Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters Volume 22, Number 2

From the President's desk...

Hope everyone's new year started out great and this year will be prosperous for you.... especially in fossils. January's Gainesville trip was a success. I know that for members who toured the Florida Museum of Natural History, especially those who hadn't been there before, had their eyes opened to a great family/ educational museum. Bonnie's got a full report inside.

Chris DeLory at the Brevard Zoo gave me and Bonnie a "behind the scenes" tour of the new Dinos - Dead or Alive exhibit that will be opening this month. He's got a great set-up and some cool events planned at the Zoo. We would like to arrange a club trip there with enough members for a discount. Sign-up sheets, dates, etc. are coming, so watch our website and your newsletters for details.

Orlando Science Center's Fossil Fest #6 will be on March 17th.... check out the article inside for more info.

Winter brings us to low water levels in the rivers. So if you can handle a little cold water, you can start your collecting season. As always, bring in something ... new or old... that you have found to the meeting.

Russell Brown

Looking forward to 2012

Fossil Field Trip

February 11, 2012 (see pg 6 for details)

February Mtg

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

March Mtg

March 17, 2012 OSC Fossil Fest (see pg 2 for details)

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

February 18, 2012

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

March 17, 2012

Orlando Science Center's Fossil Fest, No Club Meeting

April 21, 2012

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

More events listed on back page

Table of Contents

For more info...
www.floridafossilhunter.com

Fragments	2
Kids Fossil Blast	2
OSC March Fossil Fest	2
Tour Report of Florida Museum of Natural History	3
Mouse to Elephant? Just Wait 24 Million Generations	3
Ancient Dinosaur Nursery	5
Diet & Evolution	5
Vulcan Field Trip	6
More Fragments	6
Contacts and Membership Info	7
Calandar	0

Florida Fossil Hunters News

Fragments

Fossil Fest 6

The Orlando Science Center will have its Fossil Fest on Saturday, March 17th from 11 am to 4 pm. Our club has partnered with the Science Center on this event for the last several years, displaying our fossils and sharing our enthusiasm for fossils and Florida's geologic history with the visitors.

This is one of most important educational events we have each year and we urge as many of you as possible to come and join the fun and volunteer for this event. There will be sign-up sheets at February's meeting. There will be no regular club meeting in March.

Please call me if you have any questions. Bonnie: 352-429-1058 or bjrb48@netzero.com

Tampa Bay Fossil Fest

Tampa Bay Fossil Club will hold its annual fossil & mineral show on March 24th & 25th, at the Florida State Fairgrounds near the intersection of I-4 and Hwy. 301, just east of Tampa. There will be vendors with fossils, artifacts, gems, minerals, & shells, as well as exhibits, workshops, kids' fossil mine, silent auctions, and more.

Cost is \$6 for adults. Kids age 12 and under can get in free. There is a charge for parking at the State Fairgrounds.

Kids' Fossil Blast

Those of you who went to the Florida Museum of Natural History on January 21st got to see not only the fantastic fossil collection the Museum has but collections of many kinds that people brought in. All of us like to collect things.....fossils, minerals, shells, superhero figures, and lots of other stuff. It's just human nature.

So for our February kids' meeting, bring in whatever you collect (it doesn't have to be fossils) - enough to display in a 2 ft. x 2 ft. area on a table. We're going to talk about the fun of collecting along with tips for you to organize your collections so it's just not a box tucked into a corner of your closet.and we'll have the fun of seeing what everyone else collects.

See you on Saturday, February 18th at 2 pm.

Piece on the Peace

The water level is still hovering around 4.5ft. at Zolfo so get out and dig if you can. Bet you can walk in areas that have been too deep to reach before.

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 paleo-artists.

.....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.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 the following Sundays:

Feb. 19th - Fossil Nuts with Steve Manchester, Ph.D., Curator of Paleobotany

March 11th - Fossil Primates with Jonathan Bloch, Ph.D., Assoc. Curator of Vertebrate Paleontology

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: Feb. 12, Mar. 4, 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.

More shows.....

The Imperial Valley Gem, Mineral & Fossil Society will have its 8th annual show on Saturday, February 25th at the First Presbyterian Church, 175 Lake Hollingsworth Dr., Lakeland, FL

The Suncoast Gem & Mineral Society will have its show on Friday, March 2nd through Sunday, March 4th at Minnreg Hall, 6340 - 126th Ave., Largo, FL



Tours of Florida Museum of Natural History

Museum Tour Report

There was an enthusiastic group gathered on Saturday morning, Jan. 21st, at Dickinson Hall. Alex Kittle took us through the Invertebrate research/collection section where boxes of specimens lay on the floor in the aisles waiting to be cataloged. As with all institutions these days, funding is short so Alex is doing his very best to sort through the collections that have been donated recently. Although the Museum concentrates on fossils from Southeast United States and the Caribbean, they have lately acquired a rare collection of Eocene Antarctic fossils that needed a good home. It was amazing to see beds of small brittle stars from an area that few people will ever collect from. There were also many fossils from a collection of Florida fossils from sites that are now built over. This particular collection is especially challenging since the paleontologist who collected them purposely mislabeled the locations to keep them secret. It's a good lesson in maintaining accurate records of our finds. We just never know when a particular fossil will have importance in the future.

Richard Hulbert then took over and showed us the "big" fossils in the Vertebrate section. There they are working on making molds of the fossils from the Panama dig site

as well as teasing fossils out of matrix collected in Florida. There was an incredible - though squashed- skull from an amphicyonid, commonly called a "beardog", found at Haile Quarry. There was a beautiful fossilized giant armadillo tail and a skull of one of the ground sloths laying on the floor where they had been studied by visiting paleontologists. Of course, the huge fossils of whales, mammoths, giant ground sloths, etc., stacked on shelves evoked awe from all of us.

After lunch, we joined the folks at Powell Hall where the rooms were packed with collections of all sorts (from microscopes to Minnie Mouse toys) as well as the usual Museum exhibits. No matter how many times I've been to the Fossil Hall there, I always manage to see something I hadn't noticed before. For example... in the entrance hall, there are maps of the earth showing how the continents were arranged in the Paleozoic with red dots marking where the Florida land mass was at that time.

For those of you that couldn't join us this time, I strongly recommend a visit to the Florida Museum of Natural History. You won't be disappointed.

Dinosaurs at the Brevard Zoo

The moving, roaring dinosaurs that Chris DeLory talked to us about in November will be at the Zoo from February 18th through May 28th. We'll be planning a club trip there at the February meeting so be sure to have your calendars with you so we can agree on a date. If we can get a group of at least 15 people, we can get a discount of \$2 off the admission price....every penny counts.

Russell & I got to tour the exhibit under construction with Chris on January 18th. It's going to awesome!

Of course, while we were at the Zoo, we had to check out the animals, especially the tapirs, capybaras, and the cassowaries (think Terror Bird) that remind us so much of prehistoric Florida. We also got to see the new baby giraffe with the herd. It's mind-boggling to realize there used to be camels almost that tall here in Florida.

For more info on the Zoo go to www.brevardzoo.org For more information of the dinosaur exhibit visit www.brevardzoodinos.com

(Best when sung to the tune of "My Ding-A-Ling")

"Once I's going down Lulu Creek, man, them 7-gills was all around my feet, sure was hard crawling down that thang, with both hands holdin' my shovel and sein'."

Coming this summer to a newsletter near you.... A Journey Back in Time to Classic Lulu Creek*

The story told through time of the "Winter Garden

The story told through time of the "Winter Garden Ditch" from today and back to the days of the early settlers, railroads, then further back to the Indians, the first true Floridians, then to an age of strange 4-tusked elephants roaming the shores of what would one day be called Lake Apopka. Then finally back to the time when baleen whales and other marine animals swam there... especially sharks, which was the lure that brought me there.

Russell Brown



Mouse to Elephant?

Just Wait 24 Million Generations



Dr. Alistair Evans with the skulls of a mouse and an elephant. (Credit: Image courtesy of Monash University)

ScienceDaily (Jan. 30, 2012) — Scientists have for the first time measured how fast large-scale evolution can occur in mammals, showing it takes 24 million generations for a mouse-sized animal to evolve to the size of an elephant.

Research published in the *Proceedings of the National Academy of Sciences* describes increases and decreases in mammal size following the extinction of the dinosaurs 65 million years ago.

Led by Dr Alistair Evans of Monash University's School of Biological Sciences a team of 20 biologists and palaeontologists discovered that rates of size decrease are much faster than growth rates. It takes only 100,000 generations for very large decreases, leading to dwarfism, to occur.

Dr Evans, an evolutionary biologist and Australian Research Fellow, said the study was unique because most previous work had focused on microevolution, the small changes that occur within a species. "Instead we concentrated on large-scale changes in body size. We can now show that it took at least 24 million generations to make the proverbial mouseto-elephant size change -- a massive change, but also a very long time," Dr Evans said.

"A less dramatic change, such as rabbit-sized to elephant-sized, takes 10 million generations."

The paper looked at 28 different groups of mammals, including elephants, primates and whales, from various continents and ocean basins over the past 70 million years. Size change was tracked in generations rather than years to allow meaningful comparison between species with differing life spans.

Dr Erich Fitzgerald, Senior Curator of Vertebrate Palaeontology at Museum Victoria and a co-author, said changes in whale size occurred at twice the rate of land mammals.

"This is probably because it's easier to be big in the water -- it helps support your weight," Dr Fitzgerald said.

Florida Fossil Hunters News

Dr Evans said he was surprised to find that decreases in body size occurred more than ten times faster than the increases.

"The huge difference in rates for getting smaller and getting bigger is really astounding -- we certainly never expected it could happen so fast!" Dr Evans said.

Many miniature animals, such as the pygmy mammoth, dwarf hippo and 'hobbit' hominids lived on islands, helping to explain the size reduction.

"When you do get smaller, you need less food and can reproduce faster, which are real advantages on small islands," Dr Evans said.

The research furthers understanding of conditions that allow certain mammals to thrive and grow bigger and circumstances that slow the pace of increase and potentially contribute to extinction.

Alistair R. Evans, David Jones, Alison G. Boyer, James H. Brown, Daniel P. Costa, S. K. Morgan Ernest, Erich M. G. Fitzgerald, Mikael Fortelius, John L. Gittleman, Marcus J. Hamilton, Larisa E. Harding, Kari Lintulaakso, S. Kathleen Lyons, Jordan G. Okie, Juha J. Saarinen, Richard M. Sibly, Felisa A. Smith, Patrick R. Stephens, Jessica M. Theodor, and Mark D. Uhen. **The maximum rate of mammal evolution**. Proceedings of the National Academy of Sciences, 2012; DOI: 10.1073/pnas.1120774109

Ancient Dinosaur Nursery

The oldest nesting site of dinosaurs found to date is at an early Jurassic (190 million years ago) fossil site in South Africa. At least 10 nests have been discovered at several levels, each with 34 round eggs in tightly clustered clutches, as well as embryos of the prosauropod dinosaur Massospondylus. They even found tiny fossilized footprints, providing evidence that the hatchlings remained at the nesting site long enough to at least double in size.

The rest of the article can be found at http://www.sciencedaily.com/releases/2012/01/120123152505.htm

Diet & Evolution

Elephants (think mammoths, too) have long been known to be a part of of the Homo erectus diet. But the significance of this specific food source, in relation to both the survival of Homo erectus and the evolution of modern humans, has never been understood - until now. When Tel Aviv Univ. researchers examined the published data describing animal bones associated with Homo erectus at the Acheulian site of Gesher Benot Ya'agov in Israel, they found that elephant bones made up only 3% of the total. But these low numbers are misleading. While the six ton animal may have been represented by a tiny percentage of bones at the site, it actually provided as much as 60% of animal source calories.

The elephant, a huge package of food that is easy to hunt, disappeared from the Middle East 400,000 years ago - an event that must have imposed considerable nutritional stress on Homo erectus. The researchers connected this evidence about diet with other cultural and anatomical clues and concluded that the new hominids recently discovered at Qesem Cave in Israel - who had to be more agile and knowledgeable to satisfy their dietary needs with smaller and faster prey - took over the Middle Eastern land-scape and eventually replaced Homo erectus.

The findings, which have been reported in the journal PLoS One, suggest that the disappearance of elephants 400,000 years ago was the reason that modern humans first appeared in the Middle East. In Africa, elephants disappeared from archaeological sites and Homo sapiens emerged much later - only 200,000 years ago.

The rest of this article can be found at www.esciencenews.com

....On a side note, the prolonged dependence of Homo erectus on elephants as a food source would explain their use of mainly one tool - the hand axe, for the millions of years they roamed the world.

Vulcan Field Trip

February 11th

There will be a field trip to Vulcan Mine near Brooksville on Saturday, November 12th and the Trip Leader contact is Christophe Cardot,

email: christopheart@yahoo.fr, home phone: 386-426-6374. For the day of the field trip only, his cell phone is: 386-689-4581.

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.

Next Trip March 10th
Trip Leader Needed! (Earn Fossil Bucks)

2012 Dues

Thanks to those of you who have already renewed your club memberships. If you haven't, please send your check to Florida Fossil Hunters, P.O. Box 540404, Orlando, FL 32854-0404 along with the application form so I have your correct mailing and/or email address. It's still a great bargain at \$17 per household. Thank you. Bonnie

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:			
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 fro

nbership 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 Tunters News

Florida Fossil Hunters Mark Your Calendar

February 4th: - Sept 3 Opening of Cruisin' the Fossil Highway at FLMNH

February 11th: Vulcan Mine Field Trip

February 18th: 2 pm Kids' Fossil Blast 3 pm Meeting

March 10th: Vulcan Mine Field Trip
- if we can get a trip leader

March 17th: Orlando Science Center's Fossil Fest

March 24th & 25th: **Tampa Bay Fossil Fest** Annual Fossil & Mineral Show

April 13th - 15th: Venice Shark Tooth Festival

February 25th: The Imperial Valley Gem, Mineral & Fossil Society Show

March 2nd - 4th: The Suncoast Gem & Mineral Society Show



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



