

SEAC

NEWSLETTER



SOUTHEASTERN ARCHAEOLOGICAL CONFERENCE • VOLUME 20 NUMBER 1 • APRIL 1978

SEAC NEWSLETTER • VOL. 20 NO. 1

• APRIL 1978

The SEAC *Newsletter* is published biannually in the spring and fall by the Southeastern Archaeological Conference. Subscription is by membership in the SEAC. Dues for annual membership are \$5.00 for individuals, \$7.50 for family and \$7.50 for institutions. Membership includes one (1) bulletin and two (2) newsletters. Requests for memberships and general inquiries should be addressed to the secretary; subscriptions, dues, changes of address, and orders for back issues to the treasurer; manuscripts for publication in the bulletin to the editor of the bulletin; and newsletter items to the editor of the newsletter.

OFFICERS

President: Charles H. McNutt, Department of Anthropology, Memphis State University, Memphis, TN 38152

Vice-president: Roy S. Dickens, Jr., Department of Anthropology, Georgia State University, Atlanta, GA 30303

Secretary: Martha A. Rolingson, Arkansas Archeological Survey, University of Arkansas Museum, Fayetteville, AR 72701

Treasurer: Alfred K. Guthe, Frank H. McClung Museum, University of Tennessee, Knoxville, TN 37916

Sergeant at arms: Robert S. Neitzel, 110 Joffrion St., Marksville, LA 71351

Editor of the Bulletin: Drexel A. Peterson, Jr., Department of Anthropology, Memphis State University, Memphis, TN 38152

Editor of the Newsletter: David H. Dye, Department of Anthropology, Washington University, St. Louis, MO 63130

INSIDE THIS ISSUE

SEAC Business	
35th Annual Meeting	1
1978 Nominations Committee	1
Business Meeting Minutes	1
CHSA Announcements	3
Articles	
The Owl Hollow Project	
Laboratory Flotation Device	
(by James E. Cobb and Charles H. Faulkner)	4
Augering Archaeological Sites	
(by Julie Stein)	11
Replies to Trinkley	19
Current Research	
Alabama (University of Alabama)	26
Florida (University of South Florida)	28
(University of South Florida)	32
Georgia (Georgia State University)	34
(South Georgia College)	35
(University of Georgia)	38
Massachusetts (Harvard University)	43
Missouri (Washington University –	
University of Missouri – SMAP)	44
(Washington University – TRAP)	47
North Carolina (Appalachian State University)	47
Tennessee (University of Tennessee)	48
Proposed Articles of Incorporation and By-Laws	
Articles of Incorporation	53
By-Laws	56

SEAC BUSINESS

35TH ANNUAL MEETING

Place: Ramada Inn, 7621 Kingston Pike, Knoxville, Tennessee
37919 (615) 693-8111

Date: Thursday, November 9 - Saturday Noon, November 11, 1978

Abstract and Symposium Deadline: September 1, 1978

Program Chairperson: Jefferson Chapman
Department of Anthropology
University of Tennessee
Knoxville, TN 37916

Mailing of motel data and call for papers will be made in May.

Note: Historic Site Conference will not be meeting with the SEAC this year.

1978 NOMINATIONS COMMITTEE

President Charles McNutt has appointed the following individuals to the Nominations and Elections Committee: Patty Jo Watson, chairperson; J. Bennett Graham and Kathleen Deagan. The elections for 1978 will be in accord with the proposed By-Laws. Suggestions for nominations should be sent to:

Patty Jo Watson
Department of Anthropology
Washington University
St. Louis, MO 63130

BUSINESS MEETING MINUTES

The Southeastern Archaeological Conference Business Meeting, held October 28, 1977, Lafayette, Louisiana, was called to order at 6:00 p.m. by President Berle Clay. Several individuals important to the Conference were recognized. Stu Neitzel presented Jeff Brain with a poster enlarged from a photograph of Jeff Brain (you had to see it to appreciate it.) Jon Gibson announced that plaques were being presented to distinguished members for their contributions to arch-

aeology of the Southeast and to the Conference. Jon Gibson presented a plaque to Clarence Webb for his contributions to Caddoan and Poverty Point archaeology; Stephen Williams presented one to Bill Haag for his contributions as editor of the Conference Newsletter, his ceramics typology, and as a teacher; and Jeffrey Brain presented one to Stu Neitzel for his varied contributions to archaeology and for his wisdom, witticisms, and fund of jokes.

Two officials of the University of Southwestern Louisiana were introduced: Dr. James Oliver, Vice President for Administrative Affairs and Dr. Mary Dickman, Dean of the College of Liberal Arts.

Reports of the officers were the first order of business. Martha Rolingson, Secretary, reported on the progress of the proposed constitution. The draft constitution will be published in the spring Newsletter along with a request for responses to it. It will then be put to a mail ballot of the current membership to accept, modify or consider further at an open meeting of the membership. Present plans are to implement this constitution for the 1978 meeting.

Ted Guthe, Treasurer, reported the following finances:

Treasury as of Oct. 1, 1976	\$3,528.76	
Received during 1977	2,465.94	
Expended for publications		3,457.35
postage		160.24
refunds on out-of-		
print publications		53.75
1977 Balance	2,315.36	

He recommended that the dues be raised to \$7.50 for active individuals and to \$10.00 for family memberships and institutions for 1979. A motion was made and passed unanimously for the dues raise.

Drexel Peterson, Editor, reported that Bulletin 20 is in proof. It will cost in excess of the money on hand. He also has papers for a volume on Jim Ford. He proposed a surcharge or a charge of probably no more than \$2.00 for the Ford volume. After some discussion a motion was made and seconded that the Conference charge enough to defray all costs of the Ford volume, to be no more than \$4.00. The motion was passed unanimously.

David Dye, Newsletter Editor, reported that he needs more items to publish such as current research, book reviews, short articles and comments. The format of the Newsletter is being changed to offset to reduce costs.

The Nominating Committee for the election of officers at

the 1977 meeting presented the following slate:

President - Charles McNutt
Vice-President - Roy Dickens
Secretary - Martha Rolingson
Treasurer - Ted Guthe
Editor - Drexel Peterson
Sergeant at Arms - Stu Neitzel

It was moved and seconded that this slate be elected and it was passed unanimously.

President Clay turned the meeting over to President McNutt.

President McNutt announced that the University of Tennessee had invited the Conference to Knoxville for 1978 with Jefferson Chapman handling the arrangements. There was some discussion about changes in sessions, whether or not to meet simultaneous or following the Historic Site Conference, shorter schedule for meeting, control of papers and length of time. It was decided that the Executive Committee should make the final decision. It was moved, seconded and passed that the Conference meet the weekend of October 28.

The Conference then expressed appreciation to the University of Southwestern Louisiana and to Jon Gibson for hosting the 1977 Conference.

Meeting adjourned.

Respectfully submitted,
Martha A. Rolingson
Secretary

Any additions and/or corrections should be sent to Martha A. Rolingson, Arkansas Archeological Survey, University of Arkansas Museum, Fayetteville, AR 72701

CHSA ANNOUNCEMENTS

The Board of Directors of the Conference on Historic Site Archaeology has voted to secede from the union that has bound this conference to the Southeastern Archaeological Conference for the past 18 years. This action resulted from debate within the SEAC as to whether their colleagues excavating historic sites should continue to meet the day prior to the SEAC meetings which culminated in a vote by the members of the SEAC that the two conferences "should go their independent ways."

The newly independent Conference on Historic Site Archaeology

will meet in Old Salem, North Carolina, on September 28 and 29, 1978. Those interested in supporting the Conference on Historic Site Archaeology should send \$8.00 annual dues to Stanley South, Chairperson, The Conference on Historic Site Archaeology, Institute of Archeology and Anthropology, University of South Carolina, Columbia, SC 29208. Dues entitle the member to receive the annual volume of papers presented at the conferences.

ARTICLES

THE OWL HOLLOW PROJECT LABORATORY FLOTATION DEVICE

James E. Cobb and Charles H. Faulkner
Department of Anthropology
University of Tennessee
Knoxville, TN 37916

In 1965 Stuart Struever described a simplified water separation system adapted to free-flowing streams where the current and hand agitation separated ecofactual materials from their matrix (also see Struever 1968). Watson (1976) and Dye and Moore (1977) have recently described machine assisted systems of water flotation designed to maximize the processing of soil samples in a labor saving, one-step operation. The above flotation devices are very effective, but are designed for outdoor use. Since water flotation significantly extends the range of data recovery, it is extremely desirable but not always possible under some field conditions. Limitations are sometimes imposed by factors of time, labor, site location/soil transportation and weather conditions. Archaeological projects such as federal and state contracts and public and private research grants increasingly involve intensive field and laboratory research emphasizing the recovery and analysis of a broad spectrum of cultural and environmental data. Under these conditions, techniques of material processing must keep pace with intensified year-round excavation schedules. This often involves conflicts on sites excavated during the winter months or located in areas where it is not always possible to conduct water flotation. A direct confrontation with this problem prior to our winter 1975 testing of three Owl Hollow Project sites led to the construction of an indoor laboratory flotation device modeled after the SMAP machine (Watson 1976). By utilizing Watson's comprehensive design, the laboratory flotation device proved easy to construct and adapt to existing facilities, economical to operate and an efficient tech-

nique for soil processing and cultural data recovery. To date, several thousand pounds of soil samples from six Owl Hollow Project sites have been processed using this laboratory model. Analysis of recovered materials have contributed significantly to our understanding of late Middle Woodland subsistence and settlement strategies. Following Watson's (1976:86) sound advice and after two years of evaluation, the authors fully recommend the laboratory model and wish to share with the archaeological community comparative information on its design and performance.

The Owl Hollow Project

The Owl Hollow Project was a 16 month research project funded by the National Science Foundation to study late Middle Woodland Owl Hollow phase subsistence and settlement patterns in the Central Basin-Eastern Highland Rim physiographic sections of Middle Tennessee. This project involved three separate field phases of testing and/or extensive excavation of six sites. Five tested sites (40BD55; 40BD51; 40BD46; 40FR45 and 40CF214) were located on private lands that were subjected to continuous cropping. Therefore, it was necessary to test these sites with a small crew in winter, 1975 (Phase I) and spring, 1977 (Phase III) following harvesting and prior to cultivation. Because the sites were privately owned and farmed, it was impossible to waterscreen and the weather was too cold for stream flotation. The Owl Hollow type station (40FR7) was excavated for eight weeks during the summer of 1976 (Phase II) by a University of Tennessee field school. This site is located on the shore of Tims Ford Reservoir where water flotation was restricted because of a lack of stream flow and water quality restrictions. Because of these recovery problems, it was necessary to develop an alternative method of subsistence data collection in the archaeology laboratory of the Department of Anthropology, University of Tennessee, Knoxville.

Collection of Flotation Samples

Soil flotation samples were selected from sealed deposits in features, post-holes and refuse middens. The sample size varied depending upon the criteria of subsurface disturbance type, size, quantity of inclusive floral remains, and associations of diagnostic cultural material remains. All flotation samples were collected directly from the hand excavated deposits and were not submitted to other forms of field processing. Flotation samples were collected in standardized 2.5 gallon buckets and transferred to 4 or 6 mil. plastic bags doubled for added strength. A maximum of two buckets of soil for each doubled plastic bag (4 bu size) was collected. An aluminum tag with minimal provenience data was placed inside

the bag with the soil sample and a cloth tag with full provenience data was attached to the outside of the bag. Transportation from the field to the laboratory and temporary storage of the soil sample(s) was in protective cardboard boxes. In the laboratory, the soil was removed from the plastic bags and spread out to dry on 14 x 16 in. cafeteria trays for a period of approximately three days depending on the soil type. Prior to flotation, pertinent provenience data and the dry weight of each soil sample was recorded using a Hanson Model 1515 parcel post scale (capacity 50 lbs) (Table 1).

Table 1. Dry weight of flotation samples from Owl Hollow Project sites (calculated in lbs)*

<u>Site No.</u>	<u>Location/River System</u>	<u>Owl Hollow Project Fieldwork</u>	<u>Dry Soil Weight</u>
40BD46	Thompson Ck./Duck R.	Phase I testing	554.60
40BD51	Thompson Ck./Duck R.	Phase I testing	68.43
40BD55	Thompson Ck./Duck R.	Phase I testing	1592.08
40FR7	Town Creek/Elk River	Phase II excav.	1499.48
40FR45	Elk River	Phase III test.	1114.26
40CF214	Betsy Willis Ck./Elk R.	Phase III test.	967.45

Total dry soil weight of flotation samples (lbs) . . 5796.30

*One flotation sample is 2.5 gal or 21.80 lbs.

The Laboratory Flotation Device

The operation of the laboratory flotation device is in conjunction with a washing sink in the archaeology laboratory (Fig. 1 & 2). This is an important consideration since the device could not interrupt or interfere with other laboratory processing. However, no major problems were encountered. Laboratory equipment adapted for use with the flotation device are an 8 x 2.5 ft stainless steel processing sink, a 5 ft x ½ in. diameter flexible water hose equipped with a standard 1 in. shower head, a 2 in. diameter drain and a ½ gallon cylindrical sludge trap (Fig. 1, 1-6 & Fig. 2). The flotation device is operated at one end of the dually equipped sink which frees the opposite end for artifact washing.

A major piece of equipment is a 12 gallon galvanized metal tank 16 in. in height and 15 in. in diameter (Fig. 1, A-E, & Fig. 2). This was modified by placement of a 9 x 6 in. metal sluice spout recessed ½ in. below the rim and a 1 in. diameter hole centered in the bottom of the tank for insertion of the water hose and attachment of the shower head. Rubber washers are placed on the inside and outside of the insert hole to prevent leaking

FIGURE I
 OWL HOLLOW PROJECT LABORATORY FLOTATION DEVICE

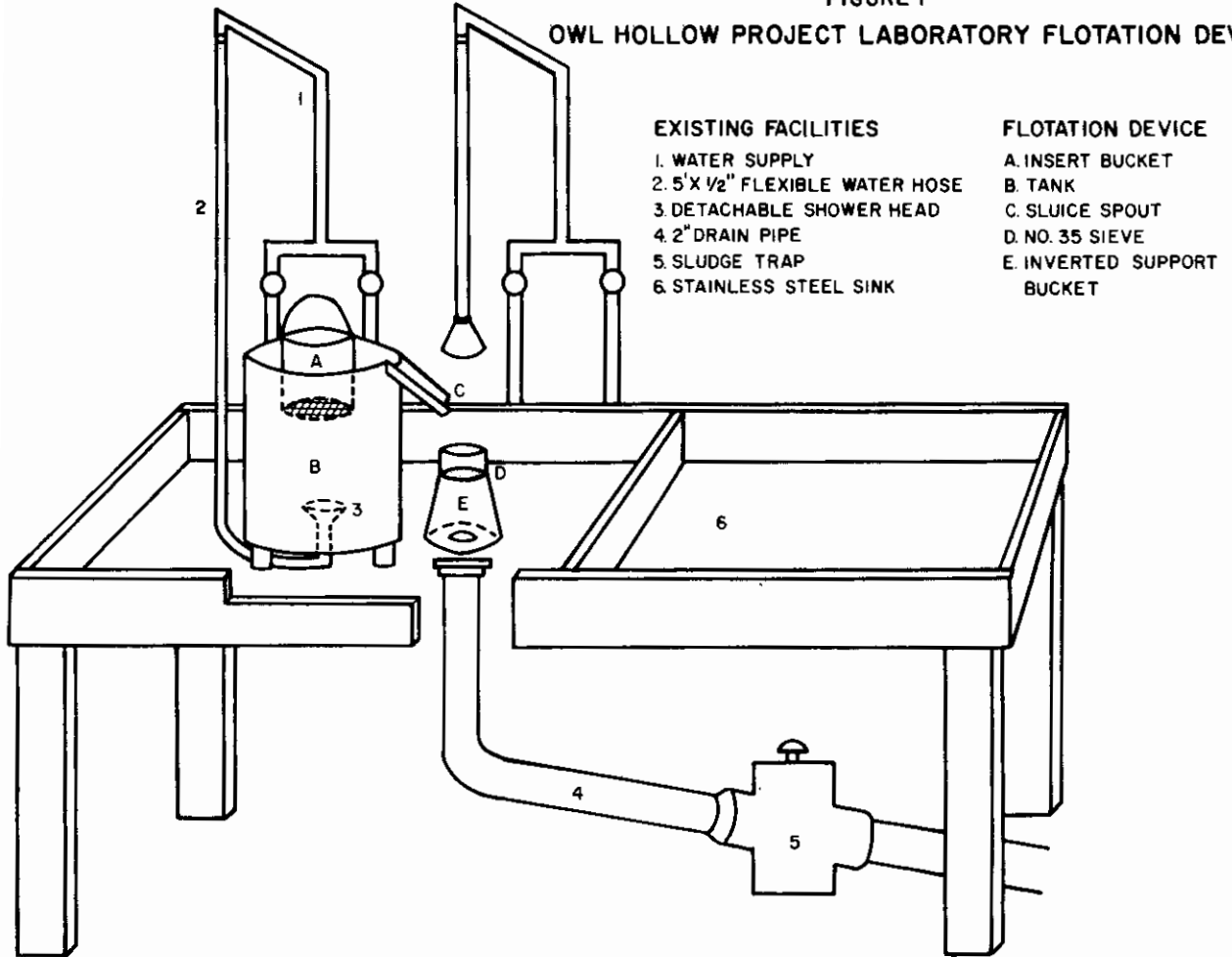


Fig. 2. The flotation device in action.

and maintain full water capacity (approximately 10 gallons) while in operation. A second metal container, a #10 bucket with a 2.5 gallon capacity, is modified by removal of the bottom and replacement with 1/4 in hardware cloth to support an inner sieve of fine window screen (about 1.6 mm² mesh). The latter container functions as a mobile insert bucket. One additional and expensive piece of equipment is necessary. This is a fine wire mesh stationary screen (#35, Standard Testing Sieve, 500 micrometers or .0197 in) positioned at the end of the sluice spout through which all drainage from the insert bucket must pass. The #35 sieve (stationary in comparison to the mobile insert bucket) is supported by an inverted and bottomless #10 bucket strategically positioned over the drainage pipe leading to the sludge trap.

The Processing of Soil Flotation Samples

Satisfactory operation of the flotation device and laboratory recording procedures can be accomplished by one experienced individual. This operation entails setting up and connecting the above equipment to the water source, maintaining the necessary bookkeeping records, placing together all weighed and recorded soil samples of the same provenience, and filling the insert bucket with a portion (usually 1/2 full) of the soil sample. After the tank fills with water and begins overflowing through the sluice, the insert bucket is placed into the tank. Water pressure from the shower head and a twisting movement of the bucket agitate the contents and cause the light weight materials to separate from the soil matrix and flow to the top of the insert bucket. This separation produces a light and a heavy fraction. The former consists of the less dense, usually charred plant remains separated from the soil matrix. Water pressure and the direction of flow force the light fraction through the sluice and onto the stationary screen positioned to catch the sluice run-off. Following solution of the soil matrix, the remaining materials in the insert bucket constitute the heavy fraction. After removal from the flotation tank, the light and heavy fractions are sprayed with clean water to remove any remaining soil film. Following a brief period of draining, both fractions are spread onto cardboard meat trays to dry for a period of one to three days. The flotation process can be repeated without cleaning the tank provided the next sample is from the same provenience. However, the flotation is interrupted every four hours or so for cleaning out the sludge trap - a 30 minute operation. Approximately five samples (12.5 gallons) can be processed before the trap must be cleaned.

The length of time required for preparing and processing one soil sample for analysis is approximately one week; however, ten + samples (25 gallons) from the same provenience can be processed by one operator in an eight hour day (see Table 2).

Increasing the number of operators by more than one does not significantly speed up the process. Table 3 compares a standardized amount of soil (m^3) that can be processed with the Owl Hollow Project laboratory flotation device with the Apple Creek immersion system and the SMAP machine (see Watson 1976: Table 1).

Table 2. Approximate laboratory hours necessary for flotation of Owl Hollow Project soil samples.

<u>Laboratory Work Day</u>	<u>Dry Soil Floated/Day</u>	<u>Total Hours of Flotation</u>	<u>Total Soil Floated</u>
8 hrs	25 gal or 218 lbs	213 hrs	5796.30 lbs

Table 3. A comparison of flotation processing rates for flotation techniques used in the Southeast. All rates are figured on the basis of an eight hour day and refer to m^3 of soil floated. (From Watson 1976:100)

<u>Technique</u>	<u>Approximate Rate</u>
Apple Creek Immersion System (Struever 1968)	0.07
SMAP machine (Watson 1976)	0.50 - 0.60
Owl Hollow laboratory flotation device	0.25

Comments

The Owl Hollow Project laboratory flotation device compares favorably with other systems of flotation in terms of efficient, large-scale soil processing. After two years of evaluation, there are definite positive and negative aspects concerning its overall operation. An obvious plus is the location of the device in an archaeological laboratory. This neutralizes the factor of seasonal outdoor use and adds the dimension of day and/or night operation with warm water availability, if desirable. The entire laboratory procedure is a simple operation, quickly learned and requires no specialized skill. The flotation process is labor-saving with a maximum of one operator undertaking all preparation and flotation procedures. The indoor water flotation system is designed as a single operation of separating the light and heavy fractions from a soil matrix without the use of chemicals. Once the mechanics of flotation are completed and the samples dried, laboratory facilities are available for immediate analysis or storage, thus eliminating further transportation requirements.

There are two obvious inadequacies with indoor laboratory flotation: one is the requirement of laboratory space for associated activities such as storage, the drying of soil and light and heavy fractions; and the second is the cleaning out and disposal of accumulations in the sludge trap. The drying of large amounts of soil for flotation takes considerable laboratory space. The soil on trays can be stacked but this usually entails a longer drying period and causes compaction. This problem can be alleviated somewhat by spacing the soil samples on a drying rack (easily constructed with 2 x 4 in studs) and increasing the heat at night to speed up the drying process. Failure to clean the sludge trap can cause flooding problems of major proportions. An improvement in the Owl Hollow laboratory device would be installation of a larger trap averaging about two gallons in capacity and designed for easier access and elimination of sludge. After cleaning the trap, the sludge is retained in buckets until dried which requires additional storage space for a few days. Disposing of the soil on the university campus has presented minor problems; however, a large amount has been farmed out for garden top soil.

Following flotation, additional space is needed for drying the light and heavy fractions and laboratory space is required for sorting the heavy fraction. These conflicts are eliminated, somewhat, by rebagging and temporary storage prior to sorting and analysis. The sorting of the heavy fraction is the most labor intensive process associated with flotation requiring considerable time and expertise to recognize the small and often fragmentary artifactual and ecofactual remains.

Acknowledgements

Terry Faulkner drew Fig. 1. The Owl Hollow Project and the construction of the laboratory flotation device were supported by National Science Foundation grant #BNS576-11266.

References Cited

Dye, David H. and Katherine M. Moore

- 1977 Hydro-archaeology in the Mid-South: a case study from the Middle Tennessee Valley. Paper presented at the 34th annual meeting of the Southeastern Archaeological Conference, Lafayette.

Struever, Stuart

- 1965 The "flotation" process for recovery of plant remains. Southeastern Archaeological Conference, Bulletin 3:32-35.
- 1968 Flotation techniques for the recovery of small-scale archaeological remains. American Antiquity 33:353-362.

Watson, Patty Jo

1976 In pursuit of prehistoric subsistence: a comparative account of some contemporary flotation techniques. Mid-Continental Journal of Archaeology 1:77-100.

AUGERING ARCHAEOLOGICAL SITES

Julie Stein
Department of Geology
University of Minnesota
Minneapolis, MN 55455

In the past, one of the only ways an archaeologist could determine the subsurface configuration of a site was to examine profiles of long trenches excavated through the cultural debris. Alternatively one could rely on a stratigraphic profile pieced together from test pits randomly selected from a grid pattern. These methods involve extensive excavation - an endeavor consuming time, labor and money and accelerating the controlled destruction of the site.

Knowledge of the subsurface configuration of some sites has now been determined utilizing another technique - augering. In 1977 the Shell Mound Archaeological Project (SMAP) employed the augering technique at three mounds on the Green River, Kentucky (see Marquardt and Watson, 1978, for background of SMAP). This article describes the augering method and the data obtained from the Carlston Annis Mound (15BT5). The results of the project rendered a paléotopographic expression of the surface below the mound, the subsurface extent of the cultural deposits, and volumetric estimates of the cultural debris.

The site is a shell mound consisting of riverine shells, sandstone rock fragments (fire-cracked), lithics, charcoal and a sandy-silt matrix (Fig. 1). The nature of the mound components facilitated relatively effortless augering. The sandy-silt floodplain sediments were easily augered to depths of one to two meters if sufficiently wet. The sediment of the mound, because of its uncompacted structure, could be augered to depths of over three meters. As an additional benefit, the shells provided an easily identifiable marker indicating the distribution of cultural deposits.

Other characteristically different sites should still be eligible for augering. The most difficult obstacle is the delineation of cultural deposits from artifact-free deposits. It may be that sites containing shell refuse are best suited for this type of analysis, but certainly any site with dramatic soil-color variations would suffice. Gradational

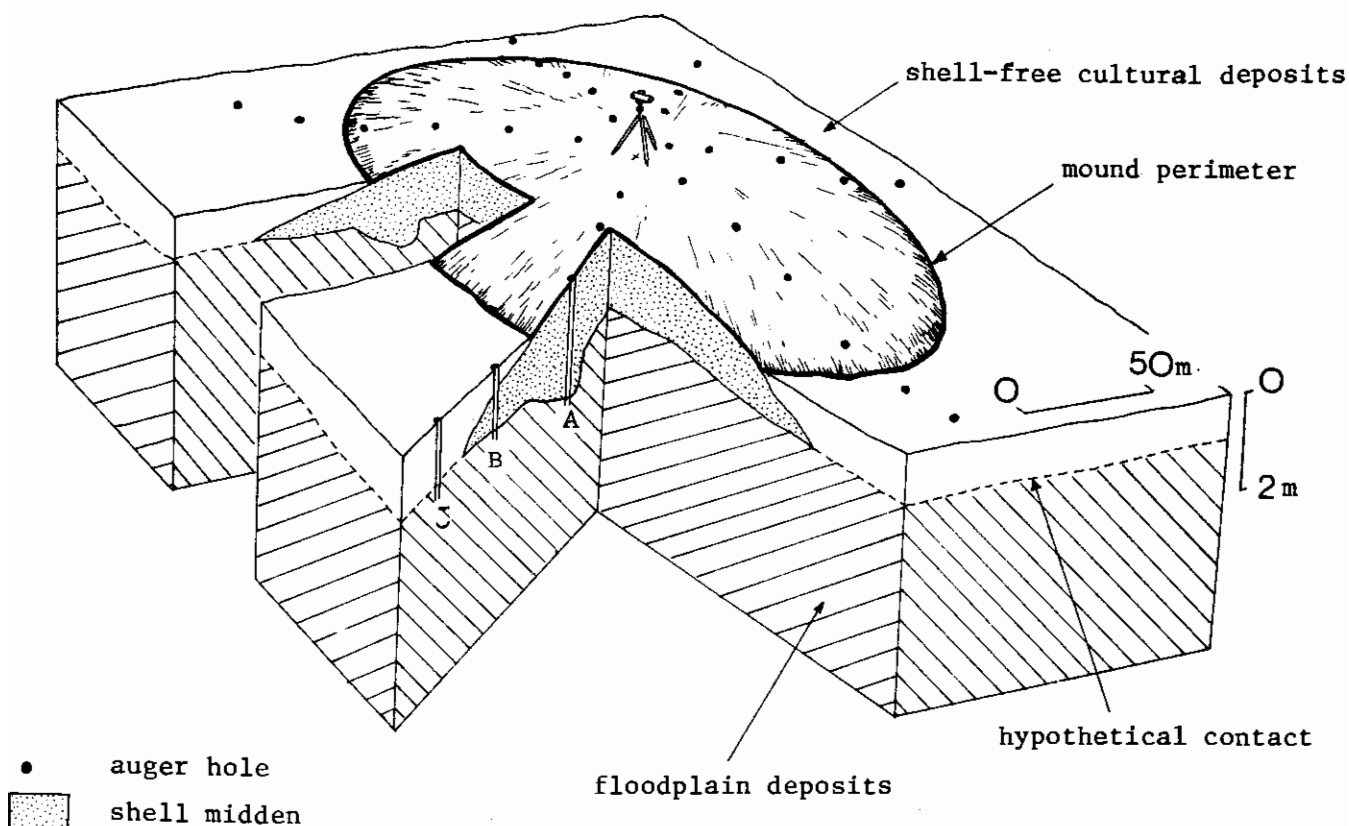


Fig. 1. Block diagram representing a simplified form of the Carlston Annis Mound (15BT5), Green River, Kentucky.

changes in soil color and texture are the most difficult features to define from auger cuttings.

Method

The essential augering implement is a three-foot soil auger (one inch, split-spoon type) obtainable from any supplier of soil testing equipment. The auger consists of a split-spoon head, circular cutting edge, two one-foot screw-on extension rods and a screw-on handle. Additional aluminum extension rods with couplings are required for deeper augering. Other equipment includes transit and stadia rod, 50 m measuring tape, stakes and a small metal tape measure.

One proceeds by selecting a zero point on an elevated location somewhere close to the center of the mound. The transit is erected over this point, and radial distances are measured from zero outward as far as the cultural material extends on the surface (see Fig. 1). Locations of auger holes to be punched along these radial distances are marked by stakes. One should be certain to drive stakes beyond the surface expression of the mound for as seen in Fig. 1, the shell deposits extend in the subsurface beyond the mound perimeter.

Each hole is augered by initially clearing vegetation and dirt clods from an area of approximately .25 m². This insures that no contaminants will enter the hole as one extracts each punch. The first punch is collected by pushing the auger straight down until the hollow spoon of the auger head is filled. We found it convenient to measure this distance (24 cm) and mark the handle. This precaution is important because the porous shell and matrix has a tendency to compact, decreasing the accuracy of the depth reading.

After each 24 cm punch, the auger is extracted and the contents extruded onto the surface. Here the cultural deposits can be examined (shell concentration, charcoal, sediment type, etc.). These samples cannot be subjected to chemical analysis because they have been contaminated by material clinging to the auger.

The depth of the hole should be measured after each punch. This is done by inserting a metal tape measure into the hole and recording the depth. The possibility of an incorrect measurement (tape can be caught on protrusions of material that have fallen back into the hole) necessitates the additional precaution of measuring the portion of the auger and extension rods that extended below the surface. The two measurements should agree within two centimeters.

It should be mentioned that the driving of an auger 24 cm through the mound is sometimes difficult. Rock fragments and shells frequently resist punching. A sharp cutting edge on the auger is helpful, but we discovered that it often requires four strong bodies, punching in unison, with quick pounding strokes to cut through the obstructions. The handle and rods of the auger, having a limited number of locations to grasp, force the participants into rather unusual positions. Experience taught us to "grin and bear" the discomfort, for after augering almost two meters it is easier to exert that extra effort than to start another hole.

As the augering continues, extension rods are added until the punching exceeds the depth of the shell detritus. This contact is usually well defined, although in some cases the sediment below the contact continues to exhibit flakes of shell and charcoal. These lower deposits may also be culturally derived material, but for our purposes we utilized the easily observable shell/sediment contact as the marker horizon signaling the bottom of the mound. This contact is usually discovered in the spoon, so the exact distance from the surface to the contact must be calculated. This is accomplished by measuring the total depth of the hole, then subtracting the distance from the bottom of the auger to the contact. The thickness of the shell deposits is the critical element utilized in the construction of the paleotopographic and isopach maps.

There are three types of situations we encountered while augering. The most common setting (Fig. 1, A) involved augering through continuous shell, of varying concentrations, until the contact was reached. We were surprised to find that the thickest shell deposits were not restricted to the center of the mound and that the thicknesses can vary widely from meter to meter.

Another sequence commonly encountered at the periphery of the mound (Fig. 1, B) included a unit of shell-free floodplain sediment, underlain by shell midden, with a subsequent return to silty floodplain sediment. Because these midden deposits often went undetected until more than a meter had been augered, one is advised to persevere until it is certain that the auger hole extends beyond the midden. Holes punched into shell-free sediment (the third type of situation, e.g. Fig. 1, C) are the most difficult to auger. These sediments are denser than the unconsolidated midden. With the mastery of the aforementioned technique one can attain depths of 1.5 to 2.0 m fairly consistently.

The final step, after each radial transect has been sampled, is to measure the elevation of each hole opening. The transit, set at the top of the mound, can provide this information without moving the instrument.

Following the collection of the field data, three maps can be constructed: a topographic map showing the surface contours of the site, a paleotopographic map illustrating the pre-occupational surface below the site and an isopach map showing lines of equal thickness of the site deposit. These maps assist in planning excavation strategy.

Paleotopographic Map

The elevation of each auger hole has been determined so the depth of the shell deposits can be subtracted from the surface elevation to obtain points of elevation for the pre-occupational surface. The subsurface elevations, recorded on a base map, yield a sufficient number of points of reference for a contour map to be drafted. Unlike a topographic map the area between each point must be estimated because it cannot be determined visually.

Figure 2 is a simplified version of the paleotopographic map constructed from the data collected at the Carlston Annis Mound. The stippled area represents the area covered by the shell mound. The contour interval is small (.25 m) to illustrate fine details. There are two areas of high elevation, at the top center and the top right. In a wet floodplain environment it is assumed that the elevated regions served as living floors and that habitation debris was

discarded into the adjacent gullies. After the gullies were filled occupation expanded to encompass a wider area. This hypothesis was proposed before excavation plans were conceived. The hypothesis will be evaluated through excavation during the 1978 summer field season.

The construction of paleotopographic maps is not restricted to sites that have been augered. A paleotopographic map was produced for a large habitation site in Greece (Stein and Rapp 1978). The excavations had been extensive, exposing many units from which thickness data could be obtained. Any excavation that has a sufficient number of data points at the base of the cultural material can utilize this mapping technique.

The Subsurface Extent

Another mound feature worth noting is the shape of the cultural deposits. The mound appears to be elliptical in Fig. 1, with a north/south axis (toward the top of the block diagram). When the subsurface expression of the mound is considered (Fig. 2) the axis maintains an east/west orientation. The surface expression could mislead an archaeologist planning to trench the edge of the mound.

Many factors contribute to the alteration of the surficial

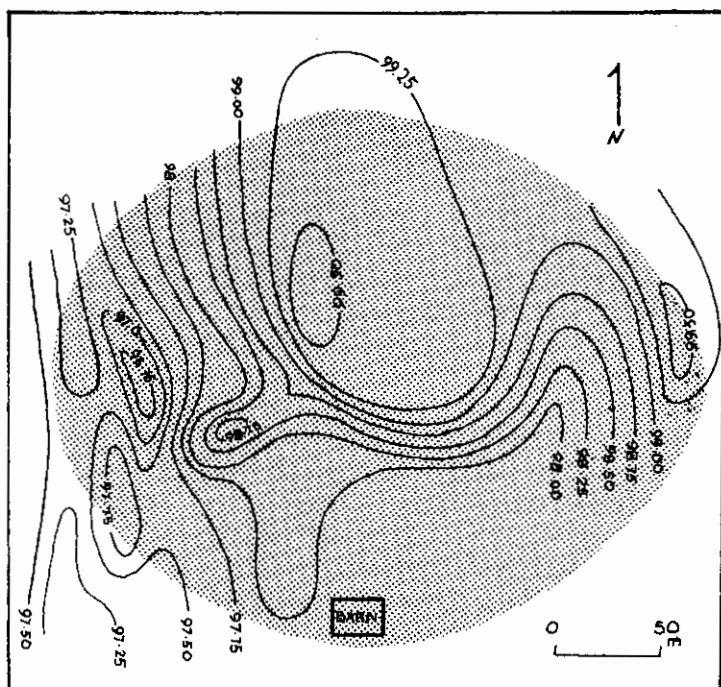


Fig. 2. Simplified paleotopographic map of the Carlston Annis Mound (15BT5), Green River, Kentucky. Contours illustrate the surface below the mound occupied 4000 years ago. Contour interval is .25 meters. Stippling represents the approximate area covered by the shell midden.

expression of a site. Burial and erosion are the dominant processes operation in a fluvial environment. More than one meter of shell-free deposits masks the periphery of the Carlston Annis mound. These sediments were most probably derived from the mixing of floodplain sediments and material from the mound itself. The comminution of the shell by the plow, together with chemical changes caused by mixing, altered the physical characteristics of these deposits and buried the true midden.

*Another situation was revealed at another shell mound (the Russell Site, 15BT11) a short distance south of the Carlston Annis Site. The Russell Site has been severely eroded by a combination of scouring flood-waters and lateral channel migrations. The post-depositional changes affecting a site can be unraveled by the determination of the site's areal extent through augering.

Volumetric Estimates

To arrive at an estimate of the volume of sediment and shell in the mound one must plot all the thickness data on a base map. Contour lines are drawn through points of equal thickness (a process similar to drafting topographic contours). The resulting product is called an isopach map. A planimeter is used to measure the area contained within each isoline. This measurement is converted to a volumetric value by utilizing the following equation (Wetzel 1975):

$$\text{volume of unit bounded by } A_1 \text{ and } A_2 = \frac{h (A_1 + A_2 + A_1 A_2)}{3}$$

where:

- h = distance between A_1 and A_2 (contour interval)
- A_1 = area of isoline 1
- A_2 = area of isoline 2

The number obtained is the volume between two isolines; the equation must be calculated for every pair of isolines. The sum of these volumetric measurements is the total volume of the site.

The proportions of shell, sediment, charcoal, bone and lithics have to be determined from excavation data. These proportions can then be converted to percentages of the total volume and utilized in population estimates.

Parmalee and Klippel (1974) report estimates of the nutritional value of mussels. He then converts the values to number of pounds required to feed a family of four, or bands of 25 and 100 individuals. With the nutritional estimates and

a volumetric proportion of the shell material, population sizes could be estimated.

An isopach map has been constructed for the Carlston Annis Mound, but volumetric estimates have not yet been determined. The proportions of shell, sediment and other material will be calculated this summer during excavation together with an attempt at dietary reconstruction.

Exploration

The possibilities for utilizing augering in subsurface exploration are obvious. The prospecting would be tedious but much less expensive than using large earth moving equipment. When adopted by the Tennessee River Archaeological Project directed by David H. Dye, the augering method detected additional shell lenses not visible at the surface. The one drawback is that it would be most readily detect shell deposits, possibly to the exclusion of other types of habitation sites. With the call for more exploration of deeply buried sites (Bryan 1977) one might turn to the auger before alternate, more costly survey techniques are initiated.

Summary

The method of systematically augering a site is explained, and some techniques utilizing the data acquired are described. The following reiterates the reasons one should go to this trouble.

1) The construction of paleotopographic maps can help archaeologist visualize the landscape available to the original inhabitants. The attitude of the landscape could provide a clue indicating the reason for occupying that particular spot.

2) Knowledge of subsurface extent of the site aids in excavation planning. The areal distribution can facilitate a reconstruction of events affecting the site since occupation ceased.

3) Volumetric values obtained by augering aid in reconstructing cultural variables. The calculations quantify the amount of debris sampled by excavation and suggest the extent of occupation.

4) The process of augering to determine buried cultural horizons is an inexpensive method of site exploration.

By purchasing an inexpensive item of soil-testing equipment and spending a few weeks at the site before designing excavation strategy, one can multiply the number of specific hypotheses for evaluation through archaeological excavation.

Acknowledgements

Illustrations were done by Ramesh Venkatakrisnan.

References Cited

Bryan, Alan L.

- 1977 The problem of finding Early Man in the northeast. In Amerinds and their paleoenvironments in north-eastern North America, edited by Walter S. Newman and Bert Salwen, pp. 160-162. Annals of the New York Academy of Sciences, Vol. 288. New York.

Marquardt, William H. and Patty Jo Watson

- 1978 Excavation and recovery of biological remains from two Archaic shell middens in western Kentucky. Southeastern Archaeological Conference, Bulletin 20. In press, ms. 1976.

Parmalee, Paul W. and Walter E. Klippel

- 1974 Freshwater mussels as a prehistoric food resource. American Antiquity 39:421-434.

Stein, Julie and George I. Rapp

- 1978 Geologic studies. In Nichoria I: site, environs, technique, edited by Stan Aschenbrenner and George I. Rapp, pp. 234-257. University of Minnesota Press, Minneapolis.

Wetzel, Robert G.

- 1975 Limnology. W.B. Saunders, Philadelphia.

REPLIES TO TRINKLEY

SOME COMMENTS ON SCIENCE WITH A SMALL "S"

David G. Anderson
509 Harwood
Jackson, MI 49203

Scholarly debate about the direction of archaeological research should take has a long history in American archaeology. It is probable that in the course of any given year as many papers appear suggesting how archaeology ought to be done as actually manipulate field data. In a recent issue of the SEAC Newsletter Trinkley (1977) reviews a number of archaeological projects recently completed or ongoing within the Southeast as part of a thinly veiled polemic against what

he views as the tyrannies of the so-called "New Archaeology". In the course of his argument Trinkley implies that the archaeologists responsible for the projects and reports in question (uncited yet transparently disguised) are perpetuating lunacy, bad archaeology and a host of other equally distasteful practices. (From SOPA Code of Ethics II, 1a "an archaeologist shall give appropriate credit for work done by others.")

As the author (Anderson 1974) of one of the uncited reports I feel compelled to respond to what I consider to be exceptional artistic license. At least in reference to my report Mr. Trinkley has not only taken quotations out of context and distorted them, but has also completely missed the point of the analysis.

The project in question was an intensive archaeological survey of a highway corridor segment extending over a distance of some six miles near Columbia, South Carolina. The project was undertaken in August of 1974, while the author was a research assistant with the Institute of Archeology and Anthropology at the University of South Carolina. The purpose of the survey was to provide the South Carolina Highway Department with information amenable to incorporation into a general Environmental Impact Statement about possible effects of the proposed construction.

The entire area of the corridor was surveyed on foot, and all sites encountered were mapped and then surface collected employing two procedures, described as "general" and "intensive". Once the extent of artifact scatter had been delimited an intensive collection was taken from each acre of site, for a period of 20 minutes, from within a 50 ft circle. After this procedure the remainder of the site was searched for typologically useful or unusual forms.

Contrary to Trinkley's (1977:8) statement, the dog-leash (intensive) collection procedure was not intended to obtain "a complete sample from a statistically defined portion of the site" (his comment, not mine!). At no point do I refer to the samples as randomly selected or probabilistically based, what I assume Trinkley means by "statistical". What I do state, however, is that

Until all of the site or some percentage of is can be sampled using a valid statistical method the collection obtained, however inclusive, cannot be said to be representative of other than the area from which they were obtained (Anderson 1974:154).

The paper makes no pretense at being other than an attempt to develop, within a contract archaeological opportunity, a method for determining site surface density and content.

Much of Trinkley's subsequent argument about the "statistical" nature of the sample is therefore irrelevant and unfounded.

Trinkley (1977:8) also states "No allowances or controls were made for ground cover, bias introduced by amateur collectors, plowing differences, soil conditions, or collector differences." I invite him to re-read the report, particularly the following statements:

Ground cover conditions as well as a brief description of the immediate environment were recorded for each area collected (Anderson 1974:137).

and

Except for 38LX5 all the samples came from low-lying fields cultivated in soybeans and characterized by alluvial soils. All of these fields had been plowed in the spring and sites in some of them - 38LX5, 38LX19, and 38LX68 - had been extensively collected immediately after this spring plowing. The thick ground cover and alluvial nature of the soil were therefore relatively consistent in most of the areas from which the samples were taken (Anderson 1974:153).

Regarding my lack of control for "bias introduced by amateur collectors", Trinkley manages to contradict himself within the space of two paragraphs. First I am accused of not controlling for this effect (see above), and then I am disparaged for attempting to investigate it! In particular Trinkley (1977:8) notes

There are few archaeologists so unfamiliar with the local collectors and sites that they would be unable, with a high degree of confidence, to "indicate the degree and orientation of relic collectors" (sic) Anderson 1974).

I would argue that the effects of collector behavior must be controlled for, and that comparative analyses are an effective method of doing so. One aspect of the report (Anderson 1974: 155-157) was, in fact, a comparison of general surface collections made right after plowing and later in the year. Mr. Trinkley apparently feels that such efforts are unnecessary and characterizes attempts in this vein as the "lets pretend" method of science. His attitude strikes me more as an example of "lets pretend we know all the answers."

Trinkley proceeds to discount the intersite comparative analysis because it is based on (Trinkley 1977:8)

the assumption that "the factors causing artifacts to appear on the surface are the same throughout" (Anderson 1977). Those factors include depth of plowing, depth of midden and erosional factors.

What is particularly galling about this quote is not so much that it is taken completely out of context, but that it implies that I do not have even a minimal understanding of stratigraphy, depositional environments, and site formation processes. What I actually said, however, was

A rough hierarchy of the sites and sub-areas within the sites intensively sampled has been arranged (Table 2); this arrangement represents one way of comparing artifact densities between and within sites in a given area. This, of course, rests on the assumption that the factors causing artifacts to appear on the surface (depth of plowing, depth of midden, erosive factors, etc.) are the same throughout. Because most of the sites are quite similar to one another in their characteristic locations (cultivated alluvial field), I feel that the technique does have some merit and warrants further investigation (Anderson 1974:155).

Trinkley may be justified in pointing out weaknesses in the method - but he should give credit to the author for pointing them out first!

Virtually every statement reported by Trinkley and attributed to my report exhibits similar distortion. Trinkley (1977:8) states

as the author of this particular survey admits, only the traditional techniques provide data "useful in placing sites within a chronological or cultural perspective (Anderson 1974:154).

What I actually said, however, was

The general collection procedure would appear to be oriented towards obtaining categories of artifacts useful in placing sites within a chronological or cultural

perspective (Anderson 1974:154).

This statement is a far cry from what Trinkley reads into it. Both procedures, I argued, have their strengths and weaknesses, and the combination of both a general and an intensive collection was undertaken to combine the positive advantages of both.

Problems of scholarship aside, Trinkley's article is disturbing because of its implicit philosophy about the goals of contract archaeology. In particular, he seems to believe that attempts to develop or refine survey method, or seek behavioral reconstructions, in a contract (resource assessment) framework, are inappropriate. In particular he notes

Anything beyond a listing of sites and the associated recommendations is not within the scope of the initial survey (Trinkley 1977:8).

In contrast, a number of authors have argued that archaeology should take advantage of all available opportunities to advance itself as a scientific discipline (Schiffer and House 1975; Goodyear 1975; Raab and Klinger 1977). This means problem oriented research, be it refining field collection procedures, testing behavioral hypotheses, developing chronologies, or even describing data. Efforts at increasing field and analytical efficiency that have as a goal the better understanding of the archaeological record should not be condemned, particularly if they involve no more (or perhaps even less) expense than the "traditional" approach (whatever that is).

In a related matter, Trinkley (1977:9) lambasts probability sampling in archaeological resource assessment, arguing that it is inappropriate for archaeological materials. He notes that sites are unevenly distributed, and implies that a purely random sample of terrain may considerably underrepresent favored occupation areas. Few archaeologists would disagree with this observation, or accept random sampling as the sole method for assessing site distributions within an area. Ideally multistage efforts, employing both sampling and intuitive approaches should be attempted. Even "statistical" methodology is flexible. A variety of procedures exist, such as stratification, that facilitate the examination of specific areas, be they intuitively or otherwise perceived.

Continuing his discussion on sampling Trinkley (1977:9) opines

in the case of salvage archaeology (or EIS archeology) the purpose is not to arrive at a statistical sample of the sites, but to provide an environmental assessment of the

archaeological resources, all of them that the investigator can locate. The only way to fulfill such contractual obligations is to completely survey the endangered area, not a portion of it.

There should be little need to explain why 100% surveys are impossible in many cases, or why looking in areas not traditionally examined might prove fruitful. Suffice it to say that the value of any assessment may be viewed as questionable if it does not attempt to establish total population parameters. Short of total examination, however, only probabalistically-based random sampling strategies can achieve this goal with any knid of reliability.

In general Mr. Trinkley's article exhibits a naiveite about the goals of contract archaeology, the role of research design in planning and executing field work, the judicious use of sampling, the need to test opinions against real-world data, and in particular the nature of scholarship on a professional level. I have read or am generally aware of all of the projects and reports that Mr. Trinkley "references". The extend of misrepresentation appears universal, and does all of the investigators an injustice. Science is not advanced by distorting or ignoring the contributions of its practitioners, but by positive example.

References Cited

Anderson, David G.

1974 An archaeological survey of the proposed alternate two route of the Columbia southeastern beltway Richland-Lexington counties, South Carolina, August 1974. Institute of Archeology and Anthropology, University of South Carolina, The Notebook VI:125-163.

Goodyear, Albert C.

1975 A general research design for highway archeology in South Carolina. Institute of Archeology and Anthropology, University of South Carolina, The Notebook VII:3-38.

Raab, L. Mark and Timothy C. Klinger

1977 A critical appraisal of "significance" in contract archeology. American Antiquity 42:629-634.

Schiffer, Michael B. and John H. House (assemblers)

1975 The Cache River Archeological Project: an experiment in contract archeology. Arkansas Archeological Survey, Research Series 8.

Trinkley, Michael B.

1977 Science with a small "s". Southeastern Archaeological Conference, Newsletter 19(2):7-10.

REPLY TO TRINKLEY

Charles M. Baker
Department of Anthropology
University of Georgia
Athens, GA 30602

Inferences are perhaps no stronger than the data set(s) and theoretical foundations upon which they are based. Should this be the point of Trinkley's recent (1977) critique in the SEAC Newsletter on current Southeastern EIS-related research, it was lost in the mire created by his casual position. Certainly, the quality of EIS research is a concern of most professional archaeologists. In this recent statement, however, it was clear to many readers that as an indirectly acclaimed "closet traditionalist", another hopeful soul had failed to see the light of day.

No one would disagree that "there is nothing new about bad archaeology." To make a blanket generalization that "there is just more of it today" only illustrates a misunderstanding of recent demographic trends in the discipline. Simply, there are more archaeologists today. Assuming a constant proportional relationship between the number of good and bad investigations and the episodes of involvement, an increase in the number of examples of bad archaeology would be expected with an increase in activity. There would also, however, be an increase in the amount of good archaeology. The suggestion that there had been a proportional increase in bad work, based upon emotional oversight, is not warranted.

Trinkley's attempts to maintain the anonymity of the archaeological reports, authors and/or agencies he criticizes were unsuccessful. Because of information available to me, but perhaps not to most readers, it was unquestionably apparent that the "Archaeology Branch" of a certain southeastern state was within an hour drive of the Research Laboratories of Anthropology, Chapel Hill. Might it be true that there had been no desire nor attempt by certain Laboratories of Anthropology personnel to communicate ideas concerning appropriate archaeological activity in this "southeastern state"? Is this Trinkley's notion of science? I find such appalling - and with a small "s".

Trinkley's comment that ". . . the archaeologists of this Archaeology Branch could not determine that a temple mound, such as Peachtree or Town Creek (both in North Carolina) was

significant without a research design", is spitefully unprofessional. Unclear to Trinkley is the fact that no site, nor article for that matter, is significant unless viewed in the context of some recognized technical, substantive, methodological or theoretical problem of interest in the discipline. Judged accordingly, Trinkley's comments may now be forgotten.

References Cited

- Trinkley, Michael B.
1977 Science with a small "s". Southeastern Archaeological Conference, Newsletter 19(2):7-10.

CURRENT RESEARCH

ALABAMA

University of Alabama

CURRENT RESEARCH

The University of Alabama, Office of Archaeological Research, was engaged in several projects during 1977. Work continues in the Gainesville Reservoir. This research is funded by the USCOE-Mobile as part of the Tennessee Tombigbee Waterway Development. Excavations this year, directed by Ned Jenkins, have concentrated on sites 1PI33 and 1PI61. These sites are base camps with late Miller and Mississippian components. Both sites have produced a large number of burials and features, and several structures. Extensive faunal, botanical and osteological samples were recovered. Three graduate students are currently responsible for different aspects of the analysis: Blaine Ensor, lithics; Gloria Caddell, botanical material; and Ann Noble, vertebrate and invertebrate fauna.

This year was the fourth and final year of field work in the Rother L. Harris Reservoir, east Alabama. This project is funded by the Alabama Power Company. Charles Hubbert is field director. This season emphasized survey and testing work in an attempt to record data on some 48 fish weirs and determine their role, if any, in the aboriginal settlement and subsistence pattern. As a portion of this project, Wesley Moorehead conducted ethnographic research on the construction and use of fish traps and weirs by current area residents.

This past summer was also the second of three seasons of

excavation in the Cedar Creek and Upper Bear Creek Reservoirs, sponsored by TVA. This area of northwest Alabama was most extensively utilized during the Late Archaic, and much of the work focuses on that period. J.B. Graham is directing the project. Several sites were tested or excavated during the season. Some of the sites were primarily used for the procurement and processing of chert. One tested site contained a buried midden dating to the Benton-Sykes/White Springs Association. Site 1FR562 was found to have been extensively occupied, with Woodland and Archaic components. Data recovery here was hampered by the intensity of occupation, with as many as 35-40 superimposed and intersecting pits within a single 2 x 2 m square. Two seated burials on the site had sandstone vessels inverted over the skull. A stone burial mound similar to those reported for the Little Bear Creek Reservoir was also excavated. The project is being supervised in the lab by Eugene Futato.

Laboratory work directed by Robert Lafferty continues on materials from Phipps Bend, Tennessee. This is the site of a TVA power plant and research is sponsored by TVA. The majority of the data comes from two sites at the confluence of Stony Point Creek and the Holston River. These sites yielded up to one meter of stratified Early Woodland deposits with burials, feature complexes and well-preserved faunal samples.

A manuscript is in preparation concerning the excavations at 1MS300. The site is located on Guntersville Reservoir in northeast Alabama. This site is a Copena burial site comprising two mounds. Excavations were sponsored by TVA and directed by J.B. Graham. Gloria Cole is preparing the manuscript under the supervision of Mr. Graham.

The USCOE-Mobile funded a cultural resources survey of flowage easement and development areas on Jones Bluff Lake on the Alabama River in central Alabama. The project, under the direction of Carey B. Oakley, covered about 11,000 acres. Approximately 240 sites were recorded. Two archaeological districts were nominated to the NRHP. They appear to represent the riverine and upland segments of the local Woodland settlement pattern.

The National Park Service funded a cultural resource survey of Bay Springs Lake, northeast Mississippi, as part of the Tennessee Tombigbee Waterway project. Project Director was Charles Hubbert. The area surveyed was some 15,000 acres and approximately 75 sites were recorded. The area is characterized by poor soils with eroded uplands and poorly drained lowlands. Most of the archaeological sites were small, shallow scatters of lithic debris. Few diagnostic artifacts occurred on these sites.

The report of excavations at the Bellefonte site, on

Guntersville Reservoir, has been completed by Eugene Futato. The project was funded by TVA and the report has been published by them. The site was a small shell midden with Archaic through Mississippian components.

PUBLICATIONS

Futato, Eugene M.

1977 The Bellefonte site, 1Ja300. Research Series 2. 257 pp., 21 figs., 22 tables, 37 plates. Estimated price, \$8-\$9.

Oakley, Carey B. and Eugene M. Futato

1975 Archaeological investigations in the Little Bear Creek Reservoir. Research Series 1. 314 pp., 18 figs., 37 tables, 79 plates. \$7.32 tax included.

Eugene M. Futato
Office of Archaeological
Research
University of Alabama
18 ten Hoor Hall
University, AL 35486

FLORIDA

University of Florida

CURRENT RESEARCH

During the spring quarter of 1977, the University of Florida undertook a field school project within the confines of the Paynes Prairie State Preserve. This fieldwork was under the direction of Dr. Prudence Rice, Assistant Professor of Anthropology, University of Florida and graduate assistant, Sue Mullins. Test excavations were carried out at four sites whose occupations span from Archaic to 19th century. These excavations were a continuation of a larger project undertaken during 1976-1977 to survey the Preserve and provide information necessary for proper management of cultural resources.

The first of the sites tested by the field school was a multi-component site, the majority of the occupation occurring around A.D. 500. Several features and possible evidence of structures were uncovered during the 15 days spent at the site. Some faunal material was also recovered. An Archaic site was the second site to be tested. Occupation here consisted only of sporadic camping. The last two sites consisted of a large prehistoric village (ca. A.D. 800), with an 1875 house structure superimposed on one margin of the prehistoric site. These were excavated concurrently by the field school students.

Analysis of the material is currently being carried out at the University of Florida. A complete report is expected in June.

Sue Mullins
Department of Anthropology
University of Florida
Gainesville, FL 32611

CURRENT RESEARCH

The long-term investigation of the post-A.D. 100 aboriginal populations of north Florida, begun by the Florida State Museum-University of Florida in 1976, has continued into early 1978. Research is focused on the prehistoric Weeden Island culture and the colonial period Utina aborigines (a Timucuan group). A grant of \$74,000 from the National Science Foundation awarded to J.T. Milanich (Florida State Museum) is presently being used to fund 30 months of excavations and surveys of Weeden Island sites in Columbia and Suwannee counties. Previously, the project was funded by the Wentworth Foundation, founded by the late A. Fillmore Wentworth.

To date, the excavations have centered on the McKeithen site, a large (30 hectares) Weeden Island village with three associated mounds and a plaza. Thirty weeks of excavation have been completed in the horseshoe-shaped McKeithen village under the direction of Tim A. Kohler (University of Florida).

Initial sampling excavations utilized a disproportionate probability sample later enriched with transect and cluster samples of three areas believed to contain structural remains. A series of ten radiocarbon dates from features and postmolds place the main occupation of the village at A.D. 150-750. Seriation of each of the three intensively-sampled village areas has proceeded separately by means of principal components analysis and the resultant factor scores along with a detailed attribute analysis of a sample of the ceramic collection. These seriations were then tied together by means of the radiocarbon dates and the trends of change in the ceramic modes. Controlling for time in this manner, the synchronic artifact distributions across the site can be explained in terms of kinship and ranked areas. Kohler's dissertation reports on these analyses and summarizes the diachronic changes in north Florida Weeden Island material culture.

During the fall, 1977, Milanich directed the excavation of Mound B, one of three mounds at the site. The mound had been constructed as a monument over a structure burned following the interment of a male about 30 years of age in a shallow grave dug into the floor. The rectangular structure, measuring about 12.5 x 9 m with an entrance on the western side (toward

the nearest village midden), had been erected on a low rectangular platform of clean sand. A rounded pole screen separated the entrance from the village. Prior to the burning of the structure, a log tomb and low mound were placed over the burial. No grave goods accompanied the individual; red ochre had been used to impregnate the hair. A small triangular arrow point was imbedded in the left ilium at least one year prior to death.

The structure contained several hearths, evidence of benches along the short walls, small quartz cobbles, muscovite mica, and deer bones which were strewn along the walls of the structure. Several red ochre deposits were placed along the outer portions of the walls. Relative to the associated midden, a large percentage of Weeden Island Zoned Red and Weeden Island Red plate forms and wide mouthed bowls were utilized within the structure. Possibly, the structure functioned as a "feast-council" house destroyed when the associated "big man" was killed.

Radiocarbon dates of 1580 ± 75 radiocarbon years: A.D. 370 (UM-1234) and 1485 ± 75 radiocarbon years: A.D. 465 (UM-1235) were obtained from two adjacent charred in situ exterior pine support posts. A date of 2030 ± 65 radiocarbon years: 80 B.C. (UM-1233) was obtained from a large charred pine interior support post. The latter date is too early. Additional samples are being dated.

Excavation of Mound C at the site was also begun by Milanich in the fall, 1977. Mound C appears to be a patterned mound very similar to Mounds D and E at the Kolomoki site excavated by William H. Sears. The center of the mound presumably covers a burial tomb for a high-status individual (chief?), although excavations have thus far been restricted to the mound's eastern side. A cache of Weeden Island ceramic vessels and a number of bundle burials and burials consisting of an individual decapitated skull and detached arms and hands were placed beside and on the edge of a primary mound prior to being covered with the secondary mound cap.

The cache (partially excavated by local individuals) included Kolomoki-style pedestaled animal effigies, large Weeden Island Incised squared-globular bowls, Weeden Island Red plate and bowl, and a unique bowl with four animal head effigies attached to the lip. At least 14 vessels are present. The pottery, which appears later in time than that recovered from Mound B, reflects a high degree of technical knowledge, including the use of more than one slip on a vessel and the practice of smoke-clouding areas to darken them before adding a slip. Mound C possibly represents a tomb and mound erected to honor a chief associated with a ranked society organized in a more complex fashion than that associated with Mound B. The remainder of Mound C will be excavated in spring, 1978.

Technological and physiochemical analysis of the pottery from various village contexts and from the mounds is being undertaken by Ann S. Cordell (University of Florida) under the supervision of Prudence Rice (University of Florida). This analysis, which will include comparison with collections from other Weeden Island sites, will form the empirical basis for Cordell's master's thesis which examines ceramic trade and inter- and intra-site ceramic specialization.

Under the field direction of Brenda J. Lavelle (New School for Social Research) the first stage of a multi-stage site survey of the Weeden Island sites in Columbia and Suwannee counties is being completed. More than 11 mound sites have thus far been located, most clustered within 15 km of the McKeithen site. This survey and the collections in the possession of local individuals have failed to reveal any Swift Creek or Fort Walton sites. The Weeden Island ceramic complex apparently spans a very long time range, from Deptford times until at least the 15th century, when it appears to have been replaced by a ceramic complex related to the late Kolomoki-Blakely ceramic complex recognized by Sears at Kolomoki. By the late 16th century this complex changed into the Leon-Jefferson ceramic complex associated with mission sites.

The data from the surveys will be reported by Lavelle in her dissertation examining Weeden Island economic system(s). Field work at the McKeithen site and surveys and excavations at outlying sites will continue through 1979.

Investigation of the historic Utina Indians in northern Florida, begun in 1976 with the excavation of a portion of a late 16th century mission site in Suwannee County, is also continuing. L. Jill Loucks (University of Florida) is presently surveying southwestern Suwannee County, studying the effects of Spanish contact (via the mission system) on aboriginal settlement patterns and economic systems. Only seven small sites of a transitory and scattered nature were found along the Suwannee River. Two miles from the river, in an area punctuated by numerous limestone sinks and springs, four larger aboriginal village sites ranging in occupation dates from Archaic through protohistoric periods were located within a restricted area surrounding a known early Spanish mission site. These latter sites were systematically surface-collected and analysis of ceramic design/paste attributes is currently being carried out in conjunction with an analysis of local clay resources. It is anticipated that these analyses will demonstrate not only changes in design motifs but also associated changes in utilized clay sources and manufacturing techniques during the historic period.

Additional survey and excavations are being planned for the mission village and adjacent aboriginal sites. Changes in housing, subsistence patterns, and economic relations

between contemporaneous aboriginal and Spanish groups will be studied. Given the nature of these sites within a restricted geographical area, it is anticipated that important data relevant to defining acculturation processes, their effects and material correlates, will be obtained. Additional funding is being sought for the continuation of this project which will be reported in Loucks' dissertation.

J.T. Milanich, T.A.
Kohler and L.J. Loucks
Florida State Museum
Gainesville, FL 32611

CURRENT RESEARCH

Assessment of the archaeological resources on Sapelo Island, Georgia, continued during the summer of 1977 under the supervision of Lewis H. Larson, Jr. (West Georgia College). Basic community-plan research was conducted on Sapelo at Kenan Field and Bourbon Field under the direction of Morgan R. Crook, Jr. (University of Florida). Through an intensive community-sampling scheme, remains of six large Mississippian period structures were encountered at Kenan Field. Analysis of the material culture and subsistence remains associated with these structures is progressing. The site also contains two probable burial mounds, several low sub-structural mounds, and other earthworks. Locational and subsistence analysis of the Kenan Field test results will form a doctoral dissertation by Crook, under the supervision of Jerald T. Milanich (University of Florida). The dissertation is supported by a grant from the National Science Foundation. A paper by Crook summarizing characteristics of coastal Mississippian aggregate villages recently appeared in The Florida Anthropologist 31:21-34.

Morgan R. Crook
Florida State Museum
Gainesville, FL 32611

University of South Florida

LABORATORY ACTIVITIES

Graduate student Jeff Mitchem is working on a type collection of pottery and projectile points found in Florida and the Southeast.

RESEARCH BY GRADUATE OR UNDERGRADUATE STUDENTS

John Fioroni, a graduate student, has been conducting research on the archaeological resource base of Hillsborough

County, Florida under a grant to Roger T. Grange, Jr., from the Historic Tampa-Hillsborough County Preservation Board. The research will include an assessment of the present site condition and site significance, as well as recommendations for future archaeological research in the county.

Barry Wharton, another graduate student, is presently engaged in archaeological research in Hardee County, Florida, an inland area that has received little attention to date. He has just completed excavations at a village site there. Contrary to recent interpretation, Hardee County may have been a center of significant cultural-historical development, particularly during the Weeden Island period. An unreported temple platform mound has recently come to light and numerous burial mound sites have been recorded over the last three years. Mr. Wharton plans to continue an informal survey of the county's archaeological resources, and is currently preparing a summary paper on past and present research in the area.

Graduate students, David McCullough and Elizabeth Fisher, (directed by Drs. Roger T. Grange, Jr., and J. Raymond Williams) completed an archaeological survey and historic documents review of the Fletcher Avenue Park site, slated for development by Hillsborough County, Florida. Five archaeological sites were located and tested. State and local records, as well as secondary sources were screened for information. The park theme will utilize the archaeological and historical resources and further work on both aspects is forthcoming.

Barry Wharton and Gayle Russell (directed by Dr. Stephen J. Gluckman) are currently working on a survey for a proposed county nature park in western Hillsborough County, Florida. The archaeologists are working with the county and their planners to preserve the area's cultural resources and to provide an interpretive framework for the resources to be used for public education. Because of the lack of information on mangrove-coastal land utilization from this area, the proposed park area is important in the local archaeological record.

A similar survey is underway in the mangrove areas of the proposed E.B. Simmons County Park under Dr. Gluckman's direction. Graduate student Kurt Fiegel is working on the project.

NEW PERSONNEL

Stephen J. Gluckman has joined the faculty of the Anthropology Department at the University of South Florida. Gluckman, who received his Ph.D. from the Catholic University of American in 1973 has spent the last four years as Chief of the Archaeology Section of the North Carolina Division of

Archives and History. His main interests are cultural resources management, archaeology of the eastern U.S., underwater archaeology, historical archaeology and industrial archaeology.

NEW FACILITIES

An additional laboratory (700 square feet) will be given to archaeological research in the building in which the old laboratory is located.

PUBLICATIONS

Grange, Roger T., Jr.

- 1977a Cumulative seriation and ceramic formula dating: a preliminary study. History and Archaeology/Histoire et Archeologie, No. 16. National Historic Parks and Sites Branch, Parks Canada Printing and Publishing Supply Services, Canada, Ottawa. K1A 0S9. \$4.25 in Canada, \$5.10 other countries. 120 pp.
- 1977b Early fortification ditches at Ile-aux-Noix, Quebec. History and Archaeology/Histoire et Archeologie, 18a, 18b, National Historic Parks and Sites Branch, Parks Canada, Ottawa.
- 1977c Excavation of the Porter's Cottage, Civilian Barracks/Straw Shed, Northern Mounds and Rampart at Fort Lennox National Historic Park, 1966. History and Archaeology/Histoire et Archeologie 19. National Historic Parks and Sites Branch, Parks Canada, Ottawa.

J. Raymond Williams
Department of Anthropology
University of South Florida
Tampa, FL 33620

GEORGIA

Georgia State University

CURRENT RESEARCH

Environmental impact surveys and mitigation continue on the Metropolitan Atlanta Rapid Transit Authority (MARTA) rights-of-way. This work, begun in 1975 and planned through 1978, is being conducted under contracts between MARTA and the Georgia State University Anthropology Department. Project

Director is Roy S. Dickens, Jr., Staff Field Archaeologist is William R. Bowen, Staff Assistant Archaeologist is Linda F. Carnes, and Laboratory Assistant is Linda H. Worthy.

The MARTA project has led to the development of innovative techniques for archaeology in the urban setting. These include systematic metal detection, intensive construction monitoring, and contractual procedures for expediting emergency mitigation. The archaeological resource base has been found to consist mostly of late 19th century and early 20th century remains. Although Southeastern archaeologists have not generally recognized the importance of Industrial period sites, preliminary research on the Atlanta data has demonstrated that these resources can be valuable in elucidating the processes of American urbanization and industrialization, and in testing assumptions of archaeologists working in contexts lacking extensive historical documentation. At present, ten Georgia State students are working on a six-month project in which they will analyze several categories of urban material culture within the framework of hypotheses about urban cultural development in the period 1870-1920.

Roy S. Dickens, Jr.
Department of Anthropology
Georgia State University
Atlanta, GA 30303

South Georgia College

CURRENT RESEARCH

South Georgia College has coordinated a number of archaeological programs during the past year. These include continuous support of amateur activities in the local area, hosting a symposium meeting of the Society for Georgia Archaeology, publication of the Society Newsletter, The Profile, and publication of several reports.

In October 1977, the Society met in Douglas. A symposium on South Georgia Prehistory was the core of the session. Paul Fish of the University of Georgia served as moderator of a panel that discussed several papers that had been prepared and distributed to members prior to the meeting. These papers are published in Early Georgia, Vol. 5. The titles of these papers and other reports presented at the meeting were published in The Profile Vol. 17, September 1977.

The first results of a nine year salvage survey in central-south Georgia were published in 1977. Frankie Snow's paper, "Swift Creek designs and distribution: a south Georgia study" was published in Early Georgia, Vol. 32, No. 2. Snow extended and elaborated the earlier study by Bettye Broyles (1968) on

Swift Creek designs. Swift Creek ceramics from the Lower Ocmulgee and Upper Satilla River Basins were used to demonstrate the potential value of the individualistic designs for cultural and settlement analysis. His symposium paper, "A survey of the Ocmulgee Big Bend Region", presented an overview of Ocmulgee Big Bend prehistory, as far as can be determined from surface salvage survey. This paper included regional ceramic styles and selected artifacts within and between river basins in centralsouth Georgia. Snow also shows the relatively high density of occupation of the area during Swift Creek and Ocmulgee Cordmarked phases as contrasted with other cultural periods. Snow's report titled "An archaeological survey of the Ocmulgee Big Bend Region" was published as Occasional Paper from South Georgia, No. 3. This report is based on a nine year surface salvage survey in 17 counties in south Georgia. It lists the cultural characteristics and environmental settings of 320 sites in the area. Representative artifacts are illustrated. The report is an effort to provide information on this previously unexplored section of Georgia.

Preliminary analysis of the data reveals several patterns and trends. Evidence suggests that a population expansion or major cultural change occurred between the Late Paleo and Early Archaic periods in this area. This assumption is based on an apparent restriction of sites to a limited range of microenvironments prior to the Early Archaic period. During the Early Archaic period this changed: Bolen projectile points have been found in all microenvironments. There was no substantial change indicated in this pattern of settlement and land use until the Late Woodland or Early Mississippian periods. The Ocmulgee Cordmarked wares indicate a restricted settlement land use system during this time. These ceramics occur in dense concentrations in a narrow zone along the Ocmulgee floodplain, suggesting a high probability of horticulture and less seasonal exploitation of sand ridges and creeks as was the case from the Early Archaic through Swift Creek-Weeden Island phases.

Several new ceramic series are identified. These include the Ocmulgee Cordmarked Series, the Satilla (semi-fiber-tempered) Series, and a new Lamar variety. The Satilla Series appears to be related to the Norwood wares of north Florida. Types include plain, simple stamped, and check stamped ceramics. The Ocmulgee wares are believed to be of Late Woodland or Early Mississippian tradition. They differ from West Florida, Wilmington, Savannah, and Prairie cordmarked wares in several characteristics. The Lamar ware is decorated with a unique "square-ground" motif as a complicated stamped design on cazuela bowls and jars.

Site reports on these and other sites recorded since the completion of this study are filed in the Archaeology Laboratory at the University of Georgia.

Chris Trowell has been conducting a survey of the Okefenokee

Swamp area since March 1977. To date this has been primarily an examination and recording of collections from and visitations to known sites. Photographs and compass traverse maps of sites have been made. Surface artifacts have been photographed inside the Okefenokee National Wildlife Refuge and collected on sites outside the Refuge. A short working paper entitled "A preliminary survey of archaeological site - 9WE1, Cowhouse Island, Ware County, Georgia" has been prepared in an initial effort to consolidate field notes and artifact inventories and to provide researchers with the first hard archaeological data from the Okefenokee Swamp. A few copies were mailed to interested researchers and to archaeological laboratories. The Cowhouse Island site is a mound-village site on the eastern perimeter of the Swamp. Although a few sherds suggest Early Woodland camping activity, the site appears to have been a Weeden Island village (probably 1b), followed later by a Lamar occupation. Preliminary analysis of artifacts indicate that Weeden Island ceramics in the Swamp area differ from Weeden Island ceramics along the Lower Ocmulgee in several ways. Incised rims are common in the Swamp area; they are rare along the Ocmulgee. Plain rims also differ between the Okefenokee and Ocmulgee areas. The Swamp sites seem to be related to the Gulf area, not to the Ocmulgee area. However, the village plan in the Swamp seems to differ from the pattern in north Florida. Initial mapping of sites suggests about eight kilometers between settlements in the Swamp area.

Dennis Blanton and Tim Warnock conducted an intensive systematic survey of 9DG40 (Dodge County) in an effort to salvage an overall artifact pattern before the site was destroyed. The multi-component site is a long dune hammock on the Ocmulgee floodplain. The major occupation was indicated by a dense concentration of Ocmulgee I Cordmarked sherds. Although damaged, features were detected by the survey.

A number of destroyed sites were investigated in the south Georgia area during the year. Surface surveys and collection studies from several sites in Bulloch, Ware, Bacon and Charlton counties extended our understanding of areal distributions in the Coastal Plain. Dwight Kirkland, Dennis Blanton, Tim Warnock, Eli Willcox, Frankie Snow and Chris Trowell were involved in this project. These brief reports appeared in The Profile in 1977.

Two reports on south Georgia prehistory will be presented at the Georgia Academy of Science meeting in Milledgeville in late April. Chris Trowell will present a paper entitled "A reconnaissance of aboriginal Okefenokee" in the Geography Section and Dennis Blanton will present a report on "An archaeological survey of the Upper Satilla River Basin" in the Anthropology Section. Abstracts of these papers are published in the Bulletin of the Georgia Academy of Science, 1978.

The long-range objective of these studies is the reconstruction of past cultural geographies in south Georgia. All of these personal research projects have contributed toward this goal.

References Cited

Broyles, Bettye J.

- 1968 Reconstructed designs from Swift Creek Complicated Stamped sherds. Southeastern Archaeological Conference, Bulletin 8:49-74.

PUBLICATIONS

Snow, Frankie

- 1977 An archaeological survey of the Ocmulgee Big Bend Region. Occasional Papers from South Georgia, 3. South Georgia College, Douglas, GA. \$5.00.

Order from Bookstore, South Georgia College, Douglas, GA 31533. Make check payable to South Georgia College.

C.T. Trowell
Division of Social and
Behavioral Sciences
South Georgia College
Douglas, GA 31533

University of Georgia

CURRENT RESEARCH

David J. Hally is currently analyzing material recovered during three field seasons at the Little Egypt site (9MU102) in northwest Georgia. This work is funded by a grant from the National Park Service and is scheduled for completion in June 1978. Excavations at the site focused on village area and mound summit structures of the protohistoric Lamar occupation. Floor surfaces were gridded in 2 x 2 ft squares, and occupation debris was recovered from each by means of flotation. All forms (botanic, faunal, lithic and ceramic) of floor debris are being identified as to type or species, quantified and analyzed for spatial and associational patterning. The ultimate goal is to identify tool functions, activity areas within structures and functional differences between structures. In conjunction with this work, Marilyn Pennington has recently completed an M.A. thesis dealing with the typological analysis of non-flaked stone tools from Little Egypt and the King site (9FL5), and a second graduate student, Beverly Connor, is analyzing chert debitage.

The Wallace Reservoir Project on the Oconee River in the

southern Georgia piedmont has been the primary focus of research by the Laboratory of Archaeology during the past year. The work has involved an intensive surface reconnaissance of the entire reservoir after removal of vegetation by clearing, a subsurface backhoe testing program involving a stratified sampling design in alluviated portions of the valley, test excavations at sites located during survey and major excavations at 30 aboriginal sites. Sites selected for excavation have temporal affiliations ranging from Early Archaic to late protohistoric times and included small specialized activity localities as well as small hamlets and major ceremonial centers. The project has been under the overall direction of Paul R. Fish and David J. Hally. Gary Berber, Dean Wood, Kay Wood, Mark Williams, Anne Rogers, Greg Paulk, Gerald Ledbetter, Chung Ho Lee, Suzanne Fish, Richard Jefferies, Jim Rudolph, Charles Siegel, Marvin T. Smith and Charles M. Baker have supervised specific areas of investigation within the project.

The overall research theme of the Wallace Project is a focus on identification and investigation of changing human institutions within the locational constant of the riverine setting. Basic features of our research methodology are: a) a regional survey sampling design; b) excavation sampling designs involving broad horizontal exposures in order to recover data pertaining to habitation and other activity loci; and c) the collection of large amounts of environmental, paleoenvironmental and cultural data on a large number of variables within an interdisciplinary setting. Attempts to utilize an interdisciplinary approach in laboratory and field studies have involved efforts in ethnobotany by Elizabeth Sheldon, ethnozoology by Gary Shapiro and Barbara Ruff, geology by Robert Carver, geomorphology by George Brook, palynology by Suzanne Fish and chert trace element analyses by Sharon Goad.

RESEARCH BY GRADUATE STUDENTS

Charles M. Baker has undertaken a study of the technological and morphological variation of flaked stone artifacts from Late Archaic sites in the Wallace Reservoir. Preliminary findings suggest that raw material (primarily coarse crystalline materials) reduction, biface manufacture and refinement, and unifacial tool use vary with respect to site size (measured by surface artifact dispersion and density) and proximity to local resource deposits. A general model of lithic resource procurement and utilization is being developed to investigate activity variation through time and different localities within the Georgia piedmont region.

Sharon I. Goad is currently completing an analysis of Middle Woodland and Mississippian copper artifacts for the purpose of establishing their source areas. Over 350 native copper artifacts and ore sources were analyzed for this project.

The findings of the Middle Woodland copper analysis will be presented at the Hopewell Conference in March and a final presentation will be given in Tucson at the Society for American Archaeology meetings in May. A new phase of this analysis has been recently initiated. This involves the collection of additional ore samples from throughout the southeastern United States, and the analysis of a series of Late Archaic and Adena copper artifacts. Anyone wishing to submit samples for analysis or who is interested in the project can contact Ms. Goad at the Department of Anthropology, University of Georgia, Athens, GA 30602.

Richard Jefferies is currently involved in the analysis of flaked stone tools and associated debitage from the Woodland sites in the Lookout Valley area of northwest Georgia. The project involved a systematic survey of the valley and adjacent areas of the research universe with an emphasis on locating Woodland period (1000 B.C. - A.D. 1000) sites. The ultimate goal of the research project is to explain the nature of inter-site activity diversity as discerned through the analysis of lithic artifacts. Site activity variability is examined with respect to site location, distance to lithic resource acquisition loci and other environmental variables. Financial support was provided by the Historic Preservation section, Department of Natural Resources, State of Georgia and a private grant. Bruce D. Smith served as principal investigator.

Charles E. Pearson is currently completing his dissertation research on Mississippian period adaptations to Georgia's marsh-estuary area. Settlement and subsistence data from Savannah (A.D. 1150 - A.D.1350) and Irene (A.D.1350 - A.D.1550) phase sites on Ossabaw Island, Georgia, has been collected and analyzed in an attempt to assess the continuities and changes that occurred in the adaptive patterns of these two Mississippian period phases. The distribution of cultural features (shell middens, burial mounds, etc.) has been mapped at many of these sites and small test excavations have been conducted at a sample of 26 of these sites. Tests were conducted at sites to gather data which can be used to assess site variability and general patterns of subsistence. Initial observations indicate substantial differences between Savannah and Irene phase settlement structure but little variability in patterns of subsistence. These settlement differences are being examined in light of other socio-cultural factors. In addition to analysis of these two phases, attempts are being made to develop and refine quantitative methods of subsistence and settlement analysis which have wider application.

Fort Michilimackinac served as a major center of the North American fur trade for the French, and later for the British who abandoned the fort in 1780. Since 1959 the site of Fort Michilimackinac has been under constant historical and arch-

aeological investigation, and has presented an excellent opportunity for anthropologists studying the dynamics of cultural contact between the aboriginal and European groups. Gary Shapiro is currently conducting a faunal analysis designed to investigate that interaction.

An early analysis of faunal remains from Michilimackinac (Cleland 1970) demonstrated a basic difference between French and British exploitative strategy in that French refuse deposits show a relatively greater proportion of wild meat sources than the British, although both groups relied primarily on domestic animals.

Present research at the University of Georgia is designed to investigate the extent of European adaptation to the North American environment by employing a synchronic view of subsistence strategy. Toward that end, the 1977 excavations at Michilimackinac, directed by Dr. Donald P. Heldman of the Mackinac Island State Park Commission, emphasized maximum recovery of faunal materials. Excavation of refuse features was either performed or supervised by the faunal analyst (Gary Shapiro), resulting in controlled, methodical recovery of large samples of fragile fish and bird remains as well as the more substantial mammal bone. Based on subsequent analysis of the artifact assemblage, three refuse features were found to be temporally equivalent (1765-1775, British), and preliminary examination showed that each faunal assemblage exhibited differences in proportions and kind of wild vs. domestic animals represented. A series of observational predictions were constructed, integrating historical and archaeological data to test hypotheses concerning seasonal variance of faunal exploitation and relative influence of aboriginal hunting patterns on European subsistence strategy. The preliminary results of this investigation will be available by this summer (Heldman 1978).

NEW FACILITIES

A matching funds contract between the University of Georgia and the Georgia Department of Natural Resources has enabled the expansion of existing vertebrate skeletal collections housed in the Department of Anthropology Faunal Laboratory. The collection is designed to enable identification of vertebrate remains from archaeological sites, and to provide a facility for Zooarchaeological research in Georgia. Current specimen procurement strategy is aimed toward correcting an underrepresentation of fish and reptile skeletons. The collections are planned and curated by Gary Shapiro, and skeletons are processed by a full-time research technician, Clare Close. With the help and cooperation of the University of Georgia Department of Zoology, Veterinary School and the Georgia Department of Natural Resources, 125 specimens have been acquired and processed since October 1, 1977.

A second Georgia Department of Natural Resources matching funds contract has been awarded to the Department of Anthropology for the purpose of establishing a computerized state archaeological site inventory. Site data collected by the major research institutions in the state are being assembled, collated and coded for storage on magnetic tape.

PUBLICATIONS

Fish, Paul R.

- 1976 Patterns of prehistoric site distribution in Effingham and Screven counties, Georgia. Laboratory of Archaeology Series, 11. Department of Anthropology, University of Georgia. \$3.00.

Fish, Paul R. and William W. Mitchell

- 1976 Late Archaic settlement in the Big Slough watershed. Laboratory of Archaeology Series, 13. Department of Anthropology, University of Georgia. \$3.00.

Fish, Paul R. and Suzanne K. Fish

- 1977 Prehistoric settlement in the Dry Creek watershed. Laboratory of Archaeology Series, 14. Department of Anthropology, University of Georgia. \$3.00.

Fish, Paul R., Suzanne K. Fish and Richard W. Jefferies.

- 1978 An examination of interfluvial settlement in the southern Georgia piedmont: The Georgia Power Company plant Scherer archaeological survey. Laboratory of Archaeology Series, 15. Department of Anthropology, University of Georgia. \$3.00.

Hally, David J.

- 1969 Archaeological investigation of the Little Egypt site (9MU102), Murray County, Georgia. Laboratory of Archaeology Series, 18. Department of Anthropology, University of Georgia. \$3.00.

Heldman, Donald P.

- 1978 Excavations at Fort Michilimackinac. Archaeological Completion Report Series, 2. Mackinac Island State Park Commission, Mackinac Island, Michigan.

Jefferies, Richard W.

- 1976 The Tunacunnhee site: evidence of Hopewell interaction in northwest Georgia. University of Georgia, Department of Anthropology, Anthropological Papers, 1. \$5.00.

Jefferies, Richard W. and Paul R. Fish

- un-dated Stone mound investigations in the southern piedmont. Laboratory of Archaeology Series, 17. Department of Anthropology, University of Georgia. \$3.00.

Pearson, Charles

1976 Analysis of late prehistoric settlement on Ossabaw Island, Georgia. Laboratory of Archaeology Series, 12. Department of Anthropology, University of Georgia. \$3.00.

Smith, Marvin T.

1978 A report on excavations at several Woodland and Archaic camp and workshop sites in Laurens County, Georgia. Laboratory of Archaeology Series, 16. Department of Anthropology, University of Georgia. \$3.00.

David J. Hally
Department of Anthropology
Athens, GA 30602

MASSACHUSETTS

Harvard University

CURRENT RESEARCH

The Lower Mississippi Survey was involved in a series of projects during 1977.

In May and October excavations were conducted on the grounds of the Louisiana State Penitentiary at Angola. Historic Indian burials were reported to have been uncovered by inmates a short distance from the location worked by Jim Ford in 1934. The possibility that the new location would contribute substantially to our Tunica researches won support from the National Geographic Society. In May a joint operation with the Louisiana Archaeological Survey and Antiquities Commission was fielded under the overall direction of Jeffrey P. Brain. Using convict labor, additional burials were exhumed, and a nearby early 18th century occupation site was located and tested. Because the latter was apparently single component, and probably Tunica, the Lower Mississippi Survey returned for further excavation in October. These investigations have provided us with a solid archaeological datum for the first decades of the 18th century.

In September the Lower Mississippi Survey was contracted by the Cottonlandia Educational and Recreational Foundation, Inc., to survey portions of the Yazoo Basin in Mississippi. The fieldwork was performed by Ian W. Brown and his wife Nancy Lambert-Brown, assisted by Betsy Caldwell of Cottonlandia. The vicinity of Clarksdale was surveyed with particular emphasis on locating protohistoric sites which might be related to the proto-Tunica. A second locale, south of

Greenwood, was also surveyed with special attention devoted to establishing the 18th century Indian settlement of such tribes as the Chakchiuma and Ibitoupa. Both surveys produced sufficient encouragement for further investigation.

In December, The Petite Anse Project was launched on Avery Island, Louisiana, by Ian Brown and Nancy Lambert-Brown. Presently programmed for an 18 month period, this project is designed to establish a basic chronology for the island and contiguous coastal regions, and to explore problems of prehistoric-historic adaptation, especially focusing on salt mining activity.

NEW PERSONNEL

Ian W. Brown has joined the Lower Mississippi Survey as a Research Assistant. He and his wife Nancy Lambert-Brown are in charge of the fieldwork for the Petite Anse Project at Avery Island, Louisiana.

PUBLICATIONS

On the Tunica Trail. Louisiana Archaeological Survey and Antiquities Commission, 1645 Nicholson Drive, Baton Rouge, LA 70802 (Free).

Jeffrey P. Brain
Peabody Museum
Harvard University
Cambridge, MA 02138

MISSOURI

Washington University - University of Missouri

Shellmound Archaeological Project

ERRATUM: One of the 15BT5 dates published in the October, 1977, issue of the SEAC Newsletter (Vol. 19, No. 2) was incorrect. UCLA-2117B, charcoal from Trench C3, level 5, at the Carlston Annis site (15BT5) should read 3330 \pm 80 years or 1380 B.C. \pm 80.

CURRENT RESEARCH

Plans are underway for several weeks of fieldwork at 15BT5 during the summer of 1978. Our intention is to open a large but shallow area and to examine the process of midden-formation in as great detail as possible. The fieldwork will be

jointly directed by William Marquardt (archaeologist), Julie Stein (geoarchaeologist) and Patty Jo Watson (archaeologist).

As noted in the October issue of the SEAC Newsletter (Vol. 19, No. 2), we have begun a program of wet pollen coring (Figs. 1-3) in and near the Big Bend of the Green River, and of soil augering at two of the shell mounds (15BT5 and 15BT11). In October, 1977, two 6.5 m long cores were obtained from the bottom of Taylor Lake, a cut-off meander of the Green River inside the Big Bend, and further coring of small lakes near the Big Bend is planned. The Taylor Lake sediment is favorable for pollen preservation but detailed results on the pollen content of the October cores are not yet available. Radiocarbon samples comprising organic material from the core have been submitted for dating. The accompanying photos (Figs. 1-3) illustrate the coring techniques used by Professor Herbert E. Wright of the University of Minnesota, who directed our initial efforts at Taylor Lake.

William H. Marquardt
Department of Anthropology
University of Missouri
Columbia, MO 65201

Patty Jo Watson
Department of Anthropology
Washington University
St. Louis, MO 63130

(All photos taken by David Dye)



Fig. 1. The coring platform used at Taylor Lake: two john boats lashed together with rope and two-by-fours. The coring equipment is lowered to the lake bottom in the slot between the boats.



Fig. 2.

Pushing down on the extension rods to force the corer into the lake bottom sediment.



Fig. 3.

Extrusion of the sediment core onto a sheet of aluminum foil. The core was then wrapped snugly in the foil, sealed with masking tape, labelled, and packed for transport to the palynological laboratory at the University of Minnesota.

Washington University

Tennessee River Archaeological Project

CURRENT RESEARCH

During the first two weeks of January 1978, a 1 x 2 m test pit was excavated at the Snake Creek site (40HR35 - previously known as 40HF203) in southwest Tennessee. The test revealed a heavy Early Mississippian-Late Woodland McKelvey phase occupation separated by a thick clay layer from a 40 cm thick Early Woodland-Late Archaic midden. A small amount of Late Mississippian material was found in the plow zone. The total depth of deposit was 2.0 m. Two large bell-shaped features were mapped from the river bank profile. Only one was excavated because of the limited time and inclement weather. Several float samples were taken from the test pit and river bank feature, while the remainder of the deposit was water screened through 1/8 inch mesh hardware cloth. This material is presently being processed in the Archaeological Laboratory at Washington University.

Excavations are planned for the summer of 1978 at the Walker site (40HR212) in the Big Bend of the Tennessee River and other late Archaic sites in Hardin County. The fieldwork will be conducted as part of the Washington University Summer Field School in Archaeology (June 5 - August 12). The focus of the Field School will be the recovery of subsistence data and general chronological information for the Middle Tennessee Valley.

David H. Dye
Department of Anthropology
Washington University
St. Louis, MO 63130

NORTH CAROLINA

Appalachian State University

CURRENT RESEARCH

Burt Purrington and Harvard Ayers have worked for the last two summers (1976-1977) at the Wakeman 2 and 3 sites in Watauga County, NC. Wakeman 2 is in a high (4200 ft a.m.s.l.) saddle and Wakeman 3 is in a south-facing cove head about 100 ft below. Lithic artifacts at both sites cover the range from Early Archaic (Palmer-Kirk) to late prehistoric (Pisgah phase) times. Ceramics from Early Woodland (Swannanoa phase) and Early Middle Woodland (Pigeon phase) cultures are present,

but there are no late prehistoric wares. Charred hickory and in particular walnut fragments are also present at the two sites. Excavation of these sites, which will soon be lost to housing construction, has continued through November under ASU students Ed Peters and Bill Radisch.

Ayers and Purrington have conducted environmental assessment projects in the North Carolina Blue Ridge Mountains throughout the year. In addition, Purrington is currently conducting a reconnaissance in the French Broad River drainage of the Pisgah National Forest in Madison County, NC under a cooperative agreement with the U.S. Forest Service. The primary goals of this project are to test sampling procedures in rugged, wooded terrain and to develop predictive models of site occurrence based on environmental and cultural correlations. So far, 49 non-ceramic sites and one ceramic site have been found in a roughly 700 acre area of rugged uplands.

PUBLICATIONS

Reports are published as bulletins of the North Carolina Archaeological Council and are available from the Division of Archives and History, 109 E. Jones St., Raleigh, NC 27611.

Burt Purrington
Department of Sociology
and Anthropology
Appalachian State University
Boone, NC 28608

TENNESSEE

University of Tennessee

CURRENT RESEARCH

The Phase III field season of the Owl Hollow Archaeological Project was conducted during the spring of 1977. Dr. Charles H. Faulkner is principal investigator and James E. Cobb is field director of this two-year project supported by NSF grant BNS76-11266, designed to test hypotheses about late Middle Woodland settlement and subsistence patterns in the Eastern Highland Rim of south-central Tennessee. Phase III was concerned with testing Owl Hollow phase sites on the Elk River and its tributaries to determine season of occupation, subsistence strategies and relationship to the large type site in the Elk River Valley and to Owl Hollow phase sites in the adjacent Upper Duck Valley (Normandy Reservoir).

Ten days were spent testing two important habitation sites. The Peters site (40FR45) is a large site on the flood plain of the Elk. It was predicted that this site would produce evidence of Owl Hollow food production because of its location and that it would offer a marked contrast in exploitative strategies from those evidenced at the Owl Hollow type site excavated in the summer of 1976 (Phase II) and the Hamby site (40FR214) which was excavated in the Phase III operation (see below). Both Owl Hollow and Hamby are located in the uplands on tributaries of the Elk, the latter site being close to the rugged Cumberland Plateau escarpment.

Excavations at the Peters site recovered cultural remains from 15 features, 13 postholes and a midden deposit 10 cm in thickness. Seven of these features were large storage pits. One of these pits, Feature 12, was radiocarbon dated at A.D. 480 \pm 60 years (UGa 1776). A 25% sample of the charred plant remains from Feature 12 and an identical companion storage facility analyzed by Gary Crites indicates hickory nut, walnut, acorn, hazelnut, maygrass, goosefoot and cleavers were important wild plant foods; and maize, squash and gourd were domesticated. This is the first definite occurrence of maize in Owl Hollow phase context and supports the hypothesis that horticulture was becoming increasingly more important in late Middle Woodland subsistence patterns in the Eastern Highland Rim of Tennessee.

The Hamby site, located on a third order tributary of the Elk River was tested with 18 2 x 2 m units revealing nine features and three postholes. Two of these features were large storage pits, and an analysis of the inclusive plant and animal remains indicates a limited range of species exploitation. Plant remains were almost exclusively hickory nut (5 species) with the principal animal species being white-tailed deer and turkey. Unlike the Peters site which produced evidence of year-round occupation and intensive exploitation of floodplain biota, Hamby appears to have been primarily a fall-winter base camp established to exploit the uplands of the Eastern Highland Rim and Cumberland Plateau. Both Peters and Hamby seem to have been occupied about the same time period as some sites in the Upper Duck Valley, but were somewhat later than the main occupation at the Owl Hollow site.

Field work continued during the spring and summer of 1977 in the proposed Tellico Reservoir under contracts with the National Park Service, Dr. Jefferson Chapman, Principal Investigator. Investigations focused on six sites. Two Overhill Cherokee sites were partly stripped by backhoe under the field supervision of Robert Newman and Dr. Gerald Schroedl. At Toqua (40MR6), two council houses and several structures were recorded; abundant Anglo-American and native material was recovered. At the Toqua Dallas component, Richard Polhemus

completed the investigations begun two years earlier by recording the first two stages of Mound A construction. At the Cherokee town of Mialoquo (40MR3), evidence of a council house was uncovered which apparently post-dates Timberlake's visit to the Little Tennessee Valley.

Two buried Late Archaic period sites were excavated providing our first abundant, sealed lithic assemblages from this time period in the valley. The Iddins site (40LD38) was occupied around 1500 B.C. and the Bacon Bend site (40MR25) contained a Savannah River component dating around 2200 B.C. Squash (Cucurbita pepo) was present at both sites; gourd (Lagenaria) was present at the Iddins site.

Excavations, with Patricia Cridlebaugh as field supervisor, recovered abundant paleobotanical and radiocarbon data from the Middle Woodland Connestee/Candy Creek component at Icehouse Bottom (40MR23). Radiocarbon assays suggest an uncorrected weighted average of early fifth century A.D. Additional Hopewellian material was recovered.

Other activities included additional testing of the Middle Archaic and later components at the Bacon Farm site (40LD35) and an archaeological reconnaissance of the Tellico Reservoir area that recorded an additional 145 sites. An intensive analysis program has begun with the cessation of field work and a number of reports will be forthcoming.

Dr. Walter Klippel was principal investigator of a Phase II testing project for Tenna-Tech Corporation in July 1977, on a Late Woodland shell midden (40RH62) along the Tennessee River near Dayton, Tennessee. The midden had been badly disturbed by previous alteration of the levee, but data indicates the same subsistence pattern noted in other Late Woodland shell middens in the eastern Tennessee Valley. The inhabitants appear to have been concentrating on aquatic resources; few vertebrate remains were recovered. Floral remains were restricted to hickory nuts, wlanuts and acorns; there was no evidence of cultigens. Douglas Prescott was field supervisor on this project.

Dr. Klippel was also principal investigator of a project conducted under contract with the Tennessee Department of Transportation to test two sites on a bridge alignment over Long Island in the Holston River near Kingsport. Neil Robison was field supervisor of this project during August 1977. Both sites were excavated to depths of three meters and cultural materials were found to be restricted to the upper meter of alluvial deposits. Historic, Woodland and Archaic manifestations were mixed throughout the culture-bearing deposits that have been aggraded as much as 90 cm during the historic period.

The department conducted excavations at a Late Mississippian

village/cemetery complex in the Nashville Basin in Middle Tennessee throughout the fall of 1977. Dr. Walter Klippel is principal investigator of this ongoing project with Ann Reed serving as field supervisor. The palisaded site (40DV60) covers six to eight acres and is situated on a small tributary of the Cumberland River. The site, which has been partially disturbed by urban expansion, contains over 500 stone box burials in three separate cemeteries as well as over 50 structures. The project provides the unique opportunity to study both biological and cultural aspects of a single prehistoric group only infrequently attempted in the Southeast. Field strategies have been developed to deal specifically with prehistoric demography, social organization, subsistence patterns and intrasite spatial organization. Work will continue on this important site in spring, 1978.

During November and December 1977, the department conducted archaeological excavations at the Ducks Nest site (40WR4), a small Early Mississippian site in Warren County, Tennessee. The project was funded by the Tennessee Department of Transportation in compliance with Phase II archaeological procedures. Dr. Charles H. Faulkner served as principal investigator and Gerald W. Kline supervised the field operations.

The location of 40WR4 is unusual for a Mississippian site. It is located on a ridge top (950 AMSL) inside a tight bend in the Barren Fork River, a small interior drainage in the Eastern Highland Rim physiographic section of Middle Tennessee. Although only a small area was opened, two superimposed wall trench structures and five associated features were excavated. Structures 1 and 2 were rectangular and oriented northeast-southwest. Structure 1, the earlier of the two, was considerably larger - measuring 10 x 7.2 m. Entry was obtained through the eastern corner with the remaining three corners closed by single rows of posts connecting the ends of the trenches. The wall trenches themselves were massive, ranging in width from 28-32 cm and in depth from 60-75 cm below the plow zone. There were 140 wall posts incorporated into the Structure 1 pattern and a single row of large interior support posts equidistantly spaced on the central long axis.

In contrast, Structure 2 was much smaller - measuring 8 x 5.5 m. The wall trenches were also considerably more narrow and less deep than those of Structure 1 and none of the corners were closed by rows of posts. Structure 2 burned in antiquity leaving dense concentrations of carbonized elements and daub overlying discontinuous patches of compact floor.

The material remains from 40WR4 have not yet been analyzed but include various classes of debitage, an interesting variety of Early Mississippian ceramics, small triangular

projectile points, flake tools, and ground stone implements. Bone was not preserved at this site but considerable quantities of charred plant remains were collected by flotation.

Analysis of the Ducks Nest material will be completed in late spring, 1978, and a final report will be submitted to the Tennessee Department of Transportation.

The Fourth Report of the Normandy Archaeological Project, edited by Charles H. Faulkner and Major C.R. McCollough has been published as the University of Tennessee Department of Anthropology Report of Investigations 19. This 309 page monograph containing 48 tables, nine figures and 47 plates, reports on the 1973 excavations at the multicomponent Hicks I, Eoff I and Eoff III sites. Important contributions to Normandy research include definition of an early Late Archaic phase dated ca. 3000 B.C., evidence for domestication of sunflower and squash in the early Middle Woodland period (ca. 100 B.C. - 100 A.D.), and presence of a Middle Woodland complex possibly participating in the Hopewell Interaction Sphere. This publication can be purchased from the UT Press for \$12.00.

Two other reports in the Normandy Archaeological Project series will be published during the next four months. The Fifth Report will focus on the 1973 excavation of the Banks V site, occupied primarily by late Middle Woodland and Early Mississippian groups. Edited by Faulkner and McCollough, this monograph will include studies of the Owl Hollow and Mississippian phases and chapters on the intensive analysis of the faunal and floral remains found with these components. The Sixth Report will include the 1974 excavations at the Terminal Archaic Nowlin II site by Bennie C. Keel and the 1975 excavations at the multicomponent Wiser-Stephens site by R.P. Stephen Davis, Jr. This report will be published jointly as UTK Department of Anthropology Report of Investigations No. 21 and Wright State University Laboratory of Anthropology Notes in Anthropology No. 4.

A report documenting archaeological research in the Watts Bar Nuclear Plant area will be available in early April, 1978 (University of Tennessee, Department of Anthropology Report of Investigations No. 22, also published as TVA Publications in Anthropology No. 15. The report includes description and analysis of five Late Woodland period burial mounds designated the McDonald site (40RH7) and a single Early Mississippian period platform mound referred to as the Leuty site (40RH6). The Leuty mound, covering undisturbed Woodland period occupation, contains two construction stages and four structures. Although disturbed by previous excavations and plowing, the McDonald site mounds show single and multiple construction stages. Between one and 22 burials were recovered from each mound providing a total sample of 45 individuals. Comparative

analysis suggests no striking differences with previously excavated Late Woodland period burial mounds in the eastern Tennessee River Valley. Eleven radiocarbon dates indicate that the McDonald site mounds were built between ca. A.D. 700 and A.D. 1000 if not later. Comparison and interpretation of the dates, artifacts, and mortuary patterns include previously unpublished information from Late Woodland-Early Mississippian contexts in the Lower Little Tennessee River Valley (Tellico Archaeological Project) and the Lower Clinch River Valley (Clinch River Breeder Reactor Plant Archaeological Project).

Archaeology Staff
Department of Anthropology
University of Tennessee
Knoxville, TN 37916

PROPOSED ARTICLES OF INCORPORATION AND BY-LAWS

As stated at the Business Meeting in Lafayette, proposed Articles of Incorporation and By-Laws have been drafted and reviewed by the Executive Committee and are ready to be considered by the membership of the Conference. Articles and By-Laws must be approved by the membership before the Conference can be considered for tax-exempt status. The procedure decided on is that the entire Articles and By-Laws be published here. Suggestions for changes or modifications should be sent no later than June 15 to Martha A. Rolingson, Arkansas Archeological Survey, University of Arkansas Museum, Fayetteville, AR 72701. Based upon this response, a ballot for acceptance or rejection of the Articles and By-Laws will be mailed to the membership, probably in June. The Articles and By-Laws can be approved by two-thirds of the votes cast. If drastic changes are suggested, or if the membership rejects the Articles and By-Laws on the ballot, then a discussion session will be planned at the October 27-28 meeting in Knoxville.

ARTICLES OF INCORPORATION

ARTICLE I - NAME

The name of this organization shall be the Southeastern Archaeological Conference.

ARTICLE II - PURPOSE

The purpose of the Southeastern Archaeological Conference shall be to promote and to stimulate interest in the archaeology of the southeastern United States and neighboring areas; to serve as a bond among those interested in this and related subjects; to publish and to encourage publication; to advocate and to aid in the conservation of archaeological data; and to encourage an appreciation and support of archaeological research.

ARTICLE III - POWERS

Section 1. The Conference shall have the power to receive, administer, and disburse dues, assessments, and grants to further its ends; to acquire, hold absolutely or in trust for the purposes of the Conference, and to convey property, real and personal; to publish newsletters, proceedings, monographs, reports, bulletins, journals, and books; to affiliate with other organizations in the pursuit of common aims, and to appoint delegates or representatives to such organizations; to establish branches, sections, or divisions, on a regional or functional basis; and to engage in such other activities as are in keeping with the objects of the Conference.

Section 2. No part of the net receipts of the Southeastern Archaeological Conference shall inure to the benefit of or be distributable to its members, officers, committee members or other private persons, except that the Conference shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes of the Conference as set forth in these Articles of Incorporation and By-Laws.

Section 3. No substantial part of the activities of the Conference shall involve propagandizing or otherwise attempting to influence legislation, and the Conference shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these Articles of Incorporation and By-Laws, the Conference shall not carry on any other activities which are proscribed for organizations exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Code) or which are proscribed for organizations to which contributions are deductible under 170(c)(2) of the Internal Revenue Code (or the corresponding section of any future Internal Revenue Code).

ARTICLE IV - MEMBERSHIP

Section 1. Membership in the Conference shall be open to all interested persons concerned with the purpose of the Conference as set forth in Article II of the Articles of Incorporation

without regard to sex, race, religion, or nationality.

Section 2. Members shall be governed with respect to membership by the By-Laws of the Conference.

Section 3. The determination of classes of membership, dues assessments, and responsibilities and privileges of Conference membership shall be made through the By-Laws of the Conference.

ARTICLE V - PUBLICATIONS

Section 1. The Conference shall publish a newsletter and a bulletin, and other such publications as provided by the By-Laws of the Conference.

ARTICLE VI - OFFICERS

Section 1. The officers of the Conference shall be a President, a President-elect, a Secretary, a Treasurer, an Editor, and two Executive Officers. These officers will constitute the Executive Committee.

Section 2. The officers shall be nominated, elected, replaced, installed to office, and excused, and exercise respective duties and responsibilities in accord with the By-Laws of the Conference.

ARTICLE VII - LIABILITIES

The officers, properly designated officials, and members of this Conference and their private property shall be exempt from liability for the Conference's debts and obligations.

ARTICLE VIII - COMMITTEES

Section 1. The Executive Committee may transact business for the Conference and shall have and exercise the normal business of the Conference in the intervals between the Conferences' meetings. Its actions shall be subject to ratification of the Conference membership at the Annual Business Meeting.

Section 2. The President may create such other committees as are required by the Articles of Incorporation to conduct the necessary and routine business of the Conference, and as the President may deem necessary and advisable and shall appoint the separate committee members. The President may dissolve such committees.

Section 3. The Executive Committee shall also have the power to create and dissolve committees.

ARTICLE IX - MEETINGS

Section 1. The Conference shall hold at least one business meeting each calendar year.

Section 2. Special meetings of the Conference may be called as provided for by the By-Laws of the Conference.

Section 3. The annual meeting of the Executive Committee of the Conference shall be held prior to the Annual Business Meeting of the Conference and an organizational meeting of the newly constituted officers shall be held following the Annual Business and Special Meetings.

Section 4. Meetings of the Conference membership and of the Executive Committee shall be open meetings.

ARTICLE X - AMENDMENTS

Section 1. The Executive Committee or ten percent of the dues-paid voting membership of the Conference may propose that the Articles of Incorporation and By-Laws be amended, repealed, or altered in whole or in part. Provisions for amending the Articles of Incorporation and By-Laws shall be such as are described in the By-Laws.

Section 2. The Executive Committee may adopt additional standing rules and procedures in harmony herewith, but shall not alter the Articles of Incorporation or any By-Laws adopted by the members of the Conference.

ARTICLE XI - FINANCES

Section 1. The fiscal year of the Conference shall be set by the Executive Committee.

Section 2. Annual dues and disbursement of the income from annual dues and from investments and other revenue sources shall be determined and accounted for through rules and procedures adopted by the Executive Committee for fiscal and managerial accounting as set forth in the By-Laws. Such activities shall be structured as to preserve the tax exempt status of the Conference.

Section 3. Matters of financial obligations and accountability of the Conference and its officers shall be through the By-Laws.

ARTICLE XII - DISPOSAL OF THE ASSETS

Section 1. In the event of dissolution of the Conference, whether voluntary or involuntary, the assets shall be distributed and disposed of as set forth in the By-Laws and Internal Revenue Code as may then be in effect.

BY-LAWS

ARTICLE I - MEMBERSHIP

Section 1. Membership is open to any person in sympathy with the objectives of the Conference, as set forth in Article II of the Articles of Incorporation without regard to sex, race, religion, or nationality.

Section 2. Membership in the Conference shall include the following categories: Member, Family Member.

Section 3. Application for membership shall constitute a written subscription to the ideals, objectives, and accepted standards of the Conference.

Section 4. Membership in the Conference shall be denied to any person who violates accepted standards of archaeological conduct by misusing archaeological materials or sites for commercial purposes, or by failing to behave in a responsible manner with respect to the archaeological record.

Section 5. Annual dues of Members and Family Members shall be fixed by the Executive Committee.

Section 6. Each Member and individual included in a Family Membership shall have one vote in the transaction of the business of the Conference and shall be eligible for any elective or appointive office in the Conference, subject only to restrictions defined elsewhere in the Articles of Incorporation and By-Laws. Each Member and each Member Family shall receive all the Conference's regular publications for the year covered by the member's dues. Individuals comprising a Member Family shall not receive more than one copy of the publications except on payment therefore of the difference between the reduced dues and the full amount of dues.

Section 7. Any library, museum, university, school, or other institution or agency may subscribe to the publications of the Conference without privilege of membership. The annual cost of subscriptions shall be fixed by the Executive Committee.

Section 8. Membership shall be terminated by voluntary resignation in writing or by non-payment of annual dues, or as noted in Section 9.

Section 9. The Executive Committee may, by three-quarters vote, remove from the membership roles any member whose acts are contrary to the ideals, objects, and accepted standards of the Conference as set forth in Article II of the Articles of Incorporation, or who otherwise makes improper use of membership in the Conference. The action of the Executive Committee may be subject to an appeal to the Conference at its Annual Meeting.

ARTICLE II - NOMINATIONS, VOTING AND ELECTIONS

Section 1. Before March 1 of each year the President shall appoint three members to form a Nominations and Elections Committee.

Section 2. The duties of this Committee shall include securing nominations for candidates for the elected positions of the Conference and announcing election results to Conference members. Members of the Nominations and Elections Committee may not serve concurrently as Officers of the Conference.

Section 3. The names of the members of the Nominations and Elections Committee and their addresses for any given fiscal year shall appear prominently in the spring issue of the Newsletter. There shall also be a listing of the offices to be vacated for which nominations will be made for the ensuing year with a notice that members may suggest the names of candidates for such offices to the Nominations and Elections Committee before July 1. For the offices of Secretary, Treasurer, and Editor the Committee shall nominate a member candidate. For the other offices the Committee shall nominate at least two and no more than three member candidates. All prospective nominees must indicate in writing to the Committee their willingness to serve as an officer of the Conference. The list of nominees shall be mailed to the individual members of the Conference in accord with the provisions of Article II Section 4 of the By-Laws.

Section 4. Each active member shall be entitled to vote for one candidate for each office. Voting shall be by mail ballot. No identification of the voter shall appear on the ballot. Ballots shall be mailed to the members by the Secretary at least thirty days before the Annual Meeting. To be counted as votes ballots must be in the hands of the Secretary on or before a date specified by him/her but not less than ten days before the Annual Meeting. The results of the elections shall be announced by the Nominations and Elections Committee at the Annual Meeting. The candidate for an office who receives the highest number of votes shall be declared elected to that office. In the event of a tie, the Committee shall hold a run-off election at the Annual Meeting.

ARTICLE III - ORGANIZATION

Section 1. The elected officers of the Conference shall consist of a President, a President-elect, a Secretary, a Treasurer, an Editor, and two Executive Officers and (in such years as the offices are filled) a Secretary -elect, a Treasurer-elect, and an Editor-elect.

Section 2. The Executive Committee shall consist of the officers of the Conference.

Section 3. The President-elect shall be elected for a two year term, at the conclusion of which the President-elect will succeed to the Presidency to serve a two year term. The Secretary-elect, the Treasurer-elect, and the Editor-elect shall be elected in that order in succeeding years for a one year term at the conclusion of which they shall succeed to the offices of Secretary, Treasurer, and Editor respectively, to serve a three year term. The other two members of the Executive Committee shall be elected, one each year, for a term of two years.

Section 4. No officer of the Conference shall be eligible for re-election to the same office until the Annual Meeting next following that at which the term of that office shall have expired.

Section 5. Subject to general directives and limitations imposed by the membership at the Annual Meeting, or a Special Meeting, or by mail ballot, the Executive Committee shall have authority to execute on behalf of the Conference all powers and functions of the Conference, as defined in the Articles of Incorporation and these By-Laws.

Section 6. In the event of the absence, death, resignation, or incapacity of the President, Secretary, Treasurer, or Editor, the duties of the office shall be assumed by the appropriate officer-elect if such position of officer-elect is filled at the time. In the event of a vacancy in any office, where no other officer is empowered to assume the duties of the office, the Executive Committee shall have the power to make interim appointment to the office. The office shall then be filled during the next regular election in the manner described in Article II, Section 3 of the By-Laws.

ARTICLE IV - DUTIES OF THE PRESIDENT

Section 1. President - The President shall be the Chief Executive officer of the Conference and as such shall preside at meetings of the Executive Committee and the Annual Business Meeting of the membership. The President may appoint representatives of the Conference to other societies, agencies, or councils. The President shall appoint all necessary committees and their chairpersons and define their duties with the advice and consent of the Executive Committee.

The President, and with the Secretary and Treasurer, shall sign all written contracts authorized by the Executive Committee.

The actions of the President in exercising the duties of the office shall be subject to review and approval of the Executive Committee.

Section 2. President-elect - The President-elect shall serve

as the Vice-President and succeed to the presidency. In the absence of the President or incapacity of the President, the President-elect shall assist and/or perform the duties of the President. In the event of failure of the President and President-elect, the immediate past President shall serve and perform the duties of the President.

Section 3. Secretary - The Secretary, subject to the directions of the Executive Committee, shall be responsible for the maintenance of the central office of the Conference and shall have general charge of administrative matters under the direction of the President. The Secretary shall act as Secretary of the Executive Committee, and shall compile the minutes of Annual, Special, Regional and Joint Meetings of the Conference which will include any individual or committee reports presented therein. The Secretary shall maintain complete records of the Conference and attend to the ordinary correspondence of the Conference. The Secretary shall render an annual report to the Executive Committee, which upon approval, shall be presented to the Annual Business Meeting. The Secretary, subject to authorization and budgetary provisions by the Executive Committee, may employ clerical assistance, and purchase supplies necessary to the office. The Secretary shall act to coordinate the programs and arrangements of the Annual Meeting.

Section 4. Treasurer - The Treasurer shall be responsible for the administration of the finances of the Conference under regulations approved by the Executive Committee. The Treasurer shall be the Conference's fiscal agent in dealing with persons or organizations. The Treasurer shall be responsible for the maintenance of adequate books and records which shall be open to inspection by the Executive Committee. The Treasurer shall forward a list of dues paid members in good standing to the Secretary. The Treasurer shall have custody of all money and securities of the Conference, keep regular books of accounts, and arrange for the services of a Certified Public Account for an annual audit of the Conference's books. The Treasurer, in consultation with the Budget Committee, shall prepare and submit a budget for the ensuing year to the Executive Committee for approval. Upon approval, the budget shall be presented to the Annual Business Meeting and included in the minutes. The Treasurer shall be bonded for the faithful performance of such duties in such sum as the Executive Committee may direct. The Treasurer shall bill all members on an annual basis for the Conference dues.

Section 5. Editor - The Editor shall have full charge of all publications of the Conference under the direction of the Executive Committee. The Editor may make negotiations for publishing contracts in the name of the Conference and make minor adjustments in basic contracts relating to publications. The Editor may initiate agreements with individuals and institutions for financing publications. All such agreements must

be approved by the Treasurer and the President. All bills relating to publishing obligations shall be certified to the Treasurer by the Editor. The Editor shall render an annual report to the Executive Committee which, upon approval, shall be presented to the Annual Meeting. The Editor, may, subject to review by the Executive Committee, appoint Associate and Assistant Editors. The Editor's representatives shall serve concurrently with, and under the direction of, the Editor, and shall be responsible to him. The Editor may, subject to authorization and budgetary provisions by the Executive Committee, employ clerical and editorial assistance.

Section 6. The elected officers of the Conference shall perform such other duties not inconsistent herewith as are required of them by the Executive Committee.

Section 7. Executive Committee - The Executive Committee may hold Special Meetings at the call of the President. Special Meetings of the Executive Committee shall be called by the President at any time upon written demand of at least three members of the Committee.

A quorum of the Executive Committee shall consist of a majority of its membership.

Questions shall be decided by the Executive Committee by a majority of the votes cast at any meeting or by mail ballot. In the case of a tie vote the decision of the President shall be final.

The President may, on his own initiative, or shall at the written request of any member of the Executive Committee, ask the Committee to vote on specific questions by mail ballot. Ballots shall be mailed by the Secretary who shall specify on the ballots the date on or before which they are to be placed in the mail for return to the Secretary. This date shall be not less than fifteen days or more than thirty days from the date they were placed in the mail by the Secretary.

Reports of officers, representatives, delegates, committees, and agents shall be approved by the Executive Committee. At the discretion of the Executive Committee these reports may be presented in full or brief form at the Annual Meeting.

The Executive Committee shall act upon the budget provided by the Treasurer. A budget shall be submitted by the Executive Committee to the Annual Meeting for approval.

ARTICLE V - MEETINGS

Section 1. The Conference shall hold an Annual Meeting at a time and place to be designated by the Executive Committee. The attending members shall constitute a quorum. At this

meeting the business of the Conference not requiring mail ballots shall be transacted, archaeological papers and other matters of scientific interest presented, and symposia and discussions may be held.

Section 2. Due notice of the place and date of the next Annual Meeting shall be published in the spring issue of the Newsletter. Insofar as practicable, announcements accompanied by a preliminary program shall be mailed by the Program Chairperson at least thirty days in advance of the meeting.

Section 3. Special Meetings shall be called by the President at any time at the direction of the Executive Committee. Any matter of business not requiring a mail ballot may be decided at a Special Meeting provided notice of such business is specified in the call. Notices of Special Meetings shall be mailed by the Secretary to members at least ten days in advance.

Section 4. An annual meeting of the Executive Committee shall be held before the Annual Business Meeting of the Conference. Special meetings of the Executive Committee may be held at the call of the President. The President shall call a special meeting of the Executive Committee at any time upon the written demand of at least three members thereof.

Section 5. All matters of business of the Conference may be decided by means of a referendum vote by mail ballot under conditions specified in the By-Laws.

ARTICLE VI - REFERENDUM

Section 1. A referendum vote shall be held by mail ballot at any time upon the initiation of the Executive Committee or a signed petition to the Executive Committee by two percent of the individual membership as listed in the last year's membership list. Ballots shall be mailed to members by the Secretary. In order that they may be counted as votes ballots must be placed in the mail by members and addressed to the Secretary not more than thirty days after the date when they were mailed to the members by the Secretary. A majority of votes received shall constitute the deciding vote. The Secretary shall certify the vote to the Executive Committee.

ARTICLE VII - FINANCES

Section 1. The fiscal year of the Conference shall be set by the Executive Committee.

Section 2. Annual dues shall be payable on a date set by the Executive Committee. Members 90 days in arrears shall not be entitled to receive the Conference's publications or to vote,

and those one year in arrears may, after final notification, be dropped from the rolls. Members thus dropped may be reinstated by payment of their arrearages, in which case they shall receive the withheld publications.

Section 3. The income from annual dues and from investments and other sources shall constitute the Working Fund, available for operating, publication, and other current expenses consistent with the purposes of the Conference as the Executive Committee may direct.

Section 4. No financial obligation in excess of funds available in the treasury shall be assumed by the Executive Committee or by any office on behalf of the Conference except when approved by a two-thirds vote of the membership of the Conference present at a regular Annual Meeting or at a Special Meeting; provided that for the purposes of this section, estimated receipts from annual dues and other accounts receivable for the current year may be considered as available funds.

ARTICLE VIII - AMENDMENTS

Section 1. The Articles of Incorporation may be amended by mail ballot provided that a proposed amendment is approved by two-thirds of the votes cast. Prior to a vote by the membership, all proposed amendments to the Articles of Incorporation shall be examined by legal counsel to insure that said amendment shall not endanger the tax exempt status of the Conference.

Section 2. The amendment and provisions of the Articles of Incorporation shall be effective immediately upon their adoption and shall supersede and nullify all previous constitutional enactments and provisions not mentioned herein.

Section 3. These By-Laws may be amended by a one-half vote of the dues paid membership in good standing by mail ballot.

Section 4. Amendment of the By-Laws may be proposed by the Executive Committee, or by petition of the membership at large by 10 percent of the dues paid members on record with the Treasurer at the time of application to the President. The proposed amendment shall be mailed to the members of the Conference by the Secretary at least thirty days before the Annual Business Meeting or a Special Meeting. In the case of a mail ballot, to be counted as votes, ballots must be returned to the Secretary within thirty days of the date of mailing.

Section 5. The amendment and provisions of the By-Laws shall be effective immediately upon their adoption and shall supersede and nullify all previous By-Law enactments in conflict with them and all amendments and provisions not mentioned herein.

ARTICLE IX - DISPOSAL OF ASSETS

Section 1. Upon the dissolution of the Southeastern Archaeological Conference, whether voluntary or involuntary, after paying all of the liabilities of the Conference, the Conference through its Executive Committee shall dispose of all of its assets exclusively for the scientific and educational purposes set forth in the Articles of Incorporation and these By-Laws by donating them to one or more institutions or organizations exempt from taxation under Section 501(c)(3) of the Internal Revenue Code of 1954 or the corresponding provision of any future Internal Revenue Code as may then be in effect.

Information For Contributors

The SEAC Newsletter is published biannually (October and April) by the Southeastern Archaeological Conference. Original short articles, book reviews, announcements, notes, current research and comments on the archaeology of the southeastern United States should be submitted to the Editor.

All manuscript material must be typed double-spaced on one side of an 8 1/2 by 11 inch white bond sheet leaving at least a 1 inch margin on all sides. Contributors are referred to American Antiquity and the Chicago Manual of Style for matters of style and reference. Footnotes are not permitted. Text citations are set in parentheses, e.g., (author 1975: 100). References are listed alphabetically by author and chronologically by year. Style must follow format of this Newsletter. Tables should be typed on separate sheets with proper titles and numbered consecutively. A note should be made in the

manuscript margin indicating where tables should appear. All illustrations must be submitted as black on white drawings or glossy prints and must not exceed 9 x 12 inches in size. All illustrations are numbered consecutively in a series and are labeled "Figure"; whereas all tabular material is numbered in a separate series labeled "Table." Each article must be accompanied by a short abstract.

DEADLINE: 1st OF MONTH PRECEDING MONTH OF PUBLICATION.

Current Research - Write in narrative form a summary of your field work or any other project or research which you might normally report upon at a Current Research session. Photographs and line drawings will be accepted. Make your report a concise summary, following the format below (if at all possible). Please include the nature of the project (field school, grant sponsored research,

etc.), dates of work, sponsoring institution, person in charge, current status of work, results.

Type of Research (Federal, State Agency, University, Private, Other)

Agency (if federal) or State - Agency, or State - University, or State - Private Agency, or individual, or other

Fieldwork

Laboratory

Publications:

New Personnel

Other categories (i.e., other research) Categories not applicable may be omitted from body of text. These headings are only for purpose of organization.

Items published reflect the views of the authors; their publication does not signify endorsement by the Southeastern Archaeological Conference Newsletter or the Southeastern Archaeological Conference.

April 1978

Vol. 20, No. 1

SEAC Newsletter
Department of Anthropology
Washington University
St. Louis, Mo. 63130



3rd class

RECEIVED
ENVIRONMENTAL PLANNING
MAY 30 1978