



Sam Noble Museum  
THE UNIVERSITY OF OKLAHOMA

# Tracks

Spring 2011 Newsletter, Volume 23, Number 1

**BLACK MESA NOW OPEN**

Whitten-Newman Foundation Funds Exhibit

**NEW DINOSAUR DISCOVERED**

Meet *Brontomerus mcintoshi*, "Thunder Thighs"

**ARCHAEOLOGY CURATOR TO RETIRE**

A Conversation with Don Wyckoff

# CONTENTS

## MUSEUM EVENTS AND HIGHLIGHTS



COLLECTIONS PAGES: 6-7



DONATION: PAGE 3



EXHIBIT: PAGES 4-5



COMING UP: PAGE 11



NEWS: PAGES: 12-13

## FEATURES & DEPARTMENTS

FROM THE DIRECTOR ..... 2  
Thanks to Museum Members and Donors

DONATION ..... 3  
Whitten-Newman Foundation Funds Exhibit

EXHIBIT ..... 4-5  
Black Mesa Exhibit Open

COLLECTIONS ..... 6-7  
New 'Thunder-Thighs' Dinosaur Discovered

CURATOR ..... 8-9  
Archaeology Curator Don Wyckoff to Retire

EDUCATION ..... 10  
Education Grants Fund Programs

UPCOMING EVENTS ..... 11  
Art and the Animal  
Summer Explorers  
Baby *Apatosaurus*

NEWS ..... 12-13  
Old Field Jacket Yields New Species  
Wyckoff Receives Citation of Merit  
Redbud Café Welcomes New Chef  
Former Curator Sidney DeVere Brown Dies  
Museum Welcomes 2011 Corporate Partners  
Longtime Volunteers Pass On  
Bill Miller Named Volunteer of the Year



# FROM THE DIRECTOR



Dear Members and Friends,

On March 4 we had a very special ribbon cutting reception for our newest permanent exhibit in the museum—Black Mesa. We started this project in the 1990s, but the construction of this exhibit was made possible by a \$1 million gift from Reggie and Rachelle Whitten and the Whitten-Newman Foundation. Located in the Hall of Natural Wonders, Black Mesa is a 1,500 square foot diorama of Oklahoma's Panhandle, home to the highest elevation in the state. When you walk into the Hall of Natural Wonders, you can now view major habitats of our state from the forest to the prairie to the Black Mesa. In the first month since Black Mesa opened, we have had over 31,000 visitors.

On April 4 & 5, the museum hosted the 9th annual Oklahoma Native American Youth Language Fair. During this two-day event, 1,753 pre-K thru 12th grade students, teachers, parents, grandparents and judges filled the Great Hall, Kerr Auditorium and Plains classroom. 700 students from 71 different schools, tribal and family programs competed in plays, performances and individual presentations. This year's fair, "Elder Voices, Youth Choices," focused on saving Native languages through the youth as the tribal nations continue to lose the voices of their elders. It showcased 32 Native languages, from Absentee Shawnee to Zuni.

In 2010 we saw museum attendance up 14.5% over 2009 with 172,600 visitors. One of our busiest times each year is Spring Break week. This year, we had 8,579 visitors and offered a variety of educational activities and programs for all ages. School field trips to date have brought 9,452 students, teachers and adult chaperones to classes and exhibits in the museum. The Fossil Fuel Fund, an ongoing funding project of our Board of Visitors, makes it possible for any school to receive funds to pay for bus fuel and a bus driver so their students can visit the museum.

We recently determined that the Sam Noble Museum collection includes 10 million objects and specimens. Discovery is an ongoing activity at the SNM: a new genus of dinosaur was recently named by Dr. Rich Cifelli. The museum's Vertebrate Paleontology Collection houses the bones of this *Brontomerus*, now known as "thunder thighs," from a quarry in Utah. You can read about it on page 6 in this issue of *Tracks*.

During this summer, and over the rest of this year, I encourage you, your family and friends to visit the Sam Noble Museum and to enjoy Black Mesa, our upcoming "Art and the Animal" exhibit and our many classes and workshops for students, adults and families.

Michael A. Mares, Ph.D.  
Director







## WHITTEN-NEWMAN FOUNDATION FUNDS EXHIBIT



OU President David Boren with Whitten-Newman Foundation founders Reggie and Rachelle Whitten at the opening of the Black Mesa Exhibit. Photo: Konrad Eek

The Sam Noble Museum recently received a generous gift from the Whitten-Newman Foundation to fund a spectacular new addition to the permanent exhibits. The \$1 million gift provided for the construction of the Black Mesa diorama, which opened in the Hall of Natural Wonders on March 5.

The Whitten-Newman Foundation has been a major supporter of the museum since the fall of 2007, when the organization made a gift of \$950,000 to create the Whitten-Newman Foundation's ExplorOlogy® Program. Now in its fourth year, this program provides hands-on science experiences for students and educators across the state of Oklahoma through field programs for middle and high school students, teacher workshops, outreach

programs, and a combined teacher/student experience during Spring Break.

The Whitten-Newman Foundation focuses its charitable giving on programs for young people that provide enrichment and help prevent substance abuse through education. It is a private family foundation established in 2007 by Reggie Whitten, his wife Rachelle Whitten, and brother-in-law Robert Newman. The foundation was created partly as a way of memorializing the Whitten's son, Brandon, who was killed in a motorcycle accident in 2002. Initially, the foundation sought ways of providing educational opportunities for "the underdogs" – young people with potential that might not otherwise be recognized or supported.

From that beginning, the Whitten-Newman Foundation has grown to provide substance abuse programs, athletic camps, science education opportunities and outreach projects to Africa.

"Reggie Whitten and the Whitten-Newman Foundation are one of the great supporters of the Sam Noble Museum," said Dr. Michael Mares, Director of the Sam Noble Museum. "Because of their generosity and willingness to give back to Oklahoma and to the University of Oklahoma, our museum's exhibits and programs have been immensely improved. We are a better museum because of their support."

For additional information about the Whitten-Newman Foundation, visit [www.whittten-newmanfoundation.org](http://www.whittten-newmanfoundation.org).





# EXHIBIT

## BLACK MESA EXHIBIT OPEN

More than 300 museum members and special guests turned out on Friday, March 4, for the ribbon cutting and preview reception for the new Black Mesa exhibit.



Top: Ribbon cutting (left to right): Museum Director Michael Mares, OU President David Boren, Melissa Newman, James Newman, Hannah Whitten, Rachelle Whitten, Reggie Whitten and Dylan Cheatwood. Photo: Konrad Eek  
Bottom: A view of the Black Mesa exhibit. Photo: Linda Coldwell



University of Oklahoma President David Boren, Sam Noble Museum Director Michael Mares, and Reggie and Rachelle Whitten of the Whitten-Newman Foundation were among the special guests who helped cut the red ribbon and open the new diorama to waiting guests. Black Mesa opened to the public on Saturday, March 5, with a day of free admission, courtesy of the Whitten-Newman Foundation. More than 1,200 visitors attended.

Black Mesa is located at the extreme west of Oklahoma's panhandle, where the mountain West meets the Great Plains. The mesa itself – at 4,973 feet elevation – is the highest point in Oklahoma. The arid habitat creates a unique ecosystem featuring many plants and animals found nowhere else in the state.

“The Black Mesa is that special habitat that moves Oklahoma into the small group of states that are the richest in numbers and types of species of animals and plants,” said museum director Michael Mares. “With habitats ranging from the southeastern swamp forest to the mesas of the Colorado Plateau in the Panhandle, Oklahoma is blessed with a virtual cornucopia of nature. Black Mesa is key to that diversity.”

The exhibit tells the ecological stories not only of the Black Mesa itself, but also of the unique short-grass prairie





habitat of the Oklahoma panhandle. Designed to simulate a seasonal stream shaded by enormous cottonwood trees, the exhibit features plants and animals native to the arid environment of Black Mesa as well as those that thrive in the short-lived streams and ponds that appear and disappear with the spring rains.



Turtles, tadpoles and fairy shrimp can be found in the exhibit's seasonal pond. Photo: Linda Coldwell

Water is scarce on the high plains, and animals that rely on water for part of their life cycle here are adapted to respond quickly when water is available. Some species of amphibians, freshwater shrimp and other animals are able to withstand long periods of drought either by burrowing into the earth or laying eggs that can withstand dry conditions. When the water returns, some of these animals are able to reanimate, breed and reproduce within a matter of days. The plains spadefoot toad can burrow as deep as 15 feet to escape arid conditions, and is able to remain underground for years, waiting for the rains to return.



A view into a rattlesnake den shows how the snakes survive through the winter. Photo: Linda Coldwell

The diorama is designed to represent the landscape as it would appear in early October – just as animals are beginning to seek out winter hibernation places, and plants are beginning to go dormant for the season. With few safe enclosures and many species in need of shelter, hibernation can make strange bedfellows. The exhibit features a nest of rattlesnakes that share their winter den with a bullsnake, a clutch of palid bats and a

white-toothed woodrat.

The exhibit is chock-full of specimens and facts: more than 150 animals and 57 species of plants are represented. Touch screen displays allow visitors to dig deeper for information, including recordings of the calls of birds and frogs, territory maps for animals, and in-depth information about many of the species represented. Two mini dioramas associated with the exhibit provide in-depth looks at particular stories: the fascinating life cycle of the American burying beetle, and the diversity of life associated with year-round rivers and ponds.



This model of a dead mouse is 12 times actual size. It is the focus of a mini diorama showcasing the unique lifecycle of the American burying beetle. The beetle pairs find a small dead animal such as a mouse or bird, and systematically bury it by excavating the soil from underneath the body. Once buried, the carcass serves first as a safe haven for the beetles' eggs, and later as a food source for the adults and their newly hatched larvae. Photo: Linda Coldwell



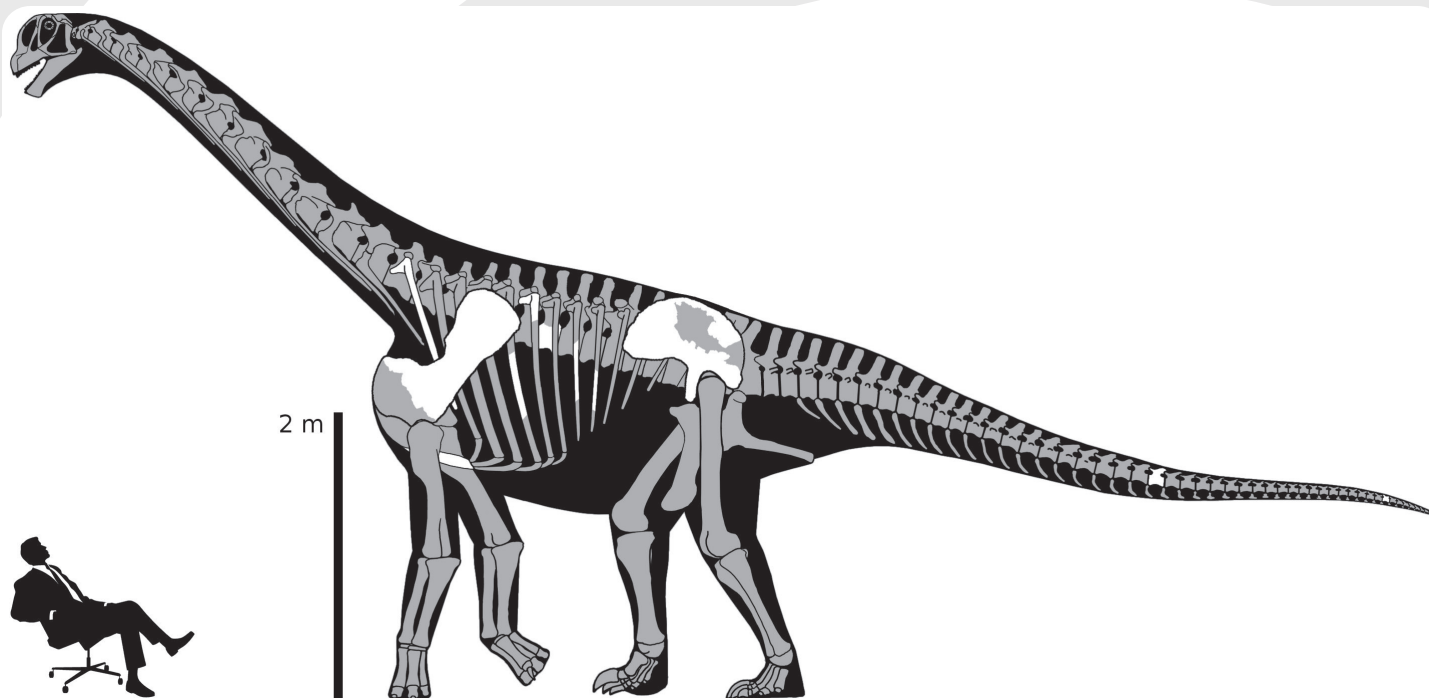
Photo: Konrad Eek





# COLLECTIONS

## NEW “THUNDER-THIGHS” DINOSAUR DISCOVERED



*Brontomerus mcintoshii* skeletal reconstruction executed by Mike Taylor based on a reconstruction of *Camarasaurus* by Scott Hartman.

In February, the museum was part of an international announcement about a new dinosaur that was discovered among the fossils in our vertebrate paleontology collection. The new species, named *Brontomerus mcintoshii* or “Thunder-Thighs,” is described in a paper recently published in the journal *Acta Palaeontologica Polonica* by an international team of scientists from the U.K. and the U.S. Primary author Mike Taylor is a researcher in the Department of Earth Sciences at University College London. Co-authors are Mathew Wedel, former University of Oklahoma graduate student and now assistant professor of anatomy at Western University of Health Sciences, Pomona, Calif., and Richard L. Cifelli, curator of vertebrate paleontology at the Sam Noble Museum.

A member of the long-necked sauropod group of dinosaurs that includes *Diplodocus* and *Brachiosaurus*, *Brontomerus* may have used its powerful thighs as a weapon to

kick predators, or to help travel over rough, hilly terrain. *Brontomerus* lived about 110 million years ago, during the Early Cretaceous Period, and probably had to contend with fierce “raptors” such as *Deinonychus* and *Utahraptor*.

The fossilized bones of two specimens – an adult and a juvenile – of *Brontomerus mcintoshii* were rescued by researchers from the Sam Noble Museum from a quarry in eastern Utah that had been looted and damaged, possibly by commercial fossil hunters. Paleontologists speculate that the larger specimen is the mother of the younger and would have weighed

around 6 tons (about the size of a large elephant) and measured 14 meters in length.

The authors classified the new genus based on an incomplete and fragile skeleton in our museum’s collection including bones from the shoulder, hip,



*Brontomerus mcintoshii* life restoration by Francisco Gascó under the direction of Mike Taylor and Matt Wedel.



# COLLECTIONS



ribs, vertebrae and some unidentifiable fragments. They used the bones to identify *Brontomerus*' unique features, primarily the shape of the ilium (hip bone), which is unusually large in comparison to that of similar dinosaurs. The wide, blade-shaped bone projects forward ahead of the hip socket, providing a proportionally massive area for the attachment of muscles. The shape of the bone indicates that the animal would likely have had the largest leg muscles of any dinosaur in the sauropod family. This is reflected in the name *Brontomerus*, which literally means "Thunder Thighs." The dinosaur's species name, *mcintoshi*, was chosen in honor of John "Jack" McIntosh, a retired physicist at Wesleyan University, Conn., and lifelong avocational paleontologist.

"*Brontomerus mcintoshi* is a charismatic dinosaur and an exciting discovery for us," said Taylor. "When we recognized the weird shape of the hip, we wondered what its significance might be, but we concluded that kicking was the most likely. The kick would probably have been used when two males fought over a female, but given that the mechanics were all in place, it would be bizarre if it wasn't also used in predator defense."

Other marks on the bones give additional clues to *Brontomerus*' lifestyle and environment. Wedel explained: "The shoulder blade of *Brontomerus* has unusual bumps that probably mark the boundaries of muscle attachments, suggesting that *Brontomerus* had powerful

forelimb muscles as well. It's possible that *Brontomerus mcintoshi* was more athletic than most other sauropods. It is well established that, far from being swamp-bound hippo-like animals, sauropods preferred drier, upland areas; so perhaps *Brontomerus* lived in rough, hilly terrain and the powerful leg muscles were a sort of dinosaur four-wheel drive."

duckbills and horned dinosaurs in the Cretaceous," explained Wedel. "In the past 20 years, however, we are finding more sauropods from the Early Cretaceous period, and the picture is changing. It now seems that sauropods may have been every bit as diverse as they were during the Jurassic, but much less abundant and so much less likely to be found."



From left: Mike Taylor, Matt Wedel and Rich Cifelli examine the fossils of *Brontomerus* in the Sam Noble Museum's collections. Photo: Linda Coldwell

Despite the international excitement over *Brontomerus*' discovery, don't look for a reconstruction of the animal in the museum's Hall of Ancient Life any time soon. The fossils are far too fragile to be put on display. Nevertheless, it is exciting to be able to add yet another important "type specimen" to the growing list of one-of-a-kind dinosaurs in our collection.

While *Brontomerus*' unusual hip structure and enormous thigh muscles place it on the list of most extreme dinosaurs, it is also a significant find for another reason: it is one more in a number of finds over the past 20 years that challenge the previously held idea that sauropods began to disappear in the Early Cretaceous Period.

"Because sauropods were the most abundant dinosaurs found during the Jurassic period and the rarest during the Early Cretaceous, there's long been the perception that sauropods were successful in the Jurassic and were replaced by





## ARCHAEOLOGY CURATOR DON WYCKOFF TO RETIRE



Don Wyckoff

Over the past 50 years, Don Wyckoff, the museum's curator of archaeology, has explored hundreds of miles of woods, ranch and grassland across Oklahoma, piecing together the ancient history of the Sooner state. He has met with dozens of landowners, turned over hundreds of metric tons of red earth and collected thousands of artifacts. This spring, Wyckoff will retire from academic life, leaving behind a legacy of millions of artifacts in the museum's archaeology collection.

Don's passion for the prehistory of Oklahoma grew from humble beginnings. He recalls his first discovery of the field of archaeology – in a Roy Rogers comic book – when he was in elementary school

in Kansas. In the pages of this particular issue, Roy rescued an archaeologist from the clutches of bad guys who wanted to steal the artifacts he had collected. It was the first time Don had ever heard of archaeology, and it sparked in his young imagination a fascination that would become a career.

He began reading about archaeology on his own, and soon took to walking along eroded streambeds near his home searching for archaeological sites, and collecting and documenting the objects that he found. Over the course of a few years, Wyckoff had discovered and mapped some 29 sites. The objects he collected and maps he drew of the sites now reside in the collections of the Kansas Historical Society.

Later, as a college student, after an “unsatisfactory” two-year stint at the University of New Mexico at Albuquerque, Wyckoff transferred to the University of Oklahoma on an advisor's recommendation. The year was 1959, and the head of the archaeology program at OU was Dr. Robert Bell – a rigorous teacher and highly respected archaeologist. Wyckoff would come to have the greatest respect for Dr. Bell, and credits him for impressing upon him the need to work cooperatively with the landowners and ranchers across the state who made personal collections of artifacts found on their land. At a time when some archaeologists considered these amateurs detrimental to the field

– damaging sites and destroying evidence – Dr. Bell saw them as “avocational” colleagues whose fascination with the prehistory of the land equaled his own and deserved equal respect.



Dr. Robert Bell was head of archaeology in 1959 and Wyckoff's mentor at OU.

Based on this belief, Bell founded the Oklahoma Anthropological Society in 1954. The society brought archaeology enthusiasts together to compare notes, and provided an opportunity for Bell to provide training in proper preservation and documentation techniques to his *ad hoc* field crew. Wyckoff became a member of the society himself in 1961, and has worked closely with the organization ever since.

“I hope that part of my legacy is that I tried to bridge the gap between professional and amateur archaeologists,” Wyckoff said. “I tried to continue the tradition started by Dr. Bell of professionals and amateurs working together.”

Bell also initiated Wyckoff's passion for archaeological fieldwork. In 1961, Bell





sent him to conduct a survey in the Broken Bow area, where the Corps of Engineers planned to build a reservoir. Wyckoff spent four weeks on the project, with funding from the National Park Service that included \$25 a week to live on plus nine-cents-a-mile vehicle use to look for sites. He located and mapped 56 prehistoric sites over four weeks ... and was hooked.

Throughout the 1960s, the boom in lake construction across Oklahoma provided many opportunities for archaeological fieldwork. Wyckoff worked full time from 1962 to 1968 scouting and documenting prehistoric sites across Oklahoma. During that time he acquired an in-depth understanding of the people of Oklahoma ... both past and present.

"I have come to love Oklahomans," he said.

"Oklahomans have a deep pride and appreciation in the state's heritage. I have met many who are sincerely and responsibly interested in learning about the natural history heritage of their state. Many have been dear friends."

Wyckoff served as state archaeologist with the Oklahoma Archeological Survey from 1968 to 1981, and as director of the survey until 1996, when he became curator of archaeology for the museum, then known as the Stovall Museum. He began teaching in the OU Department of Anthropology that same year – a task that he took on "with some trepidation." He liked fieldwork, and wasn't sure about entering the classroom. Teaching, however, turned out to be one of the most gratifying parts of his career.

"It is really a blessing to work with students," Wyckoff said, "and my colleagues in the anthropology department have been a joy to work with as well." One of the classes

he taught regularly is one called "Great Discoveries in Archaeology" for freshmen and sophomores. He takes satisfaction in knowing that this survey class has been the inspiration for at least six of his students to decide to become archaeologists themselves.



The Burnham site yielded finds that called into question a generation of archaeological assumptions.

Perhaps the greatest discovery of Wyckoff's career was at a site in northwestern Oklahoma known as the Burnham site. In 1986, Wyckoff conducted excavations there to collect some Ice Age bison bones dating to between 30,000 and 20,000 years old. He was not looking for human artifacts, as the date of the site was at least 5,000 years older than the earliest agreed-upon date for human habitation in the area. However, screenwashing of soil from around the bones yielded some surprises in the form of flakes of flint that bore the marks of those that are typically left behind in the making of stone tools.

Later excavation uncovered yet more flakes and worked fragments – some made of stone carried in from Texas, and all in soils dating at between 37,000 and 34,000 years old. If what Wyckoff was seeing was correct, then the Burnham site turned all the previous assumptions about the date of the earliest humans in North America on their ear.

"I didn't want to believe it," Wyckoff said. "It put me on the lunatic fringe." But eventually he was persuaded by colleagues to write up his findings at the Burnham site in a monograph, which was published by the museum and the

Oklahoma Anthropological Society in 2004. The site, and the puzzle it represents, is also featured in an exhibit in the museum's Hall of the People of Oklahoma.

In his conclusion to the monograph, Wyckoff wrote that while the Burnham site is not the "smoking gun" to prove that people were here 15,000 years earlier than previously supposed, it does certainly point to the need for further research, as well as a shifting of old assumptions and a willingness to look with fresh eyes.

"I think those findings will be vindicated as long as archaeologists are involved in looking for evidence of people being here instead of walking away from sites that are older than 15,000 years old," Wyckoff said. His research has opened the lid on a new puzzle – one that may require another generation of archaeologists to unravel.

Though Wyckoff will be retired from the university, he will never be retired from archaeology. "I've got plenty of archaeological projects to last me until I die," he quipped, including several books and major articles he will now have time to write. And you can bet he'll be watching to see what those students of his come up with, as well.





# EDUCATION

## EDUCATION GRANTS FUND PROGRAMS

The museum's education department recently has received a number of grants for programs and partnerships aimed at extending the museum's outreach and finding more ways to foster positive science experiences for kids.

"We are reaching out to a range of partners, including school teachers and after-school educators," said Holly Hughes, head of education for the museum. "We are trying to help them find ways they can collaborate to make a synergist experience for the students." Additional information about these programs is available from the museum education department (405) 325-1008.

### Trees and Ponds Project

The Trees and Ponds

Project is a national project funded by the National Science Foundation and coordinated through the Education Development Center in Boston. The EDC is a global nonprofit organization that works with both public and private partners to produce innovative programs to address some of the world's most urgent challenges in education, health and economic opportunity.

The Sam Noble Museum is one of five sites chosen for the Trees and Ponds Project nationally. Participating students from Longfellow Middle School in Norman will meet after school to investigate trees and ponds at natural sites around town. The curriculum is prepared by Bernie Zubrowski, senior scientist for the EDC, who has spent much of his professional life devising ways to educate young people about science, both at school and away from the classroom.

Zubrowski also will conduct a professional development session for Oklahoma

teachers focusing on teaching science through outdoor investigation. The one-day program will take place on Saturday, April 30. Information about registration is available on the museum's website.



Participants in the Sci Girls program at Irving Middle School conduct a wind experiment.  
Photo: Laura Vaughn.

### SciGirls

The national SciGirls program offers hands-on science curricula that is geared specifically for the way girls learn. The Sam Noble Museum was one of 10 sites in the United States selected for the project this year. The program is now in its second semester at Irving Middle School in Norman, and a new SciGirls program was added at Whittier Middle School for the spring semester. Museum educators are working with the science teachers at each school to get the programs up and running, with a goal of the schools eventually being able to continue the programs on their own.

### Creating Critical Connections in Math and Science

The Math and Science Project was one of two teacher workshop projects funded for this summer. Now in its eighth year, the MSP is funded by the U.S. Department of Education, and is conducted in partnership with several departments at the University of Oklahoma, eight public

and private school districts (including Putnam City and Norman Schools), and two business partners. More than 50 middle school math and science teachers in the program will spend over 120 hours

of staff development training in STEM education (science, technology, engineering and mathematics) during the next twelve months of this project. STEM education is an emphasis recently highlighted by President Obama in the Race To The Top initiative and in this year's State of the Union address and is one of the stated priorities of State Superintendent Janet Barresi.

### Rediscovering Native Oklahoma

Brand new this year is "Rediscovering Native Oklahoma," another partnership with Putnam

City and Norman Schools, is funded by the Oklahoma Humanities Council. The workshop will be based out of the museum July 11 through 15. As with the Math and Science Project, participants will divide their time between working with experts in the field and attending pedagogy workshops. But instead of biology and geology, this program will focus on social sciences and Native American themes.

Museum ethnology curator Dan Swan is collaborating with the museum education department to facilitate the program. In addition to working with Swan, participants will work with scholars from the OU Departments of Anthropology and History, the Oklahoma Archeological Survey and the Fred Jones Jr. Museum of Art. High school or eighth-grade history teachers are eligible to apply. Applications are available online and are due April 15. For more information, visit the museum's website at [www.snomnh.ou.edu/schoolprograms](http://www.snomnh.ou.edu/schoolprograms)

# UPCOMING EVENTS



## COMING UP



Refugees, Watercolor on Board, Rebecca Latham

### Art and the Animal

**April 30 through Sept. 5, 2011**

Each year, the international Society of Animal Artists holds a juried exhibition of works by members. From the juried show, a selection of works is chosen to be part of the annual traveling exhibition known as *Art and the Animal*. Museum visitors who have experienced this show when it has visited in the past can attest to the diversity and beauty of the artworks represented.

Subjects range from a photo-realistic graphite drawing of a crate of chickens to a stylized bronze sculpture of a grasshopper perched on the end of a blade of grass. Mediums include paintings in oil, acrylic and watercolor; sculptures in stone, metal and wood; pyrography; scratchboard and pastels. The diversity of artwork reflects and celebrates the amazing diversity of life on Earth.

The *Art and the Animal* tour is produced for the Society of Animal Artists by David J. Wagner L.L.C., David J. Wagner, curator/tour director.



Students in a previous Summer Explorers program pose for a group photo alongside a stream near Norman.

Photo: Krysten Marshall

### Summer Explorers

Now is the time to enroll your child, aged 4 to 14, in the popular Summer Explorers program! This year's line-up of classes include several old favorites, such as Slime and Scales, Pond Explorer and Meet the Dinosaurs. Our education department has also added some new programs, including Survivor: Oklahoma, a class for seven- to eight-year-olds that focuses on how plants, animals and people have survived on the Great Plains for thousands of years. Get Lost! is another new class in outdoor survival skills for nine- to 11-year-olds. A full listing of programs is available online at [www.snomnh.ou.edu/publicprograms](http://www.snomnh.ou.edu/publicprograms). Classes fill quickly, so register early by calling (405) 325-1008.



Museum fossil preparator Kyle Davies sculpts missing vertebrae for the reconstruction of a baby *Apatosaurus* to be installed in the museum this summer. Photo: Linda Coldwell

### Baby *Apatosaurus*

Exhibit fabricators and fossil preparators at the museum are wrapping up the final stages of a two-year project to mount the skeleton of a juvenile *Apatosaurus* in the museum's Hall of Ancient Life. The skeleton will be added to the Clash of the Titans diorama. The estimated date for installation is sometime in late summer.

Our museum has a very rare collection of baby *apatosaur* bones. Because these are so rare, few museums have enough to put together even a partially complete skeleton, and our case is no different. To make up for the lack of actual fossils, exhibit fabricators are using techniques both old and new to create the missing bones. Some of the missing bones, particularly vertebrae, are being sculpted by fossil preparator Kyle Davies. His creations are based on actual fossils in our collection and are being made of wood and clay, which will then be cast in a resin material and painted to match the original fossils.

Some of the missing bones are being generated virtually using technology now available at the Center for Shape Engineering and Advanced Manufacturing (SEAM) in the OU School of Industrial Engineering. The process involves a laser scan of adult *apatosaur* bones from our collection, which can then be digitally scaled down to the proper size on a computer. SEAM then "prints out" the digital model in plastic using 3-D fabrication technology. The same type of laser scans can be used to create mirror images of bones from our collection – say a right femur – to create its missing opposite.

With nearly 300 bones to be prepared, sculpted or replicated and then cast, it's a time-consuming process. But once the new baby is mounted in the exhibit, our museum will be one of only two in the world where you can view a fully-mounted baby *Apatosaurus*. Watch the museum website for information about opening dates and programs.





## OLD FIELD JACKET YIELDS NEW SPECIES

When volunteers in the museum's vertebrate paleontology lab opened an unlabeled field jacket from among the many still waiting preparation, they discovered something pretty exciting: the skeleton of a Miocene horned rodent, complete with skull. The find was significant from the beginning because this type of animal had previously been known in Oklahoma only from bits and pieces. As work proceeded on the fossils, it also became clear that this particular specimen bore significant differences from others of its type, and likely is a new species.



Photo: Linda Coldwell

There was only one problem: there was no data associated with the field jacket. The outside was unmarked, and there were no known notes as to where or when it was collected.

Curator Nick Czaplewski then embarked on a mission of sleuthing out clues as to the provenance of the jacket in question.

"I wanted to get in touch with David Kitts, former curator of vertebrate paleontology in the 50s, to ask him about it," said Czaplewski. "I suspected Kitts or his people probably collected it. But, sadly found that, Professor Kitts had just passed away, so that opportunity evaporated."

In hopes of finding some associated materials, Czaplewski began combing through other unopened field jackets in storage, looking for similarities. Finally he discovered one that

looked promising: a jacket with a similar style of wrapping, that bore the name of a site: near Cheyenne. Once opened, this jacket was determined to be almost certainly from the same locality. The matrix was the same consistency, color and texture, and the bones inside were from the same general time period. But the date remained unknown.

At last, on the day that Professor Kitt's death was announced in the papers, one of the volunteers in the lab discovered a date on a scrap of newspaper that had been used to pad the inside of the plaster jacket: 1959. The mystery was solved.

Czaplewski has been studying the rodent's skull and determined that it belongs to a genus and species of "horned rodents" that typically does not actually have horns. However, this individual undoubtedly bears two prominent horns on its nose. Czaplewski will be working on a paper to name the new species, and plans to dedicate it to David Kitts, more than half a century after he excavated it.

## WYCKOFF TO RECEIVE CITATION OF MERIT

Don Wyckoff, curator of archaeology at the museum, has been chosen to receive the 2011 Historic Preservation Officer's Citation of Merit from the Oklahoma Historical Society. The award is presented annually to individuals, organizations, agencies or firms that have made important contributions in the preservatin of Oklahoma's rich heritage. Wyckoff was chosen in honor of his "countless contributions to the understanding of Oklahoma's past and to the preservation of the archaeological sites that represent it"

## REDBUD CAFÉ WELCOMES NEW CHEF

Visitors to the museum this spring and summer will see some changes to the menu in the Redbud Café. In March, Chef Curtis Gregoire took over the menu management of the café. A classically trained chef, Gregoire is a graduate of Johnson and Wales University, one the finest culinary arts schools in the country. He has been with OU Food Services for two years, and has worked at the University of Massachusetts, restaurants, hotels and banquet houses throughout New England.

Gregoire has been surveying museum staff to get a sense for the changes they would like to see in the café. His first emphasis will be on providing more variety and fresher options. Sandwiches and salads will remain primary staples, since the café is not equipped for onsite cooking, but Gregoire means to draw on the campus-wide resources of OU Food Services to provide daily specials and hot items that can be prepared off-site and brought in.

Balancing the new menu to fit the needs of the café's unique blend of customers will be an interesting challenge. "The museum is unlike any other venue we have at OU," Gregoire commented. "The demographic includes everyone from college professors to families. We have several coffee shops around campus, but no other place on campus serves children."

To help meet the needs of museum visitors, Gregoire plans to begin offering some fresh, museum-themed items on the menu that will appeal to families with children, and plans to remove some of the "convenience-store" type items in favor of healthier foods.

Some of the changes will be in place this spring, with additional upgrades to the café menu and atmosphere coming this summer.