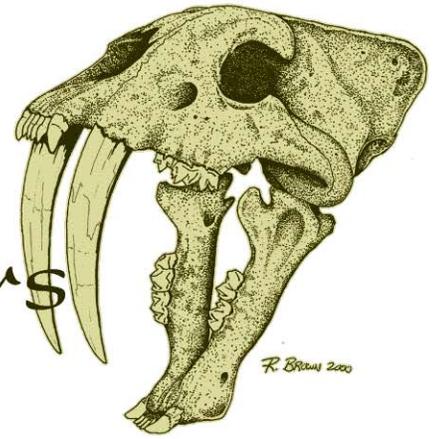


NEWS

Florida Fossil Hunters



Florida Prehistorical Museum, Inc. dba/ Florida Fossil Hunters
Volume 21, Number 5

May 2011



Peace River Issue

May 14 - 15, 2011 | 9:00am - 4:00pm

- 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
- Peace River Quick & Dirty Facts

Coming Events

UPCOMING MEETINGS at the Orlando Science Center

**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

July 2011
Club Picnic at Dave's House

August 2011
Page 2 info on Picnic

For more info...
www.floridafossilhunter.com

Table of Contents

Fragments	2
Kids Fossil Blast	2
Peace River Info	3
Peace River Quick & Dirty Facts ...	4
Odd Saber-Toothed Beast Discovered - Preyed on... Plants? ..	4
New Species of Dinosaur Bridges Gap in Dinosaur Family Tree.....	6
Contacts and Membership Info	7
Calendar	8

Peace River Map Enclosed

Florida Fossil Hunters News

Fragments

Thanks...

Thank you, David Letasi, for taking us on a fascinating trip to the Ice Age in Florida at our meeting in April with your slides and fossils. The American Lion bite marks on the mammoth vertebra were just incredible.

South Florida Museum, Bradenton, Florida

On a recent Fl. Paleontological Society weekend, Bonnie & I went to the South Florida Museum. Along with an aquarium and planetarium, they have a top notch gallery of Florida fossils....from a cast of the giant Mastodon found in the Aucilla River to wonderful and informative displays of various fossils. In addition they have a great Indian artifact collection including the best pottery I've seen anywhere.

This alone was worth the price of admission for me, but around every corner and down every hallway were even more galleries, collections, and discoveries to experience.

I know enjoyed it.
Russell Brown

For more info about the museum and events go to www.southfloridamuseum.org

John and Mari Heinsen: Thank you for your enthusiastic recommendation of this museum earlier in the year.

It is with much sadness that we report that Donovan Angell passed away on Monday, May 25th. Our thoughts and prayers are with his mother Bobbie and his brother Terry.

Kids' Fossil Blast

I was truly amazed by the imagination and creativity of all of you that participated in April's program where you created a prehistoric habitat. Remember...all of you that bring them to the Kids' meeting in June and talk about the animal you chose and its environment will get a bag of surprises.

Our next Kids' program will be at 2 pm on June 18th, when we will recreate the habitats of some of the animals from Florida's past. For more info, email Bonnie at bjrb48@netzero.com or call 352-429-1058.

Coming in August (weather permitting)...

Meeting Will Be on an Island: Yankeetown Fossil Hunting/Picnic

Once again thanks to help of club members, we will be meeting, collecting and enjoying the great outdoors, instead of meeting inside a closed room. Yankeetown is a small West Coast community where the Withlacoochie River empties into the Gulf. Several small spoil islands offer echinoid collecting, fishing, bird watching, etc. The club will provide the grill and hot dogs. We ask that participants bring side dishes to share. There will be a sign-up sheet at the June meeting or you can email Bonnie at bjrb48@netzero.com.

These islands were created by dredging sediment up from the river channels years ago. Through time many an oyster bar has formed around most sides while the other side has weed beds opening onto tidal flats. Heavy shoes/sneakers are strongly recommended since the oysters are very sharp and caution should be taken around them.

There are small trees providing plenty of shade but bring sunscreen and bug repellent. Since we have to ferry all people and supplies try to keep items to necessities: towel, water, drinks, buckets or containers for fossil finds, chairs (if you don't want to sit on the ground). There are no restrooms on the islands but we will rig up a curtained off area to use.

You can find different echinoids and a greater variety than at Vulcan as well as sand dollars.

If you plan on fishing, make sure you have your license with you.

Dave Dunaway, Dave Cass have offered to bring their small john boats to help ferry folks. If you can bring a john boat, canoe or kayak to help out, please let us know.

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.

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 takes 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.

Peace River Trip...

the quick and dirty facts

THIS DIG IS CONTIGENT ON THE RIVER BEING LOW ENOUGH TO STAND AND DIG IN. Check the website www.floridafossilhunters.com or call before you make the 2 hour plus drive there.

You can sign up for Saturday, May 14th or Sunday, May 15th or both days by emailing Bonnie at bjrb48@netzero.com or calling her at 352-429-1058.

We'll be accessing the river from the Thousand Trails Campgrounds, 2555 US 17th South, Wauchula, FL 33873. Ph: 863-735-8888. Their website is www.1000trails.com/getaways/florida/peacriver.asp They charge \$5 per car per day to park there.

Russell and I will arrive by 9 am and will be there until 4 pm. You may come and go whenever you wish. We'll break for lunch between 12 and 1 pm. The club will provide the hot dogs and fixings, plates, and utensils. Bring some food to share:

approx. 6 to 10 servings of salad or fruit or dessert. Please let us know what you're bringing so we don't end up with 10 watermelons. :)

Bring your own drinks and add'l. munchies for your family. Digging is hungry work. Bring your own chairs. We'll probably only have one or two tables for cooking/serving food.

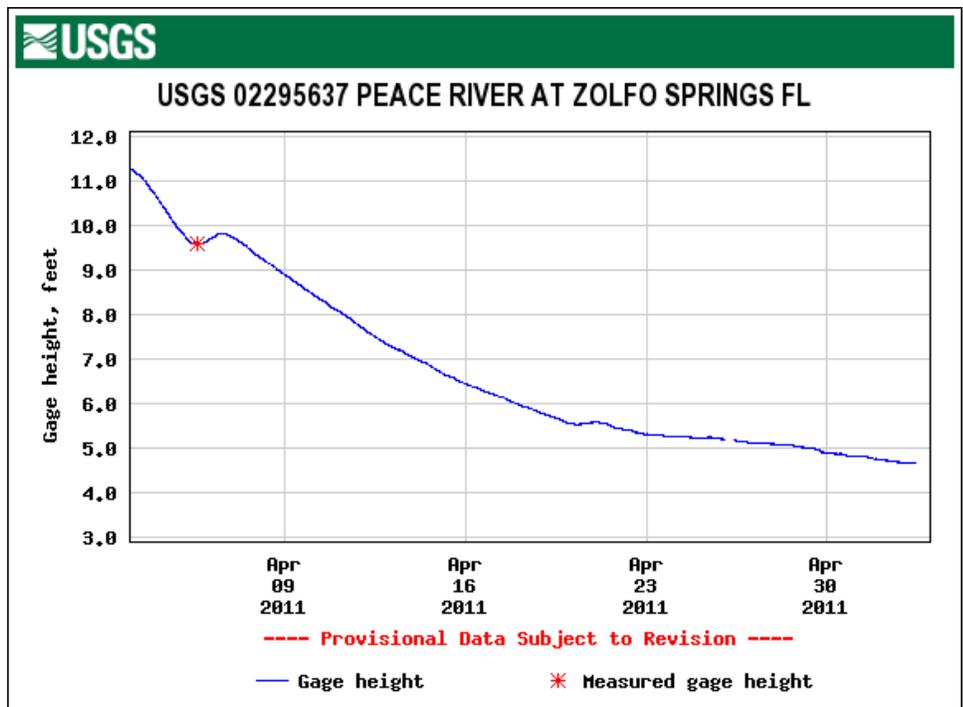
Suggest you wear dive boots or old gym shoes with socks. You'll be sifting sand and gravel over your feet and you don't want shoes full of the debris. No sandals! Many folks have lost their sandals to the river flow. Wear a hat and sunscreen.

We'll have a few extra screens and shovels to share but not many. Dave Cass is making some more up and will have them for sale at the dig. Large screen with floaties for \$15 and a small screen with no floaties for \$5.

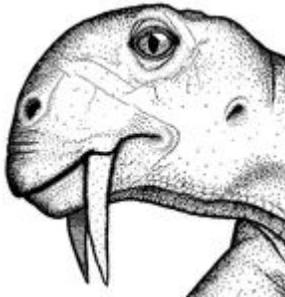
Peace River 30 Day Height Record

USGS 02295637
PEACE RIVER AT
ZOLFO SPRINGS FL

Visit floridafossilhunters.com and click on the link to check the Peace River status



Odd Saber-Toothed Beast Discovered - Preyed on ... Plants?



Tiarajudens eccentricus
illustration courtesy Juan
Cisneros, Science /AAAS

Thriving long before the dinosaur age, Tiarajudens eccentricus was armed with an incredible arsenal of teeth for grinding, tearing, and even scaring. But the newly found saber-toothed mammal ancestor was a vegetarian. Not only did this animal, the size of a big dog, have huge canines but the roof of its mouth appears to have been studded with teeth, which allowed for rapid replacement of

lost teeth, like sharks.

Part of the Anomodontia suborder within the Therapsida order - often called mammal-like reptiles - the 260 million year old fossil vegetarian "It looks like combination of different animals. It has the incisors of a horse, which are good for cutting and pulling plants; the big molars of a capybara, for grinding; and the canines of a saber-toothed cat," said paleontologist Juan Carlos Cisneros, who discovered the fossil in Brazil.

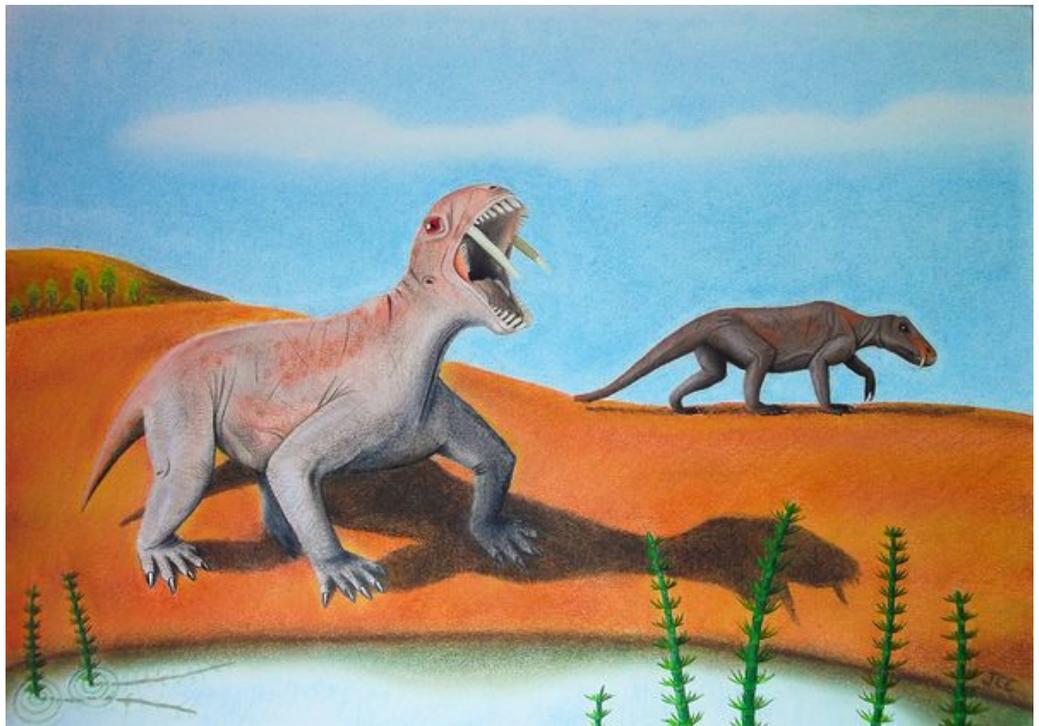
Why did it have such an idiosyncratic dentition? The answer may lie in evolutionary experimentation. No matter how unusual, Tiarajudens eccentricus' wildly differing teeth fit close together during a bite... the better to grind up and process fibrous leaves and stems. This early example of a tight tooth fit in a therapsid may offer insights into why humans and other mammals are so equipped today, since mammals evolved from therapsids.

"This animal was already capable eating like a modern ruminant, and that's very interesting", Cisneros said. Ruminants are animals which chew their cud and have complex multi-chambered stomachs, like cows and goats.

These unique dental adaptations may also offer some clues to the striking success of the anomodonts during the middle Permian era, before dinosaurs dominated Earth. They had the most species, most diverse morphologies, and the most ecological adaptations during this time. There were burrowing forms, climbing forms, semi-aquatic forms, small rat-sized forms, and large cow-sized animals in the same group.

For the entire article, go to

<http://news.nationalgeographic.com/news/2011/03/110324-saber-toothed-sabertooth-vegetarian-science-evolution-tiarajudens/>



Shown in a paleontologist's illustration, Tiarajudens eccentricus bares its unexpected saber teeth. - Illustration courtesy Juan Cisneros, Science/AAAS

New Species of Dinosaur Bridges Gap in Dinosaur Family Tree

ScienceDaily (Apr. 13, 2011) - A team of scientists led by the Smithsonian Institution has discovered a fossilized dinosaur skull and neck vertebrae that not only reveal a new species, but also an evolutionary link between two groups of dinosaurs. The new species, *Daemonosaurus chauliodus*, was discovered at Ghost Ranch, N.M. The team's findings are published in the *Proceedings of the Royal Society B* on April 13.

The oldest known dinosaurs walked or ran on their hind legs and included early predatory species such as *Herrerasaurus*. They existed in what are now Argentina and Brazil early in the Late Triassic Period, approximately 230 million years ago. The evolutionary position of these early predatory dinosaurs was contentious because there was a gap in the fossil record between them and later theropod dinosaurs. The team's discovery of *Daemonosaurus chauliodus* helps fill in this gap.

Because only the skull and neck of *Daemonosaurus* were found, the total length of the new species is unknown. The dinosaur's skull, however, is narrow and relatively deep, measuring 5.5 inches long from the tip of its snout to the back of the skull and has proportionately large eye sockets. The upper jaw has large, forward-slanted front teeth. It is this feature that helped the scientists name the species. The name *Daemonosaurus* is based on the Greek words "daimon" meaning evil spirit (because it was found at Ghost Ranch), and "sauros" meaning lizard or reptile. The species name *chauliodus* is derived from the Greek word for "buck-toothed" and refers to the species' big slanted front teeth.

Daemonosaurus, a basal (primitive) theropod species, was dated to the latest part of the Triassic Period approximately 205 million years ago, just before the beginning of the Jurassic Period. This altered the previous belief that all basal dinosaurs had vanished millions of years earlier. The skull and neck vertebrae of *Daemonosaurus* also revealed several features similar to those in neotheropods -- the succeeding group of dinosaurs on the evolutionary timeline.



*This rendering of *Daemonosaurus chauliodus* shows its size relative to an American quarter. The species name *chauliodus* is derived from the Greek word for "buck-toothed" and refers to the species' big slanted front teeth. (Credit: Jeffrey Martz)*

"Various features of the skull and neck in *Daemonosaurus* indicate that it was intermediate between the earliest known predatory dinosaurs from South America and more advanced theropod dinosaurs," said Hans Sues, curator of vertebrate paleontology at the Smithsonian's National Museum of Natural History and lead author of the team's findings. "One such feature is the presence of cavities on some of the neck vertebrae related to the structure of the respiratory system."

This new discovery shows that there is still much to be learned about the early evolution of dinosaurs. "The continued exploration of even well-studied regions like the American Southwest will still yield remarkable new fossil finds," Sues said.

Smithsonian (2011, April 13). New species of dinosaur bridges gap in dinosaur family tree. ScienceDaily. Retrieved May 3, 2011, from <http://www.sciencedaily.com/releases/2011/04/110412201715.htm>

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	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

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

See page 2 for more information on events.

May 14-15, 2011

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

July 2011

No Meeting

August 2011

Yankeetown Fossil Hunting/Picnic

(Weather permitting—see pag 2 for more info)

Be Green

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



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Visit us online at www.floridafossilhunters.com

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

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Florida Fossil Hunters News