

NEWS

Florida Fossil Hunters



Volume 19, Number 2

February 2009

Prez Sez:

Spring is here, Love is in the air-and Fossil Hunters all around are thinking of 11-foot tall, horse-eating birds, and airborne pollinating arthropods the size of your head!

Our January meeting was well attended—about thirty members and guests made it, including a few old friends who were unable to attend Wednesdays! A vote was taken, and the group decided to hold our meetings on Saturdays through June 20th. A new vote will be taken at that time to reevaluate the Saturday meeting details (see below).

A special thanks to **Florence Magovern**, who gave a talk on her work discovering dinosaur eggs in Mongolia, and the discovery of “Baby Louie”- the embryonic *Giganotoraptor!* If you were unable to attend, you can still visit **Hatching the Past** at the Science Center through May 10th. More information is available through the Magovern’s website - <http://stonecompany.com/>

On **February 21st, 2009**, we will discuss a few things, including upcoming fossil events in Central Florida, details for Fossil Fair, and your ideas. February’s also a **Kid’s Blast!** So bring the little ones to **OSC’s Learning Labs on Level 2** at 2:00 pm.

Good luck, and good hunting!
Jimmy Waldron
President of Florida Fossil Hunters

Coming Events

**MEETINGS
SATURDAY**
at the Orlando Science Center

February 21st
2:00 pm Kids' Fossil Blast
3:00 pm Meeting

March 21st
3:00 pm Meeting

April 18th
2:00 pm Kids' Fossil Blast
3:00 pm Meeting

May 16th
3:00 pm Meeting

For more info...
www.floridafossilhunter.com

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NEW MEETING TIMES

3RD SATURDAY of EVERY MONTH

until Summer

Kid’s Fossil Blast!: 2pm - 3pm

Meetings: 3pm - 5pm

Fragments

Piece on the Peace

I checked the water level and it's still low enough to dig for fossils without diving. The water temperature might be chilly though. *Happy hunting.*



Vulcan Mine Field Trips

Vulcan Mine is still allowing us to hunt for fossils on the second Saturday of each month. Make sure you arrive BEFORE 9 am because once the group is escorted in the gates are locked.

You must be a current member of the club for insurance purposes. Check our website for further information and directions.

Fossil ID

Do you have things that you can't identify? Bring them to the meetings and with all the expertise available among our membership, maybe we can figure out what you've got.

Kids' Fossil Blast

On Saturday, February 21st at 2 pm we will explore the mysteries of plate tectonics, the creation and destruction of Pangea and how all of that affected the plants and animals. ***Our next kids' program will be at the February 2009 meeting—see page 3 for more info.***

Mineral and Fossil Shows, Exhibits and more...

Orlando Science Center Fossil Fest returns Saturday, February 28th, from 11:00 am to 4:00 pm. See page 5 for more information

Tampa Bay Fossil Fest

Mark your 2009 calendars.....the Tampa Bay show will be the 7th and 8th of March.

The Mid America Paleontology Society (MAPS) will hold its National Fossil Exposition on April 3rd thru 5th at the Western Illinois University in Macomb, Illinois. For more information go to midamericapaleo.org

Earth Wonders Exhibit

This is an exhibit designed to encourage and instruct children and adults in the geological processes affecting the formation of rocks and minerals. It is housed in the Flagler County Superintendent's office building, 1769 Moody Blvd., Bunnell, Florida 32110. For more info go to www.earthwonders.org

We met the President of Geological Museum and Lapidary Arts Learning Center, John Withey, at the Tomoka Rock and Gem Show. He is looking for fossils from Florida to exhibit. Bonnie and I will be sending him a box of some assorted fossil material. If you have anything that you would like to donate, contact us or Mr. Withey at j3942j@worldnet.att.net or 386/445-9030. Thanks for your help. Russell Brown

Gem and Mineral Show

The Imperial Bone Valley Gem, Mineral and Fossil Society is having its 5th annual show on Saturday, February 21st from 10 am to 5 pm. It will be held at the Auburndale Beach Club, 321 Ramsgate Rd., Auburndale, Florida. They will have 14 vendors and admission is free. For more information, contact Jim or Cindy Reed at 863-644-6665 or lunaria@tampabay.rr.com

FLORIDA FOSSIL HUNTERS NOTES

2009 Fossil Fair: October 10 & 11, 2009

Time to renew your 2009 Membership.
Please fill out a renewal form on page 7

New Club Secretary

We would like to thank Gloria Kerr, one of our new members, for volunteering to be secretary. With her assistance we will be able to keep more accurate records of the meetings and events and convey it to the members.

Florida Fossil Hunters Board of Directors

Board meetings are held about one week before our regular club meetings. For special issues, additional meetings may be arranged. At these meetings issues, events, club business, future plans, speakers and ideas are discussed. If you are interested in becoming a board member, please contact me or one of the officers. All we are looking for are people willing to speak their mind and take the club in the direction that the membership wants it to go.

Remember...you don't have to be an officer or board member to suggest ideas. Just pass it on to a board member. We face many challenges and your input will help in making a success of the club.

Fossil Find Reveals

Early Whales Gave Birth On Land

ScienceDaily (Feb. 4, 2009) — Two newly described fossil whales---a pregnant female and a male of the same species---reveal how primitive whales gave birth and provide new insights into how whales made the transition from land to sea.

The 47.5 million-year-old fossils, discovered in Pakistan in 2000 and 2004 and studied at the University of Michigan, are described in a paper in the online journal PLoS One.

U-M paleontologist Philip Gingerich, who led the team that made the discoveries, was at first perplexed by the assortment of adult female and fetal bones found together. "When I first saw the small teeth in the field, I thought we were dealing with a small adult whale, but then we continued to expose the specimen and found ribs that seemed too large to go with those teeth," he said. "By the end of the day, I realized we had found a female whale with a fetus."

In fact, it is the first discovery of a fetal skeleton of an extinct whale in the group known as Archaeoceti, and the find represents a new species dubbed *Maiacetus inuus*. (*Maiacetus* means "mother whale," and *Inuus* was a Roman fertility god.) The fetus is positioned for head-first delivery, like land mammals but unlike modern whales, indicating that these whales still gave birth on land.

Another clue to the whales' lifestyle is the well-developed set of teeth in the fetus, suggesting that *Maiacetus* newborns were equipped to fend for themselves, rather than being helpless in early life.

The 8.5-foot-long male specimen, collected four years later from the same fossil beds, shares characteristic anatomical features with the female of the species, but its virtually complete skeleton is 12 percent larger overall, and its canine teeth or fangs 20 percent larger. Such size discrepancies are not uncommon among whales and their kin; in some species the females are larger, while in others the males are slightly to considerably bigger. The size difference of male and female *Maiacetus* is only moderate, hinting that the males didn't control territories or command harems of females.

The whales' big teeth, well-suited for catching and eating fish, suggest the animals made their livings in the sea, probably coming onto land only to rest, mate and give birth, said Gingerich, who is the Ermine Cowles Case Collegiate Professor of Paleontology and director of the U-M Museum of Paleontology. Like other primitive archaeo-

cetes, *Maiacetus* had four legs modified for foot-powered swimming, and although these whales could support their weight on their flipper-like limbs, they probably couldn't travel far on land.

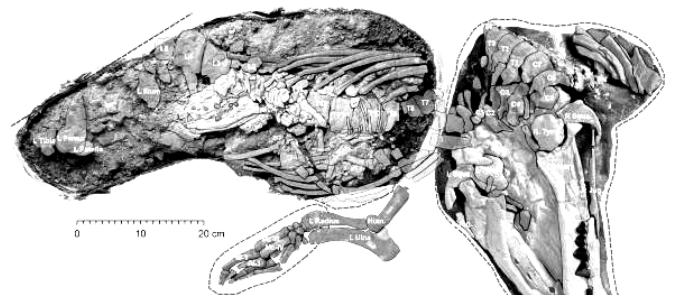
"They clearly were tied to the shore," Gingerich said. "They were living at the land-sea interface and going back and forth."

Compared with previous fossil whale finds, *Maiacetus* occupies an intermediate position on the evolutionary path that whales traversed as they made the transition from full-time land dwellers to dedicated denizens of the deep. As such, it offers invaluable, new information on structural and behavioral changes that accompanied that transition.

"Specimens this complete are virtual 'Rosetta stones'," Gingerich said, "providing insight into functional capabilities and life history of extinct animals that cannot be gained any other way."

Gingerich's coauthors on the PLoS paper are Munir ul-Haq of the Geological Survey of Pakistan; Wighart von Koenigswald of the University of Bonn in Germany; chief vertebrate preparator William Sanders of the U-M Museum of Paleontology; associate research scientist B. Holly Smith of the U-M Museum of Anthropology; and U-M postdoctoral scholar Iyad Zalmout.

The researchers received funding from the Geological Survey of Pakistan, National Geographic Society, National Science Foundation, and Alexander von Humboldt Foundation.



*Fossils of female *Maiacetus inuus* with near-term fetus in utero, as found in the field. The female's skull is shaded white (teeth brown), and other parts of her skeleton are shaded red. The single fetus, in birth position inside the mother whale, is shaded blue (teeth orange). The specimen was collected in three plaster jackets (blue dashed lines), and additional bones were picked up separately. The red dashed line indicates the edge exposed by erosion. (Credit: Copyright: University of Michigan Museum of Paleontology)*

Florida Museum Researchers Discovers World's Largest Snake - 45 feet long - in Columbia

February 5, 2009

GAINESVILLE, Fla. --- The largest snake the world has ever known -- as long as a school bus and as heavy as a small car -- ruled tropical ecosystems only 6 million years after the demise of the fearsome Tyrannosaurus rex, according to a new discovery published in the journal Nature.

Partial skeletons of a new giant, boa constrictor-like snake named *Titanoboa cerrejonensis* found in Colombia by an international team of scientists and now at the University of Florida are estimated to be 42 to 45 feet long, the length of the T-Rex "Sue" displayed at Chicago's Field Museum, said Florida Museum of Natural History Vertebrate Paleontologist Jonathan Bloch, who co-led the expedition with Carlos Jaramillo, a paleobotanist from the Smithsonian Tropical Research Institute in Panama.

Researchers say the extinct snake was even larger than the wildest dreams of directors of modern horror movies.

"Truly enormous snakes really spark people's imagination, but reality has exceeded the fantasies of Hollywood," said Bloch, who is studying the snake at the Florida Museum on the UF campus. "The snake that tried to eat Jennifer Lopez in the movie 'Anaconda' is not as big as the one we found."

Jason Head, a paleontologist at the University of Toronto in Mississauga and the paper's senior author, described it this way: "The snake's body was so wide that if it were moving down the hall and decided to come into my office to eat me, it would literally have to squeeze through the door."

Besides tipping the scales at an estimated 1.25 tons, the snake lived during the Paleocene Epoch, a 10-million-year period immediately following the extinction of the dinosaurs 65 million years ago, Bloch said.

The scientists also found many skeletons of giant turtles and extinct primitive crocodile relatives that likely were eaten by the snake, he said.

"Prior to our work, there had been no fossil vertebrates



This is an artist's perception of how the largest snake the world has ever known would have looked in its natural setting 60 million years ago. The illustration was prepared by Jason Bourque, a UF graduate student who was a member of the team.

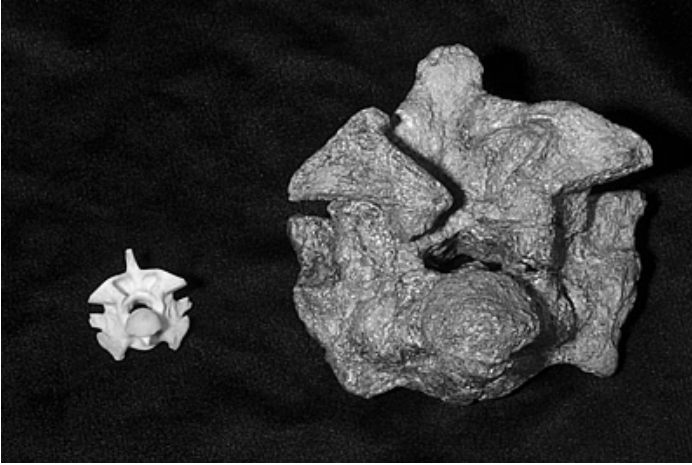
found between 65 million and 55 million years ago in tropical South America, leaving us with a very poor understanding of what life was like in the northern Neotropics," he said. "Now we have a window into the time just after the dinosaurs went extinct and can actually see what the animals replacing them were like."

Size does matter because the snake's gigantic dimensions are a sign that temperatures along the equator were once much hotter. That is because snakes and other cold-blooded animals are limited in body size by the ambient temperature of where they live, Bloch said.

"If you look at cold-blooded animals and their distribution on the planet today, the large ones are in the tropics, where it's hottest, and they become smaller the farther away they are from the equator," he said.

Based on the snake's size, the team was able to calculate that the mean annual temperature at equatorial South America 60 million years ago would have been about 91 degrees Fahrenheit, about 10 degrees warmer than today, Bloch said.

The presence of outsized snakes and turtles shows that even 60 million years ago the foundations of the modern



A vertebra of a modern Anaconda (left) and (right) a vertebra from the Titanoboa. *Photo by Ray Carson*

Amazonian tropical ecosystem were in place, he said.

Fossil hunting is usually difficult in the forest-covered tropics because of the lack of exposed rock, Bloch said. But excavations in the Cerrejon Coal Mine in Northern Colombia exposed the rock and offered an unparalleled opportunity for discovery, he said.

After the team brought the fossils to the Florida Museum of Natural History, it was UF graduate students Alex Hastings and Jason Bourque who first recognized they belonged to a giant snake, Bloch said. Head, an expert on fossil snakes, worked with David Polly, a paleontologist at the University of Indiana, to estimate the snake's length and mass by determining the relationship between body size and vertebral -- backbone -- size in living snakes and using that relationship to figure out body size of the fossil snake based on its vertebrae.

Harry W. Greene, professor in the department of ecology and evolutionary biology at Cornell University and one of the world's leading snake experts, said the "colossal" ancient boa researchers found has "important implications for snake biology and our understanding of life in the ancient tropics."

"The giant Colombian snake is a truly exciting discovery," said Greene, who wrote the book "Snakes: The Evolution of Mystery in Nature." "For decades herpetologists have argued about just how big snakes can get, with debatable estimates of the max somewhat less than 40 feet."

Writer: Cathy Keen, 352-392-0186, ckeen@ufl.edu
Source: Jonathan Bloch, 352-273-1938, jbloch@ufl.edu



Orlando Science Center Presents: February Fossil Fest

About this time, last year, the Orlando Science Center hosted the **Fossil Fest** as an exciting way to get Orlando excited about dinosaurs, fossil hunting, and the science of paleontology. It was a resounding success, with fantastic vendor booths, great shows and entertainment, and a great part of our commitment to making science fun.

We are now preparing for the Third Annual Festival of Fossils as part of our Scienterrific Saturdays events! Scienterrific Saturdays transform the whole Science Center into an all-out themed fun-day experience for the whole family. **Mark your calendars: Fossil Fest returns Saturday, February 28th, from 11:00 am to 4:00 pm.**

To improve this year's Fossil Fest, we're looking for interested people who would like to showcase fossils, minerals, artifacts, artwork, or other really cool dinosaur-related exhibitions. With the adoption of new Science Education standards in Florida, we'd like to include evolutionary information as a topic for this year's event.

Each exhibiting group is allotted a 6-foot cafeteria-style folding table on Level 4 of the Science Center. These will be located in the expanded DinoDigs exhibit and an adjacent hall, as well as in the rotunda. Table assignments are given in a first-come, first serve basis. In addition, you are invited to bring any table-top decorations, tablecloths, signboards, brochures, or other promotional materials you wish. If you'd be interested in joining us for the celebration, or if you other fossil enthusiasts who love to do this sort of stuff, please respond to me in an e-mail with your name and phone number. and please tell me if you require electricity for your table.

Tampa Bay Fossil Club's Fossilfest

TAMPA, FLORIDA, February 1, 2009 – Before everything we know, prehistoric people hunted mammoths, built pyramids along our coast, and lived in fear of the saber cat, lion, and bear. On March 7th and 8th, 2009 the Florida State Fairgrounds Special Events Center will go back in time to a different place, a different Florida when the **Tampa Bay Fossil Club** presents, **FossilFest, Florida's Ice Age!**

FossilFest is Florida's largest prehistoric show where the public can view amazing fossils found right here in Florida, as well as, artifacts left behind by Florida's prehistoric people. FossilFest features educational activities, for both children and adults, that are designed to teach the public about Florida's extensive and exciting prehistoric past. A time when saber-toothed cats, giant wolves, sharks as big as school buses, and prehistoric Indians ruled Florida's peninsula. Also on display will be gems, minerals and fossil shells. Vendors will be on hand to sell and trade fossils found both here in Florida, and from all over the world.

"Our goal is to teach Floridians about the prehistoric creatures and people that were here long before us," say club president Michael Searle. "You don't have travel to far-away exotic places to find these fossils," says Searle, "These mammoths, wolves, camels and rhinos lived right here where we live today. There fossilized remains are everywhere in Florida."

On both Saturday and Sunday there will be presentations on Florida's Ice Age Fossils and prehistoric people. These seminars, which are free to those attending FossilFest, will teach folks how to legally hunt for fossils in Florida and how to identify and preserve what they find.

One of the highlights of FossilFest is the children's Fossil Mine at Paleo Park! For a nominal fee, kids will have the opportunity to dig through a sand pit to recover authentic fossils donated by the members of the Tampa Bay Fossil Club. The adventure doesn't end there though. Club members then accompany the children to the "learning table" where they will sit down one-on-one with each child to identify and explain the fossils they find, and then bag them for the ride home. That's right, the kids get to keep everything they find!

"It's a wonderful "hands-on" learning experience for the children," say Tampa Bay Fossil Club Officer and Hillsborough County school teacher, Patrick McGirk. "You just can't believe how excited these kids get over finding fossils. They don't even realize they're learning!"

There will be free door prizes hourly, silent auctions, and raffles throughout the weekend.

"So many people these days are hooked on the Discovery Channel, and now these treasure hunting shows. Well, that's what we're all about," says Dr. Bob Sinibaldi, a former President of the Tampa Bay Fossil Club and Pinellas County special education expert. "FossilFest will appeal to anyone who frequents the Discovery Channel, loves science and nature, or has an interest in history and outdoor adventure."

The Tampa Bay Fossil Club is a family oriented organization focusing on paleontology, archaeology, and everything prehistoric. Meetings are held monthly at the University of South Florida's Tampa campus and features prominent speakers from many areas of science. The Tampa Bay Fossil Club awards annual scholarships to students studying in the field of paleontology and geology. The 22 year-old club hosts numerous field trips, campouts, gatherings, and adventures throughout its September through May seasons.

The Ice Age returns to Florida!

Where: Florida State Fairgrounds,
Special Events Center
When: March 7 & 8, 2009
Time: **Saturday - 9AM until 6PM,
Sunday - 10AM until 4PM**
Admission: \$5.00 for adults,
children 12 and under admitted free.
Contact: Michael Searle, (813) 909-9358,
fossilnerd@msn.com
Web Site: www.tampabayfossilclub.com

There also is a charge for parking at the Florida State fairgrounds.

Florida Fossil Hunters

is a fun and educational group whose goal is to further our understanding of the prehistory of Florida. We encourage family participation and welcome explorers of all ages.

Membership is \$17 per year. Other household members may be included at no charge.

Meetings are held the third Wednesday of each month at 7:00pm, check the website for the location.

Officers:

| | | |
|----------------|---------------|----------------|
| President | Jimmy Waldron | (386) 212-5814 |
| Vice President | Russell Brown | (352) 429-1058 |
| Secretary | Gloria Kerr | |
| Treasurer | Sara Morey | (407) 353-8675 |

Chairs:

| | | |
|-----------------|-----------------------|----------------|
| Education | Melissa Cole | (407) 834-5615 |
| Field Trips | Shelley Zimmerman | (407) 891-1260 |
| Fossil Fair | Valerie First | (407) 699-9274 |
| Fossil Auctions | Dave Dunaway | (407) 786-8844 |
| Fossil Bucks | Dave Dunaway | (407) 786-8844 |
| Fossil Lotto | Ed Metrin | (407) 321-7462 |
| Auctioneer | Roy Singer | (407) 645-0200 |
| Historian | Valerie First | (407) 699-9274 |
| Librarian | Kathy Munroe | (407) 846-7382 |
| Membership | Joanne Maio | (407) 375-3635 |
| Newsletter | Bonnie Cronin | (352) 429-1058 |
| | Elise Cronin-Hurley | (407) 929-6297 |
| Photography | John Heinsen | (407) 291-7672 |
| Webmaster | Elise Cronin-Hurley | (407) 929-6297 |
| | elise@liseydreams.com | |

Board of Directors:

| | |
|---------------|----------------|
| Jeremy Smith | (407) 293-9391 |
| Roy Singer | (407) 645-0200 |
| Ed Metrin | (407) 321-7462 |
| Tom Tomlinson | (407) 290-8474 |
| Melissa Cole | (407) 834-5615 |
| Russell Brown | (352) 429-1058 |
| John Jelks | (407)568-5558 |

Membership Application

Names: _____

Associate Members: _____

Address: _____

City: _____

State: Zip: _____

e-mail: _____

____ New ____ Renewal

Please list any interests, experience, talents or just plain enthusiasm, which you would like to offer to the club:

Membership is \$17 per year. Our membership year runs from January to December. All renewals are done in December and January.

Please make your checks payable to:

Florida Fossil Hunters
 Post Office Box 540404
 Orlando, Florida 32854-0404

Associate members are people in the same household, included at no extra charge, 2 adult votes per household.

Newsletter Policy

Articles must be submitted by the first of the month to be included in that month's newsletter. These can be mailed to the above Post Office Box or e-mailed to: elise@liseydreams.com. Articles can be sent as text in the e-mail or in Microsoft Word files (*.doc).

Florida Fossil Hunters Mark Your Calendar

February 21, 2009

Kid's Fossil Blast 2:00pm
3:00pm FFH Meeting

February 28, 2009

Orlando Science Center, Fossil Fest

March 7 - 8, 2009

Tampa Bay Fossil Fest

March 21, 2009

3:00pm FFH Meeting

March 31 - April 5, 2009

18th Annual Thomas Farm Dig or
Hummingbird Challenge V

April 3 thru 5, 2009

The Mid America Paleontology Society (MAPS)
National Fossil Exposition

April 18, 2009

Kid's Fossil Blast 2:00pm
3:00pm FFH Meeting

May 16, 2009

3:00pm FFH Meeting

**Time to Renew!!! - It's time to pay your 2009 dues
which are still only \$17 per household.**

Please fill out a renewal form on pg 7 so we can
make sure all your data is current
and to properly document your payment.

More information on these events on page 2

Visit us online at www.floridafossilhunters.com

Articles and comments should be sent to: elise@liseydreams.com

Florida Fossil Hunters

Post Office Box 540404

Orlando, Florida 32854-040



Florida Fossil Hunters News