



# Collecting Oklahoma

A Centennial Celebration



**While most of Oklahoma celebrates  
the 100 years since statehood,  
a new SNOMNH exhibit  
sweeps visitors back over the  
past 300 million years.**

**BY LINDA COLDWELL**  
Photos by Robert Taylor

**C**ollecting Oklahoma,” the new special exhibition at the Sam Noble Oklahoma Museum of Natural History, celebrates the centennial of Oklahoma statehood. Some of the objects on display, however, are vastly older than the state—or the museum itself, which has been around since 1899. The story told in this commemorative exhibit goes much deeper than even historic time.

The exhibition tells the story of the state as presented by the museum’s scientists, and the time scale is geologic in scope. Each of the objects and specimens featured represents a small piece of what is unique and fantastic about the land called Oklahoma. Individually they both fascinate and amaze the museum visitor. Collectively they provide a sweeping vista of Oklahoma’s past 300 million years.

The focus is on the special and the wonderful—offering facts that even a life-long Oklahoma native might not know. For instance, Oklahoma’s geographic placement at the center of the country makes it a crossroads for wildlife. The wide range of habitats means a wide range of animals, and, in fact, Oklahoma boasts the fourth greatest biodiversity of any state in the nation.

While arid habitats are common in western Oklahoma, swampy conditions are not uncommon in the southeast. As the eastern and western habitats come together, wonderful things can occur. The state’s unique ecology is beautifully showcased in an exhibit featuring a selection of northern flickers—woodpeckers with brightly colored wing and tail feathers—collected in Oklahoma.

During the last ice age, two populations of these flickers became separated from one another: one in the eastern part of the continent, and another in the west. Over many thousands of years, the separate populations developed distinctive coloring:

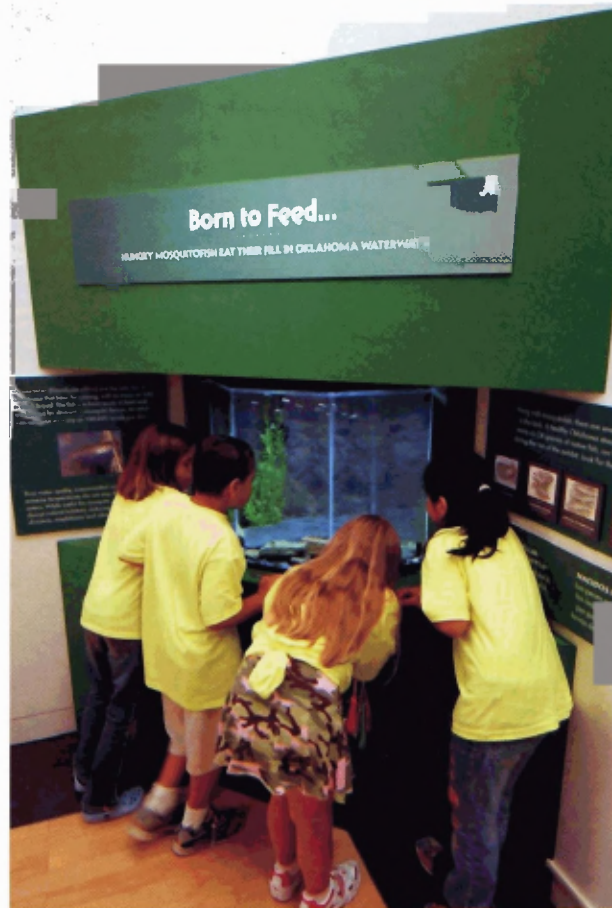
birds to the west bore red tail and wing feathers; those to the east had yellow markings. After the glaciers receded, the eastern and western populations expanded and met in the central part of the country, including Oklahoma. Here, the eastern and western birds interbred and produced hybrids, which show a mix of coloring from both sides. The Oklahoma flickers offer both red and yellow feathers. Some bear orange feathers. And their other markings, including facial marks and banding along the back of the neck, may be a mix of the characteristics of both of their ancestral families.

Two showstoppers of the exhibit represent another pair of extreme habitats that illustrate the diversity of the state:

*Camels Cometh*—Over millennia, the climate, environment and fauna of Oklahoma have changed dramatically. During the Miocene period, the climate was cool and drier, with broad areas of open grassland much like the African savanna of today. Striding across this landscape was an animal most people associate with Africa. *Megatylopus* was a 14-foot-tall camel that lived in Oklahoma some six million years ago. “Collecting Oklahoma” features the 7-foot-tall leg, foot and shoulder bones of *Megatylopus*, mounted over a life-size illustration of the animal as it may have looked in life, painted by wildlife artist Debby Kaspari. Two other species of camel lived in Oklahoma around the same time period. The fossil skull and neck of one of these species,

complete with extremely rare mummified and fossilized skin and soft tissue is also featured in the exhibit.

*Marine Predator*—If giant camels roaming the Oklahoma hills is not strange enough, another display in the exhibit takes visitors to an Oklahoma that is even more foreign and bizarre. An undulating wall-long display case houses 76 vertebrae that make up 27 feet of the backbone of an elasmosaur—a marine



Visitors examine live mosquitofish and other Oklahoma species in a tank included in the exhibit. The small and unassuming mosquitofish is the only fish in Oklahoma to bear live young – as many as 100 to a brood.



reptile that lived in Oklahoma more than 100 million years ago. During the Cretaceous period, most of Oklahoma was underwater—submerged beneath a warm shallow sea that stretched up from the Gulf of Mexico almost to Canada. The elasmosaur was a long-necked, flipped predator that fed on fish. The fossilized bones of this specimen were found on a ranch near Durant, more than 300 miles from the Gulf of Mexico, buried in soft soil where generations of farmers had raised wheat and cotton. Another of Kaspari's breathtaking and enormous murals shows this marine monster in life.

Human cultures of the state are not excluded from the exhibit. Oklahoma's Native American heritage is showcased with ancient tools made by some of Oklahoma's earliest human inhabitants and with beautiful examples of Native American traditional culture from the last century. These include a Cheyenne headdress with 60 golden eagle feathers around the crown and down the 6-foot trailer, and an Osage wedding coat—a military-style wool jacket ornamented with silver and ribbons and worn in the 19<sup>th</sup> and early 20<sup>th</sup> centuries by Osage women for their wedding ceremony.

Native languages are an important area of research at the SNOMNH. Native language is included in the exhibit through a video presentation of Euchee elders discussing growing up in Euchee-speaking schools and churches. Throughout the exhibit, Native language is honored through the presentation of exhibit labels in Cherokee. Cherokee was the first North



Museum director Ellen Censky poses in front of the enormous life-sized mural of an elasmosaur – Oklahoma's own "Loch Ness monster" that swam in the warm waters that covered the state more than 90 million years ago.



A kiosk allows visitors to listen to recordings of the calls of two types of tree frogs found in southeastern Oklahoma. Though the frogs look identical, they are actually two separate species that can be distinguished in the wild only by their very different calls.



ABOVE: Tom Luczycki, head of exhibits for the SNOMNH, visits with a great blue heron, left, and a whooping crane, two native birds included in the exhibit's Salt Plains display.

OPPOSITE: A group of children explores the interactive field camp exhibit in "Collecting Oklahoma." The exhibit is designed to simulate a scientific base camp such as those set up by museum curators studying mammals and reptiles in southeastern Oklahoma.





Cherokee language labels are presented on each display. Cherokee was chosen as a means of including Native American language in the exhibition and showcasing the grace and beauty of its unique syllabary. Label text also is presented in Spanish.

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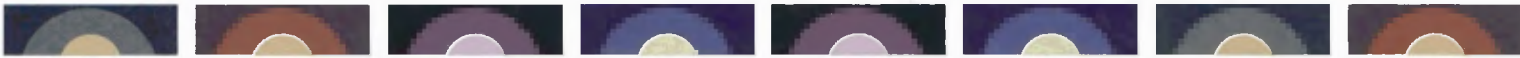


Education officer Deborah Kay, exhibit developer for "Collecting Oklahoma," stands before a rendering of the *Megatylopus*, a 14-foot-tall camel that lived in Oklahoma 6 million years ago.

*continued*







American Native American language to have its own written form—an 86-character syllabary created by Cherokee scholar Sequoyah in 1821. The labels also are presented in Spanish.

“Collecting Oklahoma” will be on view through January 20, 2008. The exhibit is made possible by the Merkel Family Foundation, Charles and Lynn Schusterman Family Foundation, the Kerr Foundation Inc. and Republic Bank & Trust, with media support from CNHI Oklahoma and Cox Communications. The Sam Noble Oklahoma Museum of Natural History is located at Timberdell Road and Chautauqua Avenue on the University of Oklahoma Norman campus. Additional information about the museum is available on the Web at [www.snomnh.ou.edu](http://www.snomnh.ou.edu), or by calling (405) 325-4712.

*Linda Coldwell is publications and promotions specialist for the Sam Noble Oklahoma Museum of Natural History.*

Rick Lupia, curator of paleobotany, was the one who came up with the initial idea for “Collecting Oklahoma,” and chaired the museum’s committee overseeing the planning and development of the exhibition.

## An Oklahoma Mystery



From left, Evan Smith, Tom Smith and Emily Smith inspect an unopened plaster “field jacket” containing mystery fossils collected in Grady County in 1947. Museum staff will open the cast in February to reveal what hides inside.

In the 1940s, museum director and paleontologist J. Willis Stovall collected dozens of specimens of dinosaurs and other prehistoric animals from across the state of Oklahoma. Fossils typically are brought in from the field inside a large chunk of rock wrapped in a protective plaster and burlap “field jacket.” Fossil preparators later open the plaster covering in the lab and begin the long, slow process of carefully removing the fossils from the rocky matrix.

Stovall and his teams of WPA workers collected so many fossils that, more than 50 years later, museum staff and volunteers are *still* working to open and prepare out all the field jackets stored in museum collections. In “Collecting Oklahoma,” visitors can see and touch one of Stovall’s original jackets, collected near Alex, Oklahoma, in 1947. Besides the date and location, no clues as to the contents of this field jacket are written on the plaster covering. Stovall’s notes on this specimen are lost, and museum paleontologists have no idea what is inside the Alex jacket.

Can you guess? Visitors are encouraged to write down their best guess and submit it for a chance to win a prize. In February, fossil preparators will open the 1947 jacket and extract and identify the fossils. Those who guessed correctly will be entered to win the grand prize.