

# III. CULTURAL RESOURCE PRESERVATION AND TREATMENT PLAN

## GOALS OF MAINTENANCE AND PRESERVATION

The primary maintenance and preservation goal of this plan is to maintain and present the Newark Earthworks, to the extent possible, as they would have appeared to the Hopewell builders/users, balancing the needs for public access and the preservation of the earthworks and other cultural and natural resources present at the site. How current and future uses of the sites impact the earthworks and associated archaeological deposits is of great concern.

The Ohio Historical Society is also committed to preserving, through a variety of means, as many of the remnants of the Newark Earthworks as possible.

## A. EARTHWORKS

### MAINTENANCE PRACTICES

OHS will establish a society-wide policy on maintenance practices for earthworks.

OHS will identify any maintenance practices that should be discontinued or modified for reasons of resource preservation and public safety.

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OHS will establish guidelines for mowing that are consistent with the long-term preservation of the site and short-term interpretation goals. The guidelines will establish, for example, the appropriate equipment for mowing earthworks as well as the appropriate use of pesticides, herbicides, and other chemical applications.

Erosion is the largest single threat to the earthworks at the Newark Earthworks State Memorial. Several key treatments have been detailed below as a management guideline for preserving the earthworks.

#### Condition Assessment

*An existing condition assessment will be completed for each earthwork located within the Newark Earthworks State Memorial. After problems are identified, a treatment plan for each area will be established. This will include determining the impact on the resources of various users (general public, golfers, group tours, Native Americans, etc.), how to accommodate their needs and mitigate their impacts. Carrying capacity of the sites will be determined to prevent overuse and damage to the resources. Of special concern are bare patches on vertical surfaces at the Octagon.*

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The condition assessment will be supplemented every two years with an assessment of current maintenance practices and existing conditions. The assessment of existing conditions will establish a baseline whereby the supplemental condition assessments can be used to evaluate the success or failure of maintenance practices. This will allow the long-term assessment of maintenance practices and the development of the optimal maintenance strategy for preservation.

### Pedestrian Traffic on Earthworks

OHS will strive to minimize walking on the earthworks. This is primarily a preservation issue as walking on earthworks can lead to erosion and degradation of the resource. However, many other factors are involved including respect for the earthworks and their builders.

At the Great Circle, stone stairs and a bridge allow access to the interior of the earthwork from the picnic area. Constructed in 1935 as part of the Depression-relief era development at Great Circle, this bridge has been evaluated as a significant resource. The original design of the stairs and bridge directed people to the top of the mound to walk along a stone path and down a set of stairs constructed on the north bank near the entrance to the earthwork. Erosion caused by people walking on the mound along this path needs to be mitigated. A plan will be developed and implemented to prevent foot traffic along the top of the earthwork from this point of access as well as others and steps taken to restore the top of the earthwork.

### Trees and Ground Cover

Existing recommendations for earthwork maintenance (Adropogon Associates 1987; Effigy Mounds National Monument n.d.) indicate that turf grass is the preferred option for ground cover at earthwork sites. This is consistent with interpretation and access needs at the Newark Earthworks. The use of supplemental condition assessments prepared every two years will allow a process where ground cover preference can be re-evaluated in light of new information and erosion assessments.

Trees are a potential threat to the archaeological resources at the Newark Earthworks State Memorial. Tree roots penetrate the soil and may thereby disrupt archaeological deposits. Moreover, when a tree falls, it uproots a large quantity of soil potentially containing archaeological materials. Trees growing on earthworks can not only disrupt the earthwork deposits pulled out of context by the eventual toppling of the tree, but the exposed bare soil will erode, further damaging the archaeological resource.

The presence of trees at the Newark Earthworks also has implications for the presentation and interpretation of the site. Archaeological evidence indicates that the Newark Earthworks were built in an extensive (probably human-created) prairie pocket within a mature oak-hickory forest (Lepper 1998). Therefore, since the primary goal on-going maintenance is to present the site as it was during its construction and use, over the long term, trees should be eliminated from the interior of the enclosures.

Balanced with this recommendation, however, is recognition of the importance of the forest to earlier and later cultures and the enjoyment trees currently provide to visitors to the site. Of special interest are the large trees and species which are remnants of the mature forest which developed following the Hopewell use of this site. Therefore, no large trees should be cut down unless they represent an imminent threat to the earthworks (i.e., they are in danger of falling over); or, there is an over-riding need to remove the tree for an interpretation/preservation/access reason, e.g., removing a line of trees at Octagon Earthworks to create a line-of-sight for the northernmost moonrise. Small trees with a diameter of less than six inches on or within the earthworks should be removed and new plantings should be restricted to areas outside the earthworks.

A policy will be developed for considering if and where new trees should be planted as well as deciding what trees and other plants would be appropriate for new plantings. This policy could be developed in cooperation with Dawes Arboretum and the Ohio State University at Newark. Native species are preferred, but non-native species may be required for particular preservation/interpretation/access reasons. Of particular interest is the use of trees around the perimeter of the sites to create a visual, sound, and smog barrier. Of concern also is the relationship of animal communities and plantings.

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A working agreement concerning trees will be developed to accommodate the special needs and concerns of Moundbuilders Country Club at Octagon Earthworks. This agreement will be maintained and periodically reviewed to insure it continues to meet current cultural resource protection standards. *In particular, a sight line through the axis of the Octagon must be created before the 2005 northernmost moonrise.*

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### **PROTECT ADDITIONAL REMNANTS OF THE NEWARK EARTHWORKS NOT OWNED BY OHS**

Preservation of other remnants of the earthworks is discussed in Section 1 under Partnerships for Preservation. OHS will identify additional remnants of the earthworks and explore the feasibility of acquiring preservation or archaeological easements, fee simple title or other property interests and/or developing partnerships with other public and private landowners to help preserve, maintain, and interpret those sites.

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### **ZONING**

OHS will work with local governments to insure that zoning and future development around the sites are compatible and have no adverse impacts.

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## **B. SUBSURFACE ARCHAEOLOGICAL RESOURCES**

### **MANAGING GROUND DISTURBANCE**

#### Intentional Disturbance

In this context, intentional disturbances does not refer to archaeological research but is ground disturbance associated with maintenance or capital improvements. Disturbances which are the result of research will be guided by the research plan and Society research guidelines.

Any intentional disturbance of the ground at the Newark Earthworks State Memorial must be preceded by an evaluation of the potential impact on archaeological resources by an OHS staff archaeologist. If it is determined that the ground disturbance might adversely affect any archaeological resources, then the strategy for mitigating that impact will be developed by the Curator of Archaeology in close cooperation with the Site Manager and the Assistant Director of Buildings and Grounds Maintenance. The development of a mitigation strategy will be based upon the archaeology guidelines promulgated by the Ohio Historic Preservation Office (1994) and will be coordinated with the research plan for the site.

A working agreement has been developed to accommodate the special needs and concerns of Moundbuilders Country Club at Octagon Earthworks (included as

Appendix IV). This agreement will be maintained and periodically reviewed to insure it continues to meet current cultural resource protection standards.

#### Unintentional Disturbance

It is the responsibility of the Site Manager to manage and report any inadvertent discovery of archaeological resources at the Newark Earthworks State Memorial. Any accidental discoveries will be treated according to the policy developed and in effect for all OHS sites (see Appendix III).

### **MANAGING ARCHAEOLOGICAL COLLECTIONS**

The Ohio Revised Code (Sec. 149.30H) requires the Ohio Historical Society to collect, preserve, and make available “by all appropriate means,” “historical objects, specimens, and artifacts which pertain to the history of Ohio and its people.” This includes the objects collected from archaeological sites as well any documentation that pertains to the context of the objects. To fulfill our responsibilities under the Ohio Revised Code, OHS maintains a curation facility for the storage and preservation of the artifacts and the records relating to them; these materials remain available for research. In addition, many of the especially meaningful or representative artifacts are displayed at OHS museums and exhibit facilities.

OHS collections relating to the Newark Earthworks are curated at the Archaeology Collections Facility in Columbus, or are on display at the Ohio Historical Center or the Newark Earthworks Museum at the Great Circle. The bulk of the collections relate to two projects: the 1928 excavations of Eagle Mound and the Wells Mound group by the Ohio State Archaeological and Historical Society, and the 1979-81 excavations along the proposed corridor of State Route 79 in Newark, conducted under the supervision of the Ohio Department of Transportation. The Wray figurine and the Marie Sunkle cache are on loan to OHS and are featured in interpretive displays. These collections have been described in various publications intended for scholarly as well as popular audiences.

OHS will explore, with Native Americans and others, concerns relating to the continued management and interpretation of these collections including display of grave goods - both actual objects and replicas - and use of images of burials. These issues will have broader implications for the Society’s exhibit and interpretive programs at all of its facilities across the state.

#### Permanent Archaeology Collections

A detailed inventory of the permanent archaeological collections is included in Appendix II: Inventory and Analysis. OHS will work to develop an on-line catalog of collections related to the Newark Earthworks and complete its inventory of these artifacts. Collections will be managed according to the OHS collections Management Policy.

### **C. STANDING STRUCTURES**

It is the policy of the Society to treat any standing structure deemed to be eligible for or listed on the National Register of Historic Places as a significant resource. Planning decisions and routine maintenance must take this significance into account. Structures at the site have been evaluated using National Register criteria. (See Appendix II, Inventory and Analysis.)

In the context of the Newark Earthworks State Memorial, significant aboveground resources include the standing structures associated with the Depression-relief work at the sites between 1933 and 1937. At the Great Circle Earthworks, these structures include the caretaker's house and the shop, as well as several stone structures, including stairs, piers, curbing, and the bridge, all built as part of the 1934 state park master plan. At the Octagon Earthworks, structures include two pair of stone piers at the entry and exit of the MCC. The caretaker's house constructed at the Octagon Earthworks is no longer owned by OHS.

All of the standing structures that comprise the facilities of Moundbuilders Country Club do not meet criteria of significance and will not be treated as significant cultural resources (See Appendix II: Inventory and Analysis). Additionally, there are standing structures including a shelter house, public restroom building and a museum building at the Great Circle that do not meet the requirements to be considered significant cultural resources.

### **TREATMENT OF SIGNIFICANT STANDING STRUCTURES**

The Depression-relief era standing structures should be maintained in a manner consistent with the Secretary of the Interior's Standards for Treatment of Historic Properties.

#### House and Garage

Owing to the nature of the standing structures at Newark Earthworks, the greatest care for preservation treatment will need to be given to the caretaker's dwelling and shop/garage.

There are two preservation standards most likely to affect operational maintenance. The first is the necessity to avoid the removal of historic materials or the alteration of features and spaces. The second is the need for deteriorated features and materials to be repaired/conserved rather than replaced. These are Standards 2 and 6. Given this, neither the interior nor exterior of the house or shop should be altered by any staff member, occupant, or other OHS divisional personnel without prior investigations and consultation by OHS Facilities Management staff.

Day-to-day maintenance procedures, such as cleaning, routine maintenance of mechanical systems, and even painting should not affect the preservation of the structures and can continue. These day-to-day procedures should be subject to the review of the Assistant Director of Buildings and Grounds Maintenance.

#### Masonry Piers, Stairs, and other Masonry Features

The masonry structures throughout the landscape need to be treated as significant cultural resources. Periodic or annual inspection should be made of each masonry structure, landscape structure, or other landscape feature to insure that they have proper drainage, there is no standing water, and that mortar joints are intact and not deteriorating. If a problem is noticed, steps to correct the problem should be taken in consultation with the Secretary of the Interior's Standards and the Facilities Management Division.

## CAPITAL IMPROVEMENTS

Before any capital improvement projects are undertaken on any significant structures or features, the scope of work will be evaluated to insure that it meets the preservation goals at the site. This includes painting or re-roofing any of the structures constructed during the Depression-relief era development. All capital improvements will be completed conforming to the Secretary of the Interior's Standards for Treatment of Historic Properties.

## PRESERVATION FOR FUTURE PLANNING

Although the Depression-relief era buildings at the Newark Earthworks are not currently interpreted, they represent a period of significance to both the state and to OHS. Until such time as OHS would make a decision to actively interpret this period at this or any other site, all structures remaining from the 1934 master plan at the Great Circle will be preserved for future planning. No work is to be undertaken that would eliminate the possibility of the structures being restored or interpreted.

## D. RECOMMENDATIONS FOR FUTURE RESEARCH AND STUDY

One of the public functions to be performed by the Ohio Historical Society, according to the Ohio Revised Code, is "engaging in research in history, archaeology, and natural science" [Sec. 149.30 (G)]. This commitment to research by the State of Ohio recognizes the essential role of research in adding to our knowledge of cultural and natural resources and for generating broad interest in preserving and maintaining those resources.

### RESEARCH AT THE NEWARK EARTHWORKS

Research (archaeological, astronomical, anthropological and others) is vital for our understanding of the Newark Earthworks. The primary goal of research at the Newark Earthworks is to discover and disseminate knowledge about the cultures that have lived in this location; especially and particularly the Hopewell culture that built and lived among the monumental earthworks. Their use of the site, however, is part of a continuum that extends from the Paleoindian pioneers of the Ice Age to today's multi-cultural society. Understanding elements of the natural history of the site is also a potential research objective.

### DATABASE

*One of the first objectives of OHS will be to develop a comprehensive database of existing sources of information about the Newark Earthworks. This database will include summaries and sources of information on the archaeology, history, and natural history of the site. The topics covered in the database will include, but will not necessarily be limited to, the following:*

- Archaeological resources
  - Books, articles, notes, photographs, artifacts, and etc. from surveys and excavations undertaken at the Newark Earthworks.
  - Books, articles, notes, etc. related to archaeoastronomical research undertaken at the Newark Earthworks.

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- Historical/archival resources
  - Ethnohistoric resources
  - Anthropological resources
  - Native American oral traditions
  - Oral histories
  - Natural history resources

This database will be a dynamic resource. As new research identifies additional documents, previously unrecorded oral traditions and oral histories, or makes new discoveries about the cultural and natural histories of the Newark Earthworks, these will be added to the expanding corpus of data. OHS will explore ways of making this database both publicly accessible, perhaps by posting it on the OHS website, and open to contributions from interested institutions and individuals, perhaps through links to other websites or by adding data entries submitted to the database by interested parties once they have been reviewed by OHS staff

### LONG-TERM STRATEGIC RESEARCH PLAN

*Building on this database, OHS will develop a strategic long-term plan for future research to be undertaken by OHS staff and/or co-operating institutions or individuals.* OHS will work with the Ohio Archaeological Council, the Newark Earthworks Advisory Board, Native Americans, individual scholars recognized for their expertise in Hopewell archaeology, avocational archaeological groups, and others to develop this research plan. The database will help to identify gaps in our existing knowledge of the site, and the research plan will prioritize the questions and make recommendations as to the allocation of resources for filling these gaps. These resources will include OHS staff time, equipment, and funding as well as grant monies, in-kind services, or other funding secured by OHS staff and/or provided by partnering institutions and individuals.

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The following are examples of research questions that should be included in the research plan. This list is not intended to be exhaustive of research possibilities and OHS always will be willing to consider innovative research questions posed by scholars that are not identified in the strategic research plan.

#### Archaeology

- Chronometric dates for all elements of the earthworks as well as other components of the prehistoric occupation are needed.
- Information on the structure (building techniques) of the various component earthworks is required for comparative analysis.
- The extent of restorations/reconstructions to the earthworks must be determined to evaluate, among other things, the accuracy of historic and modern maps.
- Hively and Horn's interpretations of the Newark Earthworks as a lunar observatory need to be subjected to independent verification.
- The so-called Great Hopewell Road proposition requires further scrutiny and verification.
- The probability of habitation (and other non-earthwork) sites associated with the Newark Earthworks needs to be explored more thoroughly.
- Additional remnants of the earthworks should be identified.

Native American oral tradition

- Oral traditions relevant to interpreting the earthworks need to be sought in the relevant ethnohistoric and ethnographic sources.
- Modern Native American tribal leaders, representing tribes with historic connections to Ohio, need to be consulted for information related to the earthworks.

Oral history

- Oral histories of Newark residents and others who attended the county fairs at the Great Circle, or who participated in CCC work at the Newark Earthworks need to be recorded while these people are still living.

Historic/archival

- Institutional archives, as well as private collections, need to be examined for early maps, records of excavations, artifacts, photographs, etc. related to the Newark Earthworks.

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Research methods should be as non-invasive as possible. Remote sensing should be employed wherever possible. More invasive methods, including excavation, will be appropriate for answering certain questions.

**NOMINATION OF SIGNIFICANT CULTURAL RESOURCES**

As part of OHS’s continuing recognition of national preservation standards, cultural resources that have been determined to be significant will be nominated to the appropriate national or international heritage program.

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*OHS will actively pursue the nomination of the Newark Earthworks as a World Heritage Site through the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Society will pursue having the site listed as a World Heritage Site by researching the process and then taking the steps necessary to nominate the site. There will be many steps to complete prior to the actual nomination of the site, including additional research and condition assessments.*

The Depression-relief era architectural features at Newark Earthworks are part of a much broader relief program that occurred during the 1930s. In order to gain to a complete understanding of the integrity of the resources they need to be compared to existing Depression-relief era facilities at other OHS sites. To accomplish this a Depression-relief era context will be completed, including the inventory of all OHS Depression-relief era resources. Eligible properties will be nominated to the National Register of Historic Places.

**OTHER ISSUES**

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Although beyond the scope of this document, OHS recognizes that research at all OHS sites must be conducted with sensitivity to all traditions and viewpoints. In order for research to fulfill the potential for generating wide interest in, and appreciation for, cultural and natural resources, public education must be a component of any research conducted on OHS sites. Moreover, OHS recognizes the benefits of facilitating research at the Newark Earthworks, as well as other OHS

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sites, by outside researchers. In order to achieve this, OHS will take the following steps:

- OHS will explore partnerships with local colleges and universities so that students and faculty can pursue their research interests at the Newark Earthworks.
- OHS will explore partnerships with Native American tribes and individuals who know and follow their cultures and traditions to facilitate gathering of oral traditions as well as to involve Native Americans in archaeological and other research efforts.
- OHS will review the current process of applying for research permits to see how it could be clarified, formalized and streamlined.

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