

Fossils In North Dakota

FIND is a newsletter dedicated to helping young readers (in age or spirit) express their love of fossils and paleontology, and to help them learn more about the world under their feet. Each issue will be broken up into sections including Feature Fossils, Travel Destinations, Reader Art, Ask Mr. Lizard, and more!

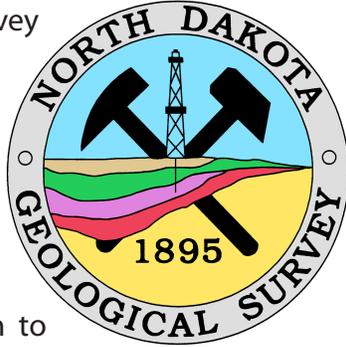
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Editor: Becky Barnes
North Dakota Geological Survey
600 East Boulevard
Bismarck, ND 58505

becbarnes@nd.gov

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<https://www.dmr.nd.gov/ndfossil/kids/newsletterkids.asp>



Feature Fossil: Highgate *Mastodon*

An iconic figure in our gallery is the Highgate *Mastodon*. It has a rich, colorful history full of travel, brass bands, changing hands, being lost in a warehouse (or two!), more travel, and finally assembly in the Heritage Center gallery. State Paleontologist John Hoganson will be writing up the whole interesting history sometime in the future. It will be taking up residence in the hallway as you enter into the museum – an impressive stand-alone fossil.

For now however, the *Mastodon* hangs partially disassembled, its skull, ribs, and backbone looking like some great whale with tusks. The legs and feet have been removed, and any minor repairs taken care of.

Many large skeletons in museums are **casts** (copied with plaster, plastic, or other light materials) - this is in part due to how rare fossils are, how incomplete skeletons can be, and how heavy real fossilized bone is in comparison with cast bones. A skeleton cast generally has an internal **armature** (unseen support system) of metal or wood that helps hold all the bones in place. In the case of the Highgate *Mastodon*, the armature is wrapped under and around the bones, acting as a cradle. It may look like the animal is standing on its feet, but most of the weight is actually suspended from sturdy steel cables connecting it to the ceiling. Because of how young the *Mastodon* is in comparison with, say, a dinosaur,

the bones are actually fairly lightweight for their size. Below are some images of the Paleontology and Heritage Center staff taking apart the skeleton. What a job!



Becky Barnes & Dr. John Hoganson



Dr. John Hoganson & Jeff Person



Bryan Turnbow & Jeff Person



Jeff Person, Bryan Turnbow, Andrew Kerr, and Dr. John Hoganson

Special Events: Museum Expansion!

Most of you already know this, but for you readers new to us: the Heritage Center is expanding! The Heritage Center in Bismarck, ND, is where the Paleontology division of the ND Geological Survey is housed. This is a place to go to see fossil exhibits, talk to paleontologists, and learn about the history of North Dakota.

Right now, the doors are closed so we can work on moving the paleontology lab and collections to a new space within the building, as well as assist in building the new "Adaptation Gallery: Geological Time" exhibits. The doors will open again in September, with the completion of the gallery and hallway exhibits (including Dakota the Dinomummy!). A Grand Opening is scheduled for Friday October 11th, with ribbon cutting ceremony and other special events.

Once we are moved, the remaining three galleries will be worked on as well. Until then, as you enter the new main entrance, you will see the hallway floors are covered in **terrazzo**, which is basically colored stone mixed with a cement-like binder, and sealed with a clear finish. Within the terrazzo, aluminum footprints and designs have been added. So, to find your way to the Adaptation Gallery: Geologic Time entrance, simply follow the dinosaur tracks! You will start off with *Triceratops*, while *Tyrannosaurus* (see below) leads you to the finish.

Leading to the other galleries you will see human footprints, horse and oxen hoofprints, and a line of locomotive tracks.



Just Imagine...

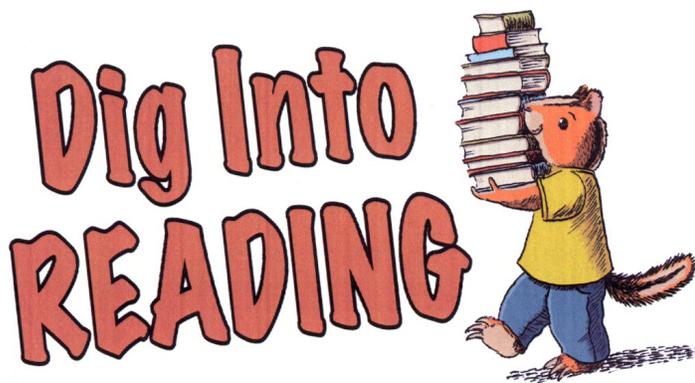
You walk through the new Heritage Center parking lot, finding yourself amidst huge boulders called *glacial erratics* that were carried like sand by huge Ice Age glaciers. Moving towards the new entrance, a giant cube of glass and metal - does it remind you of a teepee? A star pattern? An earth lodge? You can't make up your mind. Finally entering the building, you are met with the Hub of History, where your journey will begin. Do you take in the collection of birds in the hallway? Or do the sparkling rocks and minerals catch your eye first? So many choices!

Ask Mr. Lizard

Have questions about fossils, dinosaurs, or anything related to paleontology? Send them in, and our paleontologists will do their best to uncover the answer for you.

Dig Into Reading: Summer Reading Kickoff

On May 31st, the paleontology staff helped out with our regional library's summer reading program. We felt the theme this year of "Dig Into Reading" was especially appropriate, given the "digging" we do, and the museum expansion "digging." Over 2,300 people participated in the event. Visit with us 2014, late May / early June for the next Summer Reading Kickoff!



Public Fossil Dig

Because of the time and effort required to prepare for our new space, our number of public fossil digs have been reduced this year. August 19-25th we will be holding a dig up near Walhalla in the Pembina Gorge. We hope to find the rest of a mosasaur we began excavating last year. Check out the website for more details:

<https://www.dmr.nd.gov/ndfossil/digs/digs.asp>

Next Issue: Grand Opening

September is not only our 10th issue of FIND, but also the opening of the Heritage Center to the public! Prepare for a lot of behind-the-scenes photos as we put the finishing touches on our new space.