

ARCHAEOLOGY ANSWERS

A bulletin series for the Archaeology Program of the Michigan State Historic Preservation Office



Image courtesy of the Castle Museum of Saginaw County History

Bulletin 5 | www.michigan.gov/archaeology/

Artifact or Imposter: Identifying Stone Tools

What are Artifacts & Stone Tools?

Artifacts are portable objects made or used by people. Because people have occupied Michigan for roughly 14,000 years, artifacts can be found throughout the state. Finding artifacts on your land can be exciting, because it creates a tangible connection to people in the past. Stone tools are human made artifacts manufactured from stone. All societies throughout time have relied on stone tools because stone is versatile and abundant.

Precontact Native American cultures made and used a variety of stone tools, such as spear and arrow points, knives, axes, adzes, banner/bird stones and pipes. Stone tools were used for hunting, cleaning hides, cutting grasses, chopping carving wood, smoking, and so much more. Most stone tools were hafted onto wood and bone handles or shafts to be used, but the bone and wood has long-ago decayed. This is why stone tools are such common artifacts, because they are what remains centuries later.

Archaeologists are often asked to identify stone tools. But there are a variety of naturally occurring objects, created through geological processes, that can be easily mistaken for artifacts. This guide is meant to help you determine whether you have an artifact or a geological imposter.

Examples of Stone Tools

Flint-Knapped Tools

Most stone tools are made by flint knapping. This involves striking glass-like stones, such as chert, flint, and obsidian, with a hammer-stone or percussor. Spear and arrow points, like those pictured here, are commonly made by flint knapping.



Ground Stone Tools

Some stone tools are made by grinding, polishing, drilling, & sanding down rocks like sandstone, granite, and slate to shape them. Common types of ground stone tools include axes, adzes, banner stones, beads, and pipes. The artifact pictured here is a ground stone adze.



Examples of Geological Imposters

Omarulluks

Omarulluks or omars are a type of glacial erratic that has rounded hemispherical voids & pits. The voids result from the weathering away of soft carbonate concretions within the harder greywacke stone. While omars may look drilled or intentionally shaped, these stones are naturally occurring.



Chert Nodules

Chert is one of the raw materials used to make stone points and knives. But not all pieces of chert are artifacts. Nodules of chert can be found in glacial deposits, naturally weathered into interesting shapes that may look like artifacts.



Weathered Limestone

Limestone is a sedimentary rock that formed in ancient oceans. It is composed from the decayed shells of organisms. This means that limestone easily weathers, especially in water. Limestone may naturally weather in ways that make it look like it was drilled or shaped intentionally, but they are natural formations.



Iron Concretions

Concretions are natural accumulations of minerals. They tend to form in spherical or disk shapes around a central core of material and can be a variety of sizes. They weather out of limestone and other sedimentary rocks and were transported and redeposited by glaciers. Iron-rich concretions can often look like the have been intentionally shaped or polished, but it is just a natural part of weathering.



Glacial Till

Glacial till, or drift, is sediment deposited by glaciers from ice or water melt from glaciers. Till can include unsorted sand, cobbles, and boulders of different sizes and materials. Because all of Michigan was glaciated repeatedly, there are till deposits in many places throughout the state. Cobbles within till are often weathered by water, they can erode into unusual shapes that may look like stone tools. In some places, people have created piles of till cobbles to remove them from their farmland and these piles can be found on the landscape.



For more information visit: www.michigan.gov/archaeology