

# Dinosaur detectives set for monstrous exhibit

By Sandra Mingail  
Starship special

**H**E towered about 12 feet high, weighed a hefty four tons and snacked on twigs, branches and leaves. He stalked the Earth between 10,000 to 100,000 years ago, and his bones were unearthed near the sandy shores of Florida's Daytona Beach.

No, he wasn't a dinosaur — although he would certainly measure up to one. We know him as Eremotherium, the giant ground sloth. And he is getting set to greet visitors at the Royal Ontario Museum's monstrous fall event . . . Dinosaurs — running Oct. 20 to Jan. 2, 1989.

Peter May, chief technician in the ROM Vertebrate Palaeontology department, has been hard at work reconstructing the 120-bone skeleton of the giant ground sloth. May is an expert at recreating giant creatures of the past and has reconstructed about 20 dinosaurs over his 11-year career.

"The reconstruction of a skeleton is very exciting," says May. "You are looking at animals that used to walk the Earth — you get to play with these extinct animals and make them come alive again."

The recreation of a giant mammal like the sloth, begins at ground level. If you want to build an authentic prehistoric animal, you have to first find its bones.

May has worked at the world-famous Tyrell Museum of Paleontology in Alberta. It was there that he spent many months searching for genuine dinosaur bones.

"It's really hard work getting down to the bones. You can find a piece of bone, say a jaw of T-Rex, and you've got a very good find . . . so it's worthwhile to take

down a hill."

Fossil searchers use jackhammers, rocksaws, bulldozers and sometimes dynamite to excavate quarries as large as 15 metres deep by 10 metres wide (50 feet deep by 30 wide) — all in the hope of finding bones that are hundreds of thousands of years old.

How do these modern-day dinosaur detectives determine if a fossil is genuine? Much of the decision depends on weight. The older a fossil is, the heavier it is. That is because of minerals that have seeped into the bone and hardened up.

Once all the bones are collected, a mold or duplicate of each bone is made. This mold is then carefully cast in a durable material so it won't crack or break.

**MAMMOTH JOB: Peter May, right, chief technician of the ROM vertebrate palaeontology department and his partner, welder Rick Eyre, put the finishing touches on a giant sloth skeleton for the ROM's dinosaur exhibit.**

The next step in recreating a creature like old Eremotherium, is to build a steel framework to support it. Then, starting with the lower legs, to the knee, the hip, the backbone and upwards, the cast is slowly and meticulously connected to the steel pipes. Fibreglass, polyester resin, epoxy and foam are all used to bring the silent giant to a standing position.

Another host to watch for at the ROM's Dinosaur extravaganza is Dromiceiomimus, the ostrich-like dinosaur. May is working his paleological magic to reveal a fleshed-out version of Dromiceiomimus. For that effect, he is using pounds and pounds of plasticine, then taking a mold and cast.

Here are some of the features of

the ROM's big dinosaur exhibit. **Dinosaur art exhibit full of surprises:**

Imagine a Stegosaurus posing for his portrait? Or a speedy Tyrannosaurus going for a jog?

*Dinosaurs Past And Present* is a dinosaur art exhibit boasting more than 150 paintings, sculptures and illustrations, starring dozens of dinosaurs.

This exhibit has already thrilled viewers across the

United States and most recently at the Tyrell Museum of Paleontology in Drumheller, Alta.

This art exhibit is especially exciting, because artists and scientists have teamed up to recreate a scientifically correct view of dinosaurs. In fact, some of the 17 North American artists are palaeontologists themselves.

Canadians Dr. Dale Russell of the National Museum of Natural Sciences in Ottawa, and artist Ron Seguin, combined dinosaur facts with a good dose of imagination. They asked themselves, "What if dinosaurs had not become extinct and humans were their descendants?" The sculptures Dinosauroid and Stenonychosaurus were the outcome of this question — they are one odd couple that shouldn't be missed.

**Dinosaur robots roar into town:**

They are snorting, stomping and roaring their way into the ROM. Four gigantic dinosaurs that are guaranteed to send a tingle up your spine.

Tyrannosaurus, Triceratops, Parasaurolophus and Pachycephalosaurus are taking up temporary residence at the ROM for the duration of the Dinosaurs exhibit. Created by a company called Dinamation International Corporation of California, this fearsome foursome comes to life thanks to a computer-controlled system of compressed air motors. Their eerie roars are synthetic digital recordings based on sounds of modern reptiles.

**Dinosaur activities for every age:**

Dinosaur buffs can explore a Dino Den, examine dinosaur fossils, take in a dinosaur movie or soak up a lecture by a world-renown dinosaur expert.

Dinosaurs is an opportunity to travel back in time over 150 million years. It's a chance to learn about the amazing evidence that scientists have unearthed.

**Dinotrivia:**

Are you up on the latest facts and theories on dinosaurs? Test your dinosaur knowledge with these brain teasers.

1. Who was called the "three-horned face?"
2. What is a herbivore?
3. How small was the smallest dinosaur?
4. Which dinosaur could gallop?
5. Where has a dinosaur nesting ground been discovered?
6. How long were Tyrannosaurus' teeth?

**ANSWERS:**

1. Triceratops 2. A plant eater 3. About the size of a chicken, weighing less than one kilogram when full grown 4. Triceratops 5. Choteau, Montana 6. Up to 7 inches long.



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