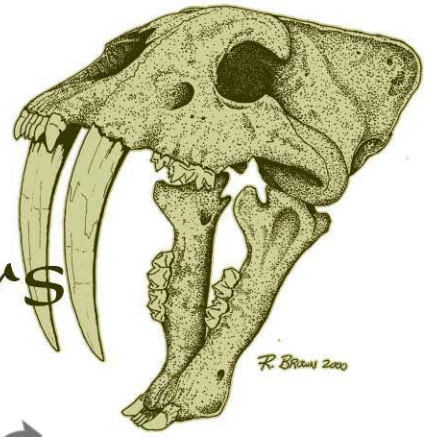


NEWS

Florida Fossil Hunters



Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters
Volume 27, Number 4

April 2017

From the President.....

Hello and welcome to yet another month of great fossil hunting in the Peace River. You'd be an "April's Fool" not to go if you have the opportunity.

Summer is here already and a lot is going on in the world of Paleontology - read on....

March meeting attendees were treated to a free Riker mount and hopefully the start of a Peace River Shark Tooth collection. If you didn't get ALL the various kinds, there are plenty at the Peace River. Bring your cases to the meetings, you never know what may show up. Steve Sharpe and Sheila Walaszek are trying to line up more trips. Details on last month's trip are inside. Get with them if you are interested in going. However, I'll let you know now that Peace River will be over flood stage on April 15th so that Steve Sharpe will be available to run the club meeting. I'll be at work.

John McIntosh from Ancient Artifacts will be our guest speaker. His presentation will be on fossils from Lebanon.

Always bring in your newest fossil finds - we all enjoy sharing and learning.

May's meeting will be on stingrays, skates, guitar fish... yes, there is a difference. We'll also be discussing our summer plans. There are no meetings in June & July and we'll meet again in August. I'd still like to talk about Yankeetown Island, a BBQ at Vulcan, Peace River...

For the last eight months, I've been driving Bonnie crazy... pacing around, wringing my hands, spending sleepless nights. The due date is May 6th for the 3rd annual **Women in Paleontology** which Cindy Lockner will deliver with the help of Eleanor Gardner at FLMNH. Now this is not my baby, but I'm as proud as any new father, with what the ladies have done with this program. Our club is not the first to have such a program nor will we be the last, but each year it has gotten bigger and better. Of all the club's outreach programs, this one is the best. Thanks in advance to our partners: to the Orlando Science Center for discounted admissions and and for providing the venue, to the Paleontological Society's Educational Outreach Committee for the \$2,500.00 grant to make admissions free for those girls who normally don't get exposed to science role models, The FOSSIL Project for all their help and expertise in getting the grant, producing webinars, and lining up women speakers, and to Dr. Bruce McFadden for helping inspire us to reach further.

There will be more on the event inside this newsletter. Please plan on attending and bring some friends... especially kids.

Go to the Peace River; come to Women in Paleo.

See you there.

Russell Brown, President

Join Our Facebook group, Search:
Florida Fossil Hunters



Coming Events

UPCOMING MEETINGS at the Orlando Science Center

Saturday, April 15th
2 PM - Kids' Fossil Blast
3 pm - Meeting

Saturday, May 6th
Women in Paleontology, OSC

*More events listed on back page
For more info...*

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www.floridafossilhunters.com

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Florida Fossil Hunters News

Fragments

Meeting, Saturday, April 15th

After a short business meeting, we will be treated to a talk by John McIntosh on the Fossils of Lebanon. You may remember John from our Fossil Fairs and from his previous presentations. He also owns

Ancient Artifacts & Treasures, Inc
1999 W Fairbanks Ave, Winter Park, FL 32789

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

Earth Day

It's time to celebrate this incredible planet of ours: minerals, gases, liquids and the forms of life that crawl, soar & swim all over it.

No matter where you live, there will probably be an Earth Day celebration near you.... city or county parks, museums, etc. Find one and party down.

Orlando Science Center
Saturday, April 22nd from 10 am to 3 pm

Kids' Fossil Blast

On Saturday, April 15 at 2 pm, the kids will get to explore the stories of the animals that went back to ocean after living on land for millions of years.

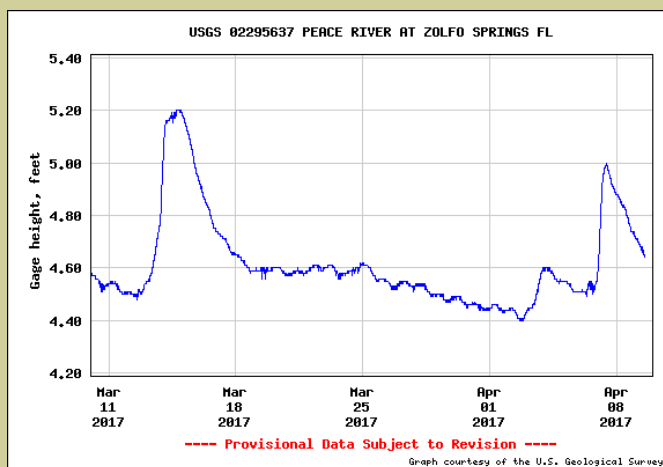
Kids' Fossil Blast is an informal, hands-on experience with real fossils, casts, etc. aimed at kids ages 5 to 14. We meet for an hour before our regular meetings.

Piece on the Peace River

FFH Peace River fossil hunting trips are unpredictable: sometimes hardly any fossils get found, sometimes everyone goes home with enough to sink a kayak. The March 25th outing had something unique: digging a very "unfossilized" cow out of the mud it was mired in.

Trip Leader Sheila Walaszek said, "Yes. It was quite the trip. We lost about 2 1/2 hours digging the cow out of the mud, but the Good Samaritan Cow Karma paid off for me at least. I found 4 megs (gave one to the 8 year old) a massive gator tooth, a complete toe bone ? Horse or bison? Many nice small teeth and other various small stuff."

Try to get yourself down to the river for some adventures before the rains resume.



Florida Fossil Hunters News

Central Florida Zoo

Help us celebrate our planet's amazing and diverse wildlife through interactive environmental education activities, amazing animal encounters, and fun games and crafts for the whole family. Connect to nature and conservation in the community, and be inspired to become conservation heroes to help protect this beautiful planet.

This event is included in general Zoo admission. Additional fees may apply for certain activities.

Please call [407-323-4450](tel:407-323-4450), ext. 100 for more information.

First mammalian red blood cells found preserved in amber

It's no dino DNA or *Jurassic Park*, but scientists have now discovered the first fossilized mammalian red blood cells encased in a piece of amber that they estimate is about 15 million to 30 million years old. According to Live Science, the researchers suggest the blood cells came from a monkey, because two holes on the back of the tick suggest it was removed from its host midfeeding, after which it became trapped in the sap. And like a Russian matryoshka doll, those blood cells yielded yet another pre-historic treasure, a species of blood parasite that still infects humans today.

Women in Paleontology

I've had discussions with people about how few women are in science (Paleontology, for example). Those that do start college in science often transfer to another field. Why? Some of it is due to the lack of a supportive network in the colleges (that's something we can't do much about).

Some don't know that ALL college students have to struggle to learn the material. They think that because it's hard, they must not be suited for science. But we can show young girls that women do go into science and do it well by bringing role models in contact with them. We are very lucky to have this opportunity to expose girls (and boys!) to professionals in the Earth Sciences and show the kids that they are intelligent but normal people.

Our message to young people at our Women in Paleontology is "You can!" whatever field they choose to follow.

Join us on Saturday, May 6th, to tell the kids and the adults what an exciting fields Paleontology, Anthropology, and Geology are.

You can volunteer by emailing Bonnie at bonnierussell62@gmail.com, calling [352-429-1058](tel:352-429-1058), or signing up at the April meeting.

Central Florida Earth Day

April 22, 2017, 10:00 am
Lake Eola Park (Downtown Side)

Central Florida Earth Day is back-- bigger and better than ever! It will be held on Saturday, April 22, 2017 from 10:00 a.m. to 6:00 p.m. at beautiful Lake Eola Park in Orlando.

Please join us at the largest and most prestigious Earth Day event in Central Florida. Admission is free! The event will include healthy living and eco-friendly exhibitors, speakers, and presentations; non-profits; fun and games for kids; dog and cat adoptions; restaurant booths; environmental and humane education; artist and craft corners; and live music and entertainment.

Central Florida Earth Day will draw both committed environmentalists and those who want to learn more about how to protect our health, the planet, and its inhabitants. All money raised will be used for local environmental education and outreach.

For more information, visit www.CFEarthDay.org.



Florida Fossil Hunters News

Car Wash for Fossil Project

Andre Tovar has scheduled three Eagle Scout car wash fundraisers for his project on the following dates:

Saturday, April 15 from
10 a.m to 4 pm
-- Winn-Dixie / Circle K
on 434 in Longwood

Saturday, April 22 from
10 am to 4 pm
-- True Value Wekiva

Saturday, May 27th from
10 a.m to 4 pm
-- Winn-Dixie / Circle K
on 434 in Longwood

Get the grime off your cars &
promote fossil education!

ALSO NEED



FOSSIL & MINERAL DONATIONS NEEDED FOR EAGLE SCOUT PROJECT!



Florida Fossil Hunters
www.floridafossilhunters.com



About the Project:

- 3 Fossil cases, each containing 20 fossils
- 3 Mineral cases, each containing 12 minerals

Florida Fossil Hunters would like three 3 fossil cases and 3 mineral cases. Once completed, the cases will be available for middle school teachers in public and private schools in Orange, Seminole, and Lake counties. Our goal is to give students an opportunity to learn about fossils and minerals by touching and holding them instead of looking at pictures.

Donations Needed (All Cases Combined):

- | | |
|------------------------|-------------------------------|
| ✓ 12 Mammal Fossils | ✓ 12 Sedimentary Rock Samples |
| ✓ 12 Bird Fossils | ✓ 12 Igneous Rock Samples |
| ✓ 12 Amphibian Fossils | ✓ 12 Metamorphic Rock Samples |
| ✓ 12 Reptile Fossils | |
| ✓ 12 Fish Fossils | |

My name is Andre Tovar and I live in Central Florida. I have been a member of both Florida Fossil Hunters and Boy Scouts since I was seven years old. I am 13 years old and am looking forward to becoming an Eagle Scout, the highest honor of scouting that only 5% of Boy Scouts achieve. I am honored to support Florida Fossil Hunters with this project. I am in 8th grade and am a member of National Junior Honor Society. In my spare time, I like to go fossil hunting, collect coins, and play soccer.

Contact: info@floridafossilhunters.com or atov777-eagle@yahoo.com

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) <http://www.flmnh.ufl.edu/files/2314/7984/0017/Montbrookdigapplication2016-2017.pdf>. 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

April 2017: 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 25, 26, 28, 29, 30

May 2017: To be decided

How chewing like a cow helped early mammals thrive

STUDY SHOWS HOW MAMMAL JAWS EVOLVED TO HELP OUR EARLIEST ANCESTORS EAT A MORE DIVERSIFIED DIET

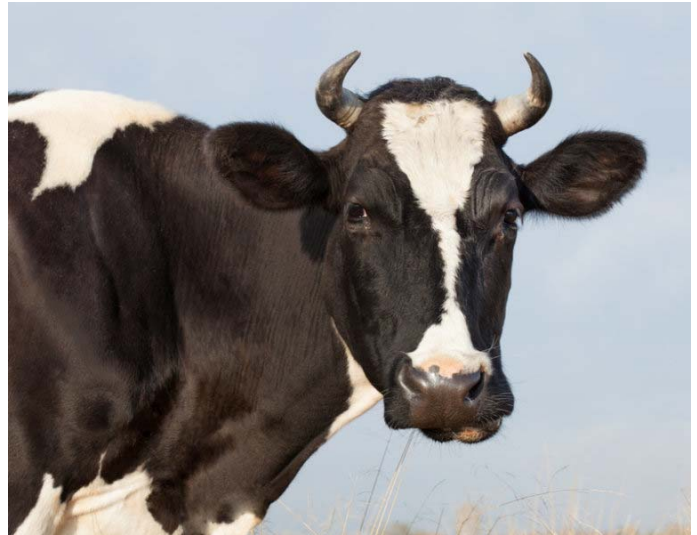
March 23, 2017

You probably haven't given much thought to how you chew, but the jaw structure and mechanics of almost all modern mammals may have something to do with why we're here today. In a new paper published this week in *Scientific Reports*, David Grossnickle, a graduate student in the Committee on Evolutionary Biology at the University of Chicago, proposes that mammal teeth, jaw bones and muscles evolved to produce side-to-side motions of the jaw, or yaw, that allowed our earliest ancestors to grind food with their molars and eat a more diversified diet. These changes may have been a contributing factor to their survival of the mass extinction at the end of the Cretaceous Period 66 million years ago.

The terms "pitch" and "yaw" usually describe movements of airplanes, but biologists also use them to describe basic movements of body parts such as the jaw. Pitch rotation results in basic up and down movement, and yaw rotation results in side-to-side, crosswise motion (think of a cow munching away on some grass). Almost all modern mammals, including placental mammals, like humans and deer, and marsupials, like kangaroos and opossums, share similarities in their jaw structures and musculature that allow for both pitch and yaw movements. This allows mammals to have especially diverse diets today, from cutting pieces of meat to grinding tough plants and vegetables. For early mammals, these characteristics meant they could be more resourceful during tough times.

"If you have a very specialized diet you're more likely to perish during a mass extinction because you're only eating one thing," Grossnickle said. "But if you can eat just about anything and 90 percent of your food goes away, you can still live on scraps."

Using 2D images of early mammal fossils from previous publications and 3D data collected from modern specimens at the Field Museum, Grossnickle analyzed the structure of teeth, jaw bones, and how the muscles that control them were attached to the



UChicago graduate student David Grossnickle explains key features that evolved to facilitate jaw yaw, or side-to-side movement that cows do, that allowed early mammals to expand their diet. -- Credit: © Supertrooper / Fotolia

skull. He saw that as species began to develop a projection on the upper molars that fit into a corresponding cup or basin on their lower counterparts, the musculature of the jaw also changed to provide greater torque for side-to-side yaw movements. This way the animal could grind its food between the molars like a mortar and pestle, as opposed to cutting it with simple up and down pitch movements.

Grossnickle, who works in the lab of Zhe-Xi Luo, PhD, professor of organismal biology and anatomy, studies the early origins of mammals, and is interested in broader questions about why certain mammal groups have diversified through time and survived extinction events. He says the adaptations of the jaws and teeth may have been key.

"Mammals rebounded from those events and kept diversifying and persisting, and that's one of my interests. Why are we in the Age of Mammals, not still in the Age of Dinosaurs?" he said. "This study begins to address that question from a functional perspective, looking at what changes occurred that might've given some mammals functional or dietary advantages over other groups."

Story Source:

[Materials](#) provided by **University of Chicago Medical Center**.

Florida Fossil Hunters News

VULCAN MINE Field Trip

Vulcan Mine Field Trip near Brooksville

FIELD TRIP LEADER

Saturday, May 13th

Last Vulcan Trip until cooler weather in Fall.

Sign up at the April Meeting

NEED TRIP LEADER

Call or email Bonnie to volunteer for the May trip
bonnierussell62@gmail.com | [352-429-1058](tel: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.

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.

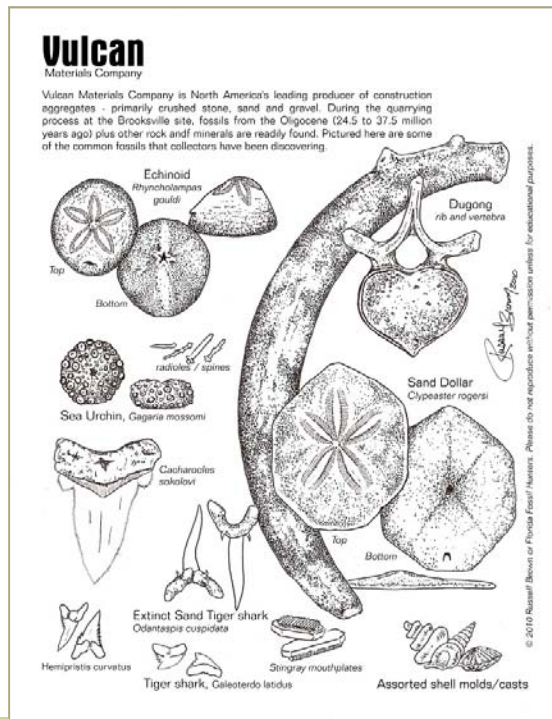
From Orlando take Hwy. 50 west (or the 408 west to the FL Turnpike, take exit 272 and then continue west on Hwy. 50) to Brooksville. Follow 50A/98 North through Brooksville and turn right on Ponce De Leon Blvd. (Hwy 98 North). Go approximately 10 miles. Vulcan/Cemex will be on your left. The address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

*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 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
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	

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.

Florida Fossil Hunters News

Florida Fossil Hunters Mark Your Calendar

See inside for more information on events.

January to May
FLMNH Montbrook Dig

Saturday, April 15th
2 PM - Kids' Fossil Blast
3 pm - Meeting

Saturday, April 22nd
Earth Day at the
Orlando Science Center

April 28 - 30th
Central FL Mineral &
Gem Society Show
Orlando, FL

Saturday, May 6th,
10 am - 4 pm
Women in Paleontology,
Orlando Science Center

Saturday, May 13th
Vulcan Mine Trip
Last until cooler Fall weather
NEED TRIP LEADER

Saturday, May 20
Meeting, 3 pm

FFH Fossil Fair
October 28th & 29th

Saturday, Nov. 4th
National Fossil Day
at FLMNH

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



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

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Orlando, Florida 32854-0404



Florida Fossil Hunters News