

Teacher's Guide: Toolesboro Mounds

Goal

The student will understand the significance of the Toolesboro Hopewellian mounds and the importance of archaeology for learning about Iowa's history.

Objectives

- Demonstrate an understanding of the Hopewell burial tradition
- Understand the sacred nature of burial mounds
- Differentiate between the different groups of people using the area over time
- Recognize the role of archaeology as a research and learning tool, as well as one of destruction
- Learn that the history of Iowa goes back more than 2000 years

Site Summary

The Hopewell

The Hopewell tradition occurred from 200 B.C. to A.D. 450. It is defined by a common burial practice among certain Native American groups: the burial of important people in large cone-shaped, earthen mounds along with exotic trade goods. The construction of burial mounds and geometric earthworks occurred throughout the eastern half of the United States, centered in Ohio.

The Hopewell tradition is one of many mound building traditions that occurred in prehistoric times in the United States. During the nineteenth century, the construction of these earthworks was incorrectly attributed to a "long-lost race" of people referred to as "the Mound Builders." At the time, few scholars believed that the mounds and other earthworks could have been built by ancient Native American groups. Since then, the notion of a "long-lost race" has been discredited through scientific excavation and study of the mounds.

The Hopewellian diet was based hunting and gathering, and supplemented by rudimentary agriculture. They lived in villages located along the flood plains of rivers. They built their mounds near their villages, typically on high bluffs. They also had an extensive trade network, indicated by artifacts made from Great Lakes copper, Rocky Mountain obsidian (volcanic glass), marine shells and pearls from the Gulf of Mexico, Appalachian mica (a shiny mineral), and shark teeth from Chesapeake Bay. The Hopewellian people are only known through archaeological excavations, primarily that of their earthworks.

The Hopewellian people had various ways of burying their dead within the mounds. Some individuals were placed lying down, others propped in a sitting position against the side of the tomb. Some individuals were cremated, others placed in structures called charnel houses where the decomposition process began, and were then later buried. The tombs and the mounds

themselves were constructed in a number of different ways. Mound construction typically began with the laying of a sand or clay floor, or a platform in the center, upon which the body and the artifacts were placed. Some mounds even contain tombs made of logs or large stones. Over this, layers of earth, clay, sand, and gravel were piled up to make a mound. Many mounds have several burials in different layers (the record is 100 burials in one mound).

The Toolesboro Mounds

The Toolesboro site consists of seven existing burial mounds on a bluff overlooking the Iowa River near where it joins the Mississippi River. The conical mounds were constructed between 100 B.C. and A.D. 200 by a local Hopewellian group. At one time, there may have been as many as twelve mounds, but subsequent settlement and excavation have reduced that number to the present seven. As of yet, no village site at Toolesboro has been located, and this is attributed to the shifting path of the Iowa River, which has obliterated possible village sites over the last 2000 years.

The mounds have been excavated by different groups of people since the middle of the nineteenth century. Extensive excavations were undertaken by the Davenport Academy of Natural Sciences, although the local groups did dig into some of the mounds. Contained within the mounds were typical Hopewellian artifacts: copper tools, stone platform pipes, shell and pearl beads, chipped stone tools, and mica sheets. The mounds also contained a limited number of burials, though the human remains still available for analysis are few in number and poorly preserved.

After the Hopewell

Since the Hopewell construction and use of the mounds at Toolesboro, there have been many other groups of people associated with the site. Originally, a nearby earthwork referred to as "the old fort" was considered to be a part of the Toolesboro Hopewellian mound group. It is possible, however, that this enclosure was actually constructed approximately one thousand years later by a different Native American culture, known as the Oneota (oh-nee-oh-tah).

Also in the vicinity of the Toolesboro mounds are the McKinney and Poison Ivy sites, which are Oneota sites as well. Local tradition places the 1673 "discovery" of Iowa by Marquette and Joliet in the shadows of the Toolesboro mounds. The Poison Ivy site supposedly corresponds with the description in Marquette's journal of a village close to where they landed. Recently, however, the validity of this belief has come under question.

The beginning of the nineteenth century marks the start of the European-American settlement of the land around the mounds. While clearing out earth for the root cellars and foundations of their farmsteads, as well as plowing over and planting crops on the mounds, the early farmers began the destruction of the mounds. They removed artifacts and human remains without documenting where items came from or sketching the internal structure of the mounds.

This practice was continued by the early archaeologists from the Davenport Academy of Natural Sciences using crude excavation techniques, causing the loss of artifacts, as well as the opportunity to study the mounds further. Some of the mounds have since been restored, that is, the pits caused by excavations or construction have been filled in or the mounds themselves rebuilt.

No further excavations are being planned for the Toolesboro mounds. This is for two reasons. First, it is important to remember that the mounds are considered sacred burial sites by Native Americans, similar to modern cemeteries. Many people today would find it offensive if their relatives' graves were excavated in order to learn more about their way of life. While it is difficult to trace the modern descendants of the Hopewell, further excavations of the burial mounds are considered disrespectful.

Also, in the past few years, the government began to pass laws making it illegal to remove artifacts and human remains from Native American burial mounds.

Second, archaeology can be a destructive science. Opening the mounds destroys the possibility of future study. Artifacts that are removed from a site can never be replaced in the exact context and position in which they were originally deposited. Currently, archaeologists prefer to use non-intrusive methods (methods other than excavation) to explore ancient sites such as the Toolesboro mounds. Non-intrusive methods include: aerial photography focusing on the features or contours of the land, surface surveys looking for signs of past occupation (such as artifacts), and remote sensing of the ground, which works something like an x-ray.

Vocabulary

Students should become familiar with these vocabulary words before visiting the Toolesboro mounds:

Archaeology: The recovery and study of material evidence remaining from past human life and culture, such as mounds, buildings, tools, and pottery.

Burial Mounds: The burial place of high status individuals, such as leaders and their families, from a Native American group.

Culture: Behaviors, beliefs, thoughts, and products characteristic of a community or population; a way of life.

Earthwork: A large construction of earth by humans, sometimes in the form of mounds, sometimes walls or enclosures for ritual or defensive purposes.

Excavation: The careful, scientific digging and recording of a site done by archaeologists to gather material evidence of past human life and culture.

Hopewell: A term used to designate the elaborate burial tradition by Native American groups of burying their dead in mounds with rare objects obtained in long distance trade that occurred from 200 B.C. to A.D. 450 in the eastern United States.

Hunting and Gathering: A method of obtaining food; typically the men hunt animals, such as deer, bison, or elk, and the women gather plant foods, such as nuts, seeds, or fruit.

Oneota: A Native American culture that existed in Iowa after A.D. 1000, and is ancestor to the Ioway tribe.

Pre-Visit Activities

Before your visit, plan some classroom time to try one or more of the following activities (adjust as necessary for grade level):

- Talk about museums and collections. Explain that a collection is a group of items assembled in a logical order and gathered because they have some kind of significance. Museums have collections that are studied and exhibited to the public. These collections are used to interpret the past, present, and sometimes the future.
- Explain that museums use both two-dimensional and three-dimensional materials (called artifacts) to interpret history. An artifact can tell us much about the people, the time, and the region from which it came. An artifact reveals what materials it is made from, when and where it was made, and how it was used. Sometimes its color and style tell us about popular trends. All of this helps us determine its relative value within the "material culture."
- Discuss what artifacts can tell us about individuals. Have each student bring in an "artifact" that reveals something important about him or her (a belief, a tradition, a hobby, a personality trait). Gather the "artifacts" and have students identify who brought in which one, how they know, and what they can say about that student from the "artifact."
- Discuss the fact that Native American burial mounds are like our cemeteries--sacred. It is considered disrespectful to walk on the mounds, as it is to step on graves in modern cemeteries. Do the attached Mound Maze activity to reinforce the point.

On-Site Activities

Include these activities in your visit to the Toolesboro mounds:

- Walk around the grounds and look at the mounds. Pretend you have x-ray vision and can see inside the mounds. What do you see in there? Draw a picture of what you see.
- Walk through the museum looking at the displays. Pretend you are a detective gathering clues about the Hopewellian people and how they lived. What clues do the artifacts provide about the people that once lived here? What can you piece together about their lives?
- Imagine you were a member of a Hopewell village, and wanted to make a fancy necklace of shell beads, a knife of obsidian (volcanic glass), or a copper headdress. What might you have to do to get the necessary materials? For example, what steps might you have to go through to get bear teeth and claws? Remember--there are no cars, airplanes, trucks, trains, telephones, or computers to help you.
- Brainstorm and help the archaeologists solve some mysteries about the Hopewell. After approximately A.D. 500, mounds were no longer built in the Hopewellian style. What might be some reasons for this? What might have happened to the traditions? {Remember--"Hopewell" is a practice, and the end of it does not mean that all the people connected with it

died, but more likely that the tradition changed over time). The second mystery is: how did they trade? The Hopewellian people had no form of currency (money). What might they have traded and how? (Consider: perishable items such as food, acting as the middlemen for trade goods as part of a "down-the-line" trading system--passing obsidian on to Hopewellian groups to the east in exchange for shark teeth).

Post-Visit Activities

Discussion

Ask some of the following questions of your students after visiting the Toolesboro mounds. After each question we give some suggested answers. Have your students expand on these answers.

- Draw a picture of what your x-ray vision revealed inside the mounds. Draw a picture of what your x-ray vision might reveal at a local cemetery. Are there any differences? What do the pictures tell you about the life 2000 years ago and life today? (Consider: both groups of people have ways to honor the dead)
- Imagine what it would have been like to live in the Toolesboro area almost 2000 years ago. What would you eat for dinner? Where would you sleep? Draw a picture of what your house and family might have looked like. (Your dinner was gathered from the surroundings: elk meat, roots, berries, and nuts)
- Discuss cemeteries in your community. What is there? What can the cemeteries tell us about the community? (Consider: ages, relationships, religious beliefs, group associations) Compare and contrast the Toolesboro mounds to a local cemetery. Name some similarities, some differences.
- Imagine you are an archaeologist 2000 years from now, trying to solve the mystery of life in Iowa. What clues about it might you find? What wouldn't you find? (For example: paper, clothing) What artifacts might be difficult to interpret? (Consider: records and CDs, a shoehorn, fingernail clippers, a telephone cord, toy figurines, a zipper)
- Archaeology is based on the study of material objects. From these objects, archaeologists must piece together the puzzle of the past, often without the help of written records or living people. This is comparable to putting together a large jigsaw puzzle without a picture and not all the correct pieces. What do the archaeologists miss about the culture? (Consider: individuals, language, stories, songs, voices, music, ideas, dance, manners, sports, games, and beliefs)

Detective Work

Here are some suggested themes for student research. Their results might be presented in both written and oral reports.

- What did the Hopewellian people look like? Investigate books and magazine articles (The Goldfinch is a good source) on Native Americans. Draw what their clothing looked like (for winter and summer), how they did their hair, and who wore the ornamentation (necklaces, bracelets, headdresses).

- Investigate the other Hopewell sites (or later Native American mound sites such as the Marching Bear effigy mounds) in Iowa. The Native American groups who built the mounds did not have tools like bulldozers and tractors to use for construction. Instead they used their hands, baskets, and hoes made of shell and bone. One basketful of dirt weighed approximately 25 pounds. Estimate the number of baskets of dirt and amount of time that went into creating these mounds.
- The largest Hopewell mound, which was located in Ohio but has since been destroyed, was 33 feet high, 150 feet wide, and 250 feet long, and contained 20,000 cubic yards of dirt and 100 burials. How does this compare to the size of your house or your room? If an average room is 12 feet wide by 12 feet long, and has a height of 8 feet, how many would you need to fill the mound?
- The book *Motel of the Mysteries* by David Macaulay (Houghton Mifflin Company, 1979) is about future archaeologists misinterpreting late-twentieth century American culture. Read the book and examine the "Treasures." (Some examples of the "Treasures": toilet paper is interpreted as "Sacred Parchment," a faucet as a trumpet, a toilet plunger as a percussion instrument, a toilet seat as "the Sacred Collar") Why were these items misinterpreted? Are there other items, places, or activities that might be misunderstood by future archaeologists?
- Create a list of 20 items that could be placed in a time capsule as "artifacts" that represent current American culture. Alternatively, create this list to explain American culture to people unfamiliar with it (aliens from another galaxy, someone from the future). Each item should have a reason why it should be included.
- Visit a local cemetery and do "above-ground" or "graveyard archaeology." What characteristics (shape, size, design) of grave markers change over time? What types of symbols are used? What do these symbols say about the person buried there? (Consider: soldier, membership in a fraternal organization such as the masons, religious beliefs, age.) Look for markers with lambs on them. What do the lambs mean? Do rubbings of the stones using a pencil or a crayon and a large sheet of paper. Compare rubbings from different sections of the cemetery. (See "Doing Local History." *The Goldfinch*. Vol. 14, No. 2, Winter 1992 for description, detailed instructions, and suggested activities.)

Doing History

These activities may be used to further explore ideas presented at the Toolesboro mounds. You may want to adjust the activities to the students' interests and abilities.

- The year is A.D. 5, and the chief of the local Hopewell village has just died. Write a short story (or a play) from the point of view of a person your age from the village about what happens (the ceremony, the mound construction). Then write a similar story (or play) about what might happen in the present day. Draw pictures to go along with the story.
- The necklaces found in the burial mounds were owned by important village members and were probably represented their role, such as leader, in the group. Design your own Hopewellian necklace based on the materials available to them: pearls, shells, copper, silver, elk teeth, bear teeth and claws, and shark teeth. Does your design represent unique something about you?

- Visit the Putnam Museum of History and Natural Science in Davenport, Iowa, where most of the artifacts removed from the Toolesboro mounds are kept. After going there, design a new display for kids for the Toolesboro museum. What artifacts would you include? Design a visitors' brochure for school children about the Toolesboro mounds. What aspects of the site would you focus on? What is the most interesting to you and your friends about the Hopewell and their mounds?
- Archaeologists study what people leave behind: that which was forgotten about, lost, or discarded as trash. In fact, a number of present day archaeological studies have been done at landfills. Try "GarbageCan Archaeology." Gather two trash cans from different rooms in the school, such as the library and another classroom (but do not tell students their points of origin). Have students go through the trash cans noting the order of placement of the items. Then have them classify the contents by type of artifact. Can they determine the activities that occurred where the trash can came from? (See *Discovering Archaeology: An Activity Guide for Educators* by Shirley Schermer, 1992 for description and more detailed instructions.)
- Alternatively, walk around a schoolyard or a park looking at the ground. Make a list of the "artifacts" on the ground. Look also at the "features" (paths, structures, land shapes). What types of items are they? What do they tell you about the site? Use descriptive language and not the proper names of the site, such as a baseball diamond or sandbox. See if other students can figure out the name of the site by description alone.

Resources

These materials will help you learn more about the Toolesboro mounds, the Hopewell, and archaeology. It may be necessary to order books or journals through interlibrary loan, so allow plenty of time to obtain the resource.

Books and Articles: 4th-8th Grade

"Ancient Site at Cherokee." Video from Iowa's P.A.S.T. series. (State Historical Society of Iowa)

"Archaeology: Digging Up History." *Cobblestone*. Vol. 4, No. 6, June 1983. (School Library, Public Library)

["Digging into Prehistoric Iowa." *The Goldfinch*. Vol. 7, No. 1, September 1985.](#) (State Historical Society of Iowa, School Library)

"Hopewell Culture." Video from Iowa's P.A.S.T. series. Iowa City, IA: Office of the State Archaeologist, The University of Iowa. 1978, 1993. (State Historical Society of Iowa, Area Education Agency)

["Indians of Iowa." *The Goldfinch*. Vol. 13, No. 3, February 1992.](#) (State Historical Society of Iowa, School Library)

Porrell, Bruce. *Digging the Past: Archaeology in Your Own Backyard*. Reading, MA: Addison-Wesley Publishing Company, Inc., 1979. (Public Library)

Books, Articles, and Videos: 9th Grade-Adult

Alex, Lynn M. *Exploring Iowa's Past: A Guide to Prehistoric Archaeology*. Iowa City, IA: University of Iowa Press, 1980. (PL)

Alex, Lynn M. and William Green. *Toolesboro Mounds National Historic Landmark Archaeological Analysis and Report*. Research Papers, Vol. 20, No. 4. Iowa City, IA: Office of the State Archaeologist, 1995. A technical analysis of the excavations at Toolesboro. (State Historical Society of Iowa)

Anderson, Duane C. *Eastern Iowa Prehistory*. Ames, IA: Iowa State University Press, 1981. (School Library, Public Library)

Deetz, James. In *Small Things Forgotten*. Garden City, New York: Anchor Press, Doubleday, 1977. A nontechnical discussion of historic archaeology. Includes a chapter on "Graveyard Archaeology." (Public Library)

Herold, Elaine Bluhm. "Hopewell: Burial Mound Builders." *Palimpsest* Vol. 51, No. 12, pp. 497-528, December 1970. Valid information but slightly outdated analysis and description of the Hopewell. (State Historical Society of Iowa, Public Library)

Macaulay, David. *Motel of the Mysteries*. Boston, MA: Houghton Mifflin Company, 1979. A spoof about future archaeologists misinterpreting /ate-twentieth century American culture. (Public Library)

"Myths and Moundbuilders." PBS *Odyssey* series video. Shows the early misconceptions about the mounds, archaeological excavations, and has a mound building experiment. (Public Library)

Silverberg, Robert. *The Mound Builders of Ancient America: The Archaeology of a Myth*. Greenwich, CT: New York Graphic Society limited, 1968. (State Historical Society of Iowa, Public Library)

Woodward, Susan I., and Jerry N. McDonald. *Indian Mounds of the Middle Ohio Valley: A Guide to Adena and Hopewell Sites*. Newark, OH: McDonald & Woodward Publishing Company, 1986. A nontechnical summary of the Hopewell tradition and a listing of mound sites in Ohio. (Public Library)

Resources for Teachers for Teaching Archaeology to Students

Hawkins, Nancy W. *Classroom Archaeology: An Archaeology Activity Guide for Teachers*. Baton Rouge, LA: Division of Archaeology, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804, 1984.

Hoyer, Julianne Loy. *Iowa's P.A.S. T.: A Classroom Manual for the Video Series*. 1993. (State Historical Society of Iowa)

McNutt, Nan. *Project Archaeology: Saving Traditions*. Longmont: Sopris West, Inc., 1120 Delaware Avenue, Longmont, Colorado 80501, 1988. An archaeology curriculum for middle school and gifted elementary school students, with activities and project ideas.

Schermer, Shirley J. *Discovering Archaeology: An Activity Guide for Educators*. Iowa City, IA: Office of the State Archaeologist, 1992. Has activities and lists several resources for teaching children about archaeology. (State Historical Society of Iowa, School Library, Public Library)

Wheat, Pam and Brenda Whorton. *Clues from the Past: A Resource Guide for Educators*. Dallas, TX: Texas Archaeological Society and the Hendrick-long Publishing Company, 1990.