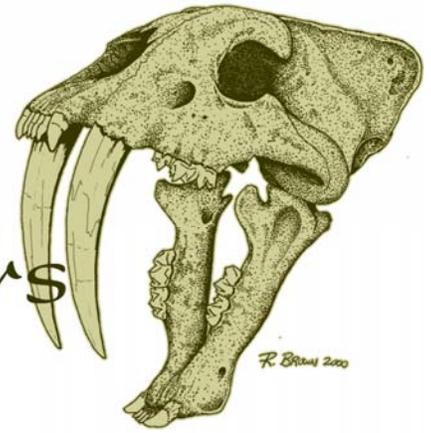


NEWS

Florida Fossil Hunters



Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters
Volume 21, Number 11

December 2011

President's Message

November has blown by... we had a great turnout at our last meeting. All who attended enjoyed Chris DeLorey's talk on hunting dinosaur fossils out West and turning the fossils into models. Then how animatronics (metal structures with computers) make movements with hydraulics. And finally how they make the skin, decide colors, add feathers, etc. The end product is a life-sized, moving, roaring Dino based on the latest scientific findings. You'll be able to see these creations at the Brevard Zoo starting in February 2012. Watch for details in future newsletters.

On December 15th we will have our dinner/auction at Golden Corral instead of a formal meeting. You can find directions and times, etc. in this newsletter.

As we are at the end of 2011, I'd like to take time to thank everyone who's had a hand at making, not only this year, but every year that has come and gone, so successful. All the things that have been accomplished are truly amazing.... the parties, fairs, field trips, cook-outs, classes, presentations. All the good times that make people feel like they want to belong.

Many, many hours of "behind the scenes" work has been put in by the members who volunteer their time and skills. Some of you have been here since the inception of the club, others have come and moved on, and some have just joined, but all make an impact on this organization. I strongly urge all of you to participate and volunteer. It's very rewarding.

So come on in - the water's fine.

Best wishes throughout the year!
Russell Brown, President

Looking forward to 2012

January Mtg

January Meeting at
Florida Museum
of Natural History
Date tba -see pg 2

February Mtg

February 18, 2012
2:00pm Kid's Fossil
Blast
3:00pm Club Mtg

March Mtg

March 17, 2012
Orlando Science
Center
Fossil Fest

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

December 15th, 2011

6 pm Holiday Party & Auction

January 2012

Trip to Florida Museum
of Natural History, date tba

February 18, 2012

2:00pm Kid's Fossil Blast

3:00pm Club Mtg

More events listed on back page

For more info...

www.floridafossilhunter.com

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Fragments

Vulcan Mine December 10th Field Trip - CANCELLED

Our club didn't have anyone who volunteered for Trip Leader this month. Hopefully everyone's schedules won't be so overloaded on January 14th and we can get a group out there then. Check the website and January's newsletter for more information on future Vulcan field trips.

Deland Gem, Mineral, & Fossil Show

Tomoka Gem & Mineral Society will have its show on Sat, Jan 14th, 10 am to 6 pm, and on Sun., Jan. 15th, 10 am to 5 pm, at the Volusia County Fairgrounds in Deland.

Directions: From I-4 take exit 118. The Fairgrounds are 1/2 mile east of I-4 on SR 44. The show will be in the Tommy Lawrence Bldg.

Largo Gem & Mineral Show

The Pinellas Geological Society will hold its show January 13th - 15th. Friday & Saturday 10 am to 6 pm. Sunday 10 am to 5 pm. It will be held at the Largo Cultural Center, Parkway Room, 105 Central Park Dr., Largo, FL

Club Library Books for Sale

Ron Wittschen has volunteered to handle the sale of the books. He will have them at the December party so bring some extra coins. This is a great opportunity to get some resource books at really cheap prices.

Fossil Fair 2012

We have the dates for our 2012 Fossil Fair - October 13th & 14th. Mark your new calendars and set aside this weekend. We'll be organizing committees for the Fair early next year so be thinking about what you can do to help..... more Fossil Bucks!

Kids' Fossil Blast

We had a really great turnout for our November kids' meeting. Everyone thoroughly enjoyed learning new facts about reptiles and getting to see their fossils. The next session will probably be in February. Check your January newsletter for more information.

January, 2012 Tour of the Museum of Natural History

As of the print date for December's newsletter, we were still ironing out details for this club activity. This will be INSTEAD of a regular meeting at the Orlando Science Center. Check our website and look for details in our January 2012 newsletter.

Piece on the Peace

Florida didn't receive much rain this past month so the water level has continued to drop. It's about 5 ft. at the Zolfo Springs gage station, which is excellent for digging and sifting fossils. Happy hunting.

2011 Fossil T-shirts

Those of you that ordered t-shirts but have not picked them up yet can get them at the December Party/Auction if you email or call me to bring them. Or you can send the money owed plus \$5 for shipping and handling to: Bonnie Cronin, 18132 Market St., Groveland, FL 34736.

For your convenience the unpaid balance for these remaining shirts is listed after your name.

Peter Avery - \$20	Jimmy Waldon - \$10
Chase Long - \$10	Kathy Derouin - \$20
Jeff Roberts \$10	Rowan Hoy - paid
Vanessa Wilcox - \$30	Joe Andusko - paid

We will only hold the unpaid shirts until March 1, 2012. After that we will offer them to the rest of the club members.

TIME TO RENEW

It's time to renew your membership!

2012 is almost here and it's time to renew your membership. Our annual club dues are still only \$17 per year per household. Make your checks out to Florida Fossil Hunters, P.O. Box 540404, Orlando, FL 32854-0404 or bring to the meeting and hand it to Bonnie. Be sure to send along a filled out renewal form or write your info on a piece of paper. People sometimes change their email address or move and just forget to notify us. We want to make sure that you continue to get your newsletters and notifications of special events.

Belated "Thank you"

I left out one dealer who donated items to the Silent Auction and Kids' Pit at the Fossil Fair. Jim Tatum has always been generous with his time, knowledge, and fossils to all of us. Thank you, Jim.

Dogs in Prehistory

There was an oral tradition in the Salish indian tribe of the the North Pacific coast, that blankets and robes were woven from dog fur before the Europeans made contact with them. With modern laboratory techniques, this story has proved to be true. Artifacts from the Smithsonian were tested and found to be a combination of mountain goat and dog hairs.

The existence of a "woolly" dog is supported by historic accounts of 18th century European explorers. The dogs were reported to be corralled on small islands off the coast to prevent interbreeding with short-haired village dogs. This breed disappeared within a 100 years after contact with Europeans and weaving after that time has sheep wool instead of dog hair.

On another front....

A recent DNA testing of dog breeds worldwide has resulted in the conclusion that dogs were first domesticated in East Asia, not the Near East as previously thought.

Dinosaurs Come to the Zoo

Those incredible life-sized dinosaur models, whose story Chris DeLorey shared with us at the November meeting, will be arriving at the Brevard Zoo in February, 2012. Check their website www.brevardzoo.org in January for information on dates, times, and reservations for special events.

Cruisin' the Fossil Highway

This traveling exhibit featuring the art of Ray Troll and the insights of paleontologist Kirk Johnson will be at the Florida Museum of Natural History in Gainesville from February 4th through September 3rd. Our club has been invited to participate on opening day, so we'll have volunteers there with displays and information. If you'd like to volunteer for this event, please email me at bjrb48@netzero.com or call me at 352-429-1058. ~ Bonnie Cronin

Mastodon Found in Daytona Beach

The fossils of an adult mastodon were uncovered by construction workers digging a retention pond in Daytona Beach on November 18th. "Zach" Zacharias, curator for education and history at the Daytona Beach Museum of Arts and Sciences, together with some local volunteers were able to salvage two tusks, vertebrae, rib pieces, parts of the skull, some teeth, and other bone pieces. A fragment will be sent to the Florida Museum of Natural History for dating.

Zach talked to Russell about the preservation techniques required and will get in touch with the Museum in Gainesville as well. Zach hopes to be able to display the mastodon fossils with the Giant Sloth once the Center for Florida History is rebuilt. It was flooded in May 2009 and they have raised \$2.3 million of the \$6.5 million cost to rebuild the west wing. Donations are always welcome.

Further excavation of the site probably will not happen because of concerns of the City, the construction company, and the Museum about who would be liable in case of an accident. But just in case, I'll be sure to let Zach know that we could round up some very willing volunteers to help out. ~ Bonnie Cronin

**Saber-Toothed Squirrel:
New Find in South America**

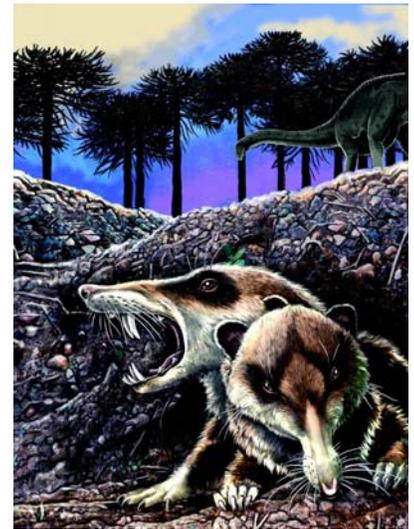
The new critter named *Cronopio deniacutus* is a dryolestoid, an extinct group distantly related to today's marsupials and placentals. This discovery is especially notable because it provides the first cranial morphology (form & structure) of a dryolestoid and one of the first mammal fossil, other than isolated teeth, from this time in the Cretaceous in South America.

The skulls were discovered in 2006 but it took years of patient work to remove the rock matrix they were embedded in.

Cronopio was shrew-sized, about 4-6 inches in length and was an insectivore living among dinosaurs on a vegetated river plain approximately 100 million years ago. The skulls found reveal that *Cronopio* had extremely long canine teeth, a narrow muzzle and a short, rounded skull.

Its resemblance to *Scrat*, the saber-toothed squirrel from the Ice Age animated movies, is uncanny.

For further info go to www.sciencedaily.com/releases/2011/11/111102161050.htm



December Party and Auction

Our December Holiday Party and fossil buck auction will be held on Thursday, December 15th, from 6 pm to 9 pm, at the Golden Corral, 897 W. Town Pkwy., Altamonte Springs. We'll have a bigger area to spread out than we had last year. Just remember, everyone who attends must purchase a meal.

We'll be enjoying their incredible selection of food beginning at 6 pm and we'll start the meeting/auction around 7:30 pm. Be sure to arrive early so we can get all our fun stuff done by 9 pm. Check out the preview of some of the auction items at our November meeting.

The costs of the meal, including tax & gratuity are:

Adult (those 13 yr & older)	\$ 12.80
Child 3-6	\$ 6.09
Child 7-12	\$ 7.31

This does not include beverages. There is no discount for seniors but they do get a free beverage.

... AND, it includes the new

"Chocolate Waterfall", where you can coat many kinds of yummy things with chocolate!

Directions: From the intersection of 436 and 434, go South on 434 and turn left onto West Town Pkwy. The Golden Corral is on the Northeast corner of 434 and West Town Pkwy.

Auction Items for December... and how to get them

For our December dinner/auction, I've been working on some fossil species display cases like the ones Bonnie & I use for our educational talks and club activities. If you would like to bring home one of these species cases, you can get one with your fossil bucks (that's the money we use for our auctions). The catch is that the club members that volunteer the most time get the most bucks. So start planning now to get more involved and help us out at the meetings, field trips, and events. Check the June 2011 newsletter for info on activities to earn fossil bucks.

December 2011 Fossil Bucks Auction

1. Tillies - 5 large swollen fish vertebrae, St. Mary's River
2. Manatee fossil case - small complete rib, ear bone, 3 teeth, skull cap piece
- K** 3. Tub of whale fossils - various vertebrae, jaw pieces, ear bone, skull piece
4. Petoskey stone bracelet
5. Tapir fossil case - carpal, canine, incisor, 4 molars, premolar
6. Croc fossil case - large scute, jaw piece with teeth
7. Camel fossil case - vertebra, canine, incisor, 2 molars, 2nd toe bone
8. Peccary fossil case - metatarsal, metacarpal, vertebra, Mylohyus molar, Platygonus molar
- K** 9. Shark teeth case - common ID assortment
10. Opalized wood - orange/yellow color
11. Stingray fossil case - various species: mouthplates, barbs, spines, vertebra
12. Giant armadillo fossil case - molar, edge scutes, dermal scutes, movable scute
13. Horse (Equus) fossil case - incisor, upper molar, lower molar in jaw piece, vertebra, toe bone
- K** 14. Spinosaurus dinosaur tooth - 2-1/2 inches, Morocco
15. Pecten shell - large, complete *Cardinapectin eboreus*
16. Alligator fossil case - jaw piece, teeth, scutes, vertebra, coprolite, femur

K - KIDS ONLY ITEM

Madagascar Dinosaur Bone Is Most Massive Osteoderm Ever Found

ScienceDaily (Nov. 29, 2011) — What more can we learn about long-necked dinosaurs that we don't already know? A Macalester professor and her colleagues have found that Madagascar dinosaurs carried giant, hollow bones in their skin that may have helped them survive the harsh environments they inhabited. This discovery has shed new light on the anatomy and function of these bones in the biggest animals to ever walk on land.

Biology/Geology Prof. Kristi Curry Rogers is the lead author of a paper in *Nature Communications* about bizarre, gigantic bones that grow in the skin of Rapetosaurus, a species of huge plant-eating dinosaur from the island country located in the Indian Ocean off the southeastern coast of Africa.

"This is the biggest osteoderm ever found for any backboned-animal," said Curry Rogers, "The fact that it's hollow debunks all sorts of ideas about how these bones functioned in long-necked dinosaurs."

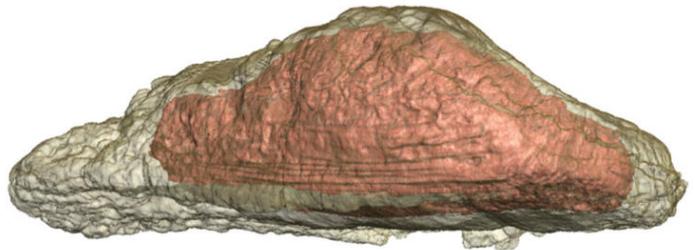
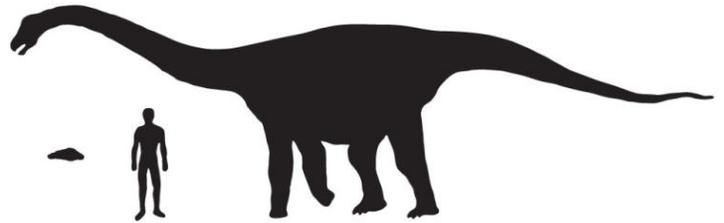
Osteoderms are bones embedded within the skin and are common among reptiles and some mammals. They create the unique pattern on the backs of crocodiles, the armor body covering on armadillos, and the distinctive plates of dinosaurs like Stegosaurus and Ankylosaurus.

Among the long-necked dinosaurs called sauropods, osteoderms are found in one globally distributed subgroup -- the Titanosauria. For more than a century, paleontologists have been trying to figure out how these weird bones were distributed in the skin of the long-necked titanosaurs and what they might have been used for. Were they for protection, like in armadillos and crocodiles? Were they for display? Could they have helped regulate body temperature?

"Knowing something about the lives of these dinosaurs, particularly in the context of the drought-prone paleoenvironment they lived in, tells us that osteoderms may have been important for storing minerals, which allowed Rapetosaurus to survive the rough times," said Curry Rogers.

Instead of the hundreds of interlocking plates in living animals with osteoderms, Rapetosaurus had only a few osteoderms in its skin. This means that they were less likely to serve as protection or as body temperature regulators.

"The discovery of these giant osteoderms provides new insights into what these bizarre structures may have done for the dinosaurs that had them," said Curry Rogers. "It



Researchers have discovered bizarre, gigantic bones that grow in the skin of Rapetosaurus, a species of huge plant-eating dinosaur from the island country located in the Indian Ocean off the southeastern coast of Africa. (Credit: Image courtesy of Macalester University)

helps us clarify what these Madagascar dinosaurs looked like with their skin on. Our sample also includes both adult and juvenile osteoderms, which tells us how the osteoderms changed over the lifespan of the dinosaur," said Curry Rogers.

In the vicinity of the osteoderm, the skin of Rapetosaurus would have stretched, making it in places up to seven times as thick as an elephant's skin. The bone also hollowed out over the course of the dinosaur's lifespan. So even though it was massive, in the adult dinosaur osteoderms would've actually been fairly lightweight.

Curry Rogers is the lead author of the *Nature Communications* paper. Her collaborators include Michael D'Emic (University of Michigan and Georgia Southern University), Raymond Rogers (Macalester College), Matthew Vickaryous (Ontario Veterinary College, University of Guelph), and Amanda Cagan, who graduated with a biology degree from Macalester in 2010.

*Kristina Curry Rogers, Michael D'Emic, Raymond Rogers, Matthew Vickaryous, Amanda Cagan. **Sauropod dinosaur osteoderms from the Late Cretaceous of Madagascar.** *Nature Communications*, 2011; 2: 564*

FFH Displays @ the OSC Neanderthal Ball



Russell and Bonnie, all dressed up and no where to dig. (above)
Valerie and the Neanderthal Skull, the guest of honor (right)



Russell and Dave...
in something besides
club t-shirts! (above)



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 usually held on the third Saturday of the month but may vary with club activities. Check the website for the date and location of the next meeting or call one of the officers.

Officers:

President	Russell Brown	(352) 429-1058
Vice President	Dave Dunaway	(407) 786-8844
Secretary	Bonnie Cronin	(352) 429-1058
Treasurer	Sara Morey	(619) 302-4863

Chairs:

Education	Bonnie Cronin	(352) 429-1058
Field Trips	OPEN	
Fossil Fair	Valerie First	(407) 699-9274
Fossil Auctions	Dave Dunaway	(407) 493-4253
Fossil Bucks	Dave Dunaway	(407) 493-4253
Fossil Lotto	Ed Metrin	(407) 321-7462
Auctioneer	Roy Singer	(407) 645-0200
Membership	Bonnie Cronin Nicole Barr	(352) 429-1058
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:

Melissa Cole	(407) 834-5615
Ed Metrin	(407) 321-7462
Dave Cass	(407) 409-9095
Shelley Zimmerman	(407) 891-1260
Marge Fantozi	
Marcia Wright	

Membership Application

Names: _____

Associate Members: _____

Address: _____

City: _____

State: _____ Zip: _____ Phone: _____

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 or .docx).

Please note in subject of email 'FFH'.

Florida Prehistorical Museum, Inc.
dba/ Florida Fossil Hunters

Florida Fossil Hunters News

Florida Fossil Hunters Mark Your Calendar

December 15, 2011
6 pm Holiday Party & Auction

January 13, 14, 15, 2012
Pinellas Gem & Mineral Show

January 14 & 15, 2012
Tomoka Gem & Mineral Show

January 14, 2012
Vulcan Field Trip - if we can find a trip leader

Coming in 2012:

January 2012 - Tour of the FL Museum of Natural History in Gainesville (date TBA)

February 4 to September 3, 2012 -
"Cruisin' the Fossil Freeway" exhibit
at FL Museum of Natural History

February to June, 2012 - Dinosaurs at Brevard Zoo

March 17, 2012 - OSC Fossil Fest



TIME TO RENEW

your Florida Fossil Hunters
2012 Membership.

Be Green

Email Bonnie at bjrb48@netzero.com to receive the newsletter via email.



Join Our Facebook group, Search:

[Florida Fossil Hunters](#)

facebook

See inside for more information on events.

Visit us online at www.floridafossilhunters.com

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

Florida Fossil Hunters

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Florida Fossil Hunters News