

Subject State fossil
Authors Myers and others
Analyst Colbey Sullivan
Date March 11, 2025

Summary

This bill would designate *Castoroides ohioensis*, commonly known as the giant beaver, as Minnesota's official state fossil. It would also require the Office of the Secretary of State to preserve a photograph of the giant beaver that is approved by the Department of Natural Resources.



161 Saint Anthony Avenue, Suite 919
Saint Paul, Minnesota 55113

February 20, 2024

Dear Chair Klevorn,

The mission of the Minnesota Indian Affairs Council (MIAC) is to protect the sovereignty of the eleven Minnesota Tribal Nations and to ensure the well-being of American Indian citizens throughout the state of Minnesota. MIAC is the official liaison between state and tribal government and its executive board consists of the elected tribal leaders.


The Minnesota Council of Indian Affairs have been introduced to the Science Museum of Minnesota's ongoing effort to have *Castoroides ohioensis* (Ćapa in Dakota and Amik in Ojibwe) named as Minnesota's official state fossil. We would like to extend our support of this endeavor.


The likely interaction between Ćapa/Amik and the first peoples of Minnesota makes this a good choice to represent its ancient life and connect with its modern culture. The living beaver is important to healthy wetlands across this state, and the presence of this ancient relative across much of Minnesota shows its importance as well. Establishing a state symbol for this animal would open new paths for education around the natural heritage of fossils, and hopefully connect people further to its deep history.

As representatives of the sovereign tribal nations within Minnesota, we identify and support the importance of *Castoroides ohioensis* in our state's narrative, and believe it to be a fossil candidate that would have the support of our respective communities.

Therefore, The Council encourages you to advance legislation that formally designates Ćapa/Amik as Minnesota's official state fossil, thereby honoring our land's past and inspiring future generations to cherish and protect our natural treasures.

Pidamaya, Thank you,

DocuSigned by:

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President Robert L. Larsen
Lower Sioux Indian Community
Board Chairman
Minnesota Indian Affairs Council

DocuSigned by:

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Shannon Geshick
Executive Director
Minnesota Indian Affairs Council



March 11, 2025

Dear Chair Nash and Lead Klevorn,

As fellow paleontologists in the state of Minnesota, we write to you in support of the Science Museum of Minnesota's efforts to establish *Castoroides ohioensis* (an ancient and giant relative of the modern beaver) as the state fossil. We think this is an excellent choice to represent the paleontological record of this state, as it is well-represented with multiple nearly complete skeletons. *Castoroides* would have likely played an important role within its ecosystem at the end of the last Ice Age, just as their modern relatives play an important part in Minnesota's habitats today. Minnesotans can see an original mounted skeleton of *Castoroides* at the Science Museum as well as a phenomenal life reconstruction (plus an original fossil jaw) at the Bell Museum. This life reconstruction was created here in Minnesota as well, by the great team at Blue Rhino Studio in Eagan.

As paleontologists, we often find that many members of the public are unaware that Minnesota even has fossils. By declaring a state fossil, this will increase public awareness that there is a fossil record in Minnesota and hopefully lead to further education about our shared impressive prehistory. We see great value in students learning about *Castoroides* alongside Minnesota's other state symbols. All but four U.S. states have declared a fossil as a state symbol, and this empowers a degree of educational outreach in each of those states. We also think the inclusion of translations in Dakota (Čapa) and Ojibwe (Amik) are an excellent addition to the bill.

There is also an opportune timing here, the annual conference of the Society of Vertebrate Paleontology will be held in Minneapolis this Fall. This conference gathers paleontologists from around the world to discuss the latest research, methods and educational outreach. Having the state fossil declared in time for this rare opportunity would be an extra connection we can make between Minnesota and this scientific community.

Thank you for your time and consideration.

A handwritten signature in black ink that reads "Alexander K. Hastings". The signature is written in a cursive, flowing style.

Dr. Alex Hastings
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Science Museum of Minnesota



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MINNESOTA STATE FOSSIL CAMPAIGN

———— 2025 ————



INTRODUCTION

Minnesota is one of just four states in the U.S. without a fossil as a state symbol. The Science Museum of Minnesota is leading the effort to change that.

As part of its 2021 Days of the Dinosaurs theme, the Science Museum invited its audiences to get smart about Minnesota's ancient life - and get a lesson in civics at the same time! They learned about nine different fossil "candidates" that once called Minnesota home - from the Crow Shark to the Columbian Mammoth.

Then came the voting. More than 11,000 individual voters and students from 61 Minnesota schools raised their voices for their favorite fossil candidates, and *Castoroides ohioensis* (known as *Ćapa* in Dakota and *Amik* in Ojibwe) became Minnesota's choice for official state fossil!

PUBLIC AWARENESS CAMPAIGN

Introducing the nine candidates for Minnesota's official state fossil:



Ancient Bison: This ancient species is one of the “youngest” on the list. It was likely related to the modern bison; scientists are working on making that link. It lived in central and southern Minnesota 60,000–4,270 year ago.



Endoceras: This squid-like creature lived in the Twin Cities area and to the south 450 million years ago during the Ordovician Period.



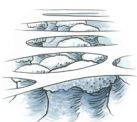
Trilobite (*Dikelocephalus minnesotensis*): This sea creature, which looked like a many-legged insect, lived on the ocean bottoms in what's now the St. Croix River Valley and southern Minnesota around 500 million years ago.



Scimitar-toothed cat (*Homotherium serum*): This lion-sized predator had large teeth - but not as large as the saber-toothed cat! It lived in southeastern Minnesota during the last ice age.



Crow Shark (*Squalicorax*): This medium-sized shark lived in and around the Mesabi Iron Range during the Cretaceous Period (100–90 million years ago). It dined on fish, pterosaurs, and even dinosaurs.



Mary Ellen Jasper (*Stromatolite*): These fossilized mounds of bacteria pumped oxygen into the atmosphere during the early days of life on Earth. Stromatolites are found in northern Minnesota and in the areas around Red Wing. They first arose around 1.9 billion years ago, and in some parts of the world, they still live today.



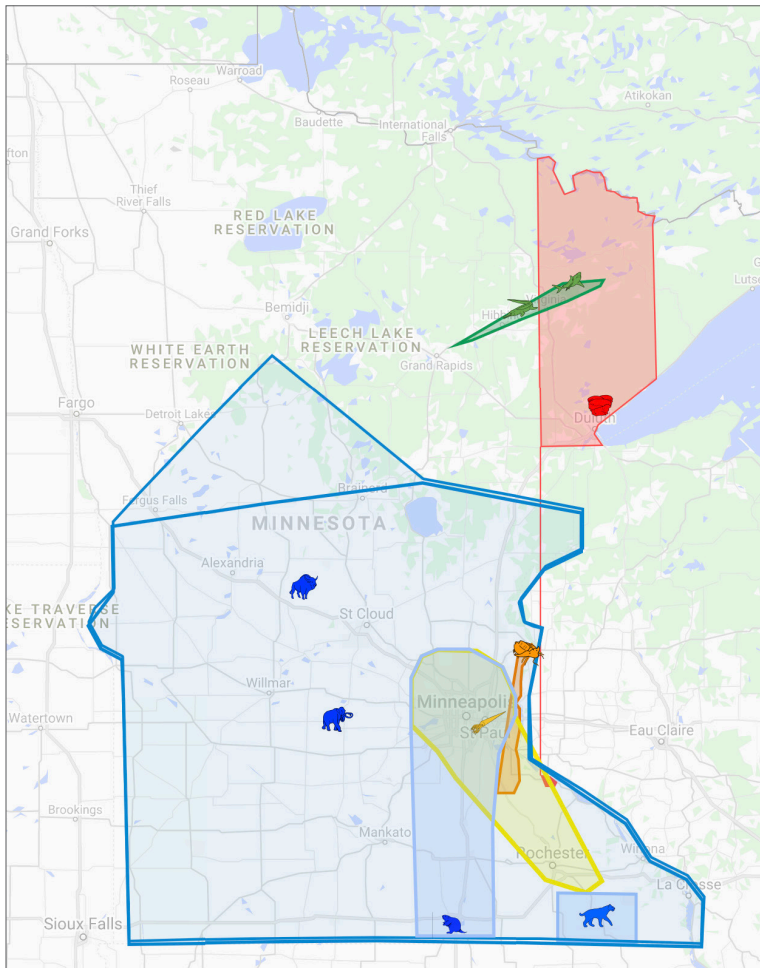
Columbian Mammoth (*Mammuthus columbi*): This giant, found in central and southern Minnesota between 2 million and 12,000 years ago, was less hairy than the more commonly-known Woolly Mammoth.












Giant crocodile-relative (*Terminonaris robusta*): This fish-eating crocodylian with a long, narrow snout made its home on the Mesabi Iron Range during the Cretaceous Period (100–90 million years ago).



Ancient Beaver-Relative (*Castoroides ohioensis*): Known as **Ćapa** [Dakota] and **Amik** [Ojibwe], this giant cousin of the modern beaver was the size of a small bear. It roamed the Twin Cities area and southern Minnesota at the end of the last ice age.



Minnesota State Fossil Candidates

-  Stromatolite
-  Trilobite (*Dikelocephalus minnesotensis*)
-  *Endoceras*
-  Crow Shark (*Squalicorax*)
-  *Terminonaris*
-  Scimitar-toothed cat (*Homotherium serum*)
-  Columbian Mammoth (*Mammuthus columbi*)
-  Ancient Bison
-  *Castoroides ohioensis*

Audiences did their research and cast their votes

The voting period kicked off in mid-August and concluded in late September 2021. Voting was open to individuals and classroom groups. During the extensive public awareness campaign, the museum invited exploration and voting on site and in its email newsletters and social media channels.

Audiences eagerly learned about the state’s prehistoric populations. The State Fossil landing page on smm.org received nearly 21,000 pageviews, and the individual candidate pages, which featured basic information, range, and light-hearted campaign videos for each candidate, brought in nearly 30,000 pageviews. The campaign reached 63,500 social media followers. Voters represented 415 of Minnesota’s zip codes.

With nearly 11,500 votes cast, the top five vote-getters were *Castoroides ohioensis* (25%), the Ancient Bison (16%), the Trilobite (11%), the Scimitar-Toothed Cat (11%), and the Mary Ellen Jasper (10%).

THE PEOPLE'S CHOICE

Castoroides ohioensis (Ćapa in Dakota and Amik in Ojibwe)

Castoroides ohioensis lived in North America from about 1.9 million years to 10,150 years ago during the Pleistocene Epoch, otherwise known as the Ice Ages.

This rodent of unusual size was as large as a black bear and inhabited waterways and the developing glacial lakes as the ice receded across the state. Minnesota has an excellent record of *Castoroides ohioensis*, including nearly complete skeletons found in each of the Twin Cities.

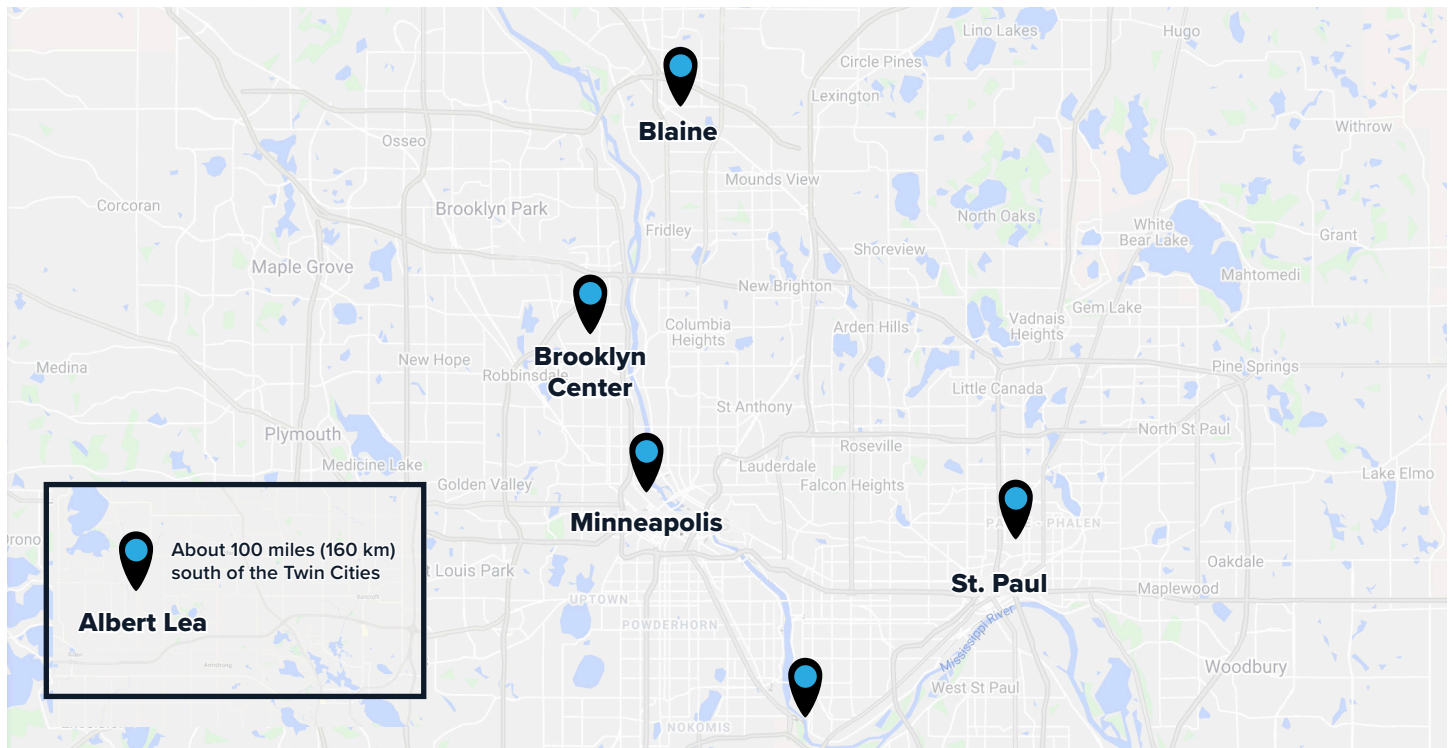
Additional material has been recovered in Blaine and Freeborn County. As beavers constitute a vital part of the modern ecosystem of Minnesota, so did this distant relative during a time when massive mammals roamed our fair state.



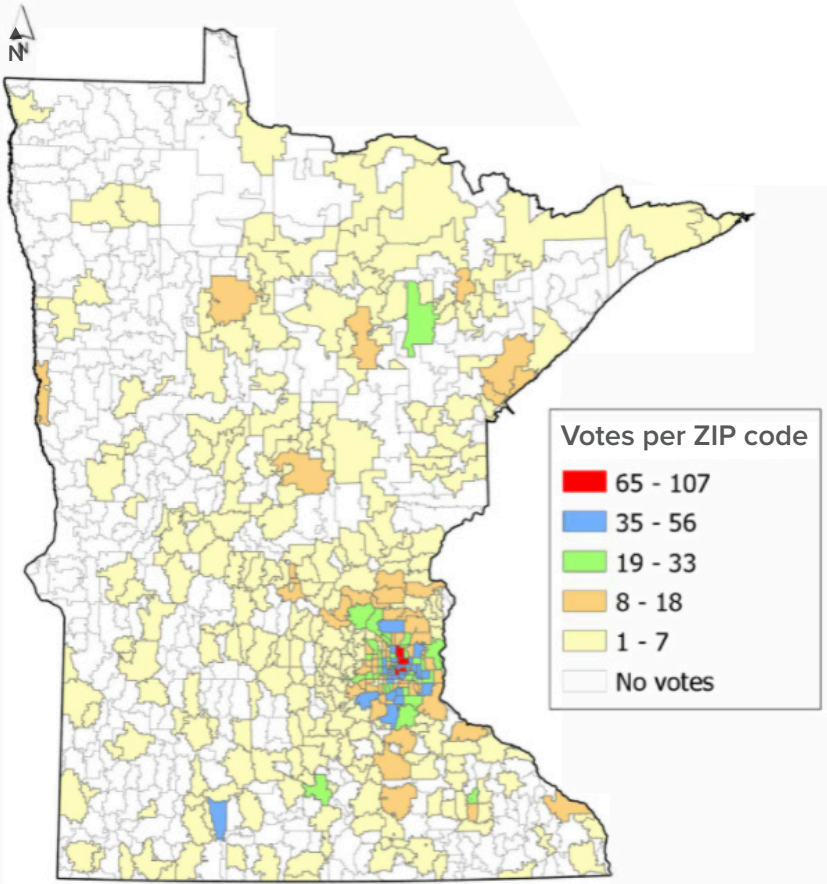
Using Indigenous Language

Whether roaming Minnesota wetlands 11,000 years ago or in 2025, the beaver holds an important place in the ecosystem and within Dakota and Ojibwe culture. Ćapa and Amik can be found in teaching stories, in creation stories, in clan systems, in food systems, and in all areas of life for Dakota and Ojibwe people. In providing a base translation for the Giant Beaver in Ćapa and Amik, room is made for Dakota and Ojibwe speakers to adjust the use for their personal needs. There are many ways to think and talk about things, like age and size, and this translation gives accommodation to the possibilities.

LOCATIONS OF CASTOROIDES OHIOENSIS IN MINNESOTA



STATE FOSSIL VOTERS BY ZIP CODES



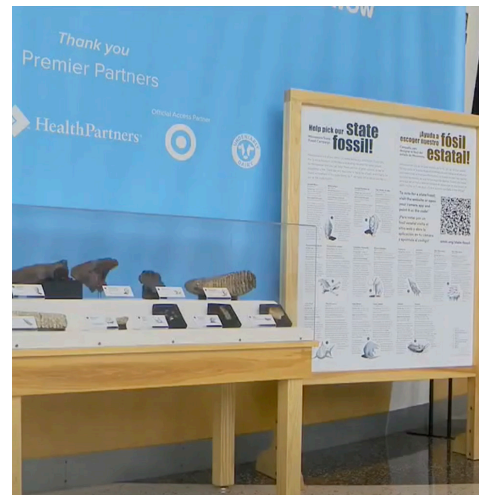
- Total of 11,452 votes
 - 9% outside Minnesota
- 415 total Minnesota ZIP codes

TOP MN ZIPS	ZIP GEOGRAPHY
55112	New Brighton/ Mounds View
55104	St. Paul- Univ/ Midway
55406	Minneapolis- E Lake
55113	Roseville
55407	Minneapolis- So Cent/ 48
55414	Minneapolis- Southeast
55124	Apple Valley
55044	Lakeville
55125	Woodbury
55108	St. Paul- Falcon Hts

CALL TO ACTION

Studying the past helps us prepare for the future. Minnesota’s fossil record is rich with evidence that gives us important clues about the intricate dynamics between life and climate through time. Yet we’re one of only a handful of states without an official state fossil.

After an extensive public awareness campaign in fall 2021 about Minnesota’s complex and varied prehistoric life, Minnesotans voted for their favorite Minnesota fossil. The Science Museum of Minnesota respectfully requests your support of this important legislation, codifying the voting public’s choice of *Castoroides ohioensis* as Minnesota’s official state fossil.





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smm.org