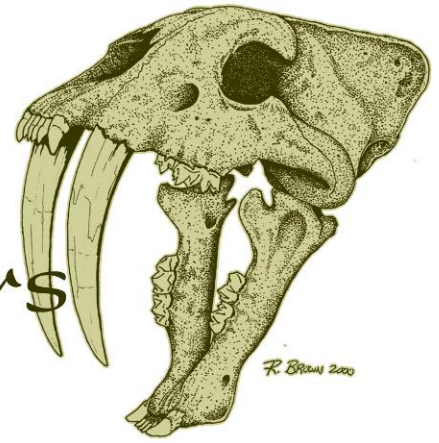


NEWS

Florida Fossil Hunters



Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters
Volume 20, Number 11

December 2010

December Holiday Party/Fossil Bucks Auction

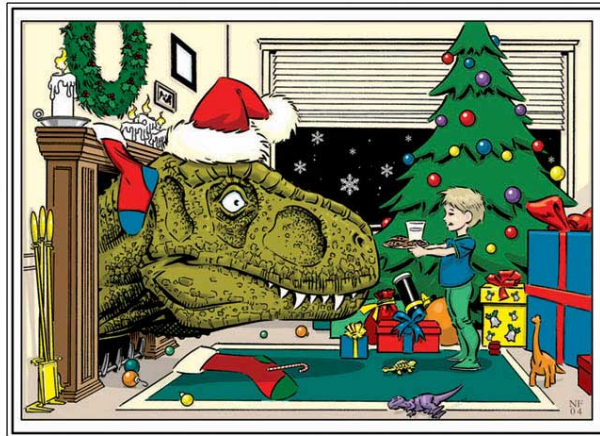
We're doing something new and different this year! Our December Holiday get together will be held at 6 pm on Thursday, December 9th, at the Golden Corral, 897 W. Town Pkwy., Altamonte Springs. Cost for adults is \$15 and \$7 for children ages 12 and under. We'll have a private room and you can eat as much as you want from their buffets. Everyone attending must pay for a meal to get into the room.

The auction will begin at 7 pm... we have a great selection of items up for bid. There will also be free prizes for all who attend. So join us for a fun-filled night of good food, fossil treasures, and great company!

Directions: Golden Corral, 897 W. Town Parkway, Altamonte Springs. From the intersection of 434 and 436, go south on 434 and turn left onto West Town Pkwy. The Golden Corral is on the northeast corner of 434 and West Town Pkwy.

Please RSVP

For more info email Sara at saraariley@yahoo.com or call her at 407-834-8675



Looking forward to 2011

January Mtg

January 15, 2011
Meeting at
Florida Museum
of Natural History

February Mtg

February 19, 2011
2:00pm Kid's Fossil
Blast
3:00pm Club Mtg

March Mtg

March 19, 2011
Orlando Science
Center
Fossil Fest

Coming Events

MEETINGS SATURDAY

at the Orlando Science Center

December 9th, 2010

6:00pm FFH Holiday Party
& Auction, 6 pm at Golden Corral

January 15, 2011

Field trip to
Florida Museum of Natural History

February 19, 2011

Kids Fossil Blast 2 pm
Club Meeting 3 pm

March 19, 2011

Orlando Science Center
Fossil Fest

For more info...

www.floridafossilhunter.com

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Fragments

Tour of Florida Museum of Natural History January 15th, 2011

Instead of a meeting in January, our club gets to visit Dickinson Hall which is the place where the real Paleontology is done for the Florida Museum of Natural History, which is renowned for having one of the best fossil collections in the world. This "behind the scenes" tour will start at 10 am on Saturday, January 15th, 2011. We will get to see some of the ongoing research in the areas of Invertebrate Paleontology, Vertebrate Paleontology, and Paleobotany.

Don't miss this opportunity to experience for yourself just how the professionals tease the information from ancient rocks.

According to mapquest, the trip from the Orlando Science Center to the University takes about 2 hours. You'll have to adjust that depending on where you live. From I-75 take exit 384 at SR 24. Take SR 24/Archer Rd. east. Turn left onto Gale Lerner and Dr. (just past Shealy Dr). Turn right on the 2nd road which is Museum Road. Dickinson Hall will be on the left after the greenhouses.

Please arrive early (in the lobby of Dickinson at 9:45 am) and give yourself some extra time to find a parking space and to walk to Dickinson Hall. Since we'll be visiting on a Saturday, we won't need decals to park but that doesn't mean that the parking spaces will all be empty. There is a parking garage across the street from Dickinson and several lots along Museum Road.

If you have any questions, email Bonnie at bjrb48@netzero.com or call 352-429-1058.



Kids' Fossil Blast

Fun was had by all at the last installment of the Fossil Blast as each kid got to take home a real fossil herbivore tooth.

There's been a change in the schedule...our next Kids' Fossil Blasts will be on February 19th, April 16th, and June 18th... unless the club is digging in the Peace in April.

For more info, email Bonnie Cronin, bjrb48@netzero.com

Renew Your Membership

It's that time of year to renew your club membership... still a bargain at \$17 per household for a full year. Be sure to fill out a renewal application so we can make sure we have your address, email and phone numbers up to date.

PLEASE WRITE YOUR EMAIL ADDRESS CLEARLY. If I misread a letter, I can't send the link for the newsletters to you as well as special notices of coming events. Thanks. Bonnie Cronin

Piece on the Peace

Give your loved ones (and yourself) the real gift of Peace this holiday season... Peace River fossil hunting! The water levels are low and as long as it's not freezing, the digging should be wonderful.

As always be sure to use the link on our website to check the water levels before you make the trip. A reading of 6 ft. or less at Zolfo means you can find places to dig. Happy Hunting.

Board Members Needed

If you would like to have some input in the club's planning, goals, etc. and can volunteer a few evenings throughout the year, please join the Florida Fossil Hunters' Board of Directors. No experience is necessary... just enthusiasm and your time.

If you're interested or would like some more information, contact Sara Morey or Bonnie Cronin.

Orlando Science Center's Fossil Fest 2011

The Science Center's blast from the very distant past will be held on Saturday, **March 19th**. As part of our partnership with them in educating the public about fossils and Florida's past, we will be setting up displays and explaining the wonders of fossils to visitors. This event will be **INSTEAD** of a regular meeting for March.

Please mark your calendars and volunteer some time that day... and you'll have fun while earning Fossil Bucks!

Thank you, Chris

The presentation that Chris Delorey gave to us at the November meeting was filled with the latest discoveries and insights into dinosaur evolution. Thank you, Chris, for such an interesting and entertaining talk.

Be sure to visit the Brevard Zoo, where Chris is the Director of Education. Your family can start a new and unique holiday tradition of feeding giraffs or kayaking through their Africa exhibition. As Chris said, "Where else can you pet a rhino?" You can get info on the hours, directions, etc. at www.brevardzoo.org

Record Breaking Field Trip

63 people participated in the November trip to Vulcan Mine. We've never had that many come before. All had a delightful time and the weather was perfect. Thanks, Dave Dunaway, for being such a conscientious and patient trip leader!

Vulcan Mine Field Trip

There will be a field trip to Vulcan Mine near Brooksville on Saturday, December 11th. Bonnie Cronin will be the Trip Leader. 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 8:30am 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 2pm.

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

Directions: From Orlando take Hwy. 50 west to Brooksville. Follow Hwy. 50 through town. **DO NOT** take the bypass 50/truckers route. Turn right onto US 98 north and go approximately 9 to 10 miles. Vulcan will be on your left (There is a Cemex sign at the driveway). The address is 16313 Ponce De Leon Blvd., Brooksville, for those of you that want to download a map.

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.

*There will be a sign-up sheet at the Fossil Fair, or you can email or call Bonnie Cronin bjrb48@netzero.com, phone 352-429-1058. Cell phone for the day of the trip **ONLY** 321-279-2592. **Do not** leave a message on the cell phone... I don't check them.*

Orange City's Blue Spring Manatee Festival

The Central Florida Zoo is partnering this year in this event which will be held on January 22nd & 23rd (Sat. & Sun.) from 10 am to 5 pm at Valentine Park, 1575 W. French Ave., Orange City, FL 32763. Admission is \$8 for adults and \$2 for kids ages 4 to 10.

There will be crafts, animal displays, food, live entertainment, etc. Shuttles will take visitors to the Blue Springs to view the manatees.

Valerie First, who volunteers almost every weekend at the Zoo with her fossils, will be setting up a display booth at the event. If you'd like to volunteer to help get the word out about fossils and our club, email her at VJFirst@aol.com or call her at 407-699-9274.

Central Florida Mineral & Gem Society

The Central Florida Mineral & Gem Society will have their Holiday show at the Central Florida Fairgrounds December 10th through the 12th. Hours are - Friday: 1 pm to 6 pm; Saturday: 10 am to 6 pm; Sunday: 10 am to 5 pm. This year's show also includes the Florida Jewelry Artists' Festival. There are a range of minerals and gems and usually some fossils. Cost is \$5 for adults and \$2 for students. For a \$1 off coupon visit their website: www.cfmgs.org

Florida Museum of Natural History

A new exhibition opens on Nov. 13th, titled "Dugout Canoes: Paddling through the Americas". It features dugouts over time and includes the discovery of the 101 canoes at Newnans Lake near Gainesville. The exhibit "Cruisin' the Fossil Freeway" with Artist Ray Troll and Paleontologist Kirk Johnson will run from Feb 4th to Sept. 3, 2011. This exhibit combines some of the Florida Museum's paleontology specimens and the fossil-inspired artwork of celebrated artist Ray Troll to explore questions about evolution, extinction and early life on Earth.

You can find out more at www.flmnh.edu/exhibits

Orlando Science Center

A new exhibit titled "Charlie and Kiwi's Evolutionary Adventure" opens October 2nd at the Science Center. It features the story of Charlie, whose curiosity leads to understanding how evolution works. While you're there at the Science Center, check out Valerie First's exhibit of hominid skulls, as well as Russell's whale fossils from Lulu Creek aka/ the Winter Garden Ditch.

Oldest Dinosaur Embryos Give Insights Into Infancy and Growth

ScienceDaily (Nov. 12, 2010) — After sitting in collections for nearly 30 years, some remarkably well-preserved dinosaur eggs and their contents are offering new insights into the infancy and growth of early dinosaurs. They represent the oldest embryos of any land-dwelling vertebrate ever found.

The eggs, found in 1976 in South Africa, date from the early part of the Jurassic Period, 190 million years ago. They belong to *Massospondylus* (mās-ō-spōn-dīl-ūs), a member of a group of dinosaurs known as prosauropods that are the ancestors to the later sauropods -- the large, four-legged dinosaurs with long necks, typified by the popular 'Brontosaurus' and *Diplodocus*.

Dr. Robert Reisz of the University of Toronto and his colleagues worked on these fossils, and it was only through modern preparation techniques that these findings were brought to light. One of Dr. Reisz's co-authors, research assistant Diane Scott, prepared the delicate fossils under high-powered microscopes and compiled the illustrations. "I don't think anybody else could have done this job," says Dr. Reisz.

These eggs contain the oldest known embryos of dinosaurs. In fact, they are the oldest of any land-dwelling backboned animal. The preservation of the embryos is exquisite, permitting a complete reconstruction of the skeleton and detailed interpretations of the anatomy.

The level of ossification -- how much of the skeleton has turned to bone -- reveals that the embryos were close to hatching. The fossils also reveal that the future hatchlings would have been oddly proportioned and would have looked very different from the adults of the species.

The 20 cm (8 in.) embryos were quadrupedal (they walked on all four legs), with relatively long front limbs and disproportionately large heads. In contrast, the 5 m (16.5 ft) long adults had relatively tiny heads and long necks; they mostly likely were bipedal, given that their forelimbs are much shorter than their hind limbs. This implies that as the dinosaurs matured, their necks and hind limbs grew much faster than their forelimbs and head. Later dinosaurs in this group, the sauropods, had body proportions more similar to those of the *Massospondylus* embryos.

In at least one way, *Massospondylus* development resembles that of humans; infancy is awkward, and a more erect stance and evenly proportioned body only come later.

There may be another way that *Massospondylus* infancy was similar to that of humans. The embryos lack teeth and this, combined with the awkward body proportions, suggests that the hatchlings may have required parental care.



Top: Artist's reconstruction of a *Massospondylus* embryo. Bottom: Photograph of skeleton of the first embryo of *Massospondylus*. White materials represent eggshell that remained around the embryonic skeleton after they had been exposed. (Credit: Top, Heidi Richter / Bottom, Diane Scott, University of Toronto at Mississauga)

If true, these fossils also document the oldest record of parental care.

"This project opens an exciting window into the early history and evolution of dinosaurs," says Reisz. "Prosauropods are the first dinosaurs to diversify extensively, and they quickly became the most widely spread group, so their biology is particularly interesting as they represent in many ways the dawn of the age of dinosaurs."

The eggs and embryos are on display at the Royal Ontario Museum in an exhibit entitled, "Dinosaur Eggs and Babies: Remarkable Fossils from South Africa." Dr. David Evans, one of the co-authors of this research, is curator at that museum.

The above story is reprinted (with editorial adaptations by *ScienceDaily* staff) from materials provided by [Society of Vertebrate Paleontology](#), via [Newswise](#).

Rainforest Collapse Drove Reptile Evolution

ScienceDaily (Nov. 29, 2010) — Global warming devastated tropical rainforests 300 million years ago. Now scientists report the unexpected discovery that this event triggered an evolutionary burst among reptiles -- and inadvertently paved the way for the rise of dinosaurs, 100 million years later.

This event happened during the Carboniferous Period. At that time, Europe and North America lay on the equator and were covered by steamy tropical rainforests. But when the Earth's climate became hotter and drier, rainforests collapsed, triggering reptile evolution.

Dr Howard Falcon-Lang of Royal Holloway, University of London, UK explained: "Climate change caused rainforests to fragment into small 'islands' of forest. This isolated populations of reptiles and each community evolved in separate directions, leading to an increase in diversity."

Professor Mike Benton of the University of Bristol, UK added: "This is a classic ecological response to habitat fragmentation. You see the same process happening today whenever a group of animals becomes isolated from its parent population. It's been studied on traffic islands between major road systems or, as Charles Darwin famously observed in the Galapagos, on oceanic islands."

Ms Sarda Sahney, also of the University of Bristol, UK said: "It is fascinating that even in the face of devastating ecosystem-collapse, animals may continue to diversify through the creation of endemic populations." However, she warned that: "Life may not be so lucky again in the future, should the Amazon rainforest collapse."

To reach their conclusions, the scientists studied the fossil record of reptiles before and after rainforest collapse. They showed that reptiles became more diverse and even changed their diet as they struggled to adapt to rapidly changing climate and environment.

December 2010 Fossil Bucks Auction

K- items for kids 14 & under...
other items are open for all to bid on

1. Petrified cycad piece from S.D., cut & polished on one side
2. Giant Tortoise edge of shell piece and 4 toe pads from Peace River
- K 3. Small saber cat skull model
4. 3 blue glass insulators; 2 Whitall & 1 Hemingway
5. Whale ear bone, auditory bulla
- K 6. Megalodon shark tooth necklace
7. Dolphin fossil collection w/case: jaw pieces, 2 teeth, vertebra, 2 ear bones (inner & outer)
8. Fossilized dinosaur bone from Utah
- K 9. Dinosaur hand puppet
10. Ambelodon model (shovel-tusked elephant)
11. Rabbit fossil collection w/case: jaws, teeth, piece of upper skull, leg bones
- K 12. Lego dinosaur model, Mosasaurus
13. Custom display case made by Dave Cass, high quality wood & glass, locking
14. Giant bear-dog lower jaw replica, cast by Jim Tatum, museum quality
- K 15. Complete mammoth skeleton

PREHISTORIC PINE HILLS

Prehistoric Pine Hills, Part IV: Revenge of the Crabs

A new dawn breaks over a slowly drying sea in an area that millions of years later would be called Pine Hills in Central Florida. A Red Drum fish, trapped here by the drop in water level as the ice grows over the polar regions, is weakly paddling its fins and is near death. In a flash it is engulfed by a large Bull Shark which is feeding on the abundant fish trapped like itself in this shrinking environment. On the nearby mudflats scurry thousands of fiddler crabs who are feasting on the victims washed up on the shoreline. Soon they too will suddenly die off....a moment of time is caught in the layers of rock and sediment.

"Hey man, get this blackberry bush off my back."

"Hold on. I'm trying to get these ticks off my legs."

Millions of years have passed and Jeremy and I are again back at Pine Hills. Through the years we became close friends...both knew when to fight or run. Jeremy has no fear of man or beast except for small, harmless spiders. He's the luckiest @*&# I know. He could fall into a septic tank and find a mastodon tooth. Together we've seen black bears, caught venomous snakes, crawled into holes you wouldn't dare stick your arm into, and played with gators and sharks. I was even attacked by a cougar once....but more about Bonnie later. We'd stay out in the deep woods for 16 hours at a time. Both got some kind of blowfly larva in our arms during one trip. Jeremy burned his out with a welding torch. I kept mine, letting it grow, until Bonnie insisted I get it cut out.

Back at Pine Hills we again were surface collecting. Months before, the construction crew had pushed up a two-story high, sloping hill. Rain and erosion made for easy pickings. Walking up and down the hills, we'd easily find a half-gallon of fossil material: shells, shark teeth, whale bones, and fish material, especially swollen fish vertebrae. That's a somewhat common fossil found in Florida, but nowhere else have I found so many. There were also pieces of hermit crab claws along with fish jaws, skull caps, and teeth. We went down to the retainage pond they had dug and along its banks we could see a one foot deep layer of pectins and scallops, one on top of another. Most were paper thin and would break as we tried to lift them. Among the scallops, we found the shells of the predator gastropod *Ecphora*. The beautiful brown color and unique shape make them prized by collectors. Above the scallop layer was a grayish thick layer which baked hard as it was exposed to the sun.

Over time, the collecting started falling off. Then one day,

as Jeremy wandered out among the clay balls, he decided to bust one open. To his surprise, inside was a pressed flat crab. In just seconds the crab dried to dust and blew away. He experimented with different techniques to preserve the crabs. Hairspray worked...sort of. Finally he formulated a mixture of glue and acetone to harden them as soon as we cracked them open. Just about every "clay ball" that we'd break open had a crab, sometimes even several. Some were in good shape, others not. Jeremy even found a small snapper-like fish in one clay ball.

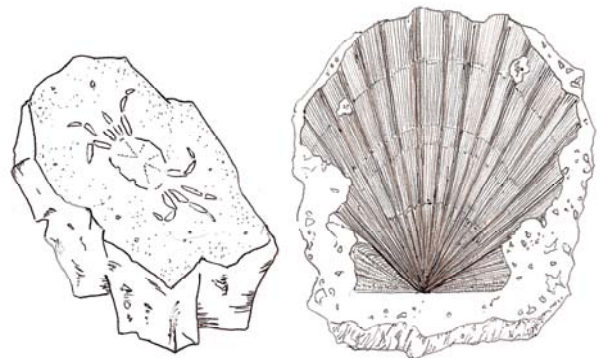
And yet another mystery arose....early mammal teeth. They were rare but we found 3-toed horse, camel, peccary, mastodon, tapir, and one lone croc tooth. We think this small sample of time came right above the crab layer.

Construction stopped after the completion of the school facility....a giant bus parking lot. Everything is now overgrown and fenced off.

Jeremy and I still get out every so often but the glory days of Pine Hills are gone. I'm still moving school displays around with Bonnie's help. Through the years I cannot count the number of fossil talks we've done. Got fossil displays at historical centers, environmental and nature centers, etc. Started displaying fossils at the Orlando Science Center. Trying to come up with something different to display.....I know, I'll put one in featuring Pine Hills fossils. Sure wish someone had told me about fossils in Florida when I was a kid. Besides I hear that Roger Portell with the Florida Museum of Natural History is coming down with one of the grad students for a talk to our club.

We've come full circle and that's the story for now. As time goes forward, maybe new aspects of Pine Hills will be discovered....maybe by Jeremy and me, maybe by someone like you.

Russell Brown



Chlamys nematopleura, Miocene, Hawthorne Group
The scallop shell that Jeremy had given me years before proved that Pine Hills was a Miocene site.

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	Jimmy Waldron	(386) 212-5814
Vice President	Russell Brown	(352) 429-1058
Secretary	Glory Kerr	
Treasurer	Sara Morey	(407) 353-8675

Chairs:

Education	Melissa Cole	(407) 834-5615
Field Trips		
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
Historian	Valerie First	(407) 699-9274
Librarian	Kathy Munroe	(407) 301-6773
Membership	Joanne Maio	(407) 375-3635
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	Paul Bordenkircher	(407) 687-3843
Directors:	Russell Brown	(352) 429-1058
	Melissa Cole	(407) 834-5615
	Dave Dunaway	(407) 493-4253
	Ed Metrin	(407) 321-7462
	John Jelks	(407) 568-5558
	Roy Singer	(407) 645-0200

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: elise@liseydreams.com. Articles can be sent as text in the e-mail or in Microsoft Word files (*.doc).

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 page 2-3 for more information on events.

December 9, 2010

6:00pm Holiday Party & Auction
6 pm at Golden Corral

December 10th - 12th

Central Florida Mineral & Gem Show

December 11, 2010

Vulcan Mine field trip
See page 3 for more info

January 8th - Vulcan Mine Field Trip

January 15, 2011

Field trip Meeting to
Florida Museum of Natural History
See page 3 for more info

January 15th - Fl. Museum of Natural History tour

February 19th - Kids Fossil Blast 2 pm
Club Meeting 3 pm

March 19th - Orlando Science Center Fossil Fest

TIME TO RENEW

your Florida Fossil Hunters
2010 Membership.

Be Green

We are *emailing* the newsletter each month. If you want to participate, just email Bonnie at bjrb48@netzero.com or sign up at the meeting. If you want to continue to receive a paper newsletter in the mail, you don't have to do anything.



Join Our Facebook group, Search:

[Florida Fossil Hunters](#)

facebook

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 32854-040



Florida Fossil Hunters News