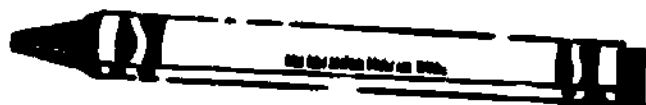




This Fact Sheet is the fifth in a series of five on Fossils of New Brunswick. It is suitable for the elementary school grades.

The Hillsborough Giant

Elephants in New Brunswick



The Discovery

One day in 1936, workers began digging a hole near Hillsborough in southeast New Brunswick. About three metres down, they uncovered some strange-looking rocks. They dug more, and saw that the "rocks" were really fossils. Their boss, Mr. Fancy, decided to call in a palaeontologist (fossil expert).

A few days later, scientists arrived from Ottawa and the New Brunswick Museum in Saint John. To everyone's surprise and excitement, the fossil turned out to be a mastodon.

What Were Mastodons?

Mastodons are now extinct. They looked a lot like elephants and stood about three metres tall, higher than most rooms. A coat of reddish hair covered their skin. They had massive legs, and long curved upper tusks.

Mastodons first appeared in North America about three million years ago. They came to eastern Canada about 400,000 years ago, during an ice age. (An ice age is a time when a thick ice sheet or glacier covers the land.) Canada has had several ice ages.

Although glaciers covered most of Canada during the ice age, parts of the coastal Maritimes were ice-free. This meant that mastodons could find food in New Brunswick. They roamed the large forests, eating spruce needles and other vegetable matter.

As the glaciers melted back between ice ages, the mastodons moved more freely. When the next ice age appeared, they wandered from place to place, searching for enough food to keep alive.

The last mastodon died out about 10,000 years ago at the end of the last ice age. We are not sure why. Most experts think they disappeared because of a change in climate and vegetation. Human beings also may have hunted and killed the last mastodons.

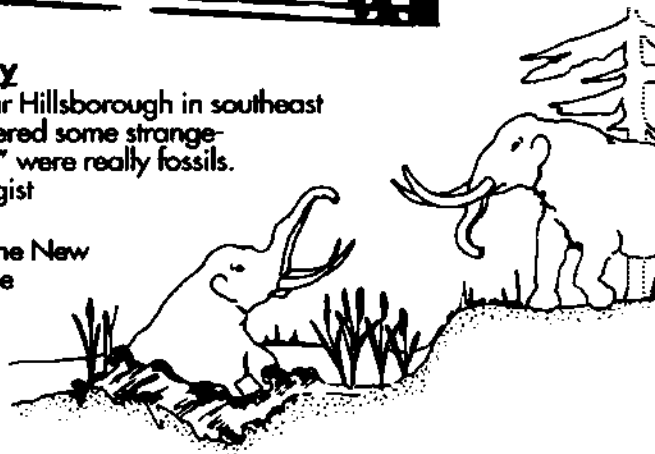
The Hillsborough Mastodon

Several kinds of mastodons once existed. Scientists identified the Hillsborough mastodon as *Mammuth americanum*—the American mastodon.

Like many fossil mastodons, the Hillsborough discovery was buried in ancient sediments. The animal probably walked into a boggy swamp and became stuck in the mud. When it died, the swamp and mud helped to preserve its remains.

The Hillsborough fossil discovery contained two tusks. Each one was almost 1.5 metres long. There were several teeth, ribs and part of the skull. As well, there were leg, hip and shoulder bones. Altogether, it was the most complete mastodon fossil ever uncovered in Canada.

This was not the first mastodon found in New Brunswick. Back in the 1840s, someone in Saint John tried to sell mastodon bones as firewood! Of course, the "wood" didn't burn. The seller ended up in court.





How Old Is The Mastodon?

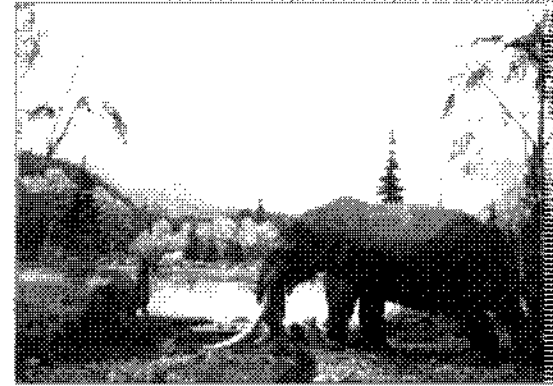
The big question about the Hillsborough mastodon is: how old is it? Palaeontologists have argued about this for years.

One way to find a fossil's age is to test how much carbon-14 it contains. Carbon-14 is a radioactive material found in all living things. When the animal or plant dies, its carbon-14 content slowly drops. If you measure how much carbon-14 is left in a fossil, you can tell how old it is.

But here's the problem. When scientists used carbon-14 to test bones from the Hillsborough mastodon, they found them to be 13,600 years old. Next, they tested a dung ball from the animal. The dung ball would have been formed shortly after the mastodon's last meal. Its carbon-14 age was 37,200 years ago.

Then they dated the material which held the dung ball together...and it gave an age of 51,500 years old!

Which date was correct? No one is sure yet, but scientists are still working on the problem. A few years ago, they drilled a hole into one of the mastodon's teeth and took out a sample for dating. We're still waiting for the final test results.



Where Is The Mastodon Now?

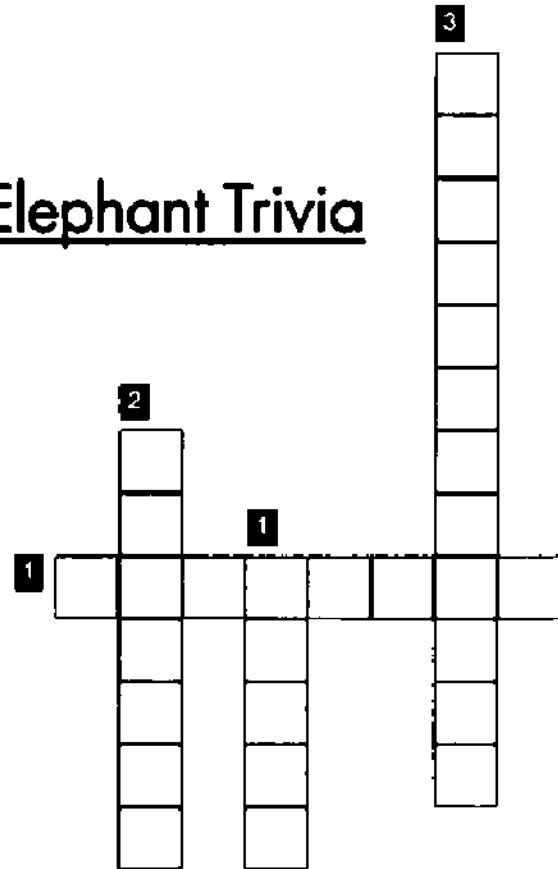
For many years, the Hillsborough mastodon was on display at the New Brunswick Museum in Saint John. But around 1978, the bones began to fall apart. Museum officials sent the mastodon to a sort of "fossil hospital" in Ottawa. There, specialists worked carefully with glue, plastic and other materials.

Six years later, the "fossil doctors" sent the new and improved mastodon fossil back to Saint John. You can see it there today, proudly displayed in the New Brunswick Museum.

Across:
 1). The fossil Mr. Fancy found turned out to be a _____

Down:
 1). _____ made up part of the mastodon's face.
 2). A _____ is a thick sheet of ice which covers the land.
 3). In which New Brunswick town was a mastodon fossil found? _____

Elephant Trivia



Across: 1. Mastodon
 Down: 1. Tusks 2. Glacier 3. Hillsborough

COOPERATION

COOPERATION
 AGREEMENT
 ON MINERAL
 DEVELOPMENT