

## **Geocache hidden on the museum grounds**

### ***Michigan Puddingstone***

Michigan Puddingstone, a conglomerate of primarily quartzite and pebbles of jasper. The pudding stone pebbles vary in color from red to brown and pink to purple. Pudding stones are considered metamorphic and sedimentary. Pudding stone minerals contained within the rock may also vary. In some puddingstones minerals such as chromites, corundum, platinum, diamonds, gold, sapphire, and zircon have been found. Tightly cemented puddingstones make great ornamental stones when cut and polished properly.

Michigan Puddingstones were formed a billion years ago in northeast Canada. Puddingstone is a type of sedimentary rock which first formed in river channels. During the Ice Age, they were pushed down through Eastern Michigan from Ontario Canada by the glaciers. The white is quartz sand which has cemented itself together over millions of years. Mixed with it is a combination of other pebbles and stones of various sizes, shapes and colors. Some may even contain fossils. Another name for puddingstone is quartz conglomerate, meaning sedimentary rock composed of quartz and various other minerals.

Puddingstone is ideal for the hobbyist. It can be tumbled to make wonderful key chains, necklaces and other small items. The larger pieces can be cut, polished and made into book ends, lamp shades, clocks, fountains and just about anything else you can think of. My favorite items are night lights and sun catchers.

Hunt for Puddingstones in Michigan on the far Eastern End of the Upper Peninsula and the Northeast part of the Lower Peninsula. In Canada look on St. Josephs Island and the surrounding areas.

### ***Museum's Puddingstone***

The museum's Puddingstone came from one of the American Aggregate gravel pits south of Milford. With a little imagination, it resembles a giant arrow head. The stone pays a tribute to the power of the glaciers. Glaciers formed many of West Bloomfield's precious inland lakes and islands, including our own Apple Island, whose surface form tells us the direction of the final glacier that sculpted out Orchard Lake.

The gravel pit owner gave the boulder to the museum. A nearby crane owner was paid \$100 to haul it to the museum. The only spot where the crane could easily drop off the boulder was where it sits today on a thin gravel bed pointing Westerly toward Apple Island. It was calculated that the stone nearly reached the capacity of the vintage crane. At 200 pounds/cubic feet, it is estimated the stone weighs about one ton.

Geologists name an outstanding rock block that was carried by glacial ice and then deposited at some distance from the outcrop from which it was derived an erratic. Erratic because it sits above a normally flat field of glacial till. Another name for it is a perched boulder. It's called a puddingstone, a name originally applied in Great Britain to a conglomerate consisting of well rounded pebbles whose colors are in marked contrast with the fine-grained matrix or cement. The prize Michigan puddingstones often have the red jasper to a lesser or greater degree. Because of the jasper, the origin of the stone has been established as having come from a Canadian mountain outcrop someplace beyond the St. Mary's River and Sault St. Marie. Many tourist spots in that area relate to the puddingstone, but for one to make it South to West Bloomfield and then be discovered or uncovered is considered by Dorr's Geology of Michigan as quite rare.

It's an easy way to talk to kids visiting the museum about glacier power, said to have once been up to a mile high over spots in Michigan. A beachcomber walking the Lake Michigan shoreline around Point Betsie, Benzie County can, if he's lucky, still find a rounded flake of puddingstone with a spot of jasper in it, almost as good as finding a Petoskey stone with a hole in it!

From Jim Laarman – 6/12/2009

Buzz, In case you don't discover previous references, I love talking about the puddingstone, one of my favorite rocks!

The one along the north side of the museum came from one of the American Aggregate gravel pits south of Milford. It first caught my eye because, with a little imagination, it resembled a giant arrow head. When I found it to be a conglomerate or pudding stone upon closer examination, I thought it would be a great landmark, perhaps honoring old chief Pontiac, but most certainly paying tribute to the power of the glacier that formed many of West Bloomfield's precious inland lakes and islands, including our own Apple Island, whose surface form even told us the direction of the final glacier that sculpted out Orchard Lake.

The pit owner gave the boulder to the museum, and I contacted a nearby crane owner to haul it to the museum, giving him \$50 for his time. The only spot where his crane could easily drop off the boulder was where it sits today on a thin gravel bed pointing Westerly toward Apple Island. At the time, we figured that it nearly reached the capacity of his vintage outfit, which was another reason why he got the 50 buck tip! As I recall, at 200 #/ cubic ft, we figured it weighed about a ton.

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## Wikipedia

Puddingstone, or Pudding stone, is a conglomerate rock made up of a mixture of different, irregular sized grains and pebbles held together by a finer matrix, usually formed from quartz sand. The sedimentary rock is formed in river channels and may contain various minerals such as chromite, corundum, platinum, diamond, gold, sapphire, and zircon. Its name is said to derive from a resemblance to Christmas pudding. [1] [2]

There are different types of puddingstone, with different makeup and geographical distribution. These include:

Hertfordshire puddingstone, principally found in Hertfordshire, England

Bearfort Mountain puddingstone, is a purple puddingstone found in northern New Jersey

Roxbury puddingstone, principally found in and around Boston, Massachusetts

Plumstead Common has a fine example of puddingstone, probably left behind after the last Ice Age

St. Joseph Island puddingstone, found in the St. Mary's River area of Northern Ontario contains red and brown pieces of jasper, a kind of quartz.