OMB No. 10024-0018

United States Department of Interior National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900A). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property			
Historic name Observatory Hill Mound Group			
Other names/site number 47DA571			
2. Location			
street & number city or town Madison state Wisconsin code WI county Dane code	N/A N/A le 025	not for p vicinity zip code	53706
3. State/Federal Agency Certification			
As the designated authority under the National Historic Preservation Act, as amended, I her request for determination of eligibility meets the documentation standards for registering preservation. Historic Places and meets the procedural and professional requirements set forth in 36 CFR meets X does not meet the National Register criteria. I recommend that this property nationally statewide locally X (See continuation sheet for additional comments) Signature of certifying official/Title	operties in Part 60. If y be consider.	n the National n my opinion,	Register of the property
State or Federal agency and bureau In my opinion, the property meets does not meet the National Register criteria.			
See continuation sheet for additional comments.) Signature of commenting official/Title	ate		
State or Federal agency and bureau			

Observatory Hill Mound Gro	oup	Dane	Wisconsin
Name of Property		County and State	
4. National Park Service	e Certification		
I hereby certify that the property is:entered in the National Register See continuation sheetdetermined eligible for the National Register See continuation sheetdetermined not eligible for the National Register See continuation sheetremoved from the National Register other, (explain:)	——————————————————————————————————————		
	Signature of the	ne Keeper	Date of Action
5. Classification			
Ownership of Property (check as many boxes as as apply) Private X Public-State Public-Federal	Category of Property (Check only one box) Building(s) District Structure X Site Object		
Name of related multiple pro Enter "N/A" if property not pa isting. Late Woodland Stage in Arch.	art of a multiple property	Number of contributing if previously listed in the	
6. Function or Use			
Historic Functions (Enter categories from instruction RELIGION/Ceremonial Site FUNERARY/Graves/Burials		Current Functions (Enter categories from instruction EDUCATION/College	ons)
7. Description			
Architectural Classification (Enter categories from instruction N/A		Materials (Enter categories from instruction Foundation N/A	ons)
		walls N/A	

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

Name of Property

County and State

8. Statement of Significance

(Marl	icable National Register Criteria c "x" in one or more boxes for the criteria fying the property for the National Register listing.)	Areas of Significance (Enter categories from instructions ARCHAEOLOGY/Prehistoric RELIGION/Ceremonial Site
Prope _ A	erty is associated with events that have made a significant contribution to the broad patterns of our history.	
_B	Property is associated with the lives of persons significant in our past.	Period of Significance
C	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.	AD 750 - 1000 Significant Dates
<u>X</u> D	Property has yielded, or is likely to yield, information important in prehistory or history.	N/A
	ria Considerations c "x" in all the boxes that apply.)	C''C'
Prope	erty is:	Significant Person (Complete if Criterion B is marked)
_ A	owned by a religious institution or used for religious purposes.	N/A
_B	removed from its original location.	
_ C	a birthplace or grave.	Cultural Affiliation
<u>X</u> D	a cemetery.	Effigy Mound Culture Late Woodland Stage
E	a reconstructed building, object, or structure.	
_ F	a commemorative property.	Architect/Builder
_G	less than 50 years of age or achieved significance within the past 50 years.	N/A

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Ob	servatory	Hill Mound Grou	0		Dan	e		Wisconsin
	e of Prope					ty and State		
9. N	Iajor Bi	ibliographic R	eferences					
(Cite	e the books	s, articles, and oth	er sources used in preparing this	form on or	ne or mo	ore continuation	sheets.)	
- - -	preliminan listing (36 previously Register previously the Natio designated landmark recorded l	ry determination of CFR 67) has been by listed in the National Register dan National History Historic America	n requested ional ble by		X State X Other Feder		vation Office tory: Visconsin-Mad	
10.	Geogra	phical Data						
Acre	eage of Pr	operty Less than	One Acre					
UTN	A Referen	aces (Place addition	onal UTM references on a continu	uation shee	t.)			
1	16 Zone	303915 Easting	4771879 Northing	3	Zone	Easting	Northing	5
2				4				
_	Zone	Easting	Northing		Zone ee Coi	Easting ntinuation Sh	Northing eet	3
Verl	oal Bound	lary Description	(Describe the boundaries of the	property on	a contii	nuation sheet)		
			n why the boundaries were selec			ŕ		

11. Form Prepared By

Name/title	Amy L. Rosebrough				
Organization	Wisconsin Historical Society			Date	07/28/2003
Street & number	816 State St.			Telephone	(608) 264-6494
City or town	Madison, WI	state	WI	zip code	53705
	,			p	

Wisconsin

Name of Property

County and State

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs Representative black and white photographs of the property.

Additional Items (Check with the SHPO or FPO for any additional items)

Property Owner

Complete this item at the request of SHPO or FPO.)

Name/title University of Wisconsin-Madison

OrganizationState of WisconsinDate07/01/2003Street&number161 Bascom Hall, 500 Lincoln DriveTelephone1-608-262-9946

city or town Madison state WI zip code 53706

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects, (1024-0018), Washington, DC 20503.

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	1

Observatory Hill Mound Group, Dane County WI

Insert Description of Physical Appearance

Narrative Description:

The Observatory Hill Mound group (47DA571) consists of the remains of a Late Woodland Stage/Effigy Mound culture mortuary and ceremonial center (ca. AD 750-1000). It is located on the summit and slopes of Observatory Hill on the University of Wisconsin-Madison campus, north of the Washburn Observatory (Figure One). It stands within the SW ¼ of the NE ¼ of the SE ¼ of the SE ¼ of Section 15, Town 07N, Range 09E. The site currently contains one bird effigy mound and one "two-tailed turtle" effigy mound. Though the mounds have suffered some damage over the years due to campus improvements, they are still largely intact. Other mounds once present at the site, including a linear mound, an animal effigy and several conical mounds, have been destroyed.

Also within the proposed NRHP boundaries are one structure and two objects. The structure consists of a remnant segment of the old carriage road that once led to the Washburn Observatory. One object is a large glacial erratic inset with a bronze plaque that commemorates the life and career of T. C. Chamberlin, a geologist and former president of the University of Wisconsin-Madison. The second object is a small granite marker commemorating a tree-planting ceremony held in 1988. The carriage road and the two markers are not added to the resource count because they are of insignificant size and scale and make no contribution to the archaeological significance of the site.

Environment and Setting:

Observatory Hill, a large glacial drumlin, stands within the campus of the University of Wisconsin-Madison. Its summit is occupied by the Washburn Observatory complex. Various campus buildings are located on its eastern, western and southern slopes (Figure Two). Agriculture Hall has cut into the southwestern slope of the hill. The western end of the hill has been cut away to provide level ground for King Hall and a set of greenhouses. The upper portion of the northern slope of the hill, facing Lake Mendota and including the extant site area, has been retained as green space. The lower portions of the northern slope are occupied by Observatory Drive and a pull-off for a scenic overlook. The land remaining between Observatory Drive and Lake Mendota is occupied by green space and a parking area.

The appearance of the site during the period of significance is unknown. However, Charles E. Brown noted that Lakes Mendota, Monona and Wingra could all be seen from the crest of the hill in 1914 (Brown 1914: 91). GLO surveyors documented the presence of burr, black and white oak intermixed

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	2

Observatory Hill Mound Group, Dane County WI

with hazel and grasses on and near Observatory Hill in 1833. An extensive marsh system with sedge meadows was located at the base of the hill, adjoining Picnic Point Bay (Lyon 1834). It is likely that a similar environment was present between AD 750 and AD 1000.

Cultural Background:

Sites attributable to the Effigy Mound culture are located in the southern two-thirds of Wisconsin, far northern Illinois, extreme southeastern Minnesota and northeastern Iowa. Artifact analysis and radiocarbon dating indicate that the culture appeared between AD 600 and AD 700, and vanished between AD 1000 and AD 1200 (Salkin 2000, Stevenson et al 1997, Stoltman and Christiansen 2000).

Mature Late Woodland sites containing effigy mounds fall within a broad area characterized by oak savanna, and seem to be limited by the presence of open prairie to the west and south, and by the southern limit of the boreal forest on the north. Effigy mounds do not scatter evenly over this area, but fall within a minimum of 90 clusters located in resource-rich areas. Mound sites are densest along the major drainages, including those of the Upper Mississippi, Wisconsin, Kickapoo, Baraboo, Yahara, Rock and Fox rivers. Many mound sites are located along the shores of the larger lakes, including Lake Winnebago, Lake Mendota, the Oconomowoc Lakes, Lake Geneva, Lake Como, Butte des Mortes, Lake Winneconne and Lake Koshkonong (Rosebrough 2003).

Artifacts most commonly associated with the effigy builders include thin-walled, grit-tempered, ceramics decorated with cord and textiles and small triangular arrow points (Baerreis 1953, Hurley 1975, McKern 1930, Rosebrough 2000, Stevenson et al 1997, Stoltman and Christiansen 2000). Excavations at Effigy Mound habitation and mortuary sites have also revealed evidence of bone, ground stone and textile craft production (Hurley 1979, McKern 1928: Plate LI, Figure 1, Rowe 1956: 56).

Evidence for long-distance trade of exotic items or raw materials is sparse (with the exception of orthoquartzite). Copper awls, wedges and beads have been recovered from habitation and mortuary contexts. Galena cubes are also occasionally found at Effigy Mound sites. Few ceremonial items or prestige items have been associated with the culture. Ceramic elbow pipes are the most commonly encountered item in this category (Stoltman and Christiansen 2000: 511-512). To date the only firmly dated Late Woodland ceremonial site not associated with mounds is that of the Gottschall Rockshelter, which yielded small, egg-shell thin, highly-decorated ceramics that may have been produced specifically as offerings or for ritual use. A spectacular carved and painted stone head was recovered

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	3

Observatory Hill Mound Group, Dane County WI

from the same strata. A panel of petroglyphs that may depict part of the historically documented "Red Horn" narrative has also been associated with Effigy Mound levels at the shelter (Salzer 1997).

Subsistence appears to have been characterized by an incipient horticultural strategy, mixing limited production of maize and other cultigens with the collection and processing of high-yield resources such as deer, mussels, fish and nuts (Benn 1979, Benn and Green 2000, Salkin 2000, Schroeder 2001, Stevenson et al 1997, Stoltman 1990, Stoltman and Christiansen 2000, Zalucha 1985). Though maize was probably present in the western reaches of the study region during the early portion of the Mature Late Woodland, the cultigen was not widely adopted until the Tenth Century (Stoltman and Christiansen 2000, Sullivan 1984).

The non-horticultural subsistence regime of the Effigy Mound people has come under considerable scrutiny. Most reconstructions of Effigy Mound social structure rely heavily on subsistence models derived from studies in the western Driftless Area (Benn 1976, 1980, Mallam 1976, Storck 1972, Theler 1987). This model posits a seasonal round with population dispersal into the uplands in winter months and population aggregation in large river valleys in the summer. The utility of this model in the east is unknown. Faunal remains from Sanders, Bigelow and Highsmith in eastern Wisconsin seem to suggest seasonal aggregation in villages near marsh habitats (Lippold 1973, Salkin 2000, Theler 1987).

The most distinctive trait of the culture is the construction of zoomorphic and anthropomorphic earthen mounds. Effigy mounds often contain evidence of the ritual use of fire, colored earth and water. Effigy Mound burial regimes were quite variable. Articulated and bundle burials, cremations, pit burials, primary mound floor and primary mound fill burials are all commonly encountered. Mound construction ranged between simple single-stage construction episodes using local soils placed over unaltered ground surfaces, to multi-stage construction using colored non-local soils, placed over elaborately prepared mound floors. The only consistency in burial regime was the preferred placement of the deceased near the "heart" of the effigy, followed by alternative but anatomically significant locations such as the head, mid-body or "hip" of the mound. Grave goods were rarely included with burials, and were generally utilitarian in nature (Birmingham and Eisenberg 2000, Rosebrough 2003, Stevenson et al 1997, Stoltman and Christiansen 2000).

Mature Late Woodland peoples continued to erect conical mounds, as well as linear mounds and a number of geometric or abstract forms. Such mounds were probably as symbolic to Late Woodland peoples as the "true" effigies, but do not yield their meanings as readily to modern researchers. The

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	4

Observatory Hill Mound Group, Dane County WI

zoomorphic and anthropomorphic effigies for which the period is best known come in a number of forms, and represent several classes of animals.

The most common forms are those of birds, so-called "bears," long-tailed forms commonly known as "panthers," shorter-tailed animals in several varieties, and so-called "turtles" (animal forms shown in plan view). Less common types include those representing cranes or waterfowl, birds with forked tails, and animals with elongated bodies sometimes identified as mink. The remaining effigy mound types are truly rare, and include deer, rabbits, horned birds or bats, anthropomorphs, buffalo, fish, and rattlesnakes (Rosebrough and Birmingham 2003, Rosebrough 2003, Rowe 1956).

There is some degree of standardization within types, but attributes such as head, wing and tail shape, and tail, limb, neck and body length vary from site to site. Portions of this variation may signify distinctions between species. Other variation seems to have been the result of idiosyncratic design. Some distinctive sub-types have generally restricted spatial distributions, probably corresponding to the core territory of their builder or builders. On a regional scale, the effigies scattered throughout the Driftless Area are built in a somewhat more naturalistic style than their eastern counterparts (Rosebrough 2000, 2003).

Most mound groups appear to have been grossly controlled by local topography. While conicals were preferentially located on flat surfaces, effigies and linears seem to have often been purposefully placed on sloping ground. Elongate mound forms were placed either parallel or perpendicular to slopes. Animal forms were positioned with legs downhill, and heads pointed down-drainage. Bird mounds were positioned with heads down-drainage and are oriented either down-slope, up-slope, or parallel to the slope.

The arrangement of mounds within a site also appears to have been controlled by topography on some levels, particularly at sites on narrow terraces, ridges and ridge spurs. Such sites often exhibit a pattern of mounds in one or more rows, oriented along the longest axis of the landform. In a number of instances mounds seem to show some alignment towards local features such as springs. In others alignments seem random, while mound placement is apparently controlled by the same types of features.

History of Investigations:

The earliest survey of the Observatory Hill mound group was conducted in August of 1888 by T. H. Lewis for the Northwestern Archaeological Survey. Lewis completed a detailed plat of the two-tailed

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	5

Observatory Hill Mound Group, Dane County WI

turtle, and his notes mention the presence of the bird mound, stating: "a bird with one wing gone, nearby east." The animal, linear and conical mounds were not discussed in his notes, and Lewis did not think enough of the group to mention it to his employer in their near-daily correspondence.

The mounds were next discussed in a report to the University of Wisconsin Regents penned by Reuben G. Thwaites in 1904. Thwaites argued passionately for preservation of mounds located on state land. He closed with a stab at the conscience of the university, suggesting that "An institution which stands for the advancement of knowledge among men can ill afford to allow its own historical memorials to become the prey of an unappreciative spirit…" (Thwaites 1904: 182). An accompanying editorial (McDonald 1904) details damage suffered by the mounds during the addition to Agriculture Hall.

The following year Arlow B. Stout journeyed to the site to produce plats of the bird and turtle mounds. Stout's plats (1905) indicate that portions of both wingtips of the bird had been disturbed and that the end of the western tail of the turtle had vanished. There is one main discrepancy between his maps and the report provided by Thwaites (1904) and McDonald (1904) the previous year. Thwaites and McDonald both mention damage to the head of the turtle mound caused by driveway construction. Stout depicts no such damage, and shows the driveway and connecting walkways well away from the head of the mound.

Wooden markers were placed on the turtle and bird mounds in 1908. In 1914 the University of Wisconsin Board of Regents and the Wisconsin Archaeological Society held ceremonies at the site to commemorate the placement of permanent markers on the mounds. The markers are made of concrete with inset bronze tablets. The tablets depict an outline of each mound and describe each mound form, the size of each mound, and state that they were "Constructed by the Winnebago, Probably About 500 Years Ago." The markers are located on the head of the turtle mound and over the "heart" of the bird (Brown 1914) (Figure 4).

The first published notice of the prior existence of other effigy mounds at the site was penned by Arthur Quan, a local resident familiar with Observatory Hill, and Charles E. Brown, secretary of the Wisconsin Historical Society. Quan provided Brown an invaluable sketch map (Figure Four) showing the location and orientation of the quadruped, linear, bird and turtle mounds, and patterns of land use around the mounds ca. 1892-1896 (Quan 1943). The map indicates that the western end of the hill was relatively undisturbed, and devoted to pasture and small garden plots.

In July, 1943, Madge Yohn published a detailed narrative about the group based on Quan's

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section 7 Page 6

Observatory Hill Mound Group, Dane County WI

reminiscences. The article states, in part:

"To reach this favorite fishing post [Camel Rock, now dynamited into rip-rap], the boys had to climb to the Observatory Hill and from there follow a trail leading down its western slope to the lake shore. On the western edge of this path was a fence which enclosed a tract of land then in use by Mr. Kleinheinz for pasturing his prize flock of University of Wisconsin sheep. In this sheep pasture were two Indian mounds which but few persons besides Arthur Quan now remember. One was a linear, wall-shaped mound about 100 feet long. One of its ends was cut off by the pasture fence. The second mound, a short distance below the other in the pasture, was an animal-shaped effigy resembling a panther. Mr. Quan and Mr. Brown found a remnant of that ancient mound the other day on their trek. The slope, they say, is now just an unsightly weed patch. The garden fields that were at the base of the slope are gone. A few half-dead fine orchard remain. . . The two mounds which Mr. Ouan remembered were part of the mound group of which the bird and turtle effigies preserved on the crest of Observatory Hill were members. One or two round mounds of this group were destroyed when Agricultural Hall was built in 1902."

Brown's notes (1943) confirm that he traveled to the site with Quan, and add that a remnant of the body of the panther effigy was located. The path Quan traveled was still visible.

Current features:

Two mounds remain extant on the summit of the hill—one bird mound and a two-tailed "turtle" mound (Figures 5 and 6).

Mound 1- Bird Mound

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	7

Observatory Hill Mound Group, Dane County WI

The bird mound is in fair condition, but has been partially reconstructed and is somewhat low. The mound lies on the northern slope of the hill, just below its crest. The head of the bird is oriented uphill and the wings are parallel to the slope. The body measures approximately 18 meters and the wings have a spread of approximately 28 meters. The 1914 marker is located on the body of the bird, at the junction of the wings. Sidewalks clip the top of the head of the bird and pass over the eastern wingtip. The western wingtip was destroyed by driveway construction.

Lewis' notes (1888) indicate that one wing of the mound (which wing is not recorded) was damaged by erosion or unknown parties prior to 1888. The *Wisconsin Engineer* reports that sidewalk construction damaged the head by 1904, and that a water line had been laid through the body of the mound (McDonald 1904). Damage to the body of the bird was later repaired, either by university workers or by WPA crews under Charles E. Brown's supervision.

Mound 2- "Two-Tailed Turtle" (Figures 6, 7 and 8).

The turtle mound has been somewhat disturbed by the construction of sidewalks across both of its tails. The fork where the tails diverge is clearly visible, as are the upper portions of both tails. The central portion of the eastern tail has been destroyed by sidewalk construction and the lower portion of the tail is faintly visible. The lower portion of the western tail has been destroyed by sidewalk and retaining wall construction. A portion of the northeastern leg and part of the head were destroyed during driveway construction. The driveway has since been removed. The ends of the western set of legs have been clipped by a sidewalk. The concrete and bronze marker placed in 1914 is located on the head of the mound.

The "turtle" mound is the site's outstanding feature. The mound is unique among effigy mounds in having a forked or paired tail. One tail is (or was) curved, the other straight. The mound is approximately 34 meters long, and still stands just under half a meter in height. There are no other records of similar two-tailed "turtle" mounds elsewhere within the expanse of the Effigy Mound culture, though fork-tailed bird mounds have been reported and several problematic effigy mounds have forks at the end of their tails.

Two maps depict a single tail. The map published in the *Wisconsin Engineer* (McDonald 1904) depicts a single curving tail (Figure 9). A plat of the western end of Observatory Hill (Kohl 1938) depicts a single straight tail (Figure 10). Neither map attempts to accurately portray the mounds. All other maps and photographs (composed both prior to and after the maps cited above) depict a pair of

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	7	Page	8

Observatory Hill Mound Group, Dane County WI

tails.

To date sub-surface archaeological investigations have not been completed near the mounds. The Charles E. Brown Manuscripts contain a sketch of a "relic" found by Raymond Roberge on August 19th, 1938, at the edge of a sidewalk just east of the turtle mound. The sketch shows a slightly stemmed or lanceolate projectile point or knife approximately 2.25 inches long (Roberge 1938). Brown was also apparently aware of finds of habitation material at the base of the hill along the Lake Mendota shoreline. An undated manuscript describing campus mounds mentions that "…in past years many aboriginal stone and other implements and some fragments of earthenware vessels have been collected" (Brown n.d.).

End of Description of Physical Appearance

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section <u>8</u> Page <u>1</u>	Observatory Hill Mound Group, Dane County, WI

_Insert Statement of Significance

Statement of Significance

The Observatory Hill mound group, built between AD 750 and 1000 by participants in the Effigy Mound Culture, meets the registration requirements of the property type, "Late Woodland Mounds" as defined in the Multiple Property Documentation, "Late Woodland Stage in Archaeological Region 8". The site contains two extant mounds—one bird effigy and one "two-tailed turtle" effigy. The turtle mound is the only one of its kind in the world. The site has the potential to yield important information about cosmological beliefs, ritual activity and social organization during the mature Late Woodland stage (AD 700-1000), and is thus eligible under Criterion D at the local level.

Site History

Urban development began on the east end of Observatory Hill in the 1870s, with the construction of the Washburn Observatory complex. The Horticulture and Dairy buildings and a small powerhouse were erected at the base of the far western end of the hill in the 1890s. Construction on Agriculture Hall commenced in 1902, and several conical mounds were reportedly destroyed as a result. Damage to the bird and turtle effigies began at that time, as sidewalks and utilities were laid and a driveway was constructed between the two mounds (University of Wisconsin 1912, Unknown 1940[?]).

The northern slope of the hill was not heavily impacted by construction, and was devoted to agricultural research. A fence passed between the turtle and bird mounds and the Observatory complex, and ran down the slope towards Lake Mendota. The area east of the fence was terraced and utilized as an orchard (Quan 1943, Kohl 1938). The terraces are still visible on this portion of the northern slope of the hill. Modern Observatory Drive runs along one of them. Terracing destroyed a portion of the lone linear mound once associated with the group. The remainder of the linear and a long-tailed animal effigy were initially preserved west of the fence in a pasture used to graze university livestock, but subsequently eroded away. A remnant of the tailed animal was visible as late as the early 1940s, but has not been relocated since (Brown 1943, Quan 1943, Yohn 1943).

The mounds have achieved some measure of fame, as perhaps no other major university campus contains so many preserved pre-contact earthworks. A business manager for the university once told C. E. Brown that visitors from Norway were invited to tour campus. The manager expected them to ask to be taken to see university buildings or campus agricultural operations. Instead, they most wanted to see the mounds (Brown n.d.).

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	8	Page	2
---------	---	------	---

Observatory Hill Mound Group, Dane County, WI

Significance

The Effigy Mound culture flourished during a period not typically associated with complex ritual activity. The Late Woodland stage in Eastern North America has typically been characterized as a interregnum separating the complex Hopewell and Middle Mississippian societies. Effigy mound culture sites stand in stark contrast to this stereotype. Rather than simply providing data on a "good gray culture," effigy mound sites yield an invaluable snapshot of a population on the cusp of a revolution in subsistence practices, settlement patterns, material culture and ceremonial behavior.

Late Woodland peoples in Wisconsin, and bordering counties in adjacent states, participated in a series of developments that set the stage for fully horticultural societies, sedentary settlements, Middle Mississippian expansion, and the Oneota emergence. Late Woodland peoples initiated a cycle of resource intensification within their territories, beginning mass harvests of native nuts and seeds, fish and shellfish. In AD 800 maize horticulture was introduced to the region (Benn and Green 2000, Salkin 2000, Stoltman and Christiansen 2000).

By AD 1000 Late Woodland peoples in the region had begun to aggregate together in semi-sedentary villages and construct raised fields. Some of these villages (Aztalan being the most prominent) participated in Middle Mississippian trade. The Upper Mississippian Oneota appear in the archaeological record at this point, possibly as the result of interaction between Late Woodland and Middle Mississippian peoples (Stoltman and Christiansen 2000).

Between AD 750 and AD 1100, as these events were taking place, Late Woodland peoples in the Upper Midwest constructed hundreds of mound groups containing thousands of mounds. The largest and most complex groups are those built by Effigy Mound peoples. The Four Lakes Locality in Dane County, Wisconsin was once home to a particularly large and dense concentration of mature Late Woodland stage mortuary sites (Rosebrough 2003). Most mound sites in the area were built on elevations overlooking the lakes, on land now highly prized for private residential development. Few survive, and at least 80% of all effigy sites ever built have been destroyed (Peterson 1979).

Effigy construction was primarily tied to mortuary ritual, but mound sites are believed to have also served as seasonal ritual centers, where world-renewal ceremonies were conducted during periods of population aggregation (Benn 1979, Mallam 1976, 1984). The forms of individual mounds at each site are thought to represent the corporate group affiliations of those either buried within the mound or participating in the ceremony (Mallam 1976, Radin 1911, Taylor 1931). Mound forms also appear to

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section	8	Page	3
	•	1 450	_

Observatory Hill Mound Group, Dane County, WI

represent animals and spirits prominent in Effigy Mound cosmology (Birmingham and Eisenberg 2000, Mallam 1976, Rosebrough 2003). Though the mounds were utilized for human burial, the age of the site and its use for significant social and cosmological ritual mitigate criteria consideration D.

Native groups of the Upper Midwest divided the cosmos into vertically-stacked worlds, each associated with certain attributes and inhabited by specific classes of beings (Penney 1985, Salzer 1997, Sampson 1988). The division of the universe into an Upper World associated with fire, thunderbirds and warfare, and a Lower World associated with snakes, monsters, bears, water, springs and caves is a pan-Eastern concept that appears in iconography as far back as the Early Woodland stage (Penney 1985, Sampson 1988). The ethnographically known native groups of the Upper Midwest organize their clan systems into moieties, and sometimes three-fold phraties, based on this cosmological division (Hudson 1985, Radin 1911, 1923). The resulting interplay of social structure and cosmology crosscuts numerous facets of society and affects burial practice, village layout, marriage practices and political structure (Radin 1911).

Based on analogies with ethnographically documented Siouan and Algonquian tribes, the most common effigy mound forms can be divided into three cosmological groups. Birds (representing the Upper World) and bears and long-tailed panthers or Water Spirits (representing the Lower World) are the most commonly encountered mound types. Some other types of animal mounds, and mounds representing geese, cranes and other water-loving birds, may have been associated with either a middle world or a liminal status (Birmingham and Eisenberg 2000, Rosebrough 2003). Further analyses of the geographic distribution of mound types and associations between individual mound forms and their environmental settings will help to further our knowledge of Late Woodland society.

Heights such as Observatory Hill would have been associated with the Upper World. Many isolated bird mounds in the Driftless Area and Four Lakes Locality are indeed found on high ridges and ridge spurs (Rosebrough 2003). Bodies of water such as Lake Mendota were considered entrances to the Lower World—not only a place of chaos, where the accepted order was turned upside down, but the location of the path of the dead. The location of the Observatory Hill mounds, on the crest of a high hill overlooking Lake Mendota, links the site with both the Upper and Lower worlds and provides easy access to the path of the dead for those buried there. The land between the mounds and the lakeshore has been preserved as green space, with the exception of Observatory Drive and an associated scenic overlook. As a result, the northern view shed of the group has been preserved relatively intact.

Surviving effigy mounds have previously been considered potentially eligible for the National Register of Historic Places (Birmingham 1990) provided that they meet the following criteria:

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 8 Page 4

Observatory Hill Mound Group, Dane County, WI

- 1. Extant mounds must be present.
- 2. The site must be eligible for the NRHP under Criteria D.
- 3. The site must be of sufficient antiquity.
- 4. The mounds should maintain sufficient integrity to yield information under Criteria D.

Birmingham's first and third criteria have obviously been met in this instance. Two mounds survive at the site, and both date to the period between AD 750 and AD 1100. The Observatory Hill site has the potential to yield significant information on Late Woodland stage societies and is therefore eligible for the National Register of Historic Places under Criterion D. The mounds, their setting, and any intact deposits within and surrounding them have the potential to inform researchers about aspects of Effigy Mound culture social structure, ritual, cosmology and land use patterns. Birmingham's second criteria has thus been met.

Although the mounds on Observatory Hill have been subject to some disturbance, the worst damage has been repaired in a manner consistent with their prior appearance. The bird mound is largely intact, with the worst damage limited to the end of the western wing. The turtle mound has suffered some damage to its forked tail, and is still overlain by portions of a sidewalk complex. However, the fork where both tails join the body is still prominent, as are the upper portions of both tails. The mound is the only example of its type ever recorded by Euro-American researchers, much less preserved relatively intact. Neither mound has been formally excavated, and it is likely that human burials and/or ritual features remain intact within them. These factors mitigate criteria consideration E, as well as Birmingham's final criteria.

Finally, though the bird mound is a fairly common effigy form, the two-tailed turtle mound is unique. The mound is the only one of its kind known to have existed within the geographic expanse of the Effigy Mound culture. Indeed, it is the only known example of a "two-tailed turtle" effigy in the world.

Preservation Activity

The University of Wisconsin Board of Regents and the Wisconsin Archeological Society initiated preservation activity on Observatory Hill in 1914, with the placement of concrete and bronze markers on the turtle and bird mounds. No major damage occurred to the mounds after that time. Efforts were made to repair disturbed portions of the bird mound, and the driveway impinging on the head of the turtle was removed. In 1996 the mound group was included in a self-guided tour of publicly accessible mounds in Dane County (Birmingham and Rankin 1996). It was later included in an expanded,

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section 8 Page 5

Observatory Hill Mound Group, Dane County, WI

statewide list of accessible sites published in *Indian Mounds of Wisconsin* (Birmingham and Eisenberg 2000). In 2003 UW-Madison staff removed dead and dying trees threatening the tails of the turtle mound, and installed post and chain barriers to prevent small vehicle traffic from passing over the mounds. The University of Wisconsin-Madison has recently received a grant to place interpretive signage at the site and conduct large-scale archaeological survey on the main campus.

Summary

The Observatory Hill mound group, built between AD 750 and 1000 by participants in the Effigy Mound Culture, meets the registration requirements of the property type, "Late Woodland Mounds" as defined in the Multiple Property Documentation, "Late Woodland Stage in Archaeological Region 8". The form of the turtle effigy, unique not only in Wisconsin, but in the world, expands our knowledge concerning Effigy Mound period iconography. The continued presence of both "Upper" and "Lower" world mound forms, in a relatively intact setting with an unimpeded view of Lake Mendota, preserves the overall integrity of the site, despite the destruction of other mounds in the group. The site has the potential to yield important information about cosmological beliefs, ritual activity and social organization during the mature Late Woodland stage (AD 700-1000), and is thus eligible under Criterion D at the local level.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 1

Observatory Hill Mound Group, Dane County, WI

Insert References

Sources

Baerreis, David

1953 Blackhawk Village Site (Da5) Dane County, Wisconsin. *Journal of the Iowa Archaeological Society* 2(4): 5-20.

Benn, David

1979 Some Trends and Traditions in Woodland Cultures of the Quad-State Region in the Upper Mississippi River Basin. *The Wisconsin Archeologist* 60(1): 47-82.

1980 Hadfield's Cave. Report No. 13, Office of the State Archeologist, Iowa City.

Benn, David and William Green

2000 Late Woodland Cultures in Iowa, In: *Late Woodland Societies: Tradition and Transformation Across the Mid-Continent*, ed. Thomas E. Emerson, Dale McElrath and Andrew Fortier, pp. 429-496, University of Nebraska Press, Lincoln.

Birmingham, Robert

1990 *The Late Woodland Stage in Archaeological Region 8 (AD 650-1300)*. National Register of Historic Places Multiple Property Documentation Form. On file Division of Historic Preservation, Room 307, Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Birmingham, Robert and Leslie Eisenberg

2000 Indian Mounds of Wisconsin. University of Wisconsin Press, Madison, Wisconsin.

Birmingham, Robert and Katherine Rankin

1996 Native American Mounds in Madison and Dane County. City of Madison, Madison, Wisconsin.

Brown, Charles E.

n.d. Indian Mounds on the Campus of the University of Wisconsin. Manuscript and Map on file in Box 21, Charles E. Brown Mss, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

1910 The State Field Assembly at Madison. *The Wisconsin Archeologist* 9(3): 57-78.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 2

Observatory Hill Mound Group, Dane County, WI

- The Unveiling of Tablets on the Observatory Hill Mounds. *The Wisconsin Archeologist* 13(2): 90-92.
- 1942 *Observatory Hill Mounds*. Manuscript and Map on file in Box 21, Charles E. Brown Mss, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.
- 1943 *Observatory Hill Mounds*. Manuscript on file in Box 21, Charles E. Brown Mss, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.
- 1944 1943 Archaeological Findings. *The Wisconsin Archeologist* 25(1): 7-10.

Hudson, Charles (ed.)

1985 Ethnology of the Southeastern Indians: A Source Book. Garland Publishers, New York.

Hurley, William

1975 An Analysis of Effigy Mound Complexes in Wisconsin. Anthropological Papers 59, Museum of Anthropology, University of Michigan, Ann Arbor.

Kohl, L.

1938 *Topographical Map of Area "G,"* Map on File Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Lewis, T. H.

1888 Northwestern Archaeological Survey Field Notebooks. Notebook 24: 47. Microfilm on file Burial Sites Preservation Office, Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Lippold, Lewis

1973 Animal Resource Utilization at Wisconsin Effigy Mound Sites. *The Wisconsin Archeologist* 54(3): 135-152.

Lyon, Orson

1834 Field Notes of Fractional Township T7N R9E, 4th Meridian, Northwest Territory. Microfilm on file Archives Division, Wisconsin Historical Society, 816 State Street, Madison WI, 53706. Mallam, R. Clark

1976 The Iowa Effigy Mound Manifestation: an Interpretive Model. Report 9, Office of the State

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 3

Observatory Hill Mound Group, Dane County, WI

Archeologist, The University of Iowa Press, Iowa City.

1984 Some Views on the Archaeology of the Driftless Zone in Iowa. *Proceedings of the Iowa Academy of Science*, 91: 16-21.

McDonald, H. L.

1904 Editorial. The Wisconsin Engineer 8(3): 184-186.

McKern, W. C.

1928 The Neale and McClaughry Mound Groups. *Bulletin of the Public Museum of Milwaukee* 3(3), Milwaukee, Wisconsin.

Penney, David W.

1985 Continuities of Imagery and Symbolism in the Art of the Woodlands. *Ancient Art of the American Woodland Indians*, ed. David Brose, pp. 147-198, Harry N. Abrams, Inc, New York.

Peterson, Robert

1979 *The Wisconsin Effigy Mounds Project I*, Unpublished Report on file, Office of the State Archaeologist, Room 307, Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Quan, Arthur

- 1942 Letter to Charles E. Brown, January 3, 1942. On file Charles E. Brown Manuscripts, Dane County, Box 21, Archives Division, Wisconsin Historical Society, 816 State Street, Madison WI, 53706.
- 1943 Observatory Hill as of Years 1892-1896, Map On file Charles E. Brown Manuscripts, Dane County, Box 21, Archives Division, Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Radin, Paul

1911 Some Aspects of Winnebago Archaeology. *American Anthropologist* 13(4): 517-538.

Roberge, Robert

1938 Letter to Charles E. Brown, August 30, 1938. On file Charles E. Brown Manuscripts, Dane County, Box 21, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 4

Observatory Hill Mound Group, Dane County, WI

Rosebrough, Amy L.

- 2000 What's Wrong with this Picture?: An Examination of Variability within the Effigy Mound Culture. Paper Presented at the 2000 Joint Midwest/Plains Archaeological Conference, St. Paul, Minnesota.
- 2003 Group Identity, Solidarity and Stylistic Symbolic Communication in Seasonally Dispersed Incipient Horticultural Populations: A Case Study of the Effigy Mound Culture of the Western Great Lakes of North America (Draft Mss). PhD Dissertation University of Wisconsin-Madison.

Rosebrough, Amy L. and Robert Birmingham

2003 Effigy Mound Landscapes in Wisconsin. Paper Presented at the 2003 Society for American Archaeology Meetings, Milwaukee, Wisconsin.

Rowe, Chandler

1956 The Effigy Mound Culture of Wisconsin. *Milwaukee Public Museum Publications in Anthropology* 3, Milwaukee, Wisconsin.

Salkin, Philip

2000 The Horicon and Kekoskee Phases: Cultural Complexity in the Late Woodland Stage in Southeastern Wisconsin. In: *Late Woodland Societies: Tradition and Transformation Across the Mid-Continent*, ed. Thomas E. Emerson, Dale McElrath and Andrew Fortier, pp. 525-542, University of Nebraska Press, Lincoln.

Salzer, Robert

1997 Wisconsin Rock Art. The Wisconsin Archeologist 78(1/2): 48-77.

Sampson, Kevin W.

1988 Conventionalized Figures on Woodland Ceramics. The Wisconsin Archeologist 69(3): 163-188.

Schroeder, Sissel

2001 2001 Investigations at the Skare Site (47 Da 96). Wisconsin Archaeological Laboratory, University of Wisconsin, Report of Investigations No. 1, Madison, WI.

Stevenson, Katherine, Robert Boszhardt, Charles R. Moffat, Philip H. Salkin, Thomas C. Pleger,

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 5

Observatory Hill Mound Group, Dane County, WI

James L. Theler and Constance M. Arzigian

1997 The Woodland Tradition. *The Wisconsin Archeologist* 78(1/2): 140-201.

Stoltman, James B.

1990 The Woodland Tradition in the Prairie du Chien Locality. In: *The Woodland Tradition in the Western Great Lakes, Papers Presented to Elden Johnson*, ed. Guy Gibbon, pp. 239-257, University of Minnesota Publications in Anthropology No. 4, St. Paul.

Stoltman, James B. and George W. Christiansen III

2000 The Late Woodland Stage in the Driftless Area of the Upper Mississippi Valley. In: Late Woodland Societies: Tradition and Transformation Across the Mid-Continent. ed. Thomas E. Emerson, Dale McElrath and Andrew Fortier, pp. 497-524, University of Nebraska Press, Lincoln.

Storck, Peter L.

1972 *The Archaeology of Mayland Cave*. Unpublished PhD. Dissertation, On File University of Wisconsin-Madison.

Stout, Arlow

1905 *Observatory Hill Mound Group.* Map on file Charles E. Brown Manuscripts, Box 21, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Sullivan, Norman

1984 Dental Caries and Subsistence Practices Among the Effigy Mound People of the Western Great Lakes. Paper Presented at the 1984 Midwest Archaeological Conference, Evanston, Illinois,

Theler, James L.

1987 Woodland Tradition Economic Strategies: Animal Resource Utilization in Southwestern Wisconsin and Northeastern Iowa. *Report 17: Office of the Iowa State Archaeologist*, Iowa City: University of Iowa.

Thwaites, Reuben Gold

1904 Our Prehistoric Earthworks-A Suggestion to the Regents. *The Wisconsin Engineer* 8(3): 180-182.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 9 Page 6

Observatory Hill Mound Group, Dane County, WI

University of Wisconsin

1911 University of Wisconsin General Plan for Future Construction and Development: Conditions in 1912. Map on File Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Unknown

1940(?) University of Wisconsin Historical Development and Growth of Student Body, 1851-1940.

Map on File Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Yohn, Madge

1943 All Around the Town. *Wisconsin State Journal*, July ? 1943. Clipping on file in the Charles E. Brown Manuscripts, Box 21, Archives Division of the Wisconsin Historical Society, 816 State Street, Madison WI, 53706.

Zalucha, Anthony

1985 Floral Analysis of Sites 47-Gt-365 and 47GT-366, Grant County, Wisconsin. *Journal of the Iowa Archaeological Society*, 32: 75-90.

End of References

Wisconsin Word Processing Format (Approved 1/92)

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section 10 Page 1

Observatory Hill Mound Group, Dane County, WI

Insert Boundary Descriptions

Boundary Description

The proposed NRHP boundary runs eastward along the south side of an east-west trending sidewalk south of the bird mound, to a point due south of where an old carriage road intersects the north side of the sidewalk (See Figure 14). From that point, the boundary extends due north to the south curb of Observatory Drive. The boundary then runs due west to the east edge of a north-south trending sidewalk that passes west of the turtle mound. From that point, the boundary runs due south along a retaining wall separating the University greenhouses from the mounds, to a point due west of the point where the sidewalk leading to the rear entrance of Agriculture hall intersects a paved turn-around. The boundary runs due east to that point, then follows the north curb of the turn-around to the east edge of a short stairway leading from the turn-around to the east-west trending sidewalk. From that point the boundary returns to the point of beginning.

Boundary Justification

The boundary incorporates both mounds remaining extant at the site, as well as the most promising location for surviving sub-surface features associated with ritual activity at the site. The eastern boundary of the NRHP nomination runs along or near a former fence line separating the site from agricultural fields, thus marking the eastern boundary of intact soil deposits on the hill. The northern and eastern boundaries were drawn to include the probable location of the 'missing' effigies, provided they were located south of Observatory Drive. The NRHP boundary also encloses a sufficient amount of space around each mound (particularly the bird) to allow definition of borrow areas and soil disturbance associated with Late Woodland stage mound construction.

End of Boundary Descriptions

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 1

Observatory Hill Mound Group, Dane County, WI

Insert Photo Descriptions

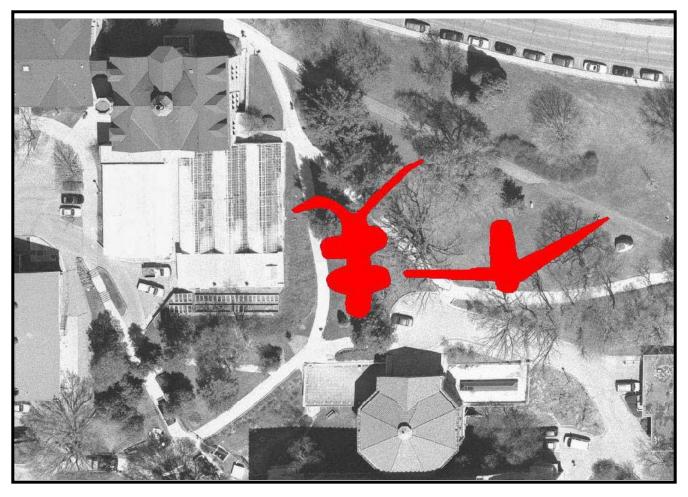


Figure One: Aerial view of Observatory Hill mound group, showing extant mound locations (highlighted), surrounding University of Wisconsin campus buildings and walkways (Photo courtesy of University of Wisconsin-Madison).

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 2

Observatory Hill Mound Group, Dane County, WI

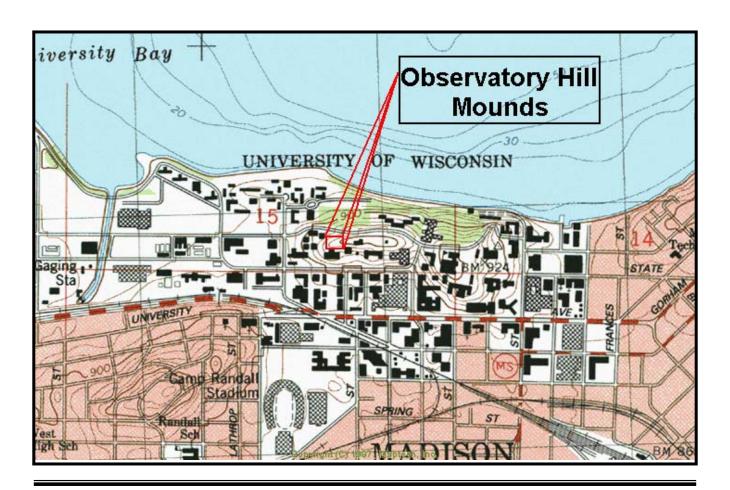


Figure Two: Portion of Madison West USGS 7.5' Topographic Map showing location of Observatory

Hill mound group (47DA571).

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 3



Figure Three: Bronze and concrete marker placed on turtle mound in 1914.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 4

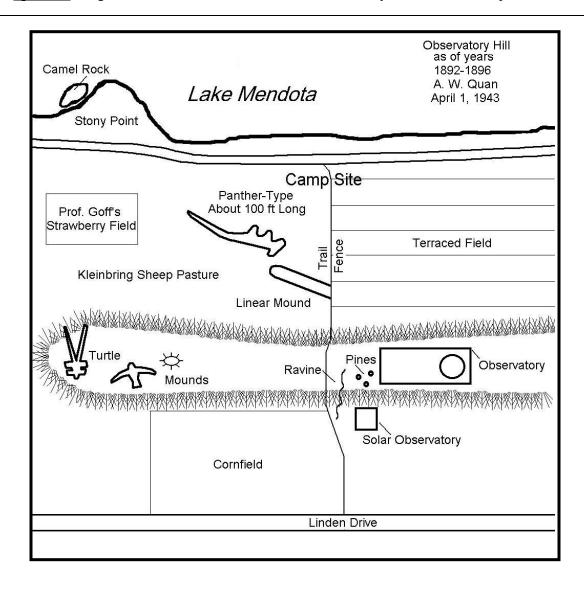


Figure Four: Re-draft of sketch map composed by A. W. Quan for Charles E. Brown in 1943. The bird mound is portrayed incorrectly, and should face south, not north.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 5



Figure Five: Bird effigy, looking southeast. The western wing is faintly outlined by leaf litter. The bronze marker placed on the "heart" of the effigy is visible at the center-right. Chamberlin Rock is visible at far center-right. The 1988 granite marker is visible at far center-left. Observatory Drive and Lake Mendota are in the background. Photograph taken in the fall of 2002.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 6



Figure Six: Turtle effigy, looking southwestward from point where sidewalk intersects the eastern tail. Agriculture Hall is in the background. Photograph taken in the fall of 2002.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 7



Figure Seven: Turtle effigy outlined in lime, ca. 1914, looking downslope from the roof of Agriculture Hall to the south-southwest. Note position of sidewalks relative to the mound and gravel drive extending along east side of mound. (Wisconsin Historical Society Archives negative number WHi (x3) 30469).

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 8

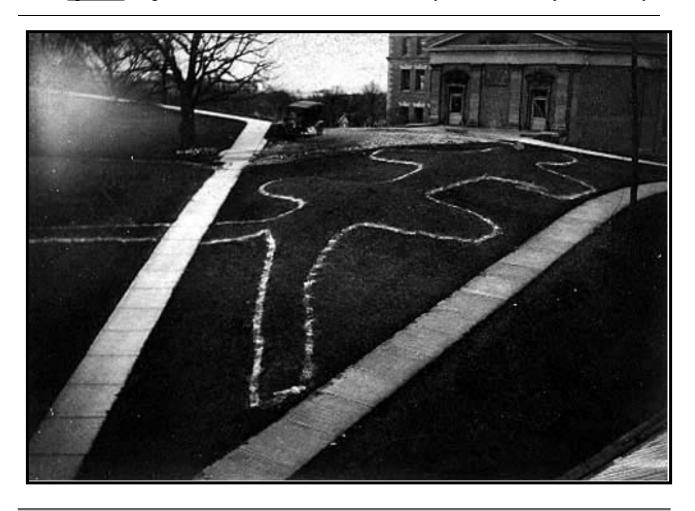


Figure Eight: The turtle effigy looking upslope towards the southeast and Agriculture Hall, ca. 1914, from roof of University greenhouses. Note damage to tails caused by sidewalks. (Wisconsin Historical Society Archives negative number WHi (x3) 18845).

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 9

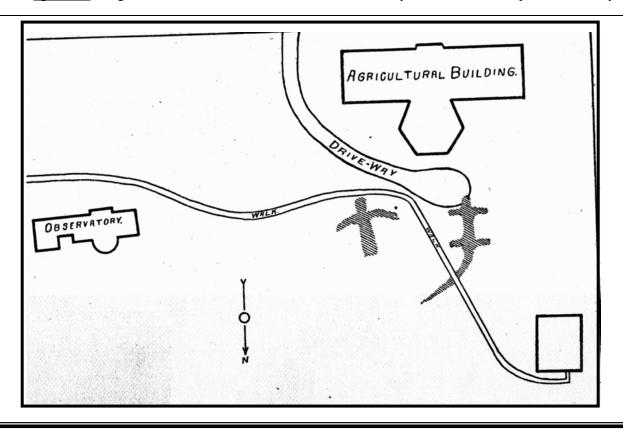


Figure Nine: Map of Observatory Hill Mounds reproduced in *The Wisconsin Engineer* in 1904. Note omission of second tail and damage to mound caused by driveway and sidewalks.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 10

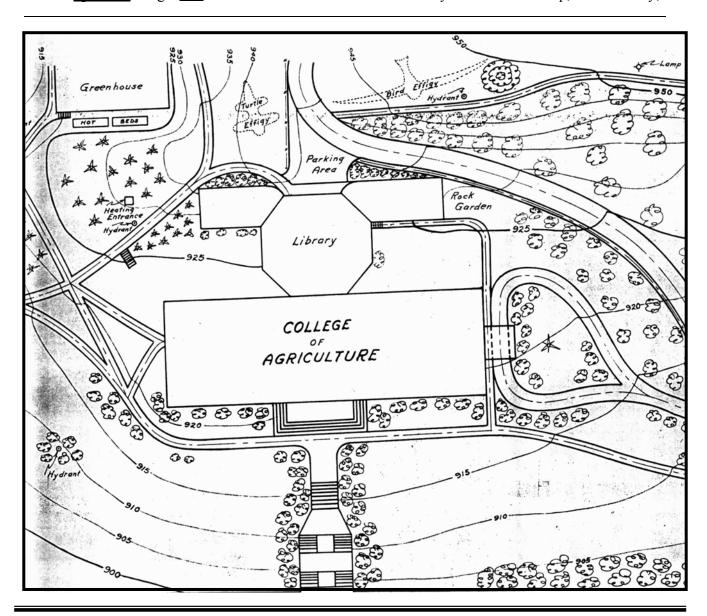


Figure Ten: Detail of Kohl topographic map of western end of Observatory Hill (1938), showing relationship of campus buildings, driveways and sidewalks to mounds. Mounds are shown schematically.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 11

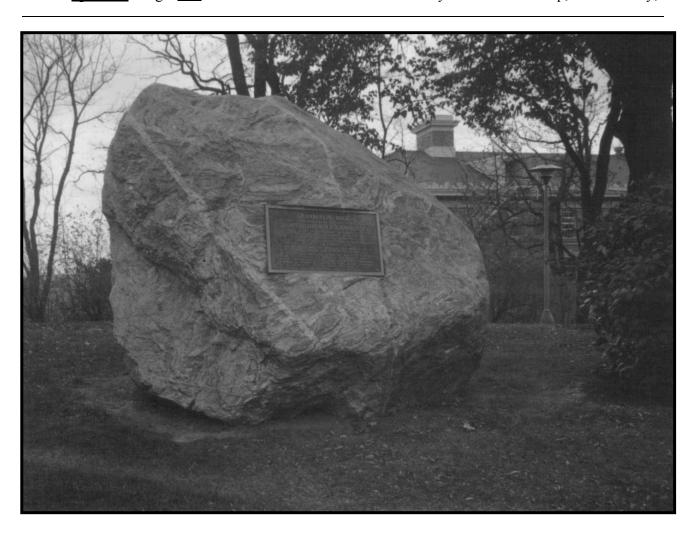


Figure Eleven: Chamberlin Rock, with Agriculture Hall in the background.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 12

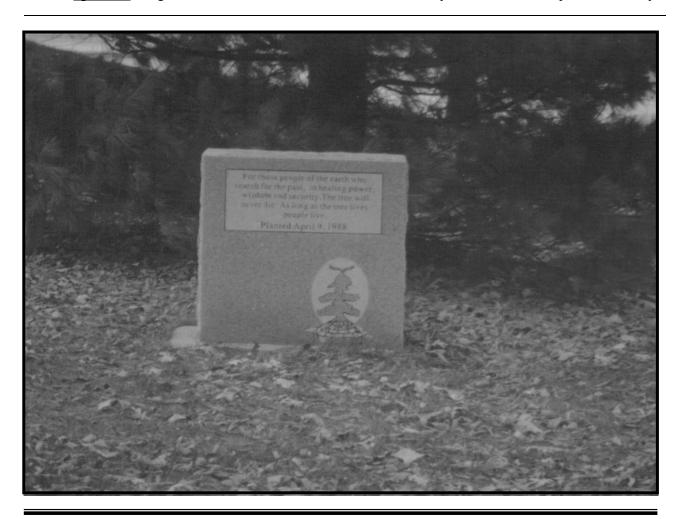


Figure Twelve: Polished granite marker placed at site in 1988.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 13



Figure Thirteen: Remnant of old Observatory Road, extending from the lamppost towards the gap in the bushes in the background. Modern Observatory Drive is located just behind the cars visible in the extreme right of the photograph. Lake Mendota is in the background. Chamberlin Rock and the 1988 marker are visible at center-right. The bronze and concrete mound markers are visible in the extreme center-left.

United States Department of the Interior

National Park Service

National Register of Historic Places Continuation Sheet

Section **photos** Page 14

Observatory Hill Mound Group, Dane County, WI

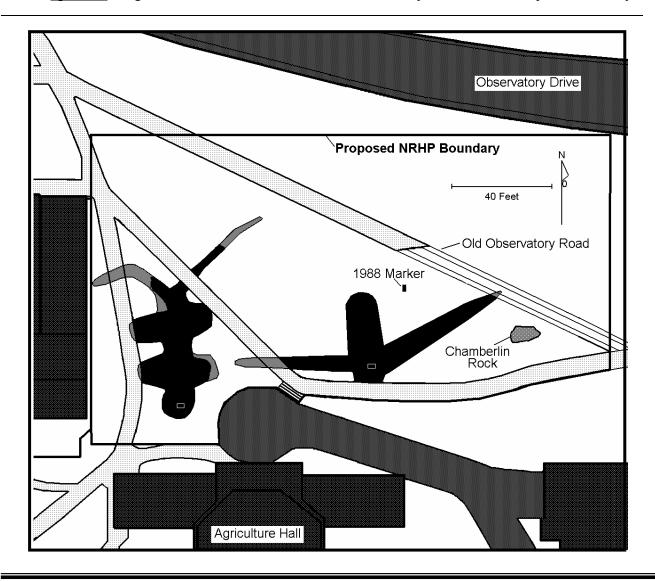


Figure Fourteen: Plan of Observatory Hill mound group (47DA571) showing location of proposed NRHP boundaries and non-contributing features. Differential shading on mounds denotes extant mound structure (dark shading) versus faint, disturbed or destroyed structure (light shading). Disturbed portions of the turtle mound have been mapped using T. H. Lewis' survey notes (1888). Disturbed portions of the bird mound have

been estimated based on extant portions. End of Photo Descriptions