

Iowa Archeology News



Newsletter of the Iowa Archeological Society

Est. 1951

Volume 52, No. 1

Issue 181

Spring, 2002

PHASE I SURVEY AT RATHBUN STATE WILDLIFE AREA

by Timothy S. Weitzel

INSIDE THIS ISSUE

Phase I Survey at Rathbun State Wildlife Area

Timothy S. Weitzel

Avenue of Saints Phase III Excavations

Tom Chadderdon

FYI

American Indian Bow and Arrow Technology

Timothy S. Weitzel

IAS Remembers

Jack Belknap

Craig A. Malven

IAS President's Report

Douglas W. Jones

IAS Announcements

Events-Education-News

IAS Chapter News

Chapter Activities

OSA News

A Phase I archaeological survey was conducted by the Office of the State Archaeologist as a portion of a feasibility study at the proposed location of a DestinationIowa resort complex on the north shore of Lake Rathbun, in Appanoose County. The land for the resort is within the Lake Rathbun State Wildlife Area—Iowa Department of Natural Resources, and the hillslopes and shoreline adjacent to Lake Rathbun Reservoir—US Army Corps of Engineers, Kansas City District. Previous archaeological investigation in the Rathbun area began with the Smithsonian River Basin Survey of the Chariton River Valley. Additional investigations included visits to key landform areas within the main valley, culminating in a resource management plan proposed by the Archaeological Laboratory of the University of South Dakota (Grantham 1980). No intensive survey had taken place in the majority of the proposed resort location.

The area to be investigated included more than 852 acres (345 ha). The hard-working crew reached a peak size of three crew chiefs, 18 field technicians, and an IAS volunteer—Milo Mendenhal. Most of the Department of Natural Resources portion of the proposed resort is sown in switchgrass that reaches a peak height of eight to ten feet in mid-August, which is when most of the survey was required to take place. Additional visits were made throughout the fall. The Corps of Engineers portion for the proposed resort occupies many steeply sloping side channels to Honey Creek and Ham Branch Creek. In addition, thickets of locust trees, Osage orange, and multiflora rose, poison ivy, ground wasps, wild parsnip, abandoned barbed wire fences, and careless hunters were encountered. Given all of the above, a stratified sampling strategy was the only practical way of addressing the project area's potential to contain significant cultural resources. Significance is generally defined as those that are eligible for the National Register of Historic Places.

Following preliminary geoarchaeological consultation with Project Geoarchaeologist Joe Artz, and Project Director John Doershuk, the Project Archaeologist developed a landform-potential model. This model was based on Natural Resource Conservation Service digital soils information and previous geoarchaeological investigations of areas with landscape features similar to the project area. It established areas of high, moderate, and low potential based on parent material, slope gradient, and geomorphologic landform (upland flats, upland ridges, side slopes, and so on). The model was tested with complete 15-m (50-ft) interval grids in three fields. Subsequent subsurface testing was limited to areas of moderate to high potential. The excavation of 1,807 subsurface tests, a 1-x-1-m test unit, and ground surface inspection in the Department of Natural Resources portion of the project area identified 18 archaeological sites (13AN150–13AN167). About half of these sites date to the late Historic period (1880 to 1950). The other half are prehistoric sites of which five contain lithic scatters in

sub-plowzone contexts (30–40 cm below ground surface). Within the Corps of Engineers portion of the project area, surface inspection and examination of exposed cutbanks were utilized to augment the predictive model prior to subsurface testing. An attempt was made to relocate previously recorded site 13AN166, but it could not be found. Two previously recorded sites, 13AN44 and 13AN45 were revisited. Two additional sites, 13AN168 and 13AN169, were recorded in the portion. These sites, and nine other areas identified as having high archaeological potential, will receive additional Phase I level investigation in 2002. Maps of two reported locations of historic graves were provided to the Burials Program at the Office of the State Archaeologist.

Two observations can be made from the work that has been completed to date: (1) upland archaeological sites do, indeed, occur in buried upland contexts. This point has been made repeatedly in the past (Abbott and Tiffany 1986; Artz 1993; Bettis 2000:157, Darwin 1882, Fishel 1977, Van Nest 1997). In the present case, the upland burial is a gradual and gentle process that appears to be the result of the action of, believe it or not, earthworms. Archaeologists need to know when to anticipate the potential for upland site burial and make plans for the project accordingly. Further investigation in 2002 will hopefully contribute to our knowledge on this subject; (2) wave action at the edge of reservoir flood pools removes material along the length of the flood pool margins creating artificially flattened areas in the sides of steep hill slopes. This is essentially the same destabilizing effect seen when the toe slope is removed from the base of a hill causing subsequent down-slope movement of material. Normally, slumped material would form a new toe that would stabilize the hill. The wave action, however, continues to remove the base of the slopes resulting in continued slope migration. This point has also been previously made (Bradley 1988; Dunn 1996; Dunn et al. 1996). The mitigation of these effects has yet to be seen.

References

Abbott, Larry R. and Joseph A. Tiffany
 1986 Archaeological Context and Upland Soil Development: The Midwest, U.S.A. Example. Paper presented at the 24th Midwest Archaeological Conference, Cleveland, Ohio.

Artz, Joe A.
 1993 Geoarchaeological Observations on Buried Archaeological Components in Loess-Mantled Terrains of Iowa. Paper presented at the 40th Midwest Archaeological Conference, Milwaukee.

Bettis, E. Arthur III
 2000 A Brief History of Geoarchaeology in the Eastern Plains and Prairies. In *Geoarchaeology in the Great Plains*, edited by Rolfe D. Mandel. University of Oklahoma Press, Norman, Oklahoma.

Darwin, Charles
 1882 *The Formation of Vegetable Mould, Through the Action of Worms, With Observations on Their Habits*. D. Appleton and Company, New York.

Dunn, Robert A.
 1996 *Impacts to Historic Properties in Drawdown Zones at Corps of Engineers Reservoirs: Three Case Studies*. Technical Report EL-96-7, Environmental Impact Research Program, Waterways Experiment Station, United States Army Corps of Engineers, Vicksburg, Mississippi.

Dunn, Robert A., Lawson M. Smith, Hollis H. Allen, Hugh M. Taylor.
 1996 *Managing Historic Properties in Drawdown Zones at Corps of Engineers Reservoirs: Three Case Studies*. Technical Report EL-96-14, Environmental Impact Research Program, Waterways Experiment Station, United States Army Corps of Engineers, Vicksburg, Virginia.

Fishel, Richard L.
 1977 *Phase I Archaeological Survey of Three Proposed Land Application Areas, Sections 16 and 17, T70N-R18W, Honey Creek State Park, Appanoose County, Iowa*. Contract Completion Report 562. Office of the State Archaeologist, University of Iowa, Iowa City, Iowa.

Grantham, Larry
 1980 *A Preliminary Management Plan for Cultural Resources, Rathbun Lake, Iowa*. Northeast Missouri State University, Kirksville, Missouri. Submitted to the U.S. Army Corps of Engineers, Kansas City District.

Van Nest, Julieann
 1997 *Late Quaternary Geology, Archaeology and Vegetation in West-Central Illinois: A Study in Geoarchaeology*. Unpublished Ph.D. Thesis, Department of Geology, University of Iowa, Iowa City, Iowa.

Avenue of the Saints Phase III Excavations by Tom Chadderdon, Louis Berger, Inc.

The Louis Berger Group, Inc. (Berger), was busy from early spring through Christmas with a series of Phase III excavations for the Iowa Department of Transportation. Most of the work took place along the Highway 34 and Highway 218 (Avenue of the Saints) corridors around Mt. Pleasant. A summary of the highlights of the excavations follows. Data analysis is currently in progress with report completion scheduled for the early spring.

Site 13HN318

Site 13HN318, the Overberg Site, is a small, single-component prehistoric site located on the uplands along Highway 218. Based on Phase II work conducted by the Office of the State Archaeologist (OSA), it was interpreted as probably representing a single occupation episode during the Early or Middle Archaic period. Berger's investigations identified four lithic features: a small pit containing

chert flakes, a rock slab a thin sandstone piece of uncertain function, and a probable hammerstone; a pit or small pile of dense flaking debris; a small cluster of chert cores and fragments; and an ovoid-shaped, dense concentration of debitage measuring ca. 1 x 2 m. The latter feature contained, among other things, an early-stage biface preform, a basal fragment of a more advanced preform, and several biface edge fragments. The thinness of the artifact concentration (ca. 3 cm) suggests that this feature represents a pile of flintknapping debris created during the actual tool making event, rather than a pit into which debris was swept.

The absence of pottery indicates that the site is indeed Archaic in age. Standard interpretations of Middle Archaic occupations of upland areas emphasize bulk processing of hickory nuts. However, the site lacked carbonized hickory or other nuts, obvious nut-processing tools such as large grinding stones, concentrations of fire-cracked rock, and fire-reddened earth. It seems clear that nut processing was not the primary use of 13HN318. The site does, however, compare well with the Ed's Meadow site (13DM712), a Middle Archaic upland site in Des Moines County interpreted to be a hunting camp.

Site 13HN216

Site 13HN216, located on the active floodplain of the Skunk River, appears to have been a temporary camp site occupied during the Late Paleo-Indian, Archaic, and Woodland periods. The site is located on an Early to Middle Holocene age Gunder Member terrace that contained an artifact-bearing buried A horizon between approximately 144 cm and 185 cm below the surface.

The Late Paleo-Indian period at Site 13HN216 is represented by a single artifact, a Golondrina-like projectile point recovered from the surface of the site. This artifact was probably redeposited at the surface by recent flood events. Archaic period artifacts recovered include a complete Tama or Thebes-like projectile point and a groundstone slab, both recovered *in situ* from within the buried A horizon. Archaic material appears to be confined to this buried A horizon, and was recovered from as much as 250 cm below the surface.

Woodland period artifacts were confined to the upper 45 centimeters of the site, within the plow zone and remnants of recent A horizon. A single Middle Woodland-like point indicates occupation during that time period. The Late Woodland period is represented by a Klunk projectile point and grit-tempered ceramics belonging to the Henry series.

Site 13LE382

Site 13LE382, the Case Site, represents a Late Woodland upland habitation site of moderate to high artifact density. The site is bisected by Iowa Highway 394 (destined to be part of the Avenue of the Saints) and only a narrow strip at the west end of the site remains undisturbed from previous road construction. This area was also unplowed. Activity areas identified on the basis of high densities of specific types of artifacts include three lithic reduction areas, two hearth areas, and three cooking areas. There are also two areas where high lithic and high ceramic density areas overlap, suggesting multiple activities at these locations.

Among the diagnostic artifacts recovered are five Late Woodland points (two Des Moines, one Madison, one Reed, and one Koster) and one Early Woodland Kramer point. The Kramer point may constitute a re-used tool, and was retrieved from disturbed soil that was deposited when an

embankment was cut during construction of the existing highway. All the Late Woodland points were recovered from intact soil horizons. Also recovered were Late Woodland grit-tempered ceramics of a ware classified to the Henry series, and a single specimen of Late Woodland Madison Ware.

Site 13HN334

The Frazier-Hiatt Farmstead site is a historic period farmstead located along Highway 218. The site is associated with a Civil War Veteran and an early settler in Henry County. Historical records show the site to have been occupied between 1847 and 1877, and suggest that there were two building periods, one 1846-1848 and one 1857-1858.

Phase III work began with geophysical investigations (electrical resistance and magnetic field gradient survey) conducted by Archaeo-Physics, LLC, of Minneapolis, MN. Ground truthing of the results identified five features: the house foundation (also evident from Phase II work conducted by the OSA), a chimney base next to the house, an ash dump, a cistern, and a well.

A backhoe was used to remove the plow zone from features to obtain a plan view, after which the features were bisected by hand and/or machine to obtain a profile. In the case of the well, which was some 30 feet deep, hand excavation took place incrementally and the backhoe was used to step back the excavation and stay within OSHA regulations for deep excavation. The final bits of the well were revealed with the backhoe, which also brought up samples of the fill to screen. The cellar, cistern, and well were dug into the native clay soil with no other lining necessary. Rock fill on the exterior of foundation wall and a rock-filled trench leading downhill and away from the house probably kept the cellar dry.

There was relatively little structural debris in the cellar and no burning, suggesting that the house was moved rather than demolished. A 1902-quarter recovered from near the cellar floor suggests that it was about that date that the cellar hole was filled.

Site 13WP306

Site 13WP306 was originally identified on the Eddyville Bypass for Highway 63 in 1990, at which time no additional work was recommended. However, redesign of the access ramps for the bypass led to additional investigations by the OSA in the spring of 2001, and the site was found to be much larger than original thought. Intensive testing by Berger recovered more than 600 prehistoric artifacts concentrated in four loci on the site. Locus 1 had the highest artifact density area on site, and also had the potential to contain intact cultural deposits in wooded parts of the locus. Therefore, excavation focused on Locus 1.

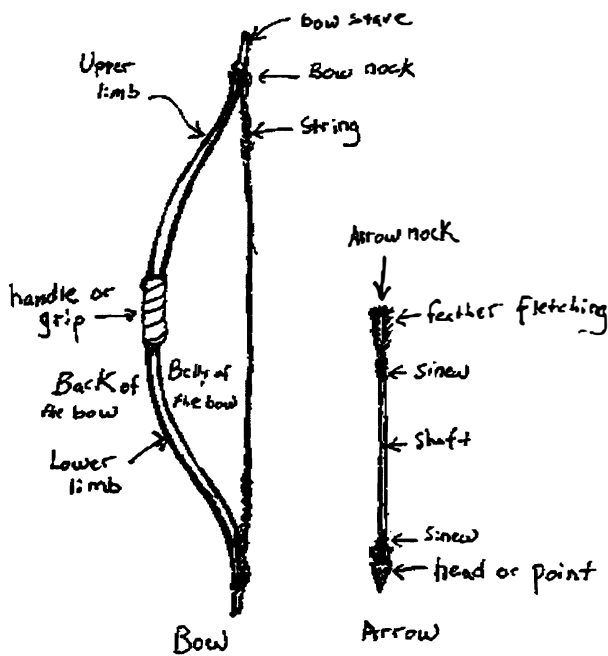
Three features and several burned rock concentrations were identified at the site. Over 2000 artifacts were recovered, including ceramics, chipped stone tools and debitage, hematite tools and debitage, groundstone tools, and burned rock. The site may have been occupied as early as the Early Archaic and as late as the Late Prehistoric. However, the highest intensity of prehistoric occupation appears to have been between the Late Archaic and the Late Woodland. Activities at Site 13WP306 included: 1) collecting and processing plant resources, possibly acorns; 2) chipped stone tool manufacture as evident from fresh and heat-treated chert (flint, jasper) tools and debitage in various stages of reduction; 3) hematite and other groundstone tool manufacture; and 4) other foraging activities including hunting.



Editor's Note: The Editor thanks Tim Weitzel of OSA. He has graciously agreed to regularly contribute to the "FYI" feature of "The Iowa Archeology News."

American Indian Bow and Arrow Technology by Timothy S. Weitzel

Although projectile points found on archaeological sites are commonly referred to as "arrow heads" American Indians did not always have the bow and arrow. It was not until about A.D. 500 that this technology was adopted. Other tools were used in the more than 10,000 years previous to this. The first projectiles people used in Iowa were likely spears. The main advantages of the bow and arrow compared to the spear are more rapid missile velocity, higher degree of accuracy, and greater mobility. Arrowheads also required substantially less raw materials than spear heads. A flint knapper could produce a large number of small projectile points from a single piece of chert. Bow and arrow technology was retained into the early part of the Historic period (1650 to 1720). In some instances, as recorded by Jesuit missionary-explorer Père Claude Aloués, bows continued to be used after the introduction of guns. Even with the many advantages of guns, bows and arrows are much quieter and much more rapid than early muzzle-loading guns, allowing the hunter more chances to strike at the prey. Indians used arrows to kill animals as large as bison and elk. Hunters approached their prey on foot or on horseback, accurately targeting vulnerable areas.



and antler. The intended use of the bow and arrow system, on foot or horse back, for instance, affects the final design. Bows used while mounted on horseback tend to be shorter than bows used when on foot. The length of the bow determines the amount and kinds of stress placed on the bow when drawn. For this reason, shorter bows tend to be made of composites of different materials while bows used when on foot tend to be made of wood.

Indians used a variety of materials to make the bow stave, relying on materials that met certain requirements, the most important of which is flexibility without breaking. Several species of plants and some animal materials common to Iowa and surrounding areas met these requirements. Ash, hickory, locust, Osage orange, cedar, juniper, oak, walnut, birch, choke cherry, serviceberry, and mulberry woods were used. Elk antler, mountain sheep horn, bison horn, and ribs, and caribou antler also were used where available.

Bow designs used included a single stave of wood (self bow), wood with sinew reinforcement (backed bow), and a combination of horn or antler with sinew backing (composite bow). Hide glue was used to attach the backing. Bow strings most frequently were made of sinew (animal back or leg tendon), rawhide, or gut. The Dakota Indians also used cord made from the neck of snapping turtles. Occasionally, plant fibers, such as inner bark of basswood, slippery elm or cherry trees, and yucca were used. Nettles, milkweed, and dogbane are also suitable fibers. Well-made plant fiber string is superior to string made of animal fibers because it holds the most weight while resisting stretching and remaining strong in damp conditions. However, plant fiber strings are generally much more labor intensive to make than animal fiber strings, and the preference in the recent past was for sinew, gut, or rawhide.

Arrow shafts were made out of shoots, such as dogwood, wild rose, ash, birch, chokecherry, and black locust. Reeds from common reed grass were also used with some frequency throughout North America with the exception of the Plains where reeds did not grow. Shoots were shaved, sanded, or heat and pressure straightened. Tools made of bone, wood, sandstone, pumice and naturally occurring clinkers or burnt lignite were used to straighten the shaft wood. Experimental archaeology has found bedrock outcrops in the Des Moines River Valley in Iowa to produce excellent raw materials for shaft-abraders.

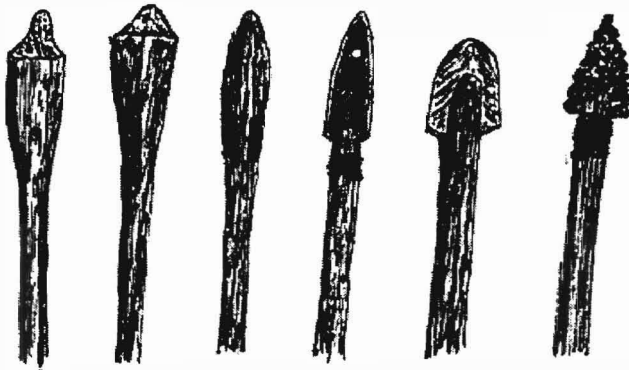
Because they are hollow and light, reed-shaft arrows typically have a wooden foreshaft and sometimes a wooden plug for the nock end of the arrow. If a foreshaft was used, it could be glued to the main shaft, tied with sinew, or fit closely enough to not need glue or sinew.

Points were attached to the arrow shaft with a variety of methods. Most frequently, the arrow shaft would have a slit cut into the end to accept the point. Sinew would then

Raw materials were not randomly chosen for constructing bow and arrows. Some materials were generally more readily available than others. Humidity alters the effectiveness of wooden bows. Temperature affects horn

be wrapped around the shaft to pinch the slit closed. Points could also be hafted directly by wrapping sinew around the point and the arrow shaft. Metal points generally were attached using the same techniques and only infrequently attached by means of a socket.

Indians made many types of arrowheads. In addition to the traditional triangular stone arrowhead, carved wood or leather points have large, broad surfaces. Prehistoric points or heads were made of stone, antler, or bone. Thin metal, bottle glass, and flint ballast stones also were used to make points in the historic period. Different types of arrow tips were used for different purposes, such as for large game versus small game. Large, blunt-tipped wooden points were used for birds. Small triangular stone points were used on large animals because the small, sharp points could more easily penetrate their thick hides. Harpoon-like points also exist and were used in fishing as an alternative to hooks, nets, or weirs.



Fletching of bird feathers was sewn to or inserted in a groove cut into the arrow shaft. Fletching balances the weight of the arrowhead to prevent the arrow from tumbling end-over-end in flight. When fletched properly, an arrow may spin in flight producing an ideal trajectory. A similar effectiveness is gained by placing grooves in the barrel of a rifle to cause the bullet to spin. In fact, until the invention of rifled guns, bows generally proved to be more accurate and could shoot arrows further than powder-thrown missiles. Feathers of wild turkey were preferred but many other birds, including eagle, crow, goose, hawk, and turkey, were often used. Sinew was generally used to attach the fletching by first stripping some of the feathers from the front and back of the vane and then tying the vane to the shaft in front of and behind the remaining feathers. Sometimes plant twine was used to sew through the quill. Hide glue was used with or instead of sinew ties. Animal products like sinew have the advantage of tightening as they dry.

The bow and arrow is a complex technology. Each element of the bow, arrow, and archer must be in balance

to the proportions of the others to make an effective tool. The power of a bow is measured in terms of draw weight. The bow acts as a pair of springs connected by the grip or handle. As the string is pulled the material on the inside or belly of the bow limbs compresses, while the outside or back is stretched and is placed under tension. This action stores the energy used to draw back the string. When the string is released, the limbs quickly return to their state of rest and release the energy stored in the drawn string. The height and strength of the archer determines the ideal draw weight of the bow. A combination of the length of draw and the draw weight of the bow determines the cast (propelling force) of the bow. Adjusting either or both of these features allows the arrowhead to be made larger or smaller as needed.

The draw weight of the bow also determines the ideal weight and diameter of the arrow shaft. Even a bow with a high draw weight can only throw an arrow so far. If the arrow is too heavy, it will not fly far or fast enough to be very useful. A shaft that is too thick or too thin will also lead to problems. The shaft must compress enough to bend around the bow stave as the string launches it. If it does not bend, the arrow flies to the side of the target. If it bends too much, it will wobble, reducing the striking force. The arrow may even shatter.

The length of the draw, also determined by the body of the archer, determines the length of the arrow. The maximum cast of the bow determines the maximum weight of the point. This is how we know that certain "arrowheads" can not really have been used on an arrow, at least not to any good effect. A general rule of thumb is that a stone arrowhead will be less than 1 1/2-x-3/4-inch in dimensions and will generally weigh less than one ounce. Larger "arrowheads" probably would have been spear, dart, or knife tips.

References

- Ackerman, Laura B.
1985 The Bow Machine, Science 85, July/August, pp. 92-93.
- Allely, Steve, and Jim Hamm
1999 Encyclopedia of Native American Bows, Arrows & Quivers: Volume 1: Northeast, Southeast, And Midwest. Lyons Press, New York.
- Allely, Steve et al.
1992 The Traditional Bowyer's Bible, Volumes 1-3. Lyons & Burford, New York.
- Hamilton, T.M.
1982 Native American Bows. Special Publications No. 5, Missouri Archaeological Society, Columbia, Missouri.

Hamm, Jim

1991 Bows & Arrows of the Native Americans. Lyons and Burford, New York. [Guide to construction]

Hardy, Robert

1992 Longbow: A Social and Military History. Lyons and Burford, New York. [Appendix has detailed description of physics related to bow and arrow]

McEwen, Edward, Robert L. Miller, and Christopher A. Bergman

1991 Early Bow Design and Construction, Scientific American, June 1991, pp. 77-82.

Pope, Saxton T.

1962 Bows and Arrows. University of California Press, Los Angeles.

Stockel, Henrietta H.

1995 The Lightening Stick: Arrows, Wounds, and Indian Legends. University of Nevada Press, Reno.

Thwaites, Ruben Gold (editor)

1900 The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France 1610-1791 (60). Burrows Brothers, Cleveland.

Hurley, Vic

1975 Arrows Against Steel: The History of the Bow. Mason Charter, New York. [Discussion of effectiveness off the bow compared to firearms]

Jack Belknap
Marion County Avocational Archaeologist (1916-2001)
By David M. Gradwohl



Pictured Above: Jack Belknap delivering lemonade to ISU archaeological crew at 13MA41 (Milo's Silo Site) summer, 1964.

In my presentation last October at the 50th Anniversary Fall Meeting of the Iowa Archeological Society held at the Neal Smith Wildlife Refuge near Prairie City, I mentioned the names of a number of individuals who had assisted in the early excavation and survey work accomplished by the Iowa State University Archaeological Laboratory (ISUAL) in Red Rock Reservoir. Jack Belknap's name was among those to whom I expressed not only my professional but personal indebtedness. Jack lived in Knoxville, had an extensive archaeological collection from Marion County, kept track of sites where he found artifacts, and eagerly shared that information with professional archaeologists involved in various projects in the region.

I was saddened to learn that Jack died in Knoxville on November 29. The study of Iowa archeology and history is much richer for Jack's life interests; we are all the poorer in his death.

Jack Stuart Belknap was born on April 12, 1916, in Nashua, Iowa. His parents were Josephine Sample Belknap and Forrest O. Belknap, an optometrist. During Jack's childhood, the Belknap family lived in Waterloo, Des Moines, Marshalltown, and Tama. Jack graduated from Tama High School in 1933 and subsequently completed graduate work

at the Hemphill School of Engineering in Chicago. In 1939 Jack married Christa Wiltsie at the Little Brown Church in Nashua.

Along the way, being somewhat of a mechanical wizard, Jack learned the art of watchmaking and repair. He worked for several jewelry stores in Des Moines and State Center before settling in Knoxville in 1941. Shortly thereafter, Jack established Belknap Jewelers on the south side of Knoxville's city square, and he worked there until his retirement in 1976. Customers, as well as visiting archaeologists, could view Jack's prize artifacts on display in cases at the jewelry store. Jack's retirement did not fit any sedentary stereotypes of retirement. Jack was an enthusiastic hunter and fisherman; he and Christa thus spent summers for many years at their cabin on a lake in Minnesota. At his home in Knoxville Jack had a shop where he avidly pursued his many hobbies, which included woodworking, lapidary work, jewelry making, and gunsmithing. Jack was a charter member of the Marion County Historical Society and, according to Christa, a member of the Iowa Archaeological Society for a short period of time.

In 1964 Iowa State University made its maiden voyage into Iowa archaeology. ISUAL was established and I ran ISU's first Summer Field School in Archaeology. Starting from scratch, armed with inadequate field equipment, and with students who had little or no background classwork in archaeology, we set out to do "salvage archaeology" in Red Rock Reservoir under the auspices of a contract with the National Park Service. I have often said I would have neither the courage nor naiveté to do that again. One large reason for the success of the 1964 field season, however, was do to Jack Belknap. He showed us his wonderful artifact collection and took us directly to archaeological sites where he collected – some of the sites had been previously recorded, many not. Even more memorable was the fact that Jack, on many occasions, played hooky from his jewelry store to visit us in the field, usually bringing ice-cold lemonade and other goodies to refresh the ISUAL crew. Jack was particularly interested in, and even helped dig, at 13MA41 (Milo's Silo Site), 13MA30 (Mohler Farm Site), and 13MA20 (the Mohler-Miller Mound Site). He also visited us other summers in Red Rock Reservoir between 1964 and 1968. Beyond the promise of refreshments, the ISUAL crew looked forward to Jack's visits because (being a vintage automobile aficionado) he would typically roll up to the site in one of his two splendid Jaguars: a red saloon sedan and black roadster coupe. Given the clunkers the University provided us, and the even more disreputable vehicles most of us personally owned, we could only stand in awe of Jack's panache!

Jack again assisted ISUAL in the late 1970s when we conducted a pedestrian and shovel-assisted-survey of the south unit of Elk Rock State Park. Jack remembered well the locations of the older-designated sites even though former fence lines, farmhouses, and other landmarks had been removed by federal and state agencies. Pursuant to the survey, which located or re-located a large number of sites in the project area, the U.S. Army Corps of Engineers (Rock Island District) agreed, in writing, to provide funds so that ISUAL could perform the required "mitigative" testing and excavation at Elk Rock. We at ISUAL were eagerly anticipating the work and Jack was enthusiastically looking forward to accompanying our investigations. Unfortunately, the USACE perfidiously reneged on its promise. Sites were subsequently (and are still being) destroyed at Elk Rock' ISUAL had no opportunity to pursue the project; and Jack was not able to offer his volunteer services.

On one of my subsequent visits to Knoxville to give a talk, Jack invited me over to his house and presented me with a beautiful pedestaled walnut bowl, which he had turned in his shop. Last November, just a few days before he died, Jack was unusually busy in his shop and Christa wondered what project was demanding so much of her husband's time. Christa soon found out on her birthday, November 21: Jack had made her a beautiful necklace and earring set. On November 26th, Jack and Christa celebrated their 62nd wedding anniversary with long-time friends.

Three days later, Jack passed away in his sleep. Christa and their two children, Burton and Marjo, survive. Jack's family, of course, can take comfort in his many joys of life as well as the material things he made for them. Members of the Iowa Archeological Society and others interested in our State's prehistory are the beneficiaries of Jack's eclectic interests and generosity.

Craig A. Malven, (1931-2001)

IAS member Craig Malven, of Monona, Wisconsin, died on December 24, 2001. Craig was an IAS member since 1999. After retiring from Bell Telephone Co. in 1991, he began a new career in archaeology. He did volunteer work for Cindy Peterson and other archaeologists at the OSA and was very active in Wisconsin archaeology. He received the MVAC amateur archaeologist award in 1999. While studying native Indian archaeology, he assisted in the accuracy research on the murals at the University of Wisconsin-Madison Memorial Union.

The President's Report

by Douglas W. Jones

Greetings Members!

I am glad to report that the Iowa Archeological Society had another productive, successful year during the Society's 50th Anniversary celebration in 2001. The Society finished with approximately 500 members for the fifth year in a row. This is tremendous! On behalf of the Executive Board, we would like to express our appreciation to you for your membership and continued support of the Society.

The Society's bank account remains very healthy as we finished with \$26,500 for 2001. The Society helped support another very successful Iowa Archaeology Month during last September. The Society also supported field schools at Ft. Atkinson in Winneshiek County and at the Maxwell site in Dallas County last year. As stated last year in my report, the healthy bank account has allowed our Society to continue supporting archaeological research and educational opportunities throughout the state. The Society has already received one application and several inquiries regarding the recently created Iowa Archeological Society Research and Education Fund. It appears that this fund will be invaluable for supporting small research and education projects or for supplementing funds for larger research and education projects. As mentioned last year, the Board is further examining the IAS Certification Programs and the IAS public outreach and education programs to identify our strengths and areas that need to be addressed.

The 2001 Spring and Fall 50th Anniversary celebration meetings were truly memorable. The Spring meeting was held at the Sanford Museum and Planetarium in Cherokee and the Fall meeting was held at the Neal Smith National Wildlife Refuge in Jasper County. Both of these meetings were extremely well attended, and it was really good to see some long time members who had not been able to make it to the meetings over the past several years. Many thanks are extended to the event organizers, speakers, and tour leaders for their contributions and efforts in making the 50th Anniversary celebrations successful. Special appreciation is extended to the Sanford Museum and Planetarium, the Northwest Iowa Chapter, Central Iowa Chapter, and the Neal Smith National Wildlife Refuge for hosting these events last year. Congratulations are extended to the Northwest Chapter and the Sanford Museum and Planetarium in celebrating their 50th Anniversaries during 2001 as well. Also, special appreciation is extended to Adrian Anderson, Duane Anderson, W.D. Frankforter, Dale Henning, Steve Lensink, and David Gradwohl for sharing their personal, and often humorous, recollections

concerning the history of Iowa archeology. It has been said that a picture is worth a thousand words. I firmly believe this to be the case as several of the pictures and slides brought to the meetings were priceless, worth much more than a thousand words.

In the midst of the 50th Anniversary celebrations, it was very difficult to have to say farewell to Bill Green as he resigned as the Iowa State Archaeologist to become the new Director of the Logan Museum of Anthropology at Beloit College in Beloit, Wisconsin. At the Spring Meeting, the Society presented Bill with a special Certificate of Appreciation for all of his efforts, contributions, and years of service to the Iowa Archeological Society as Iowa's State Archaeologist. As Bill mentioned at the Spring meeting; even though he has moved on to a new position, he will remain involved with Iowa archaeology through several research projects. Iowa Archeological Society Members now have a good excuse to visit another museum! As Bill asked us to do, the Iowa Archeological Society is patiently waiting for a new State Archaeologist to be hired.

Speaking of Bill, he will be the featured banquet speaker at the 2002 Spring meeting that will be held on May 4 at Pioneer Ridge State Park, near Ottumwa. The Southeast Iowa Chapter will be hosting the meeting, and they have already assembled an impressive program for this forthcoming meeting. The title for Bill's lecture will be "Iowaville: The Cartography, Archaeology, and History of the Ioway Indians and the Fur Trade." Further information on the Spring 2002 meeting will be mailed to the membership in the near future. Please mark your calendars for this event. I hope to see you there!

I have really enjoyed serving as President of the Society for the past several years. It has been an honor serving as the President during the 50th Anniversary of the organization. However, I have decided that I will not be running for President during the upcoming election. It appears that there will be a number of other officer and board member positions that will be open during the upcoming elections as well. The Iowa Archeological Society will be looking for members who are interested in serving as a board member or as an officer. **If you are interested in this possibility, please contact me at (515) 281-4358, or Steve Lensink and/or Lynn Alex at (319) 384-0732.**

IAS Announcements

Events-Education-News

Lab Weekends at OSA

Over the past four months volunteers have gathered to assist with washing, cataloguing and labeling of materials from the Gast Farm Site, as part of a new program at the Office of the State Archaeologist. This first in a series of "Discovery Weekends" will continue through April, 2002, and begin again next October. Nine to fourteen volunteers, mostly IAS members, have participated from 9 AM to 3 PM each weekend. The project has been of considerable assistance to Dr. Mary Whelan of the Department of Anthropology, University of Iowa, who is leaving the University and was anxious to process the last of the Gast Farm materials for their curation at OSA before her departure. Volunteers have processed artifacts, fauna, and floral materials from both the Middle Woodland Havana and Late Woodland Weaver components. A number of individuals are working towards IAS Lab Certification and are well on their way to the 80 required hours. A note of appreciation is extended to the following individuals for their assistance thus far: Melanie Sparks, John McLure, Aaron and Mark Anderson, Gail Nichols, Bob McCleary, Don Raker, Paul and Patti Farris, June Silliman, Gary Hecker, Barb and Briana MacDougall, Larry Van Gordon, Molly Ketchum, Linda Zintz, Tom Hanifan, Myrna Gray, Rosemary Harding, Jean and Alex White, Milo Mendenhall, Tom Harvey, and Gary Cameron. Anyone interested in participating please contact Lynn M. Alex.

New Certified IAS Member

Chad Burroughs of New Albin, Iowa is the most recent Certified IAS member and the first of 2002. Chad successfully completed all requirements in the Site Surveyor category. He submitted site forms on ten archaeological sites in northeast Iowa and received a perfect score on the Site Surveyor exam. The ten site sheets he submitted were model examples according to Colleen Eck, OSA Site Records Manager. One of Chad's next projects is to recheck the location of Keyes sites in northeast Iowa with the intent to more completely document their location and prepare supplemental site sheets. Everyone can meet Chad and learn of his interests in Iowa archaeology when he presents at the IAS Spring meeting on May 4 in Ottumwa. Congratulations Chad!

Update on Site Surveys

The IAS Board has approved a change in the wording for the requirement for Site Surveyor to read: **"Survey a particular region, record ten archaeological sites on the Iowa Archaeological Site Record form."** This was a change from the older requirement to record ten new sites. IAS Chapters are encouraged to contact Colleen Eck, site records person at OSA for information.

Excavation Opportunity for IAS Members during Iowa Archaeology Month 2002.

IAS members interested in the historic archaeology of southern Iowa will have an opportunity to dig into the subject first-hand over two weekends in September as part of Iowa Archaeology Month 2002. Maria Schroeder, staff archaeologist at the OSA, will supervise test excavation at the Bonaparte Pottery factory in Van Buren County Labor Day weekend, August 31-September 2, and Saturday and Sunday of the following weekend, September 7 and 8. Marilyn Thomas, owner of the property, has invited IAS members to participate in the project. Marilyn graciously conducted tours of the site during Iowa Archaeology Month 2000 and 2001. The pottery factory was utilized from the mid 1860s to the mid 1890s producing utilitarian ceramics, bricks, tiles, tubing, and chimney stacks. Architectural and archaeological research following the flood of 1993 revealed numerous in tact features including the factory building foundation and a large quantity of artifacts. Anyone interested in participating can contact Maria Schroeder at the Office of the State Archaeologist, or Lynn Alex. Specific details about the project are forthcoming.

Keyes-Orr Award 2002

Suggested nominees for the Keyes-Orr Award for 2002 can be forwarded to Lynn M. Alex, Chair of the Keyes-Orr Award Committee. Nominees should exhibit outstanding service to the Iowa Archeological Society and the research, reporting and preservation of Iowa's prehistoric and historic heritage. The individual should exemplify qualities characteristic of the two individuals after whom the award was named, specifically 1) involvement in the Iowa Archeological Society, 2) learning and practice of accepted and standard archaeological procedures for the acquisition of knowledge, and 3) the use of this knowledge to further public educational programs concerning Iowa's prehistoric and historic heritage. The winner will be decided by the Award Committee and announced at the Annual IAS Spring Banquet on May 4th. Contact Lynn at OSA, 700 Clinton Street Building, U of I, Iowa City, IA 52242, Ph: 319.384.0561, E-mail: lynn-alex@uiowa.edu

*IAS Spring Meeting
Saturday, May 4
Pioneer Ridge State Park,
Near Ottumwa.
An evening banquet with
Dr. William Green
Presenting "Towaville"*

IAS Chapter News

Black Hawk Regional Chapter

In December, Dr. Kenneth Atkinson of UNI gave a presentation on work performed at the *Old Testament Site of Gamla*. Lynn Alex and Colleen Eck of OSA gave a presentation on the *IAS Certification Program and the Recording of Sites* in January. February 13th Dr. Julie Lowell of UNI presented *Warfare and Refugees in the Prehistoric Pueblo Southwest*.

Contact Lisa Beltz

1804 W. Ridgewood Drive, Cedar Falls, IA 50613

(319) 268-0865

Lisa.Beltz@uni.edu

Central Iowa Chapter

In January the CIC began the *Laboratory and Curation Procedures of the Living History Farms; Artifacts* at the State Historical Building. In February Rick Finch and Melinda Carriker of Living History Farms gave a presentation on the *LHF Ioway Village*. The members were also challenged to identify some of the artifacts and tools that might have been used during that time.

Contact Michael Heimbaugh

3923 29th St., Des Moines, IA 50310

(515) 255-4909

paleomike@msn.com

Southeast Iowa Archaeology Chapter

The Southeast Iowa Archaeology Chapter has been preparing for the IAS Spring Meeting and Banquet to be held May 4th at Pioneer Ridge State Park near Ottumwa.

Contact Bill Anderson

Box 51, 103 High St., Richland, IA 52585

(319) 456-3911

Quad City Archaeological Society

Contact Ferrel Anderson

1923 East 13th St., Davenport, IA 52803

(319)324-0257

Northwest Chapter

In January and February the Northwest Chapter continued to work on the Van Voorhis collection.

Contact Linda Burkhart

Sanford Museum

117 E. Willow, Cherokee, IA 51012

(712) 225-3922

sanford@cherokee.k12.ia.us

Paul Rowe Chapter

Contact Dennis Miller

31126 Applewood Rd., Silver City, IA 51571

(712) 525-1007

Farming99@aol.com

Ellison Orr Chapter

Flintknapping and Prehistoric Stone Tools was presented by Lowell Blikre, Bear Creek Archeology Sunday, February 10 at Koren Hall, Luther College Campus.

Contact Lori Stanley, (319) 387-1283

or Joe B. Thompson, (319) 387-0092

Orr Chapter, PO Box 511, Decorah, IA 52101

iasorrchapter@hotmail.com

Keyes Chapter

On January 19th, Douglas Jones, State Historic Preservation Office, presented A Fish Story from Iowa: *New Considerations of Prehistoric Fishing Practices in the Eastern Prairie Plains*. Doug reported that fish remains are commonly found in features at archaeological sites in Iowa and several weir structures have been confirmed on rivers and creeks across Iowa.

Contact Keith Young

11236 Co. Rd. E17, Scotch Grove, IA 52310

(319) 465-6393 or e-mail:

pekoyoung@n-connect.net.

**ATTENTION CHAPTERS!
SEND YOUR CHAPTER MEETING
ANNOUNCEMENTS AND EVENT'S
CALENDARS TO THE IAS WEB PAGE
AS AN ATTACHMENT TO LYNN ALEX
at: lynn-alex@uiowa.edu**

OSA NEWS



A SPECIAL SECTION OF THE IOWA
ARCHEOLOGICAL SOCIETY NEWSLETTER

IOWA ARCHAEOLOGY MONTH 2002: "Bags, Bowls, Boxes, and Baskets: Life Before Plastic"

The theme for this year's Iowa Archaeology Month has been selected. "Bags, Bowls, Boxes, and Baskets: Life Before Plastic" will highlight the importance that containers of various styles, shapes, and kind have played throughout Iowa history and the evidence they leave in the archaeological record. Beginning with the woven basketry, ceramics, skin bags, and wooden boxes of Native Americans through the glass bottles, wooden trunks, and metal buckets of early pioneers, containers reflect similar needs for storage, cooking, and transport, but translate into a wide variety of shapes, materials, styles, and ethnic preferences. They also reflect dynamic processes such as interaction, adoption, trade, and the impact of a market economy.

To kick-off IAM 2002 this September, IAS members will have the chance to learn about ceramic production during excavation at the late 19th century Bonaparte Pottery factory in Van Buren County over Labor Day weekend (see notice in this issue of "Iowa News"). Workshops and presentations demonstrating the manufacture of ceramics, basketry, and birch bark containers are being planned. Tours of historic kiln sites, ceramic factories, and glass workshops will be scheduled. "Artifact Road Shows" will focus on prehistoric and historic pottery and glassware. Archaeologists and historians will discuss the temporal and social implications of pottery, how it helps to date a site, and what it may say about the ethnic composition and economic standing of the community in which it was uncovered. Museums, libraries, and historical centers are encouraged to display their own collections. Painted Norwegian trunks, shell-tempered pots, crystal Czech goblets, colorful leather parfleches, beaded skin bags, saddlebags, cloth feedbags, creamware, and cotton flour sacks provide interesting examples of items that met similar functions but were executed

in widely varying shapes and styles. And each has a story to tell.

In order to include as many organizations and institutions as possible in IAM 2002, we would like your help. Please let us know of the name and address of any organization (big or small) that you think might wish to host an event, display a collection, or sponsor a program. We hope to compose the IAM 2002 poster to exhibit prehistoric and historic containers of all shapes, styles, and ages from all across the state. If your organization can provide a digital, color image of a container they would like featured on the poster, please contact Lynn M. Alex.

Lynn M. Alex
Public Archaeology Coordinator
319-384-0561; lynn-alex@uiowa.edu

OSA STAFF AT IOWA ACADEMY OF SCIENCE MEETING

The 114th Annual Iowa Academy of Science meetings will be held 19-20 April at the Hotel Fort Des Moines. OSA staff will present 5 of the 10 papers in this year's Anthropology section. Lynn Alex will present a paper entitled *Time Capsules from the Past Resource Boxes*. Richard Fishel is co-authoring a paper with UI student Jordan Houchins entitled *Analysis of Design Motifs Occurring on Mill Creek and Great Oasis Pottery Rims within the Cowan, Phipps, Broken Kettle, and Broken Kettle West Archaeological Sites*. Tim Weitzel and Mark Anderson are co-authoring a pair of papers. Tim will present *Aerial Remote Sensing in Archaeology with Emphasis for Methods in Iowa* while Mark will present *GPS Applications in Archaeology: Examples from the Office of the State Archaeologist*. Dan Horgren is co-authoring a paper with Mark entitled *Experiences in Lithic Raw Material Identification from the Des Moines Lobe, Thoughts Regarding the OSA's Lithic Resource Assemblage*.

As an additional draw on Saturday, 20 April, the General Session III, from 10:30-11:45, will feature Dr. Nicholas Toth of Indiana University presenting the tentative topic of *Human Evolution and the Dawn of Technology*. The meetings are open to non-academy members for a modest fee. The Anthropology Section would gladly welcome any IAS members who might wish to attend.

STAFF CHANGES

Farewell to Rich...

Rich Fishel, project archaeologist for the General Contracts Program since 1993, has resigned to take a position as archaeologist with the Illinois Department of Transportation Archaeology Program. Rich is returning to his home state of Illinois to work in Macomb and will live in the nearby town of Rushville.

While at OSA, Rich did major work on an assessment of damage to archaeological sites from the 1993 floods. That project led to further work at the Dixon and Phipps sites, and an edited OSA Report, *Bison Hunters of the Western Prairies: Archaeological Investigations at the Dixon Site (13WD8), Woodbury County, Iowa*. He also helped supervise field schools at Broken Kettle sites in Plymouth County and Fort Atkinson in Winneshiek County.

Rich has served as an active member of the Johnson County Historic Preservation Commission since 1997.

Welcome to Dave....

Dave Stephenson has officially joined the General Contracts Program as an assistant project archaeologist. He has been a familiar face around OSA for 8 years, working on projects such as the flood damage assessments of the Phipps (Cherokee County) and Helen Smith (Louisa County) sites. He also managed operations of the OSA flotation machine when it arrived.

Dave, a native of Ames, attended the University of Iowa, first majoring in music before receiving his BA in anthropology in 1994. He still claims music as his main "hobby" and plays in a rock band, the Swarays, on most weekends.

SEARCH FOR A NEW STATE ARCHAEOLOGIST PROCEEDS

The University of Iowa is currently seeking a new OSA Director and Iowa State Archaeologist following the resignation of Bill Green last summer. A committee composed of members from inside and outside the university is reviewing applications. Shirley J. Schermer, OSA Burials Program Director, will serve as liaison between OSA and the search committee. The committee hopes to fill the position this spring with a starting date of July 1, 2002, for the new director.

OSA News is prepared and compiled by Julianne Hoyer (julianne-hoyer@uiowa.edu)

Archaeology Items of Interest

Calendar of Events

June 3-July 12, 2002-Luther College Archaeology Field School. Investigations will focus on protohistoric Oneota sites in Allamakee County, IA. For more information contact Colin Betts at: (563) 387-1284 or e-mail him at: bettscol@luther.edu. Or <http://anthro.luther.edu/fieldschool.htm>

April 6, 2002-Iowa History Forum
The Iowa History Forum is sponsored by the State Historical Society of Iowa. It is a gathering of amateur and professional historians with a passion for investigating Iowa's past. The Forum allows participants the opportunity to discuss new topics and learn about the latest Iowa history research. To learn more visit the Web site at www.iowahistory.org. For specific questions on registration, contact Linda Lee at (515) 281-6412 or e-mail her at: linda.lee@dca.state.ia.us

More Events

Center for American Archeology 2002 Field School Programs (Part 2)

July 30-Aug. 3	Scouts of America
Aug. 6-10	Adult Field School
Aug. 13-17	Adult Field School
Aug. 20-24	Adult Field School
Aug. 30-Sept. 1	Family Weekend
Sept. 10-14	Adults 50+ Field School
Sept. 14	Archeology Awareness Day
Sept. 17-21	Adult Field School
Sept. 23-27	Kids Ecology Field School
Sept. 23-Nov. 1	Past Lifeways
Oct. 18-20	Adult Past Lifeways

Editor's Note: The first half of the Center's Calendar was printed in Vol. 51, No. 4, Issue 180, Winter 2001, *Iowa Archeology News*.

These programs are nationally recognized, educational and fun. For detailed information contact the Center for American Archeology, P.O. Box 366, Kampsville, IL 62053. Phone (618) 653-4316 or contact by e-mail: caa@caa.archeology.org.

Web Sites

The following Smithsonian Institution web site contains a nice list of references to organizations offering volunteer participation on field projects for the coming summer. According to OSA Public Archaeology Coordinator, Lynn Alex, two such opportunities are being planned for September for Iowa. The web site is: <http://www.nmnh.si.edu/anthro/outreach/sumopp01.html>.

Journal

Lithic Technology is a peer-reviewed journal disseminating knowledge of archaeological stone tools. It appears biannually, in the spring and fall. In addition to articles, *Lithic Technology* publishes comments, book reviews, brief communications, and summaries of recent exhibits, knap-ins and other events. \$25.00 a year. Web site: <http://www.cas.utulsa.edu/anthropology/lithictechnology/>.

Membership Information

Contact Membership Secretary, Iowa Archeological Society, University of Iowa, 700 Clinton Street Building, Iowa City, IA 52242-1030.

Membership Dues

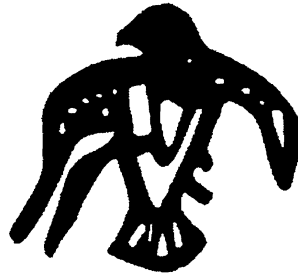
<u>Voting:</u>		<u>Non-Voting:</u>	
Active	\$15	Student (under 18)	\$7
Household	\$18	Institution	\$20
Sustaining	\$25		

Newsletter Information

The Iowa Archeological Society is a non-profit, scientific society legally organized under the corporate laws of Iowa. Members of the Society share a serious interest in the archaeology of Iowa and the Midwest. *Iowa Archeology News* is published four times a year.

All materials for publication should be sent to the Editor: Michael Heimbaugh, 3923 29th St., Des Moines, IA 50310. Phone (515) 255-4909. E-mail: paleomike@msn.com

Iowa Archeological Society
The University of Iowa
700 Clinton Street Building
Iowa City, IA 52242-1030



Non-Profit Org.
U. S. POSTAGE
PAID
Permit No. 45
Iowa City, Iowa