

SPECIAL ISSUE BY EDUCATION COMMITTEE

MAY 1958

AN INTRODUCTION TO ARCHAEOLOGICAL EXCAVATION

Excerpts from CODE OF ALABAMA, 1940, Title 55, Pages 362-363

## ARTICLE 2...ABORIGINAL MOUNDS AND ANTIQUITIES PRESERVED.

Paragraph 273...State of Alabama reserves to itself the exclusive right to explore, excavate, and survey...ownership of state expressly declared in all objects found.

Paragraph 275...Exploration shall not deface or injure remains.

Paragraph 277...Exploring or excavating a misdemeanor... not over \$100.00 fine per offense.

Alabama has thus outlawed "collectors" in an effort to prevent the greatest of all types of archaeological destruction. They operate outside the law and are "sitting ducks" for anybody who wants to declare open season and bring charges.

Our legal defense as amateur archaeologists is that we are practicing archaeology properly, expressly to prevent its destruction by casual picker-uppers, irresponsible collectors, erosion, inundation, sand-pitting, highway and other construction, etc.

## SURFACE COLLECTING PROPERLY

Proper surface collecting is a relatively simple matter of locating sites on maps, giving each site a number or other designation, so marking the map \* and putting the identical mark on each artifact found at any given site (using waterproof ink). These artifacts should be safely stored at home, or preferably in a responsible institution. We should think of ourselves as custodians, rather than owners, of artifacts. When properly collected, they represent part of the valuable history of the human race - which should belong to the entire human race. It should be arranged that when we die, our properly collected material be taken care of in order that our labors should not be for nothing, but rather a memorial to us and a benefit to humanity.

## THE PROBLEMS OF ARCHAEOLOGICAL EXCAVATION

Archaeological excavation is a more complex problem. The hidden sub-surface story lies just as the Indians left it, every detail important and difficult to read. Unless we learn the essentials, we shall certainly transgress grossly upon Paragraph 275 above; Explorations shall not deface or injure remains".

Uneducated excavation shall surely deface, injure, and infact destroy the record written in the soil. An excavation is a sort of book that can be read only once, since it is destroyed as it is being read.

Sketch a rough map (from the topographical map) to store with these artifacts. Otherwise, no one may know where your "Ala 1" is in the event of your death. Draw at least the section involved.

But do you know what a "section" is? Let us mark an actual site.

If you have a copy of the Montevallo Quadrangle, Alabama, get it out. Find Montevallo, in the central southern part of the map, on Shoal Creek. Some six miles south and west of Montevallo, Shoal Creek joins Mahan Creek to form Little Cahaba River.

On the west bank of Mahan Creek, some 200 yards south of its confluence with Shoal Creek, there is a large Indian village site which is to be destroyed, the sandy soil to be used for highway construction. You will note that the confluence of these creeks lies within a small square (1 inch square) drawn on the map, and that this square is numbered "14".

That square is a section - one square mile.

A section is  $1/36$  of a township. That is, 36 square miles or sections make a township. On the left margin of your map, opposite the village site we have located, you will find "T. 24N" - meaning "township 24 north". And you can see, by the heavier lines, just which sections lie in this township.

Then if you will look at the lower margin of the map you will see "R. 11 E" - meaning "range 11 east". So now we have the section, township and range, as well as quadrangle.

But we can locate our site more exactly in section 14, for it is obviously in the southeast quarter. Even more exactly, it is in the southwest quarter of the southeast quarter.

So here is our total location of the site; S. W.  $\frac{1}{4}$  of S. E.  $\frac{1}{4}$  of Section 14, T. 24 N., R. 11 E., Montevallo Quadrangle, Alabama, Geological Survey 1907-1908.

(You will find attached a sample sketch of a section, locating the above site, such as you would make and store with your artifacts from each site.)

#### THE GRID

You also need a map on a much larger scale of the excavation itself, on which you can locate features to within inches. This map is first laid off on the site itself, in a sort of checkerboard pattern called a grid. You should have prepared sheets of matching grids, on a smaller scale, so that you can map on this paper grid the features which are discovered in the excavation grid - grid for grid, very exactly. This sketch record will be your "master map" of the site.

To lay out this grid on the site, a particular point is located by surveying methods a certain distance in a certain direction from some fixed landmark (or when practical from an existing survey mark). A straight line is laid out running through this located point, extending in both directions from it, to form the base line of operations. (See attached sample of grid.)

Most Indian sites have been occupied a number of times over an interval of hundreds or even thousands of years. A "pure" site which has been occupied by only one culture group is a rarity, and even it may have been occupied for hundreds of years and hence have an earlier and later story to tell.

Ask any housewife what would happen if she did not dust the furniture for a month. She will throw up her hands and, with slight exaggeration exclaim about the "inches of dust" which would collect. Imagine what this layer of dust would be in ten thousand years. There are other agencies which deposit soil, as glaciers and streams overflow. In Indian villages, which appear not to have had much of a system of garbage collection, deposits of man-made refuse may be as much as twenty or thirty feet thick.

Hence old Indian village sites, for one reason or another, are usually in depth. And of course the artifacts and other village remains of the first or oldest inhabitants will normally be at the "bottom" of the site. The latest residents will have left the topmost residues. In the intervening distance there may be the archaeological records of many intermediate cultures. This is what is called the stratigraphic record of a site, since it is in strata.

In order to map accurately the records of all the culture or stratigraphic levels, we must have vertical as well as horizontal maps. We therefore make our dig six inches at a time, and record everything not only by its position on the grid map, but also by its depth - as 6" level, 12" level, 18" level, and so on down. Where there is evidence of several occupations but little depth of midden (refuse) or other deposit, it may be necessary to excavate by 3" or even 2" levels to get a stratigraphic picture.

In order to draw "depth maps" the sides of the excavation are kept shaved clean with the shovel or trowel in order that the story written in the soil may be visible in the clean bank. For example, the soil may be black and "greasy" down to the 18" level, a habitation area. Below that there may be six inches of clean, flood-deposited soil, sterile of artifacts, with only pits and burials intrusive from the above habitation area. Then below the sterile layer an old vegetated surface may appear, and with it more dark soil and artifacts. Pits and other features from the upper habitation level which extend down into this lower zone of habitation must be noted and properly assigned to the upper level to keep the two separated. Unless the sides of the excavation are kept shaved clean, these features will not be clearly visible.

Profile maps of these vertical cuts should be drawn on graph paper to preserve the record in all of the more important parts of a site. That is, habitation levels, old surfaces, pits, burials, etc., should be sketched as they appear on the vertical banks of the excavation - with depths indicated.

Vertical cuts, in both directions, can be preserved along all grid lines by excavating only alternate squares at first - as only black or red squares on a checkerboard. When this is done, features which lie only partially in one grid square (as house post molds or burials) should be left on pedestals until the adjacent squares are excavated. Otherwise part of a house outline, for example, would be dug away before the picture was complete for photographing and sketching.

And remember that an arrowhead may be one of a cache, or a common stone may be one of several outlining a fire basin, and so on, so get the habit of leaving things on pedestals until reasonable exploration around them.

Above all, remember that moving earth, though the prime object in all other kinds of digging, is not the object in archaeological excavation. Nor is the object simply to find artifacts. The object is to read the story written in the soil and transfer it to map and notes.

With the horizontal grid maps and vertical profile maps, with adequate sketches, photographs and descriptive notes, the old village virtually comes to life again. It can be studied by competent archeologists and something learned about the most important thing in the world - human history, which is the great laboratory of human behaviour. Weigh that in any scale of values against your "pretty arrowhead" or "whole pot".

#### HOW TO COLLECT THE ARTIFACTS

Though, of course, the matter of collection of artifacts has its legitimate and important place in archaeological excavation - they are part of the decipherable record if collected properly.

When you become sure an artifact is by itself, not associated with others, lift it from its pedestal of earth and place it in a marked container. Brown paper bags are conventionally used by archaeologists as inexpensive and adequate containers in the field. Each bag is marked before material is placed in it. Mark it with the site number, the grid number, and the stratigraphic level - as "Ala. 1, 106-R3, 20' level". All artifacts recovered in this grid square at this level are placed in this same bag. They stay in this bag until washed in the laboratory (or kitchen sink), where all artifacts are individually marked with the numbers on the bag.

Where a feature is involved, say a burial, the feature itself is given a number, as Feature #12. This number will also be on the master map and the more itemized sketch and photograph of the feature. And this number will go on the bag in which associated artifacts are placed, so they may later be kept with this feature. And each artifact will be given a number and placed in an individual marked bag to be folded and placed in the larger bag containing all. The sketch of the feature will likewise number these artifacts individually - as #1 for a celt, #2 for a pot, #3 for beads, and so on. In later studying the site it will be necessary to know which artifacts went with that burial (or other feature) and where they were placed.

Bags of one or two pounds capacity are handy for individually wrapped and marked feature-associated artifacts. Five pound bags will generally accommodate the artifacts from the general dig in a single grid square at a single level. Some ten pound bags may come in handy. Ponderous stone artifacts may be individually marked with a crayon pencil.

Burials are taken up very carefully a bone at a time. Each bone is wrapped loosely in paper - old newspaper is commonly used. Then the bones are placed in a cardboard box or other fairly rigid container to protect them. The box can be marked as to burial number - which will also appear on master map and sketch and photograph.

BIRMINGHAM ANTHROPOLOGICAL SOCIETY  
ARCHAEOLOGICAL SITE SURVEY FORM (see other side)

SITE No. \_\_\_\_\_

STATE \_\_\_\_\_ COUNTY \_\_\_\_\_ SITE NAME \_\_\_\_\_

PHOTOS \_\_\_\_\_ MAPS \_\_\_\_\_

SE 1/4 OF SW 1/4 OF SECTION 14 TOWNSHIP 24N RANGE 11E

OWNER'S NAME: \_\_\_\_\_ MAIL ADDRESS & TEL. No. \_\_\_\_\_

TENANT'S NAME: \_\_\_\_\_ MAIL ADDRESS & TEL. No. \_\_\_\_\_

NEAREST APPROACH TO SITE BY AUTO: \_\_\_\_\_

GENERAL DIRECTIONS FOR REACHING SITE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TYPE OF SITE:  VILLAGE, \_\_\_\_\_ MOUND, \_\_\_\_\_ WORKSHOP

SIZE OF SITE: \_\_\_\_\_ N-S DIAMETER, \_\_\_\_\_ E-W DIAMETER

CONDITION OF SITE: \_\_\_\_\_ CULTIVATED, \_\_\_\_\_ WOODED,  PASTURE

IF CULTIVATED: HOW LONG? \_\_\_\_\_ CROP? \_\_\_\_\_

NEAREST SOURCE OF WATER: \_\_\_\_\_

MATERIAL COLLECTED: _____	DATE _____
_____	_____
_____	_____
_____	_____

NAMES OF OTHERS KNOWN TO HAVE COLLECTIONS FROM SAME SITE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
INVESTIGATOR

BIRMINGHAM ANTHROPOLOGICAL SOCIETY

ARCHAEOLOGICAL SURVEY

STATE OF ALABAMA

Location No. Ala. 1-JHW

Feature No. 5 Burials

Photogr. No. \_\_\_\_\_

FEATURE DATA FORM

Definition Partially flexed burial

Inclusive \_\_\_\_\_ Intrusive \_\_\_\_\_ Precedent \_\_\_\_\_

Placement:

Vertical: 4'-6" deep ft. + or \_\_\_\_\_ ft. - from datum

Horizontal: One ft. \_\_\_\_\_ from house wall line  
\_\_\_\_\_ ft. \_\_\_\_\_ from \_\_\_\_\_ line

Diameters: Max. length 4'-0" Direction N.E.

Max. width 1'-10" Direction N.W.

Vertical thickness \_\_\_\_\_ Interior depth \_\_\_\_\_

Preservation Fair

Associations Pot (#1-FS) Greenstone celt (#2-FS)

Specimens taken \_\_\_\_\_

Descriptive notes:

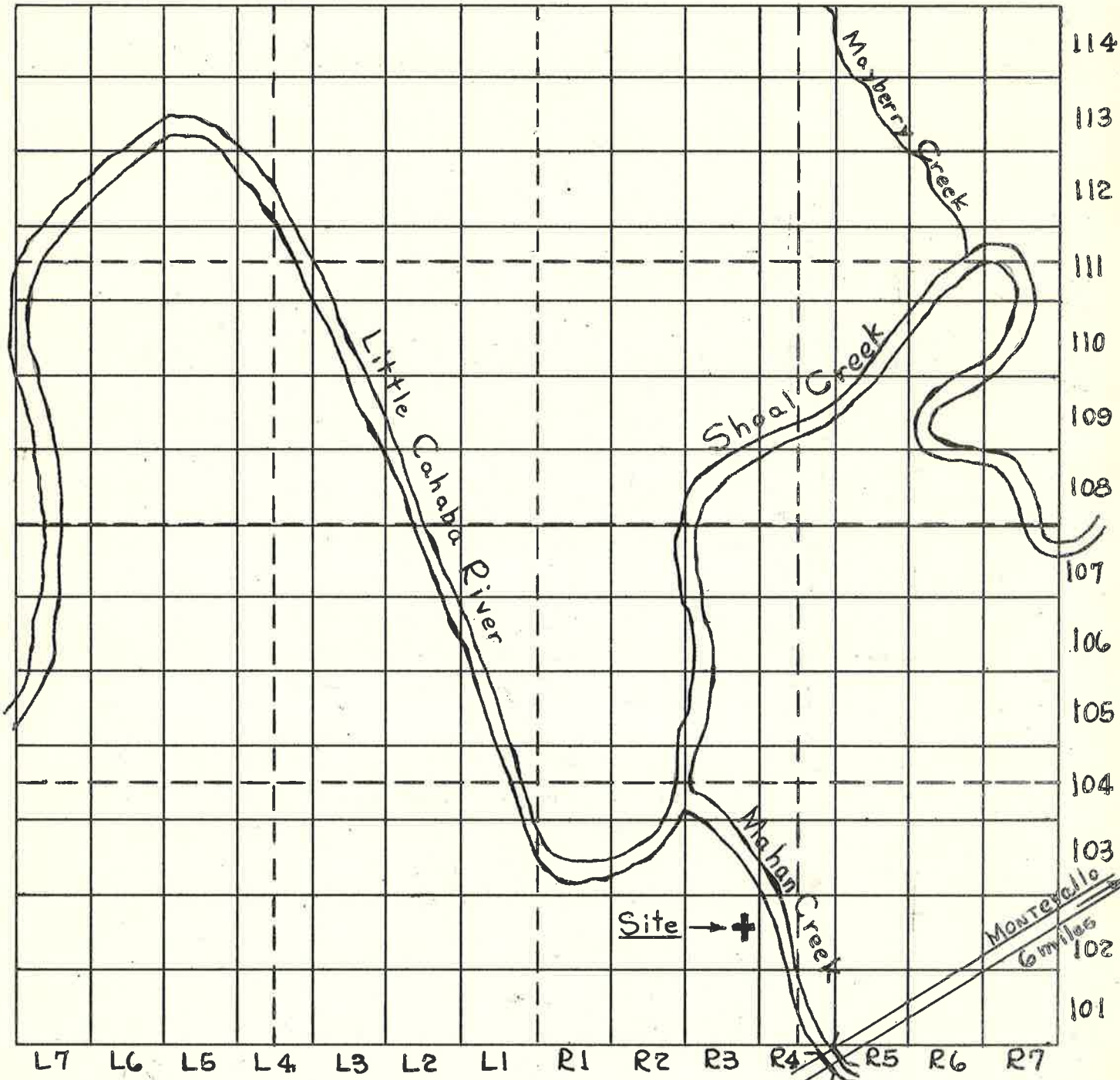
Observer JOHN H. WHOSIS Date \_\_\_\_\_

ALA. I - JHW (initials)

SITE NUMBER

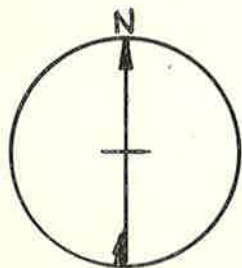
MAHAN CREEK SITE

SITE NAME



Site → +

SCALE: 1 Section



COMPASS READING  
(To orient sketch)

SE 1/4 OF SW 1/4 SECTION 14, T. 24 N. R. 11 E.  
MONTEVALLO QUADRANGLE, ALABAMA GEOLOGICAL SURVEY  
(1907-1908)

GRID MAP

(Used as section map for locating site)