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Editorial Office
199 Converse Drive, Plain City, Ohio 43064

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Membership and Dues
Annual dues to the Archaeological Society of Ohio are payable on the first of January as follows: Regular membership $10.00; Husband and wife (one copy of publication) $10.50; Contributing $25.00 Funds are used for publishing the Ohio Archaeologist. The Archaeological Society of Ohio is an incorporated non-profit organization and has no paid officers or employees.

The Ohio Archaeologist is published quarterly and subscription is included in the membership dues.

Back issues
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EDITOR'S PAGE
Spring is with us again—the most active time of the year for surface hunters. As one who shares this activity with most of our members, I, like they, have spent some of my happiest hours hunting the fields. For those people who have never surface hunted I can only tell them that they are missing one of life's true pleasures. It is particularly exhilarating to be out in a plowed and washed field where it is quiet and peaceful and a nice arrowhead can still be found. And how many times have you thought to yourself before you pick up an artifact, "The last human being to touch that piece lying at your feet was an Indian perhaps 10,000 years ago?" And no one but a surface hunter knows the pride he feels when he says to a fellow collector when looking at an especially fine piece "I found it".

While some surface hunters are meticulous about recording and marking the provenience of their surface found pieces or keeping site material separated, a few never mark their finds with the feeling that they can remember where they found them—which they will eventually realize they can't possibly do. All surface hunters have an obligation, not only to themselves but to archaeology, to catalogue every piece they find or at least keep the material from each specific site separated. This point was brought home to me during my first year of hunting when it dawned on me that some particular types occurred on some sites more than others and that I could actually determine who had occupied that site many thousand of years ago by simply keeping the material isolated. Prehistoric Indian artifacts are a diminishable resource and those who hunt them should realize that for each arrowhead, scraper, knife or stone piece he picks up, he is removing part of a jigsaw puzzle—one which may never be complete without his piece. From a purely selfish standpoint, the value of surface found material is greatly enhanced both archaeologically and monetarily when it is accompanied by good records. When we read the great number of site reports in The Ohio Archaeologist, we can grasp the importance of field finds and the significant contributions made by surface hunters. So mark and catalogue your pieces—don't be a relic hunter just for pretty artifacts.

Robert N. Converse

Back Cover
Five fine pieces of Flint Ridge flint from the collection of Gary Davis, Bainbridge, Ross County, Ohio. The fractured base point upper left is four inches long and is one of the most outstanding examples of its type known. All pieces are from Ohio.
The state of Ohio is the site of many large and complex prehistoric Indian earthworks. The great Serpent mound, the Newark works, the Marietta works, Mound City, the Highbanks works, Fort Ancient, and Fort Hill are just some of the many examples of the larger and more famous earthworks that dot the countryside. However, most general historical references usually overlook the fact that many smaller, less complex earthworks also existed throughout the Ohio territory. These smaller prehistoric works usually were nothing more elaborate than earthen walls and ditches forming simple squares or circles. A quick glance at Mills' (1914) Archaeological Atlas of Ohio indicates that at one time large numbers of these small square or circular structures existed within this state. Today it is virtually impossible to obtain accurate information on these lesser earthworks, and in many cases the actual sites themselves have been completely destroyed by farming, construction, or surface mining.

One of these smaller works that has survived the ravages of time is located just north of the city of Jackson, in Jackson County, Ohio. It was the larger of two similar earthworks (Fig. 1) that existed on the old Sam McKittrick farm back in the late 1800s. The smaller structure has been completely obliterated and no traces of its existence can be found. The surviving larger earthwork is probably one of the finest preserved specimens of the simple "square shaped" earthen structures remaining in Ohio. Although a basic description of these works exists in two very old historical publications, the information is sketchy and in some cases incorrect. For the sake of any future archaeological research, the McKittrick Earthworks deserve to have detailed site descriptions and history published that collect all available information into one source. By combining the older information recorded many years ago, with the more recent, accurate, and detailed observations, the following account of these prehistoric works will hopefully be such a source.

The largest, and still-intact, McKittrick earthwork (earthwork #1) is located near the western edge of the northeast quarter of section 19, Lick Township, Jackson County, Ohio (Fig. 2). The smaller non-existent earthwork (earthwork #2) was located in the southwest quarter of the northwest quarter of section 20, Lick Township. Located approximately ½ mile southeast of work #1, the site of work #2 is within 150 feet of the present State Route 35 from Jackson to Chillicothe. Separating the two sites in a ravine which has a small stream flowing south and draining into nearby Little Salt Creek. Both works are within ½ mile of the old Scioto Salt Licks. Record of their existence was initially made by Charles Whittlesey in 1837 when he was engaged in the first geological survey of Ohio. Whittlesey's information along with drawings of the two earthen structures is contained within an 1852 publication entitled Descriptions of Ancient Work in Ohio. Some historical background of the McKittrick works was also published in 1900 by D. W. Williams.

A recent survey was made of earthwork #1 in April 1980 (Fig. 3). It was found to be a slightly irregular rectangle approaching a square, with slightly rounded corners. It was created by digging a ditch and mounding the excavated dirt along the outside edge creating an earthen embankment with an interior "moat". The square is approximately 150 feet across (measured from top center to top center of opposing embankments) and surrounds a large level area of approximately 8500 square feet. The vertical distance from the top of the embankment to the bottom of the ditch varies from 3 feet to well over 4 feet depending on where the measurements are taken. No doubt this figure has changed because the site has been plowed on occasion. About middle distance on the eastern embankment is a break in the ditch which creates the effect of an "opening" or "ramp" from the embankment to the interior area of the structure. This opening faces approximately 25 degrees southeast, and, while it was very prominent in Whittlesey's 1837 drawing, recent aerial photography shows it to be barely discernible today (Figs. 4 and 5).

Earthwork #2, as previously mentioned, is no longer in existence, but was very similar in nature to earthwork #1. Consisting of the same square shaped embankment with an interior ditch, the structure was approximately 65 feet across, making it not quite half as large as work #1. It too had a small "opening" which faced 45 to 50 degrees southeast and crossed to the same level interior. What distinguished
Earthwork #2 from earthwork #1 was the fact that its southwest embankment was attached to a large burial mound almost 70 feet in diameter and between 7 and 8 feet high. Most of the embankment portion of the structure was destroyed in the late 1800's when Sam McKittrick built his farm house in the middle of it. Mr. McKittrick opened up the mound, and found "a number of flints, and a layer of ashes". The large opening made in the mound was later utilized for a milk house and fruit cellar behind the farm house. The original house has since burned down, and the top of the knoll where the site was located has been bulldozed completely smooth to make way for the modern home that presently is occupied by a later generation of the McKittrick family. Earthwork #2 has passed into oblivion with only Charles Whittlesey's 1837 sketch to show us what it once looked like.

It is certain that these two earthworks had a special significance for the prehistoric people who toiled with primitive tools to create the square embankments. Just what exact function the structures served will probably always be a mystery of the past. Earthwork #1 is located on level ground with several higher elevations overlooking the site. This fact may or may not have any significance with the structure's military value as a fortress, considering the weapons that would have been in use during that time period. The ditch being located on the interior side of the embankments would seem less than practical in a defensive position. It seems far more likely that the earthen square had some religious association or enclosed an area of ground that was used for some special activity or purpose. Earthwork #2 was located on a knoll, but because of the burial mound attached to it, this site's military application also seems doubtful. Williams (1900) makes record of the fact that few relics were ever found near work #1. The only artifact found inside the enclosure was a fine spear point about 4 inches in length; no other description is available. In 1896, Sam McKittrick uncovered a steel-bladed axe while plowing the field just south of the structure. Obviously, this axe had no connection with the builders of the earthwork but is being noted merely for historical reasons. A small cannon ball was also found around 1897 in a nearby charcoal pit 100 yards west of the earthwork. The iron ball apparently had been lodged in a tree many years earlier and had burned free during the charcoal making process. The steel axe and cannon ball are mute evidence of early visitations by the whiteman in this prehistoric site.

There are several water sources nearby in the form of small springs located in adjacent ravines. During the summer of 1896 one of these springs, located about 350 yards southeast of site #1, began to dry up. In hopes of finding more water, a Mr. Milton Cameron started cleaning out the bottom of the spring. At a depth of about 3 feet he discovered a pan scooped out of the sandstone where the stream welled forth. It seemed fairly evident that this pan was the work of prehistoric Indians who may have some association with the earthen enclosure. The open field area southwest of earthwork #1 may contain a small Indian occupation site. Surface hunting in this area on occasions when it is plowed will produce various items of worked flint, but which are products of various time periods. Although a good percentage of the artifacts are of Adena origin, there is no way to associate them with the people who built the earthwork. Because of the proximity to the Jackson Salt Licks a certain amount of artifacts is randomly distributed over the general surrounding area of both McKittrick sites. The mound attached to earthwork #2 would indicate that either the Adena or Hopewell people were the architects of the embankment portion. While the Hopewell people are almost always associated with the construction of earthen walls and enclosures in Ohio, all of the burial mounds contained within Jackson County appear to be of Adena origin. It is a shame that when Mr. McKittrick opened the mound that no record was kept of its contents. Doing this might have answered many questions about the earthen squares.

While flying over earthwork #1 to obtain aerial photographs, the author could not help but experience a certain amount of awe upon seeing those ancient embankments upon the face of the earth. The perception of this site from the air is far greater than the one from the ground. In my mind I kept asking over and over again the same nagging question: What took place down there so many years ago? The answer may never be forthcoming but one fact remains. The very existence of the McKittrick site, or of any archaeological site, is reason enough to record the fact for future generations. Once history is lost it is lost forever.

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Fig. 1 (Long) Drawing of the McKittrick Earthworks made by Charles Whittlesey in 1837 while making the first geological survey of Ohio. Earthworks #1 (on left) is in actuality turned 25 degrees east of magnetic north, and not oriented as shown in Whittlesey's drawing. These two plates were copied from Descriptions of Ancient Work in Ohio by Charles Whittlesey (1850). Drawing on the right is of earthwork #2 which no longer exists.

Fig. 2 (Long) Topographic map of Jackson, Ohio and surrounding area with location of McKittrick Earthworks #1 and #2 shown just north of city (north is toward top of map). Area shown is located in Lick Township, Jackson County, Ohio.
Fig. 3 (Long) McKittrick Earthwork #1 (April 1980). Author inside the earthen enclosure. Photo is looking north from south embankment.

Fig. 4 (Long) Aerial photograph of McKittrick Earthwork #1 (April 1980). Tree line to the right of structure is running north-south. Photo is looking northeast from south of earthwork.

(Fig. 5 (Long) Another aerial view of earthwork #1. This view is looking southeast. The "opening" in the enclosure is barely discernible at the center of the eastern wall which is the one nearest the top of photo.
Glacial Kame Gorget from Kentucky

By
Dennis Vesper
709 St. Joseph Lane, Covington, Ky.

A sandy terrace overlooking the Ohio River in Boone County, Kentucky yielded a portion of a constricted center gorget (Converse, 1971). Figure I shows the gorget fragment which is fashioned in cannel coal and has three holes drilled only from the flat, face up side. There was no drilling done from the slightly convex, face down side. The one large hole, which predates the breaking of the gorget, would have matched a similar hole in the missing half. The two smaller holes would be part of a repair procedure involving the interlacing of sinew with the matching holes in the missing half. This is better imagined by referring to the constricted center gorget once in the Meuser collection (Converse, 1977). This broken MEUSER gorget, also made from cannel coal, shows the holes in both halves drilled for the mending process.

The constricted center gorget is attributed to the Glacial Kame burial complex centered in Michigan, northern Ohio and northern Indiana. Although Ernest Good tells me of his discovery of marine shell sandal sole gorgets (also Glacial Kame) from Watt’s cave in Kentucky, I am unaware of any other constricted center gorget from Kentucky other than the Boone County find. James Griffin places the Glacial Kame artifacts (Cunningham, 1948-51) “toward the close of the Hopewellian or Middle Woodland period and near the beginning of the period of the spread of Middle Mississippi.” However, more recent research and radio-carbon dates prove that Glacial Kame can more accurately be placed at the end of the late Archaic and beginning of the Middle Woodland periods.

With a little imagination and the right orientation the Boone County fragment seems to resemble a bird head. In Figure I this would be a profile of a bird head facing left. This fracturing and indentation cannot be blamed on the plow or disk even though the artifact is a surface find. The bird head effigy is suggested by judging not only the shape but the technique of shaping. The gorget fragment exhibits systematic fracture on the “throat” and finished grinding, without the polish, on the “lores and forehead”. The lores on a bird’s head is the area between the eye and the beak on each side of the face.

The question which cannot be answered is whether the secondary revisions were made by the original artisan or a second later artisan who found or traded for the gorget.

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Editor’s note: The Glacial Kame people were part of a burial cult which manifested itself from around 2,000 BC to 500 BC.
The Greatest of the Great Pipes
By
Gordon Hart
Bluffton, Indiana

The quest to find and own what I consider to be the most classic single object of prehistoric art work appears to be a goal not to be attained in this period of history. That object, which to me is the epitome of what I consider to be the most desirable artifact retained in a private collection or in the national archives, seems to have been lost in modern time. I speak of the Duck Effigy Pipe which I first viewed on page 112 in the book, PHOTOGRAPHS OF INTERESTING AND OUTSTANDING SPECIMENS OF INDIAN RELICS FROM THE EDWARD W. PAYNE STONE AGE COLLECTION, 1937.

My search for this Great Pipe of the B.C. to 500 A.D. period began in 1967. My efforts were devoted to finding the owner or the place, possibly a museum, where it is deposited. With the help of several of the so-called old collectors, the search was instituted to gather information of its existence before and after 1936. That search had a selfish motive, as I expected to own the art object which would form the nucleus of the most outstanding collection of prehistoric cultural art effigies ever assembled of one basic form—pipes.

The primary purpose of this paper is to correlate and document that information which the research of the Duck Effigy Pipe has produced. I feel it would now be impossible to retrace the steps I have taken to authenticate the history which I have assembled for the present owner or owners of this Great Pipe.

Through the help of B. W. Stephens, who was one of the persons selected to catalog the material for the Payne sale in 1936, at Springfield, Illinois, most of the history prior to 1936 was produced. I was privileged to research the letters received by Edward Payne from such well-known persons as Warren K. Moorehead, W. J. Seever, Bennett Young, George West and William Beauchamp. These persons appeared to have been eager to assist Mr. Payne in acquiring the largest collection of what was referred to as "relics of the stone age".

Warren K. Moorehead, well-known author after the turn of the century, wrote Mr. Payne in regard to the pipe effigy, the subject of this paper. From my notes derived from Mr. Moorehead's letter I quote:

"This beautiful pipe of steatite is in the image of a duck floating high on the water. The head with a lifelike bill is a thing of beauty to see. To hold this relic gives one a feeling of being a part of time past. I feel Johnson has the best chance and luck to buy this pipe for you. (Author's note—I believe the 'Johnson' referred to was Cap' Johnson of Johnson City, Tennessee, who for many years operated a cabin boat museum on the Ohio River and was a primary buyer of relics for Edward W. Payne.) I have most of the story of this pipe but you can ask Seever as he has tried to buy the pipe way back. It was found by Earl Lyons who lived on Mill Creek in Kentucky. He dug it in a rock shelter near the Ohio River in Meigs County, Ohio. I talked to the son of Mr. Lyons who told me his father was across the river in Ohio and dug it out in the spring of '53 (1853). A lot of people thought it came from Kentucky as that was Lyons' home. The duck is not broken or scarred. Seever says it's the best and I agree."

Warren K. Moorehead

We know Payne secured the pipe, but through whom I could not establish, possibly Johnson but that is speculation.

After the death of Payne on February 19, 1932, his collection was assembled with the thought of selling all to a single individual or museum. The effort failed with no major offer forthcoming in the period from July 12, 1934 to August 15, 1935. On this mid-August date the material was offered for sale to any and all on a piece-meal basis.

Dr. Warren Sprague, of Chauncey, Ohio, purchased the pipe from the Payne estate and it remained in his collection until 1940. On page 89 of Dr. Sprague's book, he lists the Duck Effigy Pipe—"Pipe steatite—bird effigy—found in rock shelter in south part of Meigs Co., Ohio, near the Ohio river."

Raymond C. Vietzen, of Elyria, Ohio, purchased the Dr. Sprague artifacts in 1940 and proclaimed the Duck Effigy Pipe as the outstanding relic. In the years that followed, this pipe was featured in the books authored by Col. Vietzen, for example, THE ANCIENT OHIOANS, page 234; YESTERDAYS OHIOANS, page 59; SHAKIN THE BUSHES, page
Dr. Young persuaded Mr. Vietzen to part with the pipe in 1941 for a very substantial monetary reimbursement. At this point the trail ends. I have been unable to continue the Duck Effigy Pipe research with factual information as to who or where the next or perhaps the present owner may be.

In 1967 the aforementioned B. W. Stephens informed the author of the following:

Four reproductions were made of the pipe at the time of the Payne sale—two of green and two of brown steatite. These four fraudulent artifacts all had red beads and wax for eyes, as Mr. Payne at one time had placed bead eyes in the original. Mr. Stephens recalled three of the pipes being scattered, one to New York, one to Pennsylvania and one to Michigan. The provenience of the fourth, in the late 1930s, was unknown.

The author thought he had located the original authentic pictured pipe on two occasions, once in 1979 and again in 1980. However, both proved upon examination to be reproductions and each had the red bead eyes.

At this point in time I have established the following facts:

- The Duck Effigy Pipe is not in the large well-known museums.
- It is not held, or at least shown, by a known private collector or university.
- The pipe has not been photographed or published, using pictures taken after 1940 when owned by Raymond Vietzen.

Over the years my research has exhausted many leads to find and obtain the pipe. For example, in late 1980, Tom Shenk, of Ellicott City, Maryland, informed me that he and a fellow collector friend of near Detroit had located the owner of the pipe and thought it could be exchanged.

At this point in time I feel I have exhausted all possibilities to find the pipe. Should anyone locate or obtain this pipe now or in the future, I would feel it a great privilege to examine this art work and present its owner with the complete research work and papers authenticating its history.
Translucent Points

By
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The triangular point (Fig. 1), was a surface find from Huntington Twp., Lorain Co., Ohio. It is made of black flint with a translucent streak in the center. The material could possibly be Flint Ridge. Whether or not the flintknapper intended the light streak to go down the center will never be known, but it turned out very well. Pieces of this type are rare in collections I have seen. A number of points have a light streak passing through them which resembles lightning, but one with a wide translucent band is scarce.

The small Hopewell point (Fig. 2) is a more common translucent type of point found in this area. The light area of this Flint Ridge material is almost clear, and the dark area is brown. This point was a surface find from Sullivan Twp., Ashland Co., Ohio. The site on which this point was found, is a bluff overlooking the junction of a small creek and Black River. A number of nice Hopewell artifacts have been found here. On the opposite side of the small creek is a multicomponent site which has produced various well made artifacts.

Fig. 1 (Heath) Triangular point with quartz inclusion. Obverse and reverse.

Fig. 2 (Heath) Obverse and reverse of translucent Hopewell point of Flint Ridge flint.
A Licking County Field Find

By
Bill Habig
6171 Babbit Rd., New Albany, Ohio

In Licking County on May 18, 1980, after an entire day and night of severe storms, I hunted a recently plowed and well washed field. After about an hour and a half of looking I’d found only five broken points and one scraper and was ready to call it a day. On my way out of the field I noticed the tip of a point sticking out of the muddy soil. I pulled it out slowly and to my surprise it was a fluted point in fine condition. Needless to say, the field was well washed since two days before I hadn’t even seen a piece of flint.

This fluted point measures 3⅜ inches long and 1⅛ inches wide. The flute on the reverse extends about two thirds of the points length while the fluting on the obverse is about one half the length and consists of two smaller flutes.

The material is a fine black flint probably from the Upper Mercer deposits. It has basal and lateral grinding for about one third its length. It exhibits extremely fine chipping on all edges and a small portion of the tip is rechipped.

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Fig. 1 (Habig) Obverse and reverse of Licking county fluted point.
A Rectangular Two-hole Gorget
By David J. Snyder
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This rectangular gorget was found in Troy Township, Wood County, Ohio. Fashioned from brown banded slate, it measures approximately 5\(\frac{3}{4}\) inches long and 2\(\frac{1}{8}\) inches wide. The two holes spaced about 1\(\frac{1}{8}\) inches apart are drilled from both faces. Definite wear from an aboriginal fastening is apparent on the obverse side (Fig. 1). A much lesser degree of wear is observed on the reverse side (Fig. 2).

You Never Know
By Marjorie Evans
1700 N. Court St., Circleville, Ohio

You never know when you're going to stumble over a piece of flint that you can't wait to take home to brag about. Last December while surface hunting in a field that almost every collector in Pickaway County hunts, I was dragging myself out of the field after two hours of frustration, when I spotted this piece of flint. First sight of the "paleo" indicated a nice knife—second sight sent waves of joy that only another collector could appreciate. Like I say, you never know . . .
The Copper Head from the Hopewell Mound Group
by Stanley W. Baker
The Ohio Historical Society
Columbus, Ohio

Recently the Hopewell Mound Group has drawn national attention since it was purchased by the Archaeological Conservancy (Anonymous 1980). Similarly, public awareness of the site was aroused some 90 years ago at the Columbian Exposition by an exhibit of classic artifacts excavated by Warren K. Moorehead in 1981-1982. Under the leadership of Henry C. Shetrone, The Ohio Historical Society, then called the Ohio State Archaeological and Historical Society, returned to the Hopewell Mound Group in 1922. “Exhaustive” excavations continued through August 1925, to clarify earlier examinations at this site. This latter excavation met with much success, as attested by the artifact on the front cover. This incomplete copper figure is one of the least known but highly important artifacts recovered by Shetrone (Figs. 1 and 2). Very few Middle Woodland human figures in the round exist today in any medium. The copper head from the Hopewell Mound Group is the only three dimensional human representation in copper known to the author. At the Hopewell Mound Group human effigies are limited to three examples. The other two, a human head carved from antler and a head and torso executed in fossiliferous ivory, were both recovered from mound 25.

Shetrone’s “Exploration of the Hopewell Group of Prehistoric Earthworks” (1926) was published in volume 35 of the Ohio Archaeological and Historical Publications. In terms of the total number of status items, mound 17 (Fig. 3) where the copper head was found, nearly equalled in content the remains in mound 25 from which the bulk of the Columbus exhibit was derived. The copper head from ceremonial offering I and the excavation of mound 17 is quite interesting (Fig. 4). Since this number of the quarterly is one of the more elusive volumes, Shetrone’s descriptions (pages 43-47) of the incident is presented in its entirety. One must consider the sheer amount of artifacts from mound 17 as almost incomprehensible. With the preponderance of remains, one can easily see why the copper head has been almost theoretically lost in the total excavation, field notes and subsequent reports.

Mound Number 17

In the extreme north-east corner of the large enclosure, at the very foot of the terrace leading to the plateau, is a small mound, at the time of these explorations, almost undiscernible. This mound, shown on the map of Squier and Davis, without number, is designated by Moorehead as Number 17. In the latter’s report (p. 90) is a description of its examination. However, Moorehead clearly confused this mound with another (see description of Mound No. 29) or rather, erred in the matter of designating on his map the number of the mound in question.

The present Survey found Mound Number 17 to be altogether undisturbed, and the most prolific in results, aside from Mound Number 25, of any of the entire group. Its apparent height was not above six inches, and except when its surface was freshly plowed its location was difficult to determine. At best, the mound appeared to be merely a part of the lower slope of one of the many spurs which project from the terrace declivity into the plain below. However, it proved to be actually 18 inches in height, the apparent lower altitude being due to the filling in around it of detritus from the slope above, as the result of erosion, the original level of the surrounding surface thus being elevated at least one foot.

The mound was composed of the clayey loam of the surrounding surface with some admixture here and there, of gravel. The floor, (Fig. 13) not particularly well defined, had an extent of about 38 feet north and south, by 32 feet. A few scattered stake-holes, but no post-molds, were present. There were no burials of human remains. Instead, the mound seems to have been erected over the site of two distinct and important sacrificial or ceremonial offerings of artifacts.

Ceremonial Offering Number I, south of its center, occupied an oval space 5 feet by 7 feet, alongside and partly filling a rectangular basin of typical form, measuring 22 by 26 inches. Perhaps a cubic yard of the peculiar yellowish-green clay so often associated with burials and deposits of the Hopewell type had been placed upon the oval space mentioned, and upon and intermixed with this were the following objects:

A large beautifully carved platform pipe, of seatite, each end of the stem representing the head of the wild duck, the necks running back and intertwining around the
bowl; a very large plain platform pipe, of drab Ohio pipestone; 10 plain platform pipes, and fragments of 10 or more others, of Ohio pipestone; a hollow (boatshape) ceremonial in the images of the eagle, finely executed, eyes set with pearls, Ohio pipestone; hollow image, head and neck of the crow, made from black shale; 2 small saucer-shaped dishes, finely made, of micaceous stone (so-called goldstone); 2 large disks, or discoidal, of fine-grained sandstone; 3 cones, of chlorite and goldstone; 2 gorgets, of green chlorite; 6 large tablets, of Laurentian slate; 2 bar-like gorgets of slate; a long slender plummet, of granite; 2 large finely made rings, of slate; a large obsidian spear-point; 2 large discoidal-like specimens, made from transparent quartz crystal; a copper perforator, resembling a 20-penny spike; 2 heavy copper anklets or bracelets; a large copper axe; a copper pendant; circular, with bosses; a human head, in the round, made from copper; 10 cup-shaped objects of copper; a small perforator of meteoric iron; buttons, beads, arrow- and spear-points of flint; sharks' teeth, carved bone fragments, a copper ear-ornament, a silver-covered button, potsherds; many pieces and chunks of graphite, foliated or micaceous hematite, "gold-stone", and so forth. At the center of the deposit there had been placed a large circular plate, worked from a peculiar "cone-in-cone" stone, which had become badly deteriorated. With the deposit there was a remarkable series of celts, or ungrooved axes, from 1½ to 15 inches in length. Several of the larger of these celts weigh 5 to 6 pounds each. The materials from which these implements are made include granite, gabbro, slate, and so forth. Most of them are very carefully made, while others resemble digging tools, one of which shows the mark of the thong by which it was attached to its handle, mattock-like.

Many of the finer specimens among the above were undamaged while others had been intentionally broken. Fortunately, with a few exceptions it was possible to recover all portions of specimens, and to effect restorations. The more interesting of the specimens from this cache are shown in the cuts.

There was evidence of considerable burning in connection with this cache, and a good deal of charcoal and charred wood were in the deposit. However, it appears that the burning had not taken place where the objects were deposited, and the fact that in several instances portions of ceremonially broken specimens were not included in the cache, leads to the presumption that the ceremonial fire had been kindled elsewhere, and that the offering afterwards was scooped up and carried to the place of deposit.

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Fig. 3 (Baker) Plat of Hopewell Mound Group showing location of mound 17 and mound 25 from Shetrone (1926).
Fig. 1 (Baker) Side view of copper head from mound 17, Hopewell Mound Group.

Fig. 2 (Baker) Rear view of copper head from mound 17, Hopewell Mound Group.

Fig. 3. Floor Plan of Mound Number 17, in which two Important Offerings were found.

Fig. 4 (Baker) Floor plan of mound 17 from Shetrone (1926: 45).
Why Hopewell Cores And Bladelets?

by
Thomas C. Grubb, Mt. Vernon, O.

For many years I have wondered why the Hopewellians were the only culture, in the Northeast at least, to make their characteristic flint bladelets and cores. Why hadn't the earlier Indians made them; or, if they were such a good idea, why hadn't subsequent cultures made them? Converse (1973) unequivocally states that Hopewell cores and bladelets “are found in no other culture in comparable numbers or type of material used.” I have asked many Ohio collectors what they thought the bladelets were used for but none had a reasonable answer. Revnik (1980) thought that they were used for ceremonial blood-letting because he had seen them used in this way in modern Pueblo Indian ceremonies. Griffin (1952) stated that “striking flake knives from specially prepared cores, save for Hopewell, is an exclusively Mesoamerican trait.” Brennan (1980) wrote that they were also used in Alaska and the Northeast coast of America.

Recently while visiting the National Museum in Athens, Greece, I saw a beautiful obsidian core with its accompanying bladelets which the identifying label described as being used for shaving! Judging by the Greecian statuary, the ancient young Greeks shaved their faces while the old men let their beards grow. I wrote to the Museum Director (Donats 1980) who confirmed that the blades were used for shaving as well as for other cutting purposes. Next I asked myself why should the Hopewellians make blades to shave their faces when it is generally believed that the American Indians had little or no facial hair? However, I believe my question was answered when I accidentally saw a drawing of what a Hopewell male’s head was thought to look like for it clearly shows that most of his scalp hair, save for a small tuft in the center, had been removed (Griffin 1952). I can’t believe that Hopewell men would pluck their hair instead of shaving since it would be unnecessarily time-consuming and painful. An authoritative description of the Hopewell culture in a brochure entitled “The Mound City Group” by the U.S. Department of the Interior shows a picture of seven Hopewell men, all with bare scalps. How did the artist who painted the picture of a Hopewell cremation ceremony know that the men’s scalps were depilated? Presumably knowledge of their appearance was derived from clay figurines from the Knight Mound in Clay County, Ky. (Griffin 1952). Why were so many bladelets struck from the same core? One reason could have been that it was much easier and quicker to strike off a few extra blades than sharpen the dull ones. Is it accidental that the length of the Hopewell bladelets is 1-2 inches (Converse 1973) while that of the Gillette type “safety” razor blade is 1¼ inches; or, did prehistoric as well as modern men find that this length was the most convenient and efficient for shaving? Furthermore the slight concave edge of many of the bladelets permits closer contact with the curvature of the scalp. We will probably never know if only warriors bared their scalps or if it were a ritual of the cremation ceremony.

Flint blade making was a skill acquired by Homo sapiens throughout the world many thousands of years ago. Almost any flake knocked from a chunk of flint or obsidian can be used for cutting. Fig 1a shows a core and blade I found near the Honey Run site, probably made by a Paleo-Indian; but it was apparently not until the appearance of the Hopewellians in Northeast America that prepared cores were “invented”. A core was prepared by making an arris on one side as shown in Fig. 2. The first flake was then knocked off from either side of the arris scar and the process repeated around the core until it became too small to make usable blades. Since the bladelets from conical cores are usually triangular or prism-like they are also called prismatic cores and bladelets. We may never learn where these cores were first made but we know that they were at least in existence by 6,500 B.C. when a Neolithic man somewhere in the African Sahara struck off the core and bladelets shown in Fig. 1b (Ferring 1971). Sometime during the Bronze Age (3,000-700 B.C.) another method of making prismatic blades was introduced into certain sections of Greece. Since these cores resemble small tablets, Van Horn (1980) calls them tabular cores produced by the method shown in Fig. 3. A tabular core is prepared by first shaping a piece of flint into a rhomboid from which blades are struck across the face beginning with the arris at both ends. This method has one advantage over the conical core because if a “hinge fracture” is accidentally produced it is much easier to remove than from a conical core. Otto (1981) reported seeing tabular cores in the Ohio Historical Society collection and Fig. 1c shows one from Bob Champion’s collection, so we
know that such cores were used by the North- eastern American Indians.

The Hopewell culture represented a highly sophisticated and complex way of life which dominated the Northeast section of America from 100 B.C. till 500 A.D. The Hopewellians penchant for beautiful and artistic personal adornments such as gorgets, necklaces, bracelets, ear spools etc. made from shells, mica or copper indicates their pride in taking the time and trouble to embellish their personal appearance—a trait absent from the preceding cultures and ultimately disappearing. It is therefore entirely consistent that Hopewell men would believe that their personal appearance was greatly enhanced by baring their scalps, especially for certain ceremonies like cremation. How they removed their hair may never be known, but I believe my theory of using their core-detached bladelets is a reasonable assumption until contrary evidence is unearthed.

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Fig. 1 (Grubb) A core and blade (a) found near the Honey Run site, probably of Paleo-Indian origin. (b) A flint core and bladelets from a Neolithic site in the African Sahara. (c) A tabular core found in Ohio. (d) A conical core from Ohio. Note the hinge fracture.
Fig. 2 (Grubb) Progressive steps a to f showing the formation and removal of the arris in making bladelets from a conical core. (from Van Horn, Journal of Field Archaeology, 1980)

Fig. 3 (Grubb) Progressive steps a to d showing the formation of the arris in making bladelets from a tabular core. (from Van Horn, Journal of Field Archaeology, 1980)
Four fine flint pieces made of Upper Mercer flint from the Coshocton deposits. Dovetail upper right is four inches long. Collection of Gary Davis, Bainbridge, Ohio.
Fig. 1 (Converse) Fluted point of Flint Ridge flint four inches long—shown in actual size.

A Classic Fluted Point

By Robert N. Converse, Plain City, Ohio

Only a very few times in the life of a collector does he have the opportunity to say that he has in his collection an artifact which represents one of the best examples of a particular type. These classic type specimens display combinations of excellence in workmanship, quality of material, color, size and other attributes which set it apart and far above its counterparts. Among some specific flint types qualities such as size and color for instance are not very common—the heavy duty type being a case in point since it is not often of colorful material or of extreme size even though it is usually of the most outstanding workmanship. On the other hand, dovetails are often of colorful material and occasionally large size and fine workmanship, attributes which make them popular among collectors. Among some types these qualities such as color and size are rarely seen since they are uniformly made of uncolorful or dull material and are of small size. There is also the ever present modifier of damage or breakage which can make an otherwise classic specimen a "study piece" to the more particular collector.

The point in the accompanying color photograph has a number of characteristics rarely seen in Ohio fluted points. It has perfection of workmanship giving it a symmetrical and classic appearance. Both sides are fully fluted, the flutes ending in the pleasing end fracturing style seen only on the best examples. The fluting is almost exactly the same length on each side. Most unusual is the use of high quality Flint Ridge flint—a material seldom seen in any sort of fluted point since a vast majority are made of high quality but uncolorful flint or chert. While not the largest of its type, it nevertheless is of respectable size—four inches long.

This outstanding point was found in the latter part of the nineteenth century near Minerva in Carroll county, Ohio, near its juncture with Columbiana and Stark counties. Editor's collection.
This exceptionally fine Archaic heavy duty point was found while surface hunting on our family farm June 22, 1979. It is just over four inches long and is made of Flint Ridge flint. An inclusion of pink gem material can be seen in the lower third of the point, the balance of which is chalcedony. Just below this inclusion is a large quartz crystal.
The boxheaded type birdstone is one of the rarest types for Ohio. Seldom is this kind found in the birdstone territory of northwestern Ohio, and it is usually thought of as originating in southern Ontario and upper New York state. A similar boxheaded type was reported from Coshocton County in 1979 (Converse 1979:26). Most of the Ohio occurrences seem to be in the eastern and northeastern portions—those closest to New York and Ontario.

In the accompanying three photographs are views of a fine boxheaded type in the collection of Lester Tolliver of Logan, Ohio. It is made of a dark reddish brown slate, typical of this variety, and is from Trumbull County in northeastern Ohio.

Reference:
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A Coshocton County Birdstone
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Fig. 1 (Converse) Side view of boxheaded birdstone from Trumbull County.

Fig. 2 (Converse) Oblique view of birdstone.

Fig. 3 (Converse) Bottom view.
A Water-worn Fluted Point
By Richard Roesch, 2623½ Rathbun Dr., Toledo, Ohio

On March 24, 1972, my wife and I made our first visit to a farm in Liberty Twp, Henry County, Ohio. A friend had suggested that I look at a farm collection which contained some pieces worthy of publication. I asked about the fluted point fragment (Fig. 1) and the farmer said he had found it around 1962 while plowing—in fact his whole collection was found while working the fields. He took us to the particular place where he had found it which was on a high ridge—the majority of his collection coming from a higher level.

About a year later he loaned me the point and it is shown in both reverse and obverse. The point is well flaked and has fine pressure retouch on all edges. It is well fluted with both flutes running almost to the tip.

A remarkable feature of this point is that it appears to be water-worn. It is made from a glossy black material—probably from the Upper Mercer deposits—but it is so polished that it almost looks like obsidian. A few small chips along the blade edges show a dull material underneath and serve to magnify the surface polish evident on the balance of the piece. The ridge where it was found is not far from the Maumee River which during glacial times was part of an extension of Lake Erie. It is possible that the point was deposited at some time during one of the intervals between lake expansion and contraction and polished by the action of the water. If this is the case, the point may serve as a time marker for Paleo occupation of Henry County.

Fig. 1 (Roesch) Obverse of fluted point fragment. Note evidence of surface polish.
Fig. 2 (Roesch) Reverse of fluted point. Break occurred at a fossil inclusion.
Pictured are two oddities among pipes from the late prehistoric period in Ohio. The effigies depicted are the lowly buzzard and a painted human face with certain ceremonial connotations. Both were found in village site contexts; the example on the left with an Iroquoian settlement in Lake County and its neighbor with associated Fort Ancient material in Preble County. Both are sandstone portrayals.

We are continually impressed with the almost endless diversity of pipe forms occurring in the late prehistoric era in Ohio. This seems to be an epoch dominated by the proliferation of the use of individualized smoking devices in the large established communities. The widespread use of pipes and pipe styles can be contrasted with the scarcity of examples in the earlier Adena and Hopewell periods. An exception to this comparison are the massive sandstone effigy pipes commonly associated with the same Ft. Ancient/Mississippian focus. While this pipe form is quite rare it is proposed that it was produced in limited numbers for selected observances associated with devotional ceremonies.

Figure 1. (Gehlbach) Two effigy pipes representing diverse stylization in the late prehistoric period.
CERAMICS From the Brokaw Site (33BL-6):
Some Evidence for a Late Woodland Monongahela Occupation
By Thomas E. Pickenpaugh
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PART I OF II

INTRODUCTION

Beginning in 1974 a preliminary report on the Brokaw site (33-BL-6) was initiated in the Ohio Archaeologist. Since that time, other articles have followed in which specific topics have been discussed (1976, 1978, 1979, 1980). Similarly, the focus of this paper will be the ceramics recovered. Thus, the purpose of this report is to analyze the ceramics from the Brokaw site that can be identified, note their various attributes, compare them with specimens described in the archaeological literature, establish their typology, and attempt to reconstruct the cultural/chronological history of the site.

CERAMICS

The following study is based primarily on the analysis of 299 rim shreds and a random sample of 200 body sherds. The materials considered are from both the plow zone and undisturbed features beneath it. As no discernible difference could be determined between the ceramics of the two, although there is evidence which indicates that the site was occupied and abandoned several times, they are here treated as a single unit. Ceramic types present are: Monongahela Cord-Marked (49.49%), Monongahela Plain (28.76%), McFate Incised (01.67%), Monongahela Incised (01.00%), Baum Cord-Marked like (05.68%), and unknown types (05.01%). Combined, the Monongahela materials (including appendages) comprise approximately 89.28 percent of the rim sherds recovered. Unhappily, seventy-six rims could not be used in this study due to their fragmentary state. Only one specimen is identifiable as a pipe fragment.

MONONGAHELA SERIES

Monongahela Cord-Marked, variation Brokaw
For previous definitions of Monongahela Cord-Marked, see Dragoo, 1955; Mayer-Oakes, 1955, and for additional information see Engberg, 1930, 1932; Butler, 1939, 1947; Manson, MacCord, and Griffin, 1943.
Size of Sample: 200 body sherds and 148 rims.

PASTE

Method of Manufacture: Coiled. Interior smoothed to a plain finish and exterior malleated with a cord-wrapped paddle.

Temper: Relatively small shell particles usually not exceeding 1.5 mm in diameter, though fragments exceeding 6.0 mm and more occur; particles less than 1.0 mm in diameter predominate. Temper density ranges from approximately 15 to 30 percent of the paste; very little leaching appears. The analysis of the naiad shell remains indicates that they may be from McMahon or Wheeling Creek, streams in the more immediate vicinity which flow into the Ohio.

Texture: Fine laminations parallel to vessel walls.


Color: Typical exterior color is light gray (10YR 7/3), but many pale and very pale brown sherds (10YR 6/3, 10YR 7/4) appear; minority colors are reddish yellow and dark brown (7.5YR 6/6, 10YR 3/2). The predominate interior color is dark gray (7.5YR 4/0, 2.5YR 4/0), while the remainder are divided between very dark gray and pink (7.5YR 3/0, 7.5YR 7/4). Core colors are virtually identical to interior colors, except a minority color is reddish yellow (5YR 7/8).

Thickness: A random sample of 200 body sherds has a mean thickness of 6.6 mm and a range from 4.1 to 10.9 mm.

Surface Finish: With few exceptions interior surfaces are well smoothed, while much of the exterior has been roughened by cord-wrapped paddle impressions. Both body and rim impressions are vertical and oblique. In addition, the impressions also vary in width and spacing. The number of cord-marks per centimeter ranges from 2.0 to 6.0, the mean is around 3.4. Generally, broad impressions are widely spaced and narrow ones are close together. Both, however, are minority forms. Approximately eighty-five percent of the 200 cord-marked specimens studied display some evidence of smoothing. This varies from very little (20%) to nearly total obliteration (10%).

Decoration (Plates 1 and 2). Vessel decoration is infrequent and is restricted primarily to the lip and adjoining lower rim area. A detailed description of the decoration is presented below under the several established rim
classes. A total of ninety-one rim sherds are decorated.

FORM
Rim and Lip
In the main, the Monongahela Cord-Marked rim profiles from the Brokaw site are relatively similar in form, even though they range from everted, straight, to inverted. This is particularly true to the extent that none are exceedingly inverted or everted and the lip thickening that occurs is quite moderate. Coupled with this is the fact that few appendages appear and only five remain attached to the rims discovered. Lip treatment, however, varies considerably and here serves to subdivide the rim sherds into five formal classes which appear to have some spatial and temporal significance. It has been observed that there are eight rim sherds that possess either a combination of class

Plate 1. Monongahela Cord-Marked. Class I, cord-wrapped-stick or paddle-edge-impressed: A-B; Class II, cord-marked lips: C-D; Class III, incised notched lips: E-F.
features or do not conform to any recognized category at all. In view of the fact that in most instances there is but a single example of each, they will not be treated here.

Class I: Cord-wrapped-stick or paddle-edge-impressed lips (Plate 1, A-B). The range of variation within this category is indeed broad. Nevertheless, all specimens possess either cord-wrapped-stick or paddle-edge lip impressions. This category may be divided into two groups: lips displaying cord-wrapped-stick-impressed diagonal notches and, lips characterized by essentially parallel and diagonal paddle-edge and cord-wrapped-stick impressions. Rim lip notches in the first group range from relatively deep depressions with considerable lip overhang to shallow cord-impressions with little or no overhang. It may be noted that this group includes one transverse notched and one non-shell-tempered rim sherd. Lips in the second group show a broader range of variation in impressions, for cord impressions appear that lie both diagonally and parallel to the vessel wall. Concerning the latter, nearly all are relatively shallow and many are nearly obliterated. As no diagonal or transverse notches occur, lip overhang is nearly absent or moderate. This group also includes one non-shell-tempered rim sherd.

Rims in this class are predominately slightly everted, but everted, straight, and slightly inverted forms appear. Lip surfaces range from flat, flat and beveled (to the interior and exterior), to rounded. The cord-marks on these rims, with few exceptions, extend up to the lip and are usually oblique (5 to 20 degrees to the left), however, vertical cord-marks are not uncommon. For the most part the cords are well smoothed. Over the cord-marks of one specimen, narrow, shoddily executed incising occurs. Four rounded castellations appear in this group and one sherd previously had an appendage.

The lips range in thickness from 4.7 to 13.8 mm, the mean is 7.7 mm. The thickness 10 to 20 mm below the lip ranges from 4.1 to 8.0 mm, the mean is 5.7 mm. Seventy-two rims comprise this category; they represent sixty-three vessels (24.08 percent of the total). Fifty-seven sherds representing forty-six individuals have been recovered. Both are everted. Lip thickness ranges from 5.6 to 6.7 mm; 10 to 20 mm below the lip thickness ranges from 5.0 to 7.6 mm. One rim previously had an appendage.

Class II: Monongahela Cord-Marked, incised notched lips (Plate 1, E-F). This class of sherds is characterized by the appearance of shallow, narrow, transverse and oblique incised notches cut into an essentially flat to flattened and beveled (to the interior and exterior) lip, although one rim sherd displays deeper and wider diagonal notches. The notches in the flat to rounded lip of this specimen were probably pressed in. The majority of the specimens display lip thickening caused by the downward pressure of a tool and/or finger. Cord-marking on these rims extends up to the lip and varies from vertical and near vertical to oblique (15 to 40 degrees to the left). The cord-marks range from only slightly smoothed to well smoothed. Rim forms are straight, slightly inverted, and everted. Straight forms predominate.

On one sherd three punctations 5.0 mm in diameter and 3.0 mm deep occur approximately 35 mm below the lip. Five rim sherds representing five vessels (0.66 percent) comprise this class. Lip thickness ranges from 6.2 to 8.9 mm; the mean is 7.0 mm. Ten to twenty millimeters below the lip the thickness ranges from 5.0 to 6.0 mm; the mean is 5.9 mm. None of the rims recovered had appendages.

Class IV: Monongahela Cord-Marked, plain lips (Plate 2, A-B). The rim lips in this class display no evidence of decoration. Lip surfaces are predominately flat, but flat and beveled (to the interior and exterior) and rounded are not uncommon. Lip thickening frequently occurs and two sherds show lip overhang. This characteristic was apparently produced by applying finger pressure downwardly. On these rim sherds, cord-marking, with a single exception, extends from the sides of the rim up to the lip. The impressions range from right and left oblique (5 to 30 degrees) to vertical. Clearly, left oblique forms predominate. Smoothing has caused partial obliteration of the marks in many cases. Rim forms in this category range from everted, slightly everted, straight, slightly inverted, to inverted. Most are everted.

Fifty-seven sherds representing forty-six vessels (18.39 percent) constitute this class. Lip thickness ranges from 4.1 to 10.0 mm; the mean is 7.0 mm. Ten to twenty millimeters below the lip the thickness ranges from 3.3 to

8.3 mm; the mean is 5.5 mm. None of the rims had appendages.

Class V: Monongahela Cord-Marked, punctate. Four rim sherds with vertically applied punctations have been found. Adjacent to one are partially smoothed diagonal cord-wrapped-stick impressions. Lip forms vary from flat, flat and beveled (to the exterior), to rounded. The cord-marking on these specimens, which is moderately to well smoothed, extends up to the lip and ranges from left oblique (10 degrees) to vertical. Rim forms are straight. The thickness over the lip ranges from 5.5 to 9.0 mm; the mean is 7.0 mm. Ten millimeters
below the lip it varies from 5.1 to 7.3 mm; the average is 6.1 mm.

Appendages (Plate 3, A-F). Appendages are not common (08.36%) on the Brokaw ceramics. Only 25 occur and of these only five remain attached to the rim and lip. Thus, in general, the appendage-vessel bond was poor and the appendages have become detached. Two types are noted: straphandles and lugs. Each is described below.

Straphandles (Plate 3, A-B). Only four straphandles appear, but a neck sherd with an attachment socket and the basal remains of another testify to the presence of a fifth. Two specimen fragments suggest good workmanship. Both were attached to the rim below the lip. One is curvilinear in outline and convex to slightly concave in cross section, while the other is too fragmentary to consider. Forms similar to the first are reported at Fort Ancient sites such as Blain Village (Prufa and Shane, 1970:66; Figure 9, B) and Madisonville (Griffin, 1966:134; Plate LXII) and at a Monongahela site in Greene County (Mayer-Oakes, 1955:112; Plate 59, B), Pennsylvania. Of the two remaining specimens one, which was rather poorly executed, was attached to the lip. Unfortunately, the nature of the multiple fractures obscures the form, but it was apparently curvilinear in outline and rectangular in cross section. The last example is considerably smaller than the others. Although fragmentary, three observations may be made: it was oval in cross section, curvilinear in outline, and was attached to the rim. A handle akin to this was noted by Mills at Feurt Village (1917:360; Figure 33, No. 7). None of the specimens are cord-marked.

Discrete Lugs (Plate 3, C-F). Twenty lugs comprise the remaining appendages. And these again assume half as many different forms. Two lugs are vertically elongated. Their
nearest parallels occur at Fort Ancient sites such as Graham (McKenzie, 1967:71; Plate 5 A), Feurt (Mills, 1917:360; Figure 32, No. 1), and Blain Village (Prufener and Shane, 1970:56; Plate 5, A). On one plain specimen the lip rises like a castellation above the lug. Unhappily, the somewhat fragmentary state of the second precludes any meaningful observation beyond the fact that it was cord-marked. Two additional lugs seem to be a smaller variant of the same form, while another is similar to McKenzie’s hemispherical type (1967:71). One of the former is cord-marked and two are plain. One double lug also appears. On this example, the lug was applied to the cord-marked rim so that it entirely overlapped the lip. Finally, one plain “nipple-like” specimen occurs. Presumably, the last five are akin to the “... small teat-like attachments ...” found at Blain (Prufener and Shane, 1970:56; Plate 5, D-E).

Semicircular rim lugs are a sixth discrete lug type recovered at Brokaw. Their presence is reported at both Fort Ancient and Monongahela sites, for example, Baum and Fox Farm (Griffin, 1966:45, 176; Plate VIII, Nos. 1-3 and Plate CXV, No. 7) and Montague (Butler, 1939:21; Plate 6, e-f) and Johnston (Dragoo, 1955:101; Plate 12). No cord-marks appear. A seventh type, although fragmentary, was clearly applied to the rim and lip so that a castellation was formed. Cord-wrapped-stick impressions occur on either side of it. The rim is cord-marked. An eighth form, approximately 10 mm thick and 35 mm in diameter, has a smooth convex surface and was round in outline. Presumably it was attached to the rim. A ninth type is composed of six examples. Lugs comprising this category are relatively small and were attached to the rim so that the ends projected beyond the lip to form small “ears”. Thus, the low point of the lug was in the center. Here, however, the lip was higher than the appendage. All measure approximately 40 mm long, 15 to 20 mm in vertical height, and 10 to 15 mm thick. Cord-mark impressions appear on the base of one and extend beneath another. Three are shell-tempered and two are grit. The last specimen, attached to the rim and flush with the lip, is much heavier in construction and was apparently used to carry the vessel. Its shape is that of a quarter sphere with a smooth thumb depression adjacent to the lip surfaces. Vertical cord-marks extend from nearly the base of the lug to the top. The temper is grit. Forms similar to the last three have not been noted in the literature. Finally, two additional shell-tempered appendages are too fragmentary to describe. It will be recalled, of course, that two lugs were previously cited under rim classes I and II. Their forms remain unknown.

Diagnostic Features: Paste, surface finish, and rim and lip forms.

**BODY SHAPE**

The Brokaw vessels were globular jars with slightly constricted to well defined necks and rims and rounded shoulders. Although only two clearly identifiable basal sherds have been recovered, it seems safe to assume that the bases were rounded because it is nearly impossible to distinguish the cord-marked body and basal sherds from one another. One large section of a jar recovered indicates that it was in excess of twenty-five centimeters in height. A comparison of this specimen with others suggests that this was probably the average vessel size.

Smaller vessels such as bowls are less common, but, not unlike the larger forms, the containers had slightly constricted to well defined necks and rims and rounded shoulders, although forms with straight walls occur too. The basal configuration, unfortunately, remains unknown.

**GEOGRAPHICAL RANGE**

Related ceramics occur on sites centered primarily in southwestern Pennsylvania at the confluence of the Monongahela and Youghiheny rivers. However, they are found in much of the Monongahela, Allegheny, and Upper Ohio valleys in western Pennsylvania and West Virginia, eastern Ohio (as far south as Marietta), and southwestern New York. In Ohio and Pennsylvania, sites have been discovered some distance from a major water source.

**CHRONOLOGICAL POSITION AND CULTURAL AFFILIATIONS**

To be discussed in the interpretive section.
Miniature effigy pipes from the late prehistoric period are a fascinating part of the "artistic flowering" of several Ohio based cultural groups in the period immediately preceding the appearance of the white man. Through represented individual stylization we can glean evidence of specialized usage, possibly even totemistic deployment. Although there is a lack of documented evidence, it seems logical to propose that these pipes were used as "fetish"—like objects to magically protect or aid their owners. Functional use as smoking or medicinal instruments seems unlikely.

Shown in Fig. 1 are three examples of the miniature effigy form. Two emanated from the West Central Ohio and the third is from Illinois. On the left is the smallest example approximately one inch in height, representing a human head carved from a volcanic material. It was first encountered near Jacksonville, Illinois. In the center is a slate human effigy standing some two inches high with a frontal stem aperture. It was found near New Madison, Ohio. To the right is an interesting elbow pipe with a duck effigy head superimposed on the top of the stem. The material is grey-green steatite and the pipe was found near Celina, Ohio.

While the first two pieces have late Mississippian characteristics the last pipe resembles the form associated with several proto-historic tribes in the southern Appalachian area. What is remarkable is its minute size—1 1/8 inches in length and a bowl diameter of about ¼ inch.

Since the miniature effigy form is so unique and rare there is little information available to support the basis for this type of pipe technology. A possible application was mentioned earlier. Another might be the whimsical feeling of the maker expressed by the creation of a miniscule example for one of his children.
The Gibbs Settlement Area
By J. Bowen
Department of Archaeology
The Ohio Historical Society

Since 1977 the Department of Archaeology of the Ohio Historical Society has been engaged in research at Sandusky Tradition villages in eastern Sandusky County, notably at Pearson Villages I, II, and III, and Miller’s Ridge. Recently, however, it was noted that these villages and four more (Cemetery Ridge, Cobb’s Hills, Resaca, and Wright) are clustered in an approximately 2x3 mile area near the southwestern shore of Sandusky Bay. These eight villages all date from the period of A.D. 1300-A.D. 1500, and it is believed that they represent the sequential movements of a single village group over a period of two and one-half centuries.

The Gibbs Settlement Area study universe includes these eight village sites as well as the adjacent territory used by their inhabitants. Four non-village sites which produce ceramics are known, all being located between the villages and Sandusky Bay. Three non-village sites where arrow-points are found are known from the oak-hickory-maple forests of eastern Seneca County. Thus, through the use of the “settlement area” concept, the Ohio Historical Society Department of Archaeology’s research focus has expanded from a cluster of villages to an approximately 360 square mile region centered on eastern Sandusky and Seneca Counties. By focusing on this entire region, we will be able to examine all aspects of these people’s lives that have left discernable archaeological traces in the Gibbs Settlement Area.

THE SANDUSKY TRADITION
Department of Archaeology
The Ohio Historical Society

Peterson (33OT9) Portage River
Indian Hills (33WO4) Maumee River

A.D. 1600
Edwards (33T26) Portage River
Muddy Creek I (33SA35) Muddy Creek
Bear Fort (33SA8) Sandusky River
Wright (33SA) Raccoon Creek

A.D. 1500
*Miller’s Ridge (33SA) South Creek
*Pearson I (33SA9) Green Creek
Hudson (33SA10) Sandusky River
Muddy Creek II (33SA35) Muddy Creek

A.D. 1400
*Pearson II (33SA9) Green Creek
*Cemetery Ridge (33SA13) Green Creek
Bloom (33SA40) Sandusky River
*Pearson III (33SA9) Green Creek

A.D. 1300
Libben (33OT6) Portage River
Bull Run (33SA) Bark Creek
Eiden (33LN14) Black River
Mixter I (33ER15) Huron River

A.D. 1200
A.D. 1100
Mixter II (33ER15) Huron River
A.D. 1000
A.D. 900
A.D. 800

Mixter III (33ER15) Huron River

A.D. 700
Taylor (33ER3) Huron River
Leimbach (33LN9) Vermilion River
Esch (33ER1) Huron River

A.D. 600
Green Creek (33SA) Green Creek
Heckelman II (33ER14) Huron River

A.D. 500
*village in Gibbs Settlement Area

This is a partial listing of some Sandusky Tradition villages. All through this period the people relied heavily on walleyes and freshwater drumfish (sheepshead) as well as on hickory nuts. Deer and elk were hunted in large numbers.
Paleo Occurrence Along Pleistocene Drainage Channels in the Lower Great Miami River Valley, Ohio

By
Ken & Jenny Tankersley
Dept. of Anthropology, University of Cincinnati

On March 12, 1965, the late Dr. L.S.B. Leakey started a quake that shook New World prehistory, the search for the earliest Americans. His work, considered by some preposterous, nevertheless sparked the fuse of necessity for examining the major Pleistocene drainage areas away from shorelines and terraces (Leakey et al. 1968).

The search for pre-Clovis deposits (Sangamon Interglacial-Early, Middle Wisconsin) in the lower Great Miami River valley is restricted to drill sampling deeply buried subsurface deposits because of their occurrence below the water table, or examination of highly weathered and eroded Illinoian terrace remnants. Industrial building, interstate highway construction, and mining operations have allowed a peak into the Late Wisconsin outwash history of the area. Here deposits less than 19,000 years old have exposed the remains of Pleistocene megafauna with subtle hints regarding human presence.

Surface erosion and cultivation of Wisconsin terraces have revealed that Early and Late Paleo-Indians frequented the area. They found, as did all the cultures that followed, the terraces very suitable for habitation. The area today still abounds in plentiful game and edible plants, especially along the head waters of the Great Miami River. The area covered by this study includes all Pleistocene drainage deposits which occur below the terminal portion of the Wisconsin glaciation in the lower Great Miami River valley.

GEOLOGICAL SETTING

The Ohio Geological Survey (1963) obtained seismic refraction data that showed a now-buried valley 200-300 feet deep and about 2 miles wide had been entrenched in the bedrock surface during interglacial ages prior to the onset of the Illinoian glaciation. The valley generally followed the course of the present Great Miami River, though for much of its length it was north and west of the Great Miami, Illinoian and Wisconsin glaciers blocked this valley and caused the river to carve a new channel along its present location. The younger buried valley is about 100 feet below the present river level.

Teller (1970) has concluded that outwash, probably from both Altonian and Woodfordian glaciers, was deposited in the major valleys south of the ice. Altonian and Woodfordian loess was deposited on the older drift surface throughout the area. Forsyth (1961) has estimated that approximately 19,000 years ago the Miami lobe of the Wisconsin glacier had reached its southern most position near Cincinnati. Shortly afterward it began to retreat back to the north. Unfortunately, there is no radiocarbon record of this retreat.

Fenneman (1916) illustrated that, as the glacier retreated, debris carried by the meltwater was deposited on the Great Miami River valley floor. The ancestral Great Miami River, overloaded with debris, formed a valley train. This type of outwash deposit developed as a result of braided streams depositing banks of sand and gravel, clay deposits from ponded water, and muck from back swamp areas. Thus, swift meandering ephemeral streams on the flood plain created a variety of ecological niches advantageous to both humans and the animals they preyed upon. Goldthwait (1959) suggests that patches of spruce and hemlock grew in a taiga type of environment perhaps being prolific along streams.

Today, remains of the Wisconsin valley train deposits form terraces along the Great Miami River's flood plain. The Ohio Department of Natural Resources (1973) states that the Fox-Genessee-Ockley soil association occurs in the study area above subsurface deposits of high carbonate glacial drift. Lerch (1978) has found that subsurface remnants of valley train deposits can be identified by the presence of the Eldean-Ockley soil association. This association occurs in a layer of loamy material overlying deposits of sand and gravel. Due to the high permeability of the subsurface glacial deposits, these areas can be identified by false color infrared aerial photography. Infiltrating ground water flowing through porous deposits can be detected as darkened, patterned areas, such as those seen in figure 1.

Haynes (1966) indicates that major Clovis camp sites in the east, such as Shoop, Williamson, Quad, and Wells Creek Crater, are all on high ground such as a stream-cut terrace or a ridge overlooking the flood plain of a river or creek. In Ohio, the Honey Run site and other Walhonding valley Paleo-Indian workshops in Coshocton County are located high on Wis-
consin terraces, similar to ones in Knox, Licking, Fairfield, and Ross counties (Pi-Sunyer et al. 1975). All Paleo sites along the Pleistocene drainage channels in the lower Great Miami River valley occur on Wisconsin terraces (valley train remnants), or on a ridge overlooking the river's flood plain. All are multicomponent sites, probably because of their desirable location.

**DISCUSSION**

If the studies of the late anthropologist Dr. Leakey are correct we should be examining Pleistocene deposits of a sufficient antiquity to include a possible member of Homo erectus. Stratigraphy of this antiquity in this vicinity is highly weathered and eroded or occurs below the water table.

A buried forest floor exists in or beneath Wisconsin outwash in the study area (currently being analyzed by the junior author). Orton (1873) first noted this layer exposed at Lawrenceburg, Indiana (just west of the study area). Here he found stumps in upright positions in situ in a buried paleosol. Thin beds of ochreous clay occurred above and below the "forest bed". Drill logs in the lower Great Miami River valley have revealed that this layer occurs between 50 and 60 feet below the present flood plain and well below the water table. However, during the construction of Interstate 275, near the State Line site (33Ha58), Charles Oehler observed an exposure of a forest floor represented by carbonized needles and branches in the outwash deposit. At present there is no cultural association with this layer; however, further study may prove valuable.

Despite the disagreement toward the antiquity of the arrival of the first Americans, unambiguous radiocarbon dates concretely put man in North America by 13,000 B.P. These sites, however, all occur west of the Mississippi River. Dent, Clovis, Miami, Lehner, and Maco all show that the Clovis fluted technology was used to kill extinct Pleistocene megafauna.

Based on typology, an abundance of Clovis fluted points and sites occurs east of the Mississippi River. At present, there are no known kill sites or megafauna associations, other than caribou, with Paleo cultural debris in the East. Why? Is this due to sample fraction? One possible explanation can be seen when the Thomthwaite moisture index and major soil classifications of the United States are viewed in correlation with eastern and western Paleo sites as seen in figure 2.

Since western climates are conducive to the existence of pedocals, of a calcium carbonate based soil, it seems logical that it would also be a prime area for the preservation of calcium carbonate faunal remains. Weak acids, such as carbonic acid, occurring in the moist eastern areas, readily decompose carbonate material and pedalfers reflect this environment.

The remains of a kill site left on or near a swift meandering, ephemeral, braided outwash stream would readily be covered or dis-associated. Faunal debris covered by these unconsolidated stratified deposits of silt, sand or gravel would quickly decompose because of the porous and strongly leached nature of the deposit. Only skeletal portions that have an extra high concentration of calcium carbonate, such as teeth or tusks, could resist this highly corrosive force.

During the late Pleistocene, Paleo-Indians, who frequented southern Indiana and east-central Kentucky, left their cultural debris in the drainage areas south of the retreating Wisconsin glacier. Clovis and Ross County fluted points in Ohio are almost restricted to the Pleistocene outwash drainage areas of the Great Miami and Scioto River valleys. Remains of the Pleistocene megafauna occur in both areas. One can easily surmise that Paleo-Indians sought the plentiful game of these valleys, preservation of a kill other than tusks would be almost impossible unless sealed in a non-porous clay or clay/silt layer.

Forsyth (1963) indicates that 195 proboscidean (mammoths & mastodon) remains were recorded from Ohio Pleistocene outwash deposits. In every case there was no association with artifacts. This ratio is haunting. Occurrence of Paleo cultural debris and Pleistocene megafauna needs to be closely recorded by means of reconstructing the paleo-ecological situation in which they were deposited, derived from the surrounding stratigraphy in hopes of finding clues to man's early existence on this continent that would otherwise be lost or go undetected.

The geographical associates of Paleo cultural material and Pleistocene megafauna and local geology are shown in figure 3 for the lower Great Miami River valley. This is a preliminary summary of the weathered outwash deposits, exposed by construction and mining.

Natural weathering and erosion of stratified outwash deposits destroy Pleistocene stratigraphy. Open pit mining of Pleistocene deposits allows the geologist and archaeologist the best possible view of stratigraphy.
that otherwise would be unavailable. Increased cooperation between businessmen and archaeologist will open new doors to a unique view into Pleistocene deposits.

Fenneman, Nevin
1916 *Geology of Cincinnati and vicinity.* Geological Survey of Ohio, Columbus.

Forsyth, Jane L.

Goldthwait, Richard P.

Haynes, C. Vance

Leakey, Louis S. B. Ruth DeEtte Simpson and Thomas Clements

Lerch, Norbert K.
1978 A general soil map of Butler County, Ohio. Department of Natural Resources, Columbus.

Table 1: Paleo site summary of the lower Great Miami River Valley (SWORPA site numbers)

<table>
<thead>
<tr>
<th>Site</th>
<th>Projectile Point Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dravo—33Ha377</td>
<td>Clovis, Quad</td>
</tr>
<tr>
<td>Gravel Run—33Ha412</td>
<td>Pentagonal Fluted</td>
</tr>
<tr>
<td>Mt. Nebo—33Ha152</td>
<td>Clovis, Agate Basin</td>
</tr>
<tr>
<td>Lynch—33Ha147</td>
<td>Unfluted Fluted</td>
</tr>
<tr>
<td>Twin Mounds Village—33Ha110</td>
<td>Clovis, Unfluted Fluted</td>
</tr>
<tr>
<td>Campbell Village—33Ha213</td>
<td>Lanceolate</td>
</tr>
<tr>
<td>Egalype—33Ha411</td>
<td>Unfluted Fluted, Quad</td>
</tr>
<tr>
<td>State Line—33Ha58</td>
<td>Lanceolate</td>
</tr>
</tbody>
</table>

Acknowledgements
The authors wish to thank C. Lindner, E. Oehler, R. Espelage, E. Schoot, R. Tanner, SWOPRA, and Dravo (National Register site).

Ohio Department of Natural Resources
1973 *Know Ohio's soils.* Division of Lands and Soil, Department of Natural Resources, Columbus.

Ohio Geological Survey

Orton, Edward

Pi-Sunyer, Oriol, John Blank and Robert Williams

Teller, James T.

Fig. 1 (Tankersley) Infrared (false color) aerial photograph showing site boundaries, and a buried stream in the lower portion of the photograph.
Fig. 2 (Tankersley) Major soil classifications, Thornthwaite Moisture Index, and major Paleo sites.

Fig. 3 (Tankersley) Pleistocene drainage areas of the lower Great Miami River valley. Wisconsin outwash features, megafauna and site locations within the study area. Black curved line represents the Ohio River.
A Dandy Little Hammer
By Dennis Hiser, Gibsonburg, Ohio

The hammerstone shown in Fig. 1 is 2\(\frac{3}{4}\) inches long and 1\(\frac{3}{4}\) inches wide. It is fashioned from dark green granite with numerous yellow spots. This material in turn is widely speckled with small black crystals which gives it a sparkling appearance. It was found in April, 1978, by Jeffry Doll of Luckey, Ohio, while surface hunting in Wood County. It weighs just three ounces and is smoothly finished on all surfaces.

Shown in Fig. 2 is a flint drill 1\(\frac{3}{4}\) inches long. The entire piece is heavily ground on all surfaces and it may have possibly been used for drilling such holes as the cavities in pipe bowls.

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Book Review

American Indian Pottery—by John W. Barry
213 pages—400 color plates—hardbound—dust jacket. Price $24.95
Indian Rock Gallery, P.O. Box 583, Davis California 95616

The resurgence of interest in American Indian baskets, blankets, and pottery has brought forth a number of books on these subjects. American Indian Pottery is one of the best of these publications. The 400 color plates are invaluable to those wishing to identify many of the ceramics both of contemporary and prehistoric origin and contains photographs of a number of prehistoric vessels from the eastern United States. The book understandably concentrates on the vast amount of collectable pottery emanating from the American southwest—both prehistoric and contemporary. If a criticism of the book could be made it would be that, from the viewpoint of the eastern archaeologist, little help will be found in identifying the vast array of prehistoric pottery from our area since only fifteen pages are devoted to that subject. However, there are literally hundreds of photographs and a vast amount of information on historic and contemporary pottery from Arizona and New Mexico. In addition to the outstanding color photographs, a range of price values for each type is given. American Indian Pottery will be a valuable addition to the library of those who would like to collect, identify or determine the value of historic southwestern Indian ceramics.

Robert N. Converse
The single notched winged bannerstone is a 1980 personal surface find. It was found in Huron County, Ohio, near Wakeman. The banded slate was utilized in such a way as to complement the contours of the design on both sides of the artifact. It is obvious that much skill and care and considerable thought went into its manufacture.

Fig. 1 (Pliszka) Notched bannerstone from Huron County, Ohio. Note how banding in slate coincides with contours of piece.

Books On Michigan Archaeology

A series of booklets called the Great Lakes Informant series dealing with various aspects of Michigan archaeology is now available at no cost from:

Michigan History Division
Michigan Department of State
Lansing, Mich. 48918

Also available are A Short History of Michigan by John Kern and A Brief History of Michigan Indians by Charles Cleland—both at $1.00 each.
The Ohio Archaeological Council (OAC) has been in existence since 1975. During this time, it has gone through the growing pains typical of any professional organization. Initially, the OAC devoted most of its activities to the inhouse development of a workable system. Then the OAC became involved with the Ohio Historic Preservation Office and developed several “Guidelines” for the Ohio Historic Preservation Office for utilization in its daily activities. Because of the pressing need for these guidelines, the OAC had not actively attempted to develop a relationship with the active non-professional in Ohio.

Two forms of involvement are being initiated by the OAC in an effort to involve the non-professional and the professional in Ohio. First, the Board of Directors of the OAC has appointed Martha Otto to head an ad hoc committee aimed at investigating possible ties between the professional and non-professional communities. She has and will be meeting with members of both the OAC and the Archaeological Society of Ohio (ASO) to determine ways each can serve the other. The establishment of these OAC Comments as a regular part of the Ohio Archaeologist is the second avenue being taken to increase communication between the professional and the non-professional communities.

The overall goal of the OAC is to promote the conservation, preservation and understanding of Ohio’s archaeological resources, whether they be historic or prehistoric. I believe it is the goal of both the professional and non-professional to gain a better understanding of the historic and prehistoric lifeways through the recovery, analysis, and interpretation of archaeological remains. However, up to the present, there has been little formal effort by either the OAC or ASO to develop a mutually beneficial method to meet this goal. There are approximately 100 members of the OAC and 2000 members of ASO. It is not hard to figure out that there is a tremendous amount of interest in the archaeological resources of Ohio outside of the professional community. In fact, most professionals realize that many important archaeological sites first came to light through the efforts of a concerned non-professional. The development of better communication between OAC and the ASO could serve several purposes. The non-professional would hopefully gain from the expertise that the professional can offer in systematic recovery techniques and interpretation. The professional would benefit from a larger constituency helping to systematically locate and document archaeological sites and to promote the preservation and understanding of the archaeological records.

We recognize that the development of a good working relationship between two organizations like the ASO and the OAC requires careful thought and time. For this reason, we are starting slowly, with the committee to offer suggestions for a direction for this involvement, and this regular page in the Ohio Archaeologist.

It is hoped this page will serve direct needs of the non-professional and begin to bridge the gap between the professional and the non-professional. One intent of this page is to keep the non-professional community informed of the activities of the OAC. This would include those activities already conducted, such as excavations at archaeological sites, and those activities being proposed in the near future, such as workshops or excavations. If the opportunities exist for the non-professional to participate in archaeological research with professionals, we are hoping to publicize these activities through this page.

Another intent of this page is to address specific issues of interest to the majority of the non-professional community. These articles may run more than a page, but would address specific concerns expressed by ASO members. The issues would be responded to by appropriate professionals within the OAC. The main theme of these discussions will be the continuing development and understanding of Ohio’s archaeological resources.

There has been a history of some conflict between the professional and the non-professional working in Ohio. While I do not wish to incite additional conflict, I do not feel it is best to ignore the issue entirely. I would like to express a few personal comments on this subject and hope that future conflicts can be resolved to everyone’s satisfaction. Most of the conflicts of which I am aware occurred (continued on next page)
Book Review

The Newark Holy Stones—The History of an Archaeological Tragedy
By Robert W. Alrutz, Denison University, Granville, Ohio—available from the author
Paperback, 57 pages—price $2.00

When first this publication was sent to me for review, my initial impression was that it was probably just another book dealing with the peopling of the New World by the lost Israelites, most of which deal more in fancy than hard fact or common sense. However, I found it to be one of the most thoroughly researched and factual treatments of the fascinating story of the Newark Holy Stones yet published. The book carefully and exhaustively documents by old correspondence, newspapers reports, and other publications, the discovery of the so-called Holy Stones by David Wyrick in 1860 and the subsequent controversy which surrounded them. It introduces the opinions and thoughts of archaeologists and Biblical scholars of the day including such early Ohio luminaries as E. H. Davis and Charles Whittlesey. Few faults can be found with the general presentation—complete footnotes are on nearly every page and a complete bibliography is included. Annoying are the parentheses converting inches, feet, yards, and even miles to decimal equivalents. Author Robert W. Alrutz is a professor of biology at Denison University at Granville, Ohio, and was led into the Holy Stone subject after visiting the Johnson-Humrickhouse Museum in Coshocton where two of the stones presently reside.

Even though the book seems to be fairly objective, if it could be said to contain a villain, that villain would be Charles Whittlesey. Because of Whittlesey’s out-of-hand rejection of these finds, the author gives the impression that Whittlesey’s opinion was dogmatic and that he failed to pay proper attention to their discovery. This reviewer can only say that in his opinion—as one who has looked at a great many fraudulent artifacts—that Whittlesey and everyone else gave these spurious and patently false pieces more attention than they deserved. At the conclusion of the book the author gives the idea that there is still some justifiable controversy over the stones and that there yet remains a question about their authenticity. However, I have seen the Holy Stones and to be quite frank, I don’t see how anyone at all familiar with prehistoric Indian artifacts could be taken in by them. Despite the fact that the author calls the story of the stones a tragedy, it is no more than a fascinating history of one of the more infamous archaeological frauds. I recommend the book for entertainment and for those who would like to know more about the famous Newark Holy Stones. It is a must for those who have not yet formed an opinion but who would like to reach a conclusion on their own.

Robert N. Converse

Council’s (OAC) Comments (continued from previous page)

because of misunderstandings or misinformation. There is a lack of trust by both communities in terms of devulging information on archaeological sites. If this is not the problem, then there is often tension from a lack of understanding about the expectations of each group. In any case, the result is a falling-out between the professional and non-professional. I should point out, however, that there are many more positive results from coordination between professional and non-professionals than negative ones. Unfortunately, the negative seem to resolve more attention.

I am convinced that most members of the professional and non-professional communities are interested in increasing the understanding of the prehistoric and historic record.

Over 8000 archaeological sites have been recorded, many with the help of the non-professional. With the present trend in federal funding, there will be even less money available for archaeological research and survey. The non-professional will play an increasingly important role in documenting Ohio’s archaeological resources. Because sites are being destroyed daily, it becomes even more critical that the efforts of both the professional and non-professional be cooperative in nature. Through better communication between the professional and the non-professional, there will result a better understanding of the peoples and cultures that occupied Ohio long before any of us came along. If we wait too long, it will be too late.
OBJECT OF THE SOCIETY

The Archaeological Society of Ohio is organized to discover and conserve archaeological sites and material within the State of Ohio, to seek and promote a better understanding among students and collectors of archaeological material, professional and non-professional, including individuals, museums, and institutions of learning, and to disseminate knowledge on the subject of archaeology. Membership in this society shall be open to any person of good character interested in archaeology or the collecting of American Indian artifacts upon acceptance of written application and payment of dues.