

ARCHAEOLOGY

Also, be sure to see [GELLER HILL](#)

The earthworks at Newark were social gathering places, religious shrines, pilgrimage centers, and even astronomical observatories. Much of the Newark Earthworks were destroyed by the growth of the modern city of Newark, Ohio, but elements that remain are a monumental testimony to the achievements of the [Hopewell culture](#). The main part of the site, not including the additional square and the hilltop enclosure, covered more than four square miles and more than seven million cubic feet of earth were used in its construction.

The [Newark Earthworks](#) preserves significant remnants of the largest set of geometric earthworks ever built. Originally there was a circular enclosure twelve hundred feet in diameter, another slightly smaller circle, a huge octagon, an oval earthwork surrounding a dozen mounds, and a square enclosure 950 feet on a side, all interconnected by a series of parallel walls. In addition, there were many small circular enclosures ranging from 50 to 250 feet in diameter, a scattering of other mounds and pits and, across the South Fork of the Licking River, yet another square enclosure about 750 feet on a side and a semi-circular earthwork surrounding the top of a hill overlooking, what Squier and Davis referred to as, the "remarkable plain" below.

The main part of the site, not including the additional square and the hilltop enclosure, covered more than four square miles and more than seven million cubic feet of earth were used in its construction. A people we now call the [Hopewell culture](#) built these monumental enclosures nearly two thousand years ago. Archaeologists refer to Newark and similar sites as "ceremonial centers," but we do not know the full range of activities engaged in by the Hopewell people at such places. Hopewell shamans undoubtedly performed ceremonies here, including mortuary rituals at particular locations. But the earthworks at Newark and other centers were not just centers for the dead – they were centers for the living. They were social gathering places, religious shrines, pilgrimage centers, and even astronomical observatories. Much of the Newark Earthworks have been destroyed by the growth of the modern city of Newark, but the elements that remain are a monumental testimony to the achievements of the Hopewell culture.

[Please Click here for an in depth discussion of What are the Newark Earthworks.](#)

Also see

[THE NEWARK EARTHWORKS: A WONDER OF THE ANCIENT WORLD](#)

GELLER HILL AND THE NEWARK EARTHWORKS

It has become increasingly clear that the builders of the Newark Earthworks integrated their monumental architecture into a sacred landscape incorporating prominent hills, rivers, ponds, soils, vegetation, and the points on the horizon marking the rising and setting of the moon in its 18.6-year long cycle. Earlham College professors Ray Hively and Robert Horn argue that the lunar alignments that determine much of Newark's ancient architecture were observed first from four high hill tops surrounding the Raccoon Creek Valley. Alignments connecting these vantage points mark the rising and setting of the sun on the summer and winter solstices, establishing that the sun, as well as the moon, held a special place in the beliefs of the [Hopewell culture](#)

William Romain, in two papers published in the [Hopewell Archaeology Newsletter](#) argues that Geller Hill, a prominent hilltop located in a [City of Heath park](#) about a mile southwest of the Octagon Earthworks, was a key location for the architects of Hopewellian Newark.

Geller Hill is a [glacial kame](#) that projects more than 30 feet above the surrounding landscape. Several small burial mounds are shown on the top of this hill in an 1862 map drawn by [James and Charles Salisbury](#). It is not clear that any traces of these mounds remain today.

Ancient Ohioans since at least the Late Archaic period, more than 4,000 years ago, selected such natural features for their cemeteries. So this hill may have been sacred to the people of this valley for millennia before the Newark Earthworks were conceived.

Romain's argument for the importance of Geller Hill to the Hopewell culture begins with his observation that lines connecting three points, the northern apex of Geller Hill, the center of the Great Circle Earthworks, and the center of the octagonal enclosure at Octagon Earthworks, form "a fairly accurate [isosceles triangle](#)." An isosceles triangle has two equal sides and therefore two equal angles. Moreover, the distance from the point on Geller Hill to the center of the Octagon, and from the same point to the center of the Great Circle, is approximately equal to seven times the diameter of the circular enclosure at the Octagon Earthworks, often referred to as the Observatory Circle. Hively and Horn showed that this unit of measure, the "OCD," or "Observatory Circle Diameter," was integral to the

layout of the Newark Earthworks. Romain extrapolates further using the OCD as a basis for measurement and argues that Geller Hill was the key location from which the geometry and astronomy of the Newark Earthworks were projected.

Romain speculates that the small burial mounds located on the Geller Kame were Hopewell in age. Moreover, based on the few documented burials from the cluster of [burial mounds at Newark](#), he suggests the Geller Kame burials might represent the principal resting place of “the Newark shamans, chiefs, and Ancient Ones.” It is equally possible that these were Early Woodland mounds and the later Hopewellian builders of the Newark Earthworks chose to tie their sacred architecture to the burial grounds of their ancestors.

Whatever the correct interpretation of the burial mounds, it is clear that the Geller Kame was a part of the sacred landscape of the Hopewell Culture. Like Ayres Rock, or [Uluru](#) as it is called by the Aboriginal people of Australia, this natural feature of the landscape was integrated into their experience of the wonder of the Newark Earthworks.

FOR FURTHER READING

Romain, William F.

2005 Newark Earthwork Cosmology: This Island Earth. Hopewell

Archaeology Volume 6, Number 2,

<http://www.cr.nps.gov/mwac/hopewell/v6n2/one.htm>.

2005 Design and Layout of the Newark Earthwork Complex.

Hopewell Archaeology Volume 6, Number 2,

<http://www.cr.nps.gov/mwac/hopewell/v6n2/two.htm>.