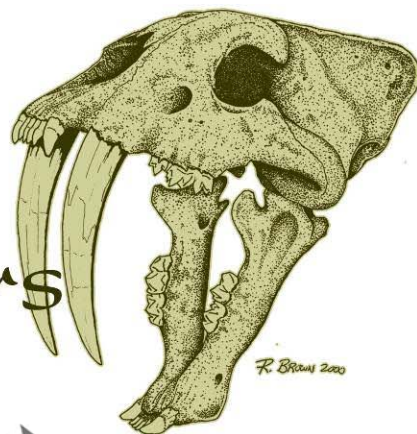


# NEWS

## Florida Fossil Hunters

Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters  
Volume 25, Number 11

December 2015



### From the President.....

Hope everybody got to visit with family and friends during the Thanksgiving holiday. Plenty of food and we all have lots to be thankful for. Now the Christmas season is in the air with cooler weather and another year coming around the corner.

One of the things I am thankful for is all the great people in the club. Thanks to all of you who made it to our yearly Fossil Fair from far away and the ones who always pitch in during our club activities. This year's Fair was probably one of our best ever. **Valerie First** has been the club's Fossil Fair chairperson for over 10 years and each year she out-does herself. Thank you, Valerie, for all you do for the club and for science education. I could write a whole newsletter thanking each of you for your help, but I'll say "Thank you" all for supporting our club. As the President, it makes me proud. But I will give one more shout-out to **Jim Tatum of Paleo Enterprises** for donating a ton (figuratively) of scrap fossil material for our Kids' Pit.

The weekend of our Fossil Fair was also time for the Orlando Science Center's 9th Annual **Neanderthal Ball**. Bonnie, her daughter and webmaster Elise, and myself represented the club Saturday evening. Our club raised \$850 with its donations for OSC. It was shy of my goal of \$1,000 but there is always next year.

Last year our club participated in outreach: School talks, Science Night Live at OSC, National Fossil Day at the South Florida Museum, opening events at FLMNH, Neanderthal Ball, Natural History Day at MOAS in Daytona Beach, and our 2nd annual Women in Paleontology. Such events are **volunteer opportunities** for our members and great ways to inform the public about the past. We went on digs: Vulcan Mine, Peace River, Mosaic Mine.... all of which we'd like to do more of. I would like to make more trips to the Peace River when the water level allows, of course there is Vulcan Mine each 2nd Saturday, and in 2016 our club is scheduled for a shell pit collection trip. I'm planning on a day trip to Yankeetown as well. All these depend on volunteers. If you would like to help out on any of these field trips, please contact me.

This month is our meeting & Fossil Bucks Auction on **December 19th**. Bring some treats to share with the club, the club will provide plates and water. We've got some really cool stuff for this auction. Everyone is guaranteed to go home with something, plus a "give-away" after the auction. Grab your fossil bucks and lets have a good time!

I close this article with a reminder to all members to make sure to fill out their fossil permit reports. If we don't see you before, Bonnie & I would like to wish all of you a Merry Christmas and New Year.

Russell Brown  
President

Join Our Facebook group, Search:  
**Florida Fossil Hunters**



### Coming Events

#### UPCOMING MEETINGS at the Orlando Science Center

**Saturday, Dec. 19th**  
3 pm Meeting and Auction

**January**  
No Meeting

**February 20th**  
2 pm Kids Fossil Blast  
3 pm Meeting

*More events listed on back page*

*For more info...*  
[www.floridafossilhunters.com](http://www.floridafossilhunters.com)

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# Florida Fossil Hunters News

# Fragments

## Gem, Mineral, Fossil, and Jewelry Show

December 4<sup>th</sup> – 7<sup>th</sup>

The Annual Gem Show of the Withlacoochee Rock Hounds will be held at the **Veterans Memorial Park, 14333 Hicks Rd., Hudson, Florida, 34669** on December 4<sup>th</sup> – 7<sup>th</sup>, from 9:00 AM until 5:00 PM.

It is a beautiful venue with a large indoor facility and loads of parking. The building houses a gymnasium with double basketball courts and several adjacent rooms, including a full kitchen. The inside vendors will be set up in the gym and any vendors who wish to be outdoors will have lots of lawn space with large shade trees to choose from.

Minerals

Fossils

Demonstrations

Handcrafted Jewelry

Lapidary Equipment

Gem and Mineral Auction

Replica of AARON'S Breastplate

Famous Diamonds of the world

### Admission:

\$3.00 Adults

\$1.00 Teens

12 and under FREE

### Directions:

West of Hwy. 50 to US-19 S.

Turn left and go south to Little Rd.

Turn left on Little. Turn left onto New York Ave. which becomes Hicks Ave.

14333 Hicks Rd. will be on your right.

**Show Chair:** Ralph Barber

Please contact Ralph with any questions at [info@withlacoocheerockhounds.com](mailto:info@withlacoocheerockhounds.com).

## Kids' Fossil Blast

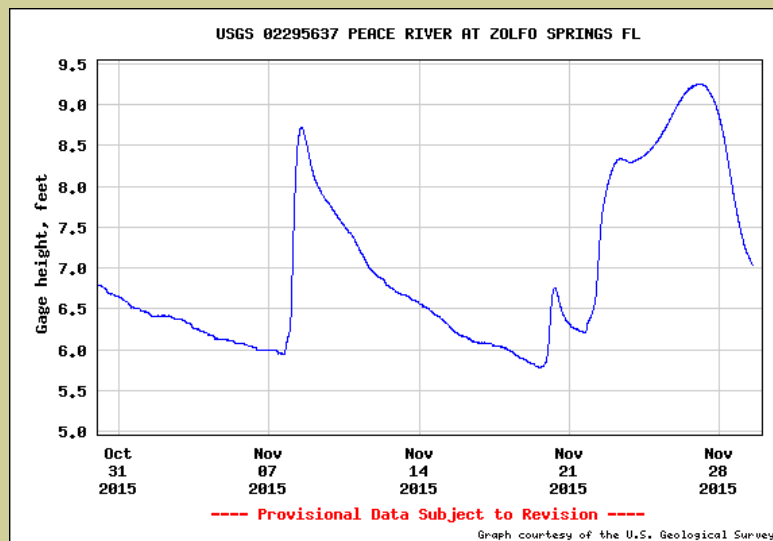
We all learned a lot in November about the elephant family including their distant cousins. The kids all went home with a real fossil, too. Our next Kids' program will be on Saturday, February 20th at 2pm.

Kids' Fossil Blast is an informal, hands-on experience with real fossils, casts, etc. aimed at kids ages 5 to 14.

## Piece on the Peace River

I really thought we'd be standing in the river by Thanksgiving. Unseasonable Fall rains brought the river up though.

With the El Nino being so strong this time, there is a good chance our winter will be colder and wetter. So if the Peace gets low enough, don't hesitate to get your gear and go hunt. The conditions may change very quickly.



## VULCAN MINE

**December 12th & January 9th**

See page 6 for more details.

# Florida Fossil Hunters News

## The Most Common Fossil

Teeth are the fossils we find most often. It is the enamel.... the hardest substance in the body, that makes them last the longest.

When did the enamel that covers our teeth evolve? And where in the body did this tissue first appear? The answer to that question is provided by two fossil fishes, *Psarolepis* from China and *Andreolepis* from Sweden, which are both more than 400 million years old and which have been studied by Qingming Qu and Per Ahlberg of Uppsala University in collaboration with Min Zhu from IVPP in Beijing. In *Psarolepis* the scales and the denticles of the face are covered with enamel, but there is no enamel on the teeth; in *Andreolepis* only the scales carry enamel.

"*Psarolepis* and *Andreolepis* are among the earliest bony fishes, so we believe that their lack of tooth enamel is primitive and not a specialization. It seems that enamel originated in the skin, where we call it ganoine, and only colonized the teeth at a later point," explains Per Ahlberg, Professor of Evolutionary Organismal Biology at Uppsala University.

For the entire article, go to [www.sciencedaily.com/releases/2015/09/150923133459.htm](http://www.sciencedaily.com/releases/2015/09/150923133459.htm)

## Skeletons: Animals Unveiled

This museum isn't like anything you've seen in a traditional museum before. The skeletons in the exhibits are 100% real, (except for the extinct ones) and there's over 400 of them. The museum is aimed at not grossing out guests, but more about learning through experiencing. The museum features over 450 species of animals from all over the world. In fact, education is the main goal of Skeletons.

And since most fossils are parts of skeletons, this is our kind of place. So, instead of a meeting at the Science Center in January, the Florida Fossil Hunters is arranging a group trip there on Saturday, Jan. 16th, 2016. We will meet in front of Skeletons at 10:00 am and go in as a group. Adults will pay \$10 each and kids will get in free. **You must be a current member and paid your 2016 dues by Jan. 5th to participate and get the discount.**

Skeletons is located at 8441 International Dr, Orlando, near the Orlando Eye ferris wheel. Parking is free. For more info, go to [www.skeletonmuseum.com](http://www.skeletonmuseum.com).

## Fossil Bucks

# Auction List

December 19, 2015 Fossil Bucks Auction

**Limit: 2 successful bids per membership**  
(not in order)

### Fossil cases:

manatee  
alligator  
giant armadillo  
camel  
dolphin  
deer  
horse

### Other items:

meteorites  
ammonites  
trilobites  
stromatolites  
petrified wood  
camel vertebra  
small screen (made by Dave Cass)  
cut & polished dino bone  
giant agate slice  
American Lion lower jaw-cast  
sliced fossil algae  
Dino coprolite  
turquoise pendant  
manatee vertebra  
wooden cases  
Herkimer diamond  
sharks' teeth  
minerals  
plus more...

# Florida Fossil Hunters News



# Fabricated Fossils

By: Jason Spalding

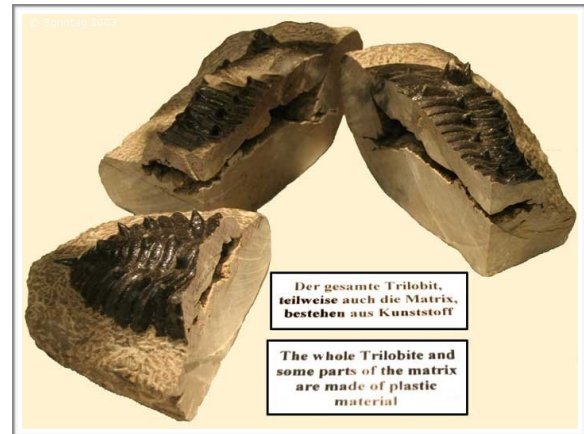
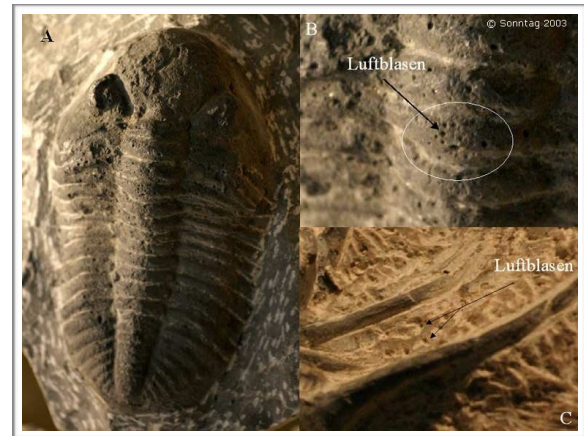
*A brief look into the various levels of fabricated, fake, forged, and repaired fossils. We have a passion for fossils, but how can we spot the various techniques used to fabricate fossils?*



Let me begin by saying, that there is nothing wrong with purchasing and owning replicated or fabricated fossils. I personally own several. When there is an elusive fossil that you just can't find or afford, owning a replica is the next best step. When we make a purchase of an "authentic specimen", only to be unknowingly sold a non-authentic specimen, then there becomes a problem. With the ever growing ability to purchase items online, it makes it difficult to tell the difference between authentic and fabricated specimens. Purchasing in person, we can hold, touch, and ask questions about the specimen. Whether you are a fossil novice or a seasoned fossil veteran, education is key to differentiating between real and fake. The information continues to grow, but there is still very detailed specifics that can be researched. I would highly encourage further investigation on your part after the basics that I will cover in the following article. Also, if you know something that is not mentioned, tell a fellow fossil hunter, as word of mouth is also a great means of communication.

## Common Problems

It is not as simple as real or fake. Some types of fossils are often more fooled around with than others. It is even possible to have real fossils within a fake matrix substance, which is common with mosasaur teeth, which I will talk more about later. Often times fossils are repaired with a synthetic substance in order to make a complete fossil. This is often for museums where pristine full specimens are preferred. Looking at the graph (pg.2), we can see the various categories of fossil condition. This makes it clear to see the "grey" areas. Ideally, the dealer should mention the true condition during a purchase. Let's be honest though, we only wish everyone could be fully educated with their merchandise. This is why educating yourself can help you avoid something you would rather not place in your collection. I know your thinking by now whether any of this is relevant because, "I find all my



own fossils". You are correct. There is nothing more fun than going fossil hunting. It provides an authentic time and natural fossils. Not all people are lucky to live in a fossil rich area. Some rely on purchasing only from dealers online or in person.

continued on page 2

## Which Fossils are Frequently Replicated?

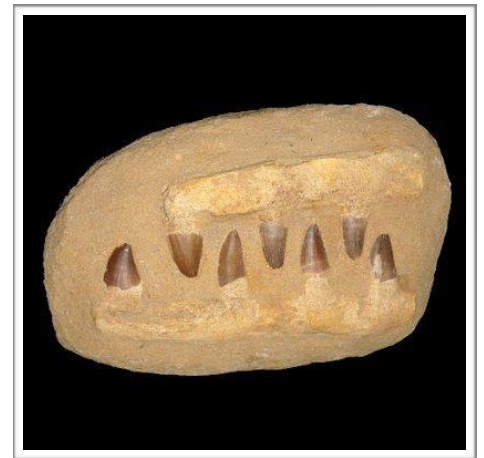
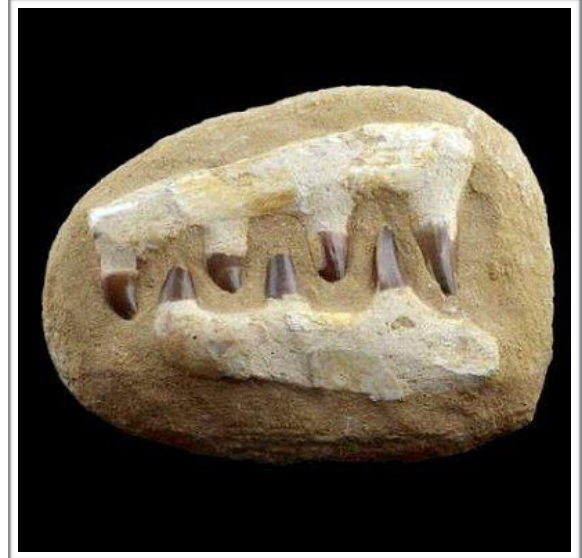
Some good news in this debacle is that not all fossils species are targeted. When investigating a fossil, two major things to consider are species and locale. Some more targeted items are fossils from China. Exporting fossils from China is illegal, therefore most are replicas. Also included are Moroccan trilobites, amber with vertebrate inclusions, dyed mammal bones, ammonites that are carved out of lime stone, Mosasaur teeth with roots, and Mosasaur jaws. When we consider pieces such as sharks teeth, it is easy to distinguish a replica from a natural tooth. Color, weight, and other details give the truth away quite fast. With a little bit more knowledge on Mosasaur teeth we can identify falseness. Some trilobites are a bit more difficult. There are some minor signs of impurity, but some are so well done that they have to be cut in half to tell. In the photos provided, we can see the resins and matrixes of the piece.

Condition	Explanation
Natural	Completely natural, except for measures to preserve (e.g. strengthening fragile matrix) the integrity of the piece.
Improved	Subject only to a treatment of the surface, such as slightly recoloring or treatment with a contrast-enhancing layer. Also very light polishing of the surface to give shine.
Restored	Restauration on a limited scale, such as filling in missing small chips, cracks or parts of shells.
Composed	The correct reassembling of disarticulated parts of the same individual, with documentation of the original condition of the find.
Reconstructed	Adding missing parts that have not been preserved.
Manipulated	Covering the fossil with a colored layer or plaster, often to hide preparation damage or missing parts. Highly polished fossils can also be regarded as 'manipulated'.
Assembled	Merging fossils or parts of fossils that are not originally found together, often in an artificial matrix.
Replica	Often a cast of an existing original fossil. Replicas are perfectly legitimate if they are marketed as such. It is deception when the replica is presented as real.
Art	Fully artificial totally fake, not based on an existing fossil.

Pristine trilobites are molded with plastics and then placed into a matrix consisting of sand, rock, glues, etc. Add color as needed. The end result is a sellable high dollar piece. If you are in the market for a natural trilobite fossil look for a few signs. Some pieces have pores where air bubbles were created during molding. This of which can be seen in the first photo. Colors in the matrix will vary as well. Color in the trilobite itself can also vary. Shininess is not always a giveaway of plastics. This can sometimes happen from abrasives to clean it. One other way to tell the difference is a slight nibble or bite on the trilobite. Don't eat it now, but your tooth will leave an indent if molded. Many of us have a few or a lot of trilobites in our collection. Many US trilobites are generally safe. These fabricated trilobites are generated in other countries, more so in Morocco.

Our next example is that of an assembled fossil. If one didn't know this however, it could be quite a let down after purchasing. Areas of Morocco are littered with Mosasaur teeth. Most often found though are teeth alone. They are found with no roots and even more rarely found as a whole jaw. Some fossil dealers in Morocco take other mammal bone fragments, often those of goats, and use them to create roots and assembled jaws. Looking at the photos, we can see real teeth placed in two different matrix substances to create the jaw. Depending on your perspective, it is either a waste of money or a cool conversation piece.

Other than spending time with my son, the thing I love most about fossils and fossil hunting is the constant learning. It never fails to provide something new and exciting.



As mentioned before, I encouraged you investigate it further. Whether you hunt, trade, or buy, it is important to know exactly what we have, purchase or sell.



# VULCAN MINE Field Trip

## **Vulcan Mine Field Trip near Brooksville**

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

**Saturday, December 12th**

Trip Leader: Russell Brown

email: [bonnierussell62@gmail.com](mailto:bonnierussell62@gmail.com) | ph: 352-429-1058

Cell phone for the day of the trip ONLY. 321-279-2592

*(do not leave a message)*

**Saturday, January 9th**

Trip Leader: Stephen Chambers

[stchamb1@outlook.com](mailto:stchamb1@outlook.com) | cell ph: [321-806-0763](tel: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**

be escorted

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

**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.

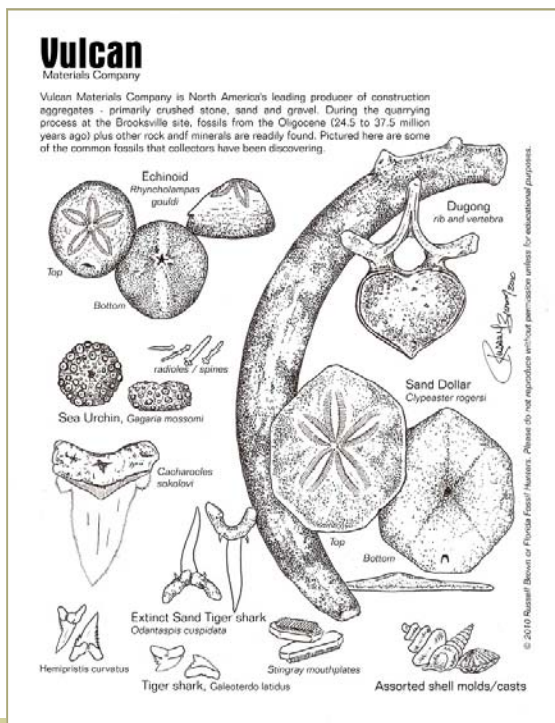
From Orlando take Hwy. 50 west (or the 408 west to the FL Turnpike, take exit 272 and then continue west on Hwy. 50) to Brooksville. Follow 50A/98 North through Brooksville and turn right on Ponce De Leon Blvd. (Hwy 98 North). Go approximately 10 miles. Vulcan/Cemex will be on your left. The address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



**JOIN US  
DEC 12th  
& JAN 9th**

*ID Sheet above is available on  
the field trip and website.  
[floridafossilhunters.com/Field\\_Trips.htm](http://floridafossilhunters.com/Field_Trips.htm)*

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

## 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	<b>OPEN</b>	
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.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	
Cindy Lockner	

# 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

See inside for more information on events.

**December 4th, 5th, & 6th**  
Withlacoochee Rock Hounds Show

**Saturday, December 12th**  
Vulcan Mine Trip

**Saturday, December 19th**  
3 pm Meeting and Auction

**January 9th**  
Vulcan Mine Trip

**January 16th**  
Skeletons Field Trip

**January**  
No Meeting

**February 20th**  
2 pm Kids Fossil Blast  
3 pm Meeting

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

facebook

## Be Green

Email Bonnie at [bonnierussell62@gmail.com](mailto:bonnierussell62@gmail.com)  
to receive the newsletter via email.



Visit us online at [www.floridafossilhunters.com](http://www.floridafossilhunters.com)

Articles and comments should be sent to: [bonnierussell62@gmail.com](mailto:bonnierussell62@gmail.com)

## Florida Fossil Hunters

Post Office Box 540404

Orlando, Florida 32854-0404



## Florida Fossil Hunters News