

January 2009

Winter/Spring

# Curator Club

## Tukufu Comes to The Oakes Museum

Tukufu is the name given to the African elephant skeleton now on permanent exhibit outside The Oakes Museum in The Jordan Science Center at Messiah College. Tukufu was officially welcomed to the Oakes Museum in August 2008, but his story began many years ago in Zambia.

In September 2005, Oakes Museum Director, Ken Mark, received a call that a full elephant skeleton was available for the museum, but it wasn't quite ready to be shipped. To prepare the skeleton, the elephant carcass was buried to be "cleaned" by insects and natural decay. In June 2007, the "cleaned" skeleton was dug up and mailed to Pennsylvania. The bones were so large it required two huge crates.

The bones were kept in storage until October 2007 when they were shipped to Skulls Unlimited, a company that specializes in osteology, the scientific study of bones. Skulls Unlimited was chosen because Mr. Mark saw the company's work at the Indianapolis Children's museum where they articulated (put together) many dinosaurs. Skulls Unlimited has produced custom skeletal mounts for major universities, museums and science centers across the country.

The assembly job was not an easy one. The bones, which weigh over 1400 lbs., had to be degreased twice and bleached before being articulated. The articulation took over two months. In March 2008, Mr. Mark flew to Oklahoma to see the completed the elephant skeleton and bring it to Pennsylvania. The assembled skeleton was divided into seven large pieces for the trip back to the museum. The pieces were re-articulated in May 2008 in its present location and surrounded by a special glass enclosure to ensure its safety.

A contest was held to name the skeleton. Over 200 entries were received from Messiah College students. Nathaniel Jenkins '11, suggested the name Tukufu, which means majestic, grand, distinguished, and important in Swahili. It was a word that captured the characteristics attributed to elephants very effectively.

Tukufu's long journey from Zambia took over three years, but now he stands proudly to greet visitors who come to The Oakes Museum. Go to <http://www.messiah.edu/Oakes> to see a short video clip of how the final seven pieces were put together!

## African Elephants...

are the largest land animals on Earth. They are slightly larger than their Asian cousins and can be identified by their larger ears that look like the continent of Africa.

eat roots, grasses, fruit, and bark. An adult elephant will spend about 16 hours a day feeding and foraging, and consume 30-50 gallons of water and about 350 pounds of food a day.

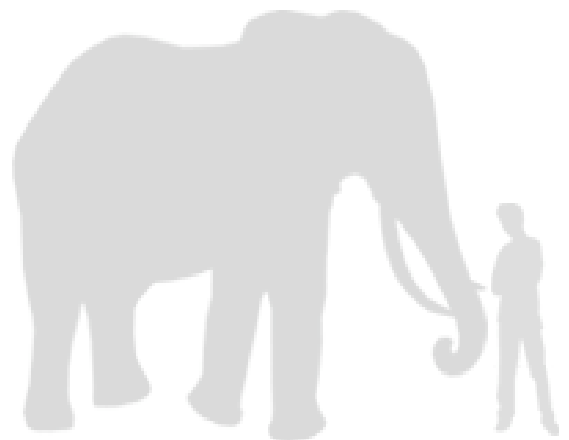
sometimes use their trunks as snorkels, allowing submerged swimming elephants to breathe as they cross deep rivers or lakes.

use dirt and water on their backs to keep their skin shielded from the sun.

go through up to 6 sets of teeth throughout their life. Their teeth rarely last their entire lifespan, which is around 65 years.

can weigh over 13,000 pounds (as much as 170 adults or 12 full size trucks) and stand 13 feet tall. The skin itself can weigh over a ton.

Size relative to a 6-ft (2-m) man:



Source: <http://nationalzoo.si.edu/Animals/AfricanSavanna/fact-of-elephant.cfm>  
<http://animals.nationalgeographic.com/animals/mammals/african-elephant.html>

January 2009

Winter/Spring

**2009 WINTER/SPRING  
ACTIVITY SCHEDULE**

**February 7th**

***Celebrate Groundhog Day!  
Learn about Punxsutawney  
Phil and the science of  
weather prediction.***

**February 21st  
Abracadabra!**

***Discover the science of  
magic and the magic of  
science.***

**March 7th**

***Danger! Plants!  
Examine carnivorous and  
deadly plants and learn  
how plants help us survive.***

**March 21st**

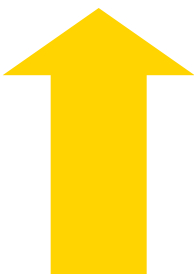
***Forces of Nature!  
Find out how volcanoes,  
earthquakes  
and other natural  
phenomenon shape our  
world.***

**April 4<sup>th</sup>**

***Rockin' Robin!  
Identify local birds, learn  
their songs and explore  
their habitats.***

**April 18th**

***Gross Me Out!  
Uncover the science behind  
nasty, gross and  
disgusting.***



## Curator Corner - Archeology

If you attended any of our Archeology events, then you have met Dr. David Pettegrew, the Curator of Archaeology for the Oakes Museum. When he is not in the field surveying or excavating, Dr. Pettegrew works at Messiah College in the Department of History where he teaches classes in Latin, Ancient Greece, the Roman World, Late Antiquity, and Classical Archaeology.

Dr. Pettegrew became interested in archaeology at 10 years of age when a biblical archaeologist, who reminded him of Indiana Jones, came and spoke at his church about the supposed location of the lost Ark of the Covenant. He was hooked! He saved up his allowance and purchased a metal detector, which he used to dig up the metal artifacts buried in the front yard of his house in Deer Park, Texas. When he went to college, he majored in anthropology and learned that archaeology was a scientific and systematic discipline.

Today Professor Pettegrew's research focuses on using archaeology as a tool to investigate and study ancient Greek and Roman history. Since 1998, he has been involved in archaeological projects in Greece, including survey and excavation at the religious sanctuary of ancient Isthmia, the city of Corinth, and the island of Kythera. He has also directed the Pyla-Koutsopetria Archaeological Project, which is investigating a buried Roman harbor town near Larnaka in the country of Cyprus. Pettegrew regularly takes students from Messiah College to excavate in Cyprus. Last summer his team uncovered the building remains of a Hellenistic town dating to 200 BC and found artifacts such as bronze coins and spear points, hundreds of pottery fragments, and a little limestone statue. This summer the team will continue their excavations in Cyprus and will focus their attention on an early Christian basilica dating to 500 AD.

Dr. Pettegrew notes that archaeology is not for everyone. "Archaeology is always slow and tedious and requires detailed note-taking. What an archaeologist finds most of the time is a whole lot of dirt. It takes a great deal of patience to enjoy the process of finding very little. However, the work always pays off." What he enjoys most about archaeology is how the little bits of material evidence really do add up to new pictures of the past. Do you have questions for Dr. Pettegrew? Email him at [curatorsclub@messiah.edu](mailto:curatorsclub@messiah.edu)

### *Did you know...*

The Oakes Museum officially opened October 26, 2002. The museum collection contains over 40,000 specimens ranging in size from an elephant to an arrowhead.

The Oakes Museum was named after Galen and Beulah "Boots" Oakes, both Messiah graduates. Mr. Oakes is a long-time member of the Board of Trustees.

Leonard Hinckley's donation of the African mammal collection inspired Messiah College to build a natural history museum.

Visit us at: [http://www.messiah.edu/Oakes/curator\\_club/index.shtml](http://www.messiah.edu/Oakes/curator_club/index.shtml)

The Oakes Museum at Messiah College  
Box 3029 One College Avenue  
Grantham, PA 17027  
717-691-6082  
[curatorsclub@messiah.edu](mailto:curatorsclub@messiah.edu)