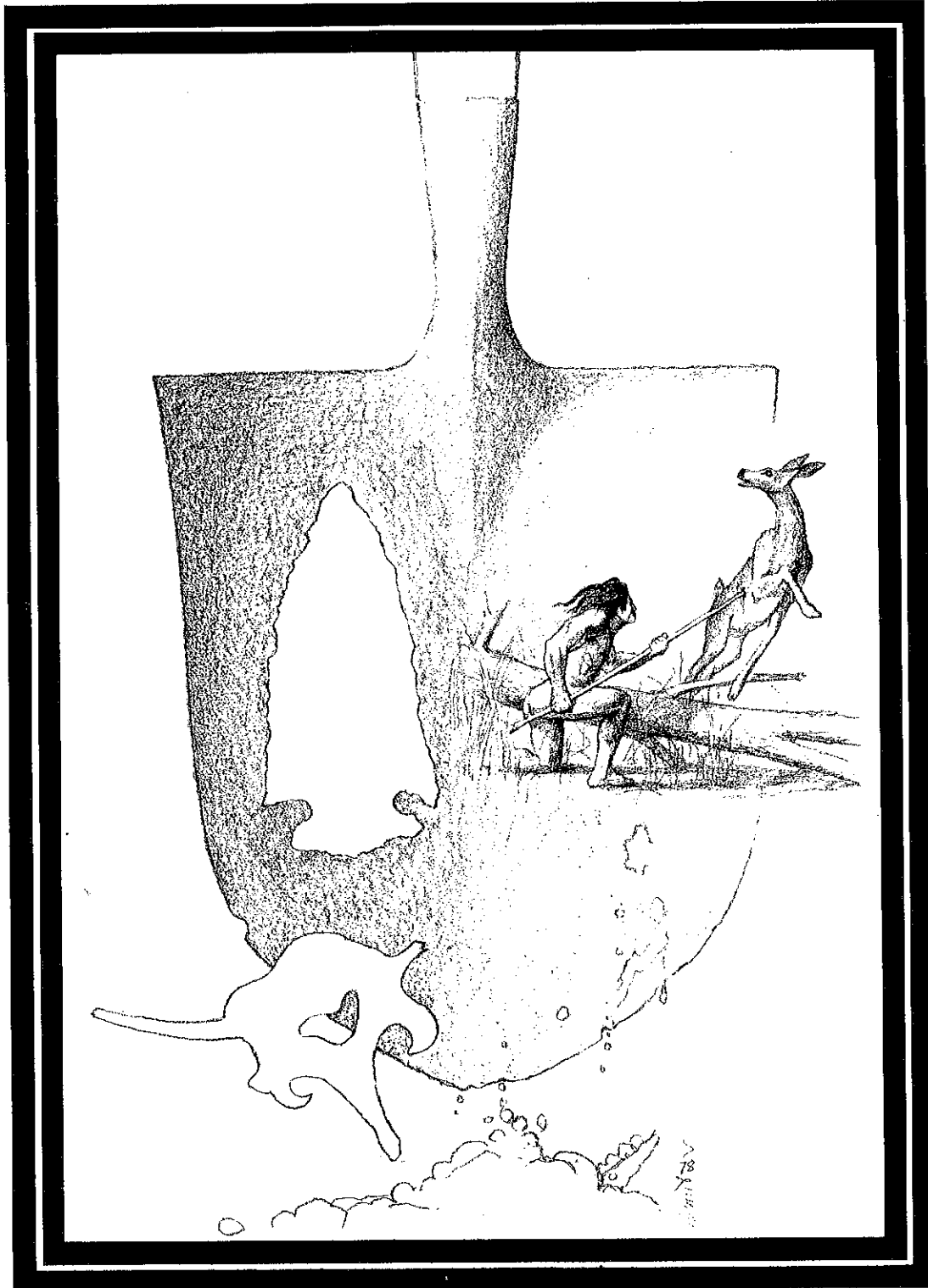


ARCHAEOLOGICAL PRESERVATION IN OHIO



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AS MAN TODAY
I GREET YOU, ANCIENT BROTHER MAN
AND POINT WITH GRATITUDE
TO THESE THE ARTIFACTS YOU MADE IN EONS PAST.
THE SIGNATURE OF MAN'S SLOW RISE
IS ON EACH TOOL, EACH POINT, EACH AXE
AND WE CAN SENSE THE HUMAN IMPACT STILL.
WHO SMOKED THIS PIPE? WHO PLAYED THIS FLUTE?
WHO USED THIS HOE? WHO THREW THIS SPEAR?
AND WAS IT MADE FOR ENEMY - OR DEER?

AS MAN TODAY
I KNEEL UPON A MOUNTAIN CIRCLED FLAT
TO FEEL THE ANCIENT ASHES YIELD, AND SEE
A KINSHIP GIFT WHICH YOU HAVE LEFT FOR ME.
I GRASP WITHIN MY HAND A PERFECT TOOL
SO LONG AGO CHIPPED CAREFULLY FROM STONE,
AND KNOW BUT FOR THE TIMING OF OUR FATES
IT MIGHT HAVE BEEN MY OWN.
I TOUCH WITH CARE ITS EDGES KEEN AND FINE,
WHERE ONCE YOU PLACED YOUR THUMB
THERE NOW IS MINE.

NORA NULL BUNNEY



Published by the
OHIO HISTORICAL SOCIETY
I-71 & 17th Avenue, Columbus, Ohio 43211

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This booklet has been funded with the assistance of a matching grant-in-aid from the Department of the Interior, Heritage Conservation and Recreation Service, under provisions of the National Historic Preservation Act of 1966; and with the assistance of the Cleveland Museum of Natural History and the Ohio Archaeological Council.

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Introduction

Once, archaeology was a scientific field limited to the university or museum, usually removed from the public. In the past decade public interest and concern has promoted passage of federal and state legislation offering some measure of protection for remaining archaeological resources. In addition, the general public has become increasingly aware of archaeological preservation through the efforts of public monies spent on archaeological inventories, surveys, and salvage.

Archaeology has become multi-faceted in recent years. The purpose of this booklet is to combine the various aspects of archaeological preservation into one source, so that everyone, from statewide planners and local engineers to interested private individuals, will be able to better understand archaeology, archaeological resources and the archaeological preservation effort.

Is The Cultural Record Worth Preservation?

It is the right of all individuals to learn about the human cultures occupying our region in past centuries. Everything from the smallest flint flake to the largest Hopewellian ceremonial center belongs to our cultural heritage.

The experiences of past societies are contained both in written and in unwritten records. In some areas of the world, a written record of sorts can be traced back approximately 5000 years. In North America, the written record extends back slightly less than 500 years. The thousands of years of human activity prior to the written word are contained in archaeological resources, areas of former human occupation containing the physical material of human existence. When no written record exists, these archaeological resources serve as an unwritten record of past human experience. We can examine an almost infinite number of attempts by man to cope with his surroundings through proper analysis of the materials from these former occupation areas.

By studying the thousands of years of interaction between man and the environment, we can better understand and cope with the future environmental processes. Scientific excavations of remaining archaeological resources (sites) provide the data necessary for reconstructing earlier environments and interpreting the operation of social systems. Specifically, the data can tell the archaeologist about social hierarchy, seasonal migration patterns, effects of diet on bone growth, nutritional diseases and dental conditions, animal and plant evolution, climatic changes, and even wanderings of the magnetic pole. Analytical

techniques yet to be developed will undoubtedly reveal much more about the physical and social environment.



Plate 1. This prehistoric burial site is being reinvestigated to learn more about its builders.

Competent archaeologists take the responsibility for the people's right to this knowledge very seriously. Archaeologists try to record all relevant data associated with the physical remains recovered through donations, field surveys, testing and various forms of excavation. All people have the right to be assured that their archaeological resources are being utilized most effectively, and that the recovered information is made accessible through publications, exhibits, lectures, and other forms of education.

A basic understanding of our past is necessary to enable present and future generations to look ahead with improved insight on man's abilities to successfully recognize and solve problems associated with the physical and social environment.



Plate 2. Archaeologists and non-archaeologists appreciate the clues to the past uncovered through careful excavation.

A Crisis in Archaeology

Considering the "energy crisis" and the problems of environmental pollution, it may seem insignificant or absurd to suggest that an "archaeological crisis" exists. However, any form of land alteration project has the possibility of disturbing or completely destroying a portion of the prehistoric record. In recent decades, the destruction of archaeological sites has risen at an alarming rate due to the increase in the number of land altering projects. The crisis exists because there is an ever increasing rate in the destruction of archaeological sites and an almost non-existent growth in funding for archaeological salvage work.



Plate 3. Archaeologists examine storm-damaged road for possible signs of prehistoric remains as part of preliminary studies required before reconstruction is begun.

The destruction of archaeological sites occurs when the previously occupied area becomes disturbed and stratigraphic and spatial relationships between artifacts and features (e.g. fire pits, midden layers, house patterns, etc.) are totally disrupted. It actually takes little effort to disrupt an archaeological site to the point where there is a complete loss of scientific data. Both natural and man-made forces are at work destroying sites; man is by far the worse offender. Sites are destroyed by all earth-moving activities involving previously undisturbed soils. In agriculture, the new forms of farm equipment require the plowed surface to be relatively level. Therefore, much leveling is done, destroying villages and campsites, many of which were located on slight knolls to take advantage of a drier habitat. Leveling also occurs in the construction of large shopping centers, housing projects, and roads.



Plate 4. Land alteration projects are the major contribution to the destruction of archaeological sites.

Additionally, many sites are destroyed through various forms of land fill excavation. Soil removal due to highway construction threatens both sites located in the fill excavation area and sites located underneath the road support soil.

Any type of construction activity or other form of land-disturbing operation has the potential for destroying part of the prehistoric record. For example, fill needed to build a ski slope meant the ultimate destruction of a prehistoric Indian village site in Ohio. The digging for sands needed in the glass industry has resulted in many archaeological sites unknowingly being carted away without concern for cultures centuries old. Topsoil companies have stripped away many sites located in the floodplains of major rivers. Surface mining activities have created a critical problem for archaeologists working in southeastern Ohio.

Architectural and historical structures are significantly different from archaeological sites, and are usually easier to preserve. Buildings of architectural or historical significance are visible, often have written documents associated with them describing the architect and related historical events, and often more easily become a part of our own society's heritage. In most cases, archaeological sites are not visible, do not have written records and are not part of our own society's heritage. Their significance is not readily recognized. In fact, it usually is only the trained archaeologist who can fully appreciate all the data obtained from an archaeological site.

For these reasons, archaeological resources are allowed to be destroyed, and little data is recovered. It is necessary to understand what archaeological resources are and to recognize and deal with them as the situation dictates. Only through education can the crisis which leads to destruction be controlled.



Plate 5. Prehistoric and historic artifacts recovered from archaeological sites.

What are Archaeological Resources?

Archaeology is the science that transforms the physical remains of former inhabitants into descriptive interpretations of their past activities. An accurate reconstruction of former life-styles is possible only through the recovery and analysis of this remaining physical evidence.

An archaeological resource (or site) is any area that has been occupied by people. Village sites, campsites, hunting stations, rock-shelters, chipping sites, ceremonial sites and burial mounds are some of the many different types of prehistoric (before European influence in North America) occupation sites remaining from thousands of years of habitation. The bits of the material culture (artifacts) which were lost, discarded, abandoned, or placed can be found at these areas. Artifacts such as chipped flint tools, ground stone tools, bone tools, ceramic vessels and pipes, skeletal remains and animal plant remains serve as valuable data for expanding the understanding of prehistoric people.

Today, some historic occupation sites are classified as archaeological resources. Old cabin sites, fort locations, mill sites, glass-works and even industrial sites are being investigated by archaeologists to gain a better understanding of man's impact on the natural and social environment, and add details not always obtainable from the written record.

Archaeological resources are non-renewable resources: once a pre-historic village site is destroyed, there is no way it can be "exactly" recreated. Every archaeological site is unique. Each one represents a particular activity over a specific time period with a unique set of surrounding influences not duplicated elsewhere. Any irresponsible act

which leads to its destruction leaves an unfillable gap in the pre-historic or early historic record.

There are three basic stages in archaeological research: survey, site testings, and excavations. Evaluation of data is on-going throughout these stages. Depending upon the type of problem being studied, the archaeologist chooses which basic form or forms of research to use.

Surveys usually involve an attempt to locate all or part of the prehistoric resources within the region under study. The reasons for conducting surveys are too numerous to mention. One example, however, might be an interest in discovering the types of habitat utilized by a specific culture during a specific time period, such as the Late Archaic Period (circa 2000 B.C.) occupants of the Lower Cuyahoga River Valley.

The techniques for conducting surveys are varied. The type of terrain, research, past inventories, surveys, manpower available, money and time all figure into the type of research design developed by the archaeologist. Survey requires the researcher to be familiar with past inventories of archaeological resources in the study area and the pre-history itself. The researcher must physically examine the study area through some on-the-ground method normally involving some form of visual examination of the ground surface, and in many instances, sub-surface testing. Cultural materials recovered from occupation sites are recorded and a determination of possible cultural affiliation is attempted. The completed survey details both the archaeological sites found and the areas where no prehistoric occupation sites were encountered.

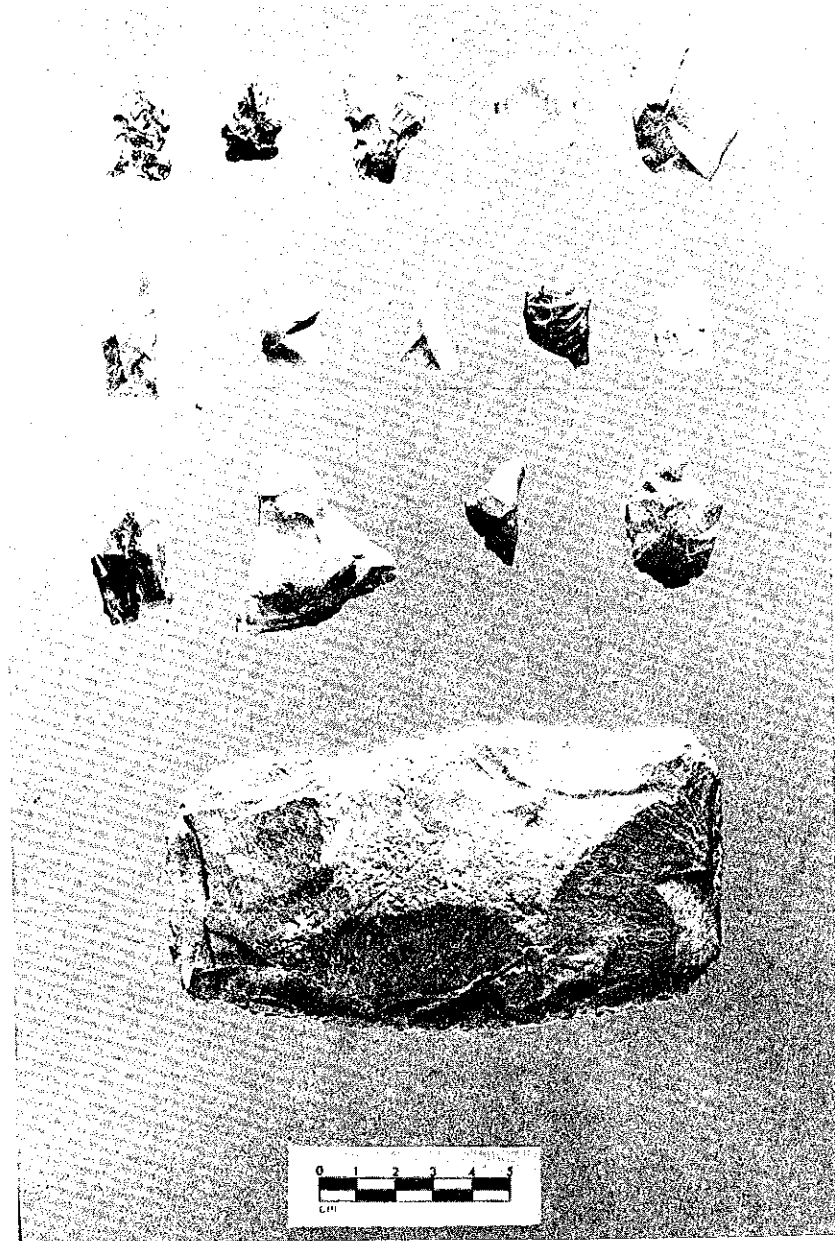


Plate 6. Visual surface examination permitted the recovery of these Archaic period stone artifacts.

The second form of basic research involves testing occupation sites. Again, there can be a variety of reasons to test an archaeological site. Testing produces a sampling of materials and data, allowing

the researcher to arrive at more definitive conclusions about the site. Testing requires below surface excavation of a predetermined sample of the site. The entire site is not usually excavated in testing.

The techniques used in testing are somewhat different from those in surveys. More time must be spent on the site to properly map and record all excavation units and recovered materials. Features are

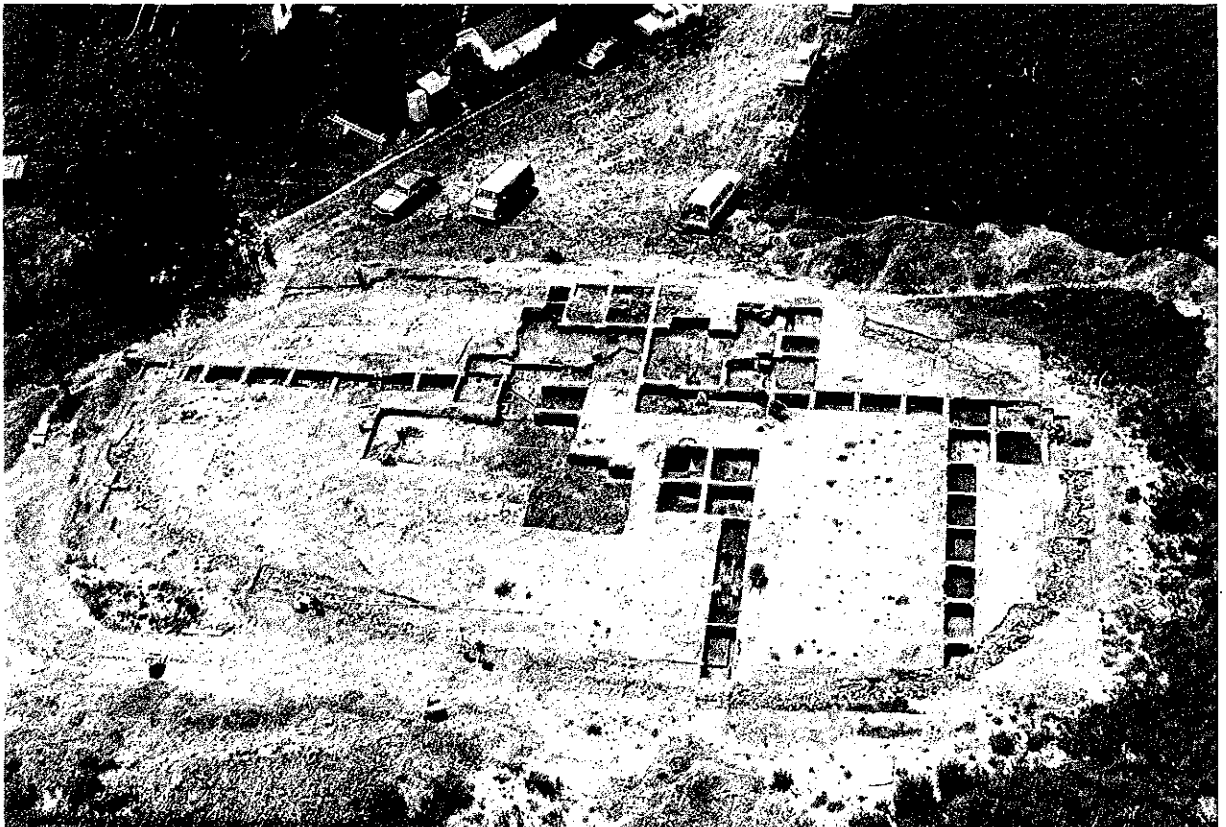


Plate 7. Aerial view of the excavation of the Edwin Harness Mound. Excavation allows the archaeologist to recover detailed information about the prehistoric people,

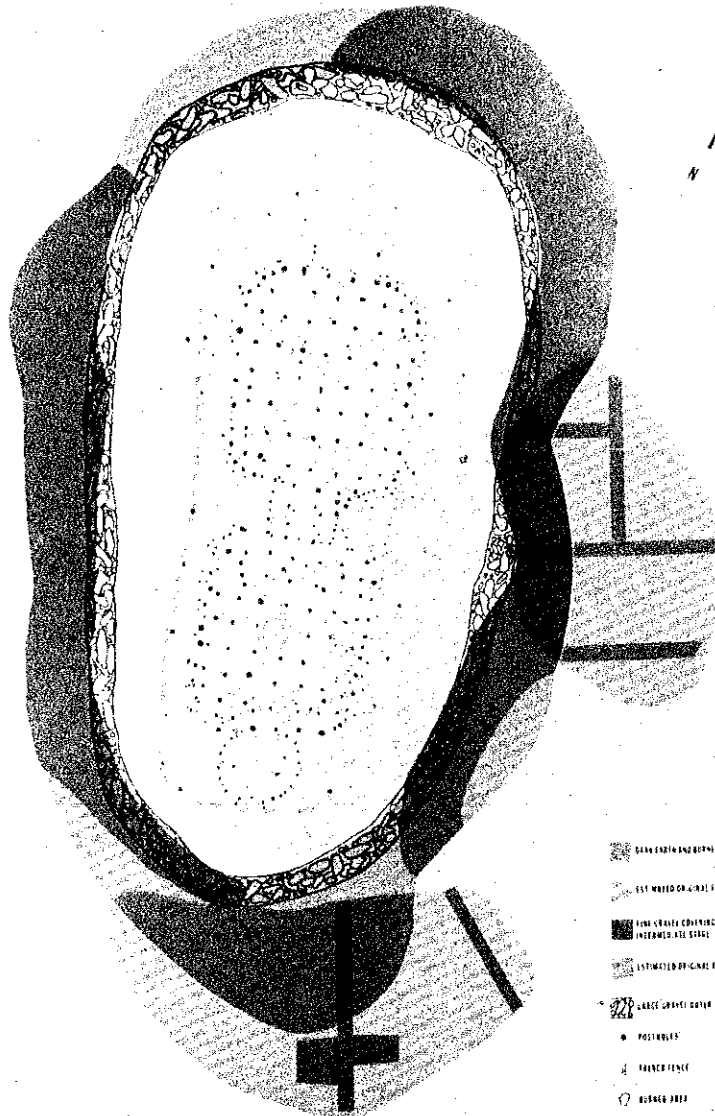


Plate 8. Analysis of all recovered data allows this reconstruction of the original Harness Mound.

meticulously removed and the materials cleaned, preserved and labelled according to specific locations within the site. Final analysis and interpretation can occupy the researcher for months after removal from the field.

The third basic form of archaeological research is a total excavation of the archaeological resources. Here, all cultural materials are removed from the site to the laboratory. Full-scale excavations require detailed planning of the methods for excavation and adequate facilities for preparing and housing the recovered materials for analysis and study. An excavation can last from several days to many years, depending on the size and depth of the site, the manpower available, the extent of data to be recovered, time, and money. The ideal outcome is to have the site excavated in such a way as to be able to reconstruct it in the laboratory. Once a total excavation of a site is attempted, care must be taken to be as thorough as possible. There is no chance of re-digging a site. For this reason, it is imperative that proper and very detailed records be kept of the locations of all features and artifacts encountered within the site.

“Public Archaeology” What is it?

The passage of recent federal and state legislation has significantly altered the role of archaeology in Ohio. For decades archaeologists have known that the archaeological resources of North America's prehistory have been slowly diminishing through natural and man-controlled forces and that there has been little the archaeologist could do to curb this destruction. The passage and implementation of federal and state legislation has given archaeologists the opportunity to apply some checks on the future destruction of archaeological sites,

Previously, archaeological resources stood a chance of being protected only if the planner or archaeologist took an active role in his area government. Today almost all federal and many state and local land alteration projects require an assessment of the impact of the proposed undertaking on the cultural resources within the project area. Even if not required by federal or state legislation, many persons involved in land alteration projects have begun to voluntarily consult archaeologists in the planning stages.

A relationship is developing between the professional archaeologist and various city, county and state planning agencies. It is no longer possible to plan and construct many types of public improvements (roadways, sewers, housing, reservoirs, etc.) without first giving adequate consideration to the project's impact on the cultural resources of the area. These cultural resources, as defined by legislation, include prehistoric and historic districts, buildings, sites, and objects that represent the events, patterns and processes of the human past.

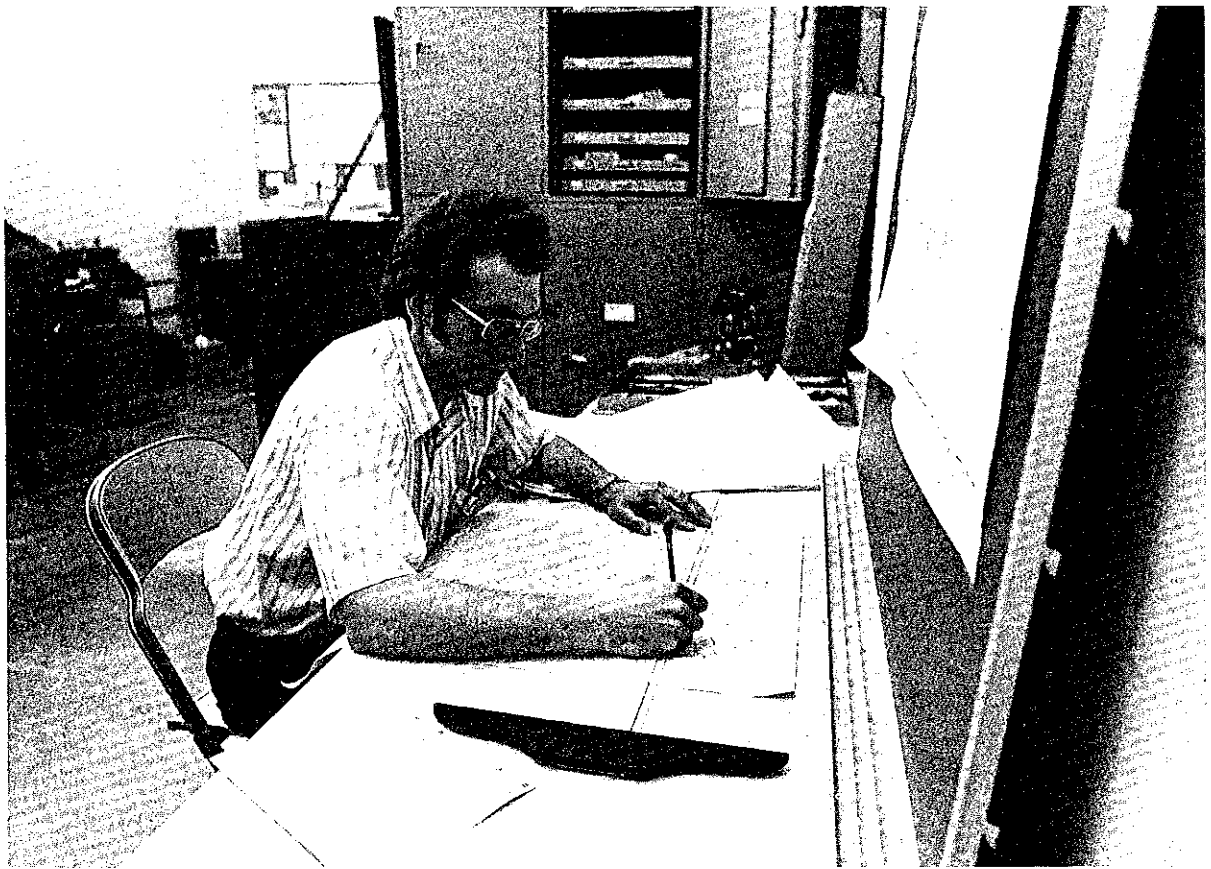


Plate 9. All federally sponsored land alteration projects are reviewed by preservationists to insure that no archaeological site will be unknowingly destroyed.

FEDERAL LAWS THAT PRESERVE AND PROTECT ARCHAEOLOGICAL RESOURCES

Early in the twentieth century the federal government began to take an active role in the preservation of the country's prehistoric record. The first and most basic piece of legislation was the Antiquities Act of 1906. Through the Department of the Interior, archaeological sites and structures located on federal lands were to be protected, preserved and made available to the public. The importance

of this legislation was that it formed a solid foundation upon which future legislative actions were built.

The Historic Sites Act of 1935 declared that archaeological preserves should be developed for public use. The National Park Service was charged with conducting archaeological investigations on a national basis. The emphasis was on preserving for the public rather than on protecting sites from the public. Most importantly, the National Park Service assumed the responsibility for conducting archaeological investigations on all land--not just federally-owned land.

The passage of the Reservoir Salvage Act of 1960 was aimed at preserving by salvage all archaeological data threatened by the construction of a dam by any federal agency. The United States Army Corps of Engineers and the Bureau of Reclamation were the two federal services affected by this act.

The most significant piece of federal legislation was the Historic Preservation Act of 1966, 16 U.S.C. Section 470 et seq. This act expanded the National Register of Historic Places to include archaeological sites of national, regional, state or local significance. Under Section 106 of the act, all federal agencies are required to consider the effects of a proposed federal undertaking on archaeological sites as well as on historical buildings and structures listed on the National Register.

The 1966 Act also authorized a fifty percent (50%) matching grant-in-aid program for the purposes of comprehensive statewide historic preservation surveys and plans and for the acquisition and development

of properties listed on the National Register of Historic Places. The State Historic Preservation Offices were established under this legislation. More will be said of these later.

The National Environmental Policy Act of 1969 has had a tremendous impact on federally-sponsored undertakings. Before proposed federal projects can receive approval for construction grants, assessment of the impact of the project on the physical, social, and cultural environment must be completed. An Environmental Impact Statement serves as the vehicle by which documentation of the impact of the proposed projects on historic and archaeological resources is recorded.



Plate 10. Winter's snow outlines a prehistoric Indian burial mound in northeastern Ohio.

In 1971, Executive Order 11593 was signed, stating that federal agencies must cooperate with the State Historic Preservation Officers to inventory, locate and nominate to the Department of the Interior all sites, buildings, districts and objects under their jurisdiction which qualified for the National Register of Historic Places. This mandate is important--for not only must federal agencies consider National Register properties when planning, they must also identify and consider properties eligible for National Register listing. In compliance with Executive Order 11593, federal agencies are now requiring extensive historic and archaeological assessments. Without Executive Order 11593, the thousands of unrecorded archaeological sites would stand little chance of being adequately identified and preserved.

The Archaeological and Historic Preservation Act of 1974 requires that federal agencies be responsible for damages caused by federally-funded, assisted or licensed projects to scientific, prehistoric, historic and archaeological resources. Projects can allocate up to 1% of total project costs (unless the project costs less than \$50,000) for data salvage work. To obtain funds for the salvage work, the project must be in compliance with the federal legislation already discussed.

On the federal level, an active role has been taken to assure that future undertakings planned by the federal government will not needlessly destroy the remaining vestiges of the Native American. Unfortunately, there are no federal preservation laws protecting significant archaeological sites from destruction by the many other land-disturbing projects not funded or licensed by the federal government.

In 1976, PL 94-422 was passed which affirmed a prior mandate of Executive Order 11593, passed May, 1971, which made federal agencies consider the effects of a proposed undertaking on historic and archaeological properties, not only on, but considered eligible for the National Register.

STATE LAWS THAT PRESERVE AND PROTECT ARCHAEOLOGICAL RESOURCES

In August of 1976, Ohio House Bill 418 was signed into law amending Ohio Revised Code Section 149.30 and adding Section 149.51 through 149.55. This bill is the strongest state legislation Ohio has produced concerning the protection of archaeological and historical sites.

The bill created both an Ohio Registry of Archaeological Landmarks and an Ohio Registry of Historic Landmarks "to ensure that the scientific knowledge about both prehistoric and historic North American Indian cultures is made available to the public and is not wilfully or unnecessarily destroyed or lost. . . ." (Section 149.51). Archaeological and historic sites possessing significant data about the prehistoric or early historic cultures in Ohio qualify for placement on the Registries, with the landowner's permission. Lands placed on these registries cannot be excavated, removed or otherwise destroyed by any person or government without:

- (1) notifying the Director of the Ohio Historical Society of the intent to disturb the site;
- (2) allowing representatives of the Ohio Historical Society an opportunity to participate in developing a salvage strategy for the threatened site;
- and (3) upon completion of the salvage work,

submitting a detailed report with records of all archaeological remains found, their intended disposition and other significant data. Excavation without the proper permits of an archaeological site placed on the state registry is against the law.

Under Section 149.52, the Ohio Historical Society has been empowered to receive dedications of public or private lands as Archaeological Preserves for significant archaeological sites. All dedicated properties under this section are exempt from taxation and are restricted from taking for other use.

Section 149.53 of the Ohio Revised Code requires that all departments, agencies, units, instrumentalities and political subdivisions of the state cooperate with historic and archaeological preservation and recovery efforts, and provide for, whenever practical, archaeological and historic surveys and salvage work prior to and during construction of all public improvements. Except in situations where time is a crucial factor and would not allow for adequate archaeological investigations, all public improvements involving disturbances of previously undisturbed land should consider the effects of the project on the area archaeological and historical sites. This section of the Ohio Revised Code will be a tremendous help in curbing the senseless destruction of archaeological and historic sites presently being lost through non-federal public improvement projects.

Section 149.54 of the Ohio Revised Code requires that individuals or institutions wishing to conduct archaeological salvage or survey work on any land that is owned, controlled or administered by the state or

any political subdivision must obtain a permit from the Ohio Historical Society assuring that individuals with proper education, training and experience are being utilized in the scientific investigations.

The minimum requirements for the individuals performing these types of investigations are to be arrived at by the Director of the Ohio Historical Society in consultation with the Ohio Archaeological Council and the Archaeological Society of Ohio. Proposals for conducting different types of archaeological investigations on state property owned, controlled, or administered by the state, or any political subdivision must be submitted to the Ohio Historical Society for approval in order to insure the archaeological salvage and survey work conducted on state properties will produce all the scientific data necessary to properly interpret the archaeological site.

Archaeological Preservation at Work

How archaeological preservation is incorporated into public planning processes and what factors are considered during assessments are well worth discussion. If a project has been federally funded or licensed, the planners are required by law to assess the project area's possible cultural resources and to assess the effect of the project on those resources. Both archaeologists and planners can best accomplish their goals if a certain amount of advanced planning is done. It is the goal of the archaeological preservationist to preserve for future study as much of the prehistoric and historic archaeological record as is possible. The planner is interested in being assured the particular project (highway, sewer, dam, etc.) will be accomplished as economically as possible. It is to the advantage of archaeologists, planners and the public that archaeological resources are considered early in the planning stages in order to avoid the needless destruction of archaeological resources, possible work-stoppages, court injunctions, rushed salvage operations, and other delays which skyrocket final project construction costs. Basically, the preservation of archaeological resources boils down to a three point operation, each defined in terms of its goal: the Location Phase, the Assessment Phase and the Mitigation Phase.

THE LOCATION PHASE

The goal of the Location Phase of archaeological preservation is to locate the archaeological resources of a proposed area. It may include

everything from a records check to a systematic subsurface testing designed to locate archaeological sites. Unfortunately, most areas do not have a complete inventory of existing archaeological resources. Most archaeological resources are sites with no readily identifiable indicators above the surface. Decay, erosion, flooding and other land alterations have buried former habitation sites. These resources must be located through intensive on-the-ground and often below-the-ground surveys. These surveys take time and only a very small region can be surveyed intensively at one time. Unlike architectural historians, an archaeologist cannot stand in an area and visually identify many of the significant cultural resources of the area. Some kind of below surface testing is required.

The intensity of the archaeological resource survey may vary depending on the status of the proposed project. For instance, in the initial conception of a proposed land alteration project, the planner usually has an entire study area for which he is concerned. Only a portion within the study area will eventually be developed. To spend time and money locating all the archaeological resources within the study area may seem ideal to the archaeologist. But this is not practical even if there were enough archaeologists to do this for every project. **Therefore, a check of written records may be the only feasible alternative at this level.** In these early planning stages, contact should be made with the Ohio Historic Preservation Office and the Regional Preservationists to acquire information on the known historical and archaeological resources of the proposed project area.

Ideally, the archaeological preservationist should be able to predict



Plate 11. Investigations of archaeological sites require a tremendous amount of time for recording data.

where the potential prehistoric site locations are within a certain study area. Actually, this is not possible until some form of sampling survey has been completed. Information on the past geology, topography, vegetation, soils, rainfall and other environmental factors added to the ecological situations surrounding presently known archaeological sites aid archaeologists in developing these "predictive models" for planners. These kinds of investigations are presently underway and will become one of the planners' tools in the near future.

In almost all cases, a records check alone will not fulfill the federal and state requirements concerning archaeological resources. Once the

planning process has advanced to the point where the study area or impacted area (the area to be taken for the project) is better defined, on-the-ground investigations are warranted. At this point a less intensive survey may suffice to locate major undiscovered archaeological resources and to help the planners decide on necessary alternatives or on feasibility studies. However, in this case not all the archaeological resources would be identified.

An intensive archaeological survey should be conducted when the impacted area has been established and there is still time to properly assess and mitigate any archaeological resources. This should occur when the project is first conceptualized if the possible locations for the project are limited to one or two alternatives. Or, it could occur several years after the first

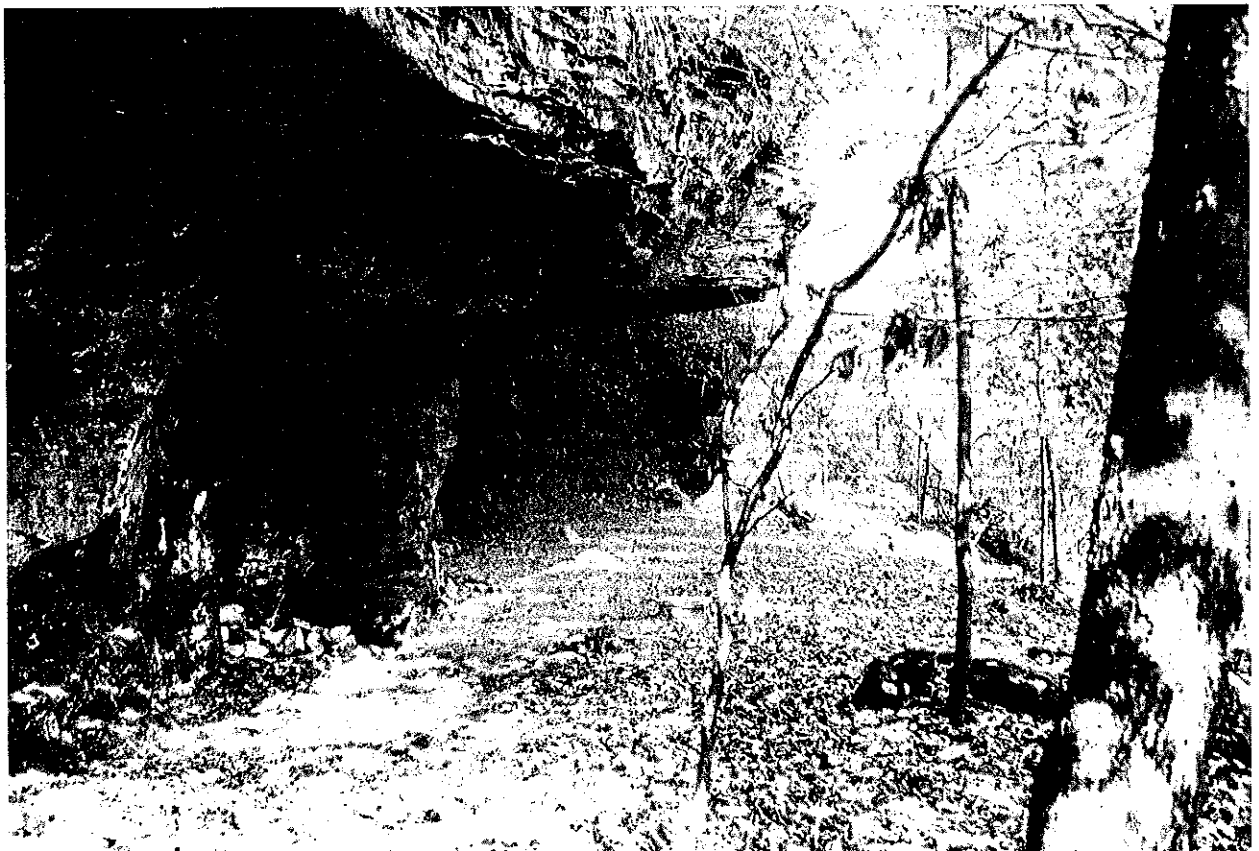


Plate 12. Rock overhangs many times served as shelters for the prehistoric inhabitants.

studies have been conducted and final alternatives have been selected.

Many federal and state organizations have their own description of what is expected in the Locational Phase investigations. Based on the intensity of the survey, the following information should be covered in the archaeologist's report. From this information planners and reviewers can make the necessary decisions about the archaeological resources of the project area.

The necessary items are:

- (1) An adequate description of the proposed undertaking (provided by the agency);
- (2) An adequate description of the study area including such information as land use, major geologic occurrences, past vegetation, soils, etc.;
- (3) A brief discussion of the regional prehistoric record;
- (4) A description and justification for the research strategy, methodology and operational procedures;
- (5) A description of all field work accomplished, including proper mapping showing the levels of survey completed;
- (6) A description of recorded archaeological resources and their known or suspected significance;
- (7) A listing of sources consulted including records, literature and informants;
- (8) Photographs of the archaeological resources (sites, features, artifacts).

The documentation should be explicit enough so that the reviewers can draw the same conclusions about the significance of the prehistoric properties as those found by the original researcher.

THE ASSESSMENT PHASE

Once the archaeological resources of an area are identified, the next step is to assess the significance of these archaeological resources for



Plate 13. Careful excavations of prehistoric refuse pits produce fragments of bone (deer mandible) and ceramics (body sherd) discarded centuries ago.

eligibility in the National Register of Historic Places or the State Registry. To determine a site's eligibility for inclusion in the National Register, the criteria set forth in 36 Code of Federal Regulations, Section 800.10 (National Register Criteria), "Procedures for the Protection of Historic and Cultural Properties" are applied. Basically, an archaeological site is considered eligible if it is of national, state, or local significance and has yielded or is likely to yield data relevant to the understanding of the prehistoric or historic record. The criteria are very broad in order to allow for a tremendous amount of temporal and regional variation.

The type of information which can qualify an archaeological site for inclusion to the National Register or State Registry include a potential

to yield data on cultural change, activity patterns, economic activities, settlement patterns or information on concepts of space and symbolism. A site's potential for shedding light on current or future research efforts will qualify it to the State and National Register.

What makes a site "significant" is flexible in order to permit expected change. A site that is significant today because of its particular research potential may not be as significant twenty years from now when that particular scientific problem has been thoroughly investigated and new scientific problems have arisen. A site's significance will change through discussion and through re-evaluation of specific criteria by archaeologists and planners.

The Assessment Phase of the investigation collects information on site size, condition, age, relationship to the known archaeological record, research potential and possible future uses. The archaeologist must develop a research strategy which will produce this type of data. Below surface testing which will reveal the various types of information noted above is usually required. This is accomplished by some form of sampling which will give the archaeologist an accurate picture of the site. These testings may require a substantial amount of time and money, depending on the site size and depth. If much undisturbed cultural material is encountered, the testing process may take longer. Unfortunately, one rarely knows these things prior to the assessment itself.

After the site is tested, analysis of the excavated materials and their spatial distribution must be completed. This analysis can require as much time, or even more, than was required to excavate the materials.

The data collected should be presented in a professionally accepted manner. The Assessment Phase archaeological report should include, but

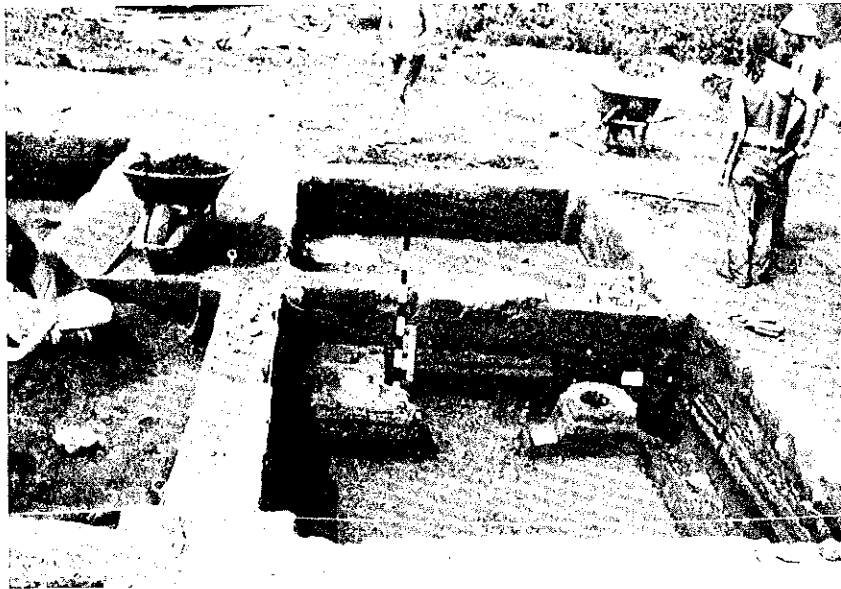


Plate 14. Excavation exposing prehistoric features is often slow but very necessary.

not be limited to, the following types of information:

- (1) A description (including map) of the proposed project;
- (2) A description (including map) of recorded archaeological resources including summary of locational methods used, previous investigations and references;
- (3) A rationale for the proposed testing strategy, methodology and operational procedures;
- (4) A site by site description with graphics of intensity of testing accomplished and data collected on site size, conditional age, relationship to the known archaeological record, research potential and future use. This would also include photographs and descriptions on features encountered, artifacts collected and all negative information;
- (5) A listing of sites considered eligible for the National Register and justification for the judgment;
- (6) A listing of sites considered not eligible for the National Register and justification for that decision;
- (7) Probable adverse effects of proposed project to the archaeological resources of the area (in specifics).
- (8) Possible plans to avoid or mitigate the adverse effect.

Many times the planner will find it more convenient to have the Locational Phase and Assessment Phase combined into one project, especially if the proposed undertaking has a relatively small area involved and/or, if there is limited planning time. Assessment of known archaeological resources may be justified before an intense locational phase survey is completed if several resources are already known. There are no rigid rules dictating the exact procedures to be followed; both the planner and the archaeologist should be flexible. The only necessity is that the archaeological resources be properly identified, then assessed.

THE MITIGATION PHASE

The goal of the Mitigation Phase of archaeological preservation involves deciding what to do about the archaeological resources that would be directly affected by a proposed undertaking, i.e., how can the impact be avoided or mitigated. Sites eligible for or listed on the National Register of Historic Places or the State Registry usually require avoidance or mitigation procedures.

Under Section 106 of the National Historic Preservation Act of 1966, archaeological resources eligible for the National Register must be considered in the project planning stage. When a site is identified and assessed as eligible, an investigative procedure takes place involving the federal agency, the Ohio Historic Preservation Office and the Advisory Council on Historic Preservation. The specifics of the procedures are outlined in the "Procedures for the Protection of Historic and Cultural Resources," 36 Code of Federal Regulations, 800 et seq.

Obviously the best way to avoid destruction of the archaeological resource is to move the project elsewhere; that is, to avoid disturbing the site and leave the material buried. Techniques for recovering additional information from archaeological sites are continually improving. Therefore, it is essential that an effort be made to protect the prehistoric record from destruction. If the project cannot be relocated, the best form of mitigation is to salvage the threatened site through total excavation. This would "mitigate the effect" of site destruction. This involves development of a research strategy applicable to the particular site in need of excavation. The goal of total excavation is to recover all the significant data about the site and make it accessible for future study. It is extremely important that care be taken to assure professionally acceptable recovery methods are utilized and the assure the implementation of proper



Plate 15. Culturally disturbed soils are shovel shaved away until undisturbed cultural materials are encountered.

recording and housing techniques. It should be stressed that total excavation is the last time an archaeologist is given an opportunity to study the site in its undisturbed state.

Factors other than the project's impact must be considered when determining whether to avoid or salvage a site. If, for example, a proposed highway was planned which would destroy a presently undisturbed village site, and the village was on the verge of eroding into a river valley, it would make better sense to allow the highway to proceed through the village as long as the village was salvaged first. To preserve the site through avoidance may keep it intact a few more years; if it is allowed to erode away with no excavation, more has been lost.

Other forms of mitigation could involve the intensive testing of several selected sites if a large area is involved, such as a dam-reservoir project. Because of time constraints it would be impossible to totally salvage every site. Therefore, a strategy could be developed to obtain a good sampling of what is contained within each site without actually excavating everything. This is not the best type of mitigation, nor is it often recommended, but occasionally it may be the only alternative.

At one time some persons felt site burial to be another form of mitigation. Burying a site with a roadbed may not actually disturb the materials but it also does not allow the undertaking of any investigations. Moreover, there are no studies indicating how the compression of chemicals found on roadbeds affect the condition of a site. This mitigation measure is no longer encouraged.

There are many possible alternatives for the mitigation of archaeological resources threatened by land alteration projects. Each project and site usually presents a different problem to be resolved.

SUMMARY

We have not attempted to outline the exact procedures for archaeologists and planners. The only universals are the three necessary phases: Location of sites, assessment of sites and mitigation. How and when each can most effectively be accomplished will vary. Archaeology must be incorporated into the planning process in order that valuable cultural resources will not needlessly be lost.

As a footnote to this section, the concerns for archaeological resources do not end after the three phases have been completed. When a proposed land alteration project actually goes to construction, there is always the possibility that additional resources will be uncovered. Because archaeologists usually depend on a sampling strategy to locate sites, some site locations could be missed until the project is under construction. There is no way to avoid this unless the archaeologist digs the entire area beforehand. This, of course, is usually not feasible. Also, sites can be buried deeper than expected and may go undetected until construction begins. In either case, it is important for the contractor to watch for and report findings to the Regional Preservation Office or the Ohio Historic Preservation Office in Columbus. These reports do two things. First, the reports help to preserve a portion of the prehistoric record by causing emergency salvage operations to be conducted at the site. This can almost always be done with little or no delay to the construction project. Secondly, the reports give the archaeologists information on the types of archaeological resources they are missing through their locational surveys, thus allowing the professionals to develop survey strategies and decrease the number of future emergency salvage programs.

The Ohio Historic Preservation Office

The National Historic Preservation Act of 1966 made each state eligible to apply for 50/50 matching grants-in-aid to be used to establish a statewide preservation program. Ohio was among the first to take advantage of the availability of these funds and in 1967 Section 149.30 of the Ohio Revised Code was amended to place the responsibility for the development of a historic preservation program with the Ohio Historical Society. The new program consisted of conducting archaeological and historic inventories, nominating properties to the National Register of Historic Places, and, in general, serving as the official historic preservation agency for Ohio. At the same time the Ohio Historic Site Preservation Advisory Board (OHSPAB) was established by law to serve as Ohio's professional review board whose duties include making determinations on properties nominated to the National Register, and advising on general historic preservation matters. OHSPAB has 17 members appointed by the Governor. Each serves a three year term and is a professional in a preservation related field such as history, architecture, engineering, or city planning. By federal law, each state appoints an official liaison person, the State Historic Preservation Officer (SHPO). In Ohio the Director of the Ohio Historical Society was appointed SHPO.

In 1971 the Ohio Historic Preservation Office was established to respond to the myriad responsibilities placed upon the SHPO due to the growing interest in preservation and due to the growing complexity of federal laws relating to the protection of cultural resources. Today, the Columbus based Ohio Historic Preservation Office (OHPO) has a staff of thirteen. In 1978 the office became a division of the Ohio Historical

Society; to deal with all facets of historic preservation the office now has three departments, an Education Coordinator, and Administrative staff. The three departments are Registration, Reviews and Field Services and Grants. The basic functions of the office include:

- (1) Advisory Services. Field Services and Grants provide technical advice and educational materials on all aspects of historic and archaeological preservation. Technical publications will be produced on a regular basis.
- (2) Ohio Archaeological Inventory and Ohio Historic Inventory. Survey work is conducted throughout the state in order to locate, document, and record all cultural resources in Ohio. One page inventory forms are used for this purpose. These forms, completed by professionals and interested citizens in all parts of the state, provide a physical description, location and literary documentation for each property. The inventories form the basis for reviews of all federally-supported projects which may have an impact on the state's cultural resources. Once an area has been thoroughly surveyed, appropriate plans for the preservation and protection of the most important cultural resources can be made.
- (3) National Register of Historic Places. The National Historic Preservation Act of 1966 provided for a National Register of Historic Places. This is the official nationwide list of those cultural resources thought to be worthy of preservation. It includes districts, sites, objects and structures of archaeological, architectural, or historical importance. From the statewide inventories, qualified properties are nominated to the National Register. All nominations are reviewed by the Registration Department staff and the OHSPAB; the forms are then sent to the SHPO for his signature. When signed, the nomination is sent to the Department of the Interior for evaluation.
LISTING IN THE NATIONAL REGISTER IS A DEPARTMENT OF THE INTERIOR DECISION.
- (4) Interagency Coordination and Environmental Review Process. The Reviews Department reviews all federally-assisted or licensed projects in the state which have an effect upon land and the built environment and comments on the project's potential impact upon properties on OR ELIGIBLE FOR the National Register of Historic Places. This includes properties significant in the areas of archaeology, architecture, or history.
- (5) Grants Program. Each year the Ohio Historic Preservation Office receives a grant from the Department of the Interior which is used to conduct the state preservation program. A portion of

this federal grant is then regranted to public or private property owners on a 50% matching basis for the repair or restoration of properties on the National Register of Historic Places. All requests are reviewed and evaluated by OHSPAB. Over 180 projects have been funded by this program since 1971.

- (6) State Historic Preservation Plan. A comprehensive historic preservation plan is formulated from a variety of sources: the daily activities of the OHPO; the input of people working in preservation, throughout the state; comprehensive surveys and nominations of properties to the National Register; and interagency coordination and environmental review. The plan is updated annually to state the goals, progress and problems of the program. The plan gives a clear picture of the state's resources and it can help delineate those actions necessary for the protection of Ohio's cultural resources.

In order to more effectively deal with the major task of recording and documenting all of the state's cultural resources, the OHPO established a network of regional preservation offices. This unique system divides the state into 11 history-architecture regions and 11 archaeological regions. Each office is sponsored by a local organization, such as a museum or college, which contracts with the Ohio Historical Society to carry out a wide range of preservation activities. One-half of the operating costs of the regional office is paid by the federal matching grants through the auspices of the Ohio Historical Society. Each office has at least one professional employee, the Regional Preservation Officer (RPO). The RPOs may be trained in any number of preservation-related fields, including archaeology, history, architecture, architectural history, American folklore, city planning or law. The RPOs assist the Ohio Historic Preservation Office in conducting surveys, completing OHI or OAI forms, assisting with local interagency coordination and environmental reviews, and, in general, provide technical and professional advice on preservation matters. Whenever possible, the OHPO refers preservation matters to the appropriate regional office. The Regional Offices' locations are listed on the following pages.

The public is encouraged to contact the appropriate preservation office for any preservation concern, particularly to inform a Regional Office of any project that may have an adverse effect on an archaeological or historic site. Public and private organizations are encouraged to coordinate activities with the RPO in order to better serve the preservation of historic and archaeological sites. The regional system allows for close local contact in a specific geographic area. The RPO is the person who is most closely involved with the recording of cultural resources in that area and can provide the most current and precise advice on preservation issues for that region.

REGIONAL ARCHAEOLOGY PRESERVATION OFFICES

Region 1A. G. Michael Pratt, University of Toledo, Department of Anthropology, Room 10, Bancroft Avenue, Toledo, Ohio 43606, (419) 537-2364. Counties: Erie, Huron, Lucas, Ottawa, Sandusky, Seneca, and Wood.

Region 2A. David Bush, Cleveland Museum of Natural History, Wade Oval, University Circle, Cleveland, Ohio 44106, (216) 231-4600. Counties: Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit and Trumbull.

Region 3A. Ronald Burdick, Defiance College, Department of History, Defiance, Ohio 43512, (419) 784-4010, Ext. 248. Counties: Allen, Auglaize, Defiance, Fulton, Henry, Mercer, Paulding, Putnam, Van Wert, and Williams.

Region 4A. Office organization in process. Call Ohio Historic Preservation Office. Counties: Ashland, Crawford, Hancock, Hardin, Marion, Morrow, Richland and Wyandot.

Region 5A. Wright State University, Department of Anthropology, Archaeology Laboratory, Dayton, Ohio 45431, (513) 873-2247. Counties: Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble and Shelby.

Region 6A. Ken Deaver, Ohio State University, Department of Anthropology, 208 Lord Hall, 124 W. 17th Avenue, Columbus, Ohio 43210, (614) 422-1539. Counties: Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Pickaway, Ross and Union.

Region 7A. Jeffrey Brown, Kent State University, Tuscarawas Campus, University Drive, NE, New Philadelphia, Ohio 44663, (216) 339-3391, ext. 57. Counties: Coshocton, Guernsey, Holmes, Muskingum, Noble, Stark, Tuscarawas and Wayne.

Region 8A. Dana Ormerod, Kent State University, East Liverpool Campus, 400 East Fourth Street, East Liverpool, Ohio 43290, (216) 385-4272 or 385-4290. Counties: Belmont, Carroll, Columbiana, Harrison, Jefferson, Mahoning and Monroe.

Region 9A. Elizabeth Scheurer, Miami Purchase Association, John Hauck House, 812 Dayton Street, Cincinnati, Ohio 45214, (513) 721-4506. Counties: Brown, Butler, Clermont, Clinton, Hamilton and Warren.

Region 10A. Rodney Riggs, Cincinnati Museum of Natural History, 1720 Gilbert Avenue, Cincinnati, Ohio 45202, (513) 621-2889. Adams County Field Office, P.O. Box 326, West Union, Ohio 45693, (513) 544-2632. Counties: Adams, Highland, Jackson, Lawrence, Pike and Scioto.

Region 11A. Susan Loughridge, Ohio University, Department of Anthropology and Sociology, 112 Carnegie Hall, Athens, Ohio 45701, (614) 594-6352. Counties: Athens, Gallia, Hocking, Meigs, Morgan, Perry, Vinton and Washington.

The Ohio Archaeological Council

Early in 1975, professional archaeologists from all parts of the state came together to discuss common concerns. In recognition of the increasing demand to establish directions on the preservation and the management of cultural resources, the Ohio Archaeological Council, Inc., a non-profit organization, was formed.

As stated in its constitution, the purposes of this Council are:

- (1) To create a coordinated group of professionally competent archaeologists representing all regions of the State of Ohio to provide consultation, aid and advice to any and all citizens and State and Federal agencies;
- (2) To serve as a clearing house for archaeological and culture-historical data pertinent to the aboriginal peoples and the early pioneers of the State of Ohio;
- (3) To promote the conservation and preservation of archaeological sites and records of early culture-history, and to develop among the general public an appreciation of these irreplaceable resources and an awareness of the need for such action;
- (4) To keep current a master file and other records pertinent to the archaeology of the State of Ohio;
- (5) To disseminate, at its own discretion and in accordance with the constitution and by-laws, to the agencies of the State of Ohio, the general public, and to persons with bona fide professional interests, information in its possession;
- (6) To organize, coordinate and give assistance to archaeological problems within the State of Ohio.

The Ohio Archaeological Council is an organization of professionals within the state. It is being recognized as the only private organization which speaks to state and federal agencies on the discipline of archaeology in Ohio. The location of the office of the Ohio Archaeological Council is 1982 Velma Avenue, Columbus, Ohio 43211.

The Future of Archaeology

It will take the cooperation of all governmental agencies, private companies, professional archaeologists and private individuals to help preserve the rapidly dwindling resources of our cultural heritage.

Governmental agencies and private persons and entities should consult with archaeologists in the planning of land altering projects to assure no prehistoric cultural resources are needlessly lost.

Private individuals can cooperate with the local archaeologist in reporting possible discoveries of archaeological sites. The comparatively few professional archaeologists in the state cannot possibly locate all the archaeological resources without the cooperation of the interested non-professional. In addition, it is up to the private individual to keep a watch for archaeological resources exposed in areas recently disturbed. Emphasis is placed on the private individual. He or she is the only one who will eventually decide the outcome of the crisis in archaeology. By reviewing this booklet and by talking with local archaeologists, the reader can learn that archaeological sites do exist in "our own" backyards. It is the right of all people to benefit from the knowledge contained in the preserved resources of prehistory.

Appendix A – Ohio Archaeological Inventory

The Ohio Archaeological Inventory is an ongoing, statewide survey of Ohio's archaeological resources. In order to accurately document sites for this purpose the Ohio Historic Preservation Office and the Ohio Archaeological Council has developed a state archaeological inventory form. This is a one page form which allows a brief, but complete description of the archaeological resource. The OAI form is used in the field by professional archaeologists, students, and local competent non-professionals who have a working knowledge of Ohio's archaeological prehistory. The OAI forms are sent to the Ohio Historic Preservation Office in Columbus for filing. Information on recorded properties is confidential and the specific site locations are revealed only on a need-to-know basis during planning or research projects. The forms are numbered for easy retrieval and the files are maintained and kept up to date by OHPO.

The OAI serves as the official, and most current, record of all historic and prehistoric archaeological resources. The goal of the survey is the eventual recording of every archaeological resource in Ohio. Presently this is the only statewide planning and research tool for archaeological purposes. This important survey data is used regularly by the Ohio Historic Preservation Office to facilitate the review of numerous projects for federal, state, and local agencies. Professional archaeologists also consult the OAI for information pertaining to their particular research goals.

OHIO ARCHAEOLOGICAL INVENTORY

1. Site Number		4. Site Name		1. Site No.																																	
2. County		5. Other Names For Site																																			
3. Township																																					
6. City or Town Vicinity of <input type="checkbox"/>		14. Land Form	23. Ownership: Public <input type="checkbox"/> Private <input type="checkbox"/>	2. County																																	
7. Map Reference		15. Elevation	24. Form Prepared by																																		
8. Township & Range Number		16. Soil Type		25. Organization																																	
9. Section Number		17. Floral Cover	26. Location of Negatives																																		
10. Latitude ° ' "		18. Condition of Site		27. Date of Survey																																	
11. Longitude ° ' "		19. Present Use	28. Survey Conditions																																		
12. U.T.M. Reference		20. Type of Site		29. Cultural Classification or Time Period																																	
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Zone			Easting						Northing																												
13. Verbal Site Location		22. Dimensions of Site																																			
30. Artifacts Collected				5. Other Names for Site																																	
31. References																																					
32. Remarks																																					
33. Use opposite side to copy portion of topographic map with site located, attachment of contact print, sketch of site plan, or continuation of items 1-32.																																					

HOW TO COMPLETE AN OAI FORM

One OAI form is to be filled out for each archaeological resource.

ITEM NO. 1: SITE NUMBER

The United States Museum Numbering (USMN) system is used in assigning every archaeological site a number. A separate number for each site allows for easy recording and recovery of information. The trinomial system for numbering is used: state number--county abbreviation--site number within county. Site numbers are assigned by the Regional Preservation Offices working under the direction of the Ohio Historic Preservation Office in Columbus, Ohio.

Example: 33-As-8. The 33 is the state number (Ohio)--the As is the county abbreviation (Ashtabula)--the 8 is the eighth site recorded in the county.

ITEM NO. 2: COUNTY

The county in which the site is located is to be recorded in this space. Fill in the entire county name.

Example: Ashtabula.

ITEM NO. 3: TOWNSHIP

The township in which the site is located is to be recorded in this space.

Example: Thompson.

ITEM NO. 4: SITE NAME

The name recorded in this category generally applies to the name most traditionally accepted for the site. If no site name exists for the site, an appropriate name should be assigned, such as the property owner's name, street name, creek name, etc.

Example: Little Mountain Site.

ITEM NO. 5: OTHER NAMES FOR SITE

List in this space all other past names or numbers which have been used to identify the site being recorded. Former surveys, articles or collections may have identified a site by a different name or number.

Listing all former site designations is very important in properly recording all data associated with the site.

Example: Little Mountain Site has also been known as Stewart's Fort No. 7, Old Indian Fort, and Miller's Village Site.

ITEM NO. 6: CITY OR TOWN

If the resource is in an incorporated area, list the name of the city or town in this space. If the resource is rural, list the nearest city or town and check the box "vicinity of."

Example: Union Town

ITEM NO. 7: MAP REFERENCE

When site locations are made, the exact location is recorded to assure others can relocate the site. Indication of the map reference for the site being recorded will assure future proper identification.

For the OAI, it is preferred that the United States Geologic Survey (U.S.G.S.) 7 1/2' quadrangle maps be utilized, with a 1:24,000 scale. If other mapping is used, indicate the map reference and scale. For the U.S.G.S. 7 1/2' quadrangle, indicate the quadrangle name.

Example: U.S.G.S. 7 1/2' Ashtabula South.

ITEM NO. 8: TOWNSHIP AND RANGE NUMBER

The designations for township and range are located on the edges of the U.S.G.S. 7 1/2' quadrangles and are indicated in red. Township designations

run east-west and are read--township six, north. Range designations run north-south and are read--range seven, west.

Example: T6NR7W

ITEM NO. 9: SECTION NUMBER

If the townships are divided into the normal 36 sections and are labeled in this manner on the map used, record the site according to this designation. In this way the site location can be transferred to mapping with section designations only. In recording the site according to section numbers, it is proper to divide the section into quarters and the quarter in which the site is found into quarters. To properly record, state the smallest quarter first containing the site in terms of cardinal points and then the larger quarter containing the site. Finally, state the section number.

Example: NW 1/4 NE 1/4 Sec. 6.

ITEM NO. 10: LATITUDE

The latitude is employed for easy recording of the site on some forms of mapping. The coordinates should define the center point of a property of less than 10 acres or the corners of a polygon locating a property of more than 10 acres. This Item and Item 11 can be left blank if Item 12 (UTM Reference) is filled out.

Example: 41° 52' 30"

ITEM NO. 11: LONGITUDE

Same as Item No. 10.

Example: 80° 47' 30"

ITEM NO. 12: U.T.M. REFERENCE

The U.T.M. (Universal Transverse Mercator) Grid System provides a simple and accurate method for recording the geographic location of a prehistoric site. The U.T.M. Grid System has a number of advantages over the Geographic Coordinate System (latitude and longitude), particularly speed and precision.

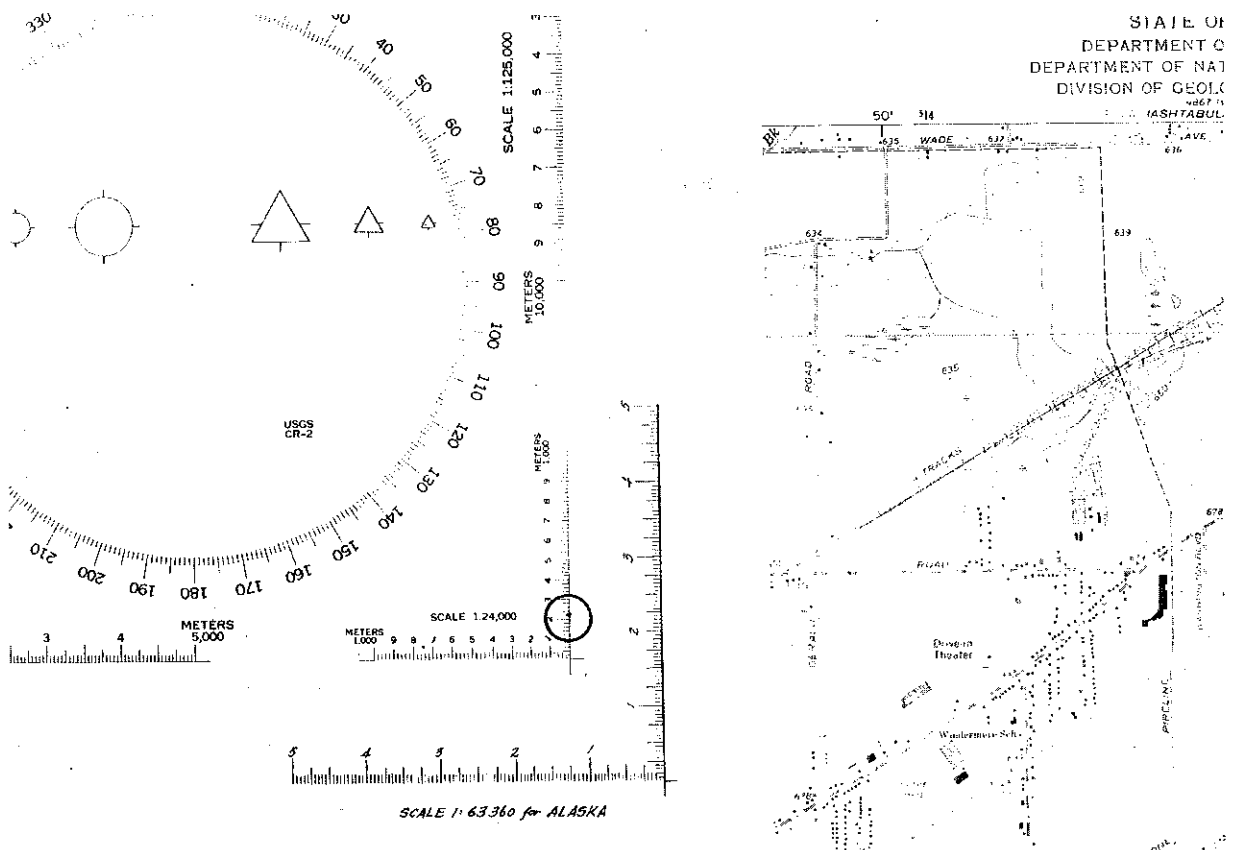


Plate 16. Scale 1:24,000 is used to easily locate a site's UTM coordinates. Zone 17, Northing 4633220, Easting 512210.

U.T.M. involves no complicated geometric constructions, and in its simplest application, requires only a straightedge, a "coordinate counter" and a sharp pencil as working tools.

The U.T.M. grid location (reference) of a point may be found if the point can be located on a U.S.G.S. quadrangle map that has the blue U.T.M.

grid tick marks along its edges. Most U.S.G.S. quadrangles published since 1950, and all published since 1959, regardless of scale, have these ticks. If no U.S.G.S. map with U.T.M. ticks exists for a location, its coordinates in terms of latitude and longitude may be used instead.

Three numbers make up the complete U.T.M. reference. The first is the ZONE. This number is found in the information provided on the lower left hand corner of the map. (For Ohio the zone will be either 16 or 17.) The next figure is the EASTING--the distance a site is from the first reference line west of the property. The last number is the NORTHING--the distance a site is from the equator, as measured from the first reference line south of the property.

Using a pencil with a very fine point and a professional quality straightedge, first locate the site in a small circle; next connect the U.T.M. (blue) ticks, from margin to margin, which are closest to, but west of the property. Be sure that the blue ticks which you connect have the same number (three digits). This is the EASTING. Now connect the U.T.M. ticks, from margin to margin, which are closest to, but south of the property. This is the NORTHING. These lines will intersect to the southwest of the property. The lines you draw may, or may not, be parallel to the edge of the map.

Copy the ZONE number onto a worksheet. Copy the portions of the EASTING (three digits) and the NORTHING (four digits) which are given on the map. Locate the scale on the coordinate counter which matches that of the map and align the counter so that the horizontal scale, which is read from right to left is placed along the east-west, or NORTHING, line. The vertical scale should be aligned to pass directly through the property being located. Read the scales: right to left for the EASTING and upward for the NORTHING.

Enter the values (three digits for each) on the worksheet. Check the figures for accuracy by re-measuring. The completed U.T.M. reference will read: ZONE (two digits), EASTING (six digits), and NORTHING (seven digits).

If the area of a property is less than ten acres, only one U.T.M. reference--the center point--has to be completed. If the property is more than ten acres, it should be enclosed in a three-or-more-sided figure, labeled clockwise starting with "A" at the north-easternmost point and continuing with "B", "C", etc. Additional U.T.M. references may be listed on the back of the OAI form,

Example:	17	473980	49756600
	Zone	Easting	Northing

ITEM NO. 13: VERBAL SITE LOCATION

The verbal site description including relationships to permanent or natural features, such as cemeteries, churches, houses, streams, rivers, etc., aids in the location of the site. The verbal description should be written to help visually spot the site location in the field.

Example: The site area is 115 m. directly north of the Miller barn on the first knoll 75 m. east of Champion Road.

ITEM NO. 14: LAND FORM

To correlate the occurrences of prehistoric occupation sites and various ecological data, the land form is recorded. Record the immediate land form upon which the site exists. It may be useful to consult the following:

Twindale, C.R., Analysis of Landforms, John Wiley & Sons, Australasia Pty. Ltd., 1976.

Thornbury, William D., Principles of Geomorphology, John Wiley & Sons, Inc., 1954.

Example: Hilltop, promontory, floodplain, hillside (with degree of slope), terrace, kame, esker, knoll, etc.

ITEM NO. 15: ELEVATION

Record in feet above mean sea level the elevation of the center of the site. This information can be derived from the U.S.G.S. map.

Example: 1190'

ITEM NO. 16: SOIL TYPE

Record the soil type upon which the site exists. Refer to the soil surveys of the particular county involved; surveys are published by the U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Ohio Department of Natural Resources, Division of Lands and Soil. If the soil type is unknown, describe it.

Example: Mahoning-Ellsworth; sandy, loam, gravel, silt, etc.

ITEM NO. 17: FLORAL COVER

Describe the present floral cover for the site being recorded. This gives some clue as to the possible condition of the site and ground conditions. It will also allow future investigators to more easily locate the site and help in determining the types of testing and excavation procedures needed.

Example: Woods (deciduous or evergreen), virgin forest, secondary forest, cropland, pasture, scrub, landscaped residential, prairie.

ITEM NO. 18: CONDITION OF SITE

State as accurately as possible the present condition of the site being recorded. This will range from completely intact (no disturbance) to totally destroyed. An elaboration of this statement can appear in Item 32-Remarks. The percent disturbed should also be recorded.

Example: Plow disturbed, 30% eroded, totally destroyed, excellent, good, fair, 50% excavated, surface site or plow zone only.

ITEM NO. 19: PRESENT USE

Record the present use of the area of the site and past historic use of the site area. Known future use of the area different from the present use should also be recorded. This information will aid in preservation planning.

Example: Agricultural, residential, commercial, park.

Note--If possible record the specific use of the site area, e.g., agricultural-hayfield, park-ballfield.

ITEM NO. 20: TYPE OF SITE

Record the "type" of prehistoric or historic occupation area under investigation. By "type" it is meant the basic or main function of the site during the time of occupation. If just a portion of a site is exposed and only a recognizable feature is present, then the type of feature should be listed.

Example: Mound, earthwork, campsite, village site, quarry site, chipping station, rockshelter, burial ground, hearth, refuse pit, midden, building foundation, etc.

ITEM NO. 21: DRAINAGE SYSTEM

Describe the closest water source to the site and the major drainage system of which it is a part.

Example: 100 m. west of intermittent stream which flows into Hubbard Run-Ashtabula River.

ITEM NO. 22: DIMENSIONS OF SITE

If possible, record the dimensions of the site. For a mound, the basal diameter both E-W and N-S should be measured plus the maximum height. For occupation sites like village or campsites, the maximum dimensions for material scatter should be noted. If large stretches of land are involved,

it may be more profitable to give measurements in terms of acres enclosed. If the sites being described are contained within almost continuous occupation areas, the areas of prehistoric cultural material concentrations should be measured noting the dispersed scatter outside the concentration areas.

Example: Mound - E-W 12 m. N-S 15 m. Height - 4.5 m.

Village - E-W 25 m. N-S 40 m.

ITEM NO. 23: OWNERSHIP: PUBLIC/PRIVATE

The property owner's name and address should be filled in this space. Use "multiple" if a site is large and extends over several different properties and list the owners under "Remarks." Check the box to indicate if the property is private or public. If the site is owned by an organization, give the name and address of the administrative or regional headquarters. Use occupant, tenant or manager where applicable.

Example: Mr. Stan Foller Private
 Hubbard Road
 Ashtabula, Ohio 44444

Investigation of any archaeological site requires permission from the present landowner or representative. Recording this information assures that contact has been made with these individuals or organizations and that they are aware of the site. Additionally, if the site is determined eligible for and nominated to the National Register, continual contact is made with the landowner.

ITEM NO. 24: FORM PREPARED BY:

All individuals responsible for the production of the form should be recorded here with appropriate titles (if any). Validating information or obtaining additional information not recorded, can be accomplished by asking the individual or individuals recorded in this category.

Example: Robert Mills
State Archaeologist

ITEM NO. 25: ORGANIZATION

The name and the address of the sponsoring institution or organization from Item 24 is filled in here.

Example: Division of Archaeology
Ohio Historical Society
Columbus, Ohio 43211

ITEM NO. 26: LOCATION OF NEGATIVES

The name of the storage facility for the negatives plus the roll number(s) and negative number(s) are required.

Photographs should be taken of all cultural material recovered from the site along with photographs of the site itself. To obtain prints of photographs of the site or cultural materials recovered, it is necessary to know the location of the negatives.

Example: Ohio Historical Society
75 - 42 - (11-16)
Dept. - Roll - Neg.
No. No. No.

ITEM NO. 27: DATE OF SURVEY

The date when the site was visited, measured, surface collected and photographed should be recorded here.

Example: 17 May 1977

ITEM NO. 28: SURVEY CONDITIONS

The environmental conditions at the time of the site investigation should be recorded in this space. This aids in evaluating the research potential, conditions and other relevant data about the site. Some of the factors to

consider in evaluating the survey conditions are time of year, weather, presence/absence of ground cover, type of ground cover, types of ground disturbances and survey techniques. A brief description should be made (excellent, very good, fair, etc.) and elaborated upon in Item 32 "Remarks" if needed.

Example: Excellent--plowed and washed; good--plowed with low crops; fair-- areas well exposed (testing, erosion); Poor--little surface exposed; N/A (not applicable)--area not accessible to viewing.

ITEM NO. 29: CULTURAL CLASSIFICATION OF TIME PERIOD

The cultural classification or time period of the site should be recorded in this space. Use bibliographical sources such as Richard G. Morgan's "Outline of Cultures in the Ohio Region" in Archaeology of Eastern United States, (ed. by James B. Griffin) 1952 and Jesse D. Jennings and Edward Norbeck's Prehistoric Man in the New World, 1964 for reference. If unable to determine the cultural classification, record "indeterminent." If radio carbon dates have been recorded for the site, these dates with appropriate lab numbers should appear here. If a site is multicomponent, list all components. Example: Late Woodland Dicar date #317 1130+ 50 A.D.

ITEM NO. 30: ARTIFACTS COLLECTED

Record the specific types and amounts of cultural material recovered from the site in as much detail as possible. Photographs should be taken of all collections from the site if feasible. Private collections should be described in detail along with photographs. If possible, the artifacts should be measured and described listing their attributes. Collections made from a site should be properly catalogued and housed in an appropriate institution, with the location noted in this space. Standard typological

references are also useful. Those often used for flint types are Ritchie, Bell, Broyles, Cambron and Hulse, Converse and others specific to the region. Ceramic "types" are much more regionally diverse and require the recorder to be well aware of the regional sequences and types. Therefore, it is suggested the recorder contact the regional archaeologists for their help in this category.

Example: Collected: CMNH Cat. 21-A-1141; 4 flint thinning flakes, 1 Madison type triangular projectile point (29 mm x 14 mm x 3 mm), 2 end scrapers, 1 Fairport Plain rim sherd (or 1 cord-marked grit-tempered rim with rim form-average thickness 8 mm), 4 cord-marked grit-tempered body sherd, much fire-cracked rock, scattered charcoal, few bone fragments (species unknown).

ITEM NO. 31: REFERENCES

References are recorded to allow an investigator an opportunity to learn more about the site being recorded. The types of references to be recorded include publications, unpublished manuscripts, informants, previous surveys, major excavations and reports or collections.

Example: Foller, Stan. Personal Collection, Ashtabula, Ohio. 1975-1977.

ITEM NO. 32: REMARKS

Within this category, the following questions and statements should be addressed to aid the reader in gaining a better perspective about the site:

1. When elaboration is needed, describe the boundaries of the site in terms of dimensions, depth, and condition.
2. Brief summary of bibliographic references and historic accounts of the site.
3. Cultural and temporal interpretations of recovered materials or physical features.

4. Is the site in present danger of being destroyed or altered and by what persons or organizations (federal, state or local involvement)?
5. What features exist on the site which do not add to the character of the site (i.e., modern intrusion including buildings, roads, oil wells, etc.)?
6. Is there anything unique or of special interest about this site?
7. Is the site significant and why (does it qualify for the National Register according to the criteria set forth in 36 Code of Federal Regulations, Section 800.10 of the "Procedures for the Protection of Historic and Cultural Properties" Federal Register, 1974)?
8. How does the landowner feel about the site, its preservation, excavation, etc.?
9. What type of survey procedures were used and is further investigation suggested and why?
10. Any other comments or observations relevant to the site.

Example: Mr. Stan Follor first cleared this area of the site in 1975. After the first plowing, Mr. Follor noted scattered bone, fire reddened rock, charcoal, shell, flint chips and ceramic sherds. Since that time, he has collected approximately 600 specimens of various types of cultural material already described. Each year hence, after plowing, he makes an effort to collect all the materials relevant to the site from the field.

We were the first to collect off the site this year just after spring plowing. We noted approximately 12 areas which appeared to be the plowed up remains of either hearths or refuse pits. A 2m. test unit was excavated into one of these areas and revealed a hearth approximately 1.3 m. in diameter and .9 m. in depth. A carbon sample associated with a Fairport Plain rim-sherd was recovered and sent to Dicar lab for dating. The materials plowed up plus the C₁₄ date suggest a probable Early Woodland Village Period site.

Mr. Follor is very interested in having his property placed on the National Register of Historic Places. There is no question of this property's eligibility to listing. Other than the plowing (maximum depth of 9 inches) no other disturbances have occurred on the site. Mr. Follor intends to continue plowing this area and will retain any materials recovered for our future study.

ITEM NO. 33: OPPOSITE SIDE OF FORM

The opposite side of the form sheet should be used to attach a xerox copy of the appropriate section of the topographic map with the site clearly indicated and numbers. A contact print from a proof sheet of all relevant photographs taken of the site and collected materials is a valuable addition to the form and should be attached to the form if available. If maps or photographs are unavailable, include a sketch of the site plan with a north arrow and relationship to permanent natural features. If additional space is needed to complete items 1 through 32, use the back of the inventory form or a continuation sheet.

PLEASE NOTE:

Items 1, 2, 4 and 5 are repeated along the right border of the inventory form and should be completed.

To acquire the forms, you may contact either the Regional Archaeological Preservation Office in the region of the site, the main Ohio Historic Preservation Office in Columbus, or the Ohio Archaeological Council, 1982 Velma Avenue, Columbus, Ohio 43211.

SAMPLE

OHIO ARCHAEOLOGICAL INVENTORY

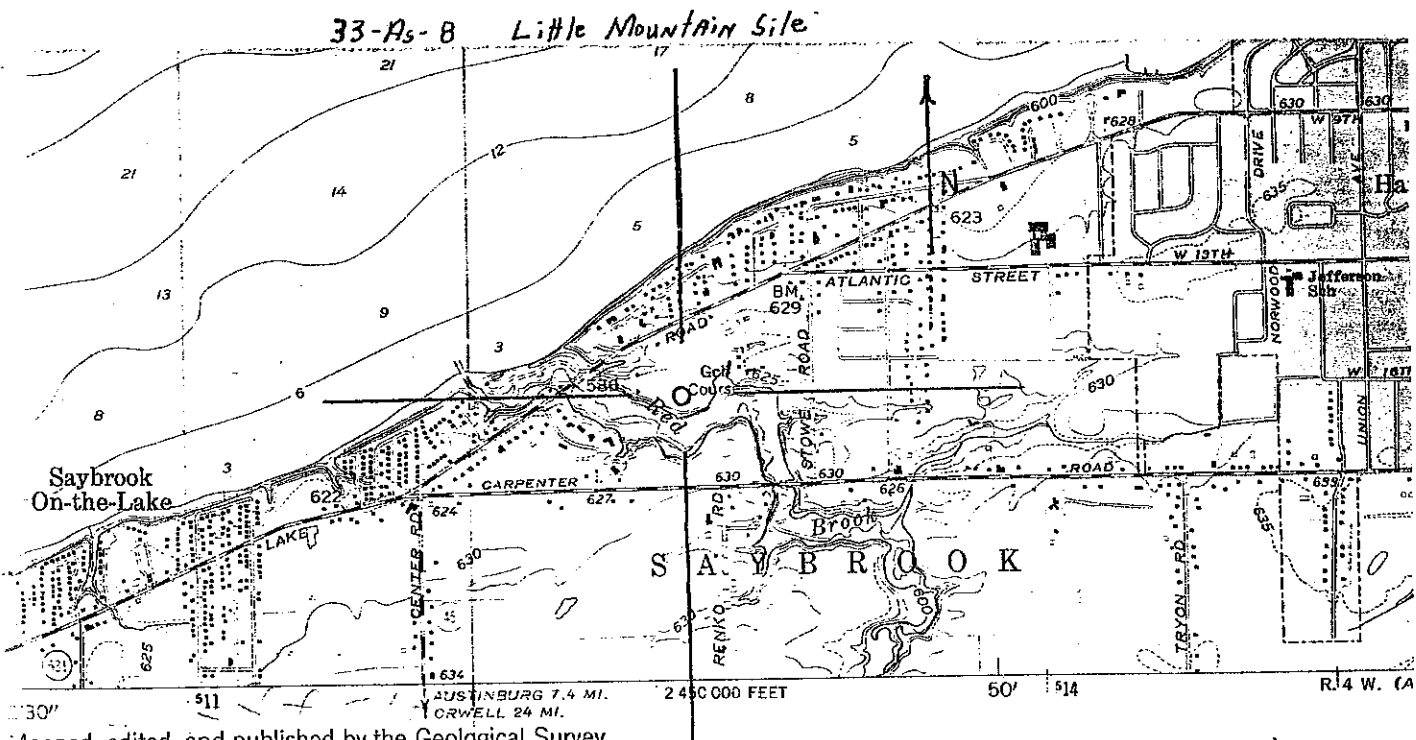
Ohio Archaeological Council
Ohio Historic Preservation Office
Ohio Historical Center
Columbus, Ohio 43211

1. Site Number 33-As-8		4. Site Name Little Mountain Site		1. Site No.
2. County Ashtabula		5. Other Names For Site Steward's Fort No. 7, Old Indian Fort, Miller's Village		
3. Township Saybrook				
6. City or Town Union Town		14. Land Form Hilltop		2. County
7. Map Reference U.S.G.S. 7½' Quadrangle Ashtabula South		15. Elevation 1190'		
8. Township & Range Number T6N R7W		16. Soil Type Mahoning-Ellsworth		4. Site Name
9. Section Number NW¼NE¼Sec.6		17. Floral Cover Crops		
10. Latitude 41 ° 52 ' 30 "		18. Condition of Site Plow Disturbed		23. Ownership: Public <input type="checkbox"/> Private <input checked="" type="checkbox"/> Mr. Stan Follor Hubbard Road Union Town, Ohio
11. Longitude 80 ° 52 ' 30 "		19. Present Use Agricultural		
12. U.T.M. Reference 17 4 7 3 9 8 0 4 9 7 5 6 6 0 Zone Easting Northing		20. Type of Site Village		24. Form Prepared by David R. Mills State Archaeologist
13. Verbal Site Location The site area is 115 m directly north of the Miller barn on the first knoll 75 m east of Champion Road.		21. Drainage System 100m east of Red Brook which empties into Lake Erie		25. Organization Division of Archaeology Ohio Hist. Society Columbus, Ohio
		22. Dimensions of Site E-W 25m. N-S 40m.		26. Location of Negatives Ohio Hist. Society 75-42-(11-16)
30. Artifacts Collected 1 Madison type triangular projectile point (29mmx14mm x 3mm), 2 end scrapers, 1 Fairport Plain rim sherd, 4 cord-marked grit-tempered body sherd, fcr, scattered charcoal several bone fragments (species unknown), 20 pieces of flint chippage				27. Date of Survey 17 May 1977
31. References Follor, Stan, Personal Collection, Union Town, Ohio 1975-1977				28. Survey Conditions Excellent
32. Remarks Mr. Stan Follor first cleared this area of the site in 1975. After the first plowing, Mr. Follor noted scattered bone, fire reddened rock, charcoal, shell, flint chips and ceramic sherds. Since that time, he has collected approximately 600 specimens of various typed of cultural material already described. Each year hence, after plowing he makes an effort to collect all the materials relevant to the site , from the field. We were the first to collect off the site this year just after spring plowing. We noted approximately 12 areas which appeared to be the plowed up remains of either hearths or refuse pits. A 2m. test unit was excavated into one of these areas and revealed a hearth approximately 1.3m. in diameter and .9m. in depth. A carbon sample				29. Cultural Classification or Time Period Late Woodland Dicar date # 317 1130 ± 50 A.D.
33. Use opposite side to copy portion of topographic map with site located, attachment of contact print, sketch of site plan, or continuation of items 1-32.				5. Other Names for Site

32. Remarks (cont.)

associated with a Fairport Plain rim sherd was recovered and sent to Dicar Lab for dating. The materials plowed up plus the C₁₄ date suggest a probable Early Woodland Village period site.

Mr. Follor is very interested in having his property placed on the National Register of Historic Places. There is no question of this property's eligibility to listing. Other than the plowing no other disturbances have occurred on the site. Mr. Follor intends to continue plowing this area and will retain any materials recovered for our future study.



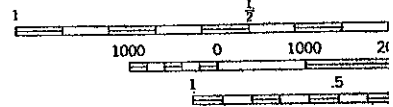
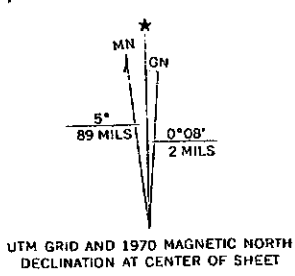
Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1958. Field check 1960

Selected hydrographic data compiled from U.S. Lake Survey charts
34 (1958) and 342 (1959). This information is not intended for
navigational purposes

Polyconic projection. 1927 North American datum
10,000-foot grid based on Ohio coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
page 17, shown in blue



CONT
DOTTED LINE
DA
DEPTH CURVES AND SOUNDINGS

THIS MAP COMPLIES WITH

SAMPLE

Ohio Archaeological Council
Ohio Historic Preservation Office
Ohio Historical Center
Columbus, Ohio 43211

OHIO ARCHAEOLOGICAL INVENTORY

1. Site Number 33-Ha-377		4. Site Name Bravo Gravel Site		1. Site No.																											
2. County Hamilton		5. Other Names For Site																													
3. Township Miami																															
6. City or Town Vicinity of <input checked="" type="checkbox"/> Gieringer, Ohio		14. Land Form Terrace	23. Ownership: Public <input type="checkbox"/> Private <input checked="" type="checkbox"/>	2. County																											
7. Map Reference U.S.G.S. 7½' Quad Map Addyston, Ohio 1:24,000, Photorevised 1970		15. Elevation 525-530 feet	Bravo Corporation 3000 Main Street Cincinnati, Ohio																												
8. Township & Range Number T1N R2W		16. Soil Type Alluvium	24. Form Prepared by Bob Genheimer	4. Site Name																											
9. Section Number NE ¼ Section 23		17. Floral Cover Bare	25. Organization Miami Purchase Association																												
10. Latitude N/A ° ' "		18. Condition of Site Partially destroyed-threatened	26. Location of Negatives Miami Purchase Assoc. University of Cincinnati																												
11. Longitude N/A ° ' "		19. Present Use gravel pit	27. Date of Survey 5/25/77																												
12. U.T.M. Reference <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">1</td><td style="padding: 2px;">6</td><td style="padding: 2px;">6</td><td style="padding: 2px;">4</td><td style="padding: 2px;">4</td><td style="padding: 2px;">0</td><td style="padding: 2px;">0</td><td style="padding: 2px;">4</td><td style="padding: 2px;">3</td><td style="padding: 2px;">0</td><td style="padding: 2px;">1</td><td style="padding: 2px;">4</td><td style="padding: 2px;">6</td><td style="padding: 2px;">0</td> </tr> <tr> <td colspan="4">Zone</td> <td colspan="4">Easting</td> <td colspan="6">Northing</td> </tr> </table>		1	6	6	4	4	0	0	4	3	0	1	4	6	0	Zone				Easting				Northing						20. Type of Site Prehistoric habitation site	28. Survey Conditions Very good
1	6	6	4	4	0	0	4	3	0	1	4	6	0																		
Zone				Easting				Northing																							
13. Verbal Site Location The site is located immediately E of East Miami River Rd. It lies approximately 500m NE of Riveredge Park.		21. Drainage System 1km S. of Great Miami River-Ohio River	29. Cultural Classification or Time Period Late Archaic	5. Other Names for Site																											
30. Artifacts Collected Stumpf Collection: 3 McWhinney points 1 Transitional(L.Archaic) Point 1 large blade		22. Dimensions of Site 300m N-S 200m E-W	28. Survey Conditions Very good																												
31. References Mr. Stumpf (Bravo Employee)		30. Artifacts Collected 1 unfinished birdstone 1 large side notchen point 2 hammerstones 3 pitted stones 5 bone awls 1 mandible-human (over)																													
32. Remarks This site was discovered by Mr. Stumpf while the area was still in crops. Bravo has subsequently removed all the overburden and some topsoil for the procurement of gravel. This stripping has greatly exposed the site material and the site limits were readily visible. Features were well exposed. Several burials were present but most of the remains were disintegrated and greatly crushed by the bulldozer. One complete mandible was recovered, however. One feature exhibited an enormous quantity of burned limestone slabs while several others contained fire cracked rock (FCR). The surface of the site was littered with flint debitage. The site will be totally destroyed by gravel operations in the near future.																															
33. Use opposite side to copy portion of topographic map with site located, attachment of contact print, sketch of site plan, or continuation of items 1-32.																															

