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- A local caver and his friends have unearthed some rich and surprising pieces of Minnesota's prehistoric past.



A hot find from the
ICE AGE

John Ackerman wasn't looking to dig up history as he crept through the cold, wet southern Minnesota cave that spring afternoon in 2008. A longtime caver, the 54-year old Farmington man simply wanted to dig out some sediment to see where a newly discovered side passage might lead.

But the prehistoric stag moose antler he and two friends unearthed that day and a saber-tooth cat skull they found two months later may be the most significant paleontological discoveries in the Upper Midwest in years.

Scientists say the fossils are the first of their kind discovered in Minnesota, meaning that both ice-age mammals, long extinct, ventured farther north than previously thought.

“What is incredible about these finds is that there is a window into Minnesota’s natural history that we didn’t even know existed,” said David Mather, national register archaeologist with the Minnesota Historical Society. “It’s mind-boggling to think of what might be there.”

SABER-TOOTH CAT

- Scientific name: Smilodon
- Several species lived from 2.5 million years to 10,000 years ago in North and South America.
- Knife-like canines were up to seven inches long
- Size of modern tiger or lion but with a bear-like weight of up to 650 lbs

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Clay Kraus, left, John Ackerman, middle, and Dave Gerboth found the stag moose antler last April as they searched one of 32 caverns Ackerman owns on property in southeastern Minnesota. It's the first evidence of the prehistorical animal to be found in Minnesota.



The stag moose antler found in the cave looked at first like the leg of an old stove.

John Ackerman, who owns a furniture-restoration business in Burnsville, shows a portion of the nearly 175 bones found in Bat River Cave and Tyson Spring Cave. A caver for a quarter century, he owns 32 underground caverns in southeaster Minnesota.

Chris Widga, assistant curator of geology for the Illinois State Museum in Springfield, said the closest discoveries of saber-tooth cat fossils to Minnesota have been in an Indiana cave and at an open site in Missouri.

Stag moose fossils have been found throughout the Great Lakes region, but never in Minnesota, he said.

“It certainly changes what we think we know,” Mather said.

That’s no elk

Ackerman, who owns a furniture restoration business in Burnsville, and fellow cavers Dave Gerboth and Clay Kraus found the stag moose antler last April as they searched one of 32 underground cavers Ackerman owns on property in Fillmore County in southeastern Minnesota.

In more than 25 years of searching the caves, Ackerman said, he and his friends “never unearthed anything.” But as the group dug through a pile of clay blocking a side passage, they unearthed what looked to be a leg to an old stove.

Ackerman looked closer, and realized it was an old bone. Hew stuffed it into his wet suit, and later took it to Mather at the historical society.

“I thought it had to be elk,” Mather said, recalling his first reaction.

Mather and Ackerman went to the Science Museum of Minnesota to inspect ancient elk skulls and bones. But the antler’s shape and connection to the skull didn’t match up with an elk skull.

Later, while searching the website of the Illinois State Museum, which has a database of North America fossil finds, Mather spotted a photograph of a skull fragment of a “stag moose.”

“I’d never heard of it,” said Mather, who has written an article about the discovery for the upcoming issue of Minnesota Conservation Volunteer. “I clicked on that and saw a picture of a stag moose skull that looked just like this thing.”

Ackerman sent the antler to the Illinois museum, which confirmed that it belonged to a stag moose.

Two months later, Widga drove to Fillmore County to explore the caves himself. While inspecting a series of smaller fossils, he stumbled on what he thought was a rock but turned out to be the saber-tooth cat skull.

“Very, very few important paleontological or archeological sites are actually discovered by professionals,” Widga said. “Most are discovered by people walking around deer hunting or doing what they do and bringing in what they find.”

More bones found

Widga said he doesn’t yet know the age of the stag moose antler. But radiocarbon dating on the cat skull has shown that it is 22,500 years old, placing the cat in Minnesota at a time when glaciers still covered parts of the Upper Midwest.

Part of southeastern Minnesota, known as the “driftless area,” wasn’t ice-covered at that time, but scientists didn’t know whether large Ice Age animals roamed there. Most of those species, Widga said, became extinct at the end of the Pleistocene, 10,000 to 12,000 years ago.

“We’d expect them to be in southeast Minnesota, but we didn’t really know,” he said.

Since then, Ackerman and friends have found 175 more bones in caves that Ackerman has discovered and owns. Widga, who revisited the caves a few weeks ago, said many are from extinct animals.

Two bones, located a mile and a half from the spot where the saber-tooth skull was found (in the same cave) also appears to be from a big cat, Ackerman said.

“It’s a very, very significant find,” he said.

It may not be the last.

There are “miles and miles of cave passages” yet to explore, Ackerman said. He and some friends discovered a new section just last weekend.

“We’re a long way from being done,” he said.