

# Bone-building task yields two faces of the allosaurus

By Deb Gray

Consider the challenges of Roger Vandiver's job.

He's presented with an "after" picture — in this case a 16-foot tower of dinosaur bones — and pastes together a life-size "before" replica of reptilian fury. A "before" that backtracks through ice ages, back to a pre-Neanderthal era.

For over a year, Vandiver, exhibit technician in Morrill Hall, has built an as-true-to-life-as-possible reconstruction of an Allosaurus, a tyrant of the dinosaur world rivaled only by the Tyrannosaurus Rex. The former UNL fine arts major said the project necessitated "a lot of reading" about the shapes and sizes of dinosaurs and studies of living reptiles. Especially, the crocodile, he said the project necessitated "a relative."

And, Vandiver said, he used

the skeleton which came from Utah — "There's hardly any dinosaur bones in Nebraska" — as a blueprint. By feeling the texture of the bones, he said, he could locate the rough spots signifying muscle attachments.

### Muscles contoured

Vandiver outlined the steps to put together his 2,600-pound creation. First, he built the frame out of welded steel. Next, he added bent steel channels shaped into body curvatures, a drape for muscle. "Comparable to the ribs on a ship," Vandiver said.

Then, the body is covered with a hardware cloth and paper-mached over with an asbestos material.

The Allosaurus' exhibit will open April 1. This gallery has been under construction for four or five years, "long before I came here," said museum director James Gunnerson.

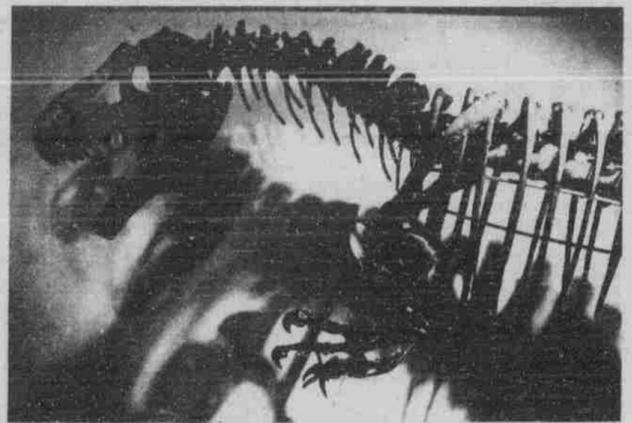
And, with the completion of one exhibit, another begins. According to Gunnerson, an exhibit under construction on second floor will showcase creatures from the largely marine world of invertebrate paleontology — the clams, snails, shellfish and other lower animals.

### Prehistoric swamp

Gunnerson said these spineless creatures will be placed in their native setting, a paleobotonic swamp. Through studying specimens from that era, museum technicians will construct a prehistoric swamp around the exhibit.

Although the exhibits change continuously, "It's not as often as we would like," Gunnerson said. Sometimes the span between an idea and its realization is eight years, he said.

The museum will install the exhibit in stages, Gunnerson



April 1, on second floor of Morrill Hall, an exhibit featuring this Allosaurus skeleton opens.

said, the first part opening in winter.

Why so long to get an exhibit ready?

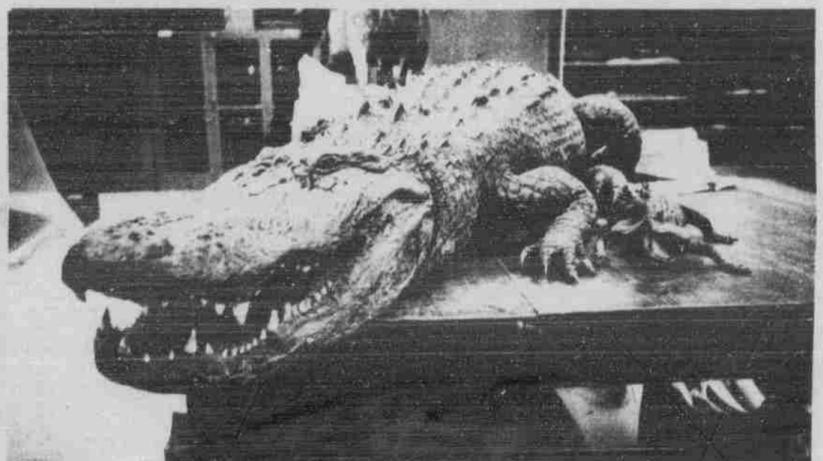
"Planning takes the most times," Gunnerson said. "There's a lot of information presented in an exhibit, and we want it to be accurate. It doesn't have to be a detailed exhibit to take a long time."

### Arising questions

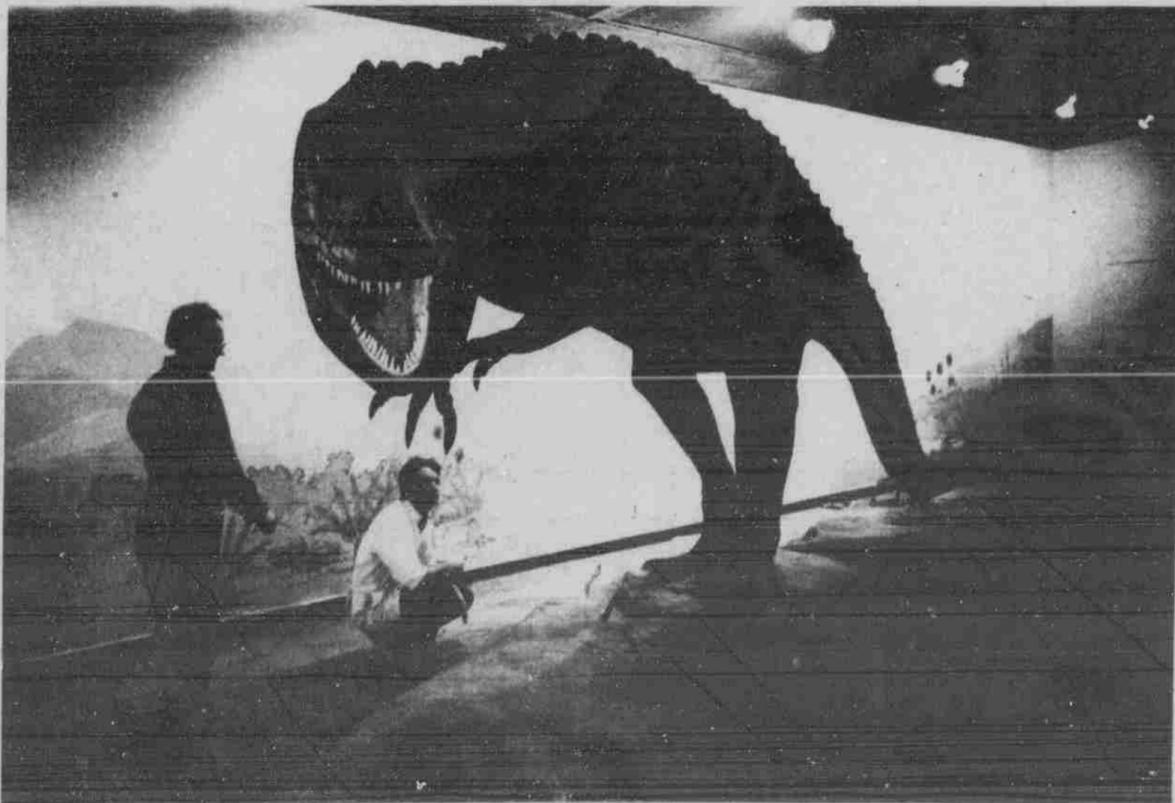
While putting together an Allosaurus, Gunnerson said, all sorts of questions creep up.

"Where did the muscles go? How big were they? Even then, there's a certain amount of guesswork about what the skin would have looked like. So we look at the skin of certain modern animals. What would a dinosaur's eye look like?"

"These things all take time, because we want to convey the best information. Whoever is looking at that gallery expects to have an accurate view of what that thing was really like."



## Midweek



A recreation of an Allosaurus (left) looms over exhibit preparers on the second floor of the State Museum. The new dinosaur exhibit is scheduled to open April 1. Visitors (below) on the main floor of the State Museum. Only 1 per cent of the University's specimen collection is exhibited at the State Museum; the rest is stored in Nebraska Hall, like the elephant skull (above right) and stuffed alligators (above). The State Historical Society stores old records in its archive collection (above, middle).



photos by steve boerner

## Sauropodian Assemblage