Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters Volume 24, Number 2 February 2014

From the President.....

Hello, everyone.

Hope the cold weather and flu season has not got you down.

2014 will be another busy year. There is a lot going on in the Paleontological world, so read your newsletters, check the websites, etc.

Women in Paleontology.... we've got them. Sara Morey & Bonnie Cronin took charge of the January meeting (Thank you). I was stuck at work while members came together for a fishy Kids Blast that stretched into the meeting. A lot of handson learning as both kids and adults checked out the animals of the water world.

The month of February has the much anticipated **North American Paleontological Convention** being held in Gainesville from the 15th through the 20th. There will be workshops, presentations, etc. on all subjects (details can be found inside this newsletter). One subject that we as a club are involved in is **The Fossil Project** which is spearheaded by Dr. Bruce McFadden of FLMNH and funded by the National Science Foundation. I am very excited to take part of this project which is focusing on better working network of information and teamwork between professionals and amateur fossil enthusiasts. I'll be giving a full report to you at our meeting on Saturday, Feb. 22nd.

During our **February meeting** we'll be also looking through gravel collected at different sites. Bring your magnifying glasses... if you have any. You can keep any fossils you find.

That evening from 8 to 11 pm, OSC will have **Science Nite Live** which is geared for the over 21 folks. We'll have a table or two set up to display fossils and answer people's questions.

Ms. Sharon Holte was one of this year's winners of the **Morgan Award.** Congratulations! More on her studies into Evolutionary Biodiversity inside.

Speaking of **Women in Paleontology**... Sara Morey has picked up the mammoth tooth and ran with it. Sara has always worked hard on club activities as anyone knows. If you can help out on this March event, please do so. More on the event inside.

Cindy Roll has been lining up **field trips** to the phosphate mines and on the lookout for more opportunities. Our club is blessed to have such an energetic and determined woman to arrange these trips. Info on the field trips inside.

That's it for now. If you have questions or comments, feel free to call me at <u>352-429-1058</u> (between 7 and 8:30 pm) or email me at <u>bonnierussell62@gmail.com</u>

Russell Brown President

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

February 22nd

3 pm - Meeting and micro-fossil hunting

March 15th

10 am to 4 pm at OSC
"Women in Paleontology"
Dr. Rachel Wentz, speaker
- "Exploring Ancient Florida"

April 19th

3pm - Meeting and Dr. Graham Worthy, speaker

More events listed on back page

For more info...
www.floridafossilhunters.com

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Florida Fossil Hunters News

Fragments

10th NORTH AMERICAN PALEONTOLOGICAL CONVENTION









FLORIDA MUSEUM OF NATURAL HISTORY

10th North American Paleontological Convention February 15 - 18, 2014, Gainesville, FL

We are pleased to announce that the 10th North American Paleontological Convention (NAPC) will be held in Gainesville, in February 2014. The meeting will be hosted by the Florida Museum of Natural History (University of Florida) from February 15th through 18th (Saturday - Tuesday).

Pre-conference and post-conference field trips are tentatively planned for February 13th -14th and 19 - 20th, respectively.

For more info visit:

http://www.flmnh.ufl.edu/napc/symposia.htm

TIME TO RENEW

Renew your membership in Florida Fossil Hunters for 2014.

It's a real bargain at \$17 per household.... not per person like a lot of organizations.

You must be a paid member of the club to participate in our field trips.

Just download the form on our website or in our newsletter and mail it to: Florida Fossil Hunters, P.O. Box 540404, Orlando, FL 32854-0404 or bring it to the meeting.

Even if you are renewing, please fill out the information so I can make sure what we have is up to date.

Piece on the Peace

With the unusual amount of rain this month, the Peace has risen a few times. Normally January is dry and the water level stays low. So be doubly sure to check the levels via the link on our website -

floridafossilhunters.com - In spite of the high and COLD water, people continue to dig and find fossils in the river. So if you've got the itch, go get it scratched.

Morgan Award

For the past few years, Florida Fossil Hunters has made a donation to the funds for the FL Paleontological Society's Morgan Awards. This year our donation was awarded to Sharon Holte, a PhD graduate student in the Biology Dept. at the University of Florida. The title of her work is: Evolutionary biodiversity of Miocene carnivorans from Thomas Farm, FL with direct comparisons to other North American faunas.

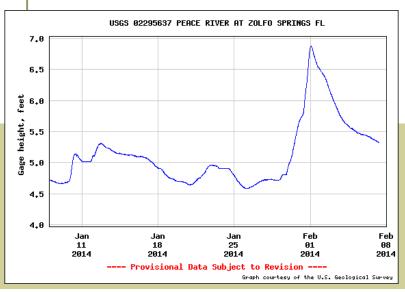
As part of her work, she's going to sift through 1,200 bags of dirt dug up from Thomas Farms and go through it all to find the microfossils. She will also take the 1,500 newly discovered carnivoran specimens from the locale to museums with collections from North America and Eurasia to see how they compare to fossils of the same age.

We certainly look forward to hearing the results from her research

WANTED: Looking for club members who have small boats with motors.

I would love another Yankeetown fossil hunting trip/ BBQ. It's easy for people with canoes or kayaks to get themselves to the spoil islands but we would still need one or two boats to ferry gear or people who can't canoe.

The club will pay \$50 each to the first two who volunteer to pay for their expenses. Call Russell at <u>352-429-1058</u> or email him atbonnierussell62@gmail.com.



MARCH

Women in Paleontology - March 15th at OSC

Come celebrate not only women's contributions to the field of Paleontology but the men who have encouraged women to pursue study in the sciences.

From 10 am to 4 pm we'll have displays and information about women who had a passion for science and made discoveries in the fields of Paleontology, Geology, and Archaeology.

We'll also have Dr. Rachael Wentz of the Florida Public Archaeology Network giving a presentation on "Exploring Ancient Florida": Millions of years ago, the peninsula that would become Florida broke off from the west coast of Africa, settling into its present location. Since then, its landscape has gone from an African-like savannah to a tropical paradise. Ancient mega-fauna that once roamed the forests and grasslands disappeared as humans arrived. Come and see what Florida was like for the earliest Native Americans.

You can sign up to volunteer at the display tables at our February meeting or by contacting Sara Morey at saraariley@yahoo.com



Everyone got into "the swim" with the fossil fishes in January.

Our next Kids' program will be on March 15th. We'll be featuring "Women in Paleontology" with a special program at OSC. We'll also have a table dedicated to the great fossil finds that kids have made through the years as well as fun activities. See you then.

Fossil Show

Tampa Bay Fossil Club will hold its 26th annual FossilFest on March 15th and 16th, at the Florida State Fairgrounds, near the intersection of I-4 and Hwy. 301 just east of Tampa. It will feature fossils exhibits, workshops, door prizes, a silent auction, kids' mine, as well as fossils, artifacts, minerals & shells for sale.

Parking: \$5 per car

Admission: adults - \$6, kids 12 & under free

Hours: Saturday 9 am to 6 pm and Sunday 10 am to 4 pm **For more information,** go to www.tampabayfossilclub.com

APRIL

Prehistoric Florida, April 4th

Zach Zacharias, Senior Curator of Education & History at the Daytona Beach Museum of Arts & Sciences, will present a talk on Prehistoric Florida - Land of Giants at the Gamble Place, 1819 Taylor Rd., Port Orange.

Directions: Take I-95 to Exit 256. Go west on Taylor Rd. approx. 1.5 miles. Turn left at the Florida Historic Site marker. Go down the shell road .5 mile to the Gamble Place.

You'll not only learn about the animals and how they went extinct but you'll be able to examine the fossils, too.

Admission is free for members of the Museum. \$5 for non-members. Please RSVP at <u>386-255-0285</u>.

April Speaker

Mark your calendars. You won't want to miss this one! Graham Worthy, Ph.D. of UCF and a member of our club, will make a presentation at our April meeting on "Marine Mammals of Florida - Then and Now". There will be more information on the presentation in March's newsletter.

Mine Field Trip, April

Cindy Roll has lined up a field trip tentatively for April 26th. She is waiting for confirmation since the mines recently changed owners. We will let you know when to signup. People who have NOT participated in one of the recent mine trips will have the first chances to register.



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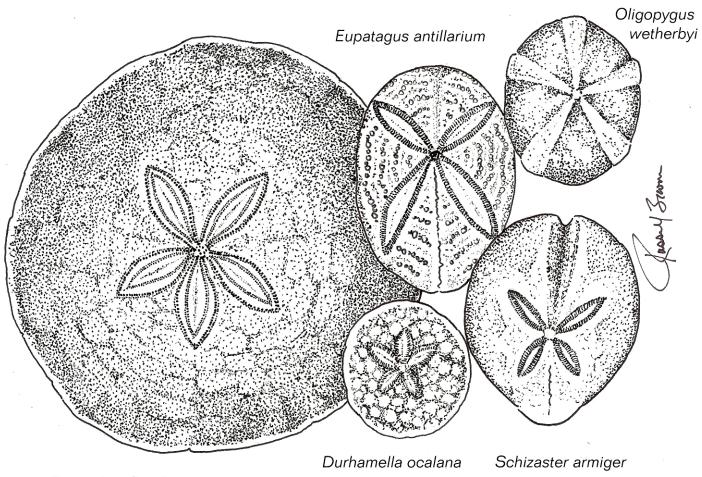
Yankeetown Echinoids

Yankeetown is located on the west coast just north of Crystal River where the Withlacoochee River empties into the Gulf of Mexico. From Orlando, take Hwy. 50 west to 98, go north on 19, turn left onto 40 till the road ends. You won't miss it. You'll need a small boat or canoe to get to several small spoil islands. The first island is only a few hundred feet from the boat ramp.

Wear old shoes. Bring a small shovel or spade and a bucket or other containers to bring back your finds. Most echinoids can be surface collected but don't be fooled because a lot are covered with algae growth or matrix or buried in the sand. Low tide will expose all the oyster bars that line the channel, also giving more echinoid hunting area.

They range from the size of a BB to about 2-1/2 inches.

The most common echinoid found here would be the Eupatagus antillarum. Others found are Schizaster armiger, Oligopygus wetherbyi, Cataopyus mississsippiensis, Weisbozdella cubae and Periarchus floridanus.



Periarchus floridanus

The Yankeetown Trip - 1999

Echinoids look like egg-shaped rocks with starfish embedded on top of them. Most people have at least one in their fossil collection. Years ago, I had one or two, when I was first discovering fossil hunting.

My old Ford Ranger raced down County Road 40. My boat could barely keep up. Inside the cab, Mike Trapp, Jeremy Smith, and I were giddy with excitement. It was barely light and we could make out the Withlacoochee River running along side the road and salt marshes spread out in all directions with small islands sprinkled in here and there. The road ended abruptly at the boat ramp. From the boat ramp, you could practically wade to the first island. But being men, we headed out to the farthest one on the horizon.

The spoil islands were dredged up through the years to allow boat traffic between the Gulf and the river. These islands are made up of sediment from the Eocene and are great places to find echinoids while enjoying nature at the same time.

On the ride out, we saw mullet, dolphins, manatees..... all kinds of things. Oyster beds were all around the islands so we had to take care not to have the razor-sharp shells cut us.

Each island has its own uniqueness. Some were small. Most had large rocks with clumps of tall grasses and stretches of tidal beaches. One island had more sand dollars on it than anywhere else. Mike Trapp found a perfect Periarchus foridanus. It was as large as a slice of bread. I found one embedded in 10 lbs of rock. We'd poke around, exploring each island and finding the bleached bones of birds and fish, driftwood, and all kinds of treasures scattered among the rocks.

I had found a couple whole common Eupatagus antillirium but most were busted on one end or the other. Come afternoon, we had worked our way back to the last two islands before the boat ramp. Both of these islands were large enough to have trees growing on them and even camping areas. It was low tide - the best time to hunt for the fossils. There were so many that a one-armed blind man could have filled a bucket in minutes. Walking the shoreline, we found them covered in algae or encrusted with limestone. Some, though were perfect.

Earlier we had found some nice sized Oligopyus wetherbyi and I found the best Schizaster armiger in my collection to date. We all loaded up our buckets. There were more than we could pick up and throw. Taking breaks up on the bank in the shade of the trees, we'd sort through the gravel. Small echinoids from the size of a quarter to as small as B.B.s could be readily found.

As we loaded the boat up on the trailer for the long ride home, Jeremy (the dog), pulled out his treasure..... a complete sea urchin, Phyllacanthus mortoni. I can still see that grin on his face.

We'd return to hunt every few years but nothing compares to the first time - a new place, a new experience.

Now you know, so it's time to go. This means you.

Russell Brown

Triassic-age 'swamp monster':

Rare female phytosaur skull found in West Texas more than 200 million years old

The female skull still had its teeth intact, which made the find even rarer.

Credit: Photo by Lacey Nobles

In the dangerous waters of an ancient oxbow lake created by a flooded and unnamed meandering river, the female phytosaur died and sank to the bottom 205 million years ago. About 40 yards away the remains of a larger male also came to rest, and both disappeared in a tomb of soil and sediment.

Evidence for the cause of their deaths and the rest of their bodies have vanished with time, but their skulls remained. After careful research, a Texas Tech paleontologist says he and others have discovered a new species of the Triassicage monster in the wilds of West Texas.

Their findings were published in the peer-reviewed journalEarth and Environmental Science Transactions of the Royal Society of Edinburgh.

Bill Mueller, assistant curator of Paleontology at the Museum of Texas Tech University, said the team named their find Machaeroprosopus lottorum after the Lott family who own the ranch on which the animal was discovered.

"We found them in an area we'd been excavating in," Mueller said. "I think we've gotten four skulls out of that area already. Doug Cunningham found this specimen, and then we dug it up. When he found it, just the very back end of the skull was sticking out of the ground. The rest was buried. We excavated it and brought it into the museum to finish preparation."

Cunningham, currently a field research assistant at the museum and a retired firefighter, remembered finding the unusual female skull on June 27, 2001. After removing it from the mudstone, he recalls looking it over carefully with others and wondering if his discovery would add a new animal to science.

"It was really well preserved with the teeth and everything," Cunningham said. "Finding one with teeth is pretty rare. It was so odd, but when they come out of the ground, you have a long way to go to actually see what you have because they're still covered in matrix. We were all kind of in awe of it. It had this long, skinny snout. It was quite a bit different. It took me years to get it prepped and ready. At the time, I was working full-time and I did that on my days off." By looking an opening on the skull called the supratemporal fenestra, the snout and the shape of the



bones at the back of the head, the team compared it to other phytosaurs and determined they'd discovered a separate species.

While West Texas is dry and dusty today, Mueller said the landscape looked more like a swampy, tropical rainforest during the Triassic period. Our planet's landmasses had converged to form the supercontinent of Pangaea. In the forest undergrowth covered by tall conifers and choked with ferns, phytosaurs lurked beneath the water and waited for prey.

"A phytosaur resembles a crocodile," Mueller said. "They had basically the same lifestyle as the modern crocodile by living in and around the water, eating fish, and whatever animals came to the margins of the rivers and lakes. But one of the big differences is the external nares, the nose, is back up next to its eyes instead of at the end of its snout."

Mueller said scientists can tell the sexes of the animals by a distinctive feature on males. A bony crest stretched from the nostrils by the eyes to the tip of the animal's beak -- a feature lady phytosaurs probably found sexy.

Judging by the female's skull size, which is more than three feet in length, Mueller guessed she would have measured 16 to 17 feet in length from nose to tail tip. The male would have measured about 17 to 18 feet. Their thin jaws suggested they hunted mainly fish as opposed to big prey.

Mueller said phytosaurs lived throughout the Triassic period from 230 to 203 million years ago, but died out during a mysterious mass extinction. Highly successful animals, they are commonly found because these animals liked to live in swampy areas and were more likely to become covered in sediment and fossilized.

ScienceDaily. ScienceDaily, 29 January 2014. www.sciencedaily.com/releases/2014/01/140129145634.htm>.



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) 786-8844		
Fossil Bucks	Dave Dunaway	(407) 786-8844		
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		
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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: bonnierussell62 @gmail.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

February 15th - 18th NAPC in Gainesville

February 22nd

Imperial Bone Valley Gem, Mineral & Fossil Show

February 22nd

3 pm - Meeting and micro-fossil hunting

March 15th

10 am to 4 pm
"Women in Paleontology" at OSC
Dr. Rachel Wentz, speaker
- "Exploring Ancient Florida"

March 15 & 16th Tampa Bay FossilFest

April 19th

3pm - Meeting and Dr. Graham Worthy, speaker

Be Green

Email Bonnie at bonnierussell62@gmail.com to receive the newsletter via email.



Join Our Facebook group, Search: Florida Fossil Hunters



Visit us online at www.floridafossilhunters.com

Articles and comments should be sent to: bonnierussell62@gmail.com

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