USDI/NPS NRHP Registration Form (Rev. 8-86)

United States Department of the Interior, National Park Service

1. NAME OF PROPERTY

Historic Name: Grand Mound

Other Name/Site Number: Smith Site (21KC3); Grand Mound Site; Laurel Mounds; Smith Mounds

2. LOCATION

Street & Number: 6749 Highway 11

City/Town: International Falls

State: Minnesota County: Koochiching

Vicinity:

Code: Zip Code: 56649

Not for publication:

3. CLASSIFICATION

Ownership of PropertyPrivate:XPublic-Local:Public-State:Public-Federal:	Category of Property Building(s): District: Site: <u>X</u> Structure: Object:
Number of Resources within Property Contributing $-$	Noncontributing <u>1</u> buildings <u>sites</u> structures
 1	objects 1 Total

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing: n/a

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

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

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

Date

Date

6. FUNCTION OR USE

Historic:	Religion Domestic	Sub:	Religious facility (burial mounds) Camp (temporary habitation site
Current:	Recreation and Culture, Forest	Sub:	Museum (interpretive historic site)

7. DESCRIPTION

Architectural Classification: Other, Native American earthworks

Materials: earth

Foundation: Walls: Roof: Other:

Describe Present and Historic Physical Appearance.

The Grand Mound is a prominent landmark at the mouth of the Big Fork River as it enters the Rainy River, to the east of the confluence and on the south side of the international boundary with Canada (Figure 1 [USGS quad map]). It is a large, ovate earthwork, the main body measuring ca. 140 feet in length and 100 feet in width. At its highest point, the mound rises approximately 25 feet above the surrounding terrain (Figure 2 [photo of mound)]. Budak (1995:28) estimates that the mound volume is 90,000 cubic feet, or 5,000 tons of earth. The mound includes a unique linear extension, measuring approximately 200 feet in length. Close to the main body of the mound, it is approximately 12 feet wide and 3 feet in height (Figures 3 and 4 [site map and photo of tail]). It tapers to a point and into the ground at the far end (Budak and Reid 1995). The body of the mound is vegetated primarily with ferns and scattered trees. Most of the extension (the "tail") is currently covered in thick brush.

Grand Mound is the largest of five earthworks at the Smith site (Figure 3 [site map]). The other four, while impressive, are more comparable in size to other mounds in Minnesota, and are dwarfed by the Grand Mound. The smallest, Mound 5, is 30 feet in diameter and 1½ feet tall. Mound 2 is 60 feet in diameter and 7 feet tall, second largest after the Grand Mound (Mound 1). The earthworks and associated habitation site are the focus of a historical park owned by the Minnesota Historical Society. Except for the interpretive center and parking lot at the southeastern corner of the property, adjacent to Trunk Highway 11, the site area is wooded. A former channel of the Big Fork River bisects the property. The mounds are located between this channel, referred to as the "Grand Mound Oxbow" by Huber (1995) and the Rainy River. Mowed grass walking trails provide access to the site, via a boardwalk that descends the slope from the interpretive center. Although currently closed due to budgetary constraints, the center houses exhibits about the site and the archaeology of the surrounding region, and has hosted public interpretive programs and experimental archaeological research since the 1970s (e.g. Budak 1984, 1985, 1990, 1991a, 1991b, 1993, 1995; Budak and Reid 1995; Swanholm 1978).

It should be noted that most estimates of the Grand Mound's height have placed it at 45 feet, beginning with the earliest records (Bryce 1885, 1904). Budak (1995) considers it unlikely that the mound has eroded to such an extent in a little more than a century, and notes that the linear distance up the slope from the ground to the top measures 45 feet. This distance itself gives a sense of the mound's scale, but is technically different that its height. Bryce's observations of the mound were quoted by Winchell (1911:369), a primary source for Minnesota archaeology, and it seems likely that the error has simply been repeated from there. Admittedly, the mound's immense size presents a challenge to casual measures of its height in particular. The correct height of the mound was also recorded by Lugenbeal (1976), who actually measured it. He points out that the mound could not have been 45 feet high at the time of Bryce's visit, as judged from the scale of the people in a 1907 photograph (Figure 4). These observations "leave it as the undisputed king of Laurel mounds, but bring it more in line with other known Laurel mounds" (Lugenbeal 1976:5).

As site manager for the Minnesota Historical Society from 1979 until 1996, Mike Budak has observed the site far more closely, daily, and in all seasons of the year, than has been possible for other archaeologists. It was this familiarity that allowed his recognition of the 200-foot "tail," which incredibly had escaped detection through more than a century of scrutiny (Wilford did notice the tail in May 1956, but he did not explore its nature in his work at the site). Essentially all of the investigations of the site throughout its archaeological history have been of brief duration, and have been conducted in the summer.

The earliest detailed description of Grand Mound and the Smith site dates to George Bryce's visit in 1884:

There is a dense forest covering the river bank where the mound is found. The owner of the land has made a small clearing, which now shows the mound to some extent to one standing on the deck of a steamer passing on the river. ... The mound strikes you with great surprise as your eye first catches it. Its crest is covered with lofty trees, which overtop the surrounding forest. These thriving trees, elm, soft maple, basswood and poplar, 60 or 70 feet high now thrust their root tendrils deep into the aforetime softened mound. A foot or more of a mass of decayed leaves and other vegetable matter encases the mound (Bryce 1885, 1904:15).

Two aspects of this passage are particularly notable. First is the clear similarity to the site setting today, which is wooded with small clearings around the mounds. Trees are still present on the Grand Mound although they have been thinned, first by Bryce's own excavations. Second is the reference to a land owner having cleared the area. The US General Land Office records do not mention a homestead at this location in 1882, in contrast to the mouth of the nearby Little Fork River. They also record a logging boom about one mile upstream from the Smith site on the Big Fork (Trygg 1966). In 1889, only two farmsteads were recorded on the American side of the river, one at the Little Fork confluence and one at the present location of International Falls (Nunnally 1996).

It is interesting to note that an anthropogenic clearance of apparent antiquity has persisted at the nearby Long Sault site (Arthurs 1986:13) and that anomalies in vegetation (for example, a patch of basswood, oak or other "southern" trees) are present at archaeological sites elsewhere in the region (e.g. Richner 1999). Similar species (elm, basswood, maple) are identified by Bryce at the Grand Mound. In addition, direct evidence of ancient clearings at the Smith site is seen in a pollen core from the old channel of the Big Fork River. Four peaks of chenopods and amaranth, indicators of disturbed ground, are present. Two below a radiocarbon date of 1850±50 BP are thought to represent changes in the paleohydrology of the Big Fork and Rainy rivers. The first peak after that date is interpreted as the result of prehistoric activity at the Smith and nearby Hannaford sites, while the last is thought to represent Euroamerican clearance and logging in the nineteenth century (Huber 1995; Rapp et al. 1995).

While intriguing, these observations do not resolve the question of the 1884 clearing. If the clearance was recent at the time of Bryce's visit, it seems likely that the owner was not a resident of the property. Selective clearing of trees at the site has continued during historic period, to facilitate visits to the mounds. The formerly neighboring town of Laurel (1903-1935) established an "Indian Mounds Park" at the site, which was the scene of local gatherings (Nunnally 1996:7.20). The property was acquired by Fred Smith in 1930 to protect the mounds from looting. His family sold it to the Minnesota Historical Society in 1970. Additional land was purchased in 1976, for construction of the interpretive center, which is out of view from the mounds (Budak 1995:28).

The landscape at a regional scale is an integral aspect of the Smith site's setting, and is briefly summarized here in terms of water, land and climate. The site is defined geographically by the confluence of the Big Fork and Rainy rivers. The west-flowing Rainy is a substantial river, with a watershed of approximately 18,000 square miles, and an average flow between 10,000 and 18,000 cubic feet per second (at International Falls and Lake of the Woods, respectively). The upper course of the watershed drains a portion of the Canadian Shield, and is readily navigable through differing series of interconnected lakes, dropping 438 feet in the 200 miles between Height of Land Portage and the outlet of Rainy Lake. Surpassing 150,000 acres, Rainy Lake is the largest of the numerous border lakes. Below the 24-foot drop of Koochiching Falls at the outlet of Rainy Lake (now contained by the dam at International Falls, MN – Fort Frances ON), the nature of the drainage changes markedly. Between the falls and Lake of the Woods (the span officially known as the Rainy River), the river

drops only 10 feet, and is entrenched in a stable course. The only cataracts are at Manitou Rapids and the Long Sault Rapids, both downstream (west) of Grand Mound. The Rainy enters Lake of the Woods 80 miles downstream from Koochiching Falls, after which its waters flow north through the Winnipeg and Nelson Rivers to Hudson Bay (Arthurs 1986; Waters 1977).

The Big Fork River watershed measures 2,063 square miles. Its discharge at the confluence with the Rainy of 950 cubic feet per second. From the upper reaches of the watershed, at the headwaters of the Bowstring River, waters of the Big Fork flow 170 miles to the Rainy. Major cataracts include the Little American Falls and associated rapids, and the Big Falls at the town of the same name (Waters 1977). Cold, long winters and heavy snows capture the imagination, and are undeniably a limiting factor in the regional ecology. Continental extreme temperatures are also known in summer, however, working with the region's vast wetlands to produce abundant swarms of insects. Out of the flood plain, the native forest was primarily pine. The Red Lake peatlands begin a short distance south of the Rainy River. Sturgeon, pike and suckers spawn in the spring, not coincidentally at the locations of earthwork sites including the Grand Mound. The sturgeon population was decimated by overfishing in the historic period, but is slowly recovering. These fish were critical resources at an unpredictable time in the hunter-gatherer seasonal round. Moose and caribou were plentiful in the region prior to historic clearance, which has favored white-tailed deer. Black bear, beaver, muskrat and other mammals were also important in the regional archaeology, and remain in the area today (Arthurs 1986; Holzkamm et al. 1988; Mather 1996; Nute 1950; Tester 1995).

Grand Mound and the Smith site are located at the eastern edge of the former reaches of Glacial Lake Agassiz, which at its greatest extent was larger than all of the Great Lakes combined. Drainage of the Emerson Phase occurred between approximately 9,900 and 9,600 years ago. The rivers stabilized as they downcut into the glacial clay sediments by 9,200 BP. This level is Hajic's (1996) T2 terrace. A long episode of river incision occurred between 6,900 and 5,900 years ago created the T1 terrace, approximately two meters below the T2 surface. The current flood plains (the T0 surfaces) are another two meters below that.

In terms of site-specific geomorphology, Hajic (1996) places the Smith site is located on the bfT0b terrace. This abbreviation means terrace "0b" of the Big Fork (bf) River. T0b surfaces are high flood plains along major rivers, and are inundated in large magnitude floods. The site area probably consisted of active meander belts and point bar development from about 5,900 to 2,250 BP, after which point flood plain deposits began the build up vertically. The former channel of the Big Fork River, which bisects the site, is the most visible legacy of this landscape evolution. Lugenbeal (1976:15) notes that the site is either east or west of the confluence of the Big Fork, or in it, depending on the timing of the channel development.

8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties: Nationally: \underline{X} Statewide: Locally:

Applicable National Register Criteria:	$A_B_C_D\underline{X}$
Criteria Considerations (Exceptions):	A_B_C_D_E_F_G
NHL Criteria: 4, 6	
NHL Theme(s):	
Areas of Significance:	
Period(s) of Significance:	Woodland Tradition, including Laurel (ca. 200 BC- 800 AD) and Blackduck (ca. AD 800-1400).
Significant Dates:	
Significant Person(s):	
Cultural Affiliation:	Native American, perhaps Algonquian language family
Architect/Builder:	
Historic Contexts:	Earthworks (Minnesota SHPO)

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

The Grand Mound is the largest earthwork in Minnesota, and is at the geographic center of a sacred landscape of mounds and sturgeon fishing sites along the Rainy River, extending from Rainy Lake to Lake of the Woods. While the Grand Mound's size alone is notable, this is not the focal aspect of the site's significance. More important are the stratified archaeological deposits of the flood plain setting, the integrity and interpretive potential of the site's landscape setting, and the unique nature of the Grand Mound when considered in the context of its recently discovered 200' "tail" (Budak and Reid 1995).

Known components of the Smith site range from the Archaic Tradition into the historic period. However, the focus of the site investigations has been the mounds and related stratified village site, ranging in date from 200 BC-AD 1400. This period of significance includes the Middle Woodland, as indicated by Laurel ceramics (ca. 200 BC-AD 800), and the beginning of the Terminal Woodland, with Blackduck ceramics (ca. AD 800-1400). The Smith site is the type site of Laurel ceramics and the Laurel Culture (Budak 1995; Jenks 1935; Lugenbeal 1976; Stoltman 1962, 1973; Wilford 1937, 1950a). It is also the type site for the Smith Phase within the Laurel Culture (Stoltman 1973). This is the youngest of three phases for Laurel, for which Stoltman (1974:88) later suggested a date of ca. AD 500-900.

The site has held a prominent role in the development of archaeology as a science, since its antiquarian beginnings in the late nineteenth century. The research goals and findings of generations of investigators amply demonstrate the significance of the site. The following summary is ordered both by the history of the research and by subject (earthworks, ceramics, osteology, etc.).

In August of 1884, George Bryce (1885, 1904) undertook the first recorded, most ambitious, and horrifying, attempt to excavate the Grand Mound. He refers to two previous excavations. One was on the top of the mound and produced the "large skull" which Bryce apparently used as a prop in his address to the Historical and Scientific Society of Manitoba. In the other, in 1883, E. McCall, Indian Agent, and Mr. Crowe, Hudson Bay officer of Fort Francis, and a party of men planned to tunnel through Grand Mound from north to south. They made it 10 to 15 feet in before giving up. Bryce hired a local group in 1884 to complete the tunnel if possible, and then dig down to it from the top of the mound.

They began digging from both sides, with the intention of meeting in the middle. The tunnels were approximately 8 feet in diameter. The earth became very hard as they dug, and they had to use pickaxes. The diggers found a "number of skeletons" (Bryce 1904:16) within the first 10 feet on the south side. That tunnel continued to a distance of 30 feet. The length of the north tunnel was not specified, although he mentions that the tunneling effort was abandoned with approximately 40 feet to go. A prominent factor in this decision was the poor preservation of finds with depth into the center of the mound. At a distance of 15 feet, one tunneler found ...

... a horizontal pocket in the earth eight or ten inches wide and eighteen or twenty inches deep, a quantity of brown dust, and a piece of bone some four inches long, a part of a human forearm bone. This pocket was plainly the original resting place of a skeleton, probably in a sitting posture. As deeper penetration was made brown earthy spots without a trace of bone remaining were come upon (Bryce 1904:16).

The party then moved to the top of the mound. Trees were removed "over a considerable space". Human skeletons were found at a depth of three to four feet from the surface in the first cut. Some were found complete

and "in other cases what seemed to be a circle of skulls, buried alongside charred bones, fragments of pottery and other articles." Several excavations were made in the mound surface, "and it was found that every part from the base to the crest contained bones and skeletons, to the depth of from six to ten feet as already said; bones and articles of interest were found thus far; deeper than this, nothing" (Bryce 1904:16-17). The tunnels were apparently not backfilled, and they collapsed after a few years (Budak 1995).

The scars of Bryce's tunnel, and the efforts of other relic hunters, are now largely obscured by vegetation in the summer. The tunnel openings in particular are quite visible in the spring and fall, but are even then overwhelmed by the sheer size and grandeur of the mound. It could be argued that these damages are themselves significant, as a legacy of the antiquarian search for the "lost race" of the Mound Builders. More importantly, they are a visible reminder of the continuing need for stewardship and protection of cultural heritage sites.

Most digging by antiquarians and relic hunters is not recorded in the written record. Another notable exception relevant to the Grand Mound is the diary of Ernest L. Brown, a taxidermist from Warren, Minnesota. In the 1890s, he trapped and traveled in the Rainy River country, and spent a considerable amount of time digging in burial mounds. His diary records some of these activities. It is difficult to correlate many of the mounds with current site records, while others, such as the Long Sault site in Ontario and the Grand Mound, are recognizable. Brown kept selected artifacts and human remains, and divided others with his associates. He may have sold some. "Sat 21. Went over to open mound at the Village but Indians have got cranky again. Some fellow has been setting them up by saying that I get a big price for relics" (Brown Diaries, p. 23).

"Wedns May 25, 1892. Waiting for the Steamboat Shamrock to make a trip to Fort Frances with the intention of opening big mound" (p. 24).

While some Indian people allowed digging in the mounds of the region, and at least one acted as a guide for the looters, the attitude of the Rainy River First Nations in Ontario is noteworthy. Brown writes, "Thurs 26. At the Soo rapids We all got out to walk while they got out the tow line got all the Indians ahold to help over the rapids. There is two mounds below the rapids and two fine big ones on high point at main rapids. It is said the Indians will not allow them opened. Indians catching lot of sturgeon. One Fellow said he caught 15 last night. Next come the Manitou Rapids not so long but terrible swift. Had to tie a long line to post across river and wind up by hand on the capstan. Took about an hour hard work. There is a big mound here also that has not been opened" (Brown Diaries p. 24-25).

On May 30, 1892, Brown visited the Grand Mound, which he refers to as the "Big Fork Mound." He lists the circumference around the base as 130 yards, the north-south profile as 45 paces and profile east-west as 60 paces. The mound was "covered with big elm and poplar about 10 rods from River in low ground. About 15 rods to smaller mounds on river bank each way. Soil inside black clay dry and hard, too big a job to tackle" (Brown Diaries).

Local resident Fred Smith purchased the land containing the mounds in 1930, with the intention of stopping the looting that had gone on for at least half a century. After that date, excavation was allowed only for professional archaeologists. The Smith family farm is located immediately east of the site, and is still in possession of the family.

Professor Albert Jenks and Lloyd Wilford of the University of Minnesota conducted the first scientific excavations at the Smith site in 1933, with a focus on Mound 4. It was the only mound that had escaped obvious damage by relic hunters, presumably due to its relative isolation from the other earthworks at the site. The

mound was completely excavated. The results are included in Wilford's (1937) dissertation and an address to the Minnesota Historical Society by Jenks (1935). The site was referred to as the Laurel Mounds by Jenks and Wilford, in reference to the adjacent "hamlet" of Laurel. This work resulted in the Smith site being the type site both for Laurel ceramics, and for the Laurel Focus of the Rainy River Aspect (Wilford 1950a), later termed the Laurel Culture (Stoltman 1973). Laurel ceramics have since been recognized to have a distribution over a large portion of the North American midcontinent (Mason 1991; Rajnovich 1994). The selection of Mound 4 for excavation demonstrates that the importance of the Smith site was recognized by Jenks and Wilford. This was the very beginning of systematic study of Minnesota archaeology. With the entire state to choose from, they decided to come here. In an address to the Minnesota Historical Society, Jenks (1935:18) confidently stated that "All the material recovered at Laurel will have significance in American archaeology."

At the time of its excavation, Mound 4 was 50 feet in diameter and 4'10" tall. More than 100 burials were encountered, the vast majority in a concentrated area at the center of the mound (103 of 113 burials counted by Wilford). Most were bundle (secondary) burials, deposited during four stages of mound construction. The mound fill contained Laurel pottery sherds. An apparent village layer was found under the mound, with two hearth features and other artifacts in the original topsoil. Notable among the burials was a torso burial (without skull or longbones – the opposite of the bundle burials, which generally consist of the skull and longbones), that was accompanied by a complete (later reconstructed) Laurel pot. Primary (complete) burials at the top of the mound were interpreted as younger, intrusive Blackduck burials. One dog burial was also present, at the west side of the mound (Wilford 1937, 1950a; Stoltman 1962, 1973).

Mound 4 also contained an apparent Blackduck cache in a pot (apparently not associated with a burial, cf. Stoltman 1973:12), consisting of 12 clamshells, four beaver incisors, three bone tools, a tubular stone pipe (sucking tube?), one projectile point and one ground fragment of green schist. One of the clamshells was included in the first comprehensive attempt to obtain radiometric dates from Minnesota archaeological sites, producing a date of 1350±120 BP (Johnson 1964).

Mound 4 contained a great number of modified human remains. Several skulls had the occipital region removed, and the ends of many longbones were "tapped," or pierced. Some bones had visible cutmarks, suggesting that the bodies were defleshed. Jenks (1935) and Wilford (1937, n.d.) interpreted these observations in terms of cannibalism. This idea was later discounted, however, through osteological study of the remains prior to reburial. The openings in the longbones were shown to not be an effective means of removing marrow (as had been previously suggested). Likewise, it was found that the tapping was not the product of post-burial damage to the bones, or for insertion of objects into the bone. Instead, it was suggested that the holes were created for purposes of mortuary ceremonialism, possibly for symbolic release of the soul (Torbenson et al. 1992).

Wilford returned to the site in May 1956 and noticed "an extensive embankment on the west side of the Grand Mound." This must refer to at least part of the tail, which otherwise escaped notice by archaeologists until the mid-1990s (Budak and Reid 1995). During this visit, Wilford was asked by the Smith family to excavate Mound 3, which they feared would soon be lost to erosion by the Rainy River (Wilford 1956). Wilford returned with a student crew later in the summer. The oblong mound at that time measured approximately 50x40 feet, by 4 feet in height. It had been disturbed by looters, and was bisected by an old trench that Wilford attributed to Bryce (Bryce only records digging in the Grand Mound). Wilford and his crew excavated the north half of the mound including part of the old trench. They found 13 burials, including four bundle burials, two torso burials near the floor, two primary burials (thought to be intrusive Blackduck, with Blackduck mortuary pots), and remains representing five burials in the old trench. Pottery in the mound fill was primarily Laurel, although

small numbers of Blackduck sherds were found in every level. The mound appeared to have been built incrementally, with the possibility of a prepared sand floor under the first stage.

Bone preservation in Mound 3 was poor, so it could not be determined if the bones had been modified as seen in Mound 4. Some of the redeposited bones in the old trench consisted of a "pair of crossed tibiae with a skullcap placed in one quadrant, a not inappropriate symbol for much that has been done in the name of archaeology" (Stoltman 1973:17).

Wilford's burial data from the smaller mounds leads Budak and Reid (1995:2) to suggest, "If the density of burials in the Grand Mound is comparable to the two excavated mounds, it may contain as many as 5,000 burials" (Budak and Reid 1995:2). Wilford's Mound 3 excavation was the last disturbance to any of the earthworks. The human remains from Mounds 3 and 4 have been studied by Ossengerg (1974) and others. Human remains have been accidentally unearthed at the site since then, as noted below, but the period of research focused on the cemetery components of the Smith site is a closed chapter.

Mike Budak personally rebuilt Mound 4 in 1990, and the human remains from excavations at the Smith and McKinstry mounds were reburied there the following year. The ceremony was conducted by Ojibwe and Dakota religious leaders. The reconstructed mound restores the cultural landscape of this part of the site, brings the human remains back where they belong, and serves as a monument to the ongoing reconciliation between archaeologists and American Indian communities.

By the mid-twentieth century, five of the six then-known Laurel sites were burial mounds, "so that the Laurel Focus, as now defined, is essentially a burial complex. That further excavations of habitation sites may alter our present picture of the Laurel Focus is indeed a possibility" (Stoltman 1962:24).

The ceramics from Wilford and Jenks' mound excavations were the subject of James Stoltman's (1962) M.A. thesis at the University of Minnesota, under the direction of Elden Johnson. Stoltman's modal analysis was an advance in archaeological science, and continues to be a model for the definition of a ceramic type. Based on statistical analysis of pottery from five of the six then-known Laurel sites, identifying modes based on materials, technique of manufacture, shape, decoration and inferred use. Correlation of these modes was the definition of the "major types," Laurel Bossed, Laurel Pseudo-Scallop Shell, Laurel Dentate, Laurel Push and Pull; and the "minor types" Laurel Incised, Laurel Linear Stamp and Laurel Non-Decorated (Stoltman 1962:37-45, 52-53, 87, 111-116). This work was the basis of Stoltman's continuing research on Laurel ceramics, and a revised and expanded typology was published in *The Laurel Culture* (Stoltman 1973:xxx).

The first non-mound excavations of the Smith site were conducted by James Stoltman in 1968, consisting of two 5x5 foot units (Features 1/68 and 2/68) in the eastern part of the habitation site. These units found stratified flood plain deposits and Blackduck cultural layers. Stoltman's primary interest was Laurel.

The Minnesota Historical Society acquired the Smith site mounds in 1970, for purposes of protection. The site was the subject of an archaeological fieldschool the same year, although not as originally envisioned. Stoltman's choice of the Smith site highlights its significance and research potential.

... I made plans to excavate the Smith site, the type site of the Laurel Culture, because it was known to be undisturbed by plowing and to possess stratified deposits of village refuse adjacent to its burial mounds. My intention was to concentrate upon the habitation areas of the site as a complement to Wilford's earlier work at Minnesota Laurel sites which had focused on burial mounds; thus I hoped to contribute a better-rounded picture

of the Laurel Culture by adding data on house types, subsistence and ecology. In addition, I hoped to exploit the stratified deposits of the site to determine how much of the betweensite cultural variation encountered by Wilford could be attributed to age differences within the Laurel Culture (Stoltman 1974:74).

This plan was stymied by flooding at the Smith site, however, and the fieldschool was moved to the nearby McKinstry Mound 1, at the confluence of the Little Fork with the Rainy River. Conditions permitted a brief return to Smith before the end. The experience solidified Lugenbeal's research focus on the Smith site, working on his PhD under Stoltman.

Towards the end of the 1970 field school the water finally abated and some postdiluvian tests were made in the Smith site. Three 2- by 2-meter pits were excavated (Features 6, 7 and 8) west of the 1968 tests. The purpose, as in 1968, was to locate the Laurel village site from which the artifact-rich fill of the mounds had been derived. The village had to be there – someplace. And it was. In Features 7 and 8 substantial amounts of Laurel habitation refuse were encountered below even larger quantities of Blackduck living debris. The 1970 testing, in which I participated, proceeded painfully because of the presence of merciless hordes of mosquitoes that seemed to generate spontaneously from the soggy flotsam of the flood. Morale was maintained by the excitement of what we were finding: excellent stratigraphic evidence for the relationship of Blackduck and Laurel artifacts, fine bone preservation, and a rich yield in artifacts (Lugenbeal 1976:100).

Returning at the head of his own fieldschool in 1972, Lugenbeal and his crew had time to lay out three 3x3 meter units before the sheriff intervened. Local Indian people had protested the dig at the site, and subsequent negotiations with the Minnesota Historical Society and State Archaeologist consumed much of the available field season. In the end it was agreed that the units already begun could be finished. The shortened field season, while a disappointment to Lugenbeal, was nevertheless a significant contribution to the archaeology of the site. In particular, the 1972 excavations determined that the area around Mound 4 is the richest part of the site, with the thickest and best defined natural strata. Lugenbeal (1976:106) characterizes this as "the single most important discovery of the field season."

Based on the cumulative excavations of the habitation site, Lugenbeal (1976:122) defined three Blackduck strata, two Laurel strata, and one possible sub-Laurel stratum, separated by sterile flood deposits and clearly defined natural stratigraphy. Radiocarbon dates range from AD 480 ± 60 in Laurel 1 to AD 1165 ± 67 in Blackduck 3. He found that artifact density drops quickly with distance from the river, and feared that much has been lost through erosion, which was active at the time of his investigation. His excavations also noted that the greatest density of artifacts lay north of the baseline and west of Mound 3, and that the stratigraphy thickens toward Mound 4 in the west. The cultural strata across the site were protected by 10 to 80 centimeters of sterile flood plain sediments. Lugenbeal (1976:12) concluded that the Smith site possesses "all the qualities that endear it to an archaeologist – thick habitation residue, rich artifact yield, excellent bone preservation, and fine natural stratigraphy."

Lugenbeal's (1976) dissertation on the archaeology of the Smith site is a model for comprehensive, interdisciplinary research to the present day. After summarizing the region's environmental and geologic context and the site's investigative history in the context of Laurel and Blackduck research, he turns to the great wealth of data offered by the Smith site excavations. He is detailed in his methods and findings, and presents exhaustive discussions of Laurel (1976:126-183) and Blackduck (1976:184-316) ceramics relative to their attributes, typology, comparative assemblages and stratigraphic context in the site. He also presents findings

related to copper, worked bone and antler, ground stone, shell and red ochre, chipped stone, archaeological features and fauna. Of particular interest is the finding that the site's fauna indicate a spring and summer habitation (Lugenbeal 1976:655; Lukens 1973), in contrast to other regional sites that focus primarily on spring spawning fish, such as Hannaford (Rapp et al. 1995), McKinstry (Morey et al. 1996) and Long Sault (Arthurs 1986).

In a summary of site components, Lugenbeal 1976:383-419) places his findings within a Sub-Laurel Phase, the Laurel Smith Phase, and Early and Late Blackduck phases. This is prior to major sections on "A Comparative Study of Laurel Ceramics with Emphasis on Late Laurel Ceramic Evolution" (1976:420-589) and the "Smith Site in Ceramic and Culture History of Northern Minnesota" (1976:590-653). While the depth of this research undoubtedly owes much to Lugenbeal's talent and vision, it must be remembered that it was the Smith site that made it possible (see also Lugenbeal 1978a, 1978b, 1979). In summarizing the 1968, 1970 and 1972 excavations, Lugenbeal estimates that 0.5% of the stratified habitation site has been excavated.

The Smith site limits were expanded southward in 1975, through application of the then-new (now standard) method of shovel test survey in forested areas (Birk and George 1976). The investigation was conducted to assess the impacts of proposed construction for the interpretive center, at the southwest corner of the Minnesota Historical Society property. Lithic artifacts including an Oxbow eared point were recovered, defining an "Archaic locus" at the site possibly dating to ca. 5,000 BP. Unfortunately, a construction contractor apparently found a burial near the interpretive center in 1980, but did not inform MHS staff. The relationship of the burial to the Archaic component is unknown, as is the relationship of the Archaic component to Lugenbeal's (1976) sub-Laurel component

Excavations were conducted by the Minnesota Historical Society in 1985 to guide the shoreline stabilization efforts, and further assess the stratified habitation site (Clouse 1985). Unfortunately, the findings of this study have not been analyzed or written up. The layer-cake stratigraphy of the habitation site is highlighted by a photograph of these excavations in Budak (1995:11). Human remains were apparently encountered in one unit (Arzigian and Stevenson 2003:424). Analysis of the artifacts and data from these units in the context of past research at the site should be a priority. Stabilization of the river bank in 1990 has contributed greatly to preservation of the site for future generations (Budak 1991a, 1995).

The period of Mike Budak's residence as site manager saw many benefits for the site, including an energetic program of experimental archaeological research and public interpretation. His steady presence at the site also allowed closer observation than had been possible for other researchers. For example, the fifth mound of the Smith site was an ambiguous feature of the site for many years. Its location immediately southeast of Mound 2 was identified by Lugenbeal (1976:2) in 1972, and independently by Mike Budak and Mary Graves Budak in 1980 (Budak files). Furthermore, the traces of a round enclosure were discovered by Budak in 1990, between the Grand Mound and Mound 2. He (1995:23) writes that this historic feature is the remains of a dance pavilion built in 1902, which was converted into a residence the following year.

The mid-1990s saw a discovery of utmost importance to the Grand Mound, which would not have been possible without Budak's interpretive vision and extensive familiarity with the site. He had been curious about the relatively prominent (although previously unnoticed by others) ridge extending from the Grand Mound for some time, and states that "the light went on" regarding a possible interpretation when attending a talk by Paddy Reid on serpent imagery in regional rock art. Budak and Reid examined this ridge with a series of three 1" soil cores, with corresponding cores off the ridge to the side. The results demonstrated that the ridge was in fact a part of the constructed earthwork. Dark soil was notably deeper along the ridge than on the surrounding terrain. They conclude that soil was scraped up to construct the extension (the "tail"), building upon an underlying low,

natural ridge. The ridge has been eliminated to the east of the mound, perhaps to accentuate the tail, and perhaps to build the main body of the Grand Mound (Budak and Reid 1995:3).

Budak and Reid (1995) presented their findings in a paper titled "Grand Mound and the Serpent" at the 1995 meeting of the Ontario Archaeological Society in Thunder Bay. They note "vaguely similar features" on some other North American mounds, including linear mounds in Minnesota, linear earthworks to form enclosures in the Hopewellian heartland, and earthen ramps on Mississippian mounds. They cite a closer, albeit still distant, similarity to the famous Serpent Mound of Ohio. They note that the 140-foot serpent mound in Vilas County, Wisconsin, near Lac du Flambeau (Ritzenthaler 1947) is a closer match, although it lacks the prominent main body of the Grand Mound. They conclude that nothing like the tail is known from other regional mounds. This is part of the unique nature of the Grand Mound, in addition to its size (Budak and Reid 1995).

Tragically, Budak's tenure as site manager was cut short by a debilitating accident in 1996. This remains a major loss for archaeology in Minnesota, and for the Grand Mound in particular.

I was fortunate to know Mike for several years before his accident, and was at the Ontario meeting in 1995 while working on the nearby McKinstry site (Thomas and Mather 1996). Budak's revelation regarding the tail always stuck in my mind, and I had a "lightbulb" moment similar to Budak's a few years ago when reading Liz Bryan's (1991) *The Buffalo People*. This is a popular overview of Canadian Plains archaeology, and contains a photograph of a large mound near Westbourne, Manitoba, with the brief statement that it was, "originally in the shape of a long-tailed muskrat." With that possibility in mind, Budak and Reid's (1995) linear extension of the Grand Mound shifts in perspective. Interpretation of the extension as a serpent separates it from the main body of the mound. Consideration of the mound as symbolic of a muskrat, with the extension its tail, unites the two portions of the earthwork. It is interesting to note in this regard that the extension is referred to as the mound's "tail" throughout Budak and Reid's (1995) paper.

The muskrat is often the Earth Diver of Algonquian cosmology, the little hero who brings up mud so that the flooded world can be created anew. Symbolism related to the Earth Diver has been recognized from the structure of Hopewellian and related mounds, with construction involving "special soils associated with wet, mucky, lake bottom or riverside locations" (Hall 1997:18). A muskrat burial has been documented at one Middle Woodland mound in Iowa (Alex 2000:98-100). Laurel (Middle Woodland in the Rainy River region) innovations such as ceramic technology and mound building are thought to have been inspired by interaction with Hopewell people, and the Rainy River was included in the vast Hopewellian trading network. An Algonquian connection to the prehistoric Rainy River cultures has been suggested by numerous scholars, perhaps as far back as the Archaic Tradition (e.g. Lugenbeal 1976; Meyer and Hamilton 1994; Schlesier 1994; Rajnovich 1994), although none consider the issue resolved. Algonquian water symbolism has previously been suggested in interpretation of clay death masks and mortuary ceremonialism in the Rainy River region (Johnson and Ready 1992).

The Earth Diver story takes place in the aftermath of a battle between the trickster hero and the water monsters. The earth is flooded by the water monsters in revenge against the hero, and after a time he asks for aid from the animals to help rebuild the world. In a Cree version recorded by George Nelson in the early nineteenth century, the hero sends the otter to look for mud, but the otter dies and is then brought back to life. The muskrat is then asked to try. "Come my little brother, go thou, thou art small and very active, art fond of water, and goeth to great depths – thy reward shall be that of the otter." A thong is tied to his foot so that he can be pulled back. He dives and comes up dead, but he has a little mud in his paws and his mouth. He is revived and tries again. This time he brings a mouth full of earth and "a good deal more in his *hands* which he held pressed to [his] breast."

The hero re-makes the world from this ball of mud, blowing it in all directions (Brown and Brightman 1988:47, emphasis in original).

Similar themes are seen in "The Wenebojo Origin Myth" as told by Tom Badger of Lac du Flambeau in 1944 (Barnouw 1977:38-39). Here the otter expires half-way down. The beaver gets to where he can see the bottom, but can't make it. The muskrat is asked as an afterthought, and he agrees to try. He is gone a long time, and comes up crippled, but he has five grains of earth – one in each paw and one in his mouth. Wenebojo revives the muskrat, dries out the grains and blows on them to re-create the earth.

The Earth Diver story recalls the landscape setting of the Grand Mound site, and the episodic flooding that continues to the present day. In times of high water the old Big Fork channel serves as a spillway, after which the area of the mounds is inundated (Figure – flooding photos). For example, the Smith site was completely flooded in the early summer of 1970, "its mounds transformed into islands rising above a village area submerged beneath a foot or more of water" (Stoltman 1974:74). Flooding also prevented Wilford (1954) from visiting the site in June of 1954. In terms of geomorphology, the site was a new landform during the Initial Woodland tradition, when mound building is thought to have begun.

Incidentally, muskrat remains have been recovered from the habitation site and the fill of Mound 4 (Lugenbeal 1976:356; Lukens 1973:40). As would be expected from the regional ecology, muskrats were definitely known to the inhabitants of the Smith site. Launching into full speculation, it is also interesting to consider of an observed habit of muskrats – piling mud onto the ice in late winter – and its timing in relation to the sturgeon and sucker spawning runs, which begin as the ice goes out – and then the perceived role of the mound sites (Smith, McKinstry, Long Sault) as locations where spring spawning fish were harvested. This concentrated resource allowed congregations of people at the sites where mounds were built. Archaic (pre-mound building) components at these sites suggest that use of the fishing resource came first, and continued for several thousand years. Indeed, the sturgeon runs remain a critical resource to the present day.

Grand Mound has traditionally been considered to be a Laurel mound due to its large size (Initial Woodland mounds are generally larger than Terminal Woodland mounds), although most of the diagnostic artifacts recovered by antiquarians and woodchucks are Blackduck. Bryce's (1904) observations support the idea of older burials in the interior of the mound. It seems likely that the mound construction was initiated in the Initial Woodland and continued into the Terminal Woodland Tradition. The date of the tail within this span of time is unknown.

The overwhelming prominence of the Grand Mound at the center of an archaeologically rich region promotes ongoing speculation regarding its anchoring role in that history. Budak and Reid (1995:2) consider the origins of the Grand Mound to be Laurel, and suggest that it "could possibly be the very first mound constructed by that culture." More than a century earlier, Bryce (1904:30) suggested the same. This very well could be true, but we will probably never know. Even if it was appropriate to renew investigation into the structure of the mound (which it is not), the immense size of the earthwork defies any imagined methods to assess its origins, which would presumably lie at the center of the base. Ambiguous results could never justify new damage to the mound, and as we know, there are no final answers in archaeology. The power of the Grand Mound is its mystery. This is what has drawn people to it throughout its history, with the full human spectrum of intentions.

Being in the presence of the Grand Mound is humbling, while its effect is different for each person. Its interpretive potential is enormous. It is symbolic, whether of a serpent, the Earth Diver, or something else. The religious and symbolic aspects of most earthworks can only be observed and interpreted through excavation. At the Grand Mound, they are visible on the surface. It is the only known mound in the United States of its type,

and it seems unlikely (although admittedly not impossible) that another would have escaped notice. A few share a vague similarity of form, such as the Vilas County serpent mound (Ritzenthaler 1947), but none compare to the dimensions of the Grand Mound's body in relation to the tail, not to mention the landscape setting of the Smith site. The stratified flood plain deposits of the Smith site hold immense potential for continued archaeological research, while the former Big Fork river channel contains a wealth of paleoecological and archaeological data.

The Smith site's primary period of significance spans much of the Woodland Tradition (ca. 200 BC – AD 1400), encompassing Initial and Terminal Woodland traditions, and Laurel and Blackduck ceramics, respectively. Other components are also present, however, ranging from the Archaic Tradition into the historic period. The Grand Mound and other Rainy River earthworks are also sacred to the Ojibwe, and the site has been a gathering place for local Euroamerican communities from at least the early twentieth century (aside from digging). Fred Smith valued the mounds enough to buy the land in order to protect them. Because of the mounds, this place has escaped the landscape changes of the historic period, and its intact setting shields them from view. Since the 1930s, the Smith site has held a pivotal role in the scientific development of archaeology. Following its acquisition by the Minnesota Historical Society, the site has been a center of public interpretation and archaeological research. After more than a century of investigations, new aspects of Grand Mound and the Smith site continue to emerge (the tail, for example). Such discoveries suggest that full appreciation of the Grand Mound has only just begun.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Alex, Lynn M.

2000 Iowa's Archaeological Past. University of Iowa Press, Iowa City.

Arthurs, David

1986 Archaeological Investigations at the Long Sault Site: A Stratified Habitation and Burial Station on The Rainy River in Northwestern Ontario. Conservation Archaeology Report No. 7. Ministry of Citizenship and Culture, Northwestern Region, Kenora, Ontario.

Arzigian, Constance and Katherine Stevenson

2003 *Minnesota's Indian Mounds and Burial Sites: A Synthesis of Prehistoric and Early Historic Archaeological Data.* Publication No. 1. The Minnesota Office of the State Archaeologist, St. Paul.

Barnouw, Victor

- 1977 *Wisconsin Chippewa Myths & Tales and their Relation to Chippewa Life.* The University of Wisconsin Press, Madison.
- Birk, Douglas A. and Douglas C. George
- 1976 A Woodland Survey Strategy and Its Application to the Salvage of a Late Archaic Locus of the Smith Mounds Site (21KC3), Koochiching County, Minnesota. *The Minnesota Archaeologist* 35(3):1-30.

Brown, Ernest L.

1890-1909 Brown Diaries (2 boxes). Archives and Manuscripts (call number A/.B878e), Minnesota Historical Society, St. Paul.

Brown, Jennifer S. H. and Robert Brightman

1988 *"The Orders of the Dreamed": George Nelson on Cree and Northern Ojibwa Religion and Myth, 1823.* Minnesota Historical Society Press, St. Paul.

Bryan, Liz

1991 *The Buffalo People: Prehistoric Archaeology on the Canadian Plains.* The University of Alberta Press, Edmonton.

Bryce, George

1904 *Among the Mound Builders' Remains*. Transaction No. 66 of the Historical and Scientific Society of Manitoba. Manitoba Free Press Company, Winnipeg.

1885

Budak, Michael K.

- 1995 Grand Mound. Minnesota Historic Sites Pamphlet No. 23. Minnesota Historical Society Press, St Paul.
- 1993 *The Atlatl.* Videotape produced by the Grand Mound History Center, Minnesota Historical Society.
- 1991a Smith Site Surface Collection Analysis: New Light on an Old Subject. *The Minnesota Archaeologist* 50(1):19-30.

1991b The Function of Shell Temper in Pottery. The Minnesota Archaeologist 50(2):53-59.

- 1990 *Laurel Ceramics*. Videotape produced by the Grand Mound History Center, Minnesota Historical Society.
- 1985 Laurel Ceramics: A Pointed Question. The Minnesota Archaeologist 44(2):31-40.
- 1984 Experiment in Laurel Burial Practices. *The Minnesota Archaeologist* 43(1):31-37.
- Budak, Michael K. and C. S. (Paddy) Reid
- 1995 Grand Mound and the Serpent. Paper presented at the Ontario Archaeological Society 1995 Annual Meeting, Thunder Bay.
- Griffin, J. G.
- 1946 Rainy River Homesteader: The Letters of Frank M. Geddes. *Minnesota History* 41:61-75).

Hajic, Edwin R.

1996 Geoarchaeology of Phase III Excavations. In Thomas and Mather (1996:6.1-6.48).

Hall, Robert L.

1997 An Archaeology of the Soul: North American Indian Belief and Ritual. University of Illinois Press, Urbana.

Hohman-Caine, Christy A. and Grant E. Goltz

1994 Descriptive Analysis of the Ceramics from the Hannaford Site (21-KC-25). Report prepared for the Minnesota Department of Transportation, St. Paul.

Holzkamm, T. E., V. P. Lytwyn and G. Waisberg

- 1988 Rainy River Sturgeon: An Ojibway Resource in the Fur Trade Economy. *The Canadian Geographer* 32:194-205.
- Huber, James K.
- 1995 Results of a Paleoecological Study of Grand Mound Oxbow Lake, Koochiching County, Minnesota. Archaeometry Laboratory Report No. 95-3. University of Minnesota-Duluth. Report prepared for the Minnesota Department of Transportation, St. Paul.

Jenks, Albert E.

1935 Recent Discoveries in Minnesota Prehistory. *Minnesota History* 16:1-21.

Johnson, Elden

- 1989 Prehistory of the Big Fork River Region. Reports of Investigations No. 56. Institute for Minnesota Archaeology, Minneapolis.
- 1972 National Register Nomination: Grand Mound.
- 1964 Twenty New Radiocarbon Dates from Minnesota Archaeological Sites. The Minnesota Archaeologist 26(2):34-49.

Johnson, Elden and Tim Ready

1992 Ceramic Funerary Masks from McKinstry Mound 2. *Midcontinental Journal of Archaeology* 17(1):16-45.

Lugenbeal, Edward N.

- 1979 Blackduck Ware. In *A Handbook of Minnesota Prehistoric Ceramics*. Occasional Publications in Minnesota Anthropology No. 5, compiled by Scott F. Anfinson, pp. 23-37. Minnesota Archaeological Society, St. Paul.
- 1978a The Laurel Ceramics of the Smith Site (21KC3) and their Implications for Culture History in Northern Minnesota. In Some Studies of Minnesota Prehistoric Ceramics: Papers Presented at the First Council for Minnesota Archaeology Symposium-1976, edited by A. R. Woolworth and M. A. Hall, pp. 35-46. Occasional Publications in Minnesota Anthropology No. 2. Minnesota Archaeological Society, St. Paul.
- 1978b The Blackduck Ceramics of the Smith Site (21KC3) and their Implications for the History of Blackduck Ceramics and Culture History in Northern Minnesota. *Midcontinental Journal of Archaeology* 3(1):45-68.
- 1976 The Archaeology of the Smith Site: A Study of the Ceramics and Culture History of Minnesota Laurel and Blackduck. PhD dissertation, Department of Anthropology, University of Wisconsin, Madison.

Lukens, Paul W., Jr.

- 1973 The Vertebrate Fauna from Pike Bay Mound, Smith Mound 4, and McKinstry Mound 1. In Stoltman (1973:37-45).
- 1963 Some Ethnozoological Implications of Mammalian Faunas from Minnesota Archaeological Sites. PhD dissertation, Department of Anthropology, University of Minnesota, Minneapolis.

Magner, Michael A.

2001 The Lake of the Woods/Rainy River Late Paleoindian Complex: An Initial Assessment from the Rainy River Region of Minnesota. *The Minnesota Archaeologist* 60:87-98.

Mason, Ronald J.

- 1981 Great Lakes Archaeology. Academic Press, New York.
- 1970 Hopewell, Middle Woodland, and the Laurel Culture: A Problem in Archaeological Classification. *American Anthropologist* 72:802-815.

Mather, David

1996 Environmental Setting. In Thomas and Mather (1996:4.1-4.10).

Meyer, David and Scott Hamilton

1994 Neighbors to the North: Peoples of the Boreal Forest. In *Plains Indians, A.D. 500-1500: The Archaeological Past of Historic Groups*, edited by Karl H. Schlesier, pp. 96-127. University of Oklahoma Press, Norman.

Nunnally, Patrick D.

1996 Landscape History and Land Use Change. In Thomas and Mather (1996:7.1-7.26).

Nute, Grace Lee

1950 *Rainy River Country: A Brief History of the Region Bordering Minnesota and Ontario.* Minnesota Historical Society, St. Paul.

Ossenberg, Nancy S.

1974 Origins and Relationships of Woodland Peoples: The Evidence of Cranial Morphology. In *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*, edited by Elden Johnson, pp. 15-39. Minnesota Prehistoric Archaeology Series No. 11. Minnesota Historical Society, St. Paul.

Rajnovich, Grace

1994 *Reading Rock Art: Interpreting the Indian Rock Paintings of the Canadian Shield*. Natural Heritage / Natural History, Inc., Toronto.

Rapp, G Jr., S. C. Mulholland, S. L. Mulholland, Z. Jing, D. E. Stoessel, C. L. Hill, O. C. Shane, S. H. Valppu, J. K. Huber, J. B. Stoltman and J. R. Shafer

1995 Final Report: Hannaford Data Recovery Project, Koochiching County, Minnesota. Archaeometry Laboratory Report No. 95-31. University of Minnesota-Duluth. Report prepared for the Minnesota Department of Transportation, St. Paul.

Richner, Jeffrey J.

1999 People of the Thick Fur Woods: Two Hundred Years of Bois Forte Chippewa Occupation of the Voyageurs National Park Area. Special Report No. 3. National Park Service, Midwest Archeological Center, Lincoln.

Ritzenthaler, Robert E.

1947 Vilas County Serpent Mound. Wisconsin Archeologist 28(3):54-56.

Schlesier, Karl

1994 Commentary: A History of Ethnic Groups. In *Plains Indians, A.D. 500-1500: The Archaeological Past* of *Historic Groups*, edited by Karl H. Schlesier, pp. 308-381. University of Oklahoma Press, Norman.

Stoltman, James B.

- 1996 Petrographic Observations of Selected Pottery Vessels. In Thomas and Mather (1996:11.1-11.18)).
- 1974 Within Laurel Cultural Variability in Northern Minnesota. In *Aspects of Upper Great Lakes Anthropology: Papers in Honor of Lloyd A. Wilford*, edited by Elden Johnson, pp. 74-89. Minnesota Prehistoric Archaeology Series No. 11. Minnesota Historical Society, St. Paul.
- 1973 *The Laurel Culture in Minnesota*. Minnesota Prehistoric Archaeology Series No. 8. Minnesota Historical Society, St. Paul.
- 1971 Prismatic Blades from Northern Minnesota. *Plains Anthropologist* 16(51):105-110.
- 1962 A Proposed Method for Systematizing the Modal Analysis of Pottery and its Application to the Laurel Focus. M.A. Thesis, Department of Anthropology, University of Minnesota, Minneapolis.

Swanholm, Marx

1978 The Grand Mound Interpretive Center: Prehistory and the Public. *The Minnesota Archaeologist* 37(2):84-95.

Tester, John R.

1995 Minnesota's Natural Heritage. University of Minnesota Press, Minneapolis.

Thomas, Matthew M.

1996 Ceramic Analysis. In Thomas and Mather (1996:10.1-10.86).

Thomas, Matthew M. and David Mather

1996 The McKinstry Site (21KC2): Final Report of Phase III Investigations for Mn/DOT S.P. 3604-44, Replacement of T.H. 11 Bridge 5178 over the Little Fork River, Koochiching County, Minnesota. Loucks Project Report 93512. Loucks & Associates, Inc., Maple Grove. Report prepared for the Minnesota Department of Transportation, St. Paul.

Torbenson, Michael, Arthur Aufderheide and Elden Johnson

1992 Punctured Human Bones of the Laurel Culture from Smith Mound Four, Minnesota. *American Antiquity* 57(3):506-514.

Trygg, J. W.

1966 Composite Map of United States Land Surveyors' Original Plats and Field Notes. Sheet 23, Minnesota Series. J. W. Trygg, Ely, MN.

Waters, Thomas F.

1977 The Streams and Rivers of Minnesota. University of Minnesota Press, Minneapolis.

Webster, David L.

- 1973 Nonceramic Artifacts from Laurel Culture Sites Excavated Prior to 1961. In Stoltman (1973:94-111).
- 1967 Mounds of the Rainy River: An Examination of the Laurel Focus of Minnesota. M.A. Thesis. Department of Anthropology, University of Minnesota, Minneapolis.

Wilford, Lloyd A.

- 1956 Memo on Koochiching County, May, 1956. Unpublished manuscript, SHPO files.
- 1954 Memo on Koochiching County June 1954. Unpublished manuscript, SHPO files.
- 1950a The Prehistoric Indians of Minnesota: Some Mounds of the Rainy River Aspect. *Minnesota History* 31(3):163-171.
- 1950b The Prehistoric Indians of Minnesota: The McKinstry Mounds of the Rainy River Aspect. *Minnesota History* 31(4):231-237.
- 1937 Minnesota Archaeology with Special Reference to the Mound Area. PhD Dissertation, Harvard University, Cambridge.

Previous documentation on file (NPS):

___ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.

- X Previously Listed in the National Register. (1972)
- ___ 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
- <u>X</u> Other State Agency (Minnesota Office of the State Archaeologist)
- ___ Federal Agency
- ____Local Government
- ___ University
- ____ Other (Specify Repository): Minnesota Historical Society (Fort Snelling and Grand Mound); Koochiching County Historical Society, International Falls.

10. GEOGRAPHICAL DATA

Acreage of Property: 71 acres

UTM References: Zone 15 Easting 101,519 Northing 51,658

Verbal Boundary Description: Land in ownership of the Minnesota Historical Society. The northern boundary is the Rainy River (US-Canadian international border) and the west is the Big Fork River. Trunk Highway 11 bounds the site on the south. On the east is the property line with the Smith farm.

Boundary Justification: This boundary contains the areas containing defined archaeological components – the mounds along the Rainy River and the Archaic component in the vicinity of the interpretive center. The areas within this parcel where archaeological materials have not been identified (forested slopes and former Big Fork River channel) are crucial to the landscape setting and sense of place of the site. The northern and western boundaries are natural features (Rainy and Big Fork rivers, respectively). Trunk Highway 11 at the southern boundary is a clear break in the historic landscape. At the eastern boundary, a barbed wire fence separates the MHS property from the Smith farm. Current land use highlights the boundary, with a sharp contact between the forest of the site area and the pasture of the farm. The interpretive center building, located in the southeastern corner of the property, is not a contributing element of the site. The exhibits and designed passage for visitors through the building, however, prepare visitors for the experience of the mounds and the site setting.

<u>11. FORM PREPARED BY</u>

Name/Title: David Mather, Archaeologist

Address: 2100 27th Avenue South Minneapolis, MN 55406

Telephone: (612) 333-3662

Date: September 9, 2003 (draft)

Edited by:

National Park Service National Historic Landmarks Survey 1849 C St., N.W. Room NC-400 Washington, DC 20240

Telephone: (202)343-

NATIONAL HISTORIC LANDMARKS SURVEY February 16, 2007