

NEWS

Florida Fossil Hunters



Volume 15, Number 1

January 2005

Prez Sez.....

Prez Sez

I hope all of you had a good Christmas and New Year's.

Our field trip this month will be to the Vulcan Mine on Saturday, January 29th. On Sunday, February 6th, we will go to the Peace River and go to Ruck's Pit the last weekend in February. (details can be found inside the newsletter).

Our guest speaker at our meeting this month on January 19th will be Dr. Bruce McFadden from the University of Florida and Museum of Natural History. He will be talking on the relationship between amateur and professional fossil collectors and how we can work together.

It is time to renew your membership for 2005 if you haven't already renewed. If you donated items for our December auction, I will have your fossil bucks at the meeting.

See you at the meeting.
Dave Dunaway

Happy New Year
2005

Coming Events

January 19th
7:00 pm Meeting
Bruce McFadden, Speaker

January 29
Vulcan Mine Field Trip

February 6th
Peace River Field Trip

February 16th
6:00pm Kid's Fossil Blast
7:00pm Meeting

February 26-27th
Ruck's Pit Drum

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Florida Fossil Hunters News

Fragments

Tampa Bay Fossil Club will have their 18th annual Fossilfest on Saturday, March 12th and Sunday, March 13th, at the Florida State Fairgrounds at I-4 and Hwy. 301 in Tampa.

December Auction

The December Auction was a big success - lots of fossil bucks were spent. The total came to \$111,450.00!

Volunteers Needed!

Museum of Discovery and Science in Ft. Lauderdale.

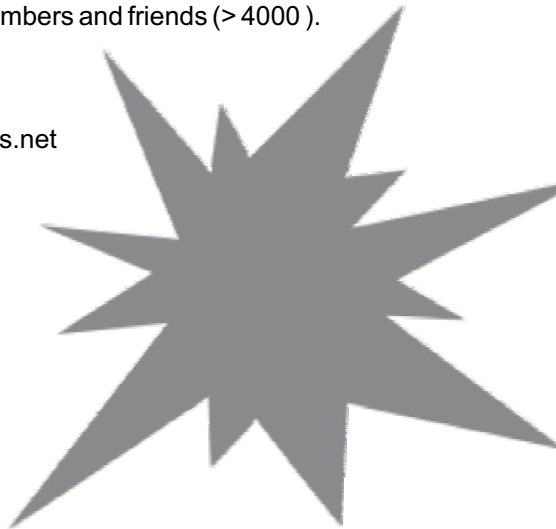
My name is Hi Bleecker, staff physicist at the Museum of Discovery and Science in Ft. Lauderdale. In May we are going to open a new IMAX film on dinosaurs. I heard that you were also interested in educating the public about fossils and paleontology, so I thought that your organization might be willing to put on an exhibit or display at the museum. The exhibit doesn't have to be anything very elaborate, bones, fossils, short talks etc. We ordinarily get several thousand people thru here a week so it would be good publicity.

The film will open May 28. The time and days for our guest exhibitors are very flexible, but weekends are when we draw the biggest crowds would be best. If you are interested I would appreciate hearing from you within the next week if possible, so that we can include your organization in our mailing to our members and friends (> 4000).

Hiram Bleecker

954.712.1162

bleeckerh@mods.net



The club still needs volunteers for
Secretary
Board Members and
Fossil Fair Chairperson

2005 is HERE! It's time to renew your club membership. Fill out the form so we can make sure all your information is current and make a check out for \$17.00 to Florida Fossil Hunters. You can mail it or bring it to the meeting.

Club T-Shirts

Here is a list of the number of t-shirts we still have available.

Horse - TAN - six XL

Shells - GRAY -two 3X

Florida River - BLUE

two M, nine L, three XL, one 3X

We will have these at the January meeting if you would like to purchase one or more. Bonnie Cronin

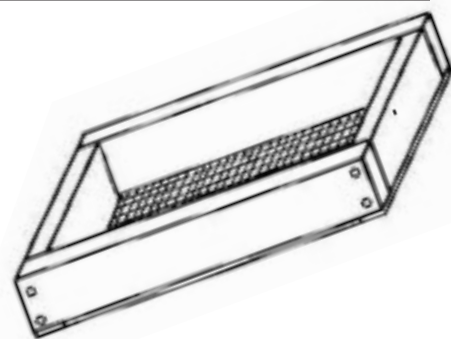
Kids' Fossil Blast

The kids had a great time learning about extinct ground sloths at the meeting in December. They got to compare skulls from different types and Zach from the Museum in Daytona Beach brought more stuff for them to look at and also explained a lot about how they walked, hunted for food and lived.

The next meeting will be on Wednesday, February 16th, at 6:00 pm in the cafeteria at Lee Middle School before our regular meeting.

Field Trips

Start the year off with a dig...



Vulcan Mine, Brooksville

When: Saturday, January 29th at 8:45 am. Meet at the gate.

Directions: Hwy. 50 west to Brooksville. Take Hwy. 98 north for a few miles and Vulcan Mine will be on your left.

Take buckets, small containers for fragile fossils, trowels or shovels, and hammers. Bring water and food. Wear sturdy shoes. This is shallow digging and surface collecting. Children are permitted but they must stay with an adult and be supervised. Some of the areas have very sharp rocks and some of the hills are steep. Most kids love the experience.

What we find" echinoids, sand dollars, chert, and the occasional shark tooth or bone.

Peace River, Gardner

When: Sunday, February 6th

Where: The ramp at Gardner

Directions Take Hwy. 17 south. Cross the Peace River at Zolfo Springs and keep going south. Go past the golf course till you see the sign/symbol for an airport (Gardner). Turn right on the graded dirt road across from the airplane sign. The ramp is at the end of the road.

What you'll need: Clothes and shoes that you can get wet in plus dry clothes to change into. The water is cold so dress as warmly as possible. (wet suit or panty hose and jeans, i.e.) Bring fanny packs, shovels, screens with flotation devices, rope to tie screen to you, containers for small and large fossils, drinks and food, etc.

The water is shallow at the ramp so you can hunt there even if you don't have a canoe. Those with canoes can opt to hunt further upstream. The current has been strong so it's best to have a motor.

What can be found: Lots of shark teeth! Also mammal and reptile teeth and bones, fossilized wood, and lots of neat fossils from Miocene to the present.

Ruck's Pit, Ft. Drum

When: Saturday, Feb. 26th and possibly Sunday, Feb. 27th

Cost: \$15 or \$20 dollars per person (Shelley will have info later)

Directions: Take the turnpike (or Hwy.441 south) to Yeehaw Junction. Take 441 south to Ft. Drum. There is a convenience store on the left and soon after that, turn left onto road marked with Crystal Mine sign. Check with Shelley for name of the road.

You will need: Shovels, rock hammers, screens if you want to look for shark teeth or other fossils. buckets and containers and stuff to wrap fragile fossils or shells. Bring drinks, food (Eddie Rucks is supposed to have one of his barbeques that weekend and I've heard it's very good), sturdy shoes that can get muddy, hat, etc.

The hunting is on the surface and shallow digging for the shells. Some of the digging can be very hard if you're trying to get a big crystal shell out of the rock and some people bring large picks. Children can come but you have to keep a close eye on them. This is a working shell pit and the walls can be very steep and the water is deep in places. Kids do love to find the crystals though.

What can be found: Clam and gastropod shells with calcite crystals, fossilized shells, some shark teeth and other fossils.

You can sign up for these trips at the meeting in January or February. If you have questions, call Shelley Zimmerman at 407/891-1260.

Future Field Trips:

Gatorland in April, the annual campout and fossil hunt on the Peace River in May, the Brevard Zoo sometime..... info will come later.

Shelley Zimmerman and Valerie First are planning a trip to the Mount Ida quartz mines in Arkansas from March 31st to April 3rd. Anyone interested in joining them should contact Shelley Zimmerman at 407/891-1260.

When Earth Turned Bad:



New Evidence Supports Terrestrial Cause of End-Permian Mass Extinctions

ScienceDaily Magazine
Geological Society Of America
December 8, 2004

Two hundred and fifty million years ago, ninety percent of marine species disappeared and life on land suffered greatly during the world's largest mass extinction. The cause of this great dying has baffled scientists for decades, and recent speculations invoke asteroid impacts as a kill mechanism. Yet a new study published in the December issue of *Geology* provides strong indications that the extinction cause did not come from the heavens but from Earth itself.

An international team of scientists led by Christian Koeberl from the University of Vienna studied rock samples taken from deep in the Carnic Alps of southern Austria and the western Dolomites in northeast Italy. Their findings promise to fuel what is already one of the hottest debates in earth science.

"Our geochemical analyses of these two famous end-Permian sections in Austria and Italy reveal no tangible evidence of extraterrestrial impact," said Koeberl. "This suggests the mass extinction must have been home-grown."

Layers of rocks contain a chemical testimony of environmental change through time. Asteroids and comets are chemically different from the Earth and when these objects arrive they leave a tell-tale chemical fingerprint in the rocks.

With the help of colleagues from the USA and UK, Koeberl confirmed the presence of the element iridium in the samples. Iridium is abundant in asteroids, comets, and other extraterrestrial material.

However, the amounts found were very small compared to those associated with the asteroid impact that many scientists believe killed off the dinosaurs 65 million years ago. At the same time, the team found no traces of the extraterrestrial isotopes helium-3 and osmium-187, commonly associated with impact events.

What the team did find, however, was evidence of purely terrestrial processes at work. According to Koeberl, "The slight concentrations of iridium may have been deposited by sluggish oceans when atmospheric carbon dioxide levels were high and seawater oxygen levels were low. The source of the carbon dioxide was probably volcanic activity."

Large areas of Earth's crust can be split by volcanic activity to create space in which oceans form. When it comes to cracking continents, however, breaking up is very hard to do. At the close of the Permian, one such failed attempt at ocean forming led to massive volcanic activity in the heart of present day Siberia. Emissions flooded the atmosphere leading to changes in climate and patterns of oceanic circulation.

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URI Researcher Shows that Dinosaur Extinction Occured at Peak of Diversity

KINGSTON, R.I. -- November 17, 2004 -- When dinosaurs became extinct from the effects of a massive asteroid hitting Earth 65 million years ago, there were more varieties of the reptiles living than ever before, according to a new analysis of global fossil records by a team of researchers led by a University of Rhode Island paleontologist.

"Our analysis finally lays to rest the old, utterly unsupported idea that dinosaurs were declining in diversity during the last 10 million years of their time on Earth," said David Fastovsky, URI professor of geosciences.

Fastovsky's analysis, published in the October issue of *Geology*, found that early dinosaurs from the late Triassic period comprised only 40 known genera, but diversity dramatically increased throughout the time dinosaurs were on Earth, skyrocketing in the Cretaceous period -- 99 to 65 million years ago -- when at least 245 dinosaur genera lived.

"Dinosaur diversity was increasing logarithmically throughout their 160 million years on Earth," said Fastovsky, who is conducting research at the National Autonomous University of Mexico through July 2005 as a

Fulbright Scholar. "Their increasing diversity seems to have been fueled by the evolution of new innovations that allowed them to explore new habitat."

According to Fastovsky and his co-authors, early dinosaurs tended to be unspecialized, but during the late Cretaceous period they became much more specialized in their feeding and behavior patterns, driving their evolution into more and more genera. The diversity of plant-eating dinosaurs in the Cretaceous period was found to be especially high.

"The ability to colonize heretofore unavailable ecospace by the invention of new feeding mechanisms and behaviors may have been a key driving force in the striking and continuous Jurassic-Cretaceous dinosaur diversification," the researchers wrote in *Geology*.

Earlier studies, based almost entirely on North American dinosaur records, suggested a drop in dinosaur diversity in the 10 million years leading up to their extinction. Fastovsky's conclusions are drawn from his analysis of a new database of global dinosaur records, which shows that much of the diversity of dinosaur genera is found in fossils unearthed in Asia and South America.

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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, Le Middle School Cafeteria (Maury Road, two blocks West of Edgewater Drive, Orlando).

Officers:

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

Chairs:

Education Melissa Cole (407) 834-5615
 Field Trips Shelley Zimmerman(407) 891-1260
 Fossil Fair

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

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

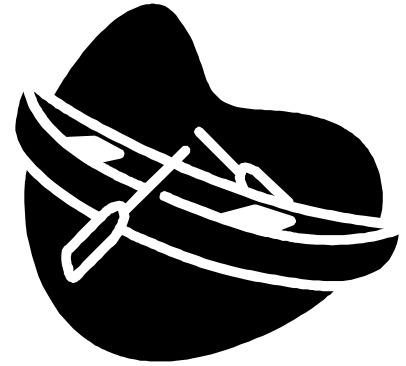
Newsletter Policy

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).

On a piece of the Peace

The weather was warm and Russell had some vacation days so we just couldn't resist the call of the River any longer. The first day we put in at Wauchula where the boat ramp is completely underwater and we motored upstream. The second day we started at the Bowling Green bridge and went downstream. The current is still very strong - I wouldn't want to even try to paddle upstream. We did find some places to dig close to the shore out of the faster current and of found enough fossils to make the effort worth it. There are trees and branches in the river but it is navigable so those of you willing to put up with the cold water and fast current can go dig at the Peace again.

Bonnie



When Earth Turned Bad: New Evidence Supports Terrestrial Cause of End-Permian Mass Extinctions (cont'd)

"Our findings support the view that evidence for an extraterrestrial impact event during this time period is weak and inconsistent," said Koeberl. "At the same time, they suggest that widespread volcanic activity may have been the 'smoking gun,' quite literally, that wiped out much of life on Earth."

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"Geochemistry of the end-Permian extinction event in Austria and Italy: No evidence for an extraterrestrial component," *GEOLOGY*, December 2004, v. 32, no. 12, p. 1053-1056.

*Christian Koeberl, Dept. of Geological Sciences, University of Vienna, Vienna, Austria

*Kenneth A. Farley, Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA, USA

*Bernhard Peucker-Ehrenbrink, Dept. of Marine Chemistry and Geochemistry, Woods Hole Oceanographic Institution, Wood Hole, MA, USA

*Mark A. Sephton, Planetary and Space Sciences Research Institute, Open University, Milton Keynes, UK

GEOLOGY is a publication of the Geological Society of America.

URI Researcher Shows that Dinosaur Extinction Occured at Peak of Diversity (cont'd)

Fastovsky also believes that searching for more dinosaur fossils -- though there are likely many more to be found -- will shed little new light on this subject. Instead, he said his

analysis suggests that "a more useful approach to understanding the dynamics of their evolution would be to more precisely date the ones that we already know about."

Mark Your Calendar

January 19th

7:00 pm Meeting: Bruce McFadden, Speaker

January 29th: Vulcan Mine Field Trip

February 6th: Peace River Field Trip

February 16th:

6:00pm Kid's Fossil Blast and 7:00pm Meeting

February 26-27th: Ruck's Pit Drum

Visit our website www.floridafossilhunters.com

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

Florida Fossil Hunters

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Florida Fossil Hunters News