

# Special Report

## Students reconstructing mastodon

By Rachael Dolson  
staff writer

Ten thousand years ago, a 2-ton prehistoric mastodon was strolling down what is now M-59 in White Lake Township and had the misfortune to fall into a bog and die.

The mastodon's misfortune, however, proved lucky for 40 Oakland Community College (OCC) students who are now reconstructing the beast from his fossilized bones, preserved for centuries by the acid in the ancient bog.

"Truly, this is a once in a lifetime experience for myself and the students," said Jeheshel Shoshani, the elephant and mastodon expert brought to OCC especially to teach the "Mounting of the Mastodon" class.

"Actually the mastodon work has become kind of a community project. The members of the class include other teachers, college students, some retired folks, a sculptor - but no professional archeologists," Shoshani said.

"It is a painstakingly tedious process, as slow as death," he said, detailing the steps of cleaning, preserving, drilling and attaching that must be completed before the 12-foot-high and 22-foot-long skeleton can be hung from the ceiling of Levinson Hall at the Highland Lakes campus.

From now until next spring, when Shoshani hopes the mastodon will be finished, he and the students must squeeze the hundreds of lab-work hours between academic lectures on biology, archeology and evolution.

In 1968, the Groleau Brothers construction company unearthed the mastodon remains while digging in a low spot behind what is now the Flame Restaurant on Highland Road. After being contacted by the construction company, OCC personnel

helped to remove the bones from the site.

Most of the bones of the creature's left side were reasonably intact, science faculty member Charles Nelson said, and the Groleau brothers donated \$500 towards the mastodon's reconstruction.

The bones remained "in limbo" for more than 10 years, while the college decided what should be done. Nelson said questions had to be answered such as who should reconstruct the mastodon, how much would it cost, what would be done with the finished product and whether to build just one side or a total skeleton.

After deciding to reconstruct the head, tail, and left side - but not the right side - Nelson said the bones were sent off to New York for study and to have the missing pieces cast. Portions of the bones which had decayed away were recast in plaster, using the famous Warren mastodon as a model.

Now housed at the American Museum of Natural History in New York, the Warren mastodon was uncovered in 1845 by workmen in Newburgh, New York. Schohani said the Warren animal and the White Lake mastodon "could have been brothers, they are so close in size, within centimeters."

Shoshani came into the picture about 2 years ago, when Nelson contacted him to see if he was interested in the mastodon reconstruction. Shoshani has long been an aficionado of Proboscidea, the genologic family that includes mastodons, mammoths, and the modern-day African and Asian elephants.

He has worked in the mammalogy department at the American Museum of Natural History, been a zookeeper in Israel and has traveled to Europe and the Far East to study the modern elephants.

"Truly this was something different, a new project I could not refuse. We who have worked on the mastodon will bring our

grandchildren (to the college) and say 'see, I helped make this for history'."

The class began in September, and 10 students signed up for day instruction and 30 for night class. Students will receive a variable amount of class credit hours for the course, depending on the amount of time they spend working each week.

The class started by putting together the bones of a cat, Shoshani said, then worked on a fox and finally a cow. Lecture and lab work are designed to show how animals are structured, and later how they are preserved sometimes by natural conditions.

Next, the class constructed a paper mache model of the mastodon on wire. The model now hangs from the third-floor ceiling of Levinson Hall, where the real finished product will be displayed. College architects and engineers for the building are still drafting the details of how the mastodon will actually be suspended.

Most likely, Nelson said the mastodon will be encased behind clear plastic, to prevent visitors from leaning over the third-floor balcony to touch the fossilized remains. On the wall behind the skeleton will hang a huge linen mural. Painted by area resident Delois Lang, the mural will depict the flora and fauna of 10,000 years ago with bison, pine trees, beavers and ancestors of the current-day wolf and bear.

Currently, the class is working on cleaning the bones with acetone, a paint thinner, and then treating them with Glyptal, lacquer cement, to prevent them from drying out.

Holes will be drilled through the bones, some as big as a desktop, and Shoshani said metal rods will connect the bones together. The drill mechanism to make the holes was planned and designed by OCC building and grounds supervisor Burt Knox, also a student in the class.

OCC staff and instructors abound in the class, including Mary and Joseph Kelty and Gerald and Lou Woughter. The Woughters' 18-year-old son Rick is also enrolled in the class. At the age of 4, Rick "helped" his mother and other OCC staffers recover the bones in 1968. The young Woughter reportedly found one of the mastodon's mounted teeth.

Nelson estimates that the project will cost at least another \$4,000 and the class has plans to raise the funds - including a lecture series, a pancake breakfast, and soliciting material donations. The first lecture is scheduled for Friday, December 11.

"This is not the average class," Shoshani said. "The group really has a spirit all its own. They are working on raising the money, they are very concerned about what is happening and will happen to the mastodon.

"I help, but they are doing the actual work. They are helpful, industrious and excited. We are working at a slow pace and trying to do our best . . . and hopefully we will have something that will still be here in 100 years," he said.

Shoshani may write a book on the mastodon mounting, and he said the prestigious National Geographic magazine has contacted the college about doing a feature for the magazine, or for one of their science books.

Mastodons were related to modern elephants, but more primitive in many ways and were distinctly inferior mentally. The heads was flat, the tusks about 6 feet in length and curving slightly. A very bulky creature, the mastodon attained an average height of about 10 feet at the shoulder with a long massive body and short, stocky legs.

Speculation is that the mastodon was covered with a dense coat of long, coarse hair and wool.