Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters Volume 22, Number 4 April 2012

Desk of the President.....

Fossil Fest 6 at the Orlando Science Center was another success. I thank all the volunteers from our club that pitched in and made the event so enjoyable for all of us. The Orlando Science Center also gives their thanks for making this event a growing success. We are already working on next year's plans to make it even better.

April will be busy.....Vulcan Mine field trip, Brevard Zoo, our meeting and kids' program, and as always, I encourage members to get down to the Peace River. Our club dig will be on May 5th & 6th. With summer weather already here, it won't be long until the water levels go up. Enjoy the record low levels while you can.

This is **your** club, so if you have any ideas on what we can do to improve or add to our meetings don't hesitate to email or call me.

Our Fossil Fair is coming faster than Christmas. I'm proud to say we have a volunteer coordinator this year - Ron Wittschen. We still need people to head up the stations at the Fair: Admissions, Silent Auction, Membership, and Kids' Area.

Thanks again for all your support.

Russell Brown

April 21st Speaker

Sean Roberts will give a talk on "Florida Caves and Cave Fossils"

May 19th Speaker

Robert Sinibaldi, author of "What Your Fossils Can Tell You."

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

April 21, 2012

2:00pm Kid's Fossil Blast 3:00pm Club Mtg

May 5th & 6th 2012 Peace River Trip - PG 2

May 19, 2012

2:00pm Kid's Fossil Auction 3:00pm Club Mtg & Speaker: Robert Sinibaldi

June 16, 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

Piece on the Peace

- GO MAN GO - Water levels throughout the state are reporting record lows. Levels so low that there's probably more people at the Peace River than at your local Walmart. Old-timers and first-timers are getting their gear together and heading to favorite spots throughout the state. Don't delay plan to take your family to the Peace River and take advantage of the low water.

Cruisin' the Fossil Highway

Florida Museum of Natural History

Feb. 4th to Sept. 3, 2012

Explore questions about evolution, extinction and early life on Earth through the fossil-inspired artwork of Ray Troll with insights from paleontologist Kirk Johnson. Watch Museum scientists prepare fossils from the field and see a giant ammonite and more.

Our own Russell Brown's artwork will be part of this display as well as that from other Florida paleoartists.

.....and you get to go through the Hall of Fossils, too!

Admission is free to the Museum but there is a small charge for this traveling exhibit: \$4.50 for adults and \$4 for kids 3-17. For more info, go to www.flmnh.edu

Curious to Learn More About Fossils?

The Museum of Natural History in Gainesville is having a free series of talks on fossils from some of their eminent paleontologists at 2 pm on Sunday, April 29th - Florida's Fossil Horses with Richard Hulbert, Ph.D., Vertebrate Paleontology Collections Manager.

The Museum will also have "Ask a Paleontologist" sessions from 1:30 to 3:30 pm on the following Sundays: Apr. 15, and May 6. Bring you fossils and questions and take advantage of this opportunity to talk with Museum paleontologists.

Venice Shark Tooth Festival

The 20th annual celebration of sharks and their beautiful teeth will be held at the Venice Airport Festival Grounds, 120 E. Airport Ave., Venice, FL 34285, on April 13th through the 15th. Hours are: Fri.- 4pm to 9pm, Sat.- 10am to 9pm, Sun.- 10am to 5pm. Admission is \$3 but kids 12 & under can get in free.

Kids' Fossil Blast

On April 21st at 2 pm we'll talk about the last 65 million years since the dinosaurs went extinct and why scientists have divided that time into different Epochs.

Bring some of your fossils.... everyone will get to make their own timeline and mark where their fossils fit in on it

On May 19th at 2:00pm we'll have a *fossil buck* auction just for the kids!

Florida Caves and Cave Fossils:

Sean Roberts will be giving us his presentation at our April 21st meeting at 3 pm. He has been exploring caves for over 20 years and photographing them and the fossils he finds there. His photos have been published in national magazines and professional papers. At the Florida Museum of Natural History he is involved in the collection, preparation, cataloging, GIS databasing, and photography of their worldwide collection of fossil invertebrates.....with emphasis on the SE United Sates and the Caribbean. His research interests include mapping of Florida caves (both underwater and dry) and photographic documentation of the invertebrate fossils found in there.

Peace River Annual Fossil Hunt

Our club's annual fossil hunting trip on the Peace River will be on Saturday, May 5th and Sunday, May 6th.

It will be at the same place as last year - Thousand Trails Campground in Wauchula. You can come for one day or both. More details will be available at the April meeting and in the May newsletter.

Dave Cass has a couple canoes that he is willing to lend to club members for the Peace River weekend. Just call him at 407-409-9095 before 8 pm to work out arrangements.

Rock Sale

Shelley Zimmerman and Dave Cass will be having a sale at 2100 Mikler Dr., Oviedo, 32765, on Saturday, May 26th from 9 am to 4 pm. There will be special deals for club members and LOTS of things for kids.

Brevard Zoo & Dinos: Dead or Alive

Our club has arranged to have a special tour of Brevard Zoo's Dinosaur exhibit as well as getting to see all the incredible animals there on Saturday, April 28th from 9:30 am to 3 pm. Thanks to Chris DeLory we have a special rate of only \$9 per person for our group for this day.



YOU MUST SIGN UP BY APRIL 14TH AND PREPAY FOR YOUR

FAMILY BY APRIL 21ST TO PARTICIPATE IN THE EVENT. Please call or email Bonnie at 352-429-1058 or email her at <u>birb48@netzero.com</u>.

We'll meet near the entrance to the Zoo at 9:15 to sign in and then we'll go into the Zoo as a group. Arrive early to leave enough time to find a parking space and walk to the entrance.

Chris DeLorey will give us a special tour of the Dino exhibit and the rest of the time you will be free to wander through the Zoo and see the animals...... giraffes (you can feed them!), rhinos, tapirs, anteaters, wolves, jaguars, birds from tiny to huge, and more!

The Zoo has a Cafe where you can buy lunch at reasonable prices. Russell and I have eaten there...the food is great and the portions are generous. Or you can bring a picnic lunch in a cooler and leave it at the cafe until you are ready to eat.

Directions: Take Hwy. 50 or the Beeline toll road east to I-95. Go south on 95 to Wickham Rd., exit 191. Go east 1/2 mile on Wickham Rd. The Zoo is on your right, 8225 N. Wickham Rd., Melbourne, 32940.

For more on the Zoo, go to www.brevardzoo.org

If you want to stay in a beach front hotel Friday and/or Saturday and make a holiday of the weekend, we have a special rate of \$79 per room per night at the Best Western Ocean Beach Hotel, 5600 N. Atlantic Ave., Cocoa Bch, 32931, and the Days Inn Cocoa Beach which is next to it at 5500 N. Atlantic..... only 23 miles from the Zoo. Call 321-783-7621, ext 366 or 377 to make your reservation. Ask for the "Dinosaur Exhibit Rate" to get the discount. To check out the hotels, go to their websites: www.bestwesterncocoabeach.com and www.daysinncocoabeach.com

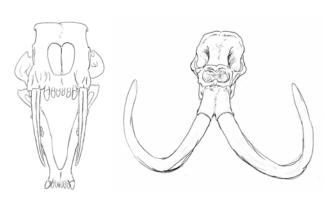
Extra 2011 Fossil T-shirts

I have a limited number of 2011 yellow fossil t-shirts that were ordered but never paid for. They will be sold on a "first come" basis. I'll have them at the April 21st meeting. The youth shirts and shirts without pockets are \$10 each. The shirts with pockets are \$12.

W/O Pocket: Youth med: 2, Adult : M - 2, Lg - 1 tan, XL - 3 & 1 tan, 2X - 1, 3X - 1

Adult w/pocket: Med - 1, Lg - 1

2012 Fossil Fair Shirt Designs



The First Time

I can remember years ago in the early 90's, when I was just discovering Prehistoric Florida... the Florida I somehow missed as a kid growing up here. I was hot with "shark tooth fever" and had been digging for about a year, as often as I could, at the Pine Hills Pit with my buddies, Jeremy Smith and Mike Trapp. Mike mentioned a place called the Winter Garden Ditch. Said he heard that some club members had been run off the property by the owner and told not to come back. Jeremy and I still hadn't joined the club at that point.... we'd met out in the woods at Pine Hills. Mike caught my total attention when he uttered the words "seven-gill shark".

Now anyone who's met me knows I kinda like sharks. I had found my first rare cow shark tooth in Pine Hills, and cow sharks (six and seven gills) have been my favorites ever since. Hearing about another place to hunt for them was enough to get me in my truck to check out out this deep ditch in Winter Garden. "Located on the south side of Lake Apopka, just past the old Starlite Drive-in, along the railroad tracks. You won't miss it", Mike said. I realized that I'd been past this area before and right at 9th Street, there it was an eroded ravine, easily about 30 ft. deep, right off the side of the road. I drove on by, noticing there was a small dirt road that ran along the side the ravine, heading north to Lake Apopka. As I drove on, I circled around, figuring the ditch would have to go under the road that ran along the lake. Sure enough, I found it but the ditch was only 3 ft. deep at that end and not much water was running through it. Going back, I turned down the dirt road I had spotted earlier and followed it as it wandered through the old oaks. It looked like others used it for parking and eating lunch...maybe city workers, police, etc. So I parked my truck, got out, and looked over the giant ravine thickly covered with vegetation. The old railroad that ran along the main road was held up by a bunch of of 12 x 12 beams that almost looked like they'd give in at any time. This end was a wide as a football field with 30 ft. cliffs full of vines and trees. I followed a small path leading down through the eroded banks and at the bottom of the ravine I came to the stream which was narrow enough to easily jump across. The clay bed was littered with railroad gravel, broken glass, and other trash. Scanning around, I soon found two bull shark teeth and a stingray mouthplate piece. The trickle of water disappeared into a thick wall of vines and plants. I headed back up to my truck and went home thinking of my next trip to this new place to hunt. I had no idea that for next 10 years this would be my second home..... called Lulu Creek, the land that time forgot.

Some Mammals Used Highly Complex Teeth to

Compete With Dinosaurs

ScienceDaily (Mar. 14, 2012) — Conventional wisdom holds that during the Mesozoic Era, mammals were small creatures that held on at life's edges. But at least one mammal group, rodent-like creatures called multituberculates, actually flourished during the last 20 million years of the dinosaurs' reign and survived their extinction 66 million years ago.

New research led by a University of Washington paleontologist suggests that the multituberculates did so well in part because they developed numerous tubercles (bumps, or cusps) on their back teeth that allowed them to feed largely on angiosperms, flowering plants that were just becoming commonplace.

"These mammals were able to radiate in terms of numbers of species, body size and shapes of their teeth, which influenced what they ate," said Gregory P. Wilson, a UW assistant professor of biology. He is the lead author of a paper documenting the research, published March 14 in the online edition of *Nature*.

Some 170 million years ago, multituberculates were about the size of a mouse. Angiosperms started to appear about 140 million years ago and after that the small mammals' body sizes increased, eventually ranging from mousesized to the size of a beaver.

Following the dinosaur extinction, multituberculates continued to flourish until other mammals -- mostly primates, ungulates and rodents -- gained a competitive advantage. That ultimately led to multituberculate extinction about 34 million years ago.

The scientists examined teeth from 41 multituberculate species kept in fossil collections worldwide. They used laser and computed tomography (or CT) scanning to create 3-D images of the teeth in very high resolution, less than than 30 microns (smaller than one-third the diameter of a human hair). Using geographic information system software, they analyzed the tooth shape much as a geographer might in examining a mountain range when charting topography, Wilson said.

The work involved determining which direction various patches of the tooth surfaces were facing. The more patches on a tooth the more complex its structure, and the most complex teeth show many bumps, or cusps.

Carnivores have relatively simple teeth, with perhaps 110 patches per tooth row, because their food is easily broken down, Wilson said. But animals that depend more on vegetation for sustenance have teeth with substantially more patches because much of their food is broken down by the teeth.



An artist's conception depicts a multituberculate in its natural habitat at the time of the dinosaurs. (Credit: Jude Swales/Burke Museum of Natural History and Culture)

In multituberculates, sharper bladelike teeth were situated toward the front of the mouth. But the new analysis shows that in some multituberculates these teeth became less prominent over time and the teeth in the back became very complex, with as many as 348 patches per tooth row, ideal for crushing plant material.

"If you look at the complexity of teeth, it will tell you information about the diet," Wilson said. "Multituberculates seem to be developing more cusps on their back teeth, and the bladelike tooth at the front is becoming less important as they develop these bumps to break down plant material."

The researchers concluded that some angiosperms apparently suffered little effect from the dinosaur extinction event, since the multituberculates that ate those flowering plants continued to prosper. As the plants spread, the population of insect pollinators likely grew too and species feeding on insects also would have benefited, Wilson said.

The paper's coauthors are Alistair Evans of Monash University in Australia, Ian Corfe, Mikael Fortelius and Jukka Jernvall of the University of Helsinki in Finland, and Peter Smits of the UW and Monash University.

The research was funded by the National Science Foundation, the Denver Museum of Nature and Science, the University of Washington, the Australian Research Council, Monash University, Academy of Finland and the European Union's Synthesis of Systematic Resources.

Vulcan Field Trip

Vulcan Mine, April 14th BBQ

This year sadly will be the last of collecting at Vulcan Mine in Brooksville. Vulcan Mine Materials, through all the years that I can remember, has been kind enough to open their mine to collectors of fossils, rocks, minerals, etc. This company has one of the greatest public outreach policies of all the mining operations that I've known. Vulcan Mine has allowed scout troops, school groups, and children of club members (which is very rare) to come in and collect. On the second Saturday of April, I've worked it out with Alan Pagels to take our club to an area where we will have a cookout on site, during which you and your children can run around, collect, and explore. I'm asking for members to bring a covered dish to go with the hot dogs that the club will provide.

Vulcan Materials will be shutting down for good this summer. I believe June is the last time to hunt for fossils. If you haven't been to the mine before, (or if you want to go "just one more time") you have just a few more opportunities.

If you plan to attend this event please email Bonnie at birb48@netzero.com or call 352-429-1058, so we know how many to plan for. Also, if you'd like to help out, we could use a couple more grills and tarps

Trip Leaders are Bonnie & Russell,

email <u>bjrb48@netzero.com</u>, and home phone 352-429-1058. For the day of the field trip only, cell phone is: 321-279-2592.

This is one of the few places where kids are allowed in to fossil hunt. Be sure to stay with them since there are steep cliffs, sharp rocks, and small sinkholes.

You MUST be a member of the club for insurance purposes to participate in this field trip.

Meet on the driveway loop near the entrance to the Mine by 8:30 am to sign releases before we are escorted into the mine around 9 am. We get to drive our vehicles in so you can have your coolers, snacks, and equipment handy while you hunt. They usually allow us to dig until noon and sometimes people can stay till 2 pm.

All participants MUST be escorted into and out of the mine. Do not leave on your own since it is easy to become lost.

Directions: The trip will take approximately 2 hours from Orlando to Vulcan Mine. Be sure to allow for extra time to stop at a restroom before you get there. THERE ARE NO RESTROOM FACILITIES AT VULCAN, other than the boulders and the hills.

From Orlando take Hwy. 50 west (or the 408 west to the FL Turnpike, take exit 272 and then continue west on Hwy. 50) to Brooksville. Follow 50A/98 North through Brooksville and turn right on Ponce De Leon Blvd. (Hwy 98 North). Go approximately 10 miles. Vulcan/Cemex will be on your left. The address is 16313 Ponce De Leon Blvd, Brooksville, for those of you who want to download a map.

If you follow the truck route for Hwy. 50, you have to turn right onto 41, and then take the fork to the left to hook up with Ponce De Leon Blvd/98. There are several fast food places on 41 where you can take advantage of the bathroom facilities. Be sure NOT to keep following 41 north. You want to take 98 north from Brooksville.

This is mostly surface collecting with occasionally a little digging to pry out a specimen. Bring a small trowel or screwdriver or rock hammer, and a bucket to put your fossils and rocks into. You may want to bring small containers and tissue for fragile fossils.

Wear a hat, sturdy shoes, long pants (some of the rocks are sharp), and sunscreen. Bring lots of water and/or drinks and some snacks or lunch to eat.

We find mostly echinoids and sometimes sea urchins, pieces of bone, or other fossils are found. We also find chert rocks. This is the material that the Indians used to make their arrowheads and tools.

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.co | 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

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 Mark Your Calendar

April 14th Vulcan Mine Field Trip

April 13th - 15th Venice Shark Tooth Festival

April 21st 2:00pm Kid's Fossil Blast 3:00pm Club Meeting

April 28th

Brevard Zoo & Dinosaurs Field Trip

May 5th & 6th 2012

Peace River Field Trip

May 19, 2012

2:00pm Kid's Fossil Auction 3:00pm Club Mtg & Speaker: Robert Sinibaldi

June 16, 2012

2:00pm Kid's Fossil Blast 3:00pm Club Mtg

Be Green

Email Bonnie at bjrb48@netzero.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: elise@liseydreams.com

Florida Fossil Hunters

Post Office Box 540404 Orlando, Florida 32854-0404



