

#### From the desk of the President.....

The heat is on - hot weather and hot fossil hunting. NOW is the time to take advantage of the low water levels in the creeks and rivers. The Rainy Season is just around the corner.

For you new members, many fossil hunting areas, like Vulcan & Montbrook, shut down during the hot days of summer. Heat stroke is a real threat so know your limits when you are outside on your fossil quests.

A big THANKS to all you members who reached out & volunteered at all the Earth Day events. Citizen Science Day at the Orlando Science Center last month was a big hit. Thanks to Bonnie, Steve, Michael, Salvatore, Sheila, & Sara and to all that attended. We had OSC guests sorting through gravel to find fossils just like volunteers at the Florida Museum do. Michael Sharpe found an extraordinary fossil in Yankeetown sand/shell mix: the elusive Florida crinoid, H. bassleri. That lucky dog - Salvatore, Mike Murray form Australia, and I have been looking long & hard to find one.

We installed a temporary exhibit at Skeletons, Museum of Osteology down near the Orlando Eye on May 5th, the day of the club's field trip there. Only a few club members took advantage of the opportunity. The display will be there for a few months. Check it out if you and your family visit the Museum during the "hot days of summer". There are so many skeletons and interesting programs.

The Prehistoric Party at the Orlando Science Center is coming up... June 23. Please volunteer to help out. Your club needs your support. So if you can, email Bonnie at bonnierussell62@gmail.com

Water level in the Peace River is low for now but visibility if only about 10 inches. That hasn't affected all the cool fossils I've been seeing come out of there.

As always, bring what you've been finding to the meeting. We love to see them and hear the stories. Don't have any stories to tell? Well, put down what you've been doing and get out there. We all need a little adventure in our lives.

See you later, Russell Brown, President

## Coming Events

**UPCOMING MEETINGS** at the Orlando Science Center

Saturday, May 19th FFH Meeting 3pm

Saturday, August 18th Meeting - 3 pm

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

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## **Fragments**

Michelle Barboza-Ramirez will be our speaker at our meeting on Saturday, May 19th at 3 pm at the Orlando Science Center. Her presentation will be about the latest finds at Montbrook.

Michelle is a vertebrate paleontology graduate student at the Florida Museum of Natural History. She has a B.S. in Geological Sciences with a minor in Geography from California State University-Fullerton, and is currently working toward her M.S. at the University of Florida. Her research uses isotopic analysis of teeth from plant-eating mammals in order to reconstruct ancient ecosystems. She has a strong interest in science communication and promoting diversity in science; she is the producer and host of the "Femmes of STEM" podcast.

Live from Orlando, it's Science Night Live! Saturday, June 2, 2018, 8:00–11:30 p.m. at Orlando Science Center.

It's Social. It's Science. It's 21+.

Florida Fossil Hunters will volunteer at the event and WOW the guests with amazing facts about incredible animals from the past.

To volunteer, email Salvatore Sansone at: ssfossilhunter@aol.com



#### Skeletons Museum of Osteology

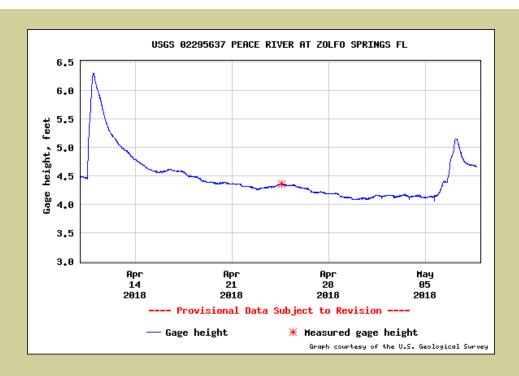
After our tour around the Museum with a few of our members, Russell installed a temporary display in one of their cases. It was drawing people to look at the curiosities before he even finished!

Hope you get a chance to go there during the summer... great way to avoid the heat and feed your brain at the same time.

## Piece on the Peace

The river is still good for diggin' and siftin'. And with it as hot as it is now, it would be wonderful to cool off in.

Check with Steve Sharpe or get some friends to join you in some fossil hunting out in the natural world.



### **Montbrook Fossil Dig**

Dig into Florida's Past with the Paleontologists

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

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

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

- Volunteers must be at least 15 years old. Volunteers age 15 to 17 will be accepted but must be accompanied by an adult sibling (18+ years old), or a parent or guardian.
- Volunteers must be **physically fit** enough to work outdoors for several hours and be able to walk up and down irregular slopes. Be aware that the site is in direct sunlight and sandy. We will have a porta-potty at the site.

Volunteers can work just a single day, a few days, or a regular schedule one or more times per week. There is no limit to the number of times a volunteer can work at the site. https://www.floridamuseum.ufl.edu/montbrook/dig-schedule/

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

### Party in the Prehistoric at OSC

July is Paleontology Month at Orlando Science Center in honor of everyone's favorite prehistoric animals. To celebrate, they are transforming Dino Digs into a Prehistoric Party! on Saturday, June 23rd. Guests will be able to dig, play, and dance their way through stations learning about creatures from Apatosaurus to Zuniceratops.

Florida Fossil Hunters will set up displays and tell the guests about all the wondrous creatures of the past. Please volunteer some time and join the fun.

Call Bonnie at 352-429-1058, email her at bonnierussell62 @gmail.com to sign up.

## Kids' Fossil Blast

Reminder: The Kid's club has been suspended due to lack of interest.

If someone is interested in taking over and even change the format, just let us know.

## Florida Fossil Hunters



Saturday, October 20, 2018 9:00am - 5:00pm Sunday, October 21, 2018 10:00am - 4:00pm

Central Florida Fairgrounds 4603 West Colonial Drive, Orlando, Florida 32808

www.floridafossilhunters.com

Educational Displays

Silent Auctions

Kids \$1

**Raffles** 

Airconditioned! INDOORS!

# NSF Grant will Improve Digital Access to Museum Vertebrate Fossils

MAY 4, 2018

The Florida Museum of Natural History recently received a \$500,000 collections grant from the National Science Foundation to improve online accessibility of vertebrate fossils in Florida.

Jonathan Bloch, a museum curator of vertebrate paleontology and principal investigator for the project, said the grant will allow for online reviews by the scientific community of the fossils of small amphibians, mammals, reptiles and birds from the early to late Miocene of Florida.

"This project is to curate fossils from two of our premier Miocene localities in Florida, one of which is a 5-million-year-old site near Williston that has been the focus of volunteer efforts over the past two years," Bloch said. "We'll be focusing on small mammals, birds, reptiles and amphibians because they are such understudied groups in the Florida fossil record. We're anticipating a lot of important new discoveries."

Incoming specimens collected by the museum at the Miocene fossil vertebrate sites have outpaced scientists' ability to store, prepare, curate and digitize the findings in a timely manner.

"We have about 30 tons of sediment from these two sites that contain many tens of thousands of fossils of small animals and hundreds of plaster jackets containing skulls, jaws and other significant fossils," said Richard Hulbert, collections manager of vertebrate paleontology and a co-principal investigator on the project. "Without this grant, it would take us decades to process this backlog and make these fossils available for study."

This grant will also provide support for graduate and undergraduate students at the University of Florida to help with screenwashing sediment to find small fossils and the preparation of fossils in plaster jackets.



The grant will allow researchers to curate fossils from the Montbrook site, pictured here, and Thomas Farm. Florida Museum photo by Jeff Gage



Smaller fossils like fish spines, scales and vertebrae are often found when screenwashing sediment.

Florida Museum photo by Jeff Gage



Photographs and 3D images from CT scanning of many of the fossils will be freely available on public websites.

"We will be using the CT-scanning efforts from the oVert Thematic Collections Network to create digital models of bones commonly sorted in screen washing from paleontological sites to facilitate identification in the collections," said David Blackburn, associate curator of amphibians and reptiles at the museum and one of the co-principal investigators on the project.

The fossils produced as a result will greatly increase sample sizes, particularly of rare species. The grant funds will also provide new cabinetry and improved storage conditions for many unstudied fossils.

"We're excited to see how this grant will let us discover and study tiny fossils and then digitize them so that they are widely accessible for research Natasha Vitek, a biology doctoral student who works in vertebrate paleontology curator Jonathan Bloch's lab, digs for fossils at the Montbrook site. Florida Museum photo by Jeff Gage

and education," said Bruce MacFadden, a curator of vertebrate paleontology at the Florida Museum and one of the co-principal investigators on the project.

The Florida Museum houses the third-largest cataloged collection of vertebrate fossils in the United States. It is comprised of more than 401,000 unique catalog numbers or lots representing about 850,000 specimens.

Source: Jonathan Bloch, 352-273-1938, jbloch@flmnh.ufl.edu Author: By Jessica Finkel

## Footprints prove humans hunted

## giant sloths during the Ice Age

ONCE-HIDDEN PRINTS, VISIBLE ONLY IN CERTAIN CONDITIONS, DETAIL A DRAMATIC CHASE

BY **DAN GARISTO** | 4:08PM, APRIL 25, 2018. JAIME CHIRINOS/SCIENCE SOURCE

People tracking giant sloths thousands of years ago in what is now New Mexico left footprints that confirm humans once hunted the giant creatures, researchers report April 25 in *Science Advances*.

Giant ground sloths, which vanished at the end of the last Ice Age around 10,000 years ago, could weigh more than an elephant. With their lethal claws and muscle, the herbivores would have been formidable prey, says David Bustos, a biologist with the National Park Service at White Sands National Monument in New Mexico.

In April 2017, researchers stumbled across more than 100 tracks in White Sands. These "ghost tracks" had previously remained hidden because they can be seen only under the right moisture conditions — too little or too much water in the soil, and the outlines of the prints were invisible.

Tests of sediment showed the sloth and human prints were made at the same time. An analysis of the tracks also suggested the two species were interacting with one another.

"We're getting a view into the past, of an interaction between two species," says Sally Reynolds, a paleoecologist at Bournemouth University in Poole, England. "This was a moment of action, a moment of drama."

Reynolds, Bustos and their colleagues reconstructed the chase: Humans stalked a sloth, or several sloths, which the hunters surrounded in the open. At seven places, a sloth reared up on its hind legs — towering over the humans — to fend off an attack. But the chase continued, with the humans in hot pursuit.

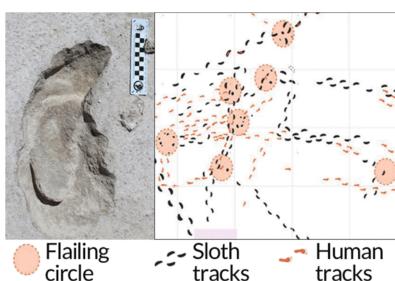


The encounter "wasn't luck or happenstance; it was cold calculation," Reynolds says. "Our intention was to kill them."

The trail of footprints ends, though, and it's not clear who came out victorious.

### ON THE HUNT

A human footprint is shown on the left with a raised heel mark inside the larger, curved footprint of a giant sloth. On the right, researchers mapped the sloth and human tracks to re-create the chase scene, with "flailing circles" to mark where an animal reared up on two feet to defend itself.



## 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	(352) 552-2296
Secretary	Bonnie Cronin	(352) 429-1058
Treasurer	Sara Morey	(619) 302-4863

#### Chairs:

Education	Bonnie Cronin	(352) 429-1058
Field Trips	OPEN	
Fossil Fair	Valerie First	(407) 699-9274
Fossil Auctions	Dave Dunaway	(407) 786-8844
Fossil Bucks	Dave Dunaway	(407) 786-8844
Fossil Lotto	Ed Metrin	(407) 321-7462
Membership	Bonnie Cronin	(352) 429-1058
Newsletter	Bonnie Cronin	(352) 429-1058
	Elise Cronin-Hurley	(407) 929-6297
Photography	John Heinsen	(407) 291-7672
Facebook	Paul Hardin	
Webmaster	Elise Cronin-Hurley	(407) 929-6297

elise@liseydreams.com

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

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

### 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,

### Newsletter Policy

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

Articles must be submitted by the first of the month to be included in that month's newsletter. These can be mailed to the above Post Office Box or e-mailed to: bonnierussell62 @gmail.com . Articles can be sent as text in the e-mail or in Microsoft Word files (.doc or .docx).

Please note in subject of email 'FFH'.

## Florida Fossil Hunters Mark Your Calendar

Saturday, May 19th

FFH Meeting 3pm Michelle Barboza, speaker

Saturday, June 2nd

8 to 11:30 pm OSC Science Night Live

Saturday, June 23rd

OSC Prehistoric Party Need volunteers!

Saturday, August 18th Meeting - 3 pm

Saturday, Sept. 29th

National Fossil Day at FLMNH

2018 FFH Fossil Fair October 20 & 21

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

Post Office Box 540404 Orlando, Florida 32854-0404



