HEMISPHERES

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Hemispheres such as those shown in Figures 1 and 2 are frequently encountered in farm collections. Their dome-shaped surfaces, smoothed edges, and usually flattened bases distinguish them from plow-broken or fire-cracked rocks. The base on certain examples is rough and irregular, making the hemisphere look like the broken top of a pestle, but even on these, the edges show smoothing. Many hemispheres are somewhat irregularly fashioned, as if a cobble with the almost-desired contour had been selected, then roughly shaped. The raw material is usually fine-grained granite, often of a pleasing color and texture, although specimens of quartzite and limestone are known. Sizes range from 1 1/2 to 2 3/4 inches wide and from 7/8 to 1 3/4 inches high.

Hemispheres are similar in appearance to cones, but the two types of artifacts differ in several respects. Hemispheres are usually larger than cones. The granite and quartzite used for hemispheres were available locally in the glacial drift, but cones were often made of exotic materials such as hematite, quartz crystal, and even chlorite. The workmanship on hemispheres is normally uneven. Cones are symmetrical and highly polished, like those shown in Figure 3.

The line differentiating cones from hemispheres and even from natural formations may be indistinct. When an anthropologist excavated human interments from the Adena Cresap Mound in West Virginia, he found two hemispheres that he thought could have been of natural origin, but wrote that he was certain of their intentional placement within the mound (Dragoo 1963:86).

Hemispheres may date to the Adena culture of 2,000 to 3,000 years ago. I have found five hemispheres on known Adena sites in Darke County. But Jim Stephan, who has meticulously collected artifacts from his purely Archaic site, has never recovered a hemisphere, and Bob Converse has never found one on the Hopewell Troyer site.

The purpose of hemispheres — and cones — is unknown. Hemispheres could have been preforms for cones, but hemispheres made of the often exotic materials of cones are not found. It has been suggested that hemispheres were used as grinding, rubbing, or polishing tools, but the awkwardness of grasping such a small rounded cobble makes that questionable. They could have been heated and used to stone boil food, as their rounded edges would not have damaged woven or ceramic cooking pots. Or hemispheres could have served as markers in games. Early people in North America almost certainly participated in games, similar to those recorded among historic tribes such as the Ottawa and Potawatomi between AD 1600 and 1760 (Quimby; 129). As with many artifacts made during prehistoric times, we may never understand the true purpose of hemispheres.

Reference Cited
Dragoo, Don W.

Quimby, George I.

Figure 1 (Holzapfel): Hemispheres in Darke County. Left to right: granite, limestone, granite, quartzite (burned).

Figure 2 (Holzapfel): Hemispheres found by Dan Schleich of Fayette County, Ohio. Left to right: quartzite, granite, quartzite.

Figure 3 (Holzapfel): Cones.