

POLISHING MAKES STONE INTO A STAR

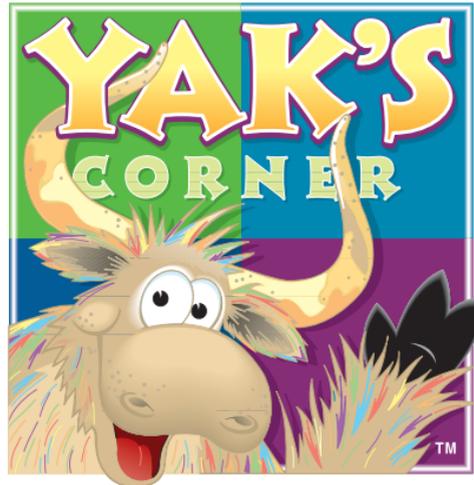
The state gem — the greenstone — isn't exactly a dazzler, at least at first sight.

"They're just ugly little green nuggets," said Ken Flood, an Upper Peninsula gemologist whose specialty is cutting and polishing greenstones.

"When you polish them up, though, you'd be amazed at the turtleback pattern — it's beautiful."

And incredibly old.

The stones were created about a billion years ago — by volcanoes that helped form part of what is now the western Upper Peninsula, said Steve Wilson, a state geologist.



The molten lava solidified, creating rocks riddled with holes. Later, dissolved minerals passing through the rock caused fine fibrous crystals to grow at the edge of the holes. They radiated inwards and intersected, forming a turtleback pattern.

The stones became a favorite prey of rock hounds and divers who scoured the beaches and coastal waters of Isle Royale National Park

in Lake Superior.

"You used to be able to find greenstones the size of golf balls," said Smitty Parratt, Isle Royale's chief interpreter. "Now you're lucky to find them the size of small gravel."

After park rangers noticed how the island's minerals were disappearing, the laws were tightened, and in 1998 the park banned the removal of any rocks or minerals from either the island or its waters.

Flood, the owner of Keweenaw Gem & Gift in Houghton, has been buying greenstones for 20 years, and now he gets his best ones from individuals and museums that have old collections. But old stones are disappearing, too.

"It's getting hard to find these

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big stones — the 1-inch and 1.5-inch greenstones we used to find," he said.

He sold one last summer for \$600, not including the cost of the gold mounting.

Rock hounds still comb the Keweenaw Peninsula's old copper mines for greenstones, and still find a lot, but they tend to be smaller and of poorer quality.

But there's hope.

Even now, the sleeping stones are being freed by erosion from the bedrock below Lake Superior, said Parratt.

"They'll sort of regenerate over time, which is exciting," he said. "They'll get washed downstream, and storm waves will push them up on shore."

Someday.

By Patricia Chagot



PHOTO FROM THE A.E. SEAMAN MINERAL MUSEUM

Chlorastrolite (klor-ASS-troe-lite) literally means "green star stone." Also known as the greenstone, it's quite beautiful when polished.