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**CELEBRATE  
MICHIGAN**



# AT THE QUARRY, THE PETOSKEY STONE TELLS ITS STORY

If the Petoskey stone could talk, it would tell the story of a shallow, sunny sea that once covered what now is Michigan and teemed with thousands, perhaps millions, of coral colonies.

"It was like the Great Barrier Reef," said Steve Wilson, a state geologist, comparing the little-known extinct reef to Australia's famous one.

"I don't know how long it stretched, but these critters — fossil corals — are everywhere. They're in Michigan, Ontario, Ohio, Iowa, Arizona, Alaska."

One of the sea's most successful residents was *Hexagonaria*, a genus, or group, of corals that lived about 350 million years ago. It is the remains of these creatures that are imprinted on the Petoskey

stone, which might better have been named the state invertebrate fossil because that's what it is. (The new state fossil, the mastodon,

was a vertebrate, or animal with a backbone.)

In the early part of its life, "*Hexagonaria* looked like a little jellyfish," said Wilson.

"These little buggers were floating anywhere they could and attaching to anything hard that they could to continue the growth of the coral."

Once they had gripped something hard, such as a rock, they grew upwards, building little tubes as they ascended. "They were always migrating up the tube and living in a calyx, or little cup, at the top," said Wilson.

At intervals, the corals budded, or divided, creating new animals that grew in the same way. Occasionally, the colony entered a sexual phase, producing new floaters



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This close-up photograph shows the tops of the tube-like structures where *Hexagonaria* once lived.



PHOTOS BY MARY SCHROEDER

Mike Mayse, manager of the Cemex quarry in Charlevoix, finds some Petoskey stones for the Yak. Make that Petoskey rocks!

that set off to start new colonies.

"Their strength was in being able to link themselves together," said Wilson. "They started as one and divided, like branches on a tree."

The Yak had always wanted to find a Petoskey stone — what Michigan doesn't? But he had never had any luck because he didn't

know exactly what to look for. So in mid-April, he met Wilson in Charlevoix, on Lake Michigan, which is prime marine fossil territory. Wilson took him to a nearby quarry, where he found more Petoskey stones — rocks, really — than he could carry, and later to Fishermans Island State Park, where he found a half-dozen small specimens on the beach!

"This is kind of like the rearing ground for Petoskey stones," Wilson said of Cemex quarry, where limestone — and any imbedded Petoskey stones — is mined, crushed and made into cement. "This is where they lived, sort of — and they can be incredibly large."

Quarry manager Mike Mayse has three at home the size of bushel baskets, "but that's an incredible size," he said.

The quarry, which is closed to the public, looked like a huge crater at the lake's edge — or a very big half-eaten cake.

Most of the Petoskey stones

are scattered in the cake's upper layers, "like sprinkles on frosting," said Wilson. But there were plenty in the middle of the cake, too, 41 feet below the lake's surface.

"You trip over them in the rain, but they're harder to find when it's dry out," said Mayse, casually picking up one and handing it to the Yak.

(Water brings out the fossil's distinct hexagon pattern, which is why collectors often carry water bottles.)

The fossils have rough surfaces because they've been buried for so long — since the glaciers plucked them from the Earth's bedrock up to 1.8 million years ago.

Those found along the area's beaches have been worn smooth by years of water and wave action. Each spring, a new trove is washed up from the lake, replenishing a treasure that seems limitless.

Mayse loves collecting them and has let school groups visit the quarry to share his enthusiasm.

"I call it geotherapy," he said from atop the limestone cake. "I'll come up here in a light drizzle for 30 minutes and just lose myself in history. I may not even take them home. I just pick them up, look at them and put them back."

By Patricia Chargot



The Yak scours the Lake Michigan beach for Petoskey stones — and found a half-dozen in a half-hour!