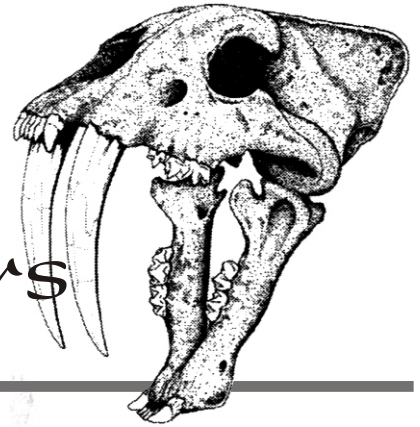


NEWS

Florida Fossil Hunters



Volume 15, Number 9

October 2005

Prez Sez.....

I'm looking forward to seeing all of our old friends at the fair...dealers, club members and visitors. I'm also eagerly anticipating meeting the new vendors who have joined us this year. If you haven't signed up to volunteer yet, call Sharon and tell her what day and time you can help out. All of you always have made this fair a great experience with your work and enthusiasm and I'm sure this year will be no exception.

Zach Zacharius will be giving a power point presentation on the Daytona Museum's sloth during our fair. Be sure to catch it. It's one of the great stories about Florida paleontology.

Don't forget to help set up or just stop by on Friday evening for our Fair Pizza Party. It's a fun way to kick off our Fossil Fair.

We have several field trips coming up so check the newsletter and the website for details.

At our October meeting we'll be sharing the ways we display our fossils covering methods and materials. Be sure to bring examples of how you show off your finds including pictures of the displays in your homes. All of us are always looking for new ideas.

And of course, bring in your new fossil and mineral finds. We love to see them.

See you at the Fossil Fair and the Meeting.

Dave Dunaway.

2005 Fossil Fair
October 15 & 16

Coming Events

Florida Fossil Hunters 2005 Fossil Fair

October 15th & 16th
Central Florida Fairgrounds
(See the flyer on page 3 for more details)

October 19th
6:00pm Kid's Fossil Blast
7:00pm Meeting

October 22: Information Fair
Main Library

November 5: Vulcan Field Trip

November 16: Club Meeting

November 26: Aurora Field Trip

December 3: Imperial Bone Valley
Tailgate Rock & Gem Show

October 11 - December 17 Florida
Museum of Natural History Dig

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Fragments

The Imperial Bone Valley Gem, Mineral & Fossil Society will have a "Tailgate Rock and Gem Sale" on Saturday, December 3rd from 8 am to 4 pm. There will be rocks, fossils, gems & Jewelry for sale, hourly door prizes, and activities for kids. Admission is \$3.00 for adults and \$2.00 for children under 14.

It will on N. Carroll Rd. between Lakeland & Auburndale, 1/2 mi. west of toll road 570, exit 17 just off 92 near Old Dixie Hwy.follow the signs. For more information, call 863-428-1214 or 813-754-1584 or 863-858-1846.

Orange County Information Fair The Main Library in downtown Orlando is having an information fair highlighting Central Florida history and geology on Saturday, October 22 from 12 noon to 2 pm. I will set up a table for our club. Any of you that would care to join me are welcome. Take advantage of this opportunity to find out resources to explore the history and geology of our region.

A Piece on the Peace

Dust off those canoes and sifters! The Peace River is low enough to find some areas to fossil hunt in providing we don't have another deluge from a tropical storm.

The reading at the Zolfo Springs station is almost to 7 ft. as of October 5th and it's sure to be lower by the time you get this. To check the depth yourself go to http://waterdata.usgs.gov/fl/nwis/uv/?site_no=02295637&PARAMeter_cd=00065,00060

For those of you that haven't fossil hunted in the Peace River before, you're in for a real treat. Fossils of all types from the Miocene to the near present can be found there: Mammoth, camel, horse, bison, turtle, tapir, sloth, armadillo, glyptodont, alligator and LOTS of shark teeth, to name just a few. You can take a canoe (there are several canoe rental places along the Peace River) and paddle downstream or upstream until you find an area low enough to stand in that has gravel and you will find fossils. Some people scuba dive or snorkel but most of us just use a floating sifter tied to us and shovel in the gravel and look for the fossils. It's fun and the Peace River is a wonderful place to enjoy nature with lots of birds and turtles and other animals.

Just take Hwy. 17 south out of Bartow and put in at Bowling Green or Wauchula or Zolfo Springs or Arcadia. Happy hunting.



P.S. I guess I spoke too soon.....the river is going back up in response to all the rain on the 5th and 6th. Just keep checking the depth and be ready to go when it gets low enough.

Fossil Fair 2005

"Are You Ready For Some Rock & Roll?"

It's Fossil Fair time! "Roll up your extension cords and bring them to set-up on Friday". "Get your fossils ready for the kid's pit and your Rocks for the silent auction". Starting around 3 pm we are going to have a Rock and Roll Sock Hop working party for the Fossil Fair set-up and pizza afterwards. We'll be playing all your favorites from the 50's & 60's. Bring your fossils for the kid's pit, extension cords, an extra ice chest, saved bags and items to donate to the silent auction. Don't forget your covered dish or food (or soda) items for the potluck luncheons on Saturday and Sunday. There is water and an ice machine in the side room, but no refrigerator. We'll have coffee and tea available. You can leave your poodle skirt at home and just wear your fossil shirt "pedal pushers" and "levi's", put your hair up in a pony tail or a duck tail and come and join us at the fairgrounds.

Fossil Fair Activities

Be sure to enjoy the Fair. There will be a lot going on during the show. In addition to all the really cool things the vendors will have check out:

Zach's Sloth Power Point presentation

A free raffle each day (see the free ticket on your flyer)

The big raffle

Win a jar of crystals by guessing the amount (provided by Shelley Zimmerman)

Silent Auction

Sloth displays

and of course, the ever popular Kid's Dig Pit

Kids' Fossil Blast

This month we will be learning about fossil sharks from the tiny to the gigantic!

So bring your curiosity and your shark stories to our meeting at 6 pm on Wednesday, October 19th.

The Kids' Fossil Blast is a fun, hands-on way to find out about fossils for kids mainly ages 4 to 14 yrs. Each meeting we focus on a different type of fossil using real fossils and replicas and printed materials. Sometimes the kids get to take a fossil home. We meet every other month at 6 pm in the cafeteria at Lee Middle School before our regular club meetings.

Bonnie Cronin

Big Game Hunters, Not Climate Change, Killed Off Sloths

University of Florida
August 08, 2005

GAINESVILLE, Fla. -- Prehistoric big game hunters and not the last ice age are the likely culprits in the extinction of giant ground sloths and other North American great mammals such as mammoths, mastodons and saber-toothed tigers, says a University of Florida researcher.

Determining whether the first arrival of humans or the warm-up of the American continent at the end of the last Ice Age was responsible for the demise of prehistoric sloths has puzzled scientists because both events occurred at the same time, about 11,000 years ago. But by using radiocarbon to date fossils from Cuba and Hispaniola, where humans appeared later than on the North American continent, long after the last Ice Age occurred, UF ornithologist David Steadman was able to separate the two events.

He and his colleagues found the last record of West Indian ground sloths coincided with the arrival of humans 4,400 years ago. The results are published in a Proceedings of the National Academy of Sciences paper this week.

"If climate were the major factor driving the extinction of ground sloths, you would expect the extinctions to occur at about the same time on both the islands and the continent since climate change is a global event," Steadman said.

Gary Haynes, anthropology professor at the University of Nevada, Reno, said Steadman's study "clearly shows that ground sloth extinctions in the New World didn't happen after serious changes in climate or vegetation -- and that the first appearance of humans must have been the decisive factor."

The fossil record shows the people who arrived in North America were making sophisticated tools out of stone, bone and ivory, Steadman said. These "big-game hunters" had a traumatic effect on the animals living there, he said.

More than three-fourths of the large species of mammals that roamed the North American landscape became extinct within a few thousand years, which, besides ground sloths, included mammoths, mastodons, saber-toothed tigers and giant bears, Steadman said.

"It was as dramatic as the extinction of the dinosaurs 65 million years ago," he said.

By understanding when, and to some extent how, ground sloths became extinct, scientists may be able to determine

the biological potential of an area for restoration if human contact could be eliminated, such as in a national forest, a national park or an island, Steadman said.

"I'm not a Steven Spielberg type in that I don't believe that DNA would bring these things back," he said. "But in lieu of Jurassic Park, I think we can come up with sound ideas using the nearest living relatives. For example, we might want to consider taking living tree sloths and introducing them to protected forested areas on Cuba or Hispaniola." While the largest of the prehistoric ground sloths grew to the size of a modern elephant and fed on bushes and the leaves of lower branches of trees, today's only surviving descendants are several small tree sloths whose range extends from southern Mexico to southern Brazil, he said.

Such an experiment might be similar to the one that involved restoring bison, once native to Florida, to Paynes Prairie Preserve State Park near Gainesville, Steadman said. "With the work we're doing, especially on islands, to reconstruct which kinds of plants and animals -- particularly birds and mammals -- used to live there, we can open up possibilities for restoring parts of these islands to something near their original condition," he said.

The only reason the living species of sloths survive is that they live high up in trees, where their green-algae-colored fur camouflages them, Steadman said. "God save the sloth that comes down to the ground because usually somebody is there to kill it," he said.

For the study, Steadman sent samples from the large collection of ground sloth skeletons at the Florida Museum of Natural History on the UF campus, to Paul Martin, a professor emeritus of geosciences at the University of Arizona, for radiocarbon dating.

Steadman said he was not surprised to find that humans were more significant than changes in climate because most species of plants and animals can adjust to changes in temperature. However, the transition between the glacial and inter-glacial period, which resulted in shifts in habitat and the ranges of plants, may have made animal species more vulnerable than they otherwise would have been, he said.

"This is the first time it's been demonstrated for West Indian ground sloths, and West Indian ground sloths are sort of the poster child of big extinct West Indian mammals," he said. "I think this will go a long way to finally put to rest this whole idea that large extinct animals from the West Indies died out in the Ice Age during the Pleistocene Epoch."



2005 Annual Fossil Fair



Presented by Florida Fossil Hunters

Focusing on the Xenarthra group – Giant Ground Sloths, Armadillos, & Anteaters.



Learn about these amazing prehistoric creatures!
Educational Displays,
Dealers selling fossils, artifacts, gems & minerals, Raffles & Silent Auctions

Kids Dig Pit \$.50
Find your own fossils!

Free Raffle Ticket! Code 963
 Code: _____
 Name: _____
 Address: _____

 City, ST, Zip Code: _____

 Telephone: _____
 E-mail: _____

Oct. 15th & 16th
Central Florida Fairgrounds
Exhibit Building A

Sat—9:00 am to 5:00 pm

Sun—10:00 am to 4:00 pm

For Only \$3.00 adult & \$ 1.00 child

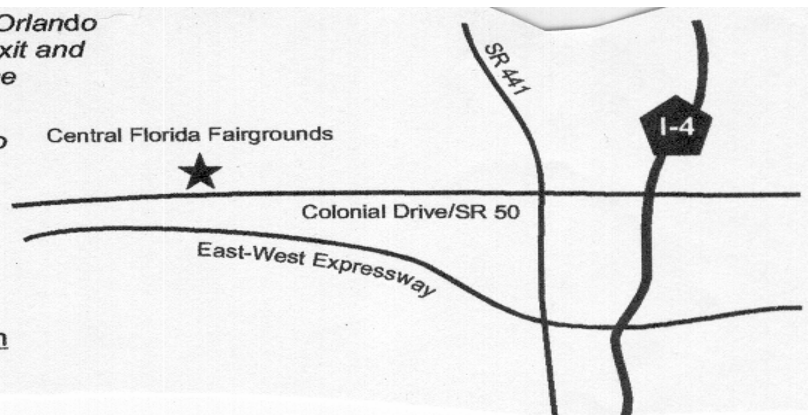
For more information visit:

www.floridafossilhunters.com

From Tampa (I-4) - Take I-4 all the way into Orlando and then take the Colonial Drive (Hwy. 50) exit and go westbound. The fair grounds will be on the right side just past Mercy Drive.

From Daytona (I-4) - Take I-4 all the way into Orlando and then take the Colonial Drive (Hwy. 50) exit and go westbound. The fair grounds will be on the right side just past Mercy Drive.

For more information visit online at www.floridafossilhunters.com or e-mail us at info@floridafossilhunters.com



Field Trips

Hopefully, we'll have info about 4 field trips: Ruck's, Aurora, Vulcan & Hubbell's. Here is the info for two of them.

Ruck's Pit - Fort Drum Crystal Mine

Saturday, Nov. 12th and Sunday, Nov. 13th from 8 am to 5 pm

Fee: \$20.00/day per adult, \$8.00/day per child (15 and under) Minors must be accompanied by an adult at all times.

What you find: fossil shells, calcite crystals, and occasionally shark teeth and vertebrate fossils

You will need: shovels, rock hammers, buckets and materials and containers to wrap fragile specimens in. Long pants, sturdy shoes/boots, gloves and protective eyewear are recommended. Of course wear a hat and sunscreen. Expect to get muddy and bring a change of clothes. You'll need lots of water and your own food.

The hunting is on the surface and shallow digging for the calcite shells. Some of it can be very hard if you're trying to get a crystal shell out of the rock and some people bring picks. This is a working shell pit and the sides can be steep and the water is deep in some places so exercise caution and keep a close eye on those kids.

Directions: South on the Florida Turnpike or Hwy. 441 to Yeehaw Junction. South on 441 to Ft. Drum. Turn left and go east on 304th St. after about 3 mi. you will see the entrance to the mine on your left. There will be people to collect the money and liability waivers.

For more information, you can contact Eddie Rucks at 863-634-4579 or go to fortdrumcrystalmine@yahoo.com

Vulcan Mine, Brooksville

When: Saturday, November 5th at 8:45 am

Meet at the gate and come a little early so that you can sign the release form.

Directions: Hwy. 50 west through Brooksville. Take 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 rock hammers. Bring food and water. Wear sturdy shoes and don't forget a hat and

sunscreen. This is surface collecting and shallow digging. Children are permitted but they must be with an adult at all times. Some of areas have sharp rocks and some of the hills are steep. Most kids love the experience of being in a huge mine with dirt piles. Fossils are just icing on the cake for them.

What we find: echinoids, sand dollars, chert (the material the Indians used to make arrowheads) and the occasional bone or shark tooth.

There will be a sign-up sheet at the Fossil Fair and at the October meeting.

If you further information, call Bonnie at 352-429-1058 or email bjrb48@netzero.com

Aurora, NC Phosphate Mine

Saturday, November 26, 2005, 8:00 AM

There are six slots open for the club trip to the phosphate mine on Saturday, November 26th. It is approximately 12 hours from Orlando.

There will be a trip into the Aurora, NC, phosphate mine on the Saturday after Thanksgiving. There are also several other fossilizing places nearby that are available to make it a longer fossilizing weekend. For those unfamiliar with Aurora, it is the place famous for large megalodon shark teeth, among other things.

Requirements include steel-toed boots, hard hats (some may be available there), long pants, no tank tops and you must be over 18 and have a photo ID. You will be taken into the mine by bus and brought out at about 3:00 PM. There is a wonderful museum in Aurora along with piles of material from the mine to search through.

If there are any questions, please call or E-mail me for more information.

Marge Fantozzi= Phone- 407-295-3891

E-mail- mfantozzi@aol.com

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:	intlfoossils@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

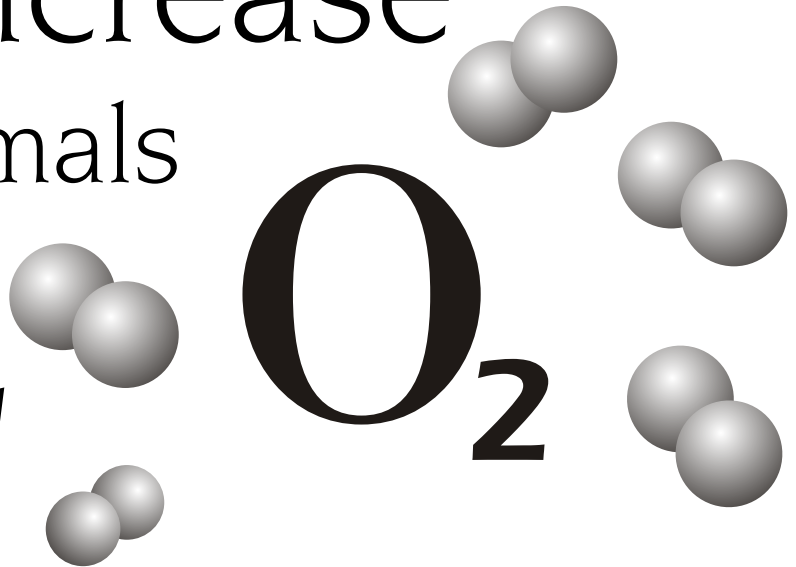
Post Office Box 540404

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).

Oxygen Increase Caused Mammals to Triumph, *Researchers Say*



*Rutgers, the State University of New Jersey
October 03, 2005*

NEW BRUNSWICK/PISCATAWAY, N.J. The first, high resolution continuous record of oxygen concentration in the earth's atmosphere shows that a sharp rise in oxygen about 50 million years ago gave mammals the evolutionary boost they needed to dominate the planet, according to Paul Falkowski, Rutgers professor of marine science and lead author of a paper published Sept. 30 in the journal *Science*.

Falkowski and his colleagues have measured the abundance of carbon 13, a byproduct of photosynthesis, in deep-sea core samples that go back 205 million years. Because photosynthesis produces oxygen and leaves carbon

13 behind, the presence of carbon 13 in the fossil samples allows scientists to estimate precisely how much oxygen was in the atmosphere at any given time, Falkowski says.

From a steady 10 percent the level at which dinosaurs flourished the oxygen percentage rose to 17 percent 50 million years ago and then to 23 percent by 40 million years ago.

"In the fossil record, we see that this rise in oxygen content corresponds exactly to a really rapid rise of large, placental mammals," Falkowski says. "The more oxygen, the bigger the mammals. We argue that the rise in oxygen content allowed mammals to become very, very large mammals like 12-foot-tall sloths and huge saber-toothed

cats. They paved the way for all subsequent large mammals, including ourselves."

The results described in Falkowski's article, "The Rise of Oxygen Over the Past 205 Million Years and the Evolution of Large Placental Mammals," stem from years of analysis of organic and inorganic core samples. Scientists have been using deep-sea core samples for years, but Falkowski and his colleagues have achieved greater precision in their measurements, thanks to two high-precision, isotope ratio mass spectrometers housed in the geological sciences department at Rutgers.

There were placental mammals on Earth at the time of the great extinction of dinosaurs about 65 million years ago, Falkowski says. They were, however, tiny, limited creatures; the extinction event itself, while eliminating the dinosaurs, did little to further the mammalian domination of the planet. It was the subsequent spreading of shallow seas, the increase in plant life and photosynthesis in addition to the consequent increase in oxygen content that gave the mammals the boost they needed, according to Falkowski.

In the last 10 million years, the percentage of oxygen in the earth's atmosphere has decreased to 21 percent. Falkowski says many scientists believed that great fires burned over the earth about 10 million years ago, reducing the number of trees and, therefore, the amount of photosynthesis and oxygen.

Mark Your Calendar

Florida Fossil Hunters

2005 Fossil Fair

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Visit our website www.floridafossilhunters.com

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

Florida Fossil Hunters

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Orlando, Florida 32854-040



Florida Fossil Hunters News