Visitors travel millions of years back in time at local company

by Terry McNamee Weekend Edition

On January 11 and 12, people had a chance to walk with dinosaurs and live to tell the tale.

Research Casting International in Beamsville held an Open House to show the public a glimpse of life as it was millions of years ago. Skeletons and realistic "fleshed-out" models of dinosaurs and other extinct creatures, all actual size, dwarfed visitors who dared to venture into Lincoln's own lost world. It was a rare opportunity to see an exact replica of "Sue", the world's largest and most complete Tyrannosaurus rex skeleton ever found, without having to travel to the Field Museum in Chicago, which owns the skeleton. Visitors also saw a cast of Coelophysis, a dinosaur about the size of a large house cat that lived 215,000 to 222,000 years ago. This cast showed the bones as they were found embedded in soil and rock. Both castings are so realistic they look like the actual fossil and not replicas.

That realism is the specialty of RCI, explained dinosaur creator Peter Prudek.

"First and foremost, we're dinosaur builders," he said. "There's not many museums in the world that don't have connections to Peter May or Research Casting."

The company was founded by Mr. May in a garage in Toronto in 1986. It grew quickly, moving

to Oakville in 1989 and then to Beamsville in 1998. RCI now is a world leader in creating exact replicas of everything from ancient stone wall carvings to fossilized bones to models of the planets.

Mr. Prudek explained that RCI does many types of castings. Some are museum and research quality, which means they must be an exact duplicate of the original bone, carving or relief. Others are entertainment quality, which do not have to be quite so precise. Two examples of these are the T. rex and Allosaurus skeletons that collapsed in the visitor's centre at the end of the movie Jurassic Park. Both were made by RCI.

Mr. Prudek said molds are made in two different ways. One method uses liquid rubber to make an exact mold of the original. Then a hollow or solid fibreglass cast is made from the mold. This reproduces every mark on the bone, including marks from nerves and tendons and muscles, as well as damage to the bones made by other animals or environmental factors. Large bones are usually cast hollow and filled with foam for stability and lightness.

The company also does ceramic shell or investment casting. This involves more steps, which basically uses a wax model covered in several layers of a silica sand "slurry" to strengthen the wax. This is heated in a kiln, melting the wax and leaving a

ceramic shell that is an exact duplicate of the wax piece. This ceramic mold is then filled with molten bronze to create an exact bronze model, which can be made either hollow or solid.

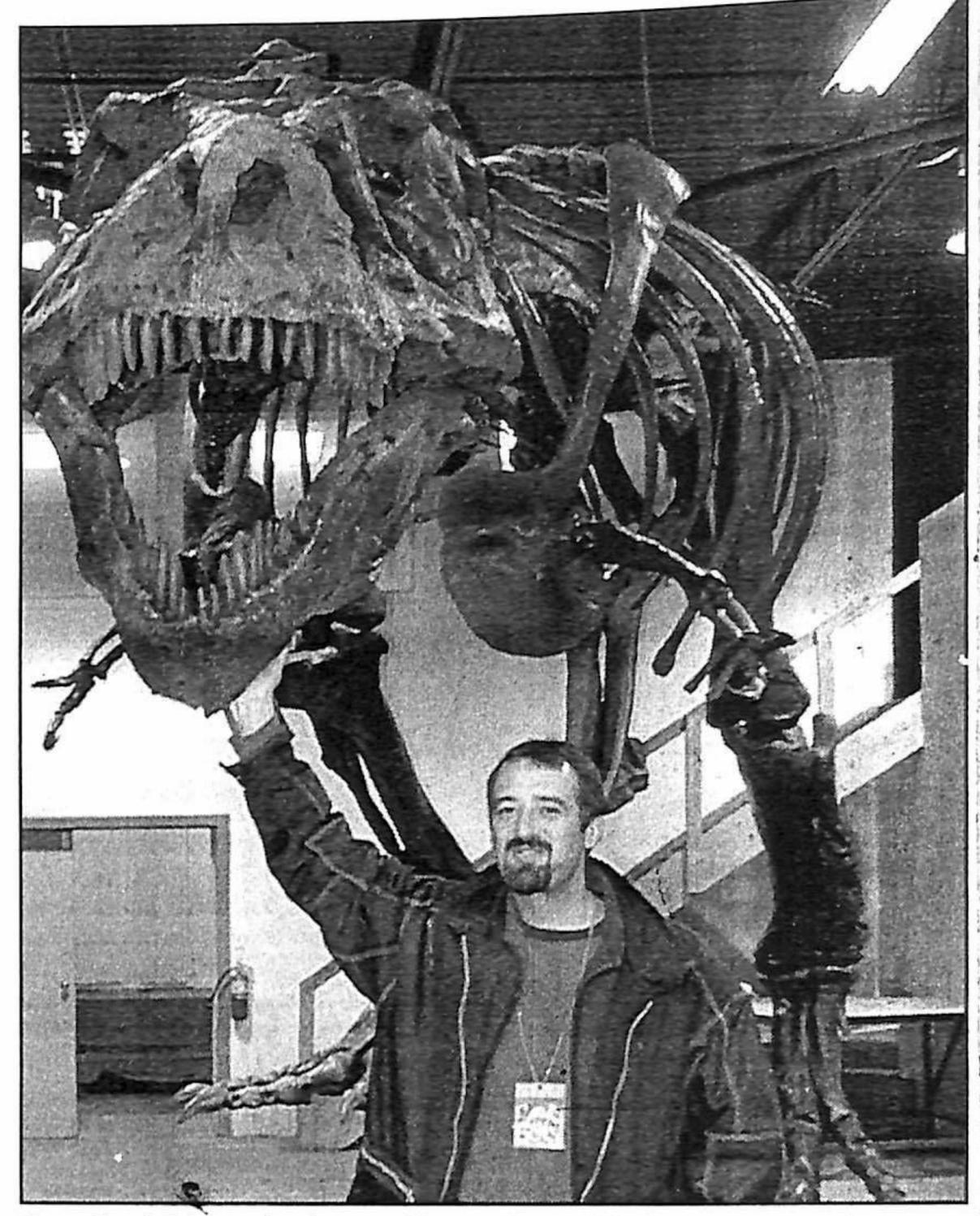
"We have our own foundry here at RCI," Mr. Prudek said.

Skilled metalworkers also are needed to form the supports that hold mounted bones together. A life-sized T. Rex is a huge skeleton, and even made out of the lightest possible materials, the overall weight of the finished product is considerable. As well, RCI also mounts actual bones. During the Open House, a complete mounted skeleton of a whale was on display.

Creating flesh-out extinct creatures is more difficult, because no one really knows what colours, patterns and surface textures are correct, or what the eyes should look like. Mr. Prudek said the skilled artisans at RCI examine living birds, reptiles and amphibians to decide how each animal should appear.

"We have to make assumptions," he said. "We've refined a fantastic eye technique. It took us forever! It's those little, tiny details, even though uncertain, that gives people the feeling that yes, that's what they looked like."

"We work hand in hand with researchers," he said. "We want to make it as real as we possibly can for everyone who's interest-



Peter Prudek has what he considers a dream job. He creates and assembles precise replicas of dinosaurs at Research Casting International. This skeleton is an exact duplicate of "Sue", the most complete and the biggest Tyrannosaurus rex skeleton ever found.

Feature

Neutral Indian artifacts will return after 25 years

A Native boy, perhaps eight or nine years old, glances skyward as a hawk flies overhead. The boy proudly wears five red-tailed hawk feathers in his hair -- feathers awarded to him by his elders for deeds he has done.

The boy is about to tell a story to the other children seated nearby.

This is a scene that could have taken place in Grimsby at the foot of the escarpment five centuries ago and it has been captured on the wall of the Nelles School library by wildlife artist Rick Manners.

The library is almost at the end of the first of three phases which will recreate the Grimsby of the 1600s.

In celebration of the project, after almost 25 years, artifacts from the Neutral Indian burial site, near Centennial Park, will be coming back to Grimsby and put on public display.

"We have received permission from the Woodland Centre to bring the artifacts to Nelles School as long as we provide the proper display cases to protect them," said Mr. Manners, Nelles School library project committee member.

The artifacts will be part of an Open House for Phase 1 of the Nelles School, Neutral Indians library project, which is being planned for late April or early May.

When looking for a unique theme for the library, Virginia Zyta, school librarian, visited other schools with library themes such as the Rain Forest. She realized the former home of the Neutral Indians provided a unique opportunity.

With the Niagara Escarpment serving as background, animals such as the black bear and the timber wolf, which were native to this area, will be depicted on the walls.

The library will continue to serve as an educational centre and will also serve the purpose of keeping this significant Native culture alive.

The Neutral Indians were Grimsby's first settlers. A peaceful people, their society was based primarily on farming. They were wiped out either by the Iroquois or illness about 1650.

An 1976/77 excavation by Dr. Walter Kenyon, an archeologist with the Royal Ontario Museum, uncovered 367 bodies and more than 2,000 artifacts at the site.

The Grimsby site was unique because, unlike other Neutral Indian burial sites, it was undisturbed. By the number of European items in the graves it was concluded the site was probably in

use from about 1640-1650, near the end of the tribe's existence.

The artifacts from the site included a considerable number of ornaments, copper and ceramic pots, knives, pipes and bead jewelry. The unfolding scenes on the library walls have already captured the students' attention, says the librarian.

The children have to decide what story the boy in the painting will tell. They will do this by studying the culture of the Neutral Indians and determine what his life may have been like and how he might have spent his time in 1600 Grimsby.

"They come in and watch the work as it progresses," said Ms. Zyta. "Sometimes I open the door and it is totally silent in here they are so caught up in it."