

This topical INDEX accompanied our 2004 publication CD-ROM “EarthWorks: Virtual Explorations of the Ancient Ohio Valley” – now out of print. Names in red indicated video segments that help illuminate each defined term. Most of these videos are now included along the [ancientohiotrail.org](http://ancientohiotrail.org) and on its YouTube channel.

## Adena

The estate of Ohio Governor Thomas Worthington, overlooking Chillicothe, Ohio. The name was applied by archaeologists to the culture which built a mound there.

The Great Circle (Newark) <NK-03>  
Grave Creek Mound <GV-01>  
Timeline: Adena Culture <TM-84>  
Naming These Cultures <GE-90>

## aesthetics

The study of what makes something beautiful; particularly, the standards generally used to evaluate the arts. Aesthetic taste varies from culture to culture.

Music <GE-77>  
Earth, Soil <GE-50>

## alignment

Arrangement or position along a straight line; some earthworks were built so that a person standing in a specific place could look toward an earthwork feature (such as a gateway or corner) at a certain time to see an astronomical event (such as a moonrise).

Anderson <AN-01>  
The Foursquare (Fort Ancient) <FA-15>  
High Bank <HB-01>  
An Architecture of Alignments <NK-43>  
Great Serpent Mound <SN-01>

## Alligator Mound

An effigy mound near Newark, Ohio. The animal form may actually represent an opossum or a water monster known from Eastern Woodland Indian tradition.

The "Alligator" <NK-27>  
Effigies <GE-52>

## amphitheatre

An enclosing arrangement of sloping shapes, resembling a circular or oval arena with rising tiers of seating.

Seip <SP-01>

## ancient

A general term used to mean very old, previous to most of recorded history. The term "prehistoric" is used by archaeologists and others to describe eras not recorded by writing, but this program avoids that term because it suggests that very old cultural traditions not recorded in contemporary writing are not truly history.

The Great Valley <IN-31>  
Fort Ancient <FA-01>  
Hopewell Mound Group <HP-01>  
Mound City <MC-01>  
Great Serpent Mound <SN-01>  
Ancient Observatories <GE-01>  
Timeline: Paleoindians in the Great Valley <TM-82>

## Anderson

Anderson Mounds, in eastern Indiana, include circles and ditched rectangles.

Anderson <AN-01>

## archaeoastronomer

A scientist who studies the ways ancient cultures have viewed and interpreted the stars, planets, moon and sun.

Ancient Observatories <GE-01>

## Archaeological Conservancy

This nonprofit group buys endangered archaeological sites and promotes preservation in other ways; publisher of *American Archaeology* magazine.

“Old Fort” (Portsmouth) <PM-03>

## archaeology, archaeologist

The systematic study of people of the past through recovery and examination of remaining evidence, such as objects, buildings, and graves; an archaeologist is professionally trained to scientifically investigate places that may hold such evidence.

Preservation <GE-25>

New Archaeology <GE-54>

Hopewell Interaction Sphere <GE-95>

World Renewal <GE-97>

Hopewell Mound Group <HP-01>

Dr. Riordan’s Excavations (Pollock) <PL-11>

## Archaic

A term meaning “very old,” and applied by archaeologists to North American Indian cultures of about 8,000 to 1,000 BC.

Timeline: Archaic Indians in the Great Valley <TM-83>

## archetype

An original or perfect ideal or type after which others are modeled; this concept is used in literature, psychology, and the arts.

Elaboration and Ritual <GE-88>

## artifact

An object shaped by human craft, of historical or archaeological interest.

NAGPRA and Respect <GE-61>

Burials (Hopewell) <HP-11>

Wall Section (Hopeton) <HP-02>  
Timeline: Adena Culture <TM-84>  
Timeline: Destruction and Preservation <TM-91>

## astronomy

Today, this word means the scientific study of matter in outer space; but its older meaning includes systems of knowledge and belief about what people saw in the sky. See also “archaeoastronomer.”

The Foursquare (Fort Ancient) <FA-15>  
High Bank <HB-01>  
An Architecture of Alignments <NK-43>  
The Woodhenge (Stubbs) <SB-06>  
Ancient Observatories <GE-01>

## Atwater, Caleb (1778-1867)

Circleville postmaster and author of the first full account of ancient Ohio Valley earthworks in 1820 (see Bibliography).

Circleville <CR-01>

## Aveni, Anthony

Archaeoastronomer; Professor of Astronomy, Anthropology, and Native American Studies at Colgate University; author of many works, including *Stairways to the Stars* (see Bibliography).

Ancient Observatories <GE-01>

## axis

The central line dividing two halves of a symmetrical figure. Also, the idea of a pole or tree as an axis representing the center of the world (the “axis mundi”), and connecting the underworld, the everyday world of the earth’s surface, and the heavens. This vertical axis is an important idea in American Indian tradition.

Anderson <AN-01>  
Circleville <CR-01>  
High Bank <HB-01>  
Lunar Movements <NK-11>

Geometry at Newark <NK-16>

## barite

A light-catching crystal mineral prized by ancient Ohio Valley peoples.

Mount Horeb <MH-01>

## basin, clay

A shallow, flat-bottomed container built by shaping clay on the ground; normally rectangular with rounded corners; varied in size from one to six or more feet in length; created by Hopewell people for ceremonial burning, often used for ritual deposits.

Buildings (Mound City) <MC-02>

Central Mound (Mound City) <MC-07>

Eagle Mound (Newark) <NK-12>

Elevated Circle (Turner) <TN-02>

Fire and Snake Mounds (Turner) <TN-18>

Tremper Mound <PM-02>

## Baum Earthworks

A geometric earthwork in the Paint Creek Valley, now disappeared, which resembled its neighbor Seip.

The Scioto Valley <IN-51>

Seip and Baum <SP-08>

## bear

The bear was very important to people in the Hopewell culture: they prized bear teeth and claws, including ones from grizzly bears who lived far west of the Ohio Valley. The bear's great strength, hibernation, and ability to stand like a person on two legs probably contributed to its symbolic importance.

Bear <GE-07>

The Copper Shapes <HP-13>

Ceremonial Robe <HP-15>

The Newark Shaman <NK-14>

## Bertsch

An earthwork complex in east central Indiana, possibly related to Anderson Mounds.

Anderson <AN-01>

## bladelet

A very sharp, narrow piece of flint about 2 inches long, used for cutting. Made only by people of the Hopewell culture, they were used for precise trimming and incising of materials such as mica, copper, and bone.

Precious Materials <GE-22>

## Blosser, Jack

Site manager and archaeologist at Fort Ancient, near Lebanon, Ohio, where he oversees the site, museum, and educational programs at the state's "gateway" site for American Indian heritage.

The Foursquare (Fort Ancient) <FA-15>

## Brown, James

Archaeologist at Northwestern University; authority on the Mound City site near Chillicothe, Ohio (Hopewell Culture National Historical Park). (See Bibliography under "Mound City.")

Reincarnation <GE-86>

The Cosmological Plan <GE-87>

## Burks, Jarrod

Archaeologist, formerly with the Hopewell Culture National Historical Park, expert with remote sensing instruments such as magnetometers.

New Archaeology <GE-54>

## cache

A hole dug for storage, or the contents of such a hole; a common way of safekeeping dried foods, tools, and precious items throughout American Indian history.

Gardening <GE-09>

## Camp Sherman

U.S. Army training camp set up on the Mound City site in 1917.

History (Mound City) <MC-04>

## carbon date

Date for an ancient object obtained by measuring the amount of carbon 14 it contains (carbon 14 deteriorates at a known rate).

Mississippian Serpent <SN-02>

## Cave, David

Ohio scholar of comparative religion, as he puts it, "how people across cultures and religions have interpreted their world and crafted through ritual, myth, symbol and architecture means of order, power, and meaning."

Burning Things <GE-18>

Elaboration and Ritual <GE-88>

## ceremony, ceremonial

Formal or ritual actions reflecting beliefs important to those who perform them.

The Ceremonial Center (Hopewell) <HP-04>

Ceremonial Robe <HP-15>

Processions (Newark) <NK-07>

Moon <GE-02>

Ceremonial Gatherings <GE-11>

Music <GE-77>

Native Preservation <GE-27>

World Renewal <GE-97>

## Cherokee

Eastern Woodland tribe originally centered in the Smoky Mountains but also in the Kentucky area at the time of European-American contact.

Golf and Prayer <NK-50>

## Cincinnati

A city on the Ohio River, site of elaborate earthwork complexes now destroyed.

Cincinnati <CI-01>  
Walls and Water (Fort Ancient) <FA-04x>  
Order of the Cincinnati <GE-80>  
Ohio Valley Region <IN-49>  
The Little Miami Valley <IN-50>  
Stubbs <SB-01>

## circle

A round shape often used by the earthwork builders, not only for enclosures of all sizes, but also for rings of timber poles, and for houses and ceremonial buildings.

Circleville <CR-01>  
Mount Horeb <MH-01>  
The Great Circle (Newark) <NK-03>  
Geometry at Newark <NK-16>  
The Woodhenge (Stubbs) <SB-06>  
Elevated Circle (Turner) <TN-02>  
Geometry and Culture <GE-12>  
Circle of Life <GE-96>

## Circleville

A central Ohio town named after the ancient earthen circle in which it was founded.

The Scioto Valley <IN-51>  
Circleville <CR-01>



## clan

An extended family group; among American Indians, tribes are usually made up of several clans whose members are related or said to be related; they are often named for an animal spirit or other figure.

Ceremonial Robe <HP-15>

Turtle Pipe <MC-21>

## clay

Prevalent in river valleys, clay is easily molded, water resistant, and hardens when heated. Builders of the earthworks used clay extensively in floor building, mound building, and for pottery; Ohio river valley clays are yellow, gray, or (when baked) red.

Inside a House <GE-40>

The Ceremonial Center (Hopewell) <HP-04>

Buildings (Mound City) <MC-02>

Eagle Mound (Newark) <NK-12>

Construction Sequence (Pollock) <PL-25>

Fire and Snake Mounds (Turner) <TN-18>

## Cochran, Don

Archaeologist at Ball State University in Muncie, Indiana; author with Beth McCord of *The Archaeology of Anderson Mounds* (see Bibliography under "Anderson").

Anderson <AN-01>

## confluence

The joining or running together of streams or rivers; mounds and earthworks often appeared at or near points of confluence.

Cincinnati <CI-01>

Portsmouth <PM-01>

## Connolly, Robert

Archaeologist, authority on the Fort Ancient; former site archaeologist at Poverty Point State Historic Site, Louisiana. (See Bibliography under “Fort Ancient.”)

Mounds (Fort Ancient) <FA-52>

## copper

A shiny metal that can be shaped by hammering and heating, favored by the mound and earthwork builders; sometimes paired with mica.

Central Mound (Mound City) <MC-07>  
Eagle Mound (Newark) <NK-12>  
Fire and Snakes Mound (Turner) <TN-18>  
The Copper Shapes <HP-13>  
Ceremonial Robe <HP-15>  
Precious Materials <GE-22>  
Deposits <GE-92>

## cosmology, cosmological plan

A culture’s ordered picture of how creation, or the cosmos, came about and is organized. The entire universe in American Indian traditions often includes the heavens or a sky world, the earth, and a watery underworld, all connected by a vertical axis symbolized by a pole or tree.

The Cosmological Plan <GE-87>  
Processions (Newark) <NK-07>

## Cowan, Frank

Archaeologist (formerly with the Cincinnati Museum Center) who uncovered the great woodhenge at Stubbs (see Bibliography under “Stubbs”).

The Woodhenge (Stubbs) <SB-06>

## Crandell, Barbara

Long active in Indian affairs, Barbara Crandell (Cherokee) is a member of the Newark Friends of the Mounds.

Golf and Prayer <NK-50>

## crater

A large rounded depression in the earth. The crater below Serpent Mound was caused by a large meteorite striking the earth between 345 and 250 million years ago.

Great Serpent Mound <SN-01>

## cremation

The burning of a body after death.

Buildings (Mound City) <MC-02>  
Tremper Mound <PM-02>

## crescent

A shape based on the appearance of the moon in its first or last quarter, sometimes the arc of a circle. People of the Hopewell culture sometimes built mounds in this shape.

Great Gate (Fort Ancient) <FA-03>  
Construction Sequence (Pollock) <PL-25>

## culture

The behavior, attitudes and products of a group of people; or, the people who share these things. Parts of the Hopewell culture were shared by people far distant from one another.

Hopewell Mound Group <HP-01>  
Ancient Observatories <GE-01>  
Geometry and Culture <GE-12>  
NAGPRA and Respect <GE-61>  
Naming These Cultures <GE-90>  
Timeline: Adena Culture <TM-84>  
Timeline: Hopewell Culture <TM-85>

## Dakota

An American Indian people sometimes called Sioux.

Making Fire <GE-94>

## Dancey, William (Bill)

Archaeologist at Ohio State University, authority on Hopewell settlements; editor with Paul Pacheco of *Ohio Hopewell Community Organization* (see Bibliography).

Preservation <GE-25>

## Davis, Edwin H. (1811-1888)

A physician from Chillicothe, Ohio, who surveyed and described many mounds and earthworks, mostly in 1845-1846, with Ephraim Squier. Their findings were published by the Smithsonian Institution in 1848 as its first publication, *Ancient Monuments of the Mississippi Valley* (see Bibliography).

History (Serpent Mound) <SN-05>

History (Mound City) <MC-04>

Preservation <GE-25>

Timeline: Early Appreciation for the Earthworks <TM-90>

## deer

In the Eastern Woodlands, the white tailed deer was the chief game animal for native people after the Ice Age ended, and became symbolically important; it remains a common wild animal.

The Copper Shapes <HP-13>

Paired Mounds (Mound City) <MC-12>

Timeline: Archaic Indians in the Great Valley <TM-83>

## Delaware

Name given by Europeans to the Lenape (pronounced *len-uh-pee*), a tribe of the Eastern Woodlands, part of which had moved into the Ohio Valley region at the time of European settlement.

Moon <GE-02>  
Timeline: Tribes in the Ohio Valley <TM-88>

## deposit

One or more items left for a purpose at a certain place; among American Indians, deposits have traditionally been part of rituals with religious, political, and personal meanings.

Hopewell Mound Group <HP-01>  
The Ceremonial Center (Hopewell) <HP-04>  
Burials (Hopewell) <HP-11>  
Fire and Snake Mounds (Turner) <TN-18>  
Fire <GE-15>  
Deposits <GE-92>

## ditch

An artificial waterway; the earthwork builders used ditches to suggest the presence of water or to bring actual water into their earthwork designs.

Anderson <AN-01>  
Walls and Water (Fort Ancient) <FA-04x>  
South Gate (Fort Ancient) <FA-11>  
Forts? (Fort Ancient) <FA-19>  
Grave Creek Mound <GV-01>  
Hopewell Mound Group <HP-01>  
Mount Horeb <MH-01>  
The Great Circle (Newark) <NK-03>

Drake, Daniel (1785-1852)

Physician and promoter of the city of Cincinnati; author of *Natural and Statistical View, or Picture of Cincinnati and the Miami Country* (see Bibliography under "Cincinnati").

Cincinnati <CI-01>

## earth

Soil, consisting of particles of organic (formerly living) matter and rock. Earth was an essential building material for ancient Ohioans, and held spiritual power as the source of plant life and as the ground, or foundation, of existence.

Walls and Water (Fort Ancient) <FA-04x>  
The Ceremonial Center (Hopewell) <HP-04>  
Burials (Hopewell) <HP-11>  
Construction Sequence (Pollock) <PL-25>  
Fire <GE-15>  
New Archaeology <GE-54>  
Earth, Soil <GE-50>  
Timeline: Earth, Art, and Culture <TM-92>

## earth diver

In creation stories belonging to various American Indian tribes, an animal such as a turtle, water beetle, or bird goes under water to bring up mud, which becomes the solid world we live on. The many water birds shown in Hopewell art (especially the shoveler duck) may suggest this idea.

The Earth Diver <GE-03>

## earth oven

A pit in which people cook by placing fire-heated stones in the bottom, topped by wrapped foods and earth; traditional among American Indians from the earliest times.

Inside a House <GE-40>  
The New Archaeology <GE-54>

## earthwork

Walls or embankments made of earth, in a pattern generally meant for a social, military, religious, and/or artistic purpose. Ancient earthworks of the Ohio region often incorporated other alterations of the natural landscape, including mounds, ditches, ponds, pavements, and land flattening and filling. Some were built in precise geometric shapes including circles, ovals, squares, and octagons.

Fort Ancient <FA-01x>  
Hopewell Mound Group <HP-01>  
The Newark Earthworks <NK-01>  
"Old Fort" (Portsmouth) <PM-03>

Geometry and Culture <GE-12>  
Sacred Landscape <GE-84>  
The Cosmological Plan <GE-87>

## ecology

The science of the interdependence of all living things and their environment; the study of the natural world, the ecosphere. The word is also sometimes used to mean the natural environment of a particular area.

Ancient Observatories <GE-01>  
Timeline: Archaic Indians in the Great Valley <TM-83>

## effigy, effigy mound

A representation of a person or creature; effigy mounds of the Ohio Valley region are earth formed into the shape of animals.

Pipes Mound (Mound City) <MC-08>  
The "Alligator" <NK-27>  
Tremper Mound <PM-02>  
Great Serpent Mound <SN-01>  
Fire and Snake Mounds (Turner) <TN-18>  
Bear <GE-07>  
Effigies <GE-52>  
Timeline: Fort Ancient Culture <TM-86>

## elders

In the traditions of all American Indians, older tribe members act as official or unofficial leaders and advisors to their people.

Central Mound (Mound City) <MC-07>  
Ceremonial Gatherings <GE-11>  
Making Fire <GE-94>

## ellipse

A symmetrical, elongated ring shape which is not perfectly circular, and may be wider at one end like an egg; a shape favored at some earthwork sites.

Cincinnati <CI-01>

The Newark Shaman <NK-14>  
Geometry at Newark <NK-16>

## embankment

A long mound of earth or stone; this term was used especially before 1950 to mean the kind of wide earthen walls found at ancient earthwork sites (see also “wall”).

Cincinnati <CI-01>  
Construction Sequence (Pollock) <PL-25>  
Timeline: Earth, Art, and Culture <TM-92>

## enclosure

An area surrounded by earth walls, and sometimes also ditches or stone paving; these varied greatly in size in the ancient Ohio Valley, and probably served a variety of purposes.

Hopewell Mound Group <HP-01>  
South Gate (Fort Ancient) <FA-11>  
Forts? (Fort Ancient) <FA-19>  
Mount Horeb <MH-01>  
The Great Circle (Newark) <NK-03>  
Processions (Newark) <NK-07>  
Great Enclosure (Turner) <TN-04>  
Hopewell Hilltops <GE-16>

## enshrine

To cherish an object, idea or person by establishing it as sacred and enclosing it actually or mentally at a place for worship or contemplation.

Flint Ridge <NK-23>

## equinox

Either of two times of the year when day and night are equal in length, about March 21 and September 21.

Anderson <AN-01>



erode, erosion

Wearing away, especially by natural forces of water and wind. The earthworks have been subject to erosion, but they were so carefully built (often reinforced with stone and clay) that they were close to their original height when European Americans first saw them in the 1600s. Plowing and development sped the process of erosion tremendously.

Anderson <AN-01>

escarpment

A cliff or slope which separates two elevations in the land.

Sacred Landscape <GE-84>

esker

A long, narrow ridge of coarse gravel left by a stream flowing under or beside a melting glacier.

Sacred Landscape <GE-84>

ethnic

Of or relating to a group of people sharing racial heritage (or, sometimes, sharing the same religion, language, or culture).

Hopewell Interaction Sphere <GE-95>

ethnomusicologist

A specialist who studies the music of cultures around the world which are not directly part of the "Western" (European) tradition.

Music <GE-77>

Music and Authenticity <GE-78>

excavation

The process of digging and removing soil, by which archaeologists collect evidence of the past; however in the process, they often have destroyed the places they were investigating. In modern times, excavation can be more precise and less destructive because of improved ways of predicting what is under the ground.

Burials (Hopewell) <HP-11>  
Eagle Mound (Newark) <NK-12>  
Dr. Riordan's Excavations (Pollock) <PL-11>

## fire

The chemical change that produces heat and light was an essential part of ancient Ohioans' lives, and also of their systems of belief. Bodies of the dead and buildings were often burned before being mounded with earth; and precious objects were burned in carefully formed clay basins as part of rituals.

The Foursquare (Fort Ancient) <FA-15>  
Burials (Hopewell) <HP-11>  
Construction Sequence (Pollock) <PL-25>  
Fire and Snake Mounds (Turner) <TN-18>  
Inside a House <GE-40>  
Fire <GE-15>  
Burning Things <GE-18>  
Making Fire <GE-94>

## flint

A very hard, fine-grained quartz stone that holds a very sharp edge; used by American Indians since their arrival in the Americas for tools and weapons.

Flint Ridge <NK-23>  
Precious Materials <GE-22>  
Deposits <GE-92>  
Timeline: Paleoindians in the Great Valley <TM-82>

## Flint Ridge

A location in central Ohio where deposits of flint near the surface were used by native groups from earliest times; now a historic site operated by the Ohio Historical Society.

Making Fire <GE-94>  
Flint Ridge <NK-23>  
Timeline: Paleoindians in the Great Valley <TM-82>

## flue

An opening to let smoke out from a fire set in a confined space.

Turner <TN-01>  
Fire and Snake Mounds (Turner) <TN-18>

## floor

A term used by archaeologists to describe the prepared surface found under most mounds, on which ancient Ohio Valley people conducted rituals, erected buildings and poles, dug pits, and built fires. These floors were usually made with layers of clay, sand, and gravel.

The Ceremonial Center (Hopewell) <HP-04>  
Buildings (Mound City) <MC-02>  
Central Mound (Mound City) <MC-07>  
Eagle Mound (Newark) <NK-12>  
Inside a House <GE-40>

## forest

At the time of earthwork building in the Ohio River Valley, forests were deciduous (they lost their leaves in winter), and extremely dense with only a few natural grassy meadows; many tree trunks were several feet in diameter.

Forests <GE-53>  
Gardening <GE-09>  
Timeline: Archaic Indians in the Great Valley <TM-83>

## Fort Ancient

The name given to a hilltop enclosure along the Little Miami river; also, the name given to the culture once mistakenly thought to have built that enclosure, but now known to have inhabited the central Ohio Valley later, about AD 900-1750.

Fort Ancient <FA-01x>  
The Foursquare (Fort Ancient) <FA-15>

Effigies <GE-52>  
Mississippian Serpent <SN-02>  
Naming These Cultures <GE-90>  
Timeline: Fort Ancient Culture <TM-86>

## Foster's

Hilltop enclosure overlooking the Little Miami river, where evidence of huge ancient fires has been found.

Foster's <FS-01>

## four directions

North, South, East, and West; the lines around which the sun and moon move in a symmetrical manner; traditionally honored by most North American Indian peoples.

Circle of Life <GE-96>

## Foursquare

A geometric shape with four equal sides and four right angles: a square.

The Foursquare (Fort Ancient) <FA-15>

## galena

The heavy ore of lead, prized by ancient Ohio Valley peoples.

Mount Horeb <MH-01>

## Gallatin, Albert (1761-1849)

Congressman, then Secretary of the Treasury under Thomas Jefferson, Albert Gallatin studied and wrote about American Indian tribes, and helped the early Smithsonian Institution to take an interest in this area of knowledge.

Timeline: Early Appreciation for the Earthworks <TM-90>

## gardens, gardening

Purposeful selecting, growing and harvesting of plants for food, an activity which increased at the time of earthwork and mound building, probably producing enough surplus to allow free time for design and construction work.

Gardening <GE-09>

Timeline: Archaic Indians in the Great Valley <TM-83>

Timeline: Hopewell Culture <TM-85>

## gate, gateway

An opening in an earthen wall, probably meant for entry and exit of people or processions; some were used to help form sightlines to rise or set points of the sun, moon, or possibly stars. Some may have been closed by wooden gates; but many were too large for that.

Great Gate (Fort Ancient) <FA-03>

North Gate (Fort Ancient) <FA-12>

South Gate (Fort Ancient) <FA-11>

The Octagon (Newark) <NK-02>

The Great Circle (Newark) <NK-03>

Pollock <PL-01>

Hopewell Hilltops <GE-16>

Circle of Life <GE-96>

## Geology, geological

Of or pertaining to the stone, soil, mountains, and other features and processes that shape the surface of the earth.

Timeline: Geological Formation of the Ohio Valley <TM-81>

## geometry

A mathematical system used to measure and describe shapes; geometric earthworks are those built in such regular, perfect shapes as circles, squares, octagons, and parallel lines.

The Scioto Valley <IN-51>

Hopewell Mound Group <HP-01>

The Newark Earthworks <NK-01>

The Octagon (Newark) <NK-02>

Stubbs <SB-01>  
Geometry and Culture <GE-12>  
The Cosmological Plan <GE-87>  
Timeline: Hopewell Culture<TM-85>

## glacier

A large mass of ice slowly flowing over the land. Ice Age glaciers helped form the Ohio River Valley and the kinds of soil found there.

Timeline: Geological Formation of the Ohio Valley <TM-81>  
Timeline: Paleoindians in the Great Valley <TM-82>  
Timeline: Archaic Indians in the Great Valley <TM-83>

## graded way

A roadway set on an incline. Builders of the earthworks sometimes cut through river banks or hills, or connected different elevations, by filling in soil to make a smooth ramp, often with low side walls.

Stubbs <SB-01>  
Turner <TN-01>  
Great Enclosure (Turner) <TN-04>

## Grave Creek Mound

A tall Adena style mound located where Grave Creek enters the Ohio River, in Moundsville, West Virginia.

Ohio Valley Region <IN-49>  
Grave Creek Mound <GV-01>

## gravel, graveling

A mixture of rock fragments or pebbles, gravel is an underlying feature of the river terraces where most large earthwork sites were built, providing good drainage and important building material. But in modern times, graveling industries have destroyed many earthworks in the process of mining.

Turner <TN-01>  
Timeline: Geological Formation of the Ohio Valley <TM-81>  
Timeline: Destruction and Preservation <TM-91>

## Greber, N'omi

Archaeologist with the Cleveland Museum of Natural History, authority on many of the Hopewell earthworks in southern Ohio. Author of many works including a CD-ROM, *The Hopewell Mound Group* (see Bibliography under "Hopewell Mound Group").

**Seip and Baum** <SP-08>

## Hall, Robert

Archaeologist and Professor Emeritus at Northwestern University, author of *Archaeology of the Soul* (see Bibliography).

**Hopewell Interaction Sphere** <GE-95>

## Hancock, John E.

Professor of Architecture at the University of Cincinnati's College of Design, Architecture, Art and Planning; director of the *EarthWorks* project and co-founder of CERHAS (Center for the Electronic Reconstruction of Historical and Archaeological Sites).

**Earth, Soil** <GE-50>

## Harrison, William Henry (1773-1841)

Born in Virginia, Harrison settled in North Bend, Ohio, just west of Cincinnati. He was active in the government of the Northwest Territory, as its secretary, Congressional delegate, and then superintendent of territory Indians and governor of the Indiana Territory. He became the ninth president of the United States but died only one month later.

**Cincinnati** <CI-01>

## Henderson, Gwynn

Archaeologist with the Kentucky Archaeological Survey in Lexington, and authority on the Portsmouth earthworks, among others. (See Bibliography under "Portsmouth Earthworks.")

“Old Fort” <PM-03>  
Light and Shadow <GE-98>

## hibernation

Passing time, often the winter season, in an inactive state similar to sleeping.

The Newark Shaman <NK-14>

## High Bank Earthworks

Circle and octagon earthwork just south of Chillicothe, Ohio, in the Scioto River Valley; now nearly disappeared.

High Bank <HB-01>

## hilltop enclosure

A hilltop surrounded by an earthen wall, and often artificially flattened, with gateways of various kinds.

Forts? <FA-19>  
Hopewell Hilltops <GE-16>  
Naming These Cultures <GE-90>  
The Little Miami Valley <IN-50>

## Hitakonanu'laxk

A Lenape (Delaware) storyteller whose tales have been published as *The Grandfather Speaks: Native American Folk Tales of the Lenape People* (Brooklyn, NY: Interlink Books, 1994).

Moon <GE-02>

## Hively, Ray

Professor of Astronomy and Physics at Earlham College in Richmond, Indiana, Dr. Hively and Prof. Robert Horn discovered the lunar alignments at the Newark



Circle-Octagon in the early 1980s. (See Bibliography under “Newark Earthworks” and “High Bank Earthworks.”)

**An Architecture of Alignments** <NK-43>

## holocaust

Great destruction, especially by fire. While the builders of the earthworks purposefully burned down some huge timber constructions, there is no evidence of living people dying in the great fires.

**Burning Things** <GE-18>

## Hopeton

A large circle and square earthwork, now nearly disappeared, across the Scioto River from Mound City, and now part of Hopewell Culture National Historical Park.

**Hopeton** <HT-01>

**Wall Section (Hopeton)** <HT-02>

## Hopewell

Name assigned by archaeologists to an earthwork and mound building culture centered in the Ohio region, active from about 200 B.C. to A.D. 500, named for the elaborate site near Chillicothe, Ohio; also, the sphere of influence or interaction of that culture across North America.

**Hopewell Mound Group** <HP-01>

**A Hopewell Settlement** <GE-13>

**Hopewell Interaction Sphere** <GE-95>

**Hopewell Hilltops** <GE-16>

**Naming These Cultures** <GE-90>

**Gardening** <GE-09>

**Deposits** <GE-92>

**Timeline: Hopewell Culture** <TM-85>

## Hopewell Culture National Historical Park

Established in 1992, this unit of the US National Park Service preserves, studies, and interprets several of the major earthworks of the central Scioto Valley, near Chillicothe, Ohio.

[The Scioto Valley](#) <IN-51>  
[History \(Mound City\)](#) <MC-04>  
[High Bank](#) <HB-01>

## Hopewell, Mordecai

A retired Civil War officer on whose farm, just west of Chillicothe, Ohio, spectacular evidence of artistic and cultural practices was investigated by Warren K. Moorehead in 1891. The culture which built the site was given his name.

[Hopewell Mound Group](#) <HP-01>  
[Naming These Cultures](#) <GE-90>  
[Timeline: Hopewell Culture](#)<TM-85>

## Hopewell Mound Group

A large, composite earthwork enclosure and mound complex west of Chillicothe, Ohio; site where the most spectacular artifact finds from this culture were found.

[Hopewell Mound Group](#) <HP-01>

## Horn, Robert (Bob)

Professor Emeritus of Philosophy at Earlham College in Richmond, Indiana, Dr. Horn and Dr. Ray Hively discovered the lunar alignments at the Newark Circle-Octagon in the early 1980s. (See Bibliography under “Newark Earthworks” and “High Bank Earthworks.”)

[An Architecture of Alignments](#) <NK-43>

## houses (Adena and Hopewell traditions)

Small houses were built by the Adena and Hopewell for dwelling, and sometimes other purposes. They were typically rectangular with rounded corners, and built with posts set in the earth, light walls of reed mats or woven twigs with plaster,

and thatched roofs. Other much larger buildings were similarly constructed and used for ceremonial purposes.

Stubbs <SB-01>

A Hopewell Settlement <GE-13>

Inside a House <GE-40>

## ideology

A set of beliefs or ideas which fit together as a system.

Hopewell Interaction Sphere <GE-95>

## incised

Decorated with lines or shapes made by cutting shallow marks on a surface; a method used in the ancient Ohio Valley on copper, mica, stone and bone.

Ceremonial Robe <HP-15>

Tremper Mound <PM-02>

Mississippian Serpent <SN-02>

## Indians

When they arrived in 1492, Europeans mistakenly gave this name to native peoples of the Americas, because of their mistaken idea that they had arrived in the East Indies, islands off the Asian coast. Many modern tribes prefer the term "American Indians" to refer to all natives; others prefer the term "Native Americans." In Canada, the term "First Nation" is now used. Where possible, the specific tribal name of an individual or group is the best identifying term.

Golf and Prayer <NK-50>

Portsmouth <PM-01>

NAGPRA and Respect <GE-61>

Reincarnation <GE-86>

Circle of Life <GE-96>

Timeline: Tribes in the Ohio Valley <TM-88>

## intonation

The accord between two voices or instruments producing the same note. Perfect intonation is favored in Western (European-based) music, but wide differences in intonation are valued in some native music of the Americas.

**Music and Authenticity** <GE-78>

## Iroquois

A confederation of tribes from northeastern North America with similar languages and customs, which included the Mohawk, Oneida, Onondaga, Seneca, Cayuga, and (after 1722) the Tuscaroras.

**Timeline: Tribes in the Ohio Valley** <TM-88>

## Jakes, Kathryn A.

Professor of Consumer Sciences at Ohio State University in Columbus; authority on ancient textiles. (See Bibliography.)

**Textiles** <GE-64>

## Jefferson, Thomas (1743-1826)

Author of the Declaration of Independence, founder of the University of Virginia, and third president of the United States, Jefferson took great interest in American Indian life and history.

**Timeline: Early Appreciation for the Earthworks** <TM-90>

## kame

A short ridge or mound of sand and gravel left behind by a glacier.

**Sacred Landscape** <GE-84>

## Kennedy, Roger

American historian and author, and Director Emeritus of the Smithsonian National Museum of American History. Author of *Hidden Cities: The Discovery and Loss of Ancient North American Civilization* (see Bibliography).

Order of the Cincinnati <GE-80>

## Ketchum, Annette

Storyteller and member of the Delaware (Lenape) tribe headquartered in Bartlesville, Oklahoma.

Turtle Pipe <MC-21>

## kin

One's relatives; members of an extended family or ancestral group.

Mounds (Fort Ancient) <FA-52>

Reincarnation <GE-86>

## knapper

One who forms tools or points from stone by striking it with a specialized tool that causes small flakes to break off. American Indians have been master flintknappers for thousands of years.

Precious Materials <GE-22>

Timeline: Paleoindians in the Great Valley <TM-82>

## Lenape

(pronounced LEN-uh-pee) A tribe of the Eastern Woodlands, part of which had moved into the Ohio region at the time of European settlement there.

Moon <GE-02>

Turtle Pipe <MC-21>

## Lepper, Bradley T.

Curator of Archaeology at the Ohio Historical Society, Dr. Lepper is the leading archaeological authority on the Newark earthworks (see Bibliography).

Processions (Newark) <NK-07>

The Newark Shaman <NK-14>

## Lewis, Merriwether (1774-1809)

Soldier and explorer, head of the Lewis and Clark Expedition from St. Louis to the Pacific and back (1803-1806).

Grave Creek Mound <GV-01>

## Liberty Earthworks

Three-part geometric earthwork along the Scioto River south of Chillicothe, now disappeared.

The M'sikamekwi and Great Tomb (Seip) <SP-02>  
Paired Mounds (Mound City) <MC-12>

## Licking River

A tributary of the Muskingum River; flows through Newark, Ohio.

Marietta <MA-01>

## lime

A white lumpy powder produced when limestone is burned.

Foster's <FS-01>

## limestone

A kind of rock formed of the compressed shells and sand of a former sea bottom, the bedrock of the Ohio region. The earthwork and mound builders used slabs of limestone extensively for paving and for reinforcing walls, mounds, and timber constructions.

Great Gate (Fort Ancient) <FA-03>  
Walls and Water (Fort Ancient) <FA-04x>  
The Foursquare (Fort Ancient) <FA-15>  
Construction Sequence (Pollock) <PL-25>  
The Woodhenge (Stubbs) <SB-06>

## Little Miami River

The Little Miami River drains much of southwestern Ohio, reaching the Ohio River at the eastern edge of the city of Cincinnati. Like the Great Miami, another Ohio tributary to the west, it was named after the Miami Indian tribe, which once lived in this region.

The Little Miami Valley <IN-50>  
Fort Ancient <FA-01>

## luminous

Shining, glowing; light-catching.

Precious Materials <GE-22>

## Lynott, Mark

Archaeologist with the National Park Service Archaeological Center, and authority on the Hopeton earthworks.

Wall Section (Hopeton) <HT-02>

## magnetometer

An instrument which allows modern archaeologists to know what features, or different soils, are underground, by detecting disturbances in the magnetic field.

Wall Section (Hopeton) <HT-02>  
New Archaeology <GE-54>

## Mann, Barbara

Northern Director, Native American Alliance of Ohio; author of *Native Americans, Archaeologists, and the Mounds* (see Bibliography).

The "Alligator" <NK-27>

## Marietta

Town founded within the elaborate earthworks at the confluence of the Muskingum and Ohio Rivers.

Ohio Valley Region <IN-49>  
Marietta <MA-01>  
Circleville <CR-01>  
Order of the Cincinnati <GE-80>  
World Renewal <GE-97>

McClure, David (1748-1820)

An early traveler in the Ohio country, whose diary describes ways of living on the frontier there.

Timeline: Europeans Encounter the Earthworks <TM-89>

medicine wheel

An American Indian circular pattern, either marked on the ground or in a mental picture, used for dance or meditation.

Circle of Life <GE-96>

Mekoce

(pronounced MEK-oh-jay) One of the septs (branches) of the Shawnee people.

The Serpent Path <SN-11>

memorial

Any structure or object created to help people remember and respect an event, a person, a group, or an idea.

Ceremonial Gatherings <GE-11>  
The Copper Shapes <HP-13>  
Mound City <MC-01>  
Buildings (Mound City) <MC-02>  
Eagle Mound (Newark) <NK-12>  
Fire and Snake Mounds (Turner) <TN-18>



## Metz, Charles (1847-1926)

A Cincinnati physician and amateur archaeologist of the late 1800s who investigated and recorded many local mounds and earthworks.

Turner <TN-01>

## Miami

A tribe in the Ohio and Indiana region at the time of European settlement; the Great Miami and Little Miami rivers, tributaries of the Ohio, were named after the tribe.

Native Preservation <GE-27>  
NAGPRA and Respect <GE-61>  
Timeline: Tribes in the Ohio Valley <TM-88>

## mica

Aluminum silicates, minerals which break into flexible, translucent sheets; occurring naturally in attached sheets called books. The Hopewell used the thin shiny mica sheets to cover the dead, and also for cutting into beautiful shapes for ceremonial purposes.

Eagle Mound (Newark) <NK-12>  
Fire and Snake Mounds (Turner) <TN-18>  
Paired Mounds (Mound City) <MC-12>  
Precious Materials <GE-22>  
Deposits <GE-92>

## midden

An old deposit of refuse, often including bones and plant remains, which indicates human occupation and ways of living at a site.

A Hopewell Settlement <GE-13>

## Mills, William (1860-1928)

Archaeologist with the Ohio Historical Society, from 1898 to 1928, and author of *The Archaeological Atlas of Ohio* (see Bibliography).

Paired Mounds (Mound City) <MC-12>

## Mississippian

The term for the native cultural flowering of about 1,000 years ago along the Mississippi River; the Fort Ancient culture in the Ohio region was related.

Great Serpent Mound <SN-01>

Mississippian Serpent <SN-02>

## moat

An artificial waterway built around a castle or defensive position, to protect the people inside from invaders. The water rings at the earthwork sites served other purposes.

Forts? (Fort Ancient) <FA-19>

Portsmouth <PM-01>

## monument

A structure built to help people remember something; monuments can take many forms, and can memorialize historic or imagined beings or events. “Monumental” suggests an association with monuments, but is also used to mean “very large.”

Cincinnati <CI-01>

Great Gate (Fort Ancient) <FA-03>

The Great Circle (Newark) <NK-03>

Ancient Observatories <GE-01>

Geometry and Culture <GE-12>

Earth, Soil <GE-50>

Forests <GE-53>

The Cosmological Plan <GE-87>

## moon, moonrise/moonset

Earth’s natural satellite, the moon, rises and sets at widely varied times and places along the horizon in a complex, 18.6 year pattern. The earthwork builders marked the extreme points in this pattern with sightlines across some of their structures.

The Foursquare (Fort Ancient) <FA-15>

High Bank <HB-01>  
An Architecture of Alignments <NK-43>  
Ancient Observatories <GE-01>  
Moon <GE-02>  
Geometry and Culture <GE-12>

Moorehead, Warren K. (1866-1939)

An Ohio archaeologist who in the 1890s investigated the Hopewell site, Fort Ancient, and other locations; first head of archaeology for the Ohio Historical and Archaeological Society. (See Bibliography under “Hopewell Mound Group.”)

Great Gate (Fort Ancient) <FA-03>  
Walls and Water (Fort Ancient) <FA-04x>  
Mounds (Fort Ancient) <FA-52>

mortuary

Having to do with the treatment and disposal of the dead.

Tremper Mound <PM-02>

mound

A pile of earth or stones; in the Ohio Valley region, mounds were created by various cultures in different ways and for different purposes, such as burial or the memorializing of places where buildings once stood. Sometimes, earthworks and enclosures are also called “mounds.”

The Foursquare (Fort Ancient) <FA-15>  
Grave Creek Mound <GV-01>  
Mound City <MC-01>  
Great Serpent Mound <SN-01>  
Fire and Snake Mounds (Turner) <TN-18>  
Sacred Landscape <GE-84>  
Ten Thousand Mounds <GE-93>  
Timeline: Adena Culture <TM-84>

Mound City

A central Scioto Valley earthwork complex, just north of Chillicothe, Ohio; now also the headquarters of Hopewell Culture National Historical Park.

The Scioto Valley <IN-51>  
Mound City <MC-01>  
Hopeton <HT-01>  
Tremper Mound <PM-02>  
Precious Materials <GE-22>

## Mount Horeb

An Adena style, circular wall and ditch just north of Lexington, Kentucky.

Mount Horeb <MH-01>  
Anderson <AN-01>

## Mount Logan

One of a group of hills which stand out on the eastern horizon when viewed from Mound City or from the Adena estate at Chillicothe, Ohio. Mount Logan appears on the Ohio state seal.

Sacred Landscape <GE-84>

## m'sikamekwi

Shawnee word meaning "big house framework," used here to describe the large timber halls memorialized by mounds at the Seip and Liberty earthworks.

The M'sikamekwi and Great Tomb (Seip) <SP-02>

## music

Evidence for music making among the ancient people of the Ohio Valley includes remains of panpipes, flutes, rasps, and rattles.

Music <GE-77>  
Music and Authenticity <GE-78>

## Muskingum River

The river system draining much of eastern Ohio, with the Marietta earthworks at its mouth.

**Marietta** <MA-01>

## myth

A traditional, ancient story that explains the origins or values of a culture; the word is also used today to suggest stories that are not true in scientific terms.

**Elaboration and Ritual** <GE-88>

**Paired Mounds** <MC-12>

## NAGPRA

The Native American Graves Protection and Repatriation Act, a US federal law which requires the return of human remains and associated items to living native descendants.

**NAGPRA and Respect** <GE-61>

## Native Americans

The first people to live in the Americas; American Indians. The term “Native American” was created in the 1970s as a way to name the people respectfully, without mixing them up with the inhabitants of India. To some people the term seems artificial, and the term “American Indian” is still preferred by most tribes.

**The Great Valley** <IN-31>

**Golf and Prayer** <NK-50>

**Native Preservation** <GE-27>

**NAGPRA and Respect** <GE-61>

**Naming These Cultures** <GE-90>

**World Renewal** <GE-97>

**The Serpent Path** <SN-11>

## Neeake (Fred Shaw)

Since 1986, Neeake, also called Fred Shaw (Shawnee) has been Principal Storyteller to the Shawnee Nation United Remnant Band. He tells stories in many places; his animal stories are featured at the Cincinnati Zoo.

The Earth Diver <GE-03>  
Bear <GE-07>

## New Castle

An earthwork complex in east central Indiana possibly related to Anderson Mounds.

Anderson <AN-01>

## Newark

One of the Hopewell culture's greatest earthworks once covered the area where the city of Newark, Ohio now stands. Visitors can now view enormous parts of it at Octagon State Memorial and Moundbuilders State Memorial. Nearby are other earthworks, including the Alligator effigy.

The Newark Earthworks <NK-01>  
The "Alligator" <NK-27>  
Flint Ridge <NK-23>  
An Architecture of Alignments <NK-43>  
High Bank <HB-01>  
Geometry and Culture <GE-12>

## observatory

A building or place from which the sky can be observed, and the positions and qualities of stars, planets, the sun and moon noted. Modern observatories hold telescopes; ancient ones provided permanent architectural markers for observations, or were situated where natural markers (such as mountain tops) worked in the same way.

Ancient Observatories <GE-01>

## obsidian

A black translucent volcanic glass, favored by the Hopewell culture especially for creation of ceremonial blades; a highly treasured material brought to the Ohio region from the Rocky Mountains.

Precious Materials <GE-22>

Deposits <GE-92>

## octagon

A shape with eight sides, which appears in some of the geometric earthworks in the Scioto Valley and at Newark.

The Octagon <NK-02>  
An Architecture of Alignments <NK-43>  
High Bank <HB-01>  
Ancient Observatories <GE-01>  
Geometry and Culture <GE-12>  
Grave Creek Mound <GV-01>

## offering

A presentation or gift made to a god or supernatural being; deposits left under mounds may have been offerings to the spirits of ancestors or others.

Deposits <GE-92>  
Pipes Mound <MC-08>

## Ohio

The state of Ohio was named for the river which defines its southern border. Originally, this Iroquois word may have meant “beautiful river.” In the central part of the Ohio River’s watershed were the most magnificent mounds and earthworks built by ancient American Indian cultures now called Adena, Hopewell, and Fort Ancient.

The Great Valley <IN-31>  
Ohio Valley Region <IN-49>  
Marietta <MA-01>  
Portsmouth <PM-01>  
Preservation <GE-25>  
Sacred Landscape <GE-84>  
Ten Thousand Mounds <GE-93>

## Ohio Historical Society

A private group largely funded by the state of Ohio, its museums hold extensive native artifact collections. The society has sponsored earthwork investigations, and now maintains some of the sites open to the public, such as Fort Ancient.

History (Mound City) <MC-04>  
Golf and Prayer <NK-50>

## Olds, Julie

Cultural Preservation Officer for the Miami Nation, Oklahoma.

Native Preservation <GE-27>  
NAGPRA and Respect <GE-61>

## Ottawa

An Eastern Woodland tribe, living in the Ohio region at the time of European settlement there.

Timeline: Tribes in the Ohio Valley <TM-88>

## oval

A shape resembling an egg or elongated circle, featured at some earthwork sites.

Cincinnati <CI-01>  
Great Enclosure (Turner) <TN-04>  
The Cosmological Plan <GE-87>

## oxidize

To be combined with oxygen, a chemical change which can occur when objects are heated.

The Foursquare (Fort Ancient) <FA-15>

## Paint Creek

A tributary of the Scioto River; its valley and tributaries are very rich in earthworks, including the Hopewell Mound Group.



The Scioto Valley <IN-51>  
Seip <SP-01>  
Seip and Baum <SP-08>  
Hopewell Mound Group <HP-01>

## Paleoindians

Native people who lived in the Ohio Valley as much as 15,000 years ago, in wandering bands, gathering plants and hunting.

Timeline: Paleoindians in the Great Valley <TM-82>

## panpipe

A musical instrument found in various forms around the world, made of several pipes or reeds of different lengths bound together, and played by blowing across the top. Hopewell panpipes had two to five pipes, and were held in copper or, occasionally, silver or meteoric iron cases.

Music <GE-77>  
Deposits <GE-92>

## parallel, parallel walls

Going in the same direction and an equal distance apart; parallel walls were often features of earthwork complexes and suggested passages or roadways.

Fort Ancient <FA-01x>  
Hopeton <HT-01>  
Geometry at Newark <NK-16>  
Geometry and Culture <GE-12>  
Timeline: Early Appreciation for the Earthworks <TM-90>

## pavement

A hard smooth surface, created in the ancient Ohio region by adjoining flat limestone pieces. The builders of the earthworks paved certain gateways and other areas, and created paved circles and rings.

Great Gate (Fort Ancient) <FA-03>  
South Gate (Fort Ancient) <FA-11>

## pearl

A smooth, lustrous deposit formed around a grain of sand or other matter inside a shellfish; fresh water pearls from river mussels were prized by the earthwork building cultures.

Ceremonial Robe <HP-15>  
The M'sikamekwi and Great Tomb (Seip) <SP-02>  
Elevated Circle (Turner) <TN-02>  
Precious Materials <GE-22>  
Deposits <GE-92>

## pilgrimage, pilgrims

A pilgrimage is the journey to a sacred place or shrine made by a person (a pilgrim) for religious reasons. It is possible that the huge earthwork sites were places of pilgrimage, where ancient people went to honor ancestors and celebrate other spiritual events.

South Gate (Fort Ancient) <FA-11>  
Pipes Mound (Mound City) <MC-08>  
Processions (Newark) <NK-07>  
The Great Hopewell Road <NK-15>  
Precious Materials <GE-22>

## Plank, Geoffrey

Associate Professor of History at the University of Cincinnati, Dr. Plank specializes in colonial American history and Native American history.

Naming These Cultures <GE-90>

## plague

An illness that sweeps through and affects large numbers of a population.

Timeline: The Great Dying <TM-87>

## plaque

A flat plate usually for mounting on a surface for ornament or information. The earthwork builders made rectangular copper plaques of various sizes, usually with two holes for hanging, and wore them on the body or posted them on wood display poles or elsewhere.

Precious Materials <GE-22>

## plateau

An elevated, level piece of land; a flat hilltop or tableland. Hopewell hilltop enclosures surrounded plateaus that were sometimes flattened artificially.

Fort Ancient <FA-01x>

Walls and Water (Fort Ancient) <FA-04x>

Pollock <PL-01>

## platform mound

A flat-topped mound suitable for a building or activity; only a few of these appear in the Ohio Valley.

Marietta <MA-01>

## point

Sharpened stone instruments for attaching to knife and spear handles, points have been crafted by American Indians throughout their history. People of the Hopewell culture favored not only the traditional flint, but also obsidian and quartz; ceremonial points were even made of mica. The bow and arrow did not arrive in the Ohio Valley until after AD 1000.

Deposits <GE-92>

Timeline: Paleoindians in the Great Valley <TM-82>

## Pollock Earthworks

A partial hilltop enclosure near Xenia, Ohio, extensively investigated over many years by Dr. Robert Riordan of Wright State University.

The Little Miami Valley <IN-50>

Pollock <PL-01>

Dr. Riordan's Excavations (Pollock) <PL-11>

Construction Sequence (Pollock) <PL-25>

pond

A still body of water smaller than a lake. Earthworks sometimes featured artificial ponds.

Walls and Water (Fort Ancient) <FA-04x>  
Hopewell Hilltops <GE-16>

Poolaw, Linda

Delaware tribe member in Anadarko, Oklahoma; former Chief of the Delaware Grand Council, which unites Delaware people across North America for cultural preservation.

Moon <GE-02>

Pope, Hawk

Chief of the Shawnee Nation United Remnant Band.

Ten Thousand Mounds <GE-93>

Portsmouth Earthworks

Elaborate earthworks built on both sides of the Ohio River at the mouth of the Scioto; now mostly disappeared.

Ohio Valley Region <IN-49>  
The Scioto Valley <IN-51>  
Portsmouth <PM-01>

postmolds

Dark marks left in the soil when wooden posts rot away, or when the posts are removed and holes refilled; post molds provide evidence of the existence of wooden buildings in the distant past.

Mount Horeb <MH-01>  
Eagle Mound (Newark) <NK-12>

The Woodhenge (Stubbs) <SB-06>  
Anderson <AN-01>

## prehistoric

From the time before writing was practiced. Because this meaning suggests that prehistoric events are not “history,” this program uses the term “ancient” instead. “Late Prehistoric” is a label for a period of time in North America, the thousand years immediately before the arrival of Europeans.

Timeline: Fort Ancient Culture <TM-86>

## preservation

Keeping something intact and free from harm. Few of the ancient mounds and earthworks have been preserved in modern times, and many of the remaining ones are endangered.

Circleville <CR-01>  
Preservation <GE-25>  
Native Preservation <GE-27>  
Timeline: Early Appreciation for the Earthworks <TM-90>  
Timeline: Destruction and Preservation <TM-91>

## primordial

Being or happening first in the sequence of time, often meaning early in creation or before human thought or time.

Water <GE-26>

## Putnam, Frederick Ward (1839-1915)

Curator of ethnology and archaeology at Harvard University’s Peabody Museum at the end of the 19<sup>th</sup> Century, he investigated the famous Serpent Mound in Adams County, the Turner Earthworks, and Foster’s.

History (Serpent) <SN-05>  
Turner <TN-01>  
Foster’s <FS-01>  
Timeline: Destruction and Preservation <TM-91>

## quartz

A very hard mineral made of silica; besides points and blades made of flint (a kind of quartz) the earthwork builders valued translucent quartz crystals.

Precious Materials <GE-22>  
Deposits <GE-92>

## ravine

A deep narrow valley made by running water; the earthwork builders used ravines and changed them in engineering the landscape.

Walls and Water (Fort Ancient) <FA-04x>  
Kern Serpents (Fort Ancient) <FA-02>  
Mount Horeb <MH-01>

## redundancy

Repetition, exceeding what is necessary or natural. Redundancy is common in the structures and arrangement of objects in Hopewell culture sites.

Elaboration and Ritual <GE-88>

## reincarnation

The concept of a dead person coming back to life, or taking on a living form. Reincarnation, at least for some people, was generally accepted in Eastern Woodland traditions.

Reincarnation <GE-86>.

## resources

Materials usable by people; the natural environment provides such useful resources as wood, game animals, seeds, and water.

Ten Thousand Mounds <GE-93>

## ridge

A long, narrow elevation, as along the tops of a chain of hills; ridges form an important part of Ohio Valley geography, and served historic tribes as pathways.

Great Gate (Fort Ancient) <FA-03>  
Elevated Circle (Turner) <TN-02>

## Riordan, Robert

Archaeologist, Professor of Anthropology at Wright State University, Dayton, Ohio; principal investigator of the Pollock Earthworks site. (See Bibliography under "Pollock.")

Pollock <PL-01>  
Dr. Riordan's Excavations (Pollock) <PL-11>  
Construction Sequence (Pollock) <PL-25>

## ritual

A ceremonial act or set of acts, performed in a set order and manner.

The Ceremonial Center (Hopewell) <HP-04>  
Processions (Newark) <NK-07>  
The Serpent Path <SN-11>  
The M'sikamekwi and Great Tomb (Seip) <SP-02>  
Fire and Snake Mounds (Turner) <TN-18>  
Burning Things <GE-18>  
Reincarnation <GE-86>  
Elaboration and Ritual <GE-88>  
World Renewal <GE-97>

## road

So-called roads built by the creators of the earthworks were very broad, as wide as a super highway, and bordered by low, straight earthen walls.

Marietta <MA-01>  
The Newark Earthworks <NK-01>  
The Great Hopewell Road <NK-15>  
Portsmouth <PM-01>

## sacred

Related to religious beliefs and practices; even when little is known about a people's beliefs, sacred spaces and objects may be recognized by the way they are situated, made, maintained and used.

South Gate (Fort Ancient) <FA-11>  
The Foursquare (Fort Ancient) <FA-15>  
Geometry and Culture <GE-12>  
Water <GE-26>  
Sacred Landscape <GE-84>  
Ten Thousand Mounds <GE-93>  
Making Fire <GE-94>

## sacrifice

The act of offering something or someone valuable to the giver so that some good (grace, or mercy, or bounty) might be gained. Probably the idea of sacrifice was behind some ritual activities of the earthwork builders.

Burning Things <GE-18>

## Salisbury, James (1823-1905) and Charles (1821-1888)

The Salisbury brothers lived in the Newark area in the mid-19<sup>th</sup> Century, when much of the earthworks remained visible. After years of careful surveying and measurement, they created a very accurate map of the earthworks. James was also a physician, and invented the "Salisbury Steak" to nourish wounded soldiers in the Civil War.

Histories and Controversies (Newark) <NK-09>

## sand

Made by river action or part of glacial till, sand was an important element in earthwork and mound building: spread on floors, or as mound layers, or used to cover certain deposits.

Central Mound (Mound City) <MC-07>  
Eagle Mound (Newark) <NK-12>  
Elevated Circle (Turner) <TN-02>  
Fire and Snake Mounds (Turner) <TN-18>  
Earth, Soil <GE-50>



Timeline: Geological Formation of the Ohio Valley <TM-81>

## Scioto River

A tributary of the Ohio River draining much of central Ohio; its valley is lined with large geometric earthworks and has been called the heartland of Hopewell culture.

The Scioto Valley <IN-51>  
Hopeton <HT-01>  
Portsmouth <PM01>  
Tremper Mound <PM-02>  
Hopewell Mound Group <HP-01>

## Seeman, Mark

Archaeologist at Kent State University in Ohio, author of many works on ancient North American cultures, including *The Hopewell Interaction Sphere* (see Bibliography).

Sacred Landscape <GE-84>

## Seip Earthworks

Geometric earthwork and mound complex on Paint Creek where major finds of artifacts were made.

The Scioto Valley <IN-51>  
Seip <SP-01>  
Seip and Baum <SP-08>  
Deposits <GE-92>

## Seneca

An Eastern Woodland tribe, part of the Iroquois Confederacy; some Seneca were in the Ohio Valley when the first pioneers arrived.

The "Alligator" <NK-27>

serpent, snake

The snake or serpent has held important spiritual meaning for American Indian cultures throughout their history; associated especially with renewed life because of how it sheds its skin. For some tribes, the so-called horned serpent, or Great Serpent, was a chief spirit of the watery underworld.

Fire and Snake Mounds (Turner) <TN-18>  
Great Serpent Mound <SN-01>  
Mississippian Serpent <SN-02>  
History (Serpent) <SN-05>  
The Serpent Path <SN-11>

## Serpent Mound

This enormous effigy snake mound, located in Adams County, Ohio, is open to the public as an Ohio state memorial.

Effigies <GE-52>  
Great Serpent Mound <SN-01>  
History (Serpent) <SN-05>  
The Serpent Path <SN-11>  
Timeline: Destruction and Preservation <TM-91>

## settlement

Most evidence of housing in the Adena and Hopewell cultures has been isolated single buildings, or maybe two or three buildings in small "hamlets." Recent evidence suggests large temporary villages were built near earthwork sites.

Fort Ancient <FA-01x>  
"Old Fort" (Portsmouth) <PM-03>  
Gardening <GE-09>  
A Hopewell Settlement <GE-13>

## shaman

A kind of priest: in tribal American Indian societies, a shaman moves between the visible world and the invisible spirit world in order to interpret and influence events.

Processions (Newark) <NK-07>  
The Newark Shaman <NK-14>

## Shawnee

An Eastern Woodland tribe living in the Ohio Valley region at the time of the earliest European settlement there; possibly the descendants of the Fort Ancient culture.

Portsmouth <PM-01>  
The Serpent Path <SN-11>  
The Earth Diver <GE-03>  
Bear <GE-07>  
Ten Thousand Mounds <GE-93>  
Circle of Life <GE-96>  
Timeline: Tribes in the Ohio Valley <TM-88>

## shells

The earthwork builders made many beads and ritual objects from shells, both local freshwater shells and seashells brought from the Atlantic or the Gulf of Mexico.

Elevated Circle (Turner) <TN-02>  
Ceremonial Robe <HP-15>  
Mississippian Serpent <SN-02>  
Precious Materials <GE-22>

## Shetrone, Henry (1876-1954)

Archaeologist and head of the Ohio Historical Society, active in the 1920s and '30s. (See Bibliography under "Hopewell Mound Group" and "Seip Earthworks.")

History (Mound City) <MC-04>

## Smithsonian Institution

Founded in 1846 through a gift to the United States from British chemist James Smithson, this institution featured the Ohio Valley earthworks in its first publication, Squier and Davis's *Ancient Monuments of the Mississippi Valley*.

Timeline: Early Appreciation for the Earthworks <TM-90>

## smoke

A powerful element in American Indian traditions, smoke has had many meanings and purposes, including cleansing a person or place, establishing peace, sending a message outward, showing or causing visions, and suggesting the transformation of what seems real into another form.

Fire <GE-15>  
Fire and Snake Mounds (Turner) <TN-18>

## soil

Earth, consisting of particles of organic (formerly living) matter and rock. Earth was an essential building material for ancient Ohioans, and held spiritual power as the source of plant life and as the ground, or foundation, of existence.

Walls and Water (Fort Ancient) <FA-04x>  
Construction Sequence (Pollock) <PL-25>  
Gardening <GE-09>  
Earth, Soil <GE-50>  
Timeline: Geological Formation of the Ohio Valley <TM-81>

## solstice

Either of two times per year when the sun is farthest from the equator. The summer solstice, about June 21, is the longest day of the year; the winter solstice, about December 21, is the shortest. The extreme sunrise and sunset positions at those dates were sometimes marked by the ancient earthworks.

Anderson <AN-01>  
The Foursquare <FA-15>  
Kern Serpents <FA-02>  
High Bank <HB-01>  
An Architecture of Alignments <NK-43>  
Great Serpent Mound <SN-01>

## spirit, spiritual

In traditional American Indian world views, invisible spirits with various qualities and powers exist and act within the everyday visible world; spirits of the dead also congregate in special places.

Pipes Mound (Mound City) <MC-08>  
The Serpent Path <SN-11>

Fire <GE-15>  
Burning Things <GE-18>  
Precious Materials <GE-22>  
Reincarnation <GE-86>  
Deposits <GE-92>  
Circle of Life <GE-96>  
World Renewal <GE-97>

## spool; earspool

Distinctively shaped like a spool or squat hourglass, this Hopewell copper ornament served as an earring. Spools also appeared in the hands of buried people and probably had extra significance. Some were coated with silver.

The Copper Shapes <HP-13>  
The Newark Shaman <NK-14>  
Precious Materials <GE-22>

## square

This equal-sided rectangle was an important shape in Hopewell geometric earthworks.

Circleville <CR-01>  
The Foursquare (Fort Ancient) <FA-15>  
Hopewell Mound Group <HP-01>  
“Old Fort” (Portsmouth) <PM-03>  
Seip and Baum <SP-08>  
Geometry and Culture <GE-12>  
The Cosmological Plan <GE-87>

## Squier, Ephraim G. (1821-1888)

A newspaper publisher in Chillicothe, Ohio, Squier teamed with Dr. Edwin Davis to survey and record mounds and earthworks in the 1848 classic of archaeology, *Ancient Monuments of the Mississippi Valley* (see Bibliography).

Preservation <GE-25>  
History (Mound City) <MC-04>  
History (Serpent) <SN-05>  
Timeline: Early Appreciation for the Earthworks <TM-90>

## stars

While ancient Ohio Valley peoples may have tracked star constellations or movements, it is difficult to tell since the stars' apparent location in the skies today is so different from what it was in ancient times. Planets keep their "place" over time; but to date there is not evidence of planet viewing or tracking in ancient Ohio.

Anderson <AN-01>  
Ancient Observatories <GE-01>  
Effigies <GE-52>  
Light and Shadow <GE-98>

## sterile

Free of impurities; "sterile soil" contains no artifacts.

Wall Section (Hopeton) <HT-02>

## Stonehenge

A set of 80 four-ton bluestones set in concentric circles, created between 2100 and 1900 BC on the Salisbury Plain in southern England; the most famous of many large, ancient stone structures in Europe. Some of the stones marked astronomical events.

Ancient Observatories <GE-01>

## Stubbs Earthworks

A geometric earthwork along the Little Miami river, now destroyed, where a wide variety of timber architecture was recently discovered.

Stubbs <SB-01>

## sun, solar

The movements of the sun were indicated by Adena and Hopewell constructions, but were most clearly marked in the ancient Ohio Valley by people of the Fort Ancient culture. Their villages were planned in accord with the location of shadows cast by central poles at key times of the year; and they created effigy mounds with sun orientations.

An Architecture of Alignments <NK-43>  
Mississippian Serpent <SN-02>  
Kern Serpents <FA-02>  
Geometry and Culture <GE-12>  
Effigies <GE-52>

## symbol, symbolic

A symbol represents something else in some way; often what is represented is an idea, as when a drawn circle might represent the world.

Ceremonial Robe <HP-15>  
Ceremonial Gatherings <GE-11>  
Fire <GE-15>  
Elaboration and Ritual <GE-88>

## symmetry

The same form on one side of a real or imaginary dividing line as on the other. Symmetry characterizes many earthwork forms and artifacts from the mounds.

Preservation <GE-25>  
An Architecture of Alignments <NK-43>  
The M'sikamekwi and Great Tomb (Seip) <SP-02>

## tablet

A slab or plaque, meant to hold an inscription. "Adena tablets" are small rectangular stone pieces engraved with symmetrical designs, possibly used to print fabrics or the skin.

Cincinnati <CI-01>

## taboo

Forbidden or prohibited, usually because of belief that handling a certain object, or performing some act, may place a person in danger from spiritual forces.

Elaboration and Ritual <GE-88>

Taylor, William

Professor of Architecture at Howard University in Washington, DC.

[The Uncanny](#) <GE-81>

Templeman, Robert

Ethnomusicologist (expert in music of cultural groups around the world) and specialist in music of the Americas; former Assistant Professor and director of groups performing Andean and other music at the University of Cincinnati.

[Music](#) <GE-77>

terrace

A flat stretch of ground with a steep slope on the side facing a waterway. Tributaries of the Ohio River often have several terraces rising from the river bed; the large geometric earthworks were generally placed on a high terrace.

[Cincinnati](#) <CI-01>

[Geometry and Culture](#) <GE-12>

[Hopewell Mound Group](#) <HP-01>

[Ohio Valley Region](#) <IN-49>

[Flint Ridge](#) <NK-23>

[Great Enclosure \(Turner\)](#) <TN-04>

[Timeline: Geological Formation of the Ohio Valley](#) <TM-81>

textile

A cloth; textiles found in connection with the earthworks and mounds were finger-woven, possibly on small hanging looms; fabrics were extremely varied, dyed and printed with designs.

[Precious Materials](#) <GE-22>

[Textiles](#) <GE-64>

till

Rock debris carried and deposited by a glacier.

[Timeline: Geological Formation of the Ohio Valley](#) <TM-81>



## timbre

The quality of a sound.

Music and Authenticity <GE-78>

## tomb

A grave or burial chamber. Tombs were part of most earthwork and mound sites. Their form varied; some featured log or stone chambers.

Precious Materials <GE-22>

Deposits <GE-92>

Grave Creek Mound <GV-01>

Burials (Hopewell) <HP-11>

Flint Ridge <NK-23>

The M'sikamekwi and Great Tomb (Seip) <SP-02>

Great Enclosure (Turner) <TN-04>

## tonic to dominant

A melodic change in Western music, from the key note on which a melody is based to the fifth tone in the key scale: a familiar and satisfying move within this tradition. The tonic to dominant change rarely occurred in American Indian music before the arrival of Europeans.

Music and Authenticity <GE-78>

## topography

The form of the land; the shape of the surface of the land.

"Old Fort" <PM-03>

## tree of life

Among Indians across the Americas, an important symbolic idea is a pole or tree, which represents the axis or center of the world, and connects the underworld, the everyday world of the earth's surface, and the heavens.

Cincinnati <CI-01>

## Tremper Mound

A large mound near the mouth of the Scioto River, which covers the remains of a building and where a collection of effigy pipes was found.

Tremper Mound <PM-02>

Portsmouth <PM-01>

Pipes Mound (Mound City) <MC-08>

## trench

A ditch, often with a flat bottom, dug by people for drainage or other purposes; careful trenches are dug by archaeologists to find and study remains under the earth.

Dr. Riordan's Excavations (Pollock) <PL-11>

Construction Sequence (Pollock) <PL-25>

The Woodhenge (Stubbs) <SB-06>

Elevated Circle (Turner) <TN-02>

## tributary

A smaller river that flows into a larger one.

Marietta <MA-01>

Timeline: Geological Formation of the Ohio Valley <TM-81>

## tundra

A treeless area with permanently frozen subsoil and only low growing plants; part of the Ohio area landscape during the Ice Age.

Timeline: Archaic Indians in the Great Valley <TM-83>

## Turner Earthworks

Elaborate geometric earthworks just east of Newtown, Ohio, along the Little Miami River; now disappeared.

Little Miami Valley <IN-50>  
Turner <TN-01>  
Fire <GE-15>

## Underwater Panther

Several American Indian tribes share the concept of a panther-like spirit who dwells in the watery underworld, beneath the world where people live. This figure with its curling tail may be the one pictured in the so-called Alligator Mound.

The "Alligator" <NK-27>

## unio

A freshwater shellfish, a mussel; the river-dwelling fat mucket mussel was the chief source of pearls for the cultures of the early Ohio Valley.

Elevated Circle (Turner) <TN-02>

## vertex (vertices, pl.)

In mathematics, the point at which the sides of an angle intersect; in the geometric earthworks, a corner where two walls meet.

An Architecture of Alignments <NK-43>

## vibrato

A slight wobble in the tone from a voice or instrument; valued differently in traditional American Indian and Western music.

Music and Authenticity <GE-78>

## vitriify

To make into glass or a glass-like substance, especially by heating. At some locations Hopewell culture fires were hot enough to vitriify objects and soil.

Foster's <FS-01>

## walls, construction

The earthwork builders created lines of earth called walls or embankments, from very low to over twenty feet high and often many feet wide. Soil could come from nearby or far away; sometimes the walls were faced with limestone. The walls usually enclosed geometric or natural figures, too large to have been roofed.

Walls and Water (Fort Ancient) <FA-04x>  
Hopewell Mound Group <HP-01>  
The Great Circle (Newark) <NK-03>  
Processions (Newark) <NK-07>  
Pollock <PL-01>  
Hopewell Hilltops <GE-16>  
Inside a House <GE-40>

## Washington, George (1732-1799)

The first president of the United States owned land along the Ohio's banks; he respected Indians living there, and may have modeled mounds at his home, Mt. Vernon, after ancient ones he saw in the Ohio region.

Order of the Cincinnati <GE-80>  
Timeline: Early Appreciation for the Earthworks <TM-90>

## water

Mounds and earthworks were built along the Ohio and its tributaries, and often designed with water features such as ditches and ponds.

Hopewell Mound Group <HP-01>  
The Ceremonial Center (Hopewell) <HP-04>  
Walls and Water (Fort Ancient) <FA-04x>  
Processions (Newark) <NK-07>  
Water <GE-26>  
Timeline: Destruction and Preservation <TM-91>

## Welsh, Mark

Trustee, Native American Indian Center of Central Ohio.

Making Fire <GE-94>

## Western

A term often used to mean whatever has to do with the European-based cultures of Europe and the Americas.

**Music and Authenticity** <GE-78>

## Wilson, Okeme Frank StandingStorm

Chief, Lower Eastern Ohio Mekoce Shawnee.

**The Serpent Path** <SN-11>

**Circle of Life** <GE-96>

## woodhenge

A circle of heavy timber poles, similar in ring shape and monumental size (although not necessarily similar in purpose) to England's Stonehenge. Several built by ancient Ohio Valley people have been found; the largest was at Stubbs.

**The Little Miami Valley** <IN-50>

**Stubbs** <SB-01>

**The Woodhenge** <SB-06>

## Woodland, Eastern Woodland

The Woodland period, also called the Woodland Tradition, lasted from about 1000 B.C. to about A.D. 1000 in eastern North America, and included the periods of the mound and earthwork building cultures of the middle Ohio valley. The Hopewell culture flourished in the middle of this time, the "Middle Woodland" period. "Eastern Woodlands" is a name given to North America east of the Mississippi River where certain American Indian tribes have lived, sharing some cultural traits.

**Bear** <GE-07>

**Fire** <GE-15>

**Music** <GE-77>

**Turtle Pipe** <MC-21>

**Fire and Snake Mounds** <TN-18>

**Timeline: Archaic Indians in the Great Valley** <TM-83>

**Timeline: Tribes in the Ohio Valley** <TM-88>

## world renewal

The idea that the continuation of the world and of life depends in part on human ceremonies and actions, part of many American Indian belief systems,

**World Renewal** <GE-97>

## Wyandot

An tribe of the Eastern Woodlands, also called Hurons, originally from the Ontario region of Canada, but driven into the Ohio area by the 1730s.

**Timeline: Tribes in the Ohio Valley** <TM-88>

## Wymer, Dee Anne

Archaeologist at Bloomsburg State University, Pennsylvania; authority on the ancient natural environment and on Hopewell artifacts; contributor to *A View from the Core* (Pacheco, Editor), and *Ohio Hopewell Community Organization* (Pacheco and Dancey, Editors). (See Bibliography.)

**World Renewal** <GE-97>