Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters Volume 24, Number 4 April 2014

BREAKING NEWS... Roger Portell from FLMNH came down to visit Pine Hills; left with case of crabs... more later.

From the President....

Spring to Summer with plenty of fossil hunting to be had. Hope you take time to get out.

Our 1st Annual "Women in Paleontology" was a success. Thank you, Sara Morey, for you hard work on this event. Rachel Wentz gave a fantastic talk encompassing the geology of Florida and its animals through time. Check out her website (www.myfloridahistory.org) along with ALL her books. Carol Peterson brought samples and info on her discoveries and work on Florida seashells. Information on ordering books from these ladies is inside this newsletter. Valerie, Bonnie, Marcia, and Sara brought in a lot of their fossils to display and Kim & Cindy were there to talk to OSC's guests. I thank all you ladies for making this 1st event as great as it was.

Yes, Vulcan mine is open for collecting on the 2nd Saturday of each month (except summer) just as it used to be. See inside for info on signing up, etc. Peace River is low, so go! Don't wait until the river rises. We'll have our club Peace River fossil hunting & picnic on May 3rd. (Unless we get early, heavy rains.)

Graham Worthy from UCF will be giving his presentation on Marine Mammals at this month's meeting. Don't miss out on this talk and please bring in your marine mammal fossils to share..... plus any of your recent finds. We all love to see them.

More news at the meeting. See you there.

Russell Brown President

Join Our Facebook group, Search: Florida Fossil Hunters



Coming Events

UPCOMING MEETINGS at the Orlando Science Center

April 7th: Board Mtg, 7 pm

April 19th

2 pm Kids' Fossil Blast 3 pm Graham Worthy, spkr "Marine Mammals - Then and Now" Founders Room, 3rd Floor, OSC

June 21

3 pm Meeting & Fossil Bucks
Auction

July: NO Meeting

More events listed on back page

For more info...
www.floridafossilhunters.com

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Florida Fossil Hunters News

Fragments

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 Board Meeting

Club members are always welcome to join us for the Board meetings. We'd love to have your ideas and opinions. This month's mtg will be on Monday, April 7th, at 7 pm at Dave Dunaway's house. (check the Dec. 2013 newsletter for directions.)

FLMNH Science Café

If you are in or near Gainesville on April 7th, you can participate in the Museum's Science Cafe from 6:30 to 8:30 pm. Dr. Bruce McFadden will be giving a talk on "Discovering Fossils in Panama".

This will be held at Blue Gill Quality Foods, 1310 SW 13th St. (Hwy 441), Gainesville, FL 32601. That's just a bit south of Archer Rd. Participants purchase their own food. Seating begins at 6 pm and is on a first-come basis.

To attend email Amanda Erickson at aerickson@flmnh.ufl.edu or call her at 352-273-2062.

Venice Shark Tooth Festival

The annual event celebrating everything shark is being held this year from April 11th to the 13th. There will be fossil vendors as well as craft booths, music and food. Admission is \$3 per person and kids 12 & younger can get in free. It's at the Venice Airport Festival Grounds, 120 E. Airport Ave, Venice, FL 34285.

Fri.- 4 to 9pm, Sat.- 10am to 9pm and Sun- 10am to 5pm For more info, go to www.sharkstoothfestival.com

Piece on the Peace

The rains have caused about a foot of variation during the past month but it is still low enough to stand in and hunt for fossils. Get out and enjoy springtime on the Peace.... nature, the greatest show on earth... and you get to bring home souvenir fossils!

Our club dig on the Peace will be on Saturday, May 3rd. More on that in the May newsletter.

VULCAN MINE April 12th, see page 3 for more info



I just realized that the Kids' Fossil Blast program has been going strong for **10 years!** And the smiles and excitement are still worth every minute.

This month we're going to explore how animals could change in different environments. Bring your favorite animal model or toy (or you can choose from ones we'll have) and we'll try to figure out the many different ways they might adapt.

See you on Saturday, April 19th at 2 pm in the Founders Room on the 3rd floor of the Science Center.

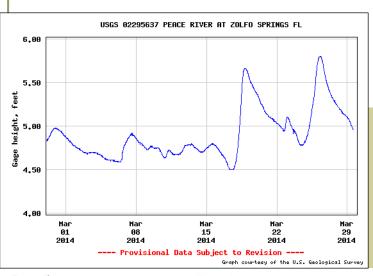
Mosaic Mine Field Trip

Cindy Roll has arranged a trip to Mosaic Mine near Wauchula on Saturday, April 26th. The group is limited to 30 people and children must be 13 or older.

First priority will be given to those people who have NOT gone on one of the mine trips yet. If there is room left, it will be filled on a first contacted basis.

To sign up email Cindy at croll59@cs.com or call her at 904-571-4258.

Thank you, Cindy Roll for getting us into mines for April. Your time and effort are appreciated by all of us in the club.



Florida Fossil Hunters News

Vulcan/Cemex Mine Field Trip

Saturday, April 12th 8:30am

Vulcan/Cemex Mine 16313 Ponce DeLeon Blvd., Brooksville

When: Saturday, April 12th- 8:30 am. Gate is locked

at 9 am so be on time.

Trip Leader: Bonnie Cronin

bonnierussell62@gmail.com or ph: 352-429-1058

cell (day of trip only) 321-279-2592

Children are allowed but keep close to them. There are steep cliffs and sharp rocks, and rattlesnakes.

Directions: From Orlando, take Hwy 50 west. Do NOT take 50A through downtown Brooksville. There is a big Blueberry Festival going on Apr. 12th. Turn right onto 41 north. If you are early enough, you can stop and use the restrooms at the fast food places. THERE ARE NO RESTROOM FACILITIES AT VULCAN - just rocks to hide behind.

Continue for a couple blocks and then take the road that forks off to the left, Ponce De Leon Blvd./ Rt. 98. Go approx. 10 miles and Cemex/Vulcan will be on your left. Park along the driveway loop, check in with me and sign the releases. I'll be in the little red Scion.

We will drive our vehicles into the mine at 9 am. There will be two departure times: 12 noon and 2 pm. You have to be led out at those times only. We don't want people getting lost.

Bring: screwdriver, rock hammer, or garden spade for prying out specimens. A bucket to carry your finds along with containers for fragile things. Also bring water and/or drinks and snacks, lunch, etc.

Wear: Hat, sturdy shoes, long pants, and sunscreen.

It is mostly surface collecting and we find mostly echinoids, some sea urchins & dugong bones, and a few other marine fossils.

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.

We look forward to Graham Worthy's presentation at our April 19th meeting at 3pm at the Orlando Science Center.

Marine Mammals of Florida – Then and Now

The marine mammal and seagrass communities of Florida and the Caribbean were very different during the Eocene to Oligocene period compared to the present. During the Oligocene, there were as many as six species of sirenians eating a wide variety of seagrasses living in the region. Changes in oceanographic conditions following closure of the Central American Seaway (about 2-3 MYA) probably led to the collapse of this diverse system, causing extinction of several seagrass species and as a result all of the dugongs. The likely enabled manatees to spread from freshwater habitats in South America into the

Caribbean and ultimately Florida. I will interpret the natural history and ecology of modern manatees and dugongs to better understand the species that once lived in the region.

Graham Worthy is a Provosts Distinguished Professor of Biology and the Hubbs-SeaWorld Endowed Professor of Marine Mammalogy at the University of Central Florida. He is also the Director of the Physiological Ecology and Bioenergetics Lab in the Department of Biology. Professor Worthy's research interests focus on understanding marine ecosystem function, and ultimately ocean health, by examining the interrelationships between different species and how those species respond to natural and human-related perturbations and how individual animals derive their nutritional needs from their environment by studying their energetics, growth, and nutrition. To achieve this he has undertaken studies on a variety of marine mammal species, including pinnipeds, cetaceans and sirenians, through laboratory and field based investigations designed to examine the capabilities of different species to withstand normal seasonal variation in their environment as well as understanding how human induced change can impact them.

More Fun

Can't get enough of cool stuff to do? Want to learn about Paleo prep?

Chris DeLorey has a Paleo-Prep lab set up and it's stuffed full of bones, skulls, etc. It's a couple miles north of the Brevard Zoo. I'd like to plan a club trip there. While I work out the details with Chris, you can always email him if you are interested. chris@educationalbiofacts.com



Ever think about volunteering? Public Outreach and Your Club

Sure our club has an outreach to the community, thanks mostly to a small handful of volunteers. Everyone can be an outreach person... from talking to your friends about fossils to speaking with guests at an event. Our club has many such opportunities.

At Orlando Science Center we have our meetings almost every month as well as the children's program every other month. We have displays there year round (which are about to get a big update). We participate in their events... Fossil Fest, Science Night Live, Neanderthal Ball, Scout programs, etc.

We have two permanent school displays at Moss Park Elementary and at Ocoee Elementary which get changed out about every 2 to 3 months. The "Teach-In" is in November and members give talks then and throughout the year at schools. Valerie First puts in LOTS of hours at the Central Florida Zoo as well as the Orlando Science Center displaying her fossils and getting the public to think about evolution.

Libraries are always looking for people to bring fossils and talk about them to adult groups and children's. Osceola Schools Environmental Studies Center has an outstanding Facility with an outreach to over 4,000 students each year.

National Fossil Day in October is a big hit. Paul Roth with FPS has put together some great events. This year, it's on Wednesday, October 15th. The Daytona Beach Museum of Art & Sciences has a Natural History Day in September that we participate in. And our yearly Fossil Fair is something we can all pitch in on and make better each year.

Then there all the festivals and events that pop up.... so many opportunities for everyone to share the good news about natural history, fossils, and our amazing past.

We have the public outreach... all we need is you. Russell Brown

More on Rachel Wentz

Dr. Wentz gave a wonderful presentation at our Women in Paleontology program. She has written books on a wide range of subjects:

"Chasing Bones" is about her experiences in becoming a bioarchaeologist.

"Life and Death at Windover: Excavations of a 7,000year-old Pond Cemetery" covers the information learned from the skeletons found at the Brevard County site.

"Searching Sand and Surf" about the origins of archaeology in Florida.

Information on these books can be found on her Facebook page - rachelwentzbooks. They can be purchased on Amazon.com on Kindle and in paperback.

You can find out about her upcoming talks throughout Florida at www.myfloridahistory.com

Carol also came to our WIP program and delighted us with her stories and the shells she brought. They sell and/or trade ammonites and echinoids.

"Southern Florida's Fossil Seashells" by Carol and Bernie Peterson

Florida's history lies buried beneath a few feet of sand. That history is in the form of fossils of every description that have been deposited and then exposed over the course of the last 40 million years. Some of the most abundant and interesting fossils to be found in Florida are those of mollusks or "seashells". This book is a fantastic resource for identifying fossil seashells.

The book can be purchased on Amazon.com

Carol & Bernie's email is bpeterson11@cfl.rr.com

Bizarre New Fossil Reptile Discovered in China

Atopodentatus unicus

Paleontologists led by Dr Xiao-Chun Wu from Canadian Museum of Nature say they have discovered a new genus and species of reptile that lived in what is now China during the middle Triassic, between 247 and 242 million years ago.

Dr Xiao-Chun Wu and his colleagues named the new prehistoric creature *Atopodentatus unicus* and suggest it belonged to a group of reptiles called thesauropterygians.

"Generic name is derived from the Latin *atopo* for the peculiar dentition and *dentatus* for teeth; the specific name is derived from the Latin *unicus* for its unique morphology," the scientists said in a paper published in the journal *Naturwissenschaften*.

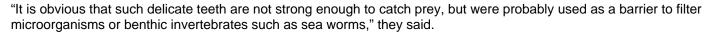
Atopodentatus unicus measured about 3 m long and had a long body, short neck and special adaptations for a fully aquatic or semi-aquatic lifestyle.

Its nearly complete skeleton and a left lateral side of the skull were collected from the middle Triassic of Guanling Formation near Daaozi village, Yunnan, China.

The most distinguishing characteristic of *Atopodentatus unicus* is its bizarre mouth.

On each side of the mouth, the reptile had about 35 small needle-like teeth in the front of the upper jaw, about 140 small needle-like teeth in the rest of the upper jaw (at least 100 in the horizontal portion and around 35 in the vertical portion), and more than 190 teeth in the lower jaw (about 100 in the horizontal portion and 90 in the shovel-headed anterior end). The teeth were covered by a layer of enamel.

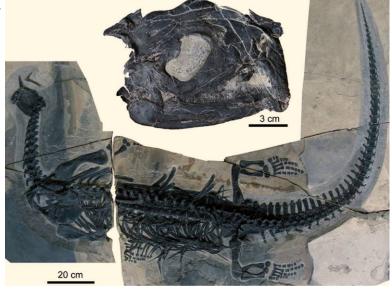
According to Dr Wu's team, Atopodentatus unicus may have been adapted to a way of bottom-filter feeding in water.



"These were collected by the specialized jaws, which may have functioned as a shovel or pushdozer and a grasper or scratcher."

Long Cheng et al. A new marine reptile from the Triassic of China, with a highly specialized feeding adaptation. Naturwissenschaften, published online January 23, 2014; doi: 10.1007/s00114-014-1148-4





FFH Peace River Dig & Picnic Saturday, May 3rd

Please email me at bonnierussell62@gmail.com or call me at 352-429-1058 to sign up. I need to have the number of vehicles to arrange for day passes into the campground and the number of people for hot dogs/buns.

We're going to mix things up a bit this year. For those of you who have canoes/kayaks or rent them, we're going to put in at the park at Wauchula at 9:30 am and float down to Thousand Trails Campground.

People that don't have canoes or prefer to just walk in can come directly to the campsites we'll rent at Thousand Trails Campground. There are places there where you can walk into the river to hunt for fossils.

We'll grill hot dogs around 1 pm and have the fixin's for those. We ask that everyone bring a side dish to share.... salad, fruit, chips, dessert, etc. Bring water/drinks (NO ALCOHOL) and snacks for yourselves and chairs or blanket for sitting while you eat.

Necessities:

Florida Fossil Permit - go to link on our website to get the application. It takes about 3 weeks to process so **do it NOW.**

- -shovel
- -sifter*
- -shoes that you can wear in the water. No sandals. Wear ones that stay on your feet such as dive boots, water shoes, or old gym shoes. I find socks that are tight around the ankle are good for keeping gravel out.
- -fanny pack for putting fossils in while you dig. A small backpack or a bag tied to you will also work.
- -containers to put your fossils in to take home some may br fragile, a bucket for large items.
- -dry clothes and a towel.
- -sunscreen and a hat.
- -chair for the cookout or to take breaks in.
- -bug repellent

*sifter: anything that has a 1/4" screen will do.

If you bring your kids....

This can be a wonderful family adventure and a great opportunity for your kids to find real fossils. These are some recommendations to make the experience enjoyable for all of you.

If you have young children (about 8 and under)

- there should be one adult for each child
- please be sure they have a life jacket on when they are in the river
- -they get hungry and tired quickly bring snacks and something for them to rest on the shore with

For all children

- they must have shoes on
- -experienced members of the club will be there to help you get started and offer advice but your kids will probably still need your help in hunting

Sifter: The easiest to work with are approx. 1 ft x 2 ft wooden boxes fitted with screening with fun-doodle floats attached to keep them from sinking while you fill them. It's important to have it tied to you with a length of rope so your finds don't float down the river. The alternative is to have a partner that holds the sifter while you shovel in the gravel.



The address for Thousand Trails Campground Is 2555 US 17th South, Wauchula, FL 33873. ph: 863-735-8888. It is on the east side of the river BEFORE Hwy. 17 crosses the bridge. If you get to Zolfo Springs, you've gone too far south.

Florida Fossil Hunters News

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:

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
Membership	Bonnie Cronin	(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.c	om

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

Associate	Members:	
Address:		
		Phone:
e-mail:		
	/ Renewa	
Please lis	t any interests	s, experience, talents or just plain
	•	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 Mark Your Calendar

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Board Meeting, 7 pm

April 12th—Vulcan Mine Field Trip

April 11th - 13th

Venice Shark Tooth Festival

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2 pm Kids' Fossil Blast 3 pm Graham Worthy, speaker "Marine Mammals - Then and Now" Founders Room, 3rd Floor, OSC

April 26th

Mosaic Mine Field Trip

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Peace River Fossil Hunting & Picnic

May 10th

Vulcan Mine Field Trip

June 7th

OSC "Science Night Live"

June 21

3 pm Meeting & Fossil Bucks Auction

July

NO Meeting

Be Green

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



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

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Post Office Box 540404 Orlando, Florida 32854-0404



