

A Phase I Archaeological Survey of Muir Knoll,
University of Wisconsin-Madison,
Dane County, Wisconsin

Prepared For:

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Abstract

In August 18, 2003, OSA personnel conducted Phase I shovel testing at Muir Knoll, on the grounds of the University of Wisconsin-Madison, Dane County, Wisconsin. A total of nine shovel tests were excavated. One pre-contact archaeological site was discovered during the survey (DA-1208).

Two shovel tests yielded non-diagnostic pre-contact artifacts. Four shovel tests produced relatively recent post-contact Euro-American debris. There was no stratigraphic separation between the pre-contact and post-contact material.

Soil profiles at the site indicate some patchy disturbance and truncation of an unplowed "A" horizon. This disturbance may be related to construction and use of a concrete overlook on the northern edge of the knoll, to construction of a sidewalk over the knoll and/or to the construction of a ski-jump tower in the vicinity of the knoll.

Based on 1) low artifact densities at the site, 2) a lack of diagnostic material and 3) stratigraphic mixing of pre- and post-contact material, the Office of the State Archaeologist does not recommend further testing.

However, since the site area is somewhat removed from planned construction at the overlook, the OSA does recommend that construction vehicles and activities be routed to non-artifact producing areas of the knoll. This will serve to protect the site area during construction.

It is important to note that modern archaeological techniques do not always locate deeply buried sites or human burials. Should human remains or artifacts be recovered during the construction phase of this project, **stop work immediately** and contact the Burial Sites Preservation Office at the State Historical Society of Wisconsin (1-608-264-6502).

Introduction

This archaeological survey was requested by Mr. Daniel Einstein, representing the University of Wisconsin-Madison. Mr. Einstein contacted the OSA in August, 2003, regarding the need for archaeological survey on Muir Knoll prior to proposed improvements to a concrete overlook. The overlook is deteriorating, and the University proposes to replace portions of the overlook and an adjoining cistern with new recreational facilities. Mr. Einstein requested survey of the knoll prior to construction due to concerns about the proximity of the reported location of the Bascom Hill-North Hall mounds (DA-0573).

The proposed project area is located on the summit of Muir Knoll, on the south shore of Lake Mendota on the grounds of the University of Wisconsin-Madison (Figure One). The knoll is located directly north and east of Observatory Drive, east of North Hall. The knoll is located in the E ½ of the NW ¼ of the SW ¼ of the SW ¼ of the SW ¼ of Section 14, Township 07N, Range 09E. The surveyed area covered less than 0.5 acres.

Project Setting

The proposed project area is located on the western margin of the Eastern Ridges and Lowlands province defined by Martin (1965). The portion of the province in the area surrounding Madison is composed of alternating limestones and sandstones. Surface topography has been substantially altered by recent glaciation, resulting in rolling terrain with numerous drumlins, moraines, kettles, lakes and marshes.

The project area lies on a small bench projecting northward from the summit of Bascom Hill, a large drumlin overlooking the south shore of Lake Mendota. The bench slopes steeply downward on its northern and eastern flanks. The north flank of the bench also slopes downward, but at a less drastic angle. The northern slope of the bench drops directly down into the southern shore of the lake.

Vegetative cover during the settlement period consisted of mixed prairie and oak savanna, with patches of hazel underbrush. An extensive marsh system was located less than a mile west, at University Bay.

At the time of survey, the project area was covered in mowed lawn. Several large prairie oaks survive on the knoll, surrounded by rings of chipped bark mulch. Muir Woods, a relatively mature patch of forest, extends from the western end of the project area to the Social Science building.

The northern end of the knoll is covered by a concrete platform overlook, with a

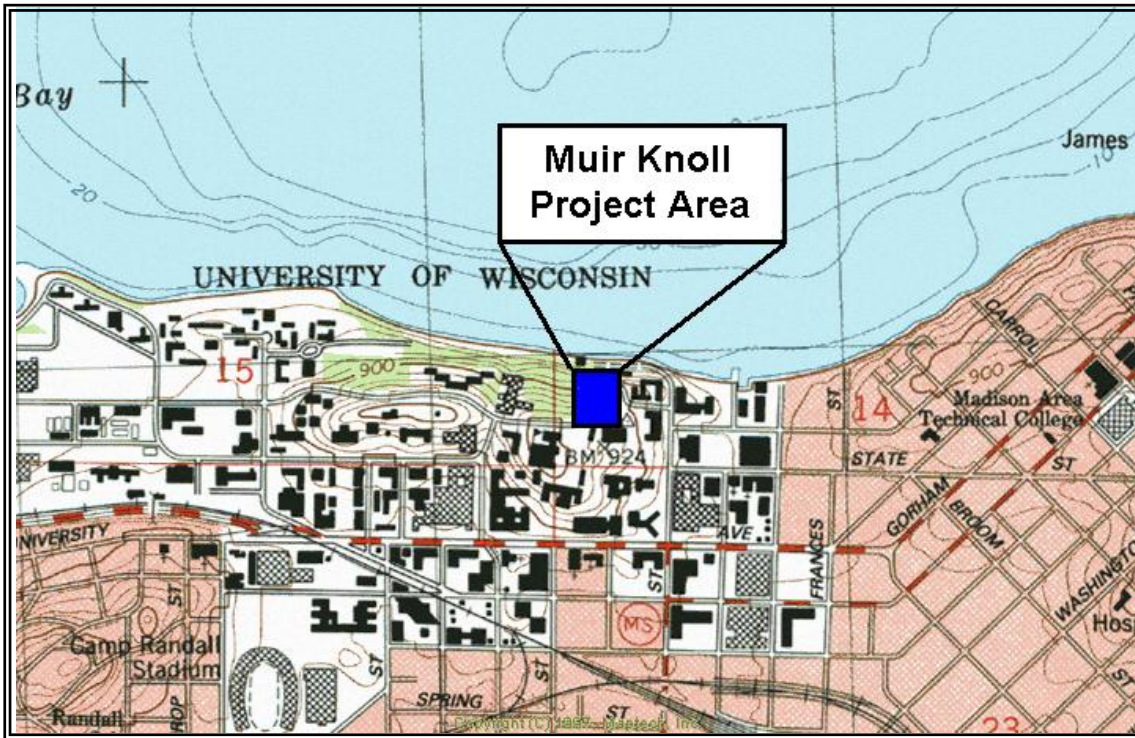


Figure One: Location of the Project Area on the University of Wisconsin-Madison Campus, City of Madison, Dane County, Wisconsin.

metal railing and several low concrete and pebble tables. A concrete sidewalk extends southward from the overlook to Observatory Drive, in the direction of Bascom Hall. Observatory Drive flanks the southern and eastern sides of the knoll.

The knoll is located across Observatory Drive from North Hall, the first building to be constructed on the UW-Madison campus. The knoll itself largely escaped development, remaining on the fringes of campus expansion. The site was dedicated to John Muir, famed naturalist, in 1918. Period photos suggest an environment largely identical to today, with small prairie oak intermixed with lawn. The following year a wooden ski jump was built on or near the knoll, extending down the slope towards Lake Mendota. It was replaced by a steel structure in 1932. The steel slide was re-located to Hoyt Park in 1957. Two years later, the Social Science building was constructed and the knoll was re-dedicated along with Muir Woods as parkland (“Who Knew?” 1999).

Cultural Setting

The University of Wisconsin-Madison campus is located on a series of drumlins and moraines extending along the south shore of Lake Mendota in the Four Lakes locality of south-central Wisconsin. The locality was heavily occupied



Figure Two: Previously reported archaeological sites within one mile of the proposed project area. Blue denotes pre-contact burial mound groups, red denotes pre-contact habitation areas and green denotes post-contact cemeteries.

during the pre-contact period, and saw intensive occupation during the mature Late Woodland stage (AD 750-1100).

WHS-OSA site files indicate that twenty-one archaeological sites have been reported within one mile of the project area (Figure Two). Nearly half the sites (N=10) date to the mature Late Woodland stage, and contain conical, linear and effigy mounds. These sites are located on prominent elevations and along the Lake Mendota and Lake Monona shorelines. Nine habitation sites have been reported within one mile of the project area, mainly on low ground along the Lake Mendota shoreline. Many of these sites have yielded material dating to the Archaic tradition (8000-1000 BC) and Late Woodland stage (AD 750-1100). The remaining two sites are cemeteries that date to the early settlement period (ca. 1840).

The project area is located very near the reported location of the Bascom Hill-North Hall site complex (DA-0573/DA-0819 and BDA-0125). Two brief and rather vague reports indicate that at least two Late Woodland stage effigy mounds (DA-0573 and DA-0189) were destroyed during the construction of

Bascom and North Halls between 1851 and 1858. These buildings are located just across modern Observatory Drive from Muir Knoll (Brown Mss n.d.). Bascom Hill was also the site of one of Madison's earliest cemeteries (BDA-0125). Two sets of skeletonized remains were encountered during placement of a statue of Abraham Lincoln in front of Bascom Hall in 1918 (WHS-BSPO Case File 94-0125). It is unknown how many other burials are located on the hill.

Methods

Survey was conducted using systematic shovel testing at a ten meter interval. Shovel tests were generally thirty centimeters or less in diameter and extended thirty centimeters in depth. Sod was removed as an intact unit, and replaced once test units were backfilled. A total of nine shovel tests were excavated, in two parallel transects oriented north-south along the length of the knoll (Figure Three).

Results

Testing resulted in the discovery of a low-density lithic scatter confined mainly to the upper levels of the soil profile. Two tests produced non-diagnostic material consisting of chert debitage and small fragments of chert shatter. Four tests produced post-contact debris consisting mainly of small fragments of glass. One small fragment of a square nail may relate to early construction activities at the University.

Soil profiles at the site indicated moderate patchy disturbance, perhaps related to construction of the wooden and steel ski-jumps and construction of the concrete overlook. Shovel test two was highly disturbed, and the soil profile was indicative of truncation of the profile by erosion. Shovel test one was least disturbed. It exhibited a dark brown silty "A" horizon twenty-eight centimeters in depth, overlying a light brown sandy silt "B" horizon. Both tests were placed adjacent to the overlook, and both were sterile.

The remaining shovel tests were placed well back from the platform, on the level to gently sloping summit of the knoll. Tests in this area exhibited shallower "A" horizons, extending to approximately 17 centimeters below the ground surface. The "A" horizons were somewhat mottled in most tests. Nearly all tests in this area produced recent post-contact debris. Tests positive for pre-contact material were located on the northern edge of the summit of the knoll, near the overlook and Muir Woods.

Shovel Test One: Sterile.
"A" horizon-dark brown silt to 28 cm.
"B" horizon- light brown sandy silt.

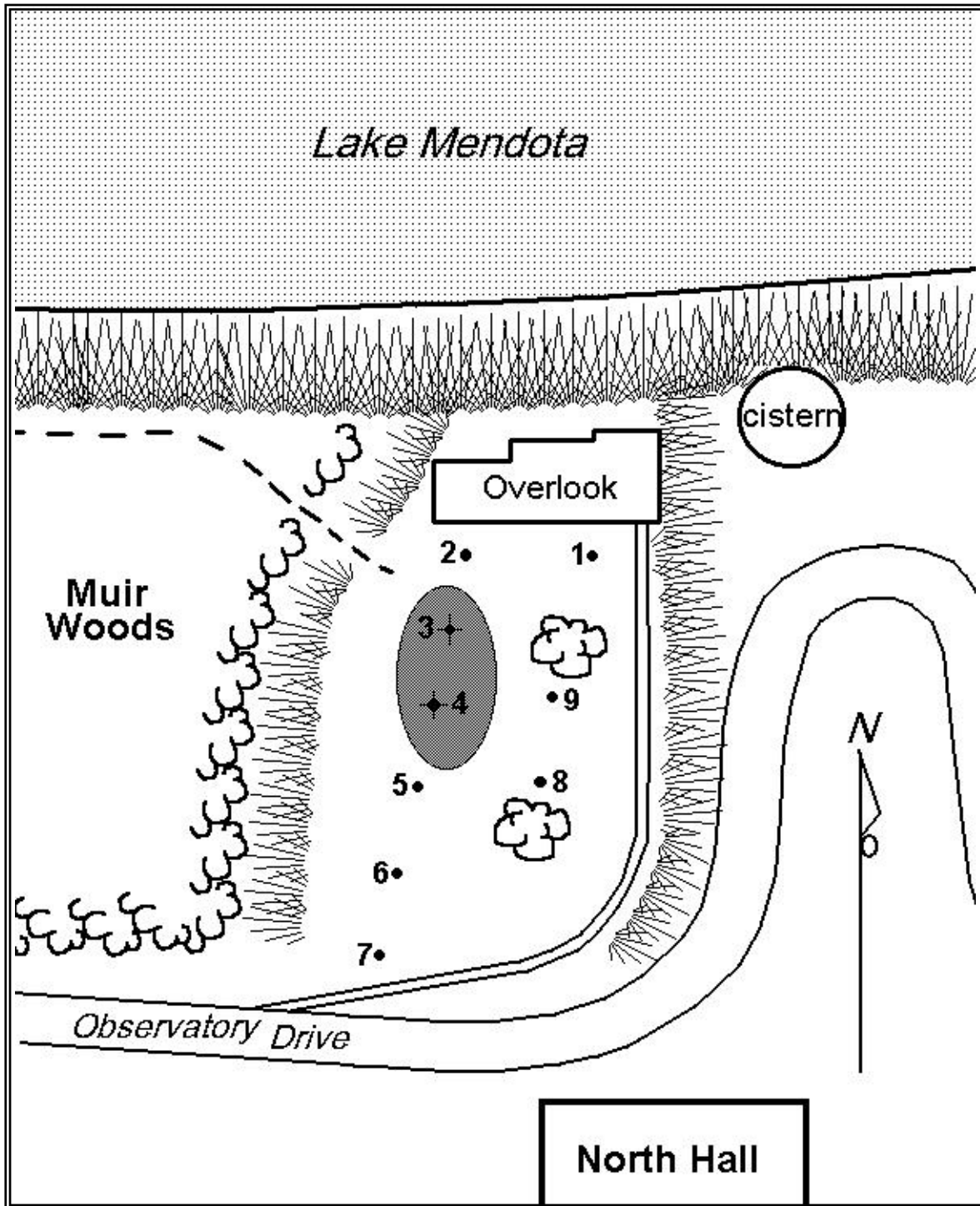


Figure Three: Location of shovel tests and Muir Knoll site area in relationship to overlook and other landmarks near the project area.

- Shovel Test Two: Extensively disturbed and eroded. Test abandoned at 20 centimeters. Test located in shallow depression at head of trail through Muir Woods.
- Shovel Test Three: Two flake fragments (heat-treated Prairie du Chien chert).
Two shatter fragments (Prairie du Chien chert)
Some disturbance in top ten centimeters of soil profile.
“A” horizon-dark brown silt to 15 centimeters.
“B” horizon- reddish-brown sandy silt.
- Shovel Test Four: Two flakes (Prairie du Chien chert)
One lump of slag
Relatively undisturbed.
“A” horizon- dark brown silt to 17 centimeters
“B” horizon- reddish brown sandy silt.
- Shovel Test Five: One fragment of possible chert shatter.
Glass shards (3 brown, 2 clear, 1 aqua)
1978 Lincoln penny
“A” horizon- dark brown silt to 17 centimeters
“B” horizon- reddish brown sandy silt
- Shovel Test Six: Glass shard (clear)
Some mottling visible in unit
“A” horizon- dark brown silt to 17 centimeters
“B” horizon- reddish brown sandy silt
- Shovel Test Seven: Sterile
“A” horizon- dark brown silt to 14 centimeters
“B” horizon- reddish brown sandy silt
- Shovel Test Eight: Glass shards (2 brown, 1 clear)
Square nail fragment
“A” horizon mottled and disturbed
“A” horizon- dark brown silt to 19 centimeters
“B” horizon- reddish brown sandy silt
- Shovel Test Nine: Sterile
“A” horizon- dark brown silt to 21 centimeters
“B” horizon- reddish brown sandy silt.

Summary and Recommendations

Despite the presence of pre-contact material on Muir Knoll, the Wisconsin Office of the State Archaeologist does not recommend further archaeological investigation. Artifact densities are extremely low, and no diagnostic material was encountered. Testing indicates that relatively recent post-contact debris is intermixed with the pre-contact material throughout the "A" horizon at the site, indicating that deposits at the site have been mixed and somewhat disturbed.

Since the positive shovel tests containing pre-contact material are located some distance away from planned construction, the Wisconsin OSA recommends that the University limit ground-disturbing activities south of the overlook if they wish to avoid further disturbance to the Muir Knoll site.

Please Note: Under Wisconsin law, Native American burial mounds, unmarked burials, and all marked and unmarked cemeteries are protected from intentional disturbance. If anyone suspects that a Native American burial mound or an unmarked or marked burial is present in an area, the Burial Sites Preservation Office must be notified. If human bone is unearthed during any phase of the project, all work must cease, and the Burial Sites Preservation Office must be contacted at 1-800-342-7834, in order to comply with Wis. Stat. 157.70. Work cannot resume until the Burial Sites Preservation Office gives permission. If you have any questions concerning the law, please contact Dr. Leslie Eisenberg, the Coordinator of the Burial Sites Preservation Program at the State Historical Society of Wisconsin, at 608-264-6503.

References

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"Who Knew?"

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