their primary context as isolated finds, and the predominant use of non-local raw materials (Hill et al. 1998; Munson 1990; Stoltman 1991).

The presence of Gainey points suggests an unknown degree of interaction with the Eastern Woodlands during the Early Paleoindian stage with Plains styles being marginal and intrusive. By the Late Paleoindian stage however there is a reversal of this pattern. Point types associated with the Plains such as Agate Basin and Cody forms appear to dominate the area (D. Carr 2001; Hill 1994). Contemporary Eastern Woodland forms similar to Dalton and Quad appear only marginally, and are not manufactured from local raw materials (D. Carr 2001). This apparent shift in cultural interaction to the Plains may be related to the encroachment of the Plains environment eastward during the Early Holocene (Florin 1996).

Widespread Utilization of Hixton Silicified Sandstone

The use of Silver Mound as an important lithic source by Paleoindians is primarily established by the recovery of Paleoindian aged points in the immediate vicinity of Silver Mound and the widespread occurrence of points manufactured from Hixton Silicified Sandstone throughout the Midwest. The frequent recovery of Clovis and Gainey type points is notable within the immediate vicinity of Silver Mound. For example, in one private collection five Clovis and seven Gainey points were recovered near Silver Mound (Hill 1994). To date, 99 Paleoindian aged projectile points documented in public and private collections have been recovered from within 5 kilometers of Silver Mound and represent an unknown percentage of the total number of Paleoindian projectile points recovered in this area, as many more are contained in undocumented private collections.

Diagnostic Paleoindian projectile points manufactured from Hixton Silicified Sandstone also occur throughout Wisconsin (Figure 14) and the western Great Lakes. *The Wisconsin Archeologist* has published multiple examples of Early Paleoindian points made from Hixton Silicified Sandstone (Boszhardt 1991; Clark Jr. 1982; Dudzick 1991; Mason 1986, 1997; Ritzenthaler 1963:223, 1965:124, 1966:75; Stoltman 1991, 1993; Stoltman and Workman 1969; Wendt 1985), and Hill et al. (1998) documented eight fluted and 40 unfluted Hixton Silicified Sandstone Paleoindian points from collections at the Milwaukee Public Museum in a statewide study. Similarly, the Region 6 Archeology Program at the Mississippi Valley Archaeology Center collected data on an additional 30 Hixton Silicified Sandstone fluted points from local, private collections. Late Paleoindian use of Silver Mound is represented most commonly by point types defined for the Plains. Examples of Agate Basin, Plainview, and Cody types are well represented in the region (Boszhardt 1991; Clark Jr. 1982; Dirst 1984; Dudzick 1991; Mason R. J. 1963, 1986, 1997; Mason R. P. 1985; Mason and Irwin 1960; Mead and Berwick 1977; Ritzenthaler 1973; Salzer 1974). There is also a noted occurrence of caches of heat-fractured points manufactured from Hixton Silicified Sandstone at Renier (Mason and Irwin 1960), Pope (Ritzenthaler 1973), Gorto (Buckmaster and Pauquette 1988), and possibly Deadman Slough (Meinholz and Kuehn 1996) during this stage.

Silver Mound was not just being utilized locally. Early and Late Paleoindian projectile points made from Hixton Silicified Sandstone have been recovered up to over 800 kilometers away at sites in Indiana, Ohio, and Kentucky (Tankersley 1988, 1991). Paleoindian points manufactured from Hixton Silicified Sandstone occur extensively to the south in Iowa (T. Morrow 1984; Morrow and Morrow 1994), and Illinois (Fishel 1988; Tankersley et al. 1992). To the north, Paleoindian points of Hixton Silicified Sandstone are reported from Minnesota (Florin 1996; Harrison et al. 1997; Higgenbottom 1991), Michigan (Buckmaster and Pauquette 1988; Buckmaster 1989; Clark C. P. 1982) and Thunder Bay, Ontario (Fox 1975; Julig et al. 1987).

Trade of Hixton Silicified Sandstone through interaction networks likely accounts for the presence of Hixton Silicified Sandstone points in distant areas such as Ohio and Ontario, however, there is evidence to suggest that the distribution of Hixton Silicified Sandstone across much of the western Great Lakes reflects the actual movement of Paleoindian populations from distances upwards of 200 kilometers to Silver Mound. Artifacts from two single component fluted point sites, Morrow-Hensel (Amick et al. 1999) and Withington (Stoltman 1993) are comprised almost exclusively (>90%) of Hixton Silicified Sandstone and are situated 110 kilometers and 170 kilometers from Silver Mound, respectively. This is similar to patterns of lithic consumption observed on Eastern Great Lakes Paleoindian sites and is attributed to the direct procurement of raw materials from lithic sources as it is unlikely that a population so reliant on a critical resource, such as high quality tool stone, would rely primarily on exchange to provide the bulk of the material (e.g. Ellis 1984, 1989; Goodyear 1979). Direct procurement of Hixton Silicified Sandstone by Paleoindian populations and subsequent transport of the material over 200 kilometers from the source is also suggested when the maximum lengths of recovered Hixton Silicified Sandstone Agate Basin points are plotted in relation to their distance from Silver Mound (Figure 15).

This scatter plot displays a continuous reduction in point length resulting from resharpening and is indicative of a population returning to Silver Mound (situated at the midpoint in the cycle) on a cyclical basis. Furthermore, the maximum distance from Silver Mound that this Late Paleoindian movement appears to encompass is approximately 220 kilometers. This type of analysis is facilitated by our ability to trace Hixton Silicified Sandstone back to a single geographical source rather than a larger geological formation.

While the direct procurement of Hixton Silicified Sandstone from Silver Mound was occurring throughout the Paleoindian tradition, Silver Mound also played an important role in interaction networks. During the 1992 MVAC survey, two diagnostic tools made from exotic materials were attributed to the Late Paleoindian period. One is a broken Agate Basin base made from Burlington chert, the other is a heavily resharpened Agate Basin point of Gun Flint Silica (Boszhardt 1993). Both material sources lie more than 400 kilometers away, and the expended nature of the points suggests that they were carried from near their source areas to Silver Mound. A complete fluted point and the broken base of a Plainview point from Moline chert were collected near Silver Mound (Boszhardt 1991; D. Carr 2001), and 19 of the 69 points surveyed by Hill (1994) were from material other than Hixton Silicified Sandstone. These included heavily resharpened and broken projectile points manufactured on obsidian and Knife River Flint from Wyoming and North Dakota, respectively. Other non-local flint-stone artifacts found near Silver Mound include Knife Lake Siltstone and Jasper Taconite from the Lake Superior region, Type II Silurian Chert from the Door Peninsula of eastern Wisconsin, and Cochrane Chert from western Wisconsin counties along the Upper Mississippi River Valley. Not only were exotic materials making their way to Silver Mound through these extensive interaction networks; it is also apparent that Hixton Silicified Sandstone was also being exchanged over considerable distances (e.g. Tankersley 1989, 1991; Harrison et al. 1997; Julig et al. 1987).

Relation to Other Quarry Sites

Silver Mound was not the only important source of high quality tool stone to be exploited by Paleoindians. Shott (2005) highlights the fact that the inter-regional comparison of Paleoindian use of lithic sources can serve as an important line of research. Across the Midwest several important raw material sources have well documented Paleoindian workshops associated with them and are sites such as Ready near the Burlington outcrops in Illinois (J. Morrow 1996), Honey Run (Pi-Sunyer et al. 1967), McConnel (Prufer 1963), and Welling (Prufer and Wright 1970) near Upper Mercer outcrops in Ohio, and the Fisher site near Fossil Hill (Collingwood) sources in Ontario (Storck 1997). Other important sources lack excavated Paleoindian components but include Attica, Flint Ridge, Bayport, and Indiana Hornstone (Shott 2005). Comparisons of raw material acquisition, biface reduction, and land use strategies can all be drawn between source areas. Silver Mound similarly possesses Paleoindian workshop localities, though none have been extensively analyzed to date, and in several instances, documentation of private artifact collections is needed to conduct analysis similar to work done by Julie Morrow (1996) at the Ready site.

Despite many similarities to these other quarry/workshop complexes, Silver Mound differs from other important Midwest sources due to the fact that *Hixton Silicified Sandstone is available at only a single outcrop*. All of the aforementioned sites consist of a single, limited workshop-campsite area located near raw material outcrops. In the case of the three Upper Mercer sites, each are spatially separated by nearly 2 miles (Prufer and Wright 1970). Any associated habitation debris is limited to short term occupations and, of the known sites, only Fisher has any significant domestic habitation associated with workshop areas (Stork 1997). Furthermore, none of the sites acknowledge any direct quarrying of tool stone within site boundaries. At Silver Mound, however, the high density of sites surrounding the outcrop and the variety of activities represented suggest that interpretation of Paleoindian behavior can include other societal aspects, including analysis of quarrying techniques and domestic occupation along with stone tool manufacture from workshops. To find similar

districts with extensive occupations, other regions of the Eastern United States need to be evaluated. Sources at Munsungun Lakes in Maine (Pollock et al. 1999), Flint Run in Virginia (Gardner 1977) and Allendale in South Carolina (Goodyear and Charles 1984) are all comparable in regards to the range of site functions associated with a single geological source of tool stone, though Silver Mound occupies a smaller area and maintains a higher site density (87 sites / sq mi).

What distinguishes Silver Mound from other major sources utilized by Paleoindian populations is the geologic nature of the raw material. In every other instance, chert is the focus of quarrying activities whereas Hixton Silicified Sandstone is an orthoquartzite, or more specifically a silicified sandstone (Porter 1961). This has resulted in a relatively thick seam of a visually distinctive tool stone at a single, restricted locale. More importantly, its high quality is homogeneously distributed throughout the seam. This is in contrast to the chert sources that are often thin beds of chert with outcrops of differing quality, dispersed sporadically across a large geographic area within a single geologic formation. The result is that Paleoindian sites around chert sources are typically distributed across the larger geographic area where several outcrops occur. At Silver Mound however, associated sites are all concentrated around a single, geologically distinct outcrop.

Statement of Significance

As stated previously, Silver Mound's national significance stems from its role in the initial settlement of North America by Paleoindian populations. Silver Mound, as a high quality, lithic, raw material source, served as the focus for a population with limited knowledge of the landscape both in terms of resource location and important cultural features. One such feature, however, is Silver Mound which served as a stable, predictable resource location. In addition, Silver Mound provided an important cultural landmark within an otherwise unfamiliar landscape. This statement is supported by the widespread occurrence of early fluted point forms either in association to Silver Mound or manufactured from Hixton Silicified Sandstone, and is the reason why this nomination falls within the context of the *Earliest Americans (Paleoindian) Theme Study for the Eastern United States*.

Research Potential

The research potential of the Silver Mound Archeological District to provide "information of major scientific importance" as stated in Criterion 6 remains diverse. Extensive sections of prehistoric quarry pits have been located on the slopes of Silver Mound as late as the 1990s (Boszhardt 1993, 1998). This is remarkable considering that the area has been investigated by archeologists since the 1930s. Investigation of the slopes of the mound has uncovered the presence of at least one workshop-campsite dating to the Paleoindian period, which remains one of the few intact Paleoindian components excavated in the region (Boszhardt 1991). In addition, radiocarbon evidence indicates the initial use of the Dwyer Rockshelter (Locality 12) at around 7550 BC. Lastly, extensive activity areas located in the fields surrounding Silver Mound have produced numerous artifacts diagnostic of the Paleoindian tradition through both systematic surface surveys and the documentation of private artifact collections (Boszhardt 1991, 1993; Hill 1994; MVAC records). This diversity of site functions, all with Paleoindian associations, represents the vast range of activities that occurred around a single resource. Silver Mound has the potential to provide information concerning the acquisition of tool stone, initial reduction strategies, social contexts surrounding visits, and land use patterns. These and additional questions are further highlighted within the frame of National Historic Landmark thematic research issues outlined by Shott in the *Earliest Americans (Paleoindian) Theme Study for the Eastern United States* (2005) and 5 of the 8 themes proposed by Grumet and Brose (2000).

In addition to work at Silver Mound, the distinctive appearance of Hixton Silicified Sandstone and the ability to distinguish it from other raw material sources enables regional distribution studies to be effective. Shott (2005) states that identification of tool stone sources is a significant research concern for the Midwest, concerns which include visual similarities to other sources, extent of geologic formation, and presence of secondary sources.

High Integrity

In addition to providing information of national significance, National Historic Landmarks must display a high degree of site integrity. The integrity of Silver Mound remains very high with nearly 90% of the proposed National Historic Landmark having never been disturbed historically. Nearly a thousand surface features are visible and cultural materials have been recovered from nearly every instance of subsurface testing and exposed surface visibility. Within the existing National Register district, the diversity of site functions all remain interrelated among a specific theme, the acquisition of Hixton Silicified Sandstone. As such, there is a high degree of integrity as known sites, both disturbed and undisturbed, can all be incorporated within the context of a larger intra-site analysis of the district as a whole.

There has been only minimal subsurface testing on Silver Mound, but, the nominal testing plays an essential role towards maintaining high site integrity. Strong Paleoindian association for many of the adjacent cultivated sites has been well established yet, remarkably, the core area of the site remains almost completely undisturbed. This provides an opportunity to conduct well-organized, multidisciplinary research within the framework of a developed cultural resource management plan. More commonly, extensive excavation of core areas within proposed districts occurs prior to their being recognized as significant resources and the implementation of resource management plans (Gardner 1977; Goodyear and Charles 1984; McCary 1975).

NHL Themes
I. Peopling Places

Within the context of the Earliest Americans (Paleoindian) Theme Study for the Eastern United States, Silver Mound has the potential to provide information concerning strategies employed by a population moving onto an unfamiliar and previously unoccupied landscape. Understanding the role that readily available, high quality, lithic raw material sources played in regard to the settlement strategies of these early groups is important in understanding other aspects of Paleoindian society, such as settlement and subsistence practices and the structure and maintenance of interaction networks. In addition, it is apparent that the restrictive patterns of lithic source utilization by Paleoindians relates to challenges associated with the landscape learning process, and is where research questions regarding this aspect of Paleoindian studies become applicable outside of North America in areas such as Australia and portions of Europe and Asia, that became deglaciated during the end of the Pleistocene.

Witthoft (1952:493), commenting on the Shoop site in Pennsylvania, was one of the first researchers to suggest that the occurrence of a Paleoindian site comprised almost exclusively of a single lithic material from a distant source was the result of a population moving into an unknown territory and transporting lithic materials long distances with them. However, subsequent research has shown that this practice persists into post-Clovis times, which suggests that other factors contribute to this restrictive practice. Some have suggested that this pattern of lithic consumption reflects high logistical and residential mobility where the constraints of a highly curated tool kit limit the sources available for utilization (e.g. Goodyear 1979; see also Kelly and Todd 1988). Others equate this to a need of maintaining social ties for the risk-pooling groups or for the exchange of information or individuals between groups (Ellis 1984, 1989; Gardner 1977; Hayden 1982).

Regardless of the specific cause of this pattern, it relates to the role of Paleoindians as colonizers facing difficulties with poorly known landscapes and sparsely inhabited territories. In addition to problems with locating critical resources such as food and tool stone, Paleoindian populations lacked place-oriented features of the cultural landscape characteristic of hunter-gatherer populations (e.g. Basso 1996; Jordan 2004; see also Kornfeld et al. 2001). While strategies of creating mobile representations of "place" as suggested by Kornfeld et al. (2001) certainly serve as a means of ensuring cultural continuity between generations, it is unlikely that this was the only adaptation by early colonizers. In other words, there is little evidence to suggest that Paleoindians simply wandered the landscape in pursuit of game until population densities restricted movement. Examining the role of lithic sources in this context is an important research focus because of their ability to not only serve as important features within the cultural landscape but also because they are stable, predictable resources and, unlike food, stone resources enable a population continuously to return to a known location.

II. Creating Social Institutions and Movements

The utilization of Hixton Silicified Sandstone has the potential to aid in understanding the role of visually distinctive lithic materials in terms of their ability to serve as an indicator of levels of social integration among a population. It has been argued elsewhere that among Great Lakes Paleoindians the restricted use of a single lithic source serves as a means of establishing social integration within a larger segment of a population (Ellis 1989). The idea is that the restricted use of lithic raw materials is interrelated within risk management strategies practiced by hunter-gatherer populations. Approaches to risk management by hunter-gatherers can manifest themselves in a variety of ways, but those most likely to influence lithic procurement strategies stem from two seemingly opposite strategies. Risk can be assumed either individually or by risk pooling, which allows risk to be distributed across a larger segment of the population (e.g. Wiessner 1982; see also Ellis 1984:408-410).

Mechanisms for the assumption of individual risk are practices such as the caching of food or tools. However, among populations choosing to pool their risk across a larger segment of the population, some degree of social integration (i.e. homogeneous group identity) needs to be maintained in order to signify membership within the risk-pooling group and to continuously reaffirm ties to the group (Wiessner 1982:173; see also Ellis 1984:408-410). One means of achieving this goal of maintaining a homogeneous identity is to utilize items that possess similar stylistic attributes such as suggested by Wiessner (1983) for projectile points utilized by the Kalahari San. More specifically, in terms of Paleoindian lithic procurement, Ellis (1984:404-410, 1989) suggests that restricting the number of lithic sources utilized may also have functioned to maintain the necessary level of social integration for risk-pooling behavior. That lithic raw materials can be a valuable stylistic component to stone tools (Ruggles 2001:58-60; Clark 1982) and a more efficient indicator of group identity than specific artifact forms such as projectile points is due to the fact that recognition of lithic material is not greatly affected by processes such as hafting, resharpening, or reworking and that lithic materials are able to be extended across all classes of tools within a lithic system and not just projectile points.

What is known about the Paleoindian utilization of Hixton Silicified Sandstone is consistent with patterns of lithic procurement elsewhere in the Great Lakes area where a single lithic source was utilized to the exclusion of other raw material sources. This allows researchers to examine the role of Hixton Silicified Sandstone among Paleoindian groups as a stylistic indicator affiliation with a risk pooling group. One current study indicates that the use of different lithic raw materials by Paleoindians also correlates with differences in other stylistic attributes even within a single point type, and that lithic raw materials serve as a measure of affiliation with a risk pooling group (D. Carr 2003). Figure 16 suggests that the selection of either Hixton Silicified Sandstone or Prairie du Chien chert by individuals manufacturing Agate Basin points in western Wisconsin,

resulted in differing outlines indicated by differences in basal width and the frequency of grinding along the basal extremity prior to hafting.

IV. Shaping the Political Landscape

Lithic raw materials can also be utilized to examine the range of inter-group interactions occurring between regions. Unlike the previous National Historic Landmark theme where lithic raw materials serve as a signifier of intra-group homogeneity, understanding the political landscape of Paleoindians requires the examination of social interaction between groups. Social interaction is most frequently discussed in terms of the exchange of valuable items or gift giving (Hayden 1982; Wilmsen 1970). While other forms of exchange can also include individuals or information, gift giving is most likely to have an influence on lithic procurement and represents the most important mechanism for the indirect acquisition of lithic materials (e.g. Meltzer 1989). It is, however, unlikely that any significant bulk of lithic materials will become exchanged simply because the costs associated with their transport would be either too great or places the recipient group at great risk (Ellis 1984:363-367; Meltzer 1989:17; Stork 1982:22) This, however, does not prevent the exchange of smaller amounts of materials between groups from occurring, primarily through gift giving. Keeping in mind Meltzer's (1989) caveats concerning the identification of raw materials within the archeological record, exotic raw materials, when identified, represent the maximum extent of inter-group interaction, or in other words, the political context of a population. Archeologically this is most likely to appear as "exotic" raw materials comprising a relatively minor component of the total artifact assemblage and is a reflection of the social need to maintain important ties between groups.

Silver Mound, within this thematic framework, has the ability to provide important information regarding interaction with adjacent regions and its change over time. Because populations making extensive use of Hixton Silicified Sandstone were primarily restricted to the Western Great Lakes, understanding the extent of their interaction networks with adjacent regions allows us to understand the political landscape within which these populations operated. This is most explicit when examining differences in the social context of Hixton Silicified Sandstone utilization between the Early and Late Paleoindian stages. Movement of Hixton Silicified Sandstone is primarily associated with the Eastern Woodlands during the Early Paleoindian stage due to the presence of Gainey points (an eastern fluted point variant) in the region and the dominant eastward movement of the material (e.g. Amick et al. 1999; Amick and Loebel 2002; Stoltman 1993; Tankersley 1989, 1991). Access to the source was apparently denied to Plains affiliated Folsom populations (Stoltman 1993; Stoltman and Workman 1969). However, during the Late Paleoindian stage, access to Hixton Silicified Sandstone switched from an eastward to a westward focus with Plains affiliated cultural groups (such as Agate Basin and Cody) controlling the use of Hixton Silicified Sandstone. Contemporaneous Eastern Woodland populations (such as Dalton) apparently had very little access to Hixton Silicified Sandstone, which highlights an important shift in the social context of Paleoindians utilizing Hixton Silicified Sandstone (D. Carr 2001). This switch is evident when the distribution of Hixton Silicified Sandstone projectile points attributed to both the early and late Paleoindian stages are plotted in relationship to Silver Mound (Figure 17).

V. Developing the American Economy

Examining economic aspects of Paleoindian society is also an important avenue of potential research at Silver Mound. The use of Hixton Silicified Sandstone by Paleoindians not only relates to stone tool economies but also can be used to infer aspects of subsistence and settlement. Understanding the role of lithic raw materials in both inter and intra group contexts is important, and, the unique geological context of Hixton Silicified Sandstone provides an ideal situation to evaluate other economic aspects of Paleoindian societies such as subsistence, settlement, and mobility. This is because one of the problems with tracing many Midwestern raw

materials to a particular source is that glaciers have produced secondary deposits in till, or secondary outcrops occur within a single geologic formation. These deposits are sometimes located at considerable distances from their original source. Differentiating between primary and secondary sources has been problematic (Meltzer 1989; Shott 2005). Silver Mound is an outcrop of a distinctive stone source (Porter 1961) that lies within the Driftless Area of Wisconsin, which precludes the existence of a secondary source to the stone.

Because Hixton Silicified Sandstone can be traced back to Silver Mound with a high degree of certainty, we can begin to evaluate other economic aspects of Paleoindian societies by plotting the distribution of sites containing Hixton Silicified Sandstone across the landscape. One question concerning Paleoindian subsistence is the organization of resource procurement within the Great Lakes. Kelly and Todd (1988) have suggested that Paleoindians are highly technological foragers focusing on generalized faunal behavior rather than specific environmental contexts. This view contrasts with others who see Paleoindians as practicing a subsistence economy more akin to collectors (Speiss and Wilson 1989). Plotting the distribution of Hixton Silicified Sandstone artifacts and sites across the landscape enables evaluation of either model.

For example, the same scatter plot used to evaluate direct procurement among the Late Paleoindian Agate Basin inhabitants of the region (Figure 15) can also be used to evaluate this aspect of Paleoindian economy. The consistent reduction in length among Agate Basin points suggest that populations were employing a subsistence strategy similar to that described for foragers where populations are continuously relocating to resource locations (Binford 1980:5-10). The fact that one end of this cycle (the right side of the graph) is consistently situated in Eastern Wisconsin within an area of concentrated wetlands suggests that some degree of resource scheduling was occurring (see Behm 1984 and Clark 1982 for environmental description). This highlights the ability of researchers to plot Hixton Silicified Sandstone artifacts to a single geographic locality and use such data to infer aspects of Paleoindian economy relating to the organization of settlement and subsistence economies.

VI. Expanding Science and Technology

The hundreds of quarry pits scattered across the slopes of Silver Mound have the potential to provide insight into adaptive quarrying techniques, through comparison to other Paleoindian quarry sites such as Munsungun Lakes (Pollock et al. 1999), Flint Run (Gardner 1977), Upper Mercer (Prufer and Wright 1970) and Fossil Hill (Stork 1997). Large amounts of lithic debitage and the presence of early stage bifaces (Boszhardt 1993) will enable researchers to study reduction sequences. Studies of technological organization surrounding a quarry could also include reconstructing the entire sequence of a visit, from discarding expended tools upon arrival to completing new ones while departing. Unfortunately, little research regarding this aspect of the Paleoindian use of Silver Mound has yet to be undertaken. However, Silver Mound undoubtedly possesses the ability to contribute significant information regarding Paleoindian quarrying technology.

Within a broader theoretical framework, this National Historic Landmark theme can encompass research into the technological organization of Paleoindian populations. Considerable research has been done regarding this subject both within the Paleoindian tradition and lithic studies in general (Ellis 1984; Lothrop 1988; J. Morrow 1996; Shott 1986; see also P. Carr 1994; Ellis and Spence 1999; Nelson 1991). In short, studies concerning technological organization seek to evaluate the role of all aspects of stone tool technology including procurement, manufacture, transport, use, maintenance, and discarding of stone tools and the external sources of stimulus that affect strategies affecting each aspect of stone tool technologies. Each of the National Historic Landmark themes relate to aspects of technological organization as discussed in the literature. Evaluation and the Paleoindian use of Silver Mound from the perspective of the organization technology provides a theoretical framework for integrating analysis of each of the other four National Historic Landmark themes into a more

consistent picture of Paleoindian utilization of Silver Mound. This can serve as a model to test the Paleoindian use of other lithic raw material sources.

Summary

Silver Mound is a unique geologic feature within the Western Great Lakes landscape and served as the only source of Hixton Silicified Sandstone available to the earliest populations colonizing this region. Not only did Silver Mound serve as a stable predictable source of high quality tool stone intensively utilized by these populations, but it also served as an important cultural feature within an otherwise unfamiliar landscape. In this capacity Silver Mound provided an important resource aiding in the settlement of Eastern North America. Silver Mound remained a regionally important lithic raw material source throughout prehistory; national significance, however, stems from its intensive and widespread use during the earliest cultural tradition in North America.

As a nationally significant property, Silver Mound is being nominated as a National Historic Landmark under Criterion 6, which recognizes the ability of the property to provide important information regarding the earliest occupations in North America. Specifically, this nomination falls within the *Earliest Americans* (Paleoindian) *Theme Study for the Eastern United States* focusing on important localities aiding in the settlement of North America. While there is a lack of published archeological research within the proposed National Historic Landmark boundaries, the unique qualities of the resource enable Silver Mound to contribute significantly to our understanding of the Paleoindian occupation of North America. The specific research potential of Silver Mound relates to five previously defined National Historic Landmark themes, each of which can be incorporated within two broad research themes. First is the use of Silver Mound to evaluate the role high quality lithic raw material sources played among Paleoindian societies as a means of facilitating the settlement of an unfamiliar landscape and to establish and maintain inter and intra group ties. Second is the examination of the organization of Paleoindian stone tool technologies through understanding the Paleoindian use of Hixton Silicified Sandstone and its relationship to settlement and subsistence strategies among Great Lakes Paleoindians.

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Previous documentation on file (NPS):

__ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
_X_ Previously Listed in the National Register.
__ Previously Determined Eligible by the National Register.
__ Designated a National Historic Landmark.
__ Recorded by Historic American Buildings Survey: #
__ Recorded by Historic American Engineering Record: #

Primary Location of Additional Data:

_X_ State Historic Preservation Office
__ Other State Agency
__ Federal Agency
__ Local Government
__ University
_X_ Other: Mississippi Valley Archaeology Center

10. GEOGRAPHICAL DATA

Acreage of Property: approximately 425 acres

UTM References:		**Zone**	**Easting**	**Northing**
	A	15	661710	4922229
	B	15	663286	4922308
	C	15	663150	4920216
	D	15	661717	4920217

Verbal Boundary Description: The proposed National Historic Landmark boundary follows the 1050’ contour in a circuit along the base of Silver Mound.

Boundary Justification: The proposed National Historic Landmark boundary encircles an outlier hill of partially silicified sandstone named Silver Mound following the 1050’ ASL contour line forming the base of Silver Mound. This natural boundary was selected because it encompasses a unique geological feature serving as the only source of Hixton Silicified Sandstone available for use by Paleoindian populations and remains a unique topographic feature within both the physical and cultural landscapes. The selection of this boundary also serves to alleviate concerns regarding the integrity of archeological deposits located off of the slopes of Silver Mound and difficulties relating to the management and protection of archeological resources within the same areas. The proposed National Historic Landmark boundary encompasses an area culturally affiliated with the Paleoindian tradition and contains intact archeological deposits possessing high archeological integrity relating to the utilization of Hixton Silicified Sandstone by populations colonizing North America.

11. FORM PREPARED BY

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February 17, 2006