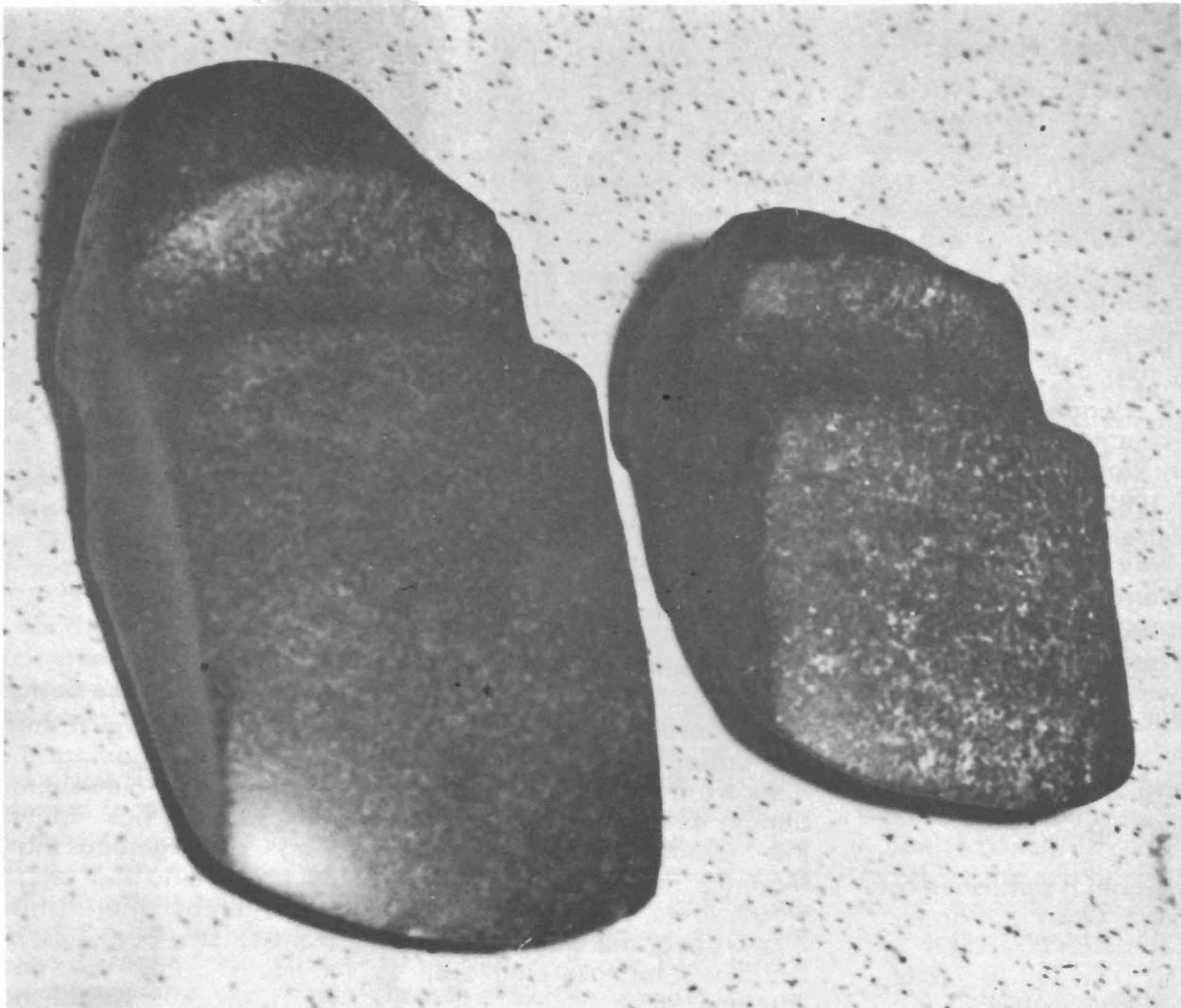


newsletter

KEOKUK AXES from S/EAST IOWA



PRESIDENTIAL REMARKS

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 archeology of Iowa and the Midwest.

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The Newsletter is published four times a year. Questions about your subscription should be addressed to the Office of State Archaeologist, Eastlawn, University of Iowa, Iowa City, Ia. 52242. All materials for publication should be sent to the editor.

At this writing (early December) I am pleased to report that our efforts to raise the condition of the Societies' financial health has paid off somewhat. You might say it has improved from "very critical" to "critical". This is wholly due to the most grateful response by a few of our members who have sent Ruth Thornton, our treasurer, tax deductible donations. Such gifts may be likened to a desperately needed transfusion to a very ill patient. Many, many thanks! Of course "critical" is a long, long way from being "well" so, if we are to continue with our present publication program, we are going to have to do more. Your board of directors, officers and committee members are working hard to seek tax deductible endowments from industry as well as private individuals. How may private individuals help in this manner? See results of committee study published on page 2&10 of this Newspaper.

The Fall meeting held October 25, 1981 was a great success. An open board meeting was held in the Eastlawn Bldg., Office of State Archaeologist, Iowa City, Ia. in the morning. Of course the most important subject was again finances. As a result of a discouraging treasurer's report, your board approved a recommendation to raise the active dues from \$7.00 to \$10.00 per annum subject to approval by the membership at the Annual Meeting to be held at Glenwood, Iowa, April 24, 25, 1982. If approved, the actual increase could not be instituted until 1 January 1983.

After lunch, in town, the Keyes Chapter assisted the State Historical Society in displaying a representative assortment of ar-

tifacts from the famous Keyes collection which is housed in the basement of the Historical Society building not normally accessible for viewing. Needless to say the standing room only attendance was excited at the chance to view some of these most elaborate finds. Most of the material was picked up during the 1930's when freshly plowed fields were seldom trod by other collectors.

Space does not allow for the much deserved praise for this exhibit and the program presented. To those to whom we are indebted, many thanks:

Loren Horton, Acting Director,
Iowa State Historical Society
Duane Anderson, State Archaeologist
Joe Tiffany, Asst. State Archaeologist
Tobby Morrow, Student, University of Iowa

And thanks to those who worked behind the scenes to make this meeting an outstanding event.

From the Finance Committee

Beyond our more immediate concerns for getting the 1982 Journal and Newsletters out, the Society has some long-range funding needs that should be brought to the attention of the membership. Unless we want to see our dues increase radically over the next few years we must establish an endowment and begin to supplement our dues with money generated from our investments. The question arises, where

cont'd Page 10

From the Editor

The start of a new year is a good time to evaluate our present situation and to establish goals for the future. The economic conditions of the country in the winter of 1981-82 creates a lot of doubts about the coming months and perhaps years. Many people face lay offs, poor employment prospects, and a greatly inflated cost of living. Such conditions have a direct impact on organizations such as the Iowa Archeological Society. It is difficult to convince people they should provide financial support to an effort that studies and preserves past cultures when there is so much concern about the survival of our present society.

The economic situation requires all of us to re-evaluate our priorities. Membership in I.A.S. may seem like an expendable frill to some people, but the destruction of sites and the need for an awareness of our archeological resources continues even in hard times. If anything, the private sector may have to pick up projects that are abandoned due to state and federal budget cuts. It is probable that archaeological work will be conducted by more volunteers in the next few years. For this reason and many others, we must keep I.A.S. alive and well.

The Finance Committee has made several recommendations for the future economic health of the Society. In addition, we should all recruit as many new members as possible. Beyond this we should make certain that our publications and programs are of sufficient quality that individuals and institutions will want to join the Society. The future of I.A.S. and archaeology in Iowa rests in the collective hands of all of us who share a concern for the preservation

and interpretation of our rich heritage.

Special thanks to all of the contributors to this issue of the **Newsletter**. One of the best ways to support the goals of I.A.S. is to share your archaeological knowledge and resources. If you are a collector, wouldn't you like to see a picture or drawing of your artifacts in print? This winter is a good time to share your discoveries with your fellow Society members.

Finally, we are looking for photographs or drawings that will make attractive covers. We would like to feature fine artifacts and drawings or photographs of sites that relate to Iowa archaeology. If you need technical advice or assistance, please contact the editor or associate editor. One way you can contribute to the **Newsletter** is to have a professional photographer produce photographs of artifacts in your collection. The cost is usually minimal and you will enjoy being a part of the **Newsletter**.

The challenges we face as a Society are exciting when you consider the benefits. Our expanded knowledge about Iowa's past may be crucial to understanding how we can survive in an age of scarcity. The clues each of us possesses in our minds, artifact collections, and sites are vital components in our quest for knowledge of the past. As a Society, we have a major task that will not be accomplished unless we do it. We wish you and our Society the best in 1982.

Subscription to the I.A.S. **Newsletter** and **Journal** may be obtained by joining the Iowa Archaeological Society. Please

send dues to Mrs. Ruth Thornton, 326 Otsego Street, Storm Lake, Iowa 50588.

Dues \$ 7.00 Active
\$15.00 Sustaining
\$ 5.00 Student
\$ 7.00 Institution

THE KEOKUK AXE

BY GLENN R. HUMMELL

Stockport, Iowa 52651

An unusual type of grooved stone axe, the Keokuk, is found in our area of Iowa. These axes are of the half-grooved variety and are very well made. These axes are square with raised grooves that are a little deeper and wider than on some of the other type of axes found in this area. The grooves run diagonally at a slight angle from the top to the bottom. The poll is flattened and nearly square. The top and bottom are nearly always straight and parallel, except from the grooves to the end of the poll. The top and bottom are slightly hollowed on several I have seen, on some more than on others. This flute is thought by some to have been used for wedges to tighten the handle when it became loose.

The KEOKUK axe is found mostly in the southeastern quarter of Iowa, but no doubt overlaps into Missouri and Illinois. I have seen several that were found along the Des Moines (Keosauqua Sepo) and the Skunk (Chi-Ca-Qua-Sepo) Rivers and their tributaries.

The axes are generally not too large. The two KEOKUKS shown on the cover are average size. The larger axe weighs 1½

cont'd. page 10

13MR95

by John E. Feeley

I would like to describe a site my wife and I have been monitoring for the last year and a half. The site is located along the Iowa River, between the towns of Union and Liscomb, and the best approach is by boat from upstream. Because the site is located directly along the water line on a high cut bank, two key erosion elements of nature, wind and water, have rapidly exposed the site. This has provided us with an excellent opportunity to watch the limits of the site expand.

Last year we knew the site to be 10 meters long, and it ran directly up to a vertical river bank, 10' above normal water level. The topography around the site is very flat, and would be subject to 50 year floods. What impressed us most was the depth of the habitation zone, 123 cm below the sod zone. This is a fairly deeply located site, and we knew that no nearby hills had slumped over time to contribute to this. There would be some build-up from floods, but the soil composition was not the normal silty deposit. Due to this depth, we hoped we were dealing with a site from the Early Woodland to perhaps the Archaic period. What we now needed was evidence.

The habitation zone varied from between 5 to 10 cm. We lightly troweled the exposed profile of the bank to see if we could establish a plow zone, or any other changes in the profile. There was some slight change in soil color, but no distinct divisions. The habitation zone was composed of hundreds of chert flakes, with a few larger cores occasionally. Only a small portion of this material showed the effects of heat treatment. From all of those flakes we never found one tool or pro-

jectile point for identification purposes, but our hopes were high.

We continued our float trips to the site all last summer and fall, and finally had to stop at ice-up time.

Our first trip down river this spring brought unexpected results. The spring ice flow had exposed the site to an extent that was hard to believe. The exposed face of the site was now over 70 meters long, and the habitation zone well defined. We continue to gather stone material, but now a new element entered the picture: bone. The bone was nearly a powder in composition, the results of the weather and soil acidity. We were now certain that it was only a matter of time before this site revealed its age.

More float trips produced more material, including preforms and hammerstones. Our big break came in July of this year. Our boat was about 20 meters upstream from the site, but there was no guessing about what was now exposed: three fire pits! We worked our boat in close to these features, and decided what to do next. The water along the site is quite swift at times, and up to 6' deep. A narrow clay ledge was between the boat and the vertical bank, and provided a handhold. The central pit was centered in a tall column of dirt, 4' wide, 2' thick, and 7' tall. From its appearance, it could change from a vertical to a horizontal position at any moment, and we didn't especially want it to occupy the middle seat of our boat! However, we had waited too long and made too many trips down river to let this get away from us. Given a choice, we would have gone on down river and left for the day, con-

tacting the O.S.A. for their help in this exploration. We also knew that this key feature would be gone soon, and this would be our only chance to at least profile it. We first photographed all three features in situ, so a record would exist no matter what the future produced. We next took all of our measurements. The pits were 75 cm across in average, and up to 30 cm deep at their centers. Nancy was elected to do a limited profile to recover what we could, without destroying the scientific value of this feature. We still entertained hopes of getting Duane Anderson to the site before nature won out. As Nancy troweled, I held the boat close to the bank, in an attempt to catch any material in its bottom, that might escape her hand. The ash layer was very compressed, and consisted of burned bone, fire cracked stone, and hundreds of secondary flaking chips, from thumbnail size on down. From the side of the pit she recovered a tooth, from a deer sized animal. We also recovered some bone fragments along the outside of this pit, for possible later identification. Finally our break came, the base from a projectile point. (See Fig. 1). It has a concave base, ex-



Fig. 1 Broken Point

panding tangs, and is side-notched. It also has the shiny, waxy appearance of heat treatment. There is a flute extending up one side from the base, ending in a hinge fracture. This was most likely the result of thinning the cross section (although we would love to think otherwise). Its style fit well into the time period we were hoping for, and the pit produced no ceramic material, nor has the rest of the site. Content with our recovery, photographic record, and measurements, we looked the rest of the site over. The entire habitation zone was now well defined, and we recovered another hammerstone and several more preforms. The zone averaged from 7 to 12 cm thick, and was composed of large amounts of flake debris. From the thickness of this zone we knew the site had seen many years of occupation, if only seasonal. We left that day fulfilled in our recovered material.

Our next trip down was a week or so later, and nature had won out. All evidence of the fire pits was now somewhere along the bottom of the Iowa River. Seeing this was a let down, but not an unexpected one. At least the habitation zone was still well defined. We had also advised the O.S.A. of our discovery, and were keeping them updated. Thank goodness now for the photos! They now took on a new meaning.

Our most recent trip was two weeks ago. As we drifted slowly by, I saw what I hoped to be a worked flake exposed in the bank. If there was a olympic game held for seeing how fast a human can exit a boat, I would have been a contender for a medal! Caution to the wind

when the glint of chert hits the eye! I was not let down. Instead of only being a utilized flake, I held a perfect projectile point, another key clue. (See Fig. 2)



Fig. 2 Complete Point

The pieces of the puzzle are now falling into place at last.

Our long term goal is to think that this site could be excavated by the O.S.A. before nature completely claims it. We have other sites being lost in the area to erosion, but few hold more promise than this one. Each Trip down river produces a different view of the site, depending upon the erosion. One time you wonder if the site is completely washed away; and the next time its an archaeological treasure. We will continue to monitor this site, and report on it as new material turns up. Most of our material is now at the O.S.A. for their review, and help in our project.

Thanks for the report, John. Have you considered taking up under water archaeology? Ed.

BOOK REVIEW

Pat Williams

The Clan of the Cave Bear. Jean M. Auel. Bantam Books, New York. 1980. 495 pp. \$3.75. paper.

The Clan of the Cave Bear 'is the first novel in a series called "Earth's Children." The novel is about a young Cro-Magnon girl who is orphaned and is adopted by a clan of Neanderthal cave dwellers. Her differing physical appearance and her superior dexterity and intellect place her at odds with the other members of the clan throughout the book. The book traces her life, and that of the clan, from the time she is adopted, into adulthood when she has a son of her own.

While the story is intriguing and entertaining, more interesting to this reader were the descriptions of everyday life during the Stone Age. The author has obviously done a tremendous amount of research, not only into the life of these prehistoric peoples, but on their physical appearance, abilities and thought processes. While I do not claim to be an expert on Neanderthal Man, I found the story most plausible.

The story takes place in Europe, but much of the material on Stone Age life can easily be applied to those people who were living in North America as the last glaciers retreated. The book holds a wealth of information on a wide variety of topics ranging from hunting and gathering to religious practices, from tool-making to social structures.

I believe that anyone interested in archeology, of either the Old World or the New World would enjoy reading this book. I look forward with anticipation to continuing my acquaintance with Ayla, her son Durc, and future generations of Earth's Children as more novels in the series become available.

CORALVILLE RESERVOIR SHORELINE SURVEY

Shirley Schermer

The Office of the State Archaeologist, with the cooperation of the Iowa Archeological Society and with the permission of the U.S. Army Corps of Engineers, conducted a 4-week survey project at the Coralville Reservoir during June, 1981. Field director for the project was Shirley Schermer; Steve Lensink served as research coordinator; assistants were Mike Spriestrsbach and Deb Zieglowsky. The proceeds of the field school were turned over to the IAS general fund.

Our permit from the Corps limited us to surface collecting along the shoreline in the area suffering erosional impact from periodic flooding. Using a stratified random sample, we completed a survey of forty 1000 ft. segments of shoreline in two of the three designated units for a 20% sample in each. A total of 32 sites were located and mapped in the sample segments: 14 in Unit I and 18 in Unit II. Projecting from this, 70 sites in Unit I and 88 sites in Unit II could be expected to exist along the Reservoir shoreline. If conditions observed during the survey are representative, all are suffering moderate to severe erosion and are endangered due to reservoir action.

A preliminary analysis of artifacts recovered provide supporting evidence of continuous occupation of the area from at least Middle Archaic through Late Woodland times. Of the projectile points recovered, 63% fell into the Middle-Late Archaic period. Grit-tempered ceramics were found on five (36%) of the sites in Unit I and eleven (61%) of the sites in Unit II. It is hoped that with further surveying of the Iowa River area we will gain an understanding of the settlement patterns of the

various cultures inhabiting the valley through time and assess relationships to cultures inhabiting similar river valleys.

During the survey, lithic sources in the area were also mapped and sampled. The chert samples have been analyzed as to quality and variability as well as subjected to heat-treating with a separate report written on the results by Toby Morrow. This will aid us in comparing archaeological lithics in terms of use of local materials versus those that were imported.

Several additional activities were scheduled throughout the 4-week field school. In addition to survey techniques, the crew gained experience in lab procedures by washing and cataloguing artifacts. Toby Morrow gave a flintknapping demonstration as well as a spear-throwing demonstration using an atlatl he made. Dr. William Furnish, a geologist, conducted a guided-tour of the geology of the Reservoir area. Yvonne Chadek, an IAS member, gave a morning-long short-course on edible wild plants. With her guidance in collection and preparation, we enjoyed a lunch of cattail spikes, milkweed and dandelion blossoms, a salad of various greens and catnip tea. Larry Abbott accompanied the crew on one survey segment to discuss the soils and landforms of the area. The final day of the project, the crew traveled to Buxton, an old black coal-mining town, to visit the ISU project under the guidance of David Gradwohl.

A special thank you goes to the Corps personnel for their cooperation and to the IAS members who participated. Of invaluable assistance to the project were the 27 IAS volunteers who contributed approximately 1000

work hours:

Yvonne Chadek, Mt. Vernon
Robert Cooper, Cedar Rapids
Gene Crawford, Kalona
Melody Crawford, Kalona
Carla Follensbee, Marion
Katherine Johns, St. Paul, Minnesota
Verlan Johns, St. Paul, Minnesota
James King, Kenosha Wisconsin
Lily Lau, New London
Susan Levine, Coralville
Jim Lorber, Oskaloosa
Leah Lorber, Oskaloosa
Robert McIntyre, Delavan, Wisconsin
Duane Miller, Iowa City
Terry Miller, Iowa City
John Mohr, Kenosha, Wisconsin
Roger Natte, Fort Dodge
John Palmquist, Stanton
Dorothy Peterson, Cedar Rapids Rapids
D.E. Pidcock, Corydon
Thelma Pidcock, Corydon
Loren Schutt, Iowa City
Rosemary Ver Cande, Cedar Rapids
Ed Zieglowsky, Washington
Nita Zieglowsky, Washington
Louise Zipp, Iowa City
Dan Zwiener, Sloan

1982 DUES

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\$15.00 Sustaining
\$ 5.00 Student
\$7.00 Institution

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The IAS crew surveying one of the sample segments along the shoreline of the Coralville Reservoir. Mike Spriestersbach, left, and Verlan Johns in foreground.



Mike Spriestersbach, center right, explains cataloguing procedures to (from left): Katherine Johns, Terry Miller, Yvonne Chadek & Verlan Johns.



IAS members enjoying cattail spikes and milkweed blossoms during our "Edible Wild Plants" lunch. From left, Yvonne Chadek, Thelma Pidcock and Deb Ziegrowsky.

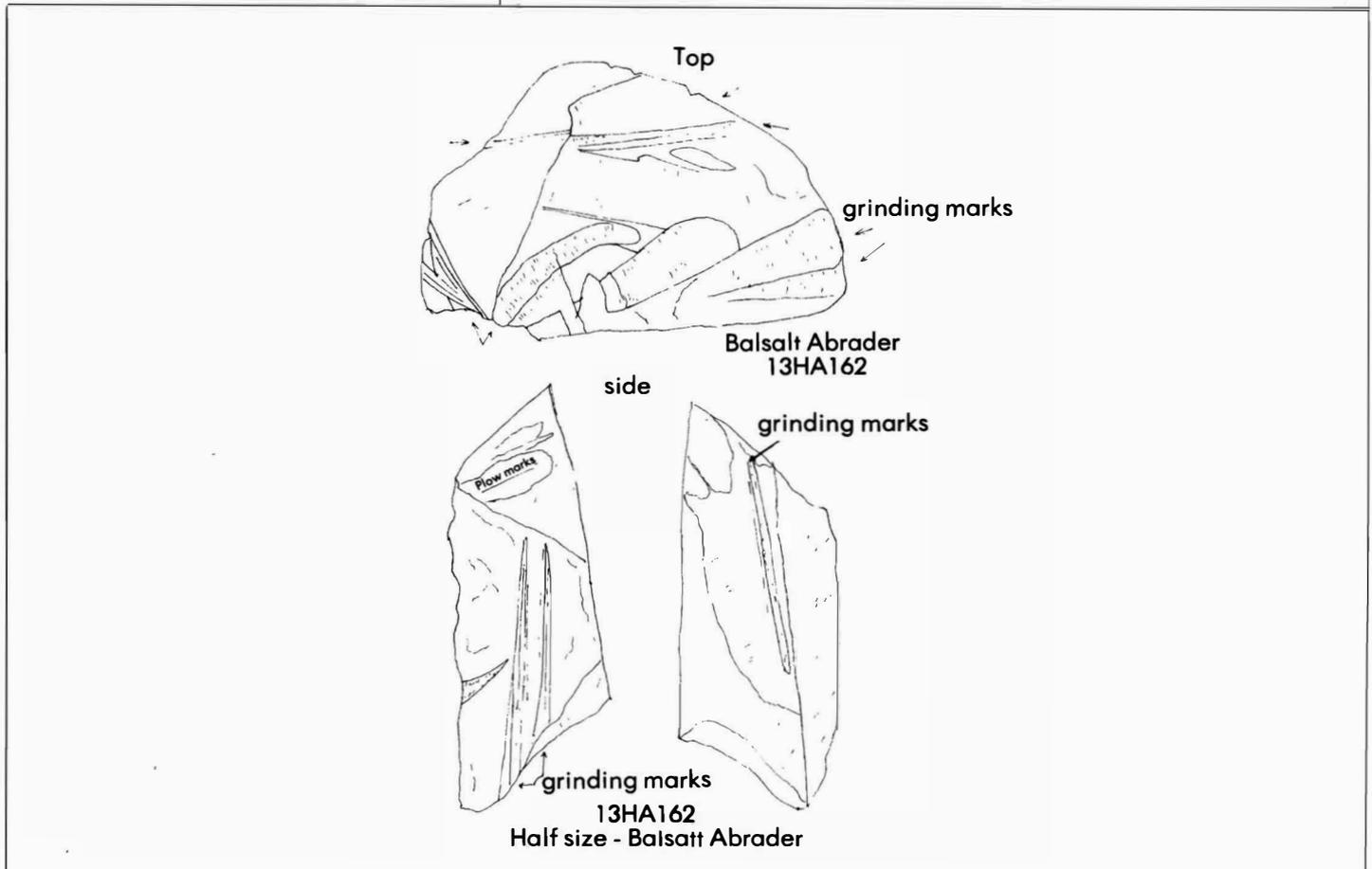
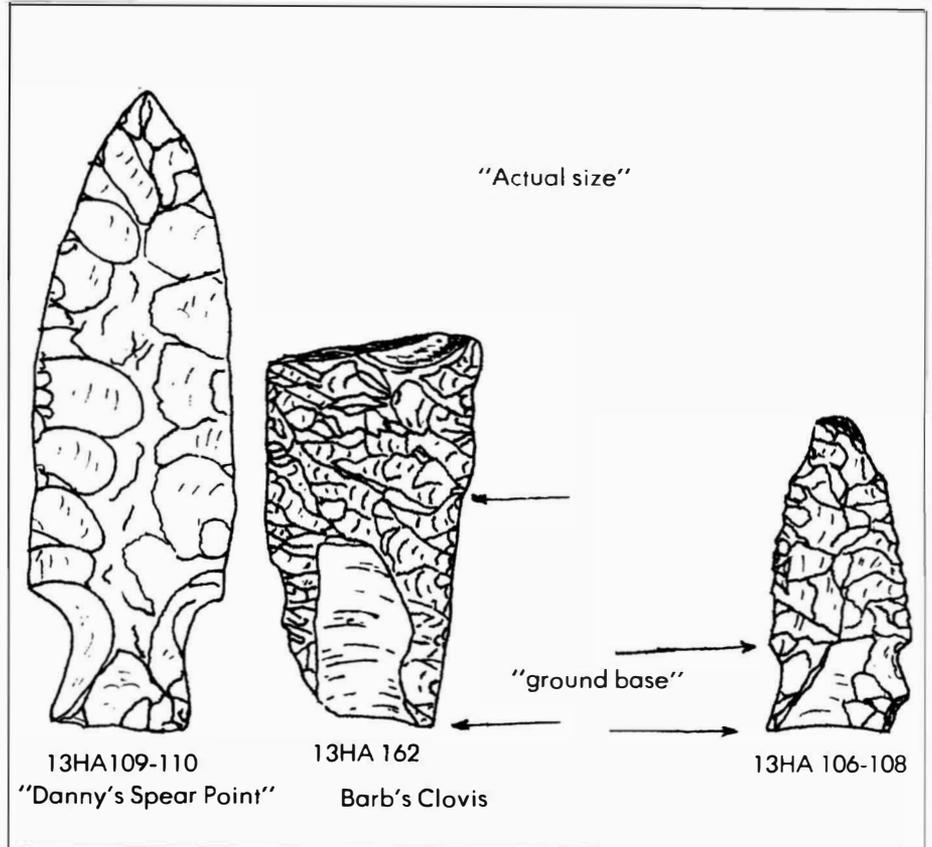
ARTIFACT REPORT

SUBMITTED BY Russ Holven

Russ, Barbara, and Danny Holven of Waterloo had an excellent collecting year as evidenced by the drawings below. The clovis point and balsalt abradar were located on site 13HA162. Russ reports the clovis is made from a fine grained pink flint with irregular flaking on the side with the flute. It appears to be the transverse parallel type with the base ground over $\frac{3}{4}$ of the way up on one side. Barb also found a nice early Woodland point on the same day.

Russ and Barb's son Danny found 2 broken archaic spear points, one complete Woodland point, 4 broken Woodland points, and 2 scrapers. Russ located 2 broken axes, 2 paleo points, an early Woodland point, and 6 scrapers.

Congratulations to the Holven family. Thanks for the report.



(cont'd. from Page 2)

will the money come from to establish this endowment? One source would be private foundations. We are working on that at this time. The other source is the membership itself. Let me suggest some ways you might consider supporting the Society.

1. **If you are an Active member, become a Sustaining member.**
2. **Make a tax deductible donation of \$50-\$100 or any amount you can afford toward the Society's endowment fund.**
3. **Take out a life insurance policy and name the IAS as the beneficiary, or sign over an existing policy.**
4. **If you have a paid up policy, you can borrow from it at low interest and use the money to buy a new policy for the IAS without threatening your benefits.**
Example: If you have a policy with a cash value of \$5000 that you can borrow at 6%, you can invest the money at 15% and make \$450, which you can either use as an outright tax-deductible gift or use toward the purchase of a new policy. (At age 40 \$450 tax deductible would buy \$23,000 worth of coverage that would go to the Society upon your death...\$15,000 at age 50).
5. **Some members may wish to make an outright tax deductible gift to the Society. If you gave \$5000 it would guarantee that the Society would have a continuous annual income on your behalf of \$500!**
6. **Finally, you might consider making provisions for the IAS in your will. Often this can be done in a way**

that will not diminish the total amount that you can pass on to your heirs.

We are convinced that it is up to us as IAS members to recognize our responsibility for the well-being of the Society. We must do what we can to provide for the future. If you have questions about any of the formulas suggested, please get in touch with your financial advisor or insurance representative. If you have questions of a general nature feel free to contact Duane Anderson (319) 353-5175. He has offered to help find the answers.

(cont'd. from Page 3)

pounds; the smaller, 1 ¼ pounds.

The two pictured are in my collection and were found in Henry Co., Iowa, along the Skunk River. Those I have seen in other collections are of a similar size. Several are made of a green granite-like stone. Most show signs of having had a polished surface. We do find other half-grooved axes in this area without the raised grooves, but they are not of the same quality.

The earliest use which I have found of the term "Keokuk Axe" is by Gerard Fowke in 1891-92, in reference to five specimens from near Keokuk, Iowa, in the collection of the Smithsonian Institution. Keokuk is located in the southeastern part of Iowa on the banks of the Mississippi River. The name comes from an Indian Chief named Keokuk, who lived in this area several years. Chief Keokuk (The Watch Fox) was born at Saukenuk, near Rock Island, Illinois, about 1780. In 1845 Keokuk led his people out of Iowa to the state of Kansas, where he died in 1848. Keokuk was of the tribe of Sac or Sauk (White Clay).

Mention is made in the Annals of Iowa of a Keokuk axe which was presented to the Iowa State Historical Department by Thomas E. DeHart of Van Buren Co. that was found on his farm near Keosauqua about 1880. The axe is described as "a beautiful specimen of diorite, finely polished throughout, the white feldspar crystals in the dark green hornblend producing that mottled appearance so characteristic of this tougher than granite igneous rock." This axe is 4 inches wide, 9 inches long, and 2 ¼ inches thick and weighs 6 pounds, 11 ounces.

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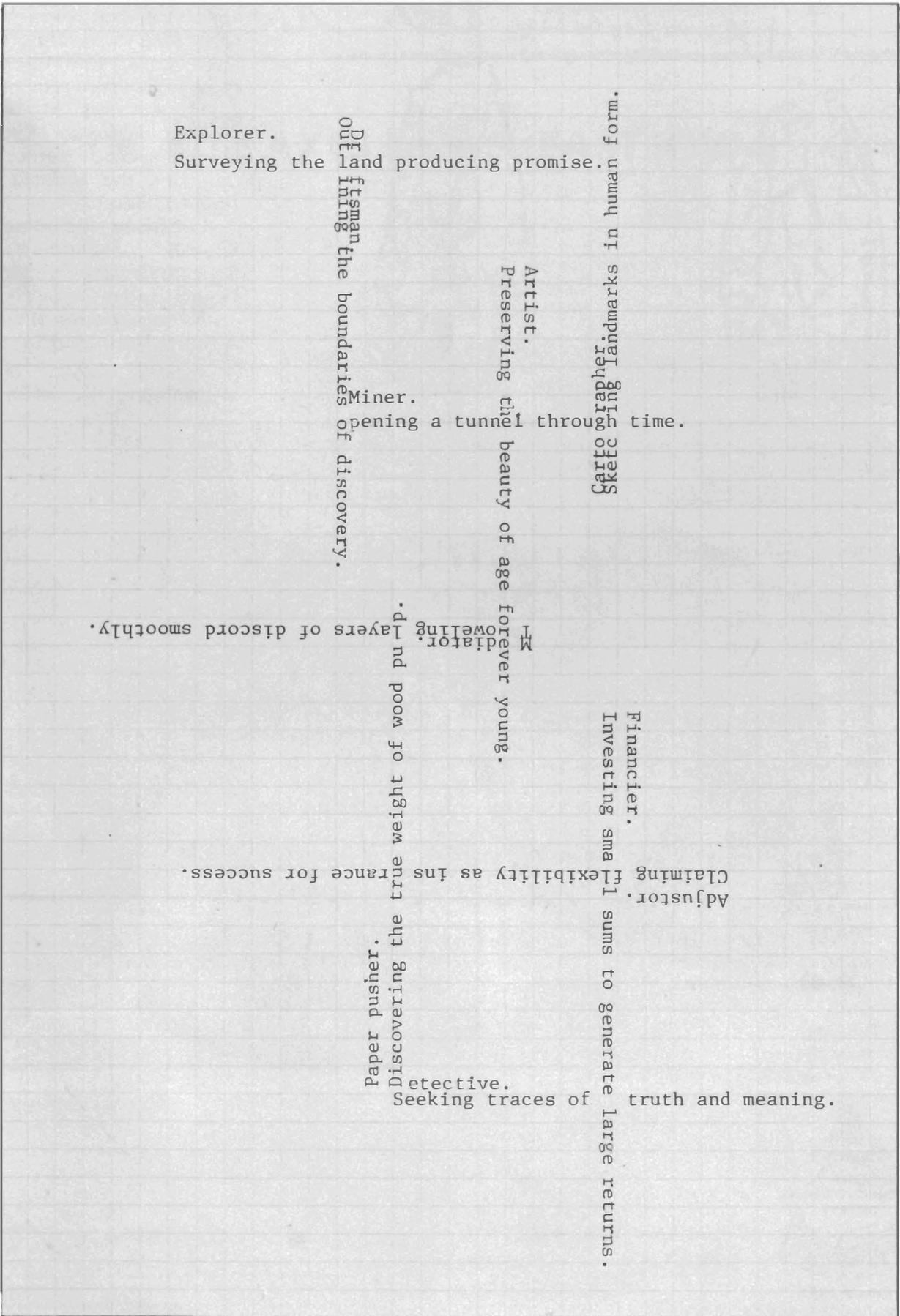
Archaeologist 13' JE1 12-29-78

by Jean Robinson, Iowa City

N

W

E



1 square = 5 cm

S

Drawings by Sue Pearce.

Two recent finds by Eric Jayne
of Iowa City from 13JH351.



Contracting stem point of possibly Burlington chert.



Middle Woodland
Expanding stem point of Rapid Member Chert.

Site reports by I.A.S. Members

Reported by
Debby Ziegrowsky, Office of
State Archaeologist

John Feeley	10 sites
Duane Miller	18 sites
Toby Morrow	19 sites
John Palmquist	7 sites
Perry and Orlendes Ross. .	4 sites
D.E. Pidcock and Herb Sovereign	11 sites
total:	69 sites
goal:	100 sites

ATTENTION IAS GARDENERS

Last years seed program was a huge success. Over 70 individuals, universities, labs, and museums contacted us for seeds last year. Due to its popularity we have expanded our seed inventory to cover many more phases and areas of prehistoric farming in America. Now represented in our collection are the following:

-26 varieties of corn including Flour corns (10 varieties), Flint corns (3 varieties), Pod corn (2 varieties), pop corn, and Dent corn. Also available are Chapolote Maize, and for the 1983 growing season, teosinte.

-11 varieties of beans including Hidastsa Red, Black Mexican, Black Kentucky Wonder, and the Hidasta "Shield-figured" Bean.

-Cucurbits. Including Arikara Squash, Mandan Banquet Squash, Omaha Pumpkin, Bottle Gourd, and melon.

-Three varieties of sunflower: Arikara, Hopi, and Seneca.

-Tobacco. Rusitca, Quadrivalvis, Multivalvis, and Bigelovii.

Interested? Send \$2.50 for a seed list with descriptions of each variety and an order form. Also available is a much improved seed manual. Send to: Dan Zwiener, Box 140, Sloan, Ia., 51055. If anyone received mixed seed from last year's program, please notify me and I will send new packets free of charge.

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