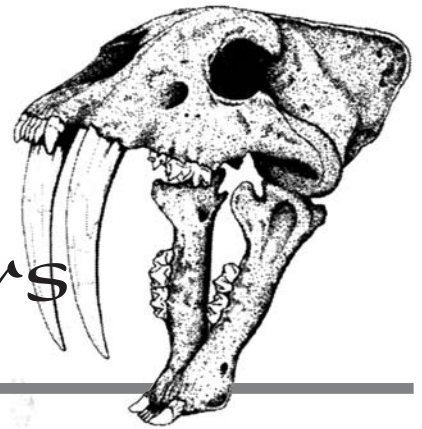


NEWS

Florida Fossil Hunters



Volume 15, Number 3

March 2005

Prez Sez.....

Our club meeting this month will be held at the library in the Northgate shopping center at Lee Rd. and Edgewater Dr. (behind the Race Track gas station). The school is closed for spring break that week. Our speaker will be Zach Zacharias of the Daytona Beach Museum of Arts and Sciences. He will give a slide presentation on the excavation of Don Serbosek's Eremotherium ground sloth.

Be sure to attend "Wild About Florida" at the Sanford Zoo on April 9th from 9 am to 3 pm. Our club will have a display set up as we've had the past three years. Ben Shaddrick is the coordinator for this event. Bring your children or grandchildren and have a nice day at the zoo as well supporting our club.

Our club's annual Peace River "Flood" and camp-out will be on Friday, April 29th through Sunday, May 1st (weather permitting). See Wiley's article inside for details.

See you at the meeting.

Dave Dunaway

Coming Events

March 16th
7:00pm

**MEETING AT
NORTHGATE LIBRARY**

Speaker- "Zach" Zacharias,
Daytona Museum of Arts and
Sciences

April 4th
Board Meeting

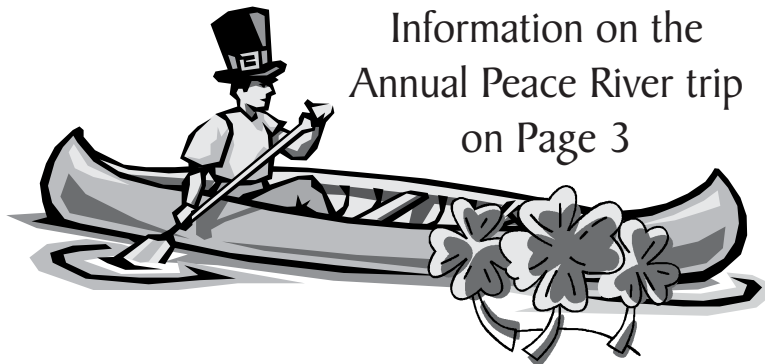
April 20th
6:00pm Kids' Fossil Blast
7:00pm Meeting
Display Night "Fossil Plants
and Petrified Wood"

May 3rd: Board Meeting

*For more events check out the
Mark Your Calendar section
on the back cover.*

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Information on the
Annual Peace River trip
on Page 3

Florida Fossil Hunters News

Fragments

Wild about Florida It's time once again for Central Florida's Zoo to have their annual event. There will be activities targeted for Boy Scouts and Girl Scouts. Meet wildlife, native animals and participate in hands on activities. View all the exhibits, enjoy the food and have fun. Florida Fossil Hunters have participated for several years and we have always had a good time. We could use some new people to help with our display. If you're interested please call Ben Shaddrick at 407-293-9733. The event is on Saturday April 9 from 9am to 3 pm. Set-up by 8:30 am.

The **Central Florida Mineral and Gem Society** will have their annual Gem, Jewelry, Mineral & Fossil Show on Saturday, April 2nd and Sunday, April 3rd from 9 am to 5 pm. It will be held at the Central Florida Fairgrounds, 4603 W. Colonial Dr., Orlando. Cost is \$3.00 per person.

The **Deland M-T Bottle Collectors Club** will have its 35th annual Antique Bottle, Insulator & Collectables Show & Sale on Sat., **March 19th** from 9 am to 3 pm. It will be at the Volusia County Fairgrounds at S.R. 44 & I-4 , Exit 118 (old #56), Deland, Florida. Admission and parking are free and there are free appraisals available, too. For more info, contact M. Pallasch at 386/668-4538 or Bill Marks at 386/789-5255.

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.

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 **Daytona Beach Museum of Arts and Sciences** will have a **Fossil Fest** on Saturday, April 23rd from 12 noon to 5:00 pm. The program is free with admission to the Museum. Admission is \$8 for adults and \$4 for students. Children 5 & under are free. The Museum is located at 1040 Museum Rd., Daytona Beach, Fl.

Program:

12-12:45 pm Paleontology Activities for Kids

Fossil Identification

1- 2 pm Guest Speaker- Eric Sanders: Fossil Sharks and Current Shark Fisheries

2- 3 pm Tour of the Giant Ground Sloth Gallery

Book Signing with Mark Renz

Fossil Identification

3- 4 pm Guest Speaker- Mark Renz: Florida Mammoths and Mastodons

4- 5 pm Tour of the Giant Ground Sloth Gallery

Directions: I-4 east to Nova Rd. exit. Take Nova Rd. to Museum Blvd.

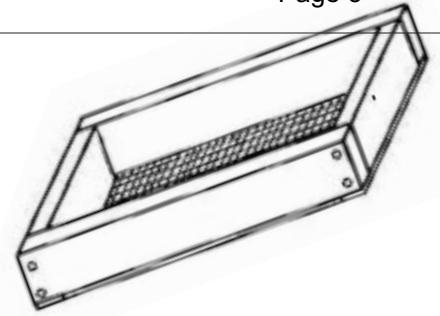
For more info call Zach at 386/255-0285, ext. 33

The **13th Annual Venice Shark Tooth Festival** is on April 8th through April 10th this year at the beach near Venice Pier. Hours are: Fri. 4 pm to 9 pm; Sat. 10 am to 9 pm; and Sun. 10 am to 5 pm. Fossil collectors from around the Southeast will display and sell sharks teeth and other prehistoric fossils. There are arts and crafts and of course, lots of seafood.

Directions from I-75: Take I-75 south to exit 193 (old 35), Jacaranda Blvd. Make a right off the exit. Take a right on Venice Ave. Continue straight, crossing over the Venice Ave. bridge and through the Venice retail section, to Harbor Dr. Turn left and go south on Harbor Dr. and continue until you reach the festival.

The **Tampa Bay Mineral and Science Club** will have it's **46th annual Gem, Jewelry & Mineral Show** on Sat., March 19th from 10 am to 6 pm and Sun. March 20th from 10 am to 5 pm at the Florida State Fairgrounds. Admission is \$5.00 for adults and \$2.00 for students. Children under 12 are free with parents. For more info go to www.tamparockclub.homestead.com

Field Trips



Annual Overnight Peace River Canoe & Camping Trip

Dates: Friday, April 29; Saturday, April 30th and Sunday, May 1st

Trip Leaders: Friday- Dave Dunaway (ph. 407/786-8844 between 7 pm and 9 pm)

Saturday- Wiley Dykes (ph. 407/298-5764 between 7 pm and 9 pm or email iamafossil@aol.com)

Location: Peace River at Bowling Green south of Payne Creek Historic Park. We will camp on the island in the river and dig one bend south of the island.

Directions: Take Hwy. 17 south through Winter Haven, Eagle Lake, Bartow, & Ft. Meade. In Bowling Green look for the sign for Payne Creek park at traffic light and turn left at the light and go past park. Before bridge pull off on dirt track and meet under the bridge to put in.

Canoe owners: Be at bridge in time to unload canoe & gear and be ready at 7:30 to drive the vehicles to Peace River Canoes. Vehicles can be parked at there and they will shuttle us back to Bowling Green and pick us up at 3:30 pm on Sunday.

Canoe Renters: Call Peace River Canoes at 863/773-6370. Tell them you are with the Florida Fossil Hunters. Cost is \$55.00 for 2 days/1 night for 2 people. They will give you info on directions to their place and time to be there.

Day Trippers(with own canoes): Meet under the bridge at 8 am either Friday or Saturday. Leave your vehicle

parked by the bridge. Paddling one way without a motor takes about one hour. If you come on Sunday, paddle downstream until you find us.

What to bring: Canoe and gear OR rent a canoe.

Sifter, shovel, fanny pack or bag for collecting, bucket for larger items or scrap for the kids' pit. Optional: probe, stand

Enough food and drinks for the time you'll be there. Water(1 gallon per day per person for drinking and cooking) Cooler with ice to last two days. A 1 gallon milk jug filled with water and frozen works real well along with a bag of ice. Remember to drain melted water daily to keep food dry.

Change of clothes in waterproof packaging(canoes do overturn at times so bag and secure all items) plus swim suits, hats, water shoes, dry shoes, towels.

Sunscreen and insect repellent, plus personal hygiene supplies including toilet paper! This is primitive camping, folks; there are no portable toilets. First aid kit.

Cups, plates, & eating utensils.

Sleeping Bag, tarps, tent, flashlights

Optional: Camera, fishing pole, bait & license; chair; mask & snorkel, wet suit, marshmallows.

More Field Trips:

Shelley has a call into Eddie Rucks to see when he'll have his next dig will be there at the crystal shell pit in Ft. Drum.she may schedule a trip to Vulcan in April.....and she's going to get in touch with Cargill to see when they will open back up for fossil hunting. Come to the meetings and check the website for further updates.

Arkansas Quartz Mines

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.

Aurora, N.C.

We have eight slots available into the Aurora PCS Phosphate Mine on May 1, 2005. It is approximately 12 hours from Orlando, mostly on interstate highways. Requirements are steel-toed shoes, long pants, no tank tops, must be 18 years or older and must wear a hard hat at all times. Most importantly, you must obey the rules of the mine about boundaries.

If more than eight people sign up, the slots will be chosen by lottery.

For information, call Marge Fantozzi at 407/295-3891.

Sea Monsters in Kansas



Scientists find the fossil remains of these ferocious sea monsters in many places that today are far from the ocean. During the Cretaceous period, which lasted from 140 million to 65 million years ago, a shallow sea covered the middle of the United States, drowning the Dakotas, Texas, Kansas, and many other southern and midwestern states.

Imagine you are on the Kansas seashore more than 65 million years ago. It's a peaceful scene. An armor-plated dinosaur called an ankylosaur lumbers along on the distant coastal plain. A sea turtle digs its nest on the beach nearby. Birds with teeth wheel in the sky overhead, while a flock of flightless birds floats on the waves.

Suddenly the sea's surface is disturbed. The birds squawk in alarm as a monstrous head rises above the water. Sharp teeth clamp on one unlucky member of the flock, which struggles in the creature's strong jaws before disappearing helplessly down the great gullet.

What was this terrible monster? A giant mosasaur.

What Big Jaws You Have

Mosasaur was the most common reptile in the ancient North American inland seaway. There were many different types, but the most terrifying of them all was Tylosaurus. A Tylosaurus skull discovered in Texas was almost six feet long.

Tylosaurus had a round bump on the top of its snout, bony plates on its head for protection, and scales covering its entire body. Like all mosasaurs, its lower jaw had a hinge in the middle that allowed it to open its mouth extra wide to quickly swallow wriggling prey. Curved, cone-shaped teeth helped Tylosaurus pull struggling animals into its massive mouth. Since Tylosaurus had no broad chewing or grinding teeth, it must have swallowed its prey whole or in huge

chunks. Two rows of teeth in the roof of its mouth helped to move its food down into its throat.

A large mosasaur could have eaten almost anything. In South Dakota, bits of birds, sharks, bony fish, and even another mosasaur were found in the stomach region of a fossilized Tylosaurus.

But scientists trying to find out the habits of creatures that lived long ago don't just study fossilized skulls and stomachs. They also observe the behavior of living animals similar to the ancient creatures. For example, monitor lizards, which live today, are close relatives of mosasaurs. These excellent swimmers hunt in open water, so perhaps mosasaurs did, too. Similarly, scientists believe that mosasaurs probably swung their broad tails from side to side, swimming like a modern alligator.

Scientists also look closely at backbones, especially the place where the muscle was once attached to the bone. If the animal had big, strong swimming muscles, they would have left large marks on the bone. Tylosaurus fossils have large muscle attachment marks, so some scientists think it could swim far, perhaps scaring its prey into shallow water and then attacking, as killer whales do. But no one really knows. Tylosaurus may instead have lurked in murky water, as many smaller mosasaurs did, lying in wait for prey to wander close by and then lifting its head to snap it up.

Long Necks

One reptile that scientists think snuck up on its prey was the

continued on page 5

Sea Monsters in Kansas (con't)

long-necked plesiosaur. These animals had tiny heads and big bodies. A hungry plesiosaur would hide in the depths, sticking up only its small head to search for prey. When its upward-facing eyes spotted a school of fish above, it would start to swim slowly. Its long, agile neck would curl and curve, and then, suddenly, its little head would shoot straight into the center of the surprised school to snatch up a mouthful of fish.

Long-necked plesiosaurs couldn't eat large prey because their heads were too small. Their thin teeth would have broken off if they had tried to bite into a big, bony animal. So, they probably used their slender teeth to pierce soft-skinned squid or as a sieve to trap fish.

Plesiosaurs had a curious habit of swallowing stones. Rounded pebbles called gastroliths have been found inside their fossilized stomachs. In a few fossils, fragments of fish bone and scales seem to be stuck to the stones, making some scientists think the stones might have helped the plesiosaur grind and digest its prey. Others think the reptiles may have swallowed this extra weight to help them balance and stay stable underwater, in the same way that human divers use lead weights.

Short Necks

One type of plesiosaur, an elasmosaur, was longer than a school bus. Its neck was especially long, more than half its entire length. Elasmosaurs swam by paddling their seal-like flippers, just as penguins flap their wings underwater to "fly" through it.

But some plesiosaurs-the pliosaurs-had short necks and were fast and fierce, streaking through the water and chasing their prey for long distances before capturing them. Smaller pliosaurs swam in the inland sea covering the United States. But larger beasts could be found in other oceans. Kronosaurus, the largest pliosaur ever, was as long as a T. rex. Its head alone was eight feet in length. It could have swallowed an animal the size of a dolphin in one great gulp.

And More!

Sea turtles, some as wide as a small car, paddled alongside the great lizards. They probably ate seaweed and jellyfish and chewed on carcasses, including the bloated bodies of dead dinosaurs that had floated into the ocean.

Teleosaurs and geosaurs, two types of crocodiles, lived in the Cretaceous period, too. They had long, narrow snouts that they could snap shut quickly underwater. They must have hidden on the seafloor, silent and still, lunging up to gulp down fish that swam too close. Geosaurs were shaped like modern crocodiles, but had none of the scaly, bony, protective armor seen in today's crocs. Without armor, they were relatively lightweight, so they could probably speed away from giant pliosaurs or other hungry predators.

Cretoxyrhina, a prehistoric shark, was one fish that held its own among the reptiles. It was the size of a great white shark, nearly as big as a mosasaur, and might have gobbled up plesiosaurs. Swordfish, long eel-like fish, and rays were plentiful in the Kansas sea, too.

What Happened to the Sea Monsters?

So, where'd they go? Why are today's oceans filled with fish, rather than ferocious reptiles?

Scientists aren't sure. Reptiles probably took to the sea in the first place because so much land was submerged during the Cretaceous and food was more plentiful in the oceans. But as the end of the Cretaceous approached, inland seas began to shrink. The climate changed, too. Perhaps the sea became too cold for the reptiles or for the prey that they depended on for food. Probably there were different reasons for the disappearance of different species. Some marine reptiles were driven to extinction long before others even came into existence. But they all seem to have died out millions of years before dinosaurs became extinct.

All but one, that is. Sea turtles have been swimming in the seas successfully, ever since the Cretaceous, when they first appeared. Why did they alone manage to survive? We don't know the answer yet. That's another monstrous mystery for scientists to solve.

The largest sea turtle ever was the Archelon, which lived during the Cretaceous period. This fossil skeleton was found in South Dakota.

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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	(407) 493-5549
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).

Tampa Bay Fossil Club

Presents Their 18th Annual **Fossilfest**

Saturday, March 12
Sunday, March 13

Florida State Fairgrounds
1-4 and Hwy. 301
Tampa

On a piece of the Peace

Good news..... the river got down all the way to 6 ft. at the Zolfo Station and some of folks even got out to dig on it.

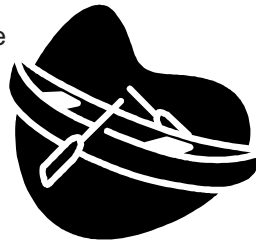
Bad news..... after the rains on Feb. 27th it went all the way up to 16 ft.

We can only hope that will go back down quickly. Have your gear ready for when it does. For those of you who'd like to check on the depth on your own, the web site is as follows.

http://waterdata.usgs.gov/fl/nwis/uv/?site_no=02295637&PARAMeter_cd=00065.00060

Good hunting.

Bonnie



Kids' Fossil Blast

We had a whale of a time last month looking at the huge whale fossils and talking about how they became marine mammals. Our next meeting will be on Wednesday, April 20th at 6 pm in the cafeteria at Lee Middle School right before our regular meeting. See *you there*.

A Tale From the Crypt

by Rachel K. Sobel

When archaeologists first cracked ancient Mayan script in the early 1960's, a remote civilization began to take on a human face. The kings of the 1,500 year old city-states in Mexico and Central America became named personages and their conquests and festivals actual, dated events. But the texts and tablets deciphered so far haven't said much about the humbler figures who kept the elite courts running - sculptors, scribes, messengers and priests. Now scholars are making the direct acquaintance of one of these little guys, a Mayan priest whose task was to win the gods' favor for his city.

Marc Zender of the University of Calgary said that his team had discovered a mini-biography of a priest, inscribed on sting-ray spines and conch shells bundled with his remains in a funeral urn. According to Zender's glyph analysis, the

priest, named Aj Pakal Tahn, first appeared on the scene as a ritual leader in A.D. 765, perhaps hired to mollify the gods during a severe drought and famine. For a dozen years, he conducted an annual rite of homage to the corn or rain god, perched on a step before the crowds, holding an incense bag. He remained in office long after the disaster had presumably abated. In other ceremonies, such as at the spring equinox, he pierced his body with a shark's tooth, shedding blood in honor of the gods. The last year of his service was recorded as A.D. 777. He probably died soon afterward, at an age somewhere around 40.

It's not exactly a kiss-and-tell account, but to Maya scholars it speaks volumes. Now we have concrete historical documentation of how priests took part in religious rituals.

Courtesy of U.S. News and World Report

Mark Your Calendar

- March 12th & 13th: Tampa Bay Fossil Fest
- March 16th: 7:00 pm MEETING AT NORTHGATE LIBRARY; Speaker- "Zach" Zacharias from the Daytona Museum of Arts and Sciences
- March 19th: Deland M-T Bottle Collectors Club
- April 2nd & 3rd: Central Florida Mineral & Gem Society Show
- April 4th: Board Meeting
- April 8th to 10th: Venice Shark Tooth Festival
- April 9th: Central Florida Zoo "Wild About Florida"
- April 20th: 6:00pm Kids' Fossil Blast
7:00pm Meeting
- April 23rd: Daytona Beach Museum of Arts & Sciences "Fossil Fest"
- April 29th - May 1st: Annual Peace River Campout & Fossil Hunt
- May 1st: Lee Creek Mine, Aurora, North Carolina

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