# Florida Fossil Hunter

Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters Volume 21, Number 4

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# Peace River Issue

- Peace River Dig What to Bring
- Florida Fossil Permit
- Peace River Do's and Don'ts
- Resources along the Peace
- Peace River Dig If You Bring Your Kids...
- Peace River Trivia
- Honey, What's That Smell?
- Florida Fossil Permit FAQs
- Time Travel on the Peace

# Coming Events

#### UPCOMING MEETINGS at the Orlando Science Center

Saturday, April 16, 2011 2:00 pm Kids' Fossil Blast 3:00 pm Meeting and Fossil Buck Auction

Saturday, May 14th and Sunday, May 15th Peace River Club Dig

**Saturday, June 18, 2011** 2:00 pm Kids' Fossil Blast 3:00 pm Meeting and Fossil Buck Auction

### Table of Contents

For more info... www.floridafossilhunter.com

Fragments 2			
Kids Fossil Blast 2			
Fossil Fest Thank You's 2			
Peace River Info3			
Florida Fossil Permit FAQs 4			
Time Travel on the Peace6			
Contacts and Membership Info 7			
Calendar 8			
Peace River Map Enclosed			

## Fragments

#### April Meeting

We'll be meeting at 3 pm in the Founders' Room on the 3rd floor of the Orlando Science Center on Saturday, April 16th. (Right after the Kids' Fossil Blast which is from 2 to 3 pm).

We'll all be treated to an interesting presentation on "The Apex Predators from Florida's Ice Age" from David Letasi, renowned historian and paleontologist, formerly with MOAS, the Museum of Arts and Sciences in Sarasota. His program will explore their hunting strategies and interactions with early Americans. He'll also have some rare carnivore fossils for us to look at.

Be sure to enter your names on the sign-up sheet for the Peace River Club Dig scheduled for May 15th and 16th.

#### Thanks From OSC

Dear Fossil Fest Participants,

I just wanted to thank you all for coming out to the Science Center and making this an awesome Fossil Fest! Both Brandan and I were so impressed by the amount of participation that both of us would like to thank you. Also, please make sure you forward this along to all your volunteers because the event would not have been possible without their help.

Just for your information, we had 1,114 visitors to the museum that day, and I am certain most of them made their way up to the fourth floor to see you. Children and adults were blown away by the sheer number of fossils that were presented and then further astounded by the information you gave them about when and where these amazing creatures lived.

Fossil Fest is an annual event and the 6<sup>th</sup> Fossil Fest will be held at approximately the same time next year. I would love it if all of you return for next year's event! Emails with further information on the event will be sent out around the first of next year, but please keep it in mind. And if you have any ideas on how to make Fossil Fest even better, please let me know!

Sincerely,

Stephanie Kazmierzak-Esler Science Interpreter Orlando Science Center

#### Fossil Fest #5, Thank You!

Once again we had a wonderful event at the Orlando Science Center. The number of guests that day was well over 1,100, and you can bet they went went home with memories, pictures and a fossils or two, as well as the new knowledge of Florida's past and what our club is all about.

If you couldn't attend, you missed a lot of great fossil displays. The OSC crew was there with different activities and I was very happy to see a team from the Florida Museum of Natural History take part his year, adding yet another great addition to the educational event. A BIG "thank you" to them for taking the time to come down from Gainesville.

THANK YOU, volunteers for making this a success. Jeremy Smith had his Mastodon upper palate and tusk on display. Ed Metrin was there with some of his outstanding fossils...hey, Ed..like to see THOSE in the Fossil Lotto. Valerie First was there with the Human Evolution material. Melissa Miller had a fantastic kids' activity area. Dave Dunaway brought his carnivore skulls - you've never seen so many Sabre-cat skulls in one area...unless you've been to Dave's house.

(Russell packed BOTH our vehicles full with fossils and shark material in his usual "I'll bring a few things" mode.)

In addition to the fossil displays, we had the invaluable help of our members: Dave Cass, Robin McLaren, Kathy Munroe, JoAnn, Ron & Griff Wittschen, John Jelks, Kim Jackson, Elise & Zach Cronin-Hurley, Jeanette Hammersley, Elaine Howard (who came all the way from Tallahassee), all under the watchful eyes of Sara Morey. .....even the elusive Jimmy Waldron showed up.

I hope as time goes on that more members will take part in this yearly event. So start now...Fossil Blast (sorry, Bonnie) Fossil Fest #6 is coming in one year. Plan on being part of the fun.

Oh, yeah. Everyone who volunteered will get double Fossil Bucks for the auction in June. Dave Dunaway and I will have some great items in this auction. Earn your bucks now.

**Russell Brown** 



Our next Kids' program will be at 2 pm on April 16th, when we will recreate the habitats of some of the animals from Florida's past. For more info, email Bonnie at <u>birb48@netzero.com</u> or call 352-429-1058.

### **Peace River**

#### Peace River Dig - What to Bring

#### Necessities:

-Shovel

-Sifter\*

-Shoes that you can wear in the water- no sandals. Wear ones that will stay on your feet such as dive boots, water shoes or old gym shoes. I find socks that are tight around the ankles are good for keeping gravel out.

-Fanny pack for putting fossils in. A small backback or a bag tied to you will also work.

-Containers to put your fossils in to take home. Some may be fragile; a bucket for large items.

-Dry clothes to change into and a towel.

-Drinks and snacks.

-Sunscreen and a hat- the sun is intense this time of year.

-Chairs for cookout

-Bug repellent

#### **Options:**

-Canoe or kayak - we will be at a place where we can walk into the river but you may want to find a place further from the "pack"

-Camera (waterproof)

\*sifter: anything that has 1/4" screen will do. The easiest to work with are approx. 1 ft x 2 ft wooden boxes fitted with screening with the fun-doodle floats attached to keep them from sinking while you fill them. It's important to have them tied to you with a length of rope as well so your finds don't float down the river. The alternative is to have a partner that holds the sifter while you shovel in gravel.

#### Florida Fossil Permit

#### Go to www.flmnh.ufl.edu/vertpaleo/vppermit.htm

The permit costs \$5 per person and tkes about 3 weeks to process.

#### Peace River Do's and Don'ts

Do: Hunt for fossils (have your fossil permit), fish (make sure you have your license with you), swim, take pictures of the wildlife, check the water level via the link on our website before you go

Don't: Dig into the banks undermining trees, collect any Native American artifacts, throw trash into the river or on shore.

#### **Resources along the Peace**

Canoe Outpost, 800-268-0083, www.canoeoutpost.com

Walmart and fast food places are in Wauchula.

Camping: Pioneer Park, Zolfo Springs, 863-735-0330 and Thousand Trails, 863-735-8889, just north of Zolfo.

#### Peace River Dig -If You Bring Your Kids...

This can be a wonderful family adventure and great opportunity for your kids to hunt and FIND real fossils. These are just some recommendations to make the experience enjoyable for all of you.

If you have young children (about 8 and under)

- there should be one adult for each child
- please be sure they have life jackets on while they are in the river
- they get hungry and tired quickly...bring snacks and something for them to rest on the shore with

#### For any children

- they must have shoes... there is broken glass in the river
- experienced members of the club will be there to help you get started and offer advice but your kids will probably still need your help in hunting

#### **Peace River Trivia**

The name of the Peace River has a long history. It was called Rio de la Paz (river of peace) on old Spanish maps and later, during the Seminole Indian wars, it was the "peace boundary".

It begins in the Green Swamp and meanders for about 130 miles through the counties of Polk, Hardee, De Soto, and Lee before emptying into the Gulf of Mexico at Port Charlotte.

The fossils come from Miocene (5 MYA) to Pleistocene (12 thousand years ago) deposits where the river has eroded into the fossil layers. Of course, there are also modern bones, old bottles, and evidence of recent human activity as well.

# Florida Fossil Permit FAQs

Who needs to get a permit?---Any one who intends to collect vertebrate fossils on state land where fossil hunting is allowed. Can be a Florida resident or nonresident, for a one-time trip or multiple hunts throughout the year....all need a permit.

Who does not need to get a permit?---Individuals who collect fossils on private land, or land belonging to a county or municipality (check local laws and regulations regarding collecting fossils). Also, individuals collecting the fossils of invertebrate animals (such s clams, snails, sea urchins, etc), plants and shark teeth do not need a permit to collect these items on state land.

**On what state lands is fossil collecting allowed?---**No collecting of any type is allowed inside the boundaries of state parks. In general, collecting is allowed in the beds of navigable rivers, unless special exemption has been made for environmental reasons (e.g. Myakka River). Some sections of river beds may be under the jurisdiction of one of the state water management districts, in which case fossil collecting is not allowed. It is always safest to check with the local branch of the Florida Fish and Wild-life Commission before collecting in a river for the first time. The sea floor from the the shoreline to three nautical miles from shore is the property of the state (out to nine nautical miles in the Gulf of Mexico) and a fossil permit is required to collect vertebrate fossils in this region.

Are children required to have a fossil permit?---Minors (those 16 years and under) who are collecting fossils under the supervision of a parent or guardian who has a valid Florida fossil permit do not need their own permit. In such cases the adult is required to report the specimens found by the child(ren) accompanying them as well as their own fossils. Children of any age can get a permit if they or their parent(s) wish them to have one.

What tools can/can't I use to collect fossils?---The state statutes that set up the fossil permit system did not specify which types or sizes of tools were allowed so that persons could collect fossils. Different state agencies have differing opinions on what tools should and should not be used, but to our knowledge this has not been settled in a legal court. It is the opinion of the managers of the Florida Program of Vertebrate Paleontology that the following tools should be allowed for the use of fossil collecting to dig into and remove sediment: trowels, screwdrivers, small knives, and small shovels (entrenching type). Screens can used to sift sediment. The following are not allowed without the permission of the state's Dept. of Environmental Protections: any devise powered by a motor, mechanical excavating equipment, or large shovels.

When do the fossils become my property?---After you report your fossils to the Program of Vertebrate Paleontology, if within 60 days the state does not claim the fossils, then they legally become your property. Before that you cannot sell, borrow, trade, deface, or harm the specimens.

How often does the state claim fossils found under the permit system?---Very, very rarely. We are only interested in retaining extremely rare and scientifically valuable fossils for all of the citizens of Florida. In the 25+ years since the system began, the state has only twice had to demand that a collector turn over a fossil that they had found. In less than than 10 other cases collectors have voluntarily donated rare fossils to the state under the assumption that we would ask for them.

How can I report a fossil if I cannot identify it?---Specimens that are complete enough to be identified but which are not one of the common types of fossils recovered in Florida's rivers are potentially important discoveries. The Florida Museum of Natural History has a free fossil identification service, see <u>www.flmnh.ufl.edu/</u> <u>vertpaleo/fos\_ids\_svc.htm.</u>

Is it legal to buy fossils from Florida rivers?---You can find fossils for sale that are purported to be from Florida rivers at many places including on-line, at flea markets, and at fossil fairs. If the specimens were collected by someone with a valid fossil permit and were reported to the state's Program of Vertebrate Paleontology, then it is legal to buy them. However, if the dealer or owner cannot produce a valid permit or if they will not certify that the specimens were collected legally, then the chances are very good that the fossils were obtained illegally. Purchasing such items is the same as knowingly buying stolen property.

Do I have to report fossils that I purchase?---No.

My fossils are soft and crumbly. Do you sell anything to harden them?---No. Many of the fossil clubs in the state sell such chemicals, called consolidants.

Can I employ persons to hunt for fossils under the jurisdiction of my permit?---No.

On a regular basis, my organization takes people to a river to hunt fossils. Do all of them need to get permits?---A person who regularly leads groups on fossil hunting trips on state land can obtain a multiple-use permit. This is for cases when the individuals in the group do no fossil hunting on their own. They do not need to have their own permits. The holder of a multiple use permit is responsible for reporting all of the fossils found by the members of this group (and in rare case when the state claims a fossil, they are responsible for turning it over). In the case of trips by a fossil club, all individuals should have a permit.

#### How long does it take to process a permit application?---Under normal circumstances, we process permit applications on one day each week (currently, Fridays). But you should allow at least three weeks time between when mailing an application and when you plan your first fossil hunting trip.

I need my permit in less time than three weeks. Is there any faster way to get one?---You can get a permit processed in person at Dickenson Hall on the University campus in Gainesville, between 9 and 5 on weekdays. If Gainesville is too far, for an extra \$5 we will scan your permit and send you a digital copy by email to use until the real one arrives. Make arrangements in advance by e-mail or phone (352-273-1821) for either of these methods.

**How does the state spend my \$5?---**The costs needed to process the application and mail the permit, including salary, supplies, and postage, total about \$3. The remaining \$2 is used to help support vertebrate paleontology digs in Florida and to educate Florida's citizens about fossils.

What are the common mistakes people make when applying for a permit?---1) Forgetting to enclose a copy of their ID. 2) Applying for a new permit instead of renewing their old one. 3) Not signing the application form and/or check. All of these will result in a delay in receiving your permit.

#### Honey, What's That Smell?

Fossils in the river have a very...distinctive scent. After we get home, we soak our fossils in a bucket of water with about 1/2 cup of bleach. Soak your fragile fossil and calcified shells, echinoid spines and such, in a weaker solution by themselves for a shorter period of time. Sometimes a slight brushing will help clean away stubborn algae growth. Soak the denser bones longer. Rinse all with fresh water and then let them soak for a couple hours in the fresh water. Then you can sort out your finds on an old towel and let them air dry.

This will not only get the stink out, but it will also kill any algae, bacteria, and bugs. If you still have a stinky smell check your shoes for fresh coprolite.

#### Hope this helps. Russell

#### Proving that science is an on-going learning process and is never finished....

#### Clovis People not the First

A cache of 15,500 yr. old artifacts from Buttermilk Creek site in Texas has shown that people were in the Americas 2,500 before the time of the Clovis culture. That means that there was enough time for the Clovis style of tools to be developed here and not brought from Asia as previously theorized.

This validates the previous pre-Clovis finds found at other locations in North and South America.

#### Eocene Land In Florida

A new UF study of 45 million year old pollen from Pine Island west of Fort Myers shows that there was dry...or sort of dry... land 10 to 15 million years earlier than previously believed. Sediment from a 767 meter deep injection well contained local, land-based pollen, disproving the popular belief that Florida was completely underwater 45 mya during the Eocene.

The sample of dark gray lignitic (brown coal) clay and limestone contained pollen from 17 different flowering plants along with 4 examples of marine phytoplankton, indicating repeated rises and falls

of the area's sea level. For more on this discovery, go to <u>www.sciencedaily.com/</u> releases/2011/03/11030214227.htm

#### Return of the Sloth

Zach Zacharias, Curator of Education at the Daytona Beach Museum of Arts and Sciences, reports that the Florida Museum of Natural History will finally be moving their Giant Ground Sloth to one of their galleries. This incredible 13 ft. tall skeleton of Eremotherium laurilardi has been in storage since the floods in Daytona damaged the fossil gallery at the Museum, much to the dismay of the visitors and staff. They will also have a newly acquired set of Megalodon jaws in the display. Both will be available for public viewing on May 1st. For more info, go to www.moas.org

# Time Travel on the Peace

#### Millions of years ago.....

Dugongs and whales are swimming around in a shallowing sea, keeping a watchful eye out for the apex predator Megalodon, the giant of sharks. This was a great time for the sharks; prey items all around like a regular buffet. Slowly moving forward in time, small reefs and sea grass beds form with their multitude of resident invertebrates..much like today. Small islands of shells and corals start to emerge. Florida, but not as we would recognize, is forming. Then as sediment washed down from the Appalachians fill in the islands, mangroves and other coastal plants take root. The animals here are strange to us...rhinos, oreodonts, shovel-tusked elephants.

As more time passes, life changes here and all around the world. Ice ages come and go and leave the land high and dry as water is frozen in the glaciers. Florida would change repeatedly from a small peninsula with small islands to a large land mass twice as big as today's.

The largest change comes about 3 million years ago. During the Pliocene, the land-bridge between North and South America forms. The world's ocean currents which had flowed freely from the Pacific to the Atlantic for over a 100 million years, find new pathways for the nutrientrich waters to travel around the continents. Megalodons food chain has been broken and their end was near. A massive extinction of large and small sea life occurs.

Land animals could now cross over on the landbridges...North to South, East to West, and vice-versa. Florida is a Land of Giants - Terror Birds, mammoths, sabre-cats, mastodonts. Even "modern" animals are huge- beavers, crocs, armadillos. Many animals have come and gone, living and dying - some leaving their fossilized remains.

#### Party for the Planet

The Central Florida Zoo will hold their annual conservation-themed event on Saturday, May 14th, from 9 am to 3 pm. Valerie First will be there talking to folks about Florida's fossils and our club. If you would like to join her at this event, you can contact her at 407-699-9274.

# 12 Thousand years ago, probably earlier...

The first humans arrive. Hunting, fishing, trading with others from the north, these first Floridians usually lived along the coast and where there were rivers or springs giving them access to inland areas. Soon there were hundreds of thousands living much as we do today.

Early Spanish explorers bring this to and end when they make landfall in the New World, the Americas. A combination of their modern technology and diseases wipe out almost all of the first True Floridians. Later other native Americans along with immigrants from Europe and Africa migrate south into Florida, sometimes living peacefully and other times at war with one another. Settlements became towns, towns became cities. More people, roads, railroads, fences, even taxes came to Florida leaving their mark as trash and treasures.....all here today and gone tomorrow.

#### Modern-day Florida, Bone Valley Region, Peace River...

As you travel down the river...especially in the early morning...you'll discover old Florida. Mist is hanging in the morning light, as some animals are calling it a night and others are starting their day. The flowers are opening, fish are jumping and chasing breakfast...or trying not to become breakfast. Most people are surprised at how quiet and peaceful it is. There are few houses on the river. Steep banks of limestone are exposed, rapids flow over gravel bars, and wildlife is everywhere. As the sun shines down into the water, you can see 5 ft. bass, gars, and even mullet and crabs for this river goes into the Gulf of Mexico.

You come up on a gravel bar too high to paddle over, so you get out and drag the canoe. Perhaps you take a break on the gravel bar and look around....and down. That's when it will happen. What is that thing?....It's a tooth..a 3 inch long meg tooth! Now you will spend the rest of your life looking for the answers to What, Why, Where, and How. And you'll always want to go back to the Peace River where there is no work, no problems, nothing that clouds your mind as you hunt for your next treasure...and the treasure of peace that the Peace River brings.

#### Page 7

### 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) 493-4253
Secretary	Bonnie Cronin	(352) 429-1058
Treasurer	Sara Morey	(407) 353-8675
Chairs:		
Education	Bonnie Cronin	(352) 429-1058
Field Trips	OPEN	
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
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:**

Melissa Cole	(407) 834-5615
Ed Metrin	(407) 321-7462
Dave Cass	(407) 409-9095
Shelley Zimmerman	(407) 891-1260

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

### Newsletter Policy

Associate members are people in the same household, 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: elise@liseydreams.com. Articles can be sent as text in the e-mail or in Microsoft Word files (.doc or .docx).

### Florida Fossil Hunters Mark Your Calendar

*April 16, 2011* 2:00pm Kids Fossil Blast 3:00pm Club Meeting

*May 14-15, 2011* Watch for more info on the Peace River Dig Weekend

Saturday, May 14th Party for the Planet, Central Florida Zoo

Saturday, June 18, 2011 2:00 pm Kids' Fossil Blast 3:00 pm Meeting and Fossil Buck Auction **Be Green** 

*Email* Bonnie at bjrb48@netzero.com to receive the newsletter via email.

Join Our Facebook group, Search: Florida Fossil Hunters



### Vísít us onlíne at www.florídafossílhunters.com

Articles and comments should be sent to: elise@liseydreams.com

# Florida Fossil Hunters

Post Office Box 540404 Orlando, Florida 32854-0404



# Peace River ACCESS POINTS

Highway 17 runs south out of Bartow along the Peace River to Arcadia. You can easily put in at these points with a canoe. Just remember...you park at these areas at your own risk. Lock up and don't leave valuables in your vehicle. There are shallow areas that can be accessed without a boat in Wauchula, Zolfo Springs, Gardner and Arcadia.

Access point #1, Ft. Meade Outdoor Recreation Area located on the southeast side of the US 98 bridge over the river, just east of Ft. Meade city limits.

Access point #2, Bowling Green, 644A bridge. From 17 in Bowling Green, turn east onto Main St., following the brown park signs, then turn south onto Lake Branch Rd. (CR 644A) and go approx 1 mi. You can either park your vehicle at Paynes Creek State Park (100 yds. west of the bridge) or park your vehicle under the bridge. You cannot collect fossils until you are south of Paynes Creek Park..look for the sign on the west side of the river.

**Access point #3**, Wauchula Crews Park. From Hwy. 17 in Wauchula, turn east onto Main St. (SR 64A/CR 636) Go approx. 1 mi. and look for the park on the left before the bridge. You can walk under the bridge from the park and find shallow areas to dig without having a boat.

Access point #4, Pioneer Park, Zolfo Springs. From Hwy. 17 turn west onto SR 64. The park entrance will be on your right. OR You can go to Thousand Trails campground just north of the Zolfo Springs bridge, pay a \$5 fee to park your car, and walk into the shallow areas along the campgrounds.

Access point #5, Gardner Boat Ramp. Take Hwy 17 south from Zolfo approx. 13 mi. Turn right onto River Rd. (becomes a dirt road). Go approx. 1-1/2 mi. to the boat ramp. There is a small shallow area that can be walked into for hunting.

Access point #6, De Soto County Park, Arcadia. From Hwy 17 in Arcadia, head west on SR 70 for approx. 1.5 mi. to the bridge. Park entrance is located on the west side of the bridge.



