

### From the President.....

Welcome all to 2017. Hope everyone had a great holiday break. Even more so, I hope everyone gets down to the Peace River while the digging is hot. For those of you who have collected, please bring your finds to the meeting for "show & tell". All of us like to see especially those who can't make the trip.

The January 21st meeting will be featuring one of our own, Lee Williams. He and his wife Nancy have traveled and collected all over the world. His talk will cover their adventures in Saudi Arabia. Our February speaker will be Harley Means of the Florida Geological Society from "Nole-town" (I mean Tallahassee).

There is more planned for later this year: trips to Peace River, Yankeetown, a Vulcan Mine cookout, the Florida Museum of Natural History, Skeletons, and more. Come to the meetings, read your newsletters, check the website, and join us on Facebook for news of events. Be sure to get out and enjoy the outdoors, too.

I want to thank **everyone** in our club for their active involvement, support, and encouragement given to our members and myself. Without you I'd be diggin' in the woods and you'd never see me. Thanks again.

In other big news, Steve Sharpe has stepped up once again and will be the club's Vice President. He and his family have been members for years and he has been extremely generous with his time, filling in at the meetings and at club activities. If you ever need to find him, check the Peace River first.... I think he moved there.

Thank you, Dave Dunaway for your many years as an officer of the club and your commitment to it. Dave will continue to handle Fossil Bucks and participate in our meetings and activities.

Now if only Marge Fantozzi would call me about wanting to be President....

See you at the meeting.

Russell Brown President

Join Our Facebook group, Search: Florida Fossil Hunters



# Coming Events

# **UPCOMING MEETINGS** at the Orlando Science Center

### Saturday, January 21st 2 pm Kids' Fossil Blast 3 pm Meeting & Speaker: Lee Williams

### Saturday, February 18th 2 pm Kids Fossil Blast 3 pm Meeting & Speaker: Harley Means

### Saturday, March 18th 3 pm Meeting

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

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# **Fragments**

# Annual Tomoka Gem and Mineral Show, Jan. 21-22, DELAND, FLORIDA

Volusia County Fairgrounds; 3150 E. New York Ave; Sat. 10-6, Sun. 10-5; Admission \$4, Children under 12 free; 46th Jewelry, gems and minerals, children's table.; contact Susan Morris, 5193 Rogers Ave, Port Orange, FL 32127, (386)-843-0152; tgmsshow@gmail.com; www.tomokagms.org

# The Fossil Club of Lee County Annual Fossil Festival, February 18th

9am to 5pm at The Shell Factory, 2787 N. Tamiami Trail (US 41), North Fort Myers, FL 33903. There will be fossil vendors, a kids' dig, silent auctions, and more. For more information go to <a href="https://www.FCOLC.com">www.FCOLC.com</a>

# Bone Valley Gem, Mineral & Fossil Society February 25-25, LAKELAND, FLORIDA:

First Presbyterian Church; 175 Lake Hollingsworth Dr; Sat. 9-4:30; Adults \$3, Students/Children free; adults \$3, students, children and teachers free; door prizes, Spin & Win Mineral Wheel, kids' Treasure Dig, demonstrations, educational displays, silent and Chinese auctions, more than 30 dealers, rocks, minerals, fossils, jewelry, gifts, hobby supplies, lapidary demonstrations, wire wrapping, cabochon making.; contact Kim Price, (863)-412-9156; IBVGMFS@gmail.com; www.bonevalley.net

# Kids' Fossil Blast

Some of the earliest life on Earth left mysterious fossils. Scientists still aren't sure what some looked like or how they lived. So bring your imagination and curiosity with you on Saturday, January 21st at 2 pm at the Orlando Science Center. We will examine those fossils and see what body plans we can come up with using some arts and crafts materials.

Kids' Fossil Blast is an informal hands-on experience with real fossils, casts, etc. aimed at kids ages 5 to 14. We meet for an hour before the regular meeting.

### Tampa Bay Fossil Club, March 11-12

Florida State Fairgrounds, intersection of I-4 & Hwy 301 just east of Tampa. Adults \$8, kids 12 & under free. Sat. 9-5, Sun 10-4. Fossils, gems, minerals, shells, kids' games, fossil mine, raffles, silent auctions. <a href="https://www.tampabayfossilclub.com">www.tampabayfossilclub.com</a>

### Central Florida Mineral and Gem Society Annual Gem Mineral and Bead Show, April 28-30, ORLANDO, FLORIDA

National Guard Armory; 2809 South Fern Creek Ave.; Fri. 1-6, Sat. 10-6, Sun. 10-5; Adults \$5, Students \$2; Central There will be demonstrations, 30 minute auctions, kids table, sluice mining for gems, and hourly door prizes. See and buy gems, minerals, beads, metaphysical stones, fossils and much more from all over the world. Scouts can earn merit badges from a mineral gemologist to assist with identification and requirements.; contact Paul Hayes, 1400 Sawyerwood Ave,, Orlando, FL 32800, (407)-816-1220; phayes3@cfl.rr.com; www.cfmgs.org



### Piece on the Peace River

Now that the water is down and in spite of the chilly weather, there have been lots of people hunting on the Peace and finding treasures. You can check out the Florida Fossil Hunters Facebook page to see what they've been finding. Hope you get your chance to dig.

Make a trip to the Peace a gift to yourself. Happy hunting!



### **ASK A SCIENTIST - GEOLOGY**

March 12th

1:00 pm - 4:00 pm

FLORIDA MUSEUM -3215 Hull Road, SW 34th Street and Hull Road Gainesville, FL 32611



Science is all around you!

Take advantage of this opportunity to talk one-on-one with researchers from UF's <u>Department of Geological Sciences</u> and ask those questions you have been wondering about. Bring your specimens and find answers during an afternoon of discovery and learning. For more information, call 352-273-2064.

## Women in Paleontology 2017

This year's program promises to be bigger and better. We are fortunate in having the support of the folks at the Florida Museum of Natural History who have helped us secure a grant from the Paleontological Society this year to target young girls and minorities.

If you want to be part of this event, contact Cindy Lockner at <a href="mailto:clockner@comcast.net">clockner@comcast.net</a> or Bonnie at <a href="mailto:bonnierussell62@gmail.com">bonnierussell62@gmail.com</a>

The date for this year's program is **Saturday**, **May 6th**. Mark your calendars! We are so excited!!!

## It's Time to Renew for 2017

A Florida Fossil Hunters membership for an entire household is still a bargain at only \$17 a year. Download the application or use the form in the newsletter and mail it along with your check to Florida Fossil Hunter P.O. Box 540404, Orlando, FL 32854-0404. Or pay your membership at the meeting.

If you just joined in the past couple months, you're already paid through 2017.

Questions? email Bonnie at bonnierussell62@gmail.com

## Dino Day at Leu Gardens

Saturday, January 28th | 9 a.m. until 2 p.m.

Explore the world of dinosaurs with your family with hands-on activities, crafts and scavenger hunt. See the dinosaur exhibit up close and follow the Dino Dig map to discover all of the dinosaurs and participate in fun events along the way!

This event kicks off their "Dinosaur Invasion" which will run from January through April.

Our participating partners include:

- -Stop by the Mad Science area to dig for Dinosaur bones, create your own Dinosaur rubbing, and even make your own fossil to take home!
- -Visit Arnold Palmer Hospital for Children to receive your own memorable keepsake and learn about dinosaur diets and to learn more about how dinosaurs roamed, and ate, all over the world!
- -The Orlando Science Center brings a fun family activity to teach your family about the amazing world of dinosaurs.
- -Let your creative side roar with the City of Orlando's Pottery Studio. Children will make their own creative masterpiece.
- -Visit Bloomingdale's for a special activity to keep all of your dinosaur pieces together!
- -Prehistoric plants come to life with the Dr. Phillips Center for the Performing Arts team. Make your own plant rubbing and learn about Erth's Dinosaur Zoo on February 17th!
- -Dig into your imagination with Super Awesome Cool Pottery as young artists unearth their creative talent.
- -Enjoy your own piece of fossilized wood and learn how fossils form.
- -Join the FOSSIL Project from the Florida Museum of Natural History as they bring fun activities for kids to learn about fossils.

Florida Fossil Hunters will display fossils and talk to the guests about hunting fossils in Florida.

Contact Bonnie to volunteer for this event bonnierussell62@gmail.com | 352-429-1058.

Harry P. Leu Gardens 1920 N Forest Ave, Orlando, Florida 32803

### **Dinner/Auction Report**

We had 30 or so members join us at the Golden Corral for our yearly Fossil Bucks Auction.

Hope everyone had a great time. There was plenty of drama and bidding wars. From shark teeth, dinosaurs & jewelry to coprolite, we had it covered. Afterward all who attended got to choose a gift from Russell & Bonnie's "boxes of wonders". It was good to spend the evening with good folks. Saw a lot of members leaving with hands full of treasures and bellies full of food.

Thank you, Marge Fantozzi, for setting this up.



# Collecting in Saudi Arabia

Our speaker for the January 21st meeting will be Lee Williams. He and Nancy will have a slide show with photos of some of the places in the desert they used to frequent. They will bring fossils (on loan from our grandson Zack), some of Nancy's desert diamonds and a desert rose; all for folks to see and handle.

Lee first became interested in fossils when, at age 15, he was digging in his backyard in Canton, Ohio and came across a fossil. Of course, he had no idea it was a fossil, but he was curious. After a trip to the library, he was fascinated to learn that it was a brachiopod and was over 450 million years old (Ordovician). This sparked a passive interest.

Lee is an information technology consultant, currently with Disney in Celebration, Florida. His work has taken him, Nancy and their 2 boys to many states across the US, and to Saudi Arabia. While in Saudi, Lee's interest in fossils was rekindled. Nearly every weekend for 3 years, the family went into the desert - sometimes for a day, sometimes for the entire weekend. Most of these trips involved looking for fossils. However, fossil hunting wasn't always the primary event as the family didn't entirely share Lee's enthusiasm. They would sometimes search out and hike camel trails or ride dune buggies and motor cycles in the sand dunes. Over time, they learned about desert diamonds, and some of the trips were geared toward this new endeavor. Of course, where you can find diamonds you can most often also find fossils.

Once back in the states, Lee looked for fossils in some of the states in which he worked, including Ohio, California, Texas, Georgia, New Jersey and Florida. Seven years ago, Lee and Nancy volunteered for a week on a dig at the Wyoming Dinosaur Center. Since moving to the Orlando area, they have joined the Florida Fossil Hunters and have been volunteering at the Florida Museum of Natural History's Montbrook site.

# Go Play in the Dirt

The FL Museum of Natural History is currently working at a large-scale, extensive excavation at the Montbrook fossil site. The **Hemphillian Montbrook Site** is about a 40-minute drive south of Gainesville, near the town of Williston in Levy County.

The **Montbrook Site** is very productive and almost all volunteers will find some fossil specimens on their first day. The most commonly found fossils are bones from the shell of freshwater turtles and vertebrae, spines, scales, and skull bones of fish, including gar, catfish, snook, and drum. Fossils of alligator, birds, and mammals are also found, but less frequently. For more

information about the Montbrook fossil site, visit: http://www.flmnh.ufl.edu/museum-voices/montbrook/

We will be working at the site from January 14 to May 21, 2017. Work at the site will occur from Tuesday through Sunday, with a few exceptions for some weeks. Volunteers from 15 to 17 years of age will be accepted but must be accompanied by an adult sibling (18+ years old), or a parent or guardian. Otherwise, volunteers must be at least 18 years old. Volunteers must be physically fit enough to work outdoors for several hours and be able to walk up and down irregular slopes. Volunteers can work just a single day, a few days, or a regular schedule one or more times a week. There is no limit to the number of times a volunteer can work at the site.

To volunteer for the Montbrook Fossil Dig, download an application form with more information (including which days we are digging at the site) <a href="http://www.flmnh.ufl.edu/files/2314/7984/0017/Montbrookdigapplication2016-2017.pdf">http://www.flmnh.ufl.edu/files/2314/7984/0017/Montbrookdigapplication2016-2017.pdf</a>. Send in the filled-out form using the directions on the back or second page of the form. If you have any questions about volunteering at the site, please email Rachel Narducci or Richard Hulbert.

You can also pick up the application form at our club meetings or contact Bonnie and she can mail the forms to you.

## Montbrook Fossil Dig 2017 dates

**January 2017:** 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 31

**February 2017:** 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 28

**March 2017:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31

**April 2017:** 1, 2, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30

May 2017: To be decided

# Amber specimen offers rare glimpse of feathered dinosaur tail

Researchers from China, Canada, and the University of Bristol have discovered a dinosaur tail complete with its feathers trapped in a piece of amber.

The finding reported today in *Current Biology* helps to fill in details of the dinosaurs' feather structure and evolution, which can't be surmised from fossil evidence.

While the feathers aren't the first to be found in amber, earlier specimens have been difficult to definitively link to their source animal, the researchers say.

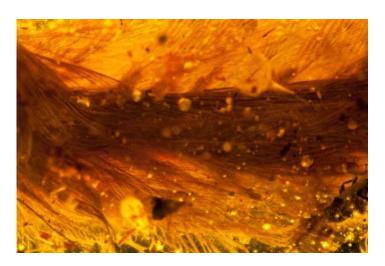
Ryan McKellar, from the Royal Saskatchewan Museum in Canada, said: "The new material preserves a tail consisting of eight vertebrae from a juvenile; these are surrounded by feathers that are preserved in 3D and with microscopic detail.

"We can be sure of the source because the vertebrae are not fused into a rod or pygostyle as in modern birds and their closest relatives. Instead, the tail is long and flexible, with keels of feathers running down each side. In other words, the feathers definitely are those of a dinosaur not a prehistoric bird."

The study's first author Lida Xing from the China University of Geosciences in Beijing discovered the remarkable specimen at an amber market in Myitkyina, Myanmar in 2015.

The amber piece was originally seen as some kind of plant inclusion and destined to become a curiosity or piece of jewellery, but Xing recognized its potential scientific importance and suggested the Dexu Institute of Palaeontology buy the specimen.

The researchers say the specimen represents the feathered tail of a theropod preserved in mid-Cretaceous amber about 99 million years ago. While it was initially difficult to make out details of the amber inclusion, Xing and his colleagues relied



on CT scanning and microscopic observations to get a closer look.

The feathers suggest the tail had a chestnut-brown upper surface and a pale or white underside. The specimen also offers insight into feather evolution. The feathers lack a well-developed central shaft or rachis. Their structure suggests that the two finest tiers of branching in modern feathers, known as barbs and barbules, arose before a rachis formed.

The researchers also examined the chemistry of the tail inclusion where it was exposed at the surface of the amber. The analysis shows that the soft tissue layer around the bones retained traces of ferrous iron, a relic left over from haemoglobin that was also trapped in the sample.

The findings show the value of amber as a supplement to the fossil record. Ryan McKellar added: "Amber pieces preserve tiny snapshots of ancient ecosystems, but they record microscopic details, three-dimensional arrangements, and labile tissues that are difficult to study in other settings.

Lida Xing, Ryan C. McKellar, Xing Xu, Gang Li, Ming Bai, W. Scott Persons IV, Tetsuto Miyashita, Michael J. Benton, Jianping Zhang, Alexander P. Wolfe, Qiru Yi, Kuowei Tseng, Hao Ran, Philip J. Currie. **A Feathered Dinosaur Tail with Primitive Plumage Trapped in Mid-Cretaceous Amber**. *Current Biology*, 2016; DOI: 10.1016/j.cub.2016.10.008



# **VULCAN MINE** Field Trip

Vulcan Mine Field Trip near Brooksville

### FIELD TRIP LEADER

### Saturday, January 14th

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

Trip Leader: Stephen Chambers
Call or email to sign up for the field trip
Email: stchamb1@outlook.com | Cell: 321-806-0763

To volunteer to be trip leader for Feb or Mar, please email Bonnie at bonnierussell62@gmail.com or call her at 352-429-1058

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.

Materials Company

Vulcan Materials Company

Vulcan Materials Company is North America's leading producer of construction aggregates primarily crushed stone, sand and gravel. During the quarrying process at the Brooksville site, fossils from the Oligocene (24.5 to 37.5 million years ago) plus other rock and minerals are readily found. Plustured here are some of the common fossils that collectors have been discovering.

Extinct Sand Tiger shark observed as a solution of the company of the common fossils that collectors have been discovering.

See Utrchin, Gagara mossomi

Extinct Sand Tiger shark observed as a solution of the company of the company of the company of the company of the common fossils that collectors have been discovering.

See Utrchin, Gagara mossomi

Extinct Sand Tiger shark observed in the company of the

**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.

TRIP LEADERS
NEEDED
FEB & MAR

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.

# 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  | Steve Sharpe        |                |
| 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 |

#### **Board of Directors:**

Webmaster

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

Elise Cronin-Hurley (407) 929-6297

elise@liseydreams.com

# 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 Mark Your Calendar

Saturday, January 14th Vulcan Mine

Saturday, January 21st 2 pm Kids' Fossil Blast 3 pm Meeting & Speaker, Lee Williams

January 21st & 22nd Tomoka Gem & Mineral Show, Deland, FL

January 28th

Dino Day at Leu Gardens, Orlando

Saturday, February 11th Vulcan Mine-NEED LEADER

Saturday, February 18th 2 pm Kids Fossil Blast 3 pm Meeting & Speaker Harley Means

> Saturday, March 11th Vulcan Mine-NEED LEADER

Join Our Facebook group, Search: Florida Fossil Hunters



Saturday, February 25th
Bone Valley Gem, Mineral & Fossil Show

Lakeland, FL

March 11th & 12th Tampa Bay Fossil Show

Saturday, March 18th 3 pm Meeting

**Sunday, March 19th**Ask a Scientist-Geology, FLMNH, Gainesville

Saturday, May 6th Women in Paleontology, Orlando Science Center

> January to May FLMNH Montbrook Dig

### Be Green





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



