

NEWS

Florida Fossil Hunters



Volume 15, Number 6

June 2005

Prez Sez.....

I would like to thank Dr. Richard Hulbert for giving an informative and interesting presentation on the evolution of Florida's bears at our May meeting.

Get your shovel out and dig up the blue mason jar filled with those fossil bucks. Roy Singer, our favorite auctioneer, will be waiting for you to place your bid. So bring those fossil bucks with you to the June meeting which will be at the Edgewater library.

We will not have a Board or Club meeting in July but we will have a cookout and picnic at my house on Sunday, July 24th from 1:00 pm to 5:00 pm. The club will provide hamburgers and hot dogs. Bring a covered dish, a couple chairs, and your bathing suit - I have a pool. Oh, and of course bring any fossils you'd like to show to the rest of us.

(directions on page 4)

See you at the meeting.
Dave Dunaway



The June Kid's Fossil Blast, meeting and semi-annual fossil bucks auction will be held at the College Park library since the schools will be closed by then.

The Library is at Edgewater Road and Lee Road. It's in the shopping center behind the Race Track gas station.

Coming Events

June 15th
6:00pm Kids' Fossil Blast
7:00pm Meeting and Auction

Have a safe fossil hunting summer.

July 24th
1 pm - 5 pm Cookout/Picnic at
Dave Dunaway's house

August 2nd
7:00 Board Meeting

August 17th
6:00 pm Kid's Fossil Blast
7:00pm Meeting and Auction

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Fragments

Seminole County Natural Land Programs will hold an open house event "Bones, Fossils and Artifacts Day" on Saturday, June 25th from 9 am to 1 pm. It will be held at the Ed Yarborough Nature Center at the Geneva Wilderness Area on 426. Address is 3501 N. CR 426, Geneva, FL 32722. For more information call Amy Raub at 407-665-7411.

Fossil Fair 2005

The votes are all in. The majority of the dealers prefer the fairgrounds. So we hold our fair at the fairgrounds this year. We plan on testing the zoo site by having an education day there - hopefully in the early spring. We'll be sending out dealer packets shortly.

Thanks for your input! Sharon and Valerie

Cleaning Up the Peace

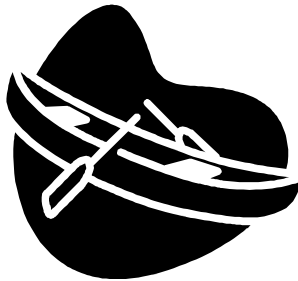
Keep Polk County Beautiful is looking for volunteers for a cleanup on the Peace River beginning at 8 am on June 18th.

Safety vests, gloves, trash bags and reporting forms will be provided.

The cleanup will begin at the Fort Meade Outdoor Recreation Area and end at Camp Wilderness, just south of Fort Meade.

Canoes and kayaks will be available while supplies last to those who preregister.

Details: 863-533-8423



A Piece on the Peace

Hope you got a chance to go fossil hunting while the river was low enough at the end of May. The rains that moved in on May 30th sent the levels back up. Keep your finger crossed that it doesn't go too high.



Smithsonian Web Site

Smithsonian Museum of Natural History has opened a Paleo Art Web page featuring years of artwork from its collections. The presentation is aimed at

anyone interested in scientific illustration, from beginners to advanced artists. You can find it at www.nmnh.si.edu/paleo/paleoart.

Books

To all of my friends who hunt fossils or who are themselves fossils:

My latest book "Giants in the Storm" has just been released. It's 263 pages long with close to 800 photos. Find out why over 2,000 bones and teeth of mammoths, mastodons, sloths, llamas, horses, peccaries, sabertoothed cats, birds, turtles, tortoises and alligators all ended up buried in a small area about the size of a baseball diamond.

Don't forget, if you haven't purchased "Megalodon: Hunting the Hunter", or my warped paleo tall tale, "Doug's Ark: Thinking Outside The Pile", they'll look so much better on your bookshelf than mine.

In fact, if you buy any two books, shipping is free.

To view the books, go on-line at <http://www.paleopress.net>. Ordering information is there.

Hurricane season begins in a few weeks...we'll still be running fossil trips on the less windy days!

Any questions, give me a holler!
Top regards, Mark Renz

Kids' Fossil Blast

Does the sight of sabertoothed cat skull get you excited? Well be prepared for lots of excitement when we look at carnivore (meat eater) fossils at the June Kid's Fossil Blast. It will be held at the Edgewater Library at 6:00pm on Wednesday, June 15th before our regular club meeting.

June Fossil Auction

N - new members J - junior members

1. Dean Quigley print
2. Withalakoochee coral
3. Sulphur crystals
4. Indian trade beads in case
- N 5. Belemnite in matrix
- J 6. Yellow, blue & green calcite
7. "Meglodon" book autographed by Mark Renz
8. Copper mineral specimen
9. Amethyst crystal
10. Sand tiger shark jaw
11. Carved stone turtle
12. Glass dolphin
13. Lepidolite - purple mica crystal
14. Polished belemnites
- N15. Dinosaur book donated by Marsha Wright
- J16. Dinosaur coloring book donated by Marsha Wright
17. Dean Quigley print
18. Megladon tooth cast
19. "Dinosaurs to Dodos" book donated by Marsha Wright
20. Withalakoochee coral
21. Petrified wood donated by Paul Bordenkircher
22. Louisiana petrified wood donated by P. Bordenkircher
23. Four mineral slabs donated by P. Bordenkircher
24. "Florida Fossil Mammals" poster donated by Wiley Dykes
25. Pre-machine bottle donated by Roy Singer
26. Framed picture of club camp out donated by Grant Groves
27. Another picture
28. And one more picture

Summer Cook Out and Picnic



Sunday, July 24th from 1:00 pm to 5:00 pm

Our July event instead of a meeting will be a get together at Dave Dunaway's house. Hamburgers and hotdogs and the fixings will be provided. Please bring a covered dish and any drinks you might want. Also please bring a folding chair or two.

Dave has a pool so you can bring your swimsuit and cool off. He also has a really neat display of fossils in his house to look at. Of course bring any fossils to show off to the rest of us. We always like to see what people have found.

Directions: I-4 to SR 434. Go west on 434 and then turn north on Markham Woods Rd. At light, turn right onto E.E. Williamson Rd. and turn right at the first street, Ferne Dr. Go to almost the end of the street. Dave's house will be on the left (601 Ferne Dr., Longwood)

Florida Fossil Hunters News

Stegosaur Spikes Just for Looks, Dino Experts Say

by Michael Schirber
LiveScience Staff Writer
LiveScience.com

Submitted by Sharon Reagan

Scientists sometimes gravitate to the strange even when simpler explanations are available. Take the Stegosaurus, for example, whose spiky outfit was thought by some to be a defensive array.

The plates that lined the backs of this oddly adorned dinosaur may have had no other function than to help them identify each other, like the colorful feathers on birds, scientists said today.

Stegosaurus lived during the Jurassic period, about 210 to 144 million years ago. The most recognizable species, *Stegosaurus stenops*, was 20 feet long and had rows of plates down its back. Other stegosaurus had spikes instead of plates, or a combination of the two.

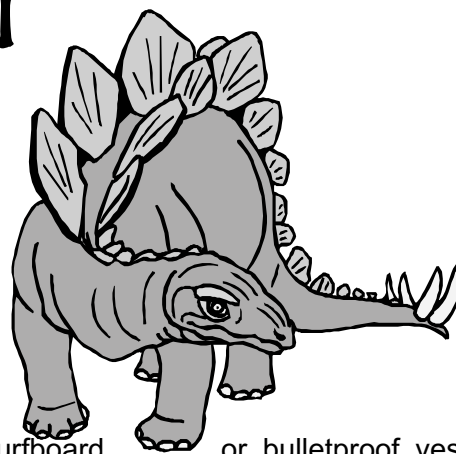
A team of paleontologists has analyzed plates from the fossil record, ruling out some of the previous explanations given for this distinctive feature.

"When people see bizarre structures, they always want to give them bizarre functions," said Russell Main from Harvard University.

The bony plates, called scutes, had been thought to protect these herbivores from attacks from predators like the ravenous *Allosaurus*, but the fin-shaped appendages apparently would not have been strong enough for the job.

"These plates wouldn't offer much protection - they consist of a layer of dense bone surrounding a latticework of bone that would be like biting through a sandwich," said Kevin Padian of the University of California, Berkeley.

Not that dinosaurs couldn't make protective gear. The ankylosaurs had club-like tails that were light and



strong as a surfboard or bulletproof vest, a recent study found.

Another theory had the plates acting as heat exchangers, like the ears of an elephant. On hot days their large surface area could have radiated heat away to cool the beast. This hypothesis was justified by the existence of large blood vessels that left tracks through the bone.

But the new study found that the blood vessels were all dead ends, which argues against thermoregulation.

Large vessels are common in the horns and antlers of many living animals. These skull appendages are not meant for heat exchange - the big "pipes" instead supply the blood needed for fast growth. This may be the reason for stegosaurus' large vessels, as well.

The researchers argue that stegosaurus plates served no other purpose than to tell species apart. Other peculiar dinosaur adornments - like the horns of triceratops, the domes of the pachycephalosaurs, and the crests of the duck-billed hadrosaurs - may also fall into this category of mere decoration.

The results will be published in the spring issue of the journal *Paleobiology*.

Visit www.LiveScience.com for more daily news, views and scientific inquiry with an original, provocative point of view. LiveScience reports amazing, real world breakthroughs, made simple and stimulating for people on the go. Check out our collection of Image Galleries, Interactive Features, Trivia and more.

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 held the third Wednesday of each month at 7:00pm, Lee Middle School Cafeteria (Maury Road, two blocks West of Edgewater Drive, Orlando).

Officers:

President	Dave Dunaway	(407) 786-8844
Vice President	Paul Bordenkircher	(407) 687-3843
Secretary		
Treasurer	Sara Morey	(407) 834-0281

Chairs:

Education	Melissa Cole	(407) 834-5615
Field Trips	Shelley Zimmerman	(407) 891-1260
Fossil Fair	Valerie First	(407) 699-9274
	Sharon Reagan	(407) 246-8848
Fossil Auctions	Dave Dunaway	(407) 786-8844
Fossil Bucks	Dave Dunaway	(407) 786-8844
Fossil ID Table	Andreas Kerner: intlfossils@msn.com	
Fossil Lotto	Ed Metrin	(407) 321-7462
Auctioneer	Roy Singer	(407) 645-0200
Historian	Valerie First	(407) 699-9274
Librarian	Bob Angell	(407) 277-8978
Membership		
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:

Dave Dunaway	(407) 786-8844
Jeremy Smith	(407) 293-9391
Roy Singer	(407) 645-0200
Ed Metrin	(407) 321-7462
Tom Tomlinson	(407) 290-8474

Florida Fossil Hunters
Membership Application

Names: _____

Associate Members: _____

Associate members are people in the same household, included at no extra charge, 2 adult votes per household.

Address: _____

City: _____

State: _____ Zip: _____

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

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 messages in the e-mail or in Microsoft Word files (*.doc).

Dinosaur Found That Turned Vegetarian

Submitted by: Sharon Reagan

May 09, 2005

NEW YORK - Caught in the act of evolution, the odd-looking, feathered dinosaur was becoming more vegetarian, moving away from its meat-eating ancestors. It had the built-for-speed legs of meat-eaters, but was developing the bigger belly of plant-eaters. It had already lost the serrated teeth needed for tearing flesh. Those were replaced with the smaller, duller vegetarian variety.

"I doubt seriously this animal could cut a steak with that mouth," said Utah state paleontologist James Kirkland, one of those describing the animal, based on bones found in east-central Utah.

The scientists dubbed it *Falcarius utahensis*. Bones from hundreds or maybe thousands of these dinosaurs were discovered at a two-acre dig site south of the town of Green River. Nobody knows why they gathered there or what killed them, Kirkland said.

It ate plants, but its bones show the transition from its carnivorous ancestors while still in progress.

All plant-eating dinosaurs were ultimately descended from a meat-eater, and switchovers to plant-eating occurred several times. The newly discovered species, which lived 125 million years ago, could help scientists understand details of how the changeovers took place.

It's "our first really good case of a dinosaur in the midst of shifting from the meat-eating body to a plant-eating one," said an expert not involved in the discovery, Thomas R. Holtz Jr. of the University of Maryland.

"It's definitely eating a substantial amount of plants, (but) we still see the original imprint of meat-eating upon it."

The creature, with 13-centimeter (5-inch) claws on its outsized hands, measured some 3 1/2 meters (12

feet) from its snout to the tip of its long skinny tail. It stood just about 1 meter (just over 3 feet) tall at the hip and could apparently reach about 1.5 meters (5 feet) off the ground with its long neck to munch leaves or fruit, said Kirkland.

He describes the creature in Thursday's issue of the British journal *Nature* with Lindsay Zanno and Scott Sampson of the Utah Museum of Natural History at the University of Utah, among others.

Analysis revealed that *Falcarius* was the earliest known member of a bizarre-looking group of plant-eaters called therizinosaurs (pronounced THAY-rih-ZY-no-sores.) Found mostly in Asia, the barrel-bodied creatures waddled upright like Godzilla or "a pot-bellied bear," Kirkland said.

Falcarius, very early in its evolution into the therizinosaur body type, retained the rather horizontal posture and powerful legs of its meat-eating ancestors. And its teeth were more suited for eating plants, Zanno said.

It also showed some change toward the larger gut needed to digest plant material rather than meat, as well as a lengthened neck and smaller head associated with eating plants, she said.

Holtz said *Falcarius* still had fairly slender proportions overall rather than the barrel body of later therizinosaurs. "This one could probably move fairly quickly," he said, whereas its more evolved relatives "would have had problems hunting things faster than a tree."

Kirkland and Zanno said they suspect *Falcarius* probably ate some meat in addition to plants.

"I wouldn't doubt this thing would eat a lizard or two in a pinch," Kirkland said.

Mark Your Calendar

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See you in August

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Visit our website www.floridafossilhunters.com

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

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