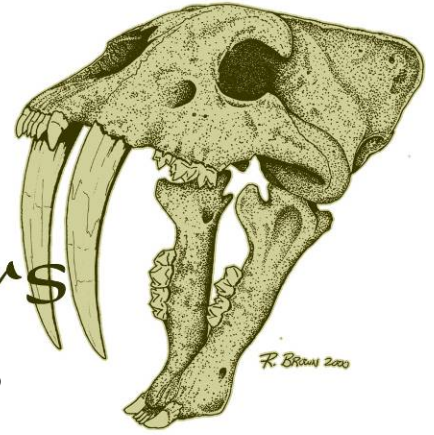


# NEWS

## Florida Fossil Hunters



Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters  
Volume 23, Number 6

June 2013

### From the President.....

Our summer break is here. Hope everyone is out enjoying friends, family, and fossiling. Get out to the Peace River before the summer rains fill it over the banks. Our club has had a great first half of the year with field trips, cook-outs, and educational events. I thank everyone for pitching in and helping your club. Fall is fast approaching, along with our Fossil Fair. Inside this newsletter you can read up on up-coming activities in which you may want to participate.

Looking ahead to next year... one of the biggest Paleo events is coming to Gainesville. The Florida Museum of Natural History is hosting the 10th North American Paleontological Convention from Feb. 15th through the 18th.

The goal of this convention is to broaden interest and create new avenues of inquiry within the field of paleontology. As well as having diverse presentations on different fields in paleontology, there will be special activities and symposia for AMATEURS AND FOSSIL CLUBS to provide networking opportunities and increase interactions between enthusiastic advocates of paleontology at any level. For more information, you can go to [www.flmnh.ufl.edu/napc/](http://www.flmnh.ufl.edu/napc/)

The Florida Paleontological Society is working on this event, along with FLMNH, and the University of Florida. This event will need an army of volunteers for everything from distribution of food, to transportation, to helping at the symposiums, etc. I'll be proposing to the Board of our club that we participate in this event next year instead of a February meeting. There will be more on this event as we learn it.

At June's meeting, there will be plenty to see and learn. Bonnie's Kids' Fossil Blast program is geared for young fossil hunters, but old ones can learn a few things also on stones/bones/trees or tusk. This is a great hands-on experience so come early and find out something new. Afterwards, we will have a quick business break before our fossil bucks auction. There's an assortment of treasures sure to attract your interest.

**Once again, reminding everyone that there is no meeting in July.**

Russell Brown  
President

**June 15 Mtg**

More Info Page 2

**NO MEETING  
OR NEWSLETTER  
IN JULY**

**2013**

**FOSSIL FAIR  
October 5th-6th**

## Coming Events

### UPCOMING MEETINGS at the Orlando Science Center

#### June 15th

2 pm Kids' Fossil Blast  
3 pm Meeting & Fossil Bucks  
Auction

**No July meeting or newsletter**

#### August 17th

2 pm Kids' Fossil Blast  
3 pm Meeting

#### Sept. 21st

3 pm Meeting

#### Oct. 5th & 6th: Fossil Fair

**More events listed on back page**

For more info...

[www.floridafossilhunter.com](http://www.floridafossilhunter.com)

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# Florida Fossil Hunters News

# Fragments

## Kids' Fossil Blast

On Saturday, June 15th, at 2 pm, our Kids' Fossil Blast will be on "Tusks, Trees, Stones, or Bones".

My yard has lots of rocks that I mistook for fossils through the years..... still bring a couple home every trip. We'll have lots of fossils and rocks and such to look at and compare so you can learn some of the differences between pieces of bones, shells, petrified wood and rocks. Those of you who are new to fossil hunting are welcome, too.

We'll meet at 2 pm at the Science Center on Saturday, June 15th. The next one will be on August 17th.

### What To Do When the Rains Come

This summer when the rain and heat make fossil hunting almost impossible, you can still enjoy exploring for them..... in the Museums.

#### Florida Museum of Natural History, Gainesville

[www.flmnh.ufl.edu](http://www.flmnh.ufl.edu) | [352-846-2000](tel:352-846-2000)

#### Daytona Beach Museum of Arts & Science

[www.moas.org](http://www.moas.org) | [386-255-0285](tel:386-255-0285)

#### Mulberry Phosphate Museum

[www.mulberryphosphatemuseum.org](http://www.mulberryphosphatemuseum.org) | [863-425-2823](tel:863-425-2823)

#### South Florida Museum, Bradenton

[www.southfloridamuseum.org](http://www.southfloridamuseum.org) | [941-746-4131](tel:941-746-4131)

#### Brevard Museum of Arts & Sciences, Cocoa

[www.nbbd.godo/BrevardMuseum/](http://www.nbbd.godo/BrevardMuseum/) | [321-632-1830](tel:321-632-1830)

#### Silver River Museum, Ocala

(only open on weekends)

[www.floridastateparks.org/silverriver/](http://www.floridastateparks.org/silverriver/) | [352-236-7148](tel:352-236-7148)

### Peace River Report

Dave Cass and Dave Dunaway led the FFH Peace River Cook-out/Dig. Groups of newcomers joined by some experienced club members met at Thousand Trails Campground on May 11th. Water was still low and, as always, Peace River produced horse teeth, armadillo scutes, gator teeth, shark teeth, etc. Dave Cass had his corn cooker, Dunaway manned the grill, plus with all the food brought by members there was plenty to eat. A little rain came up in the afternoon but this is Florida.

**Many thanks** to Dunaway and Cass for leading this field trip on the river. Bring in your fossil finds to the June meeting for show and tell. If you plan on going down to the Peace to hunt for fossils, be sure to check the water level via the link on our [webpage](#) or go the [Florida Fossil Hunters Facebook page](#) to chat and/or see what's going on.

# *Fossil Bucks Auction—June 2013*

Time for our June Fossil Bucks Auction. For those of you unfamiliar with Fossil Bucks, those are what club members earn for attending meetings and field trips. Extra bucks can be earned for volunteering at the Fossil Fair, educational events, for doing jobs for the club (writing articles for the newsletter, for example), setting up field trips, etc.

We then use our Fossil Bucks to bid on the items offered in June and December. This is the really cool stuff we have this time:

1. Sand stromatolite
2. Petrified wood piece w/smoky quartz
3. Modern red fox skull
4. Petrified wood 8" polished slab, Indonesia
5. Ammonite 7-1/2" sliced half, polished
6. Fossil fish (Knightia), Green River
7. Box of assorted minerals
8. Shark tooth necklace
9. Agatized coral
10. Horse (M. bardi) jaw piece with 4 teeth
11. Dinosaur bone piece
12. Sifting screen made by Dave Cass
13. Bison antiquus cervical vertebra
14. Folding box for rocks/fossils
15. Thunder egg
16. Raw copper specimen
17. Small partial rhino jaw w/teeth in matrix (Nebraska)
18. Heklaite - new mineral from Bartow, FL
19. Box of shells - Tamiami formation
20. Kid's "Dino Kit"

# First Snapshot of Organisms Eating Each Other: Feast Clue to Smell of Ancient Earth

Apr. 29, 2013

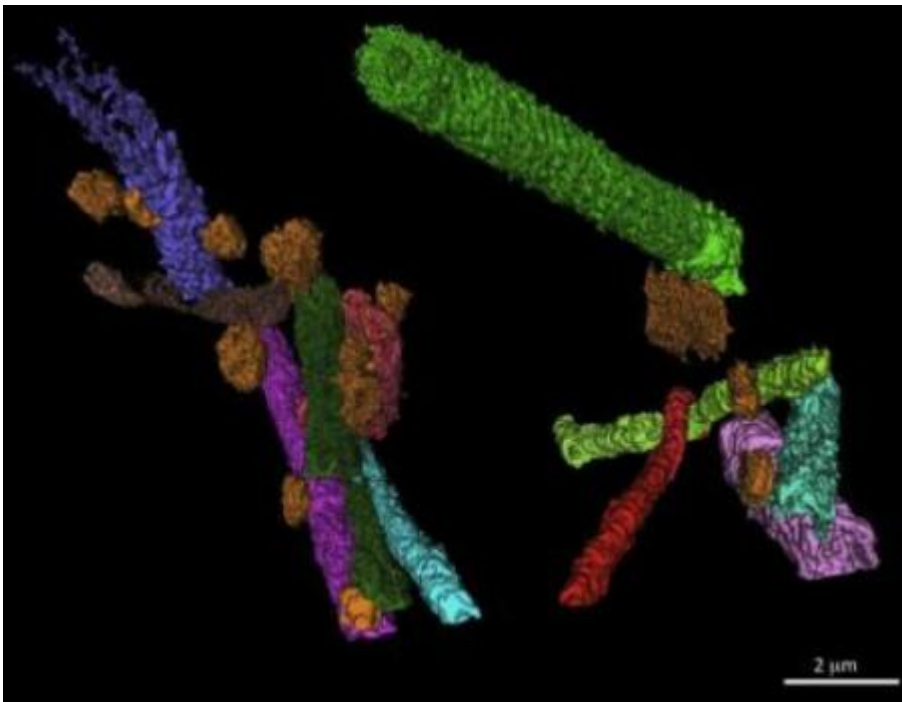
*Tiny 1,900 million-year-old fossils from rocks around Lake Superior, Canada, give the first ever snapshot of organisms eating each other and suggest what the ancient Earth would have smelled like.*

The fossils, preserved in Gunflint chert, capture ancient microbes in the act of feasting on a cyanobacterium-like fossil called *Gunflintia* -- with the perforated sheaths of *Gunflintia* being the discarded leftovers of this early meal.

A team, led by Dr David Wacey of the University of Western Australia and Bergen University, Norway, and Professor Martin Brasier of Oxford University, reports in this week's *Proceedings of the National Academy of Sciences* the fossil evidence for how this type of feeding on organic matter -- called 'heterotrophy' -- was taking place. They also show that the ancient microbes appeared to prefer to snack on *Gunflintia* as a 'tasty morsel' in preference to another bacterium (*Huroniospora*).

'What we call 'heterotrophy' is the same thing we do after dinner as the bacteria in our gut break down organic matter,' said Professor Martin Brasier of Oxford University's Department of Earth Sciences, an author of the paper. 'Whilst there is chemical evidence suggesting that this mode of feeding dates back 3,500 million years, in this study for the first time we identify how it was happening and 'who was eating who'. In fact we've all experienced modern bacteria feeding in this way as that's where that 'rotten egg' whiff of hydrogen sulfide comes from in a blocked drain. So, rather surprisingly, we can say that life on earth 1,900 million years ago would have smelled a lot like rotten eggs.'

The team analysed the microscopic fossils, ranging from about 3-15 microns in diameter, using a battery of new techniques and found that one species -- a tubular form thought to be the outer sheath of *Gunflintia* -- was more perforated after death than other kinds, consistent with them having been eaten by bacteria.



*A 3D reconstruction of tubular Gunflintia fossils being eaten by heterotrophic bacteria (orange spheres and rod-shapes) gives the first ever snapshot of organisms eating each other, Oxford University and University of Western Australia scientists report. (Credit: David Wacey)*

In some places many of the tiny fossils had been partially or entirely replaced with iron sulfide ('fool's gold') a waste product of heterotrophic sulfate-reducing bacteria that is also a highly visible marker. The team also found that these *Gunflintia* fossils carried clusters of even smaller (c.1 micron) spherical and rod-shaped bacteria that were seemingly in the process of consuming their hosts.

Dr Wacey said that: 'recent geochemical analyses have shown that the sulfur-based activities of bacteria can likely be traced back to 3,500 million years or so -- a finding reported by our group in *Nature Geoscience* in 2011. Whilst the Gunflint fossils are only about half as old, they confirm that such bacteria were indeed flourishing by 1,900 million years ago. And that they were also highly particular about what they chose to eat.'



*New research challenges evolutionary theories behind the development of our earliest ancestors from tree dwelling quadrupeds to upright bipeds capable of walking and scrambling.*

*(Credit: © Kovalenko Inna / Fotolia)*

## Why Early Human Ancestors Took to Two Feet

*May 24, 2013 - A new study by archaeologists at the University of York challenges evolutionary theories behind the development of our earliest ancestors from tree dwelling quadrupeds to upright bipeds capable of walking and scrambling.*

The researchers say our upright gait may have its origins in the rugged landscape of East and South Africa which was shaped during the Pliocene epoch by volcanoes and shifting tectonic plates.

Hominins, our early forebears, would have been attracted to the terrain of rocky outcrops and gorges because it offered shelter and opportunities to trap prey. But it also required more upright scrambling and climbing gaits, prompting the emergence of bipedalism.

The York research challenges traditional hypotheses which suggest our early forebears were forced out of the trees and onto two feet when climate change reduced tree cover.

The study, "Complex Topography and Human Evolution: the Missing Link," was developed in conjunction with researchers from the Institut de Physique du Globe in Paris. It is published in the journal *Antiquity*.

Dr Isabelle Winder, from the Department of Archaeology at York and one of the paper's authors, said: "Our research shows that bipedalism may have developed as a

response to the terrain, rather than a response to climatically-driven vegetation changes.

"The broken, disrupted terrain offered benefits for hominins in terms of security and food, but it also proved a motivation to improve their locomotor skills by climbing, balancing, scrambling and moving swiftly over broken ground -- types of movement encouraging a more upright gait."

The research suggests that the hands and arms of upright hominins were then left free to develop increased manual dexterity and tool use, supporting a further key stage in the evolutionary story.

The development of running adaptations to the skeleton and foot may have resulted from later excursions onto the surrounding flat plains in search of prey and new home ranges.

Dr Winder said: "The varied terrain may also have contributed to improved cognitive skills such as navigation and communication abilities, accounting for the continued evolution of our brains and social functions such as co-operation and team work.

"Our hypothesis offers a new, viable alternative to traditional vegetation or climate change hypotheses. It explains all the key processes in hominin evolution and offers a more convincing scenario than traditional hypotheses."

# Goodbye Lulu *Hello Gainesville*

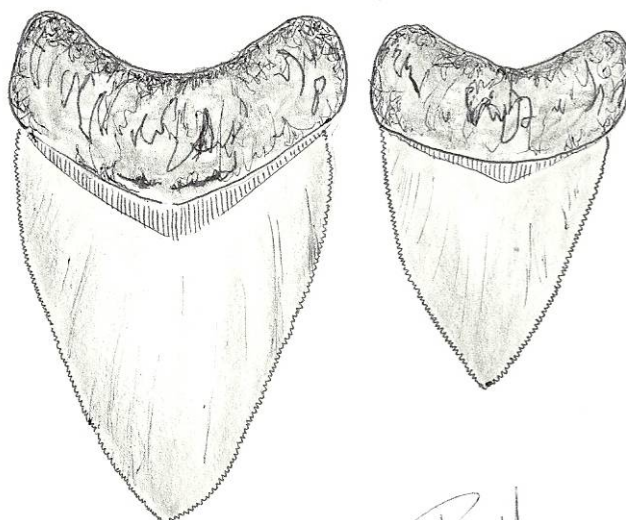
*Jeremy had that look in his eye... the one that says he'll push me down to be the first on the gravel bar. We were fossil hunting in one of the many creeks in Gainesville. Most of them had eroded down through the Hawthorne Group sediments..... Miocene in age; the Time of the Megalodon. I like the Gainesville creeks because the color of the sharks teeth remind me of Lulu and some species were different than the ones I collected elsewhere. As we searched the gravel bar, we found a fist-sized vertebra, a 2" Mako, a 3" megalodon, then another. It was that easy. We didn't screen-wash. We could just walk the creek beds, gathering up fossils on the gravel bars. As time went on, we would have many adventures here, as we had before in Pine Hills and Lulu Creek.*

It was during this time period, that Carl Darling, a buddy of ours who would go out with us now and again, said he'd take us to a place so full of fossils that it was crazy.....lots of mammal bones and teeth, sharks teeth, and just gobs of stuff. This was a great tease for mammal-loving Jeremy. Peace River? We had heard of it before and years later we'd check it out, but for now the gravel bars were thick with teeth in Gainesville.

It was the summer of '95, wading up to a shallow bar deep in the woods, the water cold and clear, collecting sharks teeth. Like always in the woods, we pay attention to our surroundings. Jeremy had wandered off again.... he likes to do his searching alone. Looking at the trickle of water running along the gravel bar for the sharks teeth, I saw a ribbon of red along the bank. Blood ! ...and it wasn't mine. A bad feeling came over me.

Russell Brown

**Next time..... Wild Times in Gainesville**



*It was the colors of the  
sharks teeth that drew  
me to Gainesville -  
creams, blues,  
oranges,...*

# 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
Auctioneer	Roy Singer	(407) 645-0200
Membership	Bonnie Cronin Nicole Barr	(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	

# 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.

## June 15th

2 pm - Kids' Fossil Blast  
3 pm - Meeting and Fossil Bucks Auction  
No July meeting or newsletter

## JULY

**NO MEETING OR NEWSLETTER**

## August 17th

2 pm Kids' Fossil Blast  
3 pm Meeting

## September 21st

3 pm Meeting

## September 28th

Daytona Beach Museum of Arts & Sciences  
"Natural History Festival"

## October 5th & 6th

FFH Fossil Fair

### Be Green

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



Join Our Facebook group, Search:

[Florida Fossil Hunters](#)

facebook

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