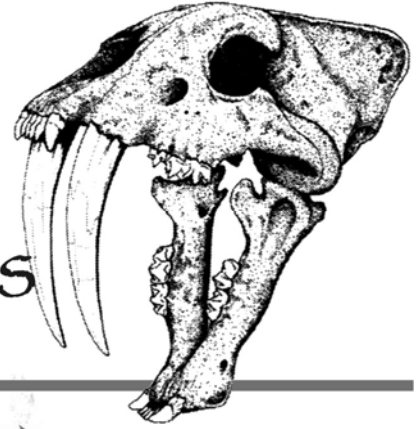


NEWS

Florida Fossil Hunters



Volume 18, Number 8

September 2008

Prez Sez:

The weather sure has messed up collecting and peoples homes. I hope you all stayed dry!

Our speaker for September will be the famous archeologist, Barbara Purdy, from the University of Florida. Don't miss this meeting.

We will also have sign up sheets for work stations at the fossil fair.

The Sept. Vulcan field trip will be on the 13th and probably still too hot to attend. The 90's limit collecting to 3-4 hours at best. If you want to go please let Bonnie & Russell know via email bjrb48@netzero.net or call 352/429-1058.

The Graves Mountain GA dig happens the first weekend in Oct. if you want to car pool plan on leaving on Weds or Thursday. Be aware that it is very hot and a lot of walking and carrying all your tools and rocks.

The only good part of Hurricane season is the uncovering of more fossils!

Shelley Zimmerman

Coming Events

Meetings held at the Orlando Science Center

September 17th, 7:00pm Mtg

October 15
6:00pm Kid's Blast and
7:00pm Meeting

October 11-12 Fossil Fair

November 19, 7:00pm Mtg

December 17
7:00pm Meeting

For more info...
www.floridafossilhunter.com

2008

Seventeenth Annual, Florida Fossil Hunters Fossil, Mineral, and Gem Show

Central Florida Fairgrounds

Saturday, October 11, 2008 - 9:00 - 5:00pm

Sunday, October 12, 2008 - 10:00am - 4:00pm



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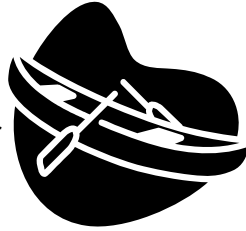
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Florida Fossil Hunters News

Fragments

Piece on the Peace

With all the usual rains of summer plus all the added water the tropical storms have brought, the Peace River is too deep and the flow too strong to do any hunting there.



However the rains do make good hunting at Vulcan. Join us there on Saturday, September 13th at 8:30 am on the driveway loop. See the box below for more info. You must be a member of our club for insurance purposes.

Daggers and Axes and Swords...

The Daytona Beach Museum of the Arts and Sciences opened a new exhibition of antique weapons and armor on August 15th. The items include artistry of some of the most famous gunsmiths and weapon makers from the medieval period to the 19th century through a wide range of finely designed and decorated muskets, rifles, pistols, lions-head daggers, war axes, knives, sabers and straight-edge swords. You can get more info at their website www.moas.org or at 386-2550285.

Roadside Geology of Florida

For those of you who weren't at the August meeting..... Florida now has its own book in this great series on geology by state. The table of contents indicate that it is a comprehensive book covering the making of this land-mass from the Precambrian to the present. It then gives the geologic formations and even some of the fossils found along many of the roads. It is listed at \$25.99 but you can find it cheaper on Amazon.com. At least one of the vendors at our fossil fair will also have copies for sale.

Evolution Cruise

Insight Cruises has scheduled a cruise from Feb 27th to Mar 9th, 2009 that features an Evolution seminar in partnership with Scientific American. Learn more about it at www.insightcruises.com. It's listed as Scientific American/Bright Horizons, Cruise #3, Evolution Emanation.

Kids' Fossil Blast

At last month's meeting, each kid got to take home a real fossil horse tooth as a memento of our journey into the evolution of horses. Our next kids' program will be on Wednesday, October 15th at 6 pm. The Kids' Fossil Blast is a fun, hands-on way to find out about fossils for kids mainly ages 4 to 14 yrs. Each meeting we focus on a different type of fossil using real fossils, replicas and printed materials. Sometimes the kids even get to take real fossils home. We meet every other month at 6:00 pm at the OSC.

2008 Fossil Fair

Four Ways to help

VOLUNTEER YOUR TIME: There are plenty of things to do....help set up on Friday, October 10th. Work at the Kids' Fossil Pit, ID table, Membership table, Silent Auction, or Admissions table on Saturday and Sunday. And then there is cleanup and packing up at the end of the fair on Sunday. You can sign up at the meeting or call Valerie at 407-699-9274

DONATE FOSSILS FOR THE KIDS PIT: We'll need everyone to give some this year...even if you just have a few fossils, they can delight some child and make it possible for them to own a piece of our distant past. We'll also need items for the Silent Auction.

GET THE WORD OUT: Tell your friends and family about the fair. Download copies of the fair flyer from the website and pass them out. There will also be copies available at the Sept. meeting.

BRING FOOD TO SHARE: We'll set up a tent like we did last year for the vendors and volunteers to get a bite to eat during the day. Please bring a yummy to share.

We REALLY need participation during the show so try to volunteer to take the burden off those that spend more than their share of hours helping.

If I have forgotten anything or any suggestions, just let me or someone know. Thanks, Valerie First 407-699-9274

Fossil Fair T-Shirts

We've changed the color of the T-shirts since the last newsletter. This year's shirts will be "sand".....not grey or blue as stated in August's newsletter. These "Brooksville Quarries" shirts will be available at the September meeting as well as at the Fossil Fair. In addition to the usual adult sizes, we'll have kids' sizes, too. The price per shirt is \$10.



VULCAN FIELD TRIP DATES

Currently these dates are available:

September 13th, 2008 October 11th, 2008
November 8th, 2008 December 13th, 2008

You must be a member to attend! For September trip contact Bonnie bjrb48@netzero.net / 352/429-1058

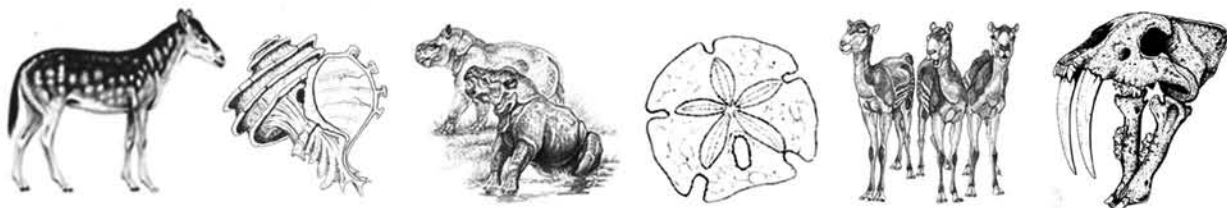
Check the website for more info.

Florida Fossil Hunters

2008

Seventeenth Annual Fossil, Mineral, and Gem Show Central Florida Fairgrounds

Saturday, October 11, 2008 - 9:00 - 5:00pm
Sunday, October 12, 2008 - 10:00am - 4:00pm



Fossils, Rocks
and Artifacts

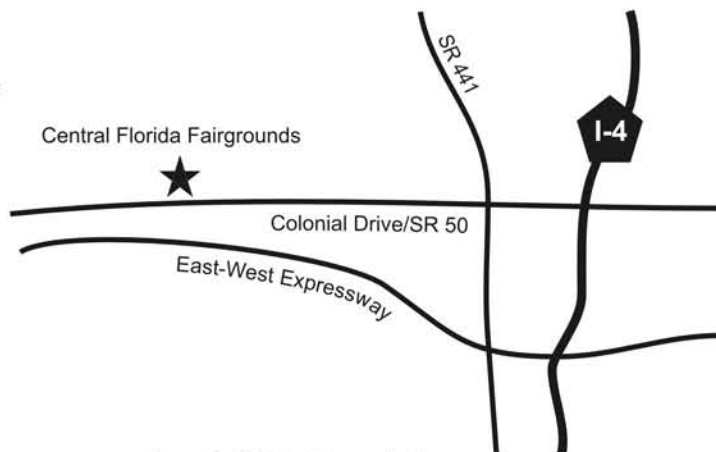
FOR ONLY
\$4.00 Adults
\$1.00 Children

Hourly Silent
Auctions

Kids can dig for their own fossils

From Tampa (I-4) - Take I-4 all the way into Orlando and then take the Colonial Drive (Hwy 50) exit and go Westbound. The fair grounds will be on the right side, just past Mercy Drive.

From Daytona (I-4) - Take I-4 all the way into Orlando and then take the Colonial Drive (Hwy 50) exit and go Westbound. The fair grounds will be on the right side, just past Mercy Drive.



For more information on the 2008 Fossil Fair
contact us by email at FossilFair@floridafossilhunters.com,
call 407-699-9274, or check the website at www.floridafossilhunters.com

Stone Age Graveyard Reveals Lifestyles Of A 'Green Sahara'

ScienceDaily (Aug. 15, 2008) — The largest Stone Age graveyard found in the Sahara, which provides an unparalleled record of life when the region was green, has been discovered in Niger by National Geographic Explorer-in-Residence and University of Chicago Professor Paul Sereno, whose team first happened on the site during a dinosaur-hunting expedition.

The remarkable archaeological site, dating back 10,000 years and called Gobero after the Tuareg name for the area, was brimming with skeletons of humans and animals — including large fish and crocodiles. Gobero is hidden away within Niger's forbidding Ténéré Desert, known to Tuareg nomads as a "desert within a desert." The Ténéré is the setting of some of Sereno's key paleontological discoveries, including the 500-toothed, plant-eating dinosaur Nigersaurus that lived 110 million years ago and the enormous extinct crocodylian Sarcosuchus, also known as SuperCroc.

The discovery of the lakeside graveyard — representing two successive human populations divided by more than 1,000 years — is reported in the September 2008 issue of National Geographic magazine and the Aug. 14 issue of the journal PLoS ONE.

As they explored the site, the team tiptoed among dozens of fossilized human skeletons laid bare on the surface of an ancient dune field by the hot Saharan wind. Jawbones still clenched nearly full sets of teeth; a tiny hand reached up through the sand, its finger bones intact. On the surface lay harpoon points, potsherds, beads and stone tools. The site was pristine, apparently never visited.

"Everywhere you turned, there were bones belonging to animals that don't live in the desert," said Sereno. "I realized we were in the green Sahara."

Two seasons of excavation supported by the National Geographic Society eventually revealed some 200 graves clearly belonging to two successive lakeside populations. The older group, determined to be Kiffian, were hunters of wild game who left evidence that they also speared huge perch with harpoons when they colonized the green Sahara during its wettest period between 10,000 and 8,000 years ago. Their tall stature, sometimes reaching well over 6 feet, was not immediately apparent from their tightly bound burial positions.

The more recent population was the Tenerian, a more

lightly built people who appeared to have had a diverse economy of hunting, fishing and cattle herding. They lived during the latter part of the green Sahara, about 7,000 to 4,500 years ago. Their one-of-a-kind burials often included jewelry or ritual poses — a girl wearing an upper-arm bracelet carved from a hippo tusk, for example, and a stunning triple burial containing a woman and two children in a poignant embrace.

"At first glance, it's hard to imagine two more biologically distinct groups of people burying their dead in the same place," said team member Chris Stojanowski, a bioarchaeologist from Arizona State University. "The biggest mystery is how they seemed to have done this without disturbing a single grave."

Although the Sahara has long been the world's largest desert, a faint wobble in Earth's orbit and other factors occurring some 12,000 years ago caused Africa's seasonal monsoons to shift slightly north, bringing new rains to the Sahara. From Egypt in the east to Mauritania in the west, lakes with lush margins dotted the formerly parched landscape, drawing animals, fish and eventually people. Separating these two populations was an arid interval perhaps as long as a millennium that began about 8,000 years ago, when the lake disappeared and the site was abandoned.

Dating the sun-bleached bones of fossil humans in the Sahara has proved very difficult. Using a new technique, the team has obtained nearly 80 radiocarbon dates from Gobero bones and teeth, including comprehensive dates based directly on human skeletons.

Archaeologist Elena Garcea of the University of Cassino in Italy helped identify the poorly known cultures so well-preserved at the site. Garcea, an expert in ancient pottery who has spent nearly three decades digging at Stone Age sites in northern Africa, traveled with Sereno in 2005 to the site, where she stood amazed, gazing at far more human skeletons than she had seen in all her previous digs combined.

She quickly homed in on two distinct types of pottery, one that bore a pointillistic pattern linked with the Tenerian and another that had wavy lines and zigzags. "These are Kiffian," a puzzled Garcea told Sereno. "What is so amazing is that the people who made these two types of pots lived in the same place more than a thousand years apart."



Over the next three weeks Sereno, Garcea and their team of five American excavators made a detailed map of the site. They exhumed eight burials and collected scores of artifacts from both cultures. In a dry lake bed nearby, they found dozens of Kiffian fish hooks and harpoons carved from animal bone as well as skeletal remains of massive Nile perch, crocodile and hippo.

A year later, a second round of excavation turned up more riddles: An adult Tenerian male was buried with his skull resting on part of a clay vessel; another adult male was interred seated on the shell of a mud turtle.

One burial, however, brought 2006 activity at the site to a standstill: Lying on her side, the skeleton of a petite Tenerian woman emerged from the sand, facing the skeletons of two young children; their slender arms reached toward her and their hands were clasped in an everlasting embrace. Samples taken from under the skeletons contained pollen clusters — evidence the people had been laid out on a bed of flowers. The team employed a range of new techniques to preserve this remarkable burial exactly as it had been for more than 5,000 years.

Bioarchaeologist Stojanowski analyzed dozens of individuals' bones and teeth for clues to the two populations. "This individual, for example, had huge leg muscles," he said of ridges on the thigh bone of a Kiffian male, "which suggests he was eating a lot of protein and had an active, strenuous lifestyle. The Kiffian appear to have been fairly healthy — it would be difficult to grow a body that

tall and muscular without sufficient nutrition." In contrast, the femur ridge of a Tenerian male was barely perceptible. "This man's life was less rigorous, perhaps taking smaller fish and game with more advanced hunting technologies," Stojanowski said.

Analysis of measurements on Kiffian skulls links them to skulls found across northern Africa, some as old as 16,000 years, Stojanowski said. The Tenerian, however, are not closely linked to these ancient populations.

Ancient bones from many animals common today on the Serengeti were identified at the site by Hélène

Jousse, a zooarchaeologist from the Museum of Natural History in Vienna, Austria. The evidence showed that elephants, giraffes, hartebeests, warhogs and pythons all made Gobero their home. Abundant bones of 6-foot-long Nile perch indicate the presence of a deep lake during Kiffian times; remains of small catfish and tilapia make it likely that the waters were shallower during Tenerian times.

The team is continuing to analyze Gobero bones for more clues to the people's health and diet. A large-scale return expedition is planned to the site to further explore the two populations that coped with extreme climate change.

Besides National Geographic, the research at Gobero is funded by the Island Fund of the New York Community Trust, the National Science Foundation and the Wenner-Gren Foundation for Anthropological Research.

The National Geographic magazine article and special Web features on Gobero are at <http://www.nationalgeographic.ngm.com>. Extensive information about the discovery and science of Gobero is available at Project Exploration's "People of the Green Sahara" Web site, <http://www.projectexploration.org>.

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First Prehistoric Pregnant Turtle And Nest Of Eggs Discovered In Southern Alberta

Adapted from materials provided by University of Calgary.

ScienceDaily (Aug. 27, 2008) — A 75-million-year-old fossil of a pregnant turtle and a nest of fossilized eggs that were discovered in the badlands of southeastern Alberta by scientists and staff from the University of Calgary and the Royal Tyrrell Museum of Palaeontology are yielding new ideas on the evolution of egg-laying and reproduction in turtles and tortoises.

It is the first time the fossil of a pregnant turtle has been found and the description of this discovery was published today in the British journal *Biology Letters*.

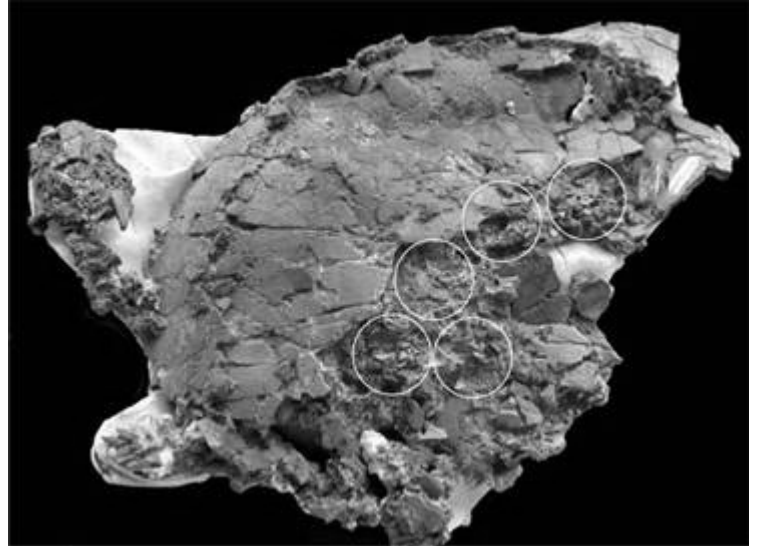
The mother carrying the eggs was found in 1999 by Tyrrell staff while the nest of eggs was discovered in 2005 by U of C scientist Darla Zelenitsky, the lead author of the article and an expert on fossil nest sites, and her field assistant. Both were found about 85 km south of Medicine Hat in the Manyberries area.

“Although it is relatively rare to find the eggs and babies of extinct animals, it is even rarer to find them inside the body of the mother,” says Darla Zelenitsky, who was also involved in the first discovery of a dinosaur with eggs inside its body.

It was almost by accident that scientists realized that the fossil turtle was pregnant.

“The turtle specimen was partly broken when it was first discovered. It is this fortuitous break that revealed that the fossil was a mother,” says François Therrien, a co-investigator of the study and curator of dinosaur palaeoecology at the Royal Tyrrell Museum.

The remains of at least five crushed eggs were visible within the body of the fossil female and a CT scan exposed more eggs hidden under its shell. The turtle, estimated to be about 40 cm long, could have produced around 20 eggs. The nest, which was laid by a different female, contained 26 eggs,



each approximately 4 cm in diameter.

Both specimens belong to an extinct turtle called *Adocus*, a large river turtle that lived with the dinosaurs and resembles today's slider and cooter turtles.

The eggs of *Adocus* are extremely thick and hard, whereas those of most modern turtles are either thinner or soft-shelled. The thick eggshell may have evolved to protect the eggs from desiccation in dry environments or to protect them from voracious predators during the time of the dinosaurs.

Zelenitsky says the pregnant turtle specimen and the nest shed light on the evolution of reproductive traits of modern turtles, specifically those traits related to their eggs and nests.

“Based on these fossils, we have determined that the ancestor of living hidden-necked turtles, which are most of today's turtles and tortoises, laid a large number of eggs and had hard, rigid shells,” says Therrien.

The fossilized pregnant turtle will be on display at the Royal Tyrrell Museum in Drumheller starting August 29th.

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 Shelley Zimmerman (407) 891-1260
- Vice President Paul Bordenkircher (407) 687-3843
- Secretary
- 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 ID Table Andreas Kerner, intlfossils@msn.com
- Fossil Lotto Ed Metrin (407) 321-7462
- Auctioneer Roy Singer (407) 645-0200
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- Webmaster Elise Cronin-Hurley (407) 929-6297
elise@liseydreams.com

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- Jeremy Smith (407) 293-9391
- Roy Singer (407) 645-0200
- Ed Metrin (407) 321-7462
- Tom Tomlinson (407) 290-8474

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

Wednesday, September 17th

7:00pm Meeting

Wednesday, October 15th

6:00pm Kid's Blast and

7:00pm Meeting

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Visit us online at www.floridafossilhunters.com

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

Florida Fossil Hunters

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Orlando, Florida 32854-040



Florida Fossil Hunters News