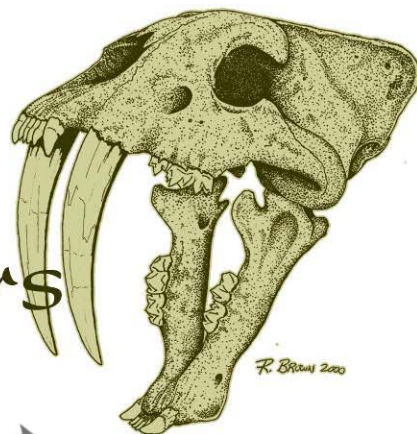


NEWS

Florida Fossil Hunters

Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters
Volume 28, Number 4

April 2018



From the desk of the President.....

Greetings, Everyone.

Hope you get out for Earth Day - there are plenty of celebrations. Salvatore Sansone will be out at Lake Lotus representing FL Fossil Hunters & the Central FL Rock, Gem & Mineral Club on Sunday, Apr. 24th. He could sure use some volunteers. If you would like to help, email him at ssfossilhunters@aol.com.

The Peace River low - dirty, but low - and lots of fossil hunters are taking advantage of the lull in rain. You should, too. Contact Steve Sharpe at 352-552-2296 to join him on one of his many trips. Speaking of the Peace River, "Dino-Dan" or Chris DeLorey as some may know him, rewarded volunteers at the Brevard Zoo with a trip to the Peace to hunt fossils. Steve & Michael Sharpe and Bonnie & me helped out with a walk-in hunt at Wauchula. About 30 or more first-timers went shark tooth crazy. A little sun and less wind would have been nice but there were no complaints... everyone had a blast experiencing the thrill of fossil hunting.

The Yankeetown trip got delayed since it was supposed to be the same day, so I'm thinking about going in May (the 12?), weather permitting. It may have been a good thing it got cancelled on the 31st. The north wind that day may have been too strong. If interested you can call or email (bonnierussell62@gmail.com).

There will be a club trip to Skeletons Museum on May 5th. Please let us know if you will attend so we can have a head count. Discounted admission depends on the size of the group.

Life is getting busier and unfortunately Bonnie will be taking a break from the "Kids' Blast Program". She always enjoyed doing the programs. If any member would like to give it a try (and we could help), this would be great. Think about. Contact us if you would like more info.

OSC will have their Prehistoric Party on Saturday, June 23. We'll have a bit of fossil displays and talk to the guests. Come join us for the fun while earning Fossil Bucks.

Summer break is approaching fast. Make your plans now to enjoy the wonderful great outdoors of Florida.

Hope to see you at an event.
Russell Brown, President

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

Saturday, April 21st
FFH Meeting

Saturday, May 19th
FFH Meeting 3pm

*More events listed on back page
For more info...
www.floridafossilhunters.com*

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Florida Fossil Hunters News

Fragments

Volunteering to the max!

Valerie First is leaving us in the dust with all the events and venues that she'll be setting up her display at: Lake Eola Earth Day, SCC's Earth Day event, the Central Florida Zoo, and the Orlando Science Center.

She is amazing!

Dinosaurs at the Brevard Zoo

Five years after their last appearance, dinosaurs are making a return to Brevard Zoo for a positively primeval family experience. Among the 16 lifelike, life-sized animatronic figures are the cunning Utahraptor, a pair of spitting Dilophosaurus and - the king himself - Tyrannosaurus rex. The trail culminates at the interactive Dinosaur Discovery Center, where guests can uncover a replica Tyrannosaurus skeleton, touch real fossils and watch volunteers prepare specimens collected by Zoo staff in Montana. "Our goal is to illustrate that everything we know about dinosaurs comes from the scientific process," said Chris DeLorey, the Zoo's director of education programs. "Because we can't observe dinosaurs firsthand, we rely on

the evidence they left behind to draw conclusions about how they lived. The exhibit, which is not included with general Zoo admission, runs from Saturday, November 18 to Monday, April 30, 2018 and will be open daily from 10 a.m. to 5 p.m. An upcharge of \$4 applies to each guest ages three and older. More information is available at www.dinosareback.com.

Brevard Zoo is home to more than 800 animals representing 180 species from all over the world. As a not-for-profit organization, it is a leader in the fields of animal wellness, education and conservation. More information is available at www.brevardzoo.org.

Kids' Fossil Blast

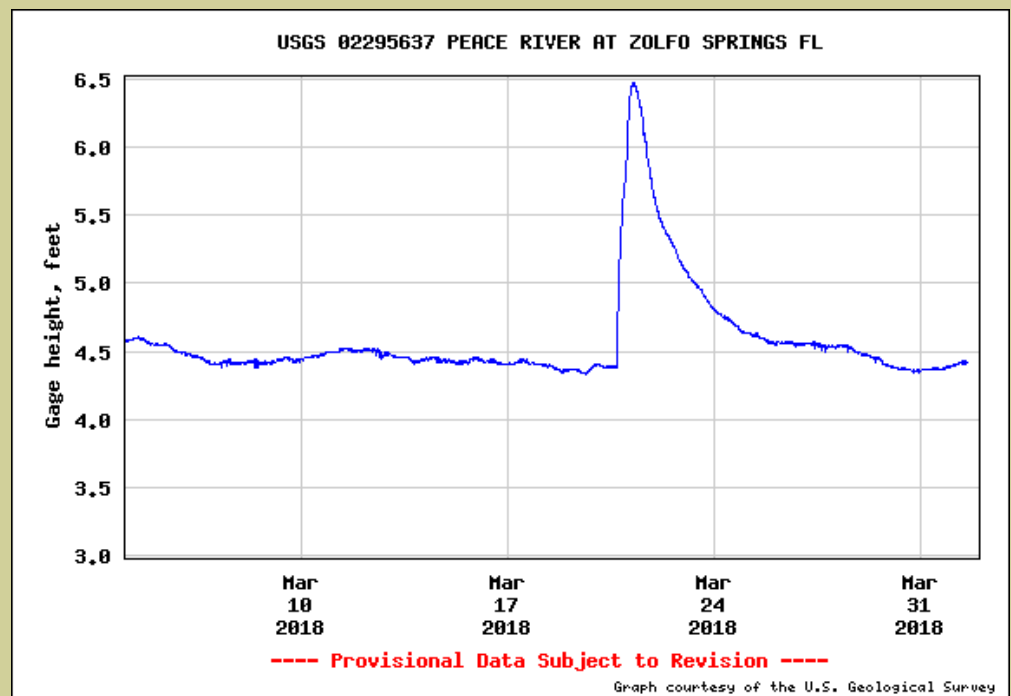
Reminder: The club is suspending the kids' programs before the meetings. There have been fewer kids attending - mostly just one or two each program.

If someone else wants to take it over and even change the format, just let us know.

Piece on the Peace

Spring is definitely here.... the river level is down (except for rain events) and the water is getting warmer. If the weather is cloudy and the air temperature is below 70, you may want a wet suit but even wimps like me can dig in it for a few hours. There are still fossils to be found.

Find yours!



Florida Fossil Hunters News

Montbrook Fossil Dig

Dig into Florida's Past with the Paleontologists

About 5 to 5.5 million years ago (latest Miocene – earliest Pliocene) the area of the Montbrook fossil dig site in eastern Levy County, Florida was a freshwater ecosystem teeming with fish, amphibians, snakes, turtles, alligators, and water birds. The majority of the fossils found at the site are from freshwater animals, with some shark and ray teeth leading us to believe that this site is an ancient river system relatively close to a coast.

Montbrook is producing more complete specimens and contains the first significant land-dwelling fauna of this age from Florida. The Palmetto Fauna is rich in marine species. So, Montbrook is providing the first direct evidence of its age about animal life in a coastal river and adjacent habitats in the Southeastern United States.

Volunteers' names and the fossils they found are permanently logged into the records of the Museum.

- **Volunteers must be at least 15 years old.** Volunteers age 15 to 17 will be accepted but must be accompanied by an adult sibling (18+ years old), or a parent or guardian.
 - Volunteers must be **physically fit** enough to work outdoors for several hours and be able to walk up and down irregular slopes. Be aware that the site is in direct sunlight and sandy. We will have a porta-potty at the site.
- Volunteers can work just a single day, a few days, or a regular schedule one or more times per week. There is no limit to the number of times a volunteer can work at the site.
- <https://www.floridamuseum.ufl.edu/montbrook/dig-schedule/>

Check out their Facebook page for pics of the latest finds.

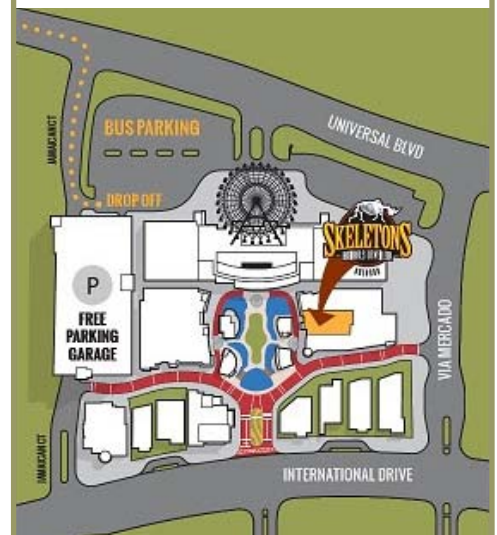
Skeletons Animals Unveiled

Skeletons Museum near the Orlando Eye, has asked Florida Fossil Hunters to install a display for several months showing the fossils from Florida. I'm working on it and need to have it done by summer.

In May, in addition to our regular meeting, I would like to plan a cub visit. This is one of only two Skeleton Museums in the USA.

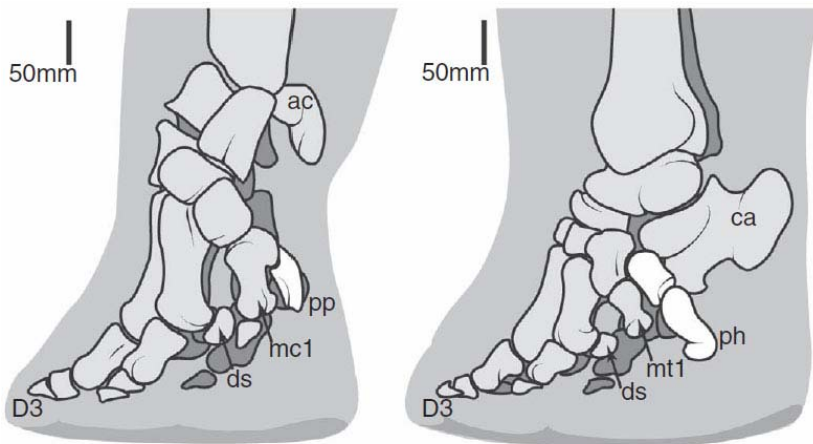
Please let us know if you would be interested in participating and what dates are good for you.

Email: bonnierussell62@gmail.com
or phone [352-429-1058](tel:352-429-1058).
Are last visit was 2 years ago.



Elephant Foot Bones

Curious about how those bones make the foot?



Florida Fossil Hunters News

Florida Museum of Natural History's first exhibit of 2018 is all about poop!

Yes, we mean it.

There's so much to learn about animals and our environment when you get right down to it!

Jan. 27-May 6, 2018

Poop is a scientific puzzle that provides important biological evidence about animals and how they live. Animals use poop to build homes, hide from enemies, attract mates, send messages and cool off – some even eat it. Discover the science behind scat by examining fecal samples to reveal clues about wildlife. Visitors can listen to an animal's digestive system, view 3-D models, touch a termite mound replica and compete in dung beetle races in this informational and interactive exhibit. Find out how scientists, farmers and power companies utilize pounds of droppings for investigative research.

The Scoop on Poop was created by Peeling Productions at Clyde Peeling's Reptiland.

Venue

Florida Museum of Natural History
3215 Hull Road, Gainesville, FL 32611

Phone: 352-846-2000

Website: www.floridamuseum.ufl.edu/visit/

Citizen Science at OSC

The Orlando Science Center will be hosting an event celebrating Citizen Science programs that will highlight how regular people can get involved in scientific research and data collection. The event will take place on Saturday, April 21st and will feature hands-on activities and programs that will highlight specific Citizen Science projects. They would love to feature our organization as one of the great ways their guests can get involved in science in the community. They are asking each organization to bring any promotional materials or giveaways and if possible, some sort of activity.

So..... from 10 am to 3 pm, we will be setting up a display about the Museum's Montbrook Dig and how volunteers can contribute. We'll also have buckets of matrix from different places in Florida for the guests to go through and sort the fossils.

At 3 pm we will pack up and then hold our regular meeting.

We need:

- Volunteers
- matrix (we have some from Peace River) If you have some, we could really use it.

Shark's Tooth Festival 2018

26th Annual Venice
Shark's Tooth Festival

Dates and Times:

Friday, April 13, 2018

- 4pm - 9pm

Saturday, April 14, 2018

- 10am - 9pm

Sunday, April 15, 2018

- 10am - 5pm

Sorry No Pets!

For more info, go to
www.sharkstoothfest.com

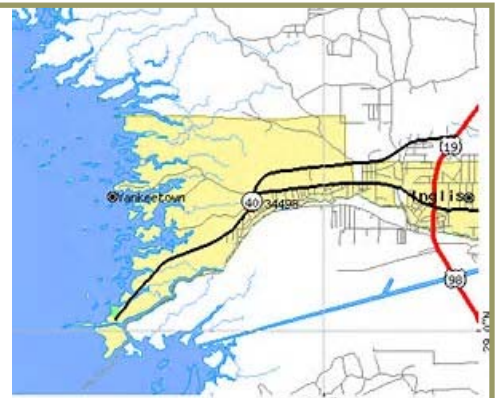
Yankeetown Trip

We have scheduled the fossil hunt at Yankeetown Spoil Islands for Saturday, **May 12th**. Meet us at the boat ramp between 9 and 9:30 am.

You will need a canoe, kayak, or boat to access the islands... the channel is too deep to walk over and the current is too strong to swim. Besides you'll be weighed down with fossils. It's a very relaxing place to spend a few hours hunting for echinoids, sand dollars, etc. We often see dolphins and manatees swimming around. Bring your fishing gear if you are so inclined.

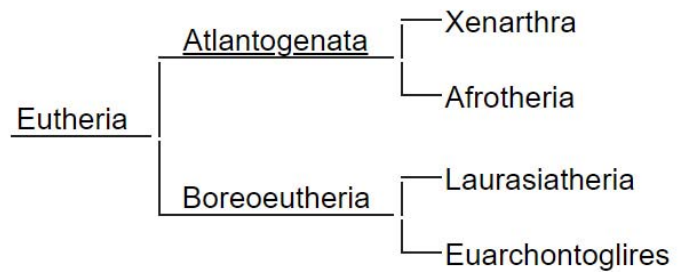
Also bring drinks, food, bug spray (unless you don't mind the biting insects), hat, etc. Wear gym shoes or dive boots - the corals around the island will cut your feet if they aren't protected.

Call or email us to let us know if you are joining us or if you have questions.
bonnierussell62@gmail.com or 352-429-1058.



Florida Fossil Hunters News

Rooting the Family Tree of Placental Mammals



Placental mammals consist of three main groups that diverged rapidly, evolving in wildly different directions: Afrotheria (for example, elephants, manatees, hyrax, aardvark and tenrecs), Xenarthra (The superorder **Xenarthra** is a group of placental mammals, extant today only in the Americas and represented by anteaters, tree sloths, and armadillos. The origins of the order can be traced as far back as the Paleocene, as early as 59 million years ago in South America. Xenarthrans developed and diversified extensively in South America during its long period of isolation in the early to mid Cenozoic Era. They had invaded the Antilles by the early Miocene and, starting about 9 Mya, spread to Central and North America as part of the Great American Interchange. Nearly all of the formerly abundant megafaunal xenarthrans, such as ground sloths, glyptodonts, and pampatheres, became extinct at the end of the Pleistocene.

Xenarthrans share several characteristics not present in other placental mammals. The name Xenarthra, which means "strange joints", was chosen because their vertebral joints have extra articulations unlike other mammals. This trait is referred to as "xenarthry". Also, unlike other mammals, the ischium and sacrum are fused. The males have internal testicles, which are located between the bladder and the rectum. Furthermore, xenarthrans have the lowest metabolic rates among the therians.

The common ancestor of Boreoeutheria lived between 100 and 80 million years ago. The boreoeutherian ancestor gave rise to species as diverse as giraffes, dogs, mice, bats, whales, and humans.)

The relationships between them have been a subject of fierce controversy with multiple studies coming to incompatible conclusions over the last decade leading some researchers to suggest that these relationships might be impossible to resolve.

There are thus many outstanding questions such as which is the oldest sibling of the three? Did the mammals go their separate ways due to South America and Africa breaking apart? And if not, when did placentals split up?

The researchers assembled the largest mammalian phylogenomic dataset ever collected before testing it with a variety of models of molecular evolution, choosing the most robust model and then analyzing the data using several supercomputer clusters at the University of Bristol and the University of Texas Advanced Computing Centre. "We tested it to destruction," said Dr Tarver. "We threw the kitchen sink at it."

To address the complexities of analyzing large numbers of genes shared among many species, the researchers paired two fundamentally different approaches -- concatenated and coalescent-based analyses -- to confirm the findings. When the dust settled, the team had a specific family tree showing that Atlantogenata (containing the sibling groups of African Afrotheria and the South American Xenarthra) is the sister group to all other placentals.

Because many conflicting family trees have already been published, the team then gathered three of the most influential rivals and tested them against each other with the same model. All of the previous studies suddenly fell into line, their data agreeing with Tarver and colleagues.

With the origins of the family tree resolved, what does this mean for placental mammals? The researchers folded in another layer -- a molecular clock analysis. "The molecular clock analysis uses a combination of fossils and genomic data to estimate when these lineages diverged from each other," said author Dr Mario Dos-Reis of Queen Mary London, UK. "The results show that the afrotherians and xenarthrans diverged from one another around 90 million years ago."

Previously, scientists thought that when Africa and South America separated from each other over 100 million years ago, they broke up the family of placental mammals, who went their separate evolutionary ways divided by geography. But the researchers found that placental mammals didn't split up until after Africa and South America had already separated.

"We propose that South America's living endemic Xenarthra (for example, sloths, anteaters, and armadillos) colonized the island-continent via overwater dispersal," said study author Dr Rob Asher of the University of Cambridge, UK.

Dr Asher suggests that this isn't as difficult as you might think. Mammals are among the great adventurers of the animal kingdom, and at the time the proto-Atlantic was only a few hundred miles wide. We already know that New World monkeys crossed the Atlantic later, when it was much bigger, probably on rafts formed from storm debris. And, of course, mammals repeatedly colonized remote islands like Madagascar.

Date: February 15, 2016

Source: University of Bristol

For more info, check out ScienceDaily.com and Wikipedia.

Florida Fossil Hunters News

VULCAN MINE Field Trip

Vulcan Mine near Brooksville

FIELD TRIP LEADERS

Saturday, April 14th

If you did not sign up at the meeting, please call or email:

Trip Leader: Peter Dionne

You can sign up by emailing peter.a.dionne@gmail.com
or calling her cell phone: 305-951-3906

May 12th Trip Leader: Stephen Chambers
email: stchamb1@outlook.com Cell ph: 321-806-0763

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.

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

MUST BE ESCORTED INTO AND OUT OF THE MINE. NO EXCEPTIONS. IF YOU ARE LATE, YOU DO NOT GET IN.

THERE ARE NO RESTROOM FACILITIES AT VULCAN MINE, other than the boulders and the hills.

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.

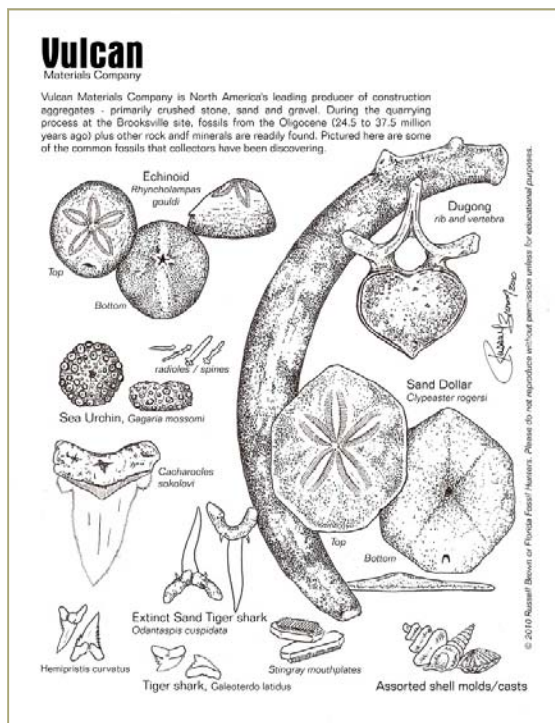
From Orlando take Hwy. 50 west (or the 408 west to the FL Turnpike, take exit 272 and then continue west on Hwy. 50) to Brooksville. Follow 50A/98 North through Brooksville and turn right on Ponce De Leon Blvd. (Hwy 98 North). Go approximately 10 miles. Vulcan/Cemex will be on your left. The address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



**TRIPS APR
14 & MAY 12**

*ID Sheet above is available on
the field trip and website.
floridafossilhunters.com/Field_Trips.htm*

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

**MUST have paid your 2018 dues
(you can bring a \$17 check with you)**

Florida Fossil Hunters News

Florida Fossil Hunters

Membership Application

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	Steve Sharpe	(352) 552-2296
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
Membership	Bonnie Cronin	(352) 429-1058
Newsletter	Bonnie Cronin	(352) 429-1058
	Elise Cronin-Hurley	(407) 929-6297
Photography	John Heinsen	(407) 291-7672
Facebook	Paul Hardin	
Webmaster	Elise Cronin-Hurley	(407) 929-6297
	elise@liseydreams.com	

Board of Directors:

Ed Metrin	(407) 321-7462
Dave Cass	(407) 409-9095
Marge Fantozi	
Marcia Wright	
Cindy Lockner	
Dave Dunaway	
Salvatore Sansone	

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,

Newsletter Policy

included at no extra charge, 2 adult votes per household.

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 Fossil Hunters News

Florida Fossil Hunters Mark Your Calendar

See inside for more information on events.

Saturday, April 14th
Vulcan Mine Field Trip
Peter Dionne - Leader

April 13 - 15th
Venice Shark's Tooth Festival

Saturday, April 21st
OSC Citizen Science
11:30 AM - 2:30 pm

Saturday, April 21st
FFH Meeting 3pm

Sunday, April 22nd
Earth Day at Lake Lotus Park
Altamonte Springs
10 am - 2 pm
Need volunteers

2018 FFH
FOSSIL FAIR
October
20 & 21

Saturday, May 5th, 10 am
Skeletons: Museum of Osteology

Until May 6th
FLMNH - Scoop on Poop exhibit

Saturday, May 12th
Vulcan Mine Field Trip
Stephen Chambers - Leader

Saturday, May 19th
FFH Meeting 3pm

Saturday, June 2nd
8 to 11:30 pm
OSC Science Night Live

Saturday, June 23rd
OSC Prehistoric Party

Join Our Facebook group, Search:
[Florida Fossil Hunters](#)

facebook

Be Green

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



Visit us online at www.floridafossilhunters.com

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

Florida Fossil Hunters

Post Office Box 540404
Orlando, Florida 32854-0404



Florida Fossil Hunters News



Looking for an unforgettable, one-of-a-kind experience? Then **SKELETONS** is the place for you!



OPEN DAILY! 10am-10pm

This unique 90-minute attraction delivers an entertaining and educational experience that is fun for the entire family! Located inside Orlando's I-Drive 360 Complex, this modern museum exhibits 500 REAL skeletons from animals that live all around the world. Examine extreme natural deformities like two-headed calves. Get up close with actual human skeletons! Let your imagination run wild at the cryptozoology exhibit. From tiny mice to giant whales, marvel at the intricate internal structure that is shared by all vertebrate life. You will leave this self-paced, interactive attraction with a new fascination and respect for the diversity and complexity of life.

Location: 8441 International Drive, Suite 250, Orlando, FL 32819
Contact: 407-203-6999 –or– info@skeletonmuseum.com
Admission Prices*: Adults \$19.99 + tax; Children (3-11) \$12.99 + tax
Group Rates: Special pricing for groups of 10 or more
Operating Hours*: 10am-10pm, 365 days a year
Parking: FREE PARKING in adjacent 1,600-space garage
Shopping: VISIT OUR AMAZING GIFT STORE to find fun, science-related gifts for the whole family!

To schedule your group or for more information:

CALL (407) 203-6999

*Pricing and times subject to change

