

Iowa Archeology News



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Prehistoric Artifacts from Five Island Lake

by David W. Benn & Art Hoppin (Bear Creek Archeology, Inc.)

In January 1999, Emmetsburg resident William "Bill" Henry took a collection of mostly fossilized bones to Iowa City to be identified. In the process of having the bones scrutinized at the Office of the State Archaeologist and at the Iowa Geological Survey Bureau, the bone source was revealed to be Five Island Lake in Palo Alto County. The day Bill Henry spent in Iowa City initiated a chain of events that included exposure in the *Des Moines Register* (June 5, 1999) and the revelation that he was finding prehistoric artifacts in the spoil dredged from the bottom of the lake.

Dating as early as 1913, dredge spoil from this lake was dumped in low lying areas along the shoreline to raise the land surface for houses and agricultural fields. Beginning in 1990 prepared spoil sites were created on-shore, with dredge spoil being jettisoned from the lake bed through plastic pipe to a bermed pond. When the sediments dried, anyone walking on the muddy surface could pick up artifacts with other heavy materials (gravel, rocks, animal bones) around the mouth of the discharge pipe. Bill Henry also reconnoitered older spoil sites and located artifacts dredged from the lake in earlier decades. Bear Creek Archeology, Inc., (BCA) personnel were contracted by the Iowa Department of Natural Resources (IDNR) to survey a proposed silt pond, which was being prepared for future dredge spoil. We found prehistoric lithic scatters (13PL64 and 13PL65), but neither was considered eligible for the National Register (Hoppin and Benn 1999; Hoppin et al. 1999). Since lake dredging operations were already underway in the summer of 1999 and nothing was known about the archeology of the lake, the IDNR expanded the BCA investigation to assess the cultural

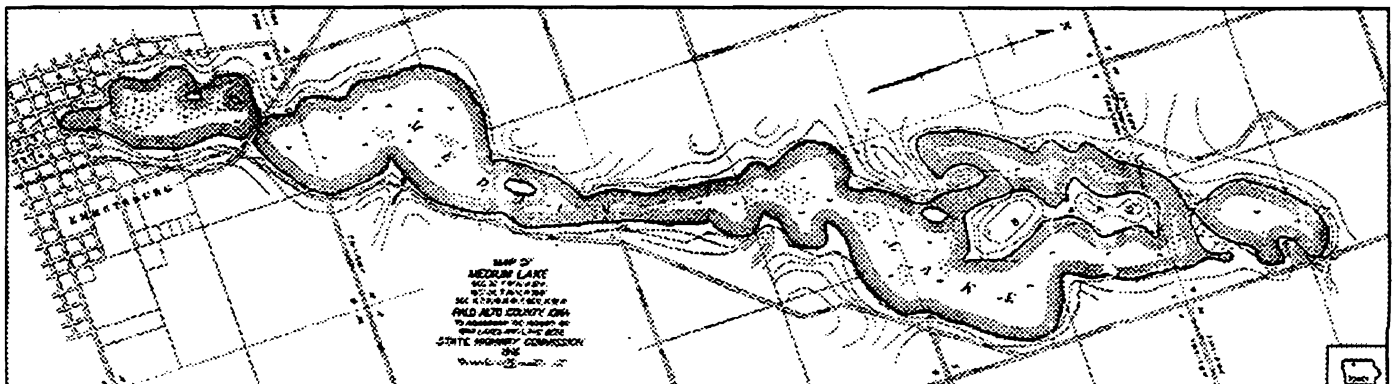


Figure 1. 1916 soundings map of the bottom of Five Island Lake (Medium Lake [State of Iowa]).

sites at the lake by undertaking to: survey lands around the lake perimeter, monitor the output of bones and artifacts from the dredge, and evaluate Bill Henry's artifact collection from dredge spoil sites.

The place called Five Island Lake, or Medium Lake as it was named in the nineteenth century (Martin 1877:6), is a natural feature of glacial origin. The best description of this type of lake would be *linked drainage-depression systems*, meaning a series of kettle (or pothole) lakes where huge chunks of glacial ice melted into ponds that were connected by flowing water, either glacial outwash channels or the Holocene-age drainage network. This lake is one of thousands that, prior to being drained, once dotted the landscape of north-central Iowa within the Des Moines Lobe (Prior 1991). The Lobe is the youngest land surface in the State of Iowa, because it developed during the final glacial advance at the end of the Pleistocene era. Medium Lake lies within the ground moraine left by the Altamont ice advance (ca. 13,500-12,600 B.P.), the sediments of which are classified as the Dows Formation (Bettis et al. 1996:2, 7). Coursing across the poorly drained Dows Formation and often incising to bedrock are stream valleys of the Des Moines River drainage system, which flank Medium Lake on both sides. We are aided in the reconstruction of the original Medium Lake by two detailed historic maps. The reason for such maps has to do with recreation. In Iowa, all of the larger-sized glacial lakes were developed into local tourist attractions by the turn of the century. Lakes were popular places for summer boating, picnicking on the islands, and cooling in the waters (McCarty 1967). But, most of Iowa's lakes were shallow, and periodic dredging has been needed at Medium Lake to allow for boat traffic to pass over rapidly accruing sediment from agricultural runoff. The 1916 map (Figure 1) shows that the original lake as not more than 5 ft. deep in a few places and 1-4 ft. deep in most of the broader expanses of water. The southern end of Medium Lake extended about one city block farther into the town of Emmetsburg before 1913, and this area also was filled with dredge spoil. The primary natural outlet for lake water ran southward through Emmetsburg and thence to the Des Moines River. This outlet was the original glacial outwash channel.

The 1935 lake map is even more informative about the geology of the lake bed, because the map presents a record of 172 soundings and 56 borings (Hutton 1935). This boring record allows us to interpret the kinds of sediment that comprise the alluvial context of the ancient lake bed. We assume that the basal *blue* and *yellow clays* in the map legend are glacial till. This identification is bolstered by information from operators of the modern dredge at the lake, who stated to the writers that clays in the lake bed contain large rocks, some too big for the dredge to move. Rocks of all sizes are typical of glacial till. Basal layers of

sand and *gravel* on the map legend may be beds of outwash which formed below the ice. Layers of *soft* and *hard silts* capping the till and sand/gravel are likely to be the DeForest Formation, i.e., fine grained suspended sediments that accumulated during the last 10,000 years. This is where archeological remains are likely to be present, especially in the lower half of the unit. The 1935 map shows these Holocene deposits to be 10-15 ft. thick in most places north of the railroad trestle and to extend 15-24 ft. below the lake surface. Of special interest is a layer of *peat* which shows up in some of the borings. This peat appears to contain some of the archeological deposits found near the "narrows" during the 1990s, because many of the artifacts from the dredge spoil were peat stained. Some of the finds of archeological materials by Bill Henry help to fill in more of the sedimentary context for Five Island Lake. He recalls finding projectile points on sand ridges ("sugar sand") on the lake bed when the water level was very low. One of these ridges transected the lower end of the "narrows." Sand ridges are formed by high energy water flow and could have their origin as glacial outwash, or the sand could be the heavy textured sediment left over from eroded glacial till. In either case, the sand is glacial-aged material, and all human artifacts must have been deposited on the surface of these landforms. The only context where human artifacts could be deeply buried in the lake bed is within the dark silt and peat deposits.

Bone and Stone Artifacts

Artifacts (e.g., animal bones, lithic debris, projectile points) found in past and currently active dredge spoil ponds by Mr. Henry appear to come from multi-component prehistoric sites of the *resource procurement* (i.e., kill sites) and *seasonal camp* site types. The known site deposits are inundated in the middle reaches of the lake mostly north and south of the narrows. Artifacts from lakebed site 13PL89 include a variety of animal bones such as bison, elk, deer, wolf, raccoon, beaver, muskrat, water birds and fish. Stone artifacts include dozens of projectile points dating from ca. 8500 years B.P. such as Agate Basin and Angostura lanceolate points, Archaic point styles like Brannon, Table Rock and Raddatz, Early to Middle Woodland projectiles including Pelican Lake and Snyders-like, Late Woodland to Late Prehistoric projectiles like St. Croix, Okoboji, and Webster. Historic artifacts like horse bones and a chert gun flint have also been found in the dredge spoil. Of particular interest are a variety of bone tools like split-bone awls and socketed antler projectile points made by the groove-and-snap technique (Figure 2). An AMS radiocarbon date run on a small piece of one of the antler points assayed at 1740 \pm 40 B.P. (Beta-133324), giving a late Middle Woodland period age range of A.D. 245-365 (1 sigma calibration). Virtually all of the artifacts are peat-stained. Some dredge spoil artifacts are made of

lithic materials from western Iowa (Argentine and Spring Branch cherts) and possibly Nebraska (possible Smoky Hill silicified chalk) and South Dakota (Bijou Hills silicified sediment and possible West Horse Creek chert). The presence of these western raw materials and some point types (above) may be indicative of plains bison hunters following herds onto the Des Moines Lobe. Eastern points include Archaic side-notched styles more commonly found in eastern Iowa and Illinois. Eastern lithic materials from the lake include Hixton silicified sandstone from southern Wisconsin, Grand Meadow chert from southeastern Minnesota, and Burlington chert from southeastern Iowa. Excello chert from northern Missouri also is present. The array of cherts and point types suggest that peoples from all directions traveled to the lake location as a part of a seasonal round and for a variety of reasons other than bison procurement.

The dredged bone beds are located near sand bars that jut into and across Five Island Lake. These sand bars probably were game trails. Deer still use one of the sand bars in the southern portion of the lake as a crossing (Bill Henry personal communication 1999), probably in part to circumvent the town of Emmetsburg and also because the lake is more than three miles long and the shortest route to the east side is across the lake. The clustering of bones and projectile points strongly suggests sandbar locations were being regularly hunted, the implication being that hunters were either driving large game into the lake shallows or were lying in wait for game to use the sand bar trails. The large numbers of bison bones in the lakebed collection indicates that these animals were frequent residents of the area. Bones of other animals, including fish, birds, and medium sized mammals, also come from the bone beds along with bone tools, one pottery sherd, and flaking debris. These items indicate camping by humans on the sand ridges as well as game hunting.

Wetland Resources

Studies done by Luther College in the late 1970s and early 1980s were conducted on the Des Moines Lobe in portions of Worth and Winnebago counties. These surveys recorded hundreds of prehistoric sites and were the first detailed analysis of site location in the region (Mallam and Bettis 1979). The Mallam-Bettis settlement model, called the "Primary Wetlands Efficiency Pattern," stated that the wetlands on the Lobe were valuable resource locations that were incorporated into the annual rounds of nomadic and semi-sedentary peoples. Wetland areas were briefly occupied by small groups during the warm months when plant and animal resources were extracted and processed both for immediate consumption and storage. Once the resources were exhausted, the group moved to another wetland. During the winter months the Lobe was essentially

abandoned by human occupants, who moved to more sheltered environs of drainage valleys along the edges of the Lobe and beyond (Mallam and Bettis 1981). Lensink (1981, 1984) used a similar site location model centered around wetlands and recorded numerous small short-term sites which were interpreted to be associated with warm season resource procurement. His study identified projectile points representing virtually all of the Holocene era, i.e., late Paleo-Indian through Mississippian (Oneota) periods. The types of artifacts found by BCA around the perimeter of the lake differ from the majority of those found by Mr. Henry in the dredge spoil. Mr. Henry's artifacts are more representative of kill and *seasonal camp* sites (e.g., projectile points, end scrapers, awls, bifaces), while the survey artifacts tend to represent a very limited range of processing tools, such as expedient scrapers/knives, burins, projectile point, cobble pounders, choppers, and hammerstones. It is well documented that prehistoric peoples were utilizing the lakes and marshes on the Des Moines Lobe as resource procurement sites (Lensink 1981). Another type of site is a *bivouac*, a short term encampment that contains a limited amount of fire-cracked rock suggesting the use of a hearth. This type of site assumes a short stay to consume or process resources (Benn 1987; Stanley 1989). Twenty-two of the sites identified in the lake perimeter survey are considered examples of bivouac sites.

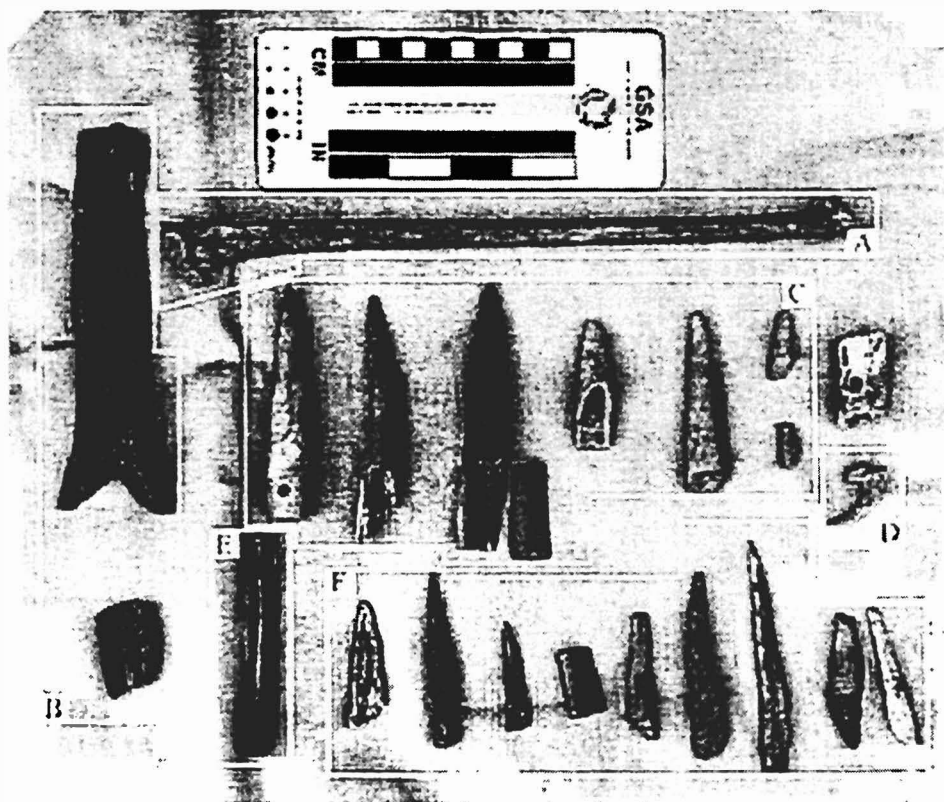
As a result of Bill Henry's diligent attention to his work with the dredge and the initial survey of the Five Island Lake project by BCA, we have gained a fresh perspective of the activities of prehistoric people in and around Iowa lakes. The archeological community and state agencies, like the IDNR, are confronted by the issue of how to manage the well preserved cultural record that undoubtedly lies in the beds of most shallow lakes in Iowa. The recommendations offered for Five Island Lake may be applied to other lake projects as well. 1) A 200 ft. buffer zone around the shoreline and shallowest portions of the lake should not be subjected to dredging. 2) Areas of intact lake bed should be probed by drilling to evaluate the sedimentary sequence and recover bone materials in context. This work is easily accomplished during the winter when the ice is thick enough to drive across. 3) Archeological and geological investigations should be conducted *prior to dredging* to evaluate the potential for intact cultural deposits.

Acknowledgements. The authors are grateful to Bill Henry for the personal time and effort he has given to the archeology of the lake. Derek Lee of BCA prepared the figures for this report.

REFERENCES CITED

- Benn, D. W. (editor)
 1987 *Big Sioux River Archaeological and Historical Resources Survey, Lyon County, Iowa.* Report No. 705. Center for Archaeological Research, Southwest Missouri State University, Springfield.
- Bettis, E. A., III, D. J. Quade, and T. J. Kemmis
 1996 *Hogs, Bogs, & Logs: Quaternary Deposits and Environmental Geology of the Des Moines Lobe.* Guidebook Series No. 18. Iowa Geological Survey, Iowa City, Iowa.
- Hoppin, Art, D.W. Benn, L. Blikre, D.G. Stanley and D. Lee
 1999 *A Phase I Cultural Resources Survey of Shoreline and Island Properties, Five Island Lake, Vernon, Emmetsburg, and Freedom Townships, Palo Alto County, Iowa.* Report No. 743a. Bear Creek Archeology Inc., Cresco, Iowa.
- Hoppin, A. and D. Benn
 1999 *Phase I Cultural Resource Survey of a Proposed Dredge Spoil Site in Vernon and Freedom Townships, Palo Alto County, Iowa.* BCA #743. Bear Creek Archeology, Inc., Cresco, Iowa.
- Hutton, M. L.
 1935 *Soundings and Borings in the Lakes of Iowa.* The Iowa State Planning Board project no. 1045.
- Lensink, S. C.
 1981 *Archaeological Investigations in the Prairie Pothole Region of North Central Iowa.* Report submitted to the Kinney-Lindstrom Foundation, Mason City, Iowa. Luther College Archaeological Research Center, Decorah, Iowa.
- 1984 *A Quantitative Model of Central-Place Foraging Among Prehistoric Hunter-Gatherers.* Ph.D. Dissertation, Department of Anthropology, University of Iowa. Iowa City, Iowa.
- Mallam, R. C., and E. A. Bettis, III
 1979 *The Iowa Northern Tier Archaeological Project.* Report submitted to the Kinney Lindstrom Foundation, Mason City, Iowa. Luther College Archaeological Research Center, Decorah, Iowa.
- Martin, J. L.
 1877 *History of Palo Alto County.* Emmetsburg, Iowa.
- McCarty, D. G.
 1967 Growing Up in Emmetsburg. *The Palimpsest* XLVIII(8):340-369.
- Prior, J. C.
 1991 *Landforms of Iowa.* University of Iowa Press, Iowa City, Iowa.
- Stanley, D. G.
 1989 *Phase I Reconnaissance Survey of Selected Tracts Within The Blood Run Locality Lyon County, Iowa.* BCA #35. Bear Creek Archeology, Inc., Cresco, Iowa.

- A) Bird (Swan) Ulna
- B) Ungulate Longbone
Flesher
- C) Socketed Antler Points
(Center provided AMS
date.)
- D) Bird Talon
- E) Bird Bone Tube
- F) Split Bone Awls



(Photo Courtesy BCA)

Figure 2. Photograph of bone and antler tools collected by Bill Henry.

IAS Announcements

Events-Education-News

Iowa Archaeology Month 2000

Plans are now underway to celebrate Iowa Archaeology Month 2000 (IAM 2000), the eighth anniversary of Iowa's premier event to raise awareness and foster stewardship of the state's antiquities, and offer opportunities for public involvement in archaeological discovery and preservation. The support and suggestions of Iowa Archeological Society members are greatly welcomed.

This year, the month of September has been selected for IAM 2000 activities in order to reach out to educators and students, take advantage of milder temperatures for outdoor events, and invite participation by lingering vacationers. Tentative activities include a state-wide poster contest for elementary age students; "behind closed gates" tours of lesser known archaeological sites; a series of "Ancient Technology" workshops; book displays, readings and meet-the-author sessions; behind-the-scenes-peeks at collections; time-capsules from the past presentations; an interactive web site; and several field opportunities. While the Office of the State Archaeologist (OSA), as in past years; will take the lead in sponsorship of this event, the co-sponsorship and cooperation of many other partners are being requested. Additional ideas for activities, tours, exhibits, speakers, and presentations are greatly appreciated.

If you would like to sponsor an event or host an activity, or if you have ideas for presentations to add to this year's calendar, please contact Lynn M. Alex, Public Archaeology Coordinator at the Office of the State Archaeologist (319 384-0561; e-mail: Lynn-alex@uiowa.edu).

The OSA plans to have a booth at the Iowa State Fair in August. Stop by to see a time capsule from the past and to pick up the IAM 2000 calendar of events and this year's poster.

Annual Spring Meeting April 29th, 2000

The Iowa Archeological Society's Annual Spring Meeting will be at the Calkins Nature Center in Hardin County, IA. The banquet speaker and tour guide will be James Collins, of OSA. Pre-registration is required for the luncheon banquet. The tentative agenda is: registration and brief presentations in the morning, lunch followed by speaker James Collins' presentation on Archaeology in Hardin County, and presentation of Keyes-Orr Award. The afternoon features tours of various archaeological sites in the area. All IAS members will receive a registration form via mail.

IAS Web Page at

<http://www.uiowa.edu/~osa/index.html>

Organizations and Meetings

Iowa Archaeology Month 2000 Poster Contest

The OSA will sponsor a poster contest in celebration of Iowa Archaeology Month 2000. We invite elementary aged students to participate.

Students who enter the IAM 2000 poster contest should compose a design(s) that illustrates either (a) the discipline of archaeology or (b) what we know about Iowa's human past as the result of archaeology. Examples might include the techniques and tools of the archaeologist, excavation and mapping, artifacts, sites, or reconstructed "scenes" from prehistory or early history based on archaeology. Students should be aware from the outset that fossils and dinosaurs fall within the scope of paleontology not archaeology.

One illustration will be selected to reproduce as a poster for IAM 2000. The poster will be displayed throughout Iowa in September to promote IAM activities. Entries submitted by other students may be used to illustrate the IAM 2000 Calendar of Events. All original art will be retained and become the property of the Office of the State Archaeologist. The winner of the IAM poster contest will receive a cash award of \$50.00, copies of the poster, and will be invited to meet Governor Vilsack when he signs the IAM 2000 proclamation. The winning student's school will receive a copy of the new book *Iowa's Archaeological Past*, by Lynn M. Alex, University of Iowa Press, 2000, <http://www.uiowa.edu/~uiopress/aleiowarc.htm>

All entries should be executed in colored marker, crayon, colored pencil, paint, or pen and ink, on white drawing paper, either 12 X 18" or 18 X 24" in size. All posters should be packaged flat and mailed to:

Lynn M. Alex, Office of the State Archaeologist
700 Clinton St. Building, University of Iowa, Iowa City,
IA 52242. Ph. (319) 384-0561 or visit OSA web site:
<http://www.uiowa.edu/~osa/edu/edu.htm>

Another Honorary Lifetime Member

Janice Hall joins the special group of IAS members that have contributed to Iowa archaeology either through 30 years or more of membership, or as a recipient of the Keyes-Orr Award. Ms. Hall works for the Putnam Museum in Davenport, has been an IAS member for 30 years, and has been of great assistance to the IAS membership.

IAS Journal Half-Price Sale

The IAS is having a Journal back-issue sale! All IAS Journals from 1996 and earlier (except for those out-of-print are being offered at 1/2 the normal cost, and issues of the IAS Newsletters for 50 cents apiece. Add postage. This is your chance to get those issues that are missing from your library.

The Office of the State Archaeologist in the 21st Century

by William Green

What will the new century hold for the Office of the State Archaeologist? Let's begin by reviewing the OSA's mission and activities, then some of OSA's resources and particular strengths, and finally some specific objectives and plans for the future.

The mission of the OSA is to develop, disseminate, and preserve knowledge of Iowa's prehistory and history through archaeological research, service, and education. The position of State Archaeologist was established in the late 1950s. State law requires the State Archaeologist to be a faculty member of the University of Iowa department of anthropology. Additionally, the OSA is an "Organized Research Unit" of the University, meaning that the State Archaeologist, who is appointed by the Iowa State Board of Regents, heads the OSA and reports to the University's Vice President for Research. The State Archaeologist consults regularly with the OSA Advisory Committee, whose members include on- and off-campus colleagues including the IAS president, and with the OSA Indian Advisory Committee, whose members include individuals from several tribes.

Over the past 40 years, the OSA and its staff members have published thousands of articles, monographs, research reports, and abstracts on Iowa archaeology. Staff members also have presented thousands of public programs throughout the state. The OSA has conducted research in all counties on sites of all types and time periods, supported by contracts and interagency agreements, by research grants, and by field schools. The OSA coordinates all work pertaining to ancient burials in Iowa, in accordance with the landmark 1976 state law on protection and reburial of human remains. In addition, the OSA is the central data manager for all recorded Iowa archaeological sites, the central repository for Iowa archaeological collections, and coordinator of the Iowa avocational certification program.

The core strengths of the OSA are:

1. A tradition of high-quality work
2. A highly experienced and motivated staff
3. Excellent relations with other state agencies and University offices, and
4. Extensive, accessible collections and other research and service resources.

The OSA's most important resource is its staff, a dynamic and highly qualified team that represents hundreds of years of experience in Midwest and Plains archaeology and cultural resource management. The full-time staff currently includes three individuals with Ph.D.s and an additional 20 with Master's degrees. Part-time staff members all have extensive archaeological experience and most have a field school background and Bachelor's degrees in anthropology. After many years in the Eastlawn building and several other buildings on the University of Iowa campus, the OSA moved in 1998 into a newly renovated 13,000 square-foot

facility. The University directly supports OSA administration and the burials program, and contributes significantly to site records, documents, and collections management. About 85 percent of OSA activities, including most of the field research, is supported by external, non-University funding.

The challenge for the coming years is to build on these strengths and resources in order to most effectively conserve and learn from Iowa's archaeological resources. In particular, it is essential to generate broader and deeper public awareness of archaeology—Iowa archaeology specifically. As Lynn Alex indicates in OSA News in this issue, we are already conducting a wide array of programs in public archaeology. These activities need stable, long-term support in order to ensure maximum impact. Therefore, our key initiative for the next few years is a new Public Archaeology program.

Public Archaeology will establish a cohesive outreach framework in which public participation plays the central role—it will bring archaeology to Iowans and Iowans to archaeology. The goal of Public Archaeology is to provide the best possible archaeological opportunities for the greatest number of Iowans. The message is simple: (1) Iowa's past contains a long and rich record of human achievement, with many valuable lessons for today and the future, and (2) archaeological methods and approaches have enormous value in other sciences, social studies, and humanities fields. Public Archaeology will serve educators, museums and historical societies, local and state agencies, Native Americans, and civic groups around the state. Public Archaeology will provide these groups with innovative programs that inform and involve participants: public field schools, multimedia presentations, hands-on archaeology workshops, guided tours of archaeological sites, "open-lab" programs, interactive electronic resources, and clinics and continuing-education opportunities for educators.

The OSA and the University of Iowa Foundation will soon begin a major fund-raising campaign to support Public Archaeology. We plan to work with IAS members in order to establish broad support for this new approach to public outreach and education.

The OSA also plans to maintain and expand its existing research and service programs. Preservation and conservation activities will continue, and we anticipate more extensive cooperative work with the State Historical Society of Iowa, Iowa State Preserves Advisory Board, Iowa Natural Heritage Foundation, The Archaeological Conservancy, and county and local zoning and planning boards. We also look forward to greater consultation with Indian tribes on a wide array of preservation and research issues. Research in general will more extensively apply modern technology (GIS, GPS, geophysical survey), and reanalyses of existing

collections by students and other researchers also will become more important. Our publication program will expand, both through traditional reports and articles and through electronic means. Finally, in order to promote effective research and planning, the OSA will supply appropriate levels of remote access to data on archaeological sites and

collections and will seek to promote easy submission of new data by professionals and non-professionals.

These are just some of the prospective OSA goals, programs, and activities for the future. We look forward to maintaining and expanding our many partnerships with the IAS in order to make these exciting possibilities really happen.

**The Status of Iowa Archaeology at the Beginning of the 21st Century:
Perspectives from the State Historic Preservation Office
by Douglas W. Jones, Archaeologist SHSI**

As we enter a new millennium and century, an opportunity presents itself to briefly reflect on the archaeological accomplishments of the past century in Iowa as well as to consider what the future may hold for Iowa Archaeology.

Archaeological resources are just one type of historic property that contributes to the understanding of the story of humans in Iowa. The State of Iowa's archaeological record is comprised of different types of sites, features, artifacts, and cultural landscapes spanning the last 14,000 years. A great wealth of archaeological information was accumulated during the last century. Approximately 19,000 archaeological sites were documented throughout the state during the past century. Considering that less than 10 percent of the state has been surveyed for archaeological resources, it is certain that many more archaeological sites will be identified in the new century.

The State of Iowa contains unique and significant archaeological resources as witnessed by the six archaeological sites and districts from Iowa that have been designated as National Historic Landmarks. Unfortunately, only a small number of the identified significant archaeological sites in Iowa are listed on the National Register of Historic Places. There are many additional significant archaeological sites that have been identified and are eligible for listing on the National Register. However, interest in nominating archaeological sites from Iowa to the National Register has greatly diminished. As a result of this, our office and the Office of the State Archaeologist will be exploring ways to insure that lists of the significant sites will be maintained in the new century.

The preservation of Iowa's archaeological record was accomplished in the last century through the identification and preservation of significant sites; through consistent documentation of archaeological research and resources; and through curation of artifacts, documentation, and reports. These tasks were supported and completed through partnerships between federal and state agencies, local governments, historic preservation commissions, professional archaeologists, American Indian Tribes, and

amateur archaeologists. The creation and issuance of the *Guidelines for Archaeological Investigations in Iowa* during 1999 bears witness to the effectiveness of these partnerships. These partnerships will need to continue into the new century to address current problems of management and accessibility of archaeological records and documents, management and curation of artifact collections, and distribution of archaeological information to the public.

Archaeological resources are arguably the most threatened and vulnerable types of historic property in Iowa. This is primarily because archaeological sites are generally less apparent or visible than other types of historic properties such as buildings. Often they are not identified until a ground disturbing activity has impacted them. Unfortunately, many of the areas throughout the state that were desirable to live in during the past are still highly desirable areas to live in today. Many identified and unidentified archaeological sites have been destroyed or severely damaged by various types of ground disturbing activities. During the past century, agricultural activities were largely responsible for these activities, as 99 percent of the land within the state of Iowa has been significantly altered for agricultural purposes during the past 165 years. At the end of the last century, urban sprawl posed new threats to the preservation of archaeological sites located near the rapidly expanding urban areas. From the perspective of our office, one of the greatest challenges for the next century in Iowa archaeology will be dealing with issues of land since the politics surrounding these issues will determine whether sites will be preserved or destroyed. The archaeological surveys and cultural resource planning efforts during the past century will hopefully be considered in evaluating and developing future land use laws and policies.

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The Office of the State Archaeologist has recorded 19,000/20,000 archaeological sites in the state of Iowa. This number is growing, on average, of 500 new sites recorded each year.

IAS PRESIDENT'S REPORT, by Joe Tiffany

Hello everyone! The Society had another very productive year. Robin Lillie, Membership Secretary, reports that the IAS had 498 members at the end of 1999 of which 37 were new members. To date, Robin says we have 350 members who have already rejoined for this year. These are great numbers and consistent with the 514 members for 1998 and the 475 members we had the year before. We are targeting 500 members, and I think Robin is doing a great job on that goal. (She has a "system," remember?).

Linda Forman, the IAS Treasurer, reported at our last Board meeting that we now have close to \$25,000 in the bank. There are some bills to pay yet, but this figure is remarkable, and I think you will all agree that the Society is finally, really, on sound financial footings. The Society's new Research and Education Fund already has over \$1,000 in it from membership support. I think this is great news and underscores the strong support the membership provides for the IAS and for innovative new directions and programs.

Our 1999 Spring and Fall meetings at the Putnam Museum and the Hitchcock Nature Center respectively were well attended. My thanks to our speakers and tour leaders and to everyone who have worked so hard to make our meetings a success. Be sure to plan on attending the Spring 2000 meeting of the IAS. We will meet at the Calkins Nature Center in Hardin County near Iowa Falls. Jim Collins of the Office of the State Archaeologist will be our featured speaker. Jim will tell us about the archaeology of the Iowa River Greenbelt and his on-going research in this reach of the Iowa Valley. A site tour is also planned. There are many folks locally with impressive collections from the Iowa Valley, and this area has received a lot of professional and amateur archaeological work and interest over the past 20 years. We all look forward to learning more about Greenbelt archaeology.

Lots of events and activities are planned for the Society this year, and many focus on our upcoming 50th anniversary. The Office of the State Archaeologist is planning a booth at the Iowa State Fair again this year. IAS materials will again be made available, and I imagine as in year's past, Central Iowa Chapter members will help at the booth as well. Be sure and stop by when you are at the fair.

At our recent Board meeting, we counted at least 7 planned or scheduled field schools in Iowa this summer. Some are open to IAS participation, others are for academic credit only. Check again with Lynn. Field school information is also posted on the Office of the State Archaeologist home page (<http://www.uiowa.edu/~osa/>).

The big item on our platter is the 50th Anniversary celebration. The 50th Anniversary Committee has come up with a list of several projects. Here is what we are planning to do: a history of the society based on past newsletters, and the like; a photo exhibit and new Society logo to be unveiled at our Spring 2001 meeting; IAS chapter histories

which I understand are all underway; a membership drive; a Governor's proclamation; special issues (cover/design) for the journal and the newsletter during 2001 (both publications will have articles which focus on the history of Iowa archaeology and the Society); a tour of sites (in the works); a revamp of the IAS web page (also in the works); marketing items (hats, T-shirts, IAS name badges for meetings and events); and indexing the Newsletters (still in the talk stage). Of course, Iowa Archaeology Month in 2001 will focus on the IAS anniversary. If you have ideas for activities or events associated with the 50th Anniversary of the IAS or would like to help, please let me or Jon Sellars know (515-333-4607; jsellar@lennox.heartland.net).

Looking ahead into the new century (we are not quite there yet, but it is never too early to start thinking about things), several issues come to mind with regard to the IAS. First, we have a hard working and dedicated group serving on the board and as officers. We need new faces and new voices to step forward, however, to carry the Society forward. Please consider becoming more active with the Society at the state level, and if you are interested, contact Bill Green, who is the Nominations Chair for the IAS (bill-green@uiowa.edu; 319-384-0725). Second, we need to have active, on going programs in site survey, lab and fieldwork in which members may participate. The Certification Program is a great start in this direction, but now we need to make opportunities for participation in archaeology available on a regular basis. The Public Archaeology Coordinator position at the Office of the State Archaeologist, which Lynn Alex now fills, is an excellent start. Professional archaeologists who are members of the Society, however, need to be far more proactive in this important service area. Three projects last year, work at the Daisy Long site, Cindy Peterson's survey at the Cedar Bluffs preserve, and Doug Jones' work with the Central Iowa Chapter in surveying Living History Farms are examples of the kind of support Society members can and should seek from the professional community. Third, we are a well-funded organization now, but there was a time in the not too distant past, when we were living on the edge.

The Society now has developed special funds accounts for Research and Education, and the response by the membership as mentioned earlier, has been excellent. Consider other ways of giving to the IAS, which will insure that the things we have all worked for and support will continue in the next hundred years. Remember, the Society is a not-for-profit organization, and your contributions are tax deductible. Finally, Iowa sites and Iowa archaeology are in many ways more endangered than when the Society formed nearly 50 years ago. The Society's support is needed when important sites like Blood Run are endangered, or when federal funding might help secure a large land (and mound group) acquisition to Effigy Mounds National

Monument. Your letters and voices to our state and national representatives are heard, far more so than when professional archaeologists write to our political leaders. When Bill Green, the State Archaeologist, sends out a call

for help to preserve sites, please heed that call. The heritage we give to the next generation is based on the work we do now. Have a great year!

Technology in the New Millennium

by Kris Hirst

The start of a new millennium doesn't really mean a whole lot to archaeologists. Most of us realize that calendar dates are cultural phenomena that don't really mean very much. Certainly there are many other calendars; this year in the Hebrew calendar is 5760, the Maya calendar puts us in the 12th bak'tun; it's the 89th year in the Republic dynasty in China. It's not even 2000 years after the birth of Christ; most scholars agree that the rabbi Jesus was born 4 BC. So, the year 2000 is 2000 years after the time picked by someone with limited math skills as the year of a rabbi's birth. Let's party!

But while there isn't a lot of significance in the date, what the turning of the calendar might provide us with is a reason to consider the changes that our recent past has wrought. This is, so the newspapers and magazines would have us believe, The Information Age; and like the rest of society, Iowa archaeologists have been the beneficiaries of the changes in information technology. Three advances in technology leap to my mind when I think of Iowa archaeology: GIS, remote sensing, and the Internet.

A Geographic Information Systems, called GIS for short, is "an organized system of computer hardware, software, geographic data, and personnel designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information" (ESRI 1996). Think of it as a computerized map, on which you layer information; say you have a topographic map of the state of Iowa and you want to overlay the locations of every known early historic site in the state on it. Sounds pretty useful; but what if you can also add information taken from the original 1830s government land office surveys, which show specific vegetation and early cabin sites to the map? And how about navigable rivers or early roads? When placed within a GIS system, all of these data may be manipulated and used to learn new things, get new ideas and a broader perspective on Iowa history and prehistory. The State Historical Society of Iowa, in partnership with the Office of the State Archaeologist and with funding from the Iowa Department of Transportation, is presently creating GIS layers for all Iowa's archaeological sites, archaeological survey areas, and historic buildings in the state (Artz 1999). Results from this project are on the world wide web at http://www.uiowa.edu/~osa/GIS_at_OSA.

Remote sensing is another technology-driven change that Iowa archaeologists have put to good use. Remote sensing

includes a whole range of techniques from infrared aerial photography to electrical resistance meters, soil conductivity meters, gradiometers, and ground penetrating radar. These techniques allow us to sense changes in a landscape resulting from cultural disturbance that are not visible to the naked eye. Subtle changes in soil temperature, in soil texture, in vegetation growth, can be noted by the use of sensitive mechanical equipment or infrared photography from airplanes. Remote sensing has been used in Iowa to detect unmarked cemeteries and mounds, which have been plowed to oblivion—at least to the human, standing at ground level. One group that has used remote sensing in Iowa is the Institute for Minnesota Archaeology, who performed a survey up at the Turkey River Mound group. You can read about their work at a project in Red Wing, Minnesota on the web at <http://www.fromsitetostory.org/sources/papers/rwlremotesensing/rwlremotesensing.asp>

Computers as a whole have made a huge difference in the production of manuscripts from Iowa archaeologists, as well as enabling statistical analyses and compilation of bibliographic databases for research; but of course the most influential use of computers in research is the result of the burgeoning of the Internet. The Internet combined with electronic mail services ("email") allow archaeologists in Iowa to connect instantly with one another and with researchers around the world. Because of the various formal and informal communication capabilities of the Internet, we are now able to share questions of techniques, strategies, planning, and identification of artifacts and processes with our fellow researchers around the globe. And along with the Internet's capacity to communicate with our fellow scientists come a capacity and a responsibility to communicate our information to the public. Today we can publish big glossy photographs of our archaeological digs and provide it to the public at no more cost than the machine and an Internet connection. One good example of this is the Cowan site report, at <http://www.uiowa.edu/~osa/research/Index.htm>

I guess the most exciting thing about living in the year 2000 for me, is thinking about what the new technology will bring us, what new techniques lie in store for us in the decades, centuries, and millennia ahead. Okay, that we can celebrate.

IAS Chapter News

Blackhawk Regional Chapter

In December Angela Snook and Heather White gave presentations on archaeological evidence preserved by volcanic eruptions in Pompeii and Thera. Werner Sells continued the theme with slides and discussion of Pompeii for January's meeting. David Benn, Bear Creek Archeology, revealed some of the new details about the 5 Island Lake site near Emmetsburg for the February meeting. Marie Cook replaces Steve Lee as the new chapter president.

Contact Marie Cook
1622 West 7th Street, Cedar Falls, IA 50613
(319)-266-0572

Paul Rowe Chapter **Contact Dennis Miller**

31126 Applewood Rd., Silver City, IA 51571
(712) 525-1007
Farming99@aol.com

Northwest Chapter

Chapter members visited the Buena Vista County Historical Museum to view the F.L. Van Voorhis collection in November. In January members explored the Stiles collection at the Sanford Museum. Joe Beals summarized the Beals site investigation in February.

Contact Jason Titcomb or Linda Burkhart
Sanford Museum, 117 E. Willow
Cherokee, IA 51012
(712) 225-3922

Southeast Iowa Chapter

February 21st marked the first chapter meeting of the year. Guests and members joined in the planning for the Chapter Archaeology Workshop on March 18th at the Indian Hills Campus. Activities planned include judging of outstanding local collections, video tape presentations, pottery making, flintknapping, site recording and an atlatl throwing contest.

Contact Anton Till
16388 Second St., Hedrick, IA 52563
(515) 684-6551

Central Iowa Chapter

During the January meeting, updates and projected activities were reviewed for the Lithic Tool Project and Living History Farm Survey. A business meeting was held, and a committee was formed to work on the chapter history for the IAS 50th Anniversary. David Gradwohl recounted impressions from a recent trip to China by presenting "Yankee on the Yangtze: Reflections of a Plains Anthropologist on China and it's Archaeology" for the February 20th meeting.

Contact Mike Heimbaugh
3923 29th St., Des Moines, IA 50310
(515) 255-4909
paleomike@msn.com

Quad Cities Archaeological Society

Contact Ferrel Anderson
1923 East 13th St., Davenport, IA 52803
(319) 324-0257

Have you renewed your membership for 2000?

Check the mailing label on your newsletter. If the number in the upper right-hand corner is NOT 2000, you have not paid your dues. Membership runs from January through December. Send in your dues now. For information on the amount and where to mail them, see the back page of the newsletter.

Call for Papers for the IAS Annual Spring Meeting

The IAS needs volunteers for presentations for the spring meeting. If you would like to present a paper or other archaeological information please contact: Joe Tiffany at (515) 294-1708 or e-mail: jtiffany@iastate.edu.

New Publication From OSA

Report No. 21

Bison Hunters of the Western Prairies: Excavations at the Dixon Site (13WD8) Woodbury Co., IA. Edited by Richard L. Fishel. With contributions by: Robin M. Lillie, Toby Morrow, K. Kris Hirst and John Weymouth, to name just a few. This book, on Oneota studies and Plains-Midwest archaeology in general, documents a 14th-century village site in northwest Iowa. Highlights include documentation of: domestic dwellings, detailed floral and faunal analyses, ceramic attribute studies, and lithic analyses. **Report No. 21 Office of the State Archaeologist University of Iowa, Iowa City.** (218 pp., \$ 19.95 plus \$3.00 Shipping). Orders: Publications Order Service, University of Iowa, Iowa City 52242-1602 or call toll free (800)-384-2665.

OSA NEWS



A SPECIAL SECTION OF THE IOWA
ARCHEOLOGICAL SOCIETY NEWSLETTER

PUBLIC ARCHAEOLOGY & EDUCATION AT OSA

Iowa is fortunate in having a public which, in general, is sensitive to its archaeological past. Many sites and finds have been recognized and saved because of the efforts of people who understand the importance of Iowa's cultural resources. Organizations including the State Historical Society, the Office of the State Archaeologist, the Iowa State Preserves Board, county conservation boards, county and municipal historical societies, and especially the Iowa Archeological Society have been exemplary in this regard. The IAS has been an integral part of public education in archaeology for almost half a century now.

Iowa's professional archaeologists recognize the value of public awareness and involvement. One of the major goals of the OSA is to expand outreach efforts to more effectively educate and include Iowa citizens in the discovery and preservation of the state's archaeological past. The OSA, often in partnership with the IAS and other organizations, offers a growing list of opportunities available to educators, students, and the interested public. The addition of a public archaeology coordinator position to the OSA has facilitated these efforts.

In addition to the events offered throughout the annual Archaeology Week/Month (including a poster contest this year!), the OSA hopes to partner with other organizations in providing expanded field opportunities, the number one request among IAS members. Like the Mahaska County survey, Hardin County excavation, and Living History Farms survey of 1999, the coming years promise additional opportunities for site survey and excavation throughout the state. In A. D. 2000 a historic-archaeology workshop in Johnson County, excavations at Ft. Atkinson, and exploration of a Meskwaki trading post near Amana represent just a few of the fieldwork possibilities. These experiences and the potential for follow-up lab

work encourage those enrolled in the IAS certification program. A list of e-mail addresses for IAS members and others who would like notification of imminent archaeological opportunities is now maintained at the OSA.

The OSA continues to arrange and provide presentations on Iowa archaeology for schools and other organizations. This past year a successful grant request through the Iowa City/Coralville Convention and Visitors' Bureau allowed a wider net to be cast in the world of archaeology with the sponsorship of two public lectures on the Neandertals. OSA staff recently have also been involved in the preparation of a traveling exhibit on the investigations at Gilbert's trading post, and new interpretive exhibits at the Toolesboro Mounds Visitors' Center, Herbert Hoover Presidential Library and Museum, UI Medical Museum, and the History Center in Linn County.

A new video entitled "Modern Methods in Iowa Archaeology," funded by the National Park Service through the SHSI and produced by the OSA and the University of Iowa, introduces viewers to the use of nondestructive techniques to investigate a number of Iowa sites including Effigy Mounds and Plum Grove. It is the newest addition to a video lending-library maintained by OSA. Additional materials prepared and offered by OSA include brochures on various aspects of Iowa archaeology (Iowa's Culture History, ancient technology series, Ancient Mounds), teacher resource packets, and several traveling displays. The OSA library maintains reports and articles pertaining to Iowa and regional archaeology and a special section just for educators.

The OSA web page (<http://www.uiowa.edu/~osa/index.html>) provides access to and information about most of these resources and useful links to many others. In addition, two features, "Ask an Archaeologist" and "What in the World" offer interactive programs for those time-traveling through cyber-space.

In the coming decade, the OSA hopes to increase funding for public outreach, expanding its partnership with many other organizations, agencies, and tribes throughout the state. An established and funded speaker's network could more

reliably meet the need for public presentations, workshops, and classroom experiences. A series of traveling kits; new videos, publications and brochures; regular tours of Iowa sites (virtual and real); workshops and field opportunities; and expanded web resources are high on the public archaeology wish-list. Continued sponsorship of Iowa Archaeology Month and liaison with the IAS and its regional chapters will remain top priorities.

For information on these and future opportunities please contact:

Lynn M. Alex
Public Archaeology Coordinator
Office of the State Archaeologist
700 Clinton Street Building
University of Iowa
Iowa City, Iowa 52242
(319) 384-0561; lynn-alex@uiowa.edu

Through two new books and videos, OSA strives to share archaeological results with the general public. *Bison Hunters of the Western Prairies: Archaeological Investigations at the Dixon Site (13WD8), Woodbury County, Iowa*, edited by Richard Fishel (1999), details OSA's 1994 salvage excavations conducted at the 14th century Dixon Oneota village along the Little Sioux River. Highlights include documentation of several Oneota houses plus detailed analysis on utilized plants and animals, as well as studies on the ceramics and lithics from the site. Site geomorphology and analysis of human remains recovered from the site are also discussed. The book's final chapter presents an overview of Oneota in northwest Iowa and discusses possible migration routes and external contacts.

Lynn Alex's *Iowa's Archaeological Past* (2000) draws upon past and recent discoveries to describe Iowa's unique archaeological record. The core of this book—which includes many historic photographs and maps as well as new maps and drawings—details what has been learned from the study of this record. She describes Iowa's earliest settlements, the development of farming, the role of the environment, geomorphology and the burial of sites, historic tribal affiliation and the arrival and impact of the Euro-Americans. Finally, she examines the question of stewardship and the protection of archaeological resources.

Archaeology Items of Interest

Archaeology Workshops

Can You Dig It? The Johnson County Historical Society has received a grant from Humanities of Iowa and the National Endowment for the Humanities to conduct a workshop for educators and the interested public. "Can You Dig It? Integrating Archaeology and History." will be held 9am - 4pm, July 24-28 at the Heritage Museum in Coralville. \$75.00 fee will cover costs of instruction, programs, workshop materials and commute to sites. Lynn M. Alex, Public Archaeology Coordinator for the OSA will introduce participants to the discipline of archaeology and its methods. Contact Lynn at (319) 384-0561 or lynn-alex@uiowa.edu for information.

Time Capsules: "Sending Today to Tomorrow: A time Capsule Workshop" will be open to the public and held via the ICN April 26th, 2pm - 5pm. Sponsored by Humanities Iowa and Iowa Conservation & Preservation Consortium. Participate in this opportunity to explore what represents Iowa's culture and how to prepare items for a time capsule. Contact Nancy Kraft (319-335-3922) or Kristina Venzke (319-335-4153) for site and fee information.

Field Schools

May 8-26 - UNI; Protohistoric Oneota Orr Focus occupations existing upstream from Decorah; volunteers welcome. Contact Michael J. Shott. Dept. of Sociology and Anthropology, UNI, 319/273-7337, e-mail at: shott@csbs.csbs.uni.edu

May 15-June 2 - U of I; Continued work on Plum Grove, other Johnson Co. historic sites; college credit; volunteers dependent on time they can dedicate. Contact Tom Charlton, Dept. Of Anthropology, U of I, 319/335-0535, e-mail at: charlton@blue.weeg.uiowa.edu

May 20-21 - Central Iowa Chapter and Living History Farms; Field Survey of agricultural fields at Living History Farms; volunteers welcome. Contact Michael Heimbaugh at 515/255-4909 or e-mail at: paleomike@msn.com or Doug Jones at 515/281-4358 or e-mail at: djones@max.state.ia.us

May 21-June 16 - Iowa Lakeside Laboratory; Oneota village site near Iowa Lakes region; college credit. Contact Dr. Joseph Tiffany or Linda Hagland, Dept. of Anthropology, www.public.iastate.edu/~Lakeside/homepage.html

June 19-July 28 - U of I American Indian & Native Studies and various cooperating organizations; focus on excavation at two Winnebago Indian village sites near Fort Atkinson: college credit; Contact John F. Doershuk, OSA, U of I at 319/384-0724; e-mail: john-doershuk@uiowa.edu or contact Larry Zimmerman American Indian and Native Studies Program, U of I at 319/335-0006, e-mail at: larry-zimmerman@uiowa.edu

July 9-15 - State Preserves Advisory Board of Iowa; field school focusing on two state preserves in Fort Atkinson area; Tuition and Fees \$250.00; Contact Diane Ford-Shivvers at 515/281-0878 or e-mail at: dfordsh@max.state.ia.us

Summer 2000 - Luther College; 6 week, college credit field school; Oneota site along the Upper Iowa River. Contact Colin M. Betts, Dept. of Anthropology, Luther College, (319)-387-1284 or e-mail at: bettscol@luther.edu.

Be sure to attend the IAS Spring Meeting on April 29th

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

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