

BE YE THEREFORE WISE AS SERPENTS

“... be ye therefore wise as serpents...”

- Jesus Christ, around 30 A.D., *Gospel of Matthew 10:16*

When Jesus Christ was ostensibly speaking these words, directing his twelve Apostles to go out and evangelize around the Eastern Mediterranean Sea, here in Adams County, Ohio, it appears that people were following those words a bit more directly. Men and women of the Woodland Cultural phase called Hopewell, who were certainly learned and sophisticated, were definitely practicing their own brand of wisdom of the serpent.

Located in and around the area of what is now named *Serpent Mound State Memorial*, people were living and working, and also practicing cultural lifeways that included using serpent motifs in their artworks and constructing large earthworks, perhaps one specifically of a snake. In fact, people have been known to have been living in Adams County as far back as the end of the last Ice Age, several thousand years ago. It is likely that people coming here at the end of the last Ice Age would have considered the area around Serpent Mound to have been a particularly special place. Why? Because at that time, Serpent Mound was literally at the end of the world.

The southern line of the glaciers at the end of the last Ice Age stopped just north of *Fort Hill State Memorial* (about 6 miles north of Serpent Mound). Anyone arriving at the ridge located just to the south of Serpent Mound during this era, looking north, would have seen a sight to behold: a giant circular depression in the ground about 4-5 miles across, and just beyond it – a two-thousand foot high wall of ice. It was the last place on earth you could go traveling north, unless you wanted to climb that wall of ice. Add to that, the unusual feelings one can get by walking through one of the several areas of stronger or weaker magnetic fields located within this circular depression, and one can quickly realize why people have been more or less continuously making pilgrimages (of one sort or another) to this place ever since.

The strange circular depression and the areas of unusual magnetic fields within it are courtesy of a meteor impact which took place around 200 million years ago. Now known by its' clunky federal moniker, the *Serpent Mound Cryptoexplosion Area Natural National Landmark* (visit the brass plaque located at *Woodland Altars* in the northeast area of the crater), has only recently been confirmed to have been a meteor impact crater by geologists from the Ohio Department of Geology. Over the past 50 years evidence has been slowly piling up in favor of the meteor-impact hypothesis, including mapping of the various magnetic highs and lows in the crater, as well as mapping of a gravity anomaly, as well as numerous fractured rock layers and faults. The final bits of this geologic puzzle were provided by hundreds of drilled “cores” which were analyzed by the Ohio Department of Geology which revealed a tell-tale layer of rare iridium crystals located at around 1,000 feet below the surface which formed as a direct result of the impact. *Shatter cones*, another bit of evidence in that they are produced in meteoritic impacts, have been found throughout the crater – you can see examples of these shatter cones by visiting the *House of Phacops* rock and fossil shop located just outside the crater in Locust Grove located 4 miles east of Serpent Mound.

Whether or not ancient Ohio peoples knew of the origins of the meteor crater doesn't really matter. The fact is people have been coming to the ridge where Serpent Mound is now located for thousands of years. When you visit the park, besides viewing the famous effigy mound, just take a look around and you can see some remnants of that evidence. Located in the area surrounding the parking lot, are three burial mounds: a large conical mound east of the parking lot, a small conical mound adjacent to the picnic pavilion, and a third “elliptical” mound located near the welcome booth. When these mounds were excavated between 1887 and 1889 by Fredrick Ward Putnam from the Peabody Museum at Harvard University, he collected boxes full of artifacts left behind by the various

people who built these mounds. It turns out, that in his excavations, artifacts were discovered that have been identified as being associated with at least five separate cultures and timeframes.

During Putnam's excavation of the large conical mound, it was discovered to have several burials – a couple in the upper layers of the mound are thought to have been from the *Intrusive Mound Culture* (600 A.D. to 1200 A.D.), but at the mound's core was found a skeleton and artifacts belonging to the *Adena Culture* (800 B.C.E. to A.D. 1). The small, conical mound adjacent to the picnic pavilion was found to have artifacts related to the *Hopewell Culture* (100 B.C.E. to 500 A.D.). The small "elliptical" mound near the welcome booth in its' upper layers of burial was found to have artifacts related to the *Fort Ancient Culture* (1100 A.D. to 1650 A.D.). There were additional burials (without mounds) that were excavated along the southern ridge of the park, and additional areas excavated near to all three mounds that revealed traces of a village site which turned up artifacts from all these cultures and one additional one – artifacts from the *Archaic Period* (8,000 B.C.E. to 500 B.C.E.) were also found to be among the artifacts that Putnam uncovered. Photos of all the artifacts that Putnam collected during his excavations at Serpent Mound can be seen in a display book in the Serpent Mound Museum Gift Shop.

So evidence has been found for people being at Serpent Mound for thousands of years, but native people were also living around Serpent Mound right up into historical times. One of the last recorded instances of a native village settlement in Ohio, was a 'summer camp' located in the valley on the other side of Brush Creek from Serpent Mound in the 1820's. Another late historical-era native 'summer camp' in Adams County was located just a few miles south of Serpent Mound along Brush Creek near the village of Lawshe that may have lasted until 1840. The native peoples continued to live in Ohio and around Serpent Mound until being forced out at gunpoint. The last of the native peoples were forcibly removed as late as 1842-43 – many to Cincinnati, where they were loaded onto riverboats and shipped away – Ohio's quiet version of the *Trail of Tears*.

It wasn't until Ephriam G. Squier and Edwin H. Davis visited Serpent Mound in 1846 and later published a survey map of it in 1847 in *Ancient Monuments of the Mississippi Valley* that the wider world learned of the existence of Serpent Mound. When Squier and Davis first visited Serpent Mound, the whole of the ridgetop was forested. Allegedly, in 1860 a tornado touched down along the ridgetop and felled a majority of the trees. The property was then further cleared to make way for farming.

Cornfields surrounded the effigy mound when Putnam first arrived in 1883, and he feared that continued farming practices of plowing and tilling would forever destroy the mound, so over the next several years he raised enough awareness of the threat to Serpent Mound that a group of women in Boston led by Alice C. Fletcher collected enough money to purchase approximately 60 acres of what was then known as Lovett's Farm to preserve the ancient sculpture.

Ironically, Putnam, the man most identified with "saving" Serpent Mound, also did the most damage to the mound, and forever altered its original design. Archaeology in the 1800's was much less sophisticated than today, and digging for artifacts to house in museums was a bit of a competitive race among leading museums. So Putnam went about his digging and collecting, once the property was secured. Of course Serpent Mound is quite lengthy and excavating it would not have been nearly as simple as digging up a conical mound, so sifting through the entire effigy wasn't feasible – however Putnam did cut twelve trenches through various points of the serpent effigy, and never found any "artifacts" (ignoring that the Serpent Mound earthen sculpture itself is one of the largest symbolic 'artifacts' ever found) or burials. Putnam was able to discover just how careful, thoughtful, and methodical the physical construction of the Serpent was done by its original builders through layering of ash, stones, and various specific colors of clay in a symbolic and ceremonial way. Putnam, however, in just two short summer seasons of

excavating did his lasting damage, the majority of which was to the area of the Serpent “from the neck up” – the ‘Oval’ and ‘Head’ area.

By carefully examining the several drawings, schematics, and photos of Serpent Mound that were produced prior to Putnam’s excavations, one can see that most of them show that the Oval was in fact a concentric, ‘double-walled oval’ (an oval within an oval). That original design feature is clearly not what we see today. One revealing photograph that was taken during Putnam’s excavations shows parts of both ovals cleared of all vegetation – awaiting excavation. Once Putnam was done with his digging, he “reconstructed” the Serpent – and the ‘oval within an oval’ vanished – leaving behind a single, thick-walled Oval. This was the most major structural change Putnam made, but not the only one. The early diagrams (including Putnam’s own sketches of the Serpent) prior to “reconstruction” uniformly show that there were two symmetrical linear mounds extending from the back of the ‘head’ of the Serpent. Putnam, in his excavations and then his reconstructions, changed these features. Today, there is visible only a single, small conical mound remnant on the north side of the ‘head’, now unconnected from the rest of the effigy. Its matching twin mound on the south side of the Serpent is now almost imperceptible due to the Ohio Historical Society’s unfortunate decision to put an asphalt pathway right over the top of it several years ago! Most people walk right over the top of this part of the effigy and have no idea that such a feature exists. Lastly, the whole of the ‘body’ of the Serpent itself has been modified. Putnam began this during his reconstruction by gathering up what he concluded to have been eroded topsoil surrounding the mound, and piling it back up onto the ‘body’ of the Serpent - amplifying what actually existed. Later, at least twice since Putnam, the Ohio Historical Society has brought in several dump truck loads of topsoil and “resurfaced” the mound, and although those actions haven’t changed the overall design, the Serpent today stands much, much taller and is much thicker than when it was originally found.

As much as the fundamental changes in design have thrown up protestations, controversy also still surrounds Serpent Mound as to which pre-historic culture created Serpent Mound originally. It was long thought by many archaeologists that Serpent Mound was built by the Adena, since the large conical mound nearby was clearly of Adena origin. The simple thinking was, if the Adena were known to have been nearby, then they must have built it. Later on, the Serpent Mound was shown to have been constructed not simply as a representation of a mythological being, but that it also has a functional aspect. This purposeful design of the Serpent Mound has been shown to have been constructed with regular units of measure and certain principles of geometry that were also found to have been used at various other Hopewell geometric earthworks in Ohio, linking the two types of design.

The functional part of both the Serpent Mound and many of the Hopewell geometric earthworks is that many of them are aligned to various cycles of time noted by the risings and settings of the Sun and Moon: the summer and winter solstices, the spring and autumnal equinoxes, the northern and southern-most risings and settings of the Moon during its’ 18.6 year long Metonic cycle, and perhaps even the ‘Last-Frost-Date’ sunrise. Also seemingly included in the noteworthy alignments may be certain risings and settings of Venus and other visible planets which follow the sun’s ecliptic path. Serpent Mound seems particularly special though, in that to some degree these various alignments have all been found at Hopewell geometric earthwork sites, but all of which seem to be included in the design at Serpent Mound. One author, Ross Hamilton, in *Mystery of the Serpent Mound*, has suggested that the layout of Serpent Mound may also be a representation of the constellation of Draco. The fact that all these astronomical alignments have been found at one site is extraordinarily remarkable – the fact that they are incorporated into a single, recognizable, symbolic design (of a serpent) is sheer genius. Nothing else like it exists anywhere in the ancient world. Serpent Mound may be the only ancient site in the world which incorporates solar, lunar, planetary, and celestial alignments in a single symbolic design. Over twenty other serpent effigy mounds of earth and stone were known to have existed in the eastern and central parts of the USA

and Canada, but none were as large, nor nearly as sophisticated. Only a few of these ancient serpent sculptures survive.

The only ancient earthwork site which comes close to matching Serpent Mound's sophisticated level of fusion of geometry, astronomy, and design is the Newark Earthworks, built by the Hopewell. The Hopewell also were known to have created magnificent symbolic serpent representations in copper and mica artifacts which have been excavated at their geometric earthworks, and thought to have played a role in their cosmological and religious beliefs. Here is where the 'origin' controversy begins.

In the mid-1990's, an archaeological dig was conducted at Serpent Mound under the auspices of the Ohio Historical Society, where several archaeologists re-cut through the Serpent Mound into one of Putnam's original trenches, looking for any material that could be carbon-dated – thereby settling the question of the age of the Serpent Mound, and finally answering the question of which culture built Serpent Mound. They were able to find three small pieces of carbon (about a thimble full) which they then carbon-date tested. The first piece was dated at 2700 years before present (approximately 700 B.C.E.) and the second two pieces dated to 1050 A.D.. Now, if we refer back to the dates for the various prehistoric cultures in Ohio, we have one piece of carbon that dates back to the earliest time of the Adena culture, and two pieces that date to just prior to, or are among the earliest-ever dates for the Fort Ancient culture. So what is the Ohio Historical Society's "official" conclusion? The Serpent Mound was built by the Fort Ancient culture. Notwithstanding the fact that the Fort Ancient Culture never built anything to the same level of sophistication, anywhere, and also conveniently ignoring that much older piece of carbon. From a purely scientific perspective, it hardly seems likely that the two bits of carbon dated to 1050 A.D. found in one re-cut trench constitute a comprehensive study (nor is ignoring 1/3 of the data), and will not likely "fix" the controversy anytime soon.

Perhaps much like Stonehenge in England, which has been found to have been modified, added-to, and changed by successive cultures over the centuries, Serpent Mound will be looked at in much the same way by future archaeologists. We have certainly seen how in the last 150 years Serpent Mound was fundamentally altered several times -- who knows what earlier changes may have taken place? It seems we'll likely need to discover a bit more 'serpent wisdom' to effectively solve the enigma of Serpent Mound.

Jeffrey Wilson, November 2009