



N D A A

North Dakota Archaeological Association Newsletter

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I WISH I WAS A MOLE IN THE GROUND: ARCHAEOLOGY, GEOARCHAEOLOGY, AND ROAD CONSTRUCTION AT THE LARSON VILLAGE (32BL9), NORTH DAKOTA

Kimball Banks, Ph.D. and Debra Green, Ph.D.

In the fall of 2010, archaeologists from Metcalf Archaeological Consultants, Inc., excavated part of the Larson Site (32BL9), an earthlodge village near Bismarck, North Dakota. The Mandan occupied the site from the late 1400s to the late 1700s. The excavation was undertaken to mitigate impacts from widening a county road bisecting the village. By the end of the project, archaeologists had excavated 54 features and traced the geoarchaeological history of the site. The results of the fieldwork are discussed along with the challenge of interpreting the archaeology and geoarchaeology of a previously disturbed, complex site.

On the first of September, 2010, the Burleigh County Highway Department and Houston Engineering began improvements along 149th Avenue NW in northern Burleigh County. The road was originally constructed in 1975 and runs west from Highway 1806 through the southern portion of the Larson Site, down the terrace, and across the Missouri River floodplain to a subdivision on the banks of the river. Larson Village is a large earthlodge village situated on the terrace bordering the floodplain.

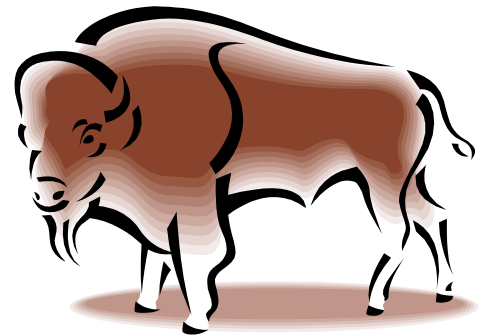
The project did not involve any federal funds or permits so the National Historic Preservation Act did not apply. However, the County Highway Department is a political subdivision of state government and it had to comply with applicable sections of the North Dakota Century Code. Consequently, the Highway Department and Houston Engineering contracted with Metcalf Archaeological Consultants, Inc., to undertake archaeological investigations at the village.

The Larson Village Site

Larson Village covers about eight acres along the western edge of the terrace bordering the Missouri River floodplain. The site is distinguished by four fortification ditches, numerous lodge depressions, refuse mounds, a central plaza, storage/cache pits, and burials. Other

ANNUAL MEETING OF THE NDAA

Free & Open to
the Public



APRIL 28, 2012
Jamestown College
Jamestown, ND

See pages 10-12 for details

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than the road, the site is relatively undisturbed as the majority is in pasture. A modern farmhouse and garage sit at the southern end of the site while a cultivated field and driveway border the east and northeast portion. House depressions, trash mounds, two of the fortification ditches, and the central plaza are evident walking across the site.

Previous Research

Unlike many other earthlodge villages of the Heart River region, Larson Village is not depicted on any nineteenth or early twentieth century maps including those of Sitting Rabbit and Wounded Face, both Mandans. Lewis and Clark camped near the site on October 22, 1804, but did not plot the site on their maps. It is depicted on an 1894 map of the Missouri River Commission and labeled as “Indian Mounds.”

E. R. Steinbrueck was the first to describe the site. He visited the site in 1904 and reported on two fortification ditches.

G. F. Will and H. J. Spinden mapped the site the following year and reported on a “well-marked ditch,” a plaza, and large mounds that ring the village.



In 1924, A. W. Bowers mapped the village and carried out the first systematic excavations. He identified at least 77 depressions, 24 of which were inside the “interlodge,” along with numerous other features and thick trash deposits. Bowers concluded that the fortification system was built after the village had been occupied for some time.

T. W. Hecker conducted limited excavations in 1938 and 1940. His maps and notes have been lost but the available information indicates that his excavations focused on the southwestern portion of the site where a road was constructed. He exposed a portion of a lodge floor and nine cache pits.

In 1975, staff from the State Historical Society of North Dakota excavated six units during construction of 149th Avenue. Four units were in lodge depressions, one was in a fortification ditch, and the last in a midden mound.

The State Historical Society of North Dakota, PaleoCultural Research Group, and the Archeo-Imaging Lab at the University of Arkansas undertook archaeological and geophysical investigations in 2006 and 2007. The team produced a geophysical map of the site and conducted limited excavations. The geophysical research revealed the presence of two previously unrecorded fortification ditches. The village now appears to have been enclosed by four fortification ditches of varying extent, indicating that its size changed through time.

Methodology

The County and Houston Engineering initially discussed the possibility that cultural features still lay beneath 149th Avenue with staff from the State Historical Society and Metcalf Archaeological Consultants, Inc. The parties agreed to systematically core the portion of the road where the culvert was to go to determine if features were indeed still present.

The coring took place in December 2009 and was done at five meter intervals with a two-inch diameter piston drill. At least three possible features were identified. Given the results, the parties developed a data recovery plan based on the engineering designs for the road. An excavator would remove the disturbed road fill in the culvert trench and then excavate the remainder in two-inch levels to expose any archaeological features with minimal impact, and archaeologists would monitor these excavation activities. If a feature was encountered, trenching would stop to allow the archaeologists to hand-excavate the feature. Features were to be excavated in their entirety and all fill waterscreened.

Four objectives guided the program. The first was to confirm that feature remnants were indeed still present under the road. The second was to determine the nature of the features, if present. The third was to locate the fortification ditches to compare against the projections from the prior geophysical mapping. The fourth was to determine the ages of the fortification ditches, if present.

Construction activities began on September 2, 2010. Three storage/cache pits were immediately encountered at which point the recovery aspect of the monitoring plan was implemented. Construction continued to expose features. Construction within the site ended and monitoring ceased on November 5, 2010.

By that time, 54 features had been identified, including 45 cache pits, five burials, three fortification ditches, and one possible midden/borrow area. Of these, 43 cache pits, four burials and two ditches and part of the borrow area were excavated.

Results – Archaeology

Trenching revealed that the 1975 roadbed fill varied in depth but was over one meter thick in places. The fill comprised dark brown mottled clay and subangular pebbles containing charcoal, artifacts, and bone fragments in the deposits.

The 1975 road construction had truncated many features. However, the composition of the road fill made it difficult to identify where the underlying, undisturbed sediments began. The large number of superimposed or intersecting features also complicated the ability to identify individual features and the corresponding construction sequence. Frequently, another feature was discovered during the course of excavating one that the archaeologists thought was clearly defined.

Cache pits of various shapes were the most common feature. These subterranean features are characteristically bell-shaped, average one meter in diameter, but vary in depth. Some pits were up to 1.2 meters deep, while others were only 30 cm deep. Several had one or two smaller pits dug into the side or floor.

Most of the fill in the pits consisted of grayish brown to olive brown mottled silt loam interspersed with ash and charcoal. Some of the pit floors were lined with rocks or organic matting. While the fill in most pits was homogeneous, a few evidenced clear, layered sequences. For example, nine distinct cultural layers were identified in one pit consisting of a sequence of charcoal, ash, animal bone, artifacts, and burnt silt lenses. Another pit contained three bone refuse deposits each separated by a sterile silt deposit.

Artifacts recovered included bone tools, fish hooks, bone beads, side-notched points, scrapers, pottery, and shell pendants and beads. Knife River flint predominated among the lithic material, although rare pieces of obsidian were found. Bison dominated the faunal assemblage. Remains of dogs or canids of varying ages also were common, including at least two partially complete skeletons.

Three of the four fortification ditches were identified during the excavations, generally where the geophysical maps suggested they should be. Ditches 1 and 2 were located during the early stages of the excavations. Ditch 3 was identified during the final phases of the monitoring. Ditch 4, probably the oldest ditch, was never located as the archaeologists could not find where it crossed the roadway; that comports with the geophysical maps which limit the ditch to the northern portion of the site.

Ditch 1 cut diagonally, northeast to southwest, across the road. The feature was identified by a faint wavy stain of brownish silt loam mottled with charcoal flecks and lenses of sterile, laminated silt. The silt indicates that natural processes were periodically depositing material into the open ditch. Cultural material was rare and consisted of bone fragments, sherds, and fire-cracked rock.

Ditch 2 was initially misidentified as a borrow feature although the geophysical map projected that the ditch crossed the road here. However, the east-west dimension of the feature was greater than it should have been if it was a ditch. To resolve the issue two east-west transects, one on each side of the trench, were systematically cored with a one-inch diameter soil probe. The coring revealed that the ditch was overlain by a midden deposit.

The fill in Ditch 2 consists of a dense concentration including disarticulated human remains, animal bones, sherds, and lithic artifacts within a dark grayish brown to olive brown silt loam. The fill is similar in color, texture and artifact content of the overlying midden fill which made identification of the contact between the two features difficult.

The base of the ditch contained thin laminated silt lenses that represent the gradual deposition of water- or wind-blown sediments. Ditch 2 was apparently open for an extended period of time before it was filled in with refuse and abandoned. Midden fill subsequently was deposited above that surface.

Ditch 3 was found in profile during the final phases of monitoring. Construction activities in 1975 had destroyed most of the ditch so only the bottom 30 to 40 cm remained *in situ*. The western edge was difficult to identify as construction of the original road cut into it. Evidence suggests that this ditch was probably over two meters wide in places; where it crosses the road, the ditch is at least 1.2 meters wide.

The ditch was filled with alternating thin black and light brownish gray silt interbedded with thicker dark grayish brown cultural deposits. These deposits match descriptions for Ditch 3 from elsewhere on the site.

Results – Geoarchaeology

Tracing the geoarchaeological history of site revealed some interesting results. The terrace soils and sediments vary from west to east. A buried soil overlying a glacial deposit of poorly-sorted basal sand and gravel was encountered at the far western edge of the terrace. The gravel gives way to fine-grained overbank clay sediment in the eastern portion of the trench but the paleosol is present along the entire length of the trench profile. This buried soil developed in sandy loam sediments along the western end of the trench but in the overbank clay sediment on the eastern end.

A thick eolian (wind blown) silt unit comprising thin carbonate filaments overlays the paleosol. The paleosol formed during cooler and wetter conditions than today. The eolian silt results from drier conditions that set in after the formation of this paleosol.

Moving east along the trench profile, the silt unit becomes thinner and is overlain by very dark grayish brown silty clay road fill.

The profile at the eastern end of the trench consists of a stacked sequence of weakly developed paleosols containing small fragments of animal bone, artifacts, and charcoal. In some areas, a carbonate horizon separates these thin paleosols. In other areas, the soils formed in the midden deposits. These paleosols and carbonate horizons are not present in the profile at the west end of the trench nor are they visible in sections of the trench lacking features and organic rich midden deposits.

What explains this difference in the terrace soil-sediment profile?

Buried soils represent periods of landscape stability when organic matter accumulates as part of soil formation processes. Over time, *in situ* weathering of the parent material combined with the addition of decomposing organic matter produces a dark colored A horizon. Archaeological sites are composed of organically-rich sediments containing bone, charcoal, shell, seeds and decomposing residues that can contribute to the development of a paleosol.

We suggest that the basal paleosol present along the western edge of the terrace formed from *in situ* weathering of the parent material and the accumulation of dead plant and animal matter during stable surface conditions and thus are pedogenic in origin. Following the formation of the paleosol, continuous deposition of eolian sediments limited further soil development. In contrast, the interbedded weak buried soils at the eastern end of the trench are anthropogenic in origin, resulting from continuous deposition of organic material by the

site occupants. Contributing to the formation of these interbedded soils is the drainage pattern on the landscape. Drainage is poor as the dense clay deposits impede the movement of water. The carbonate horizon is attributed to a lower water table in this portion of the site.

Conclusions

The preceding is a summary of the field work at the Larson Village. The field work is completed and the road is built, although the flood this past year has probably affected the portion of the road across the floodplain. The 2011 flood event exemplified why earthlodge villages were located on terraces above the floodplain.

Two lessons do stand out. The first is that coring in similar situations is not the most effective method for identifying features. We did identify possible features but coring gave no idea of the number of features that were ultimately excavated nor were we able to assess the stratigraphy adequately. The second is the value of geoarchaeology in tracing the history of these villages. Such sites are part of the environment and to fully understand the nature of human occupation here, you need to understand how environmental actions have affected site formation and how occupations have affected the environment.

Kimball Banks, Ph.D., RPA is the Regional Manager and Principal Investigator at Metcalf Archaeological Consultants, Inc. in Bismarck, North Dakota.

Debra Green, Ph.D. is a geoarchaeologist with Laramie Soils Service, Inc. in Laramie, Wyoming.

ANNOUNCEMENTS

April 13 - National History Day in North Dakota competition at the Bismarck Public Schools Career Academy. The theme is *Revolution, Reaction, Reform in History*. For more, call SHSND Curator of Education Erik Holland at 701-328-2792, email eholland@nd.gov or [visit nd.nhd.org](http://visit.nd.nhd.org).

April 28 - Annual Meeting of the North Dakota Archaeological Association. See pages 10-12 of this newsletter for details.

LINK TO ARCHAEOLOGY

Tours with The Archaeology Conservancy, including one to North Dakota, <http://www.americanarchaeology.org/tour.html>.

Field Schools: <http://www.eculturalresources.com/fieldschools.php>.

The 2012 Biennial Meeting of the American Quaternary Association is open for registration and abstract submission at <http://www.cce.umn.edu/American-Quaternary-Association-Meeting/index.html>. The theme of the meeting is *From Floods to Droughts: Water, Climate Variability, and their Impacts in the Holocene*.

PBS Series: America from the Ground Up! A four-part Springfield PBS series. The first episode (20 minutes long) is on Cahokia Mounds and available for viewing at <http://vimeo.com/27874873>. The series is planned to air on National PBS in the Spring of 2013.

Idaho Archaeology press release (November 16, 2011): *Early Evidence of human occupation is found in caves and archaeological sites.* <http://www.eculturalresources.com/>

Activity Areas, Soil Chemistry, and Earthlodges: Examining Changes in the Use of Space in 15th through 19th century Mandan Dwellings

Kacy L. Hollenback (University of Arizona) and Christopher I. Roos (Southern Methodist University)

Human activities leave patterned traces in the archaeological record (Sullivan 1978) and chemical signatures in sediments are one such trace (Holliday et al. 2010). Food preparation, cooking, and the stabling of animals, for example, alter soil chemistry in detectable ways (Macphail et al. 2004; Parnell et al. 2002; Terry et al. 2004; Wells et al. 2000). However, systematic soil chemistry studies to infer the spatial patterns of past behaviors remain uncommon around the world. Instead researchers frequently rely upon the distributions of artifacts and features to interpret the archaeological record without considering how natural and cultural formation processes may affect their spatial patterning (Schiffer 1987). The ongoing research project described here uses systematic soil sampling and chemical measurements to test hypotheses about changes in use of space within Mandan structures (Figure 1) before, during, and after Euroamerican contact (Crosby 1972). The outcomes of this research are not only relevant to anthropologists working in the Northern Plains, but also to those seeking a useful methodology for studying activity areas in earthen floored structures wherever they occur.

Historically, the Mandan were semi-sedentary village horticulturists living along the Missouri River from AD 1000 to 1865 (Bowers 1950, 1965; Lehmer 1971). The traditional Mandan residential structure was the earthlodge: oval, rectangular, or circular structures constructed of wood beams and covered with sod (Roper and Pauls 2005; Weitzner 1934). At contact, space within earthlodges was highly patterned, with areas designated for specific activities such as food preparation, cooking, storage of materials, or ritual space. These late Mandan lodges were circular domestic structures that housed extended families, but also had social and ceremonial functions. After the introduction of the horse, animals were often stabled within portions of the lodge. This pattern of a round lodge with a designated stabling area was a late phenomenon. How far back in time these spatial patterns extend has only been explored using pollen, geophysical data, and distributions of artifacts and features. At present, soil chemistry has not been used to systematically test the applicability of documented historic period activity space patterns to older periods.

Methodology & Description of Research Activities

This project is a collaborative undertaking between Southern Methodist University (SMU), the University of Arizona, and staff and a volunteer of the State Historical Society of North Dakota (Figure 2). Initiated in the summer of 2011, earthlodge floors at three sites in North Dakota were sampled. Participants included Kacy Hollenback, Chris Murray, Wendi Field Murray, Christopher Roos, Paul Picha, Fern Swenson, and Doug Wurtz.

To explore changes in activity areas and the use of Mandan structures over time, two lodges at Menoken Village (ca. AD 1200), and one lodge from the Huff Village (ca. AD1450-1480) and Fort Clark Village (AD 1822-1834) sites were sampled. Soil samples were extracted from earthlodge floors using an Oakfield soil corer at 2 meter intervals within a staggered lattice (Wells 2010). The chemical data from Fort Clark, where we know the location of activity areas from historical documents, will be used to generate correlates to help us interpret chemical signatures at older sites (Lyman and O'Brien 2001; Steward 1942).

The project generated approximately four hundred soil samples spanning pre-contact, early contact, and fur-trade periods. Currently the sampled sediments are being analyzed at SMU's Environmental Archaeology Lab using ICP-MS for a broad range of chemical elements, molybdate colorimetry for soil phosphate measurements, loss-on-ignition for organic and inorganic carbon measurements, and magnetic susceptibility for the degree of magnetic enhancement. Loss-on-ignition data will shed light on anthropogenic

organic matter and carbonates (e.g., food preparation activities and ash). Phosphate data correlate to other organic wastes either from food preparation or animal excrement, whereas magnetic susceptibility is enhanced via the microbial decay of organic wastes that fix iron as well as the alteration of iron oxides by burning. Finally, multi-element data from ICP-MS will be used to investigate patterns related to pigments and craft production using local and non-local materials. In sum, these techniques will allow us to evaluate patterned changes in chemical elements that correlate to activities such as cooking, food and pigment preparation, and the stabling of animals within domestic dwellings.

Research Significance

This research is significant because it develops and tests a rigorous, minimally invasive, and inexpensive methodology for analyzing traces of human activities in the past. Existing methods, reliant on distributions of artifacts, are prone to biases from cultural and natural formation processes. While soil chemistry is subject to distortion from formation processes, ethnoarchaeological research has demonstrated that chemical traces are almost always primary refuse and persist even after activities such as clean up and abandonment, making them more reliable signatures of human behavior related to activity space.

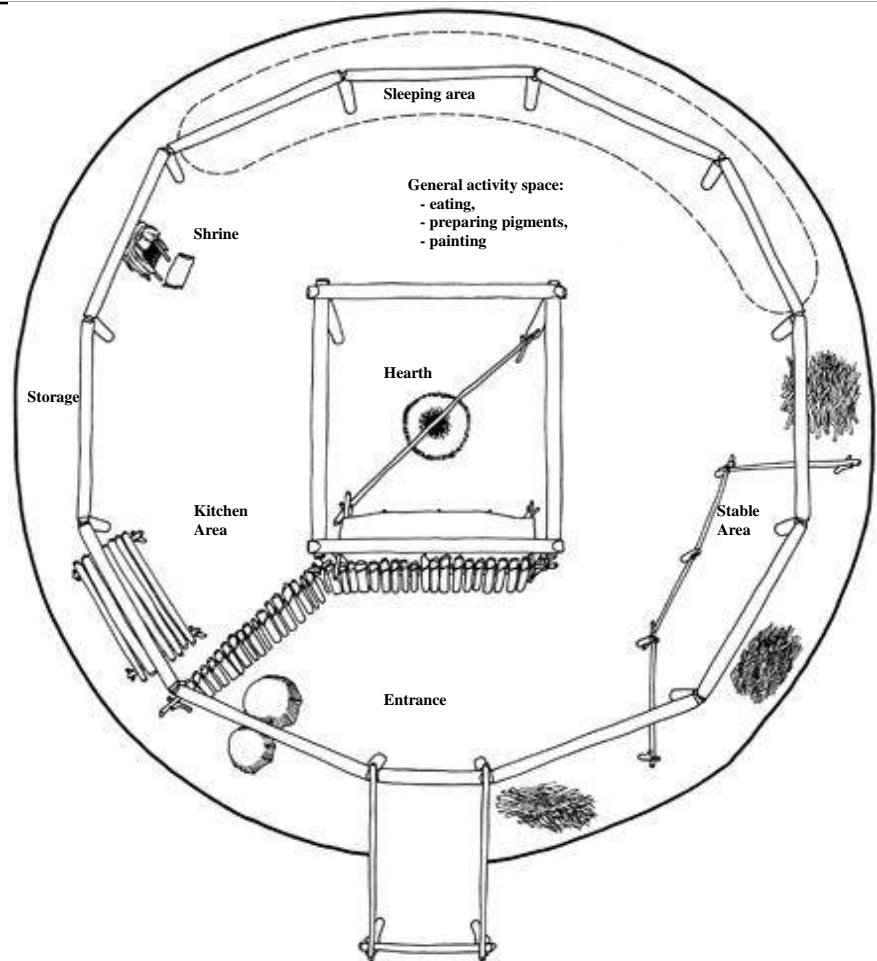


Figure 1: Plan view of a historic period earthlodge (adapted from Weitzner 1934).



Figure 2: Volunteer Doug Wurtz (left) and Chris Roos (Principal Investigator) record a soil core at Fort Clark Village (Photograph courtesy of Fern Swenson).

Acknowledgments

We would like to extend our thanks to the people of the Mandan, Hidatsa and Arikara Nation for granting permission to conduct this study with special thanks to Elgin Crows Breast and Calvin Grinnell. We would also like to extend our gratitude to everyone who volunteered on this project both in the field and in the lab. Finally, Fern Swenson deserves special mention for all of her support, input, and guidance.

References Cited

- Bowers, Alfred W. (1950) *Mandan Social and Ceremonial Organization*. University of Chicago Press.
- (1965) *Hidatsa Social and Ceremonial Organization*. Smithsonian Institution Bureau of American Ethnology Bulletin No. 194. Washington, D.C.
- Crosby, A. W. (1972) *The Columbian Exchange*. Greenwood Publishing Company, Westport.
- Holliday, Vance T., Denise Lawrence-Zuniga and Victor Buchli (2010) Prologue to Uses of Chemical Residues to Make Statements About Human Activities. *Journal of Archaeological Method and Theory* 17:175-182.
- Lehmer, Donald J. (1971) *Introduction to Middle Missouri Archeology*. Anthropological Papers, 1. U.S. Government Printing Office, Washington, D.C.
- Lyman, R. Lee and Michael J. O'Brien (2001) The Direct Historical Approach, Analogical Reasoning, and Theory in Americanist Archaeology. *Journal of Archaeological Method and Theory* 8(4):302-342.
- Macphail, Richard I., G. M. Cruise, Michael J. Allen, Johan Linderholm and Peter Reynolds (2004) Archaeological Soil and Pollen Analysis of Experimental Floor Deposits; with Special Reference to Buster Ancient Farm, Hampshire, UK. *Journal of Archaeological Science* 31:175-191.
- Parnell, J. Jacob, Richard E. Terry, and Payson Sheets (2002) Soil Chemical Analysis of Ancient Activities in Ceren, El Salvador: A Case Study of a Rapidly Abandoned Site. *American Antiquity* 13(3):331-342.
- Roper, Donna C. and Elizabeth P. Pauls (editors) (2005) *Plains Earthlodges: Ethnographic and Archaeological Perspectives*. University of Alabama Press, Tuscaloosa.
- Schiffer, Michael Brian (1987) *Formation Processes of the Archaeological Record*. University of New Mexico Press, Albuquerque.
- Steward, J. (1942) The Direct Historical Approach to Archaeology. *American Antiquity* 7:337-343.
- Sullivan, Alan P. III (1978) Inference and Evidence in Archaeology: A Discussion of the Conceptual Problems. *Advances in Archaeological Method and Theory* 1:183-222.
- Terry, Richard E., Fabian G. Fernandez, J. Jacob Parnell and Takeshi Inomata (2004) The Story of the Floors: Chemical Signatures of Ancient and Modern Maya Activities at Aguateca, Guatemala. *Journal of Archaeological Science* 31:1237-1250.
- Weitzner, Bella (editor) (1934) The Hidatsa Earthlodge by the Late Gilbert L. Wilson. *Anthropological Papers of the American Museum of Natural History* 33(5):339-420.
- Wells, E. Christian (2010) Sampling Design and Inferential Bias in Archaeological Soil Chemistry. *Journal of Archaeological Method and Theory* 17(3):209-230.
- Wells, E. Christian, Richard E. Terry, J. Jacob Parnell, Perry J. Hardin, Mark W. Jackson, and Stephen D. Houston (2000) Chemical Analyses of Ancient Anthrosols in Residential Areas at Piedras Negras, Guatemala. *Journal of Archaeological Science* 27(5):449-462.
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**Annual NDAA Meeting—Saturday, April 28, 2012
Jamestown College, Jamestown, North Dakota**

AGENDA (*All times are Central Time*)

Check-in, Membership Renewal, & Audit - 8:30 am

Call to Order - 9:00 am

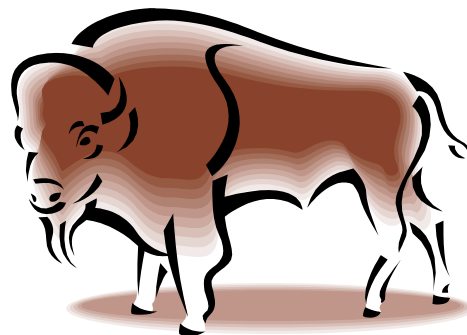
- Introduction of officers
- 2011 Meeting Minutes
- Treasurer's Report
- Newsletter & Website Report
- Journal Report

Old Business

- Electronic Newsletter
- Membership/Outreach

New Business

- Membership/Outreach Committee update
- Nomination & Election of President & Vice-President
- 2013 Meeting Location



Adjournment

10:00 am - Break & Artifact Collections Viewing & Identification

PRESENTATIONS

10:30 am - Paul Picha—*The Historical Archaeology of Art: Sketches from Western Americana*

Barbara Novak's (2007) *Nature and Culture: American Landscape and Painting, 1825-1875* frames a general context for investigating artwork as a source of information about the past. Historical archaeology and ethnohistory each add a dimension to the treatment of the investigator and the investigated in art history. Lesser-known compositions by Western American artists George Catlin, Karl Bodmer, Carl Wimar, John James Audubon, and Alfred Jacob Miller are showcased in this illustrated presentation.

11:15 am - Dr. Judy Cooper—*Pre-Contact Bison Hunting in the Great Plains: A View from ND*

Bison are viewed as a crucial resource to people who lived on the Great Plains in the past. However, a review of Great Plains bison kill sites spanning the last 2,000 years, including those from North Dakota, demonstrates that the use of bison as a food source varied significantly over both time and space. Several explanations for this pattern are explored during this presentation.

12:00 - 1:30 pm - Lunch

1:30 pm - Tom Turck: *History of the Denbigh Station and Experimental Forest*

2:15 pm - Dr. George Holley—*Oneota in the Northeastern Plains*

The Oneota archaeological culture was an explosive force on the cultural landscape of Upper Midwest and eastern Plains in the Late Prehistoric period (1000-1700 AD) of Native North America. By 1300-1400 AD Oneota grew to dominate the Prairie Peninsula (Figure 1). An important issue in understanding the Oneota phenomenon that remains unresolved is how local cultures reacted to this expansion. For the Northeastern Plains, Oneota peoples had direct impact that is recognized in a two-phase model. I also argue that this Oneota impact is a "piggy-back" on earlier Cahokia-based influence in the region.

3:00 pm - Visit the National Buffalo Museum (see map on page 11)

5:30 pm - Dinner at the Buffalo City Rotisserie Grill (RSVP if planning to attend—see page 12)

LOCATIONS - Annual NDAA Meeting

Raugust Library, Rooms A & B, Jamestown College

6070 College Lane, Jamestown, ND 58405-0001

701-252-3467

<http://www.jc.edu/library>

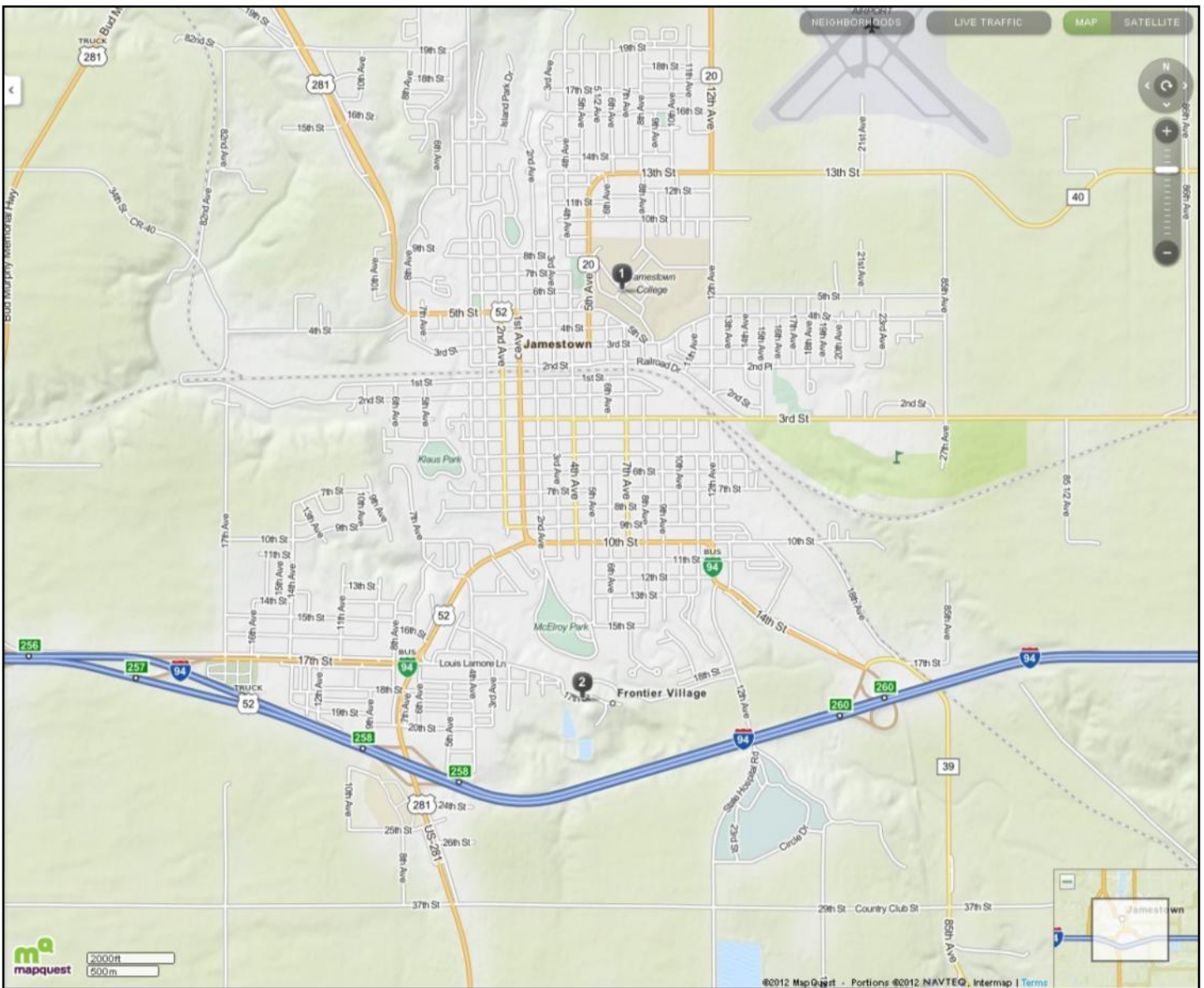
National Buffalo Museum and Prairie Winds Gift Shop

500 17th Street SE, Jamestown, ND 58401

701-252-8648 or 1-800-807-1511

<http://www.buffalomuseum.com/>

Map below: Pin #1 is the Raugust Library at Jamestown College and Pin #2 is the Buffalo Museum.



Annual NDAA Meeting—Saturday, April 28, 2012 Jamestown, North Dakota

DINNER

Members are encouraged to meet at the **Buffalo City Rotisserie Grill at 5:30 pm** for dinner. The NDAA has reserved the meeting room. We will be ordering off of the Meeting Menu at dinner.

103 1st Avenue South, Jamestown, ND 58401—701-952-9259

If you plan to dine, kindly RSVP to Amy Bleier (ableier@nd.gov or 701-328-3088). The restaurant meeting room seats 50 people. The number of guests planning to dine needs to be given to the Buffalo City staff **by Friday, April 20, 2012.**

Meeting Menu

****All entrees served with a house or Caesar salad*

Penne Alfredo—penne noodles tossed in creamy Alfredo sauce
\$10.95 (Add chicken...\$2.00; Add Andouille sausage...\$2.00; Add shrimp...\$6.00)

Cajun Tortellini—onion & peppers in Cajun cream sauce with tri-colored tortellini
\$12.95 (Add chicken...\$2.00; Add Andouille sausage...\$2.00; Add shrimp...\$6.00)

****Choice of baked or mashed potato (excludes pasta entrees)*

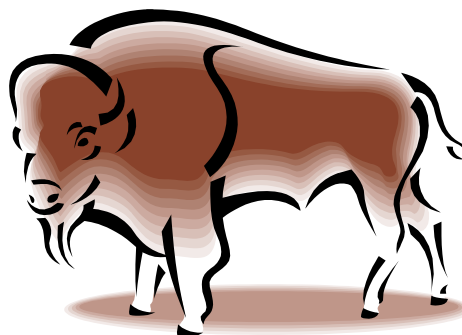
Herb & Parmesan Breaded Walleye—large walleye fillet encrusted in a signature breading & baked
\$18.95

Ribs & Chicken Combo—half of a spit roasted chicken & a half rack of Buffalo City ribs
\$21.95

Ribeye—14 oz. certified Angus beef
\$24.75

Bison Filet—locally raised bison wrapped in hardwood bacon dusted with a special blend of seasoning
\$31.50

A dessert menu is available upon request.



NDAА ADVISORY BOARD

The North Dakota Archaeological Association has an Advisory Board consisting of six nonprofessional members who have agreed to serve as advisors to the Executive Committee.

The functions of the Advisory Board are:

- 1) To act as a sounding board for ideas for the Executive Committee.
- 2) To act as a contact and go-between for local members and the general membership and Executive Committee.
- 3) To encourage local people (both members and non-members) to attend our meetings.
- 4) To help arrange meeting topics and locations for meetings.

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The Newsletter is published quarterly by the NDAА. Any articles or notices for the Newsletter should be addressed to the Newsletter Editor. Submissions should be emailed, unless other arrangements are made. The opinions expressed in the Newsletter are those of the authors and not necessarily those of the Editor or NDAА.

The Objectives of the Association

1. To organize people interested in archaeology
2. To foster the study and teaching of archaeology
3. To promote the scientific investigation, preservation, and publication of archaeological information
4. To enlist the aid of all citizens in reporting, preserving, and recording any archaeological sites

From Article II, the Constitution of the North Dakota Archaeological Association

ELECTRONIC NDAА NEWSLETTER AVAILABLE



If you would like to receive an electronic PDF version of the Newsletter please email Newsletter Editor Amy Bleier at ableier@nd.gov

If you choose to receive the electronic Newsletter, it will be sent to you from ableier@nd.gov.

Some advantages of an electronic Newsletter include:

- Speedy delivery
- Saving paper
- Saving postage
- Color images and photos
- Hyperlink functionality
- Read it almost anywhere in the world, at any time!

NDAAs Newsletter
Anthropology Research
University of North Dakota
Babcock Hall Room 301
236 Centennial Drive Stop 7094
Grand Forks, ND 58202-7094

NDAAs MEMBERSHIP FORM

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Address _____

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Telephone _____

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Membership (circle one): Current or New

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