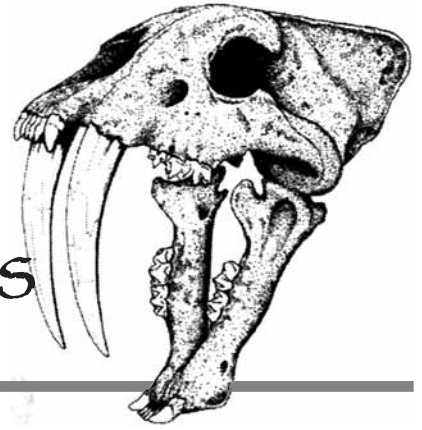


NEWS

Florida Fossil Hunters



Volume 15, Number 11

December 2005

Prez Sez.....

The auction items and our auctioneer Roy Singer are ready for our Christmas fossil buck auction and Christmas party. Wake up your dog and have him go dig up the old Mason jar that's buried in the back yard with your fossil bucks in it.

Please bring a dessert or your special covered dish to share at the party. The club will provide paper plates, cups, eating utensils, napkins, etc.

Make a note on your calendar for 2006.....our Fossil Fair will be on October 14th and 15th at the Central Florida Fairgrounds.

The club needs 2 more board members to replace some current board members who have conflicting schedules. The officers up for re-election are:

Dave Dunaway, President

Paul Bordenkircher, Vice-President

Sara Morey, Treasurer

Board Members: Dave Dunaway, Ed Metrin, Roy Singer

This season is a time for us to reflect on our place in this universe and be at peace with God.

Dave Dunaway

Merry Christmas

**Don't Miss this Month's Meeting!!
One week early – December 14th**

Coming Events

December 14th
6:00pm Kid's Fossil Blast
7:00pm Meeting and Auction

January 3rd
Board Meeting

January 18th
7:00pm Meeting

Table of Contents

Fragments	2
Kids FossilBlast	2
'Godzilla' Crocodile Had Head of a Dinosaur, Fins Like a Fish	3
Old Bones Unearth New Date for Giant Deer's Last Stand	4
Prehistoric Lizard Called Historic Link	5
Membership Application	6
December 2005 Auction	7
Calendar	8

Florida Fossil Hunters News

Fragments

Fossil Auction

Two times a year, the club has an auction where various items including fossils, books, replicas, old bottles, etc. are bid on by the club members using "fossil bucks". There are special items for new members and kids.

We all earn our fossil bucks by participating in club events or volunteering for the fair, setting up information tables at public events or giving talks to groups. It's fun and good pay-off for the hard work all of you put into the club.

So, search all the nooks and crannies where you have stashed your fossil bucks and bring them to the December auction.

Gainesville Trip 11-19-05

Six of us braved the cold weather up at Gainesville - Dave Dunaway, Ed Metrin, Andy & Yvonne Kerek, Bonnie and myself - to Dr. Gordon Hubbell's house/museum and the Museum of Natural History.

Dr. Hubbell and his wife Kate are such good hosts, you'd go there just to visit them. However having the world's largest shark collection plus Dr. Hubbell's knowledge and stories is more than enough to make you want to go. We looked at fossil shark teeth from all around the world and the modern jaws from different species of sharks and rays. Quite a few you can see no where else. Dr. Hubbell has a Megalodon shark vertebrae as wide as a plate and 5 in. tall! I saw more and learned more than I could tell you about in one article. Everyone had a fantastic time and, if you ever get a chance to go you'd be a fool to miss it.

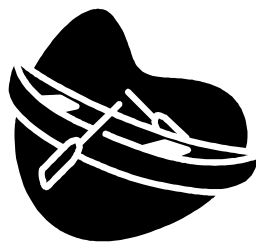
After visiting with the Hubbell's, we took off for lunch and then the Museum. If you haven't been up there lately, you're in for a full day of eye-popping exhibits. It was unfortunate that it was cool and overcast because the Butterfly Rain Forest had fewer butterflies than on a nice sunny day. Still, with all the fossil, Indian and nature exhibits, we had a great time.

See you at the meeting.

Russell Brown

A Piece on the Peace

The depth at the Zolfo station read 7.2 ft. and dropping as of Dec. 1st. Maybe we will get a little digging in before Christmas. It would certainly brighten up the holiday season!



It's Time to Renew

Be sure to renew your membership for 2006. Use the form on the website or the one in the newsletter and send it with your check to the post office box or bring it to the meeting and turn it in at the membership table. Thanks, Bonnie Cronin

2 Canoe's for sale

Moving out of my house into an RV life style and can only take 1 canoe with us. Must sell 2 canoes.

13 foot: single person "solo" fiberglass type.

Price: \$125.00

Manufacturer: Mohawk (Longwood, FL)

Color: white

Weight: less then 40 pounds

Includes: 1 each (2 bladed paddle) & tie down ropes

You can not mount any type of motor on this canoe

16 Foot: three person fiberglass type with squared off back end for small motor (under 5 horse power) or trolling motor on Canoe. If you mount a gas or electric motor on the canoe it must be registered with the state DMV.

Price: \$225

Manufacture: Mohawk (Longwood, FL)

Color: green

Includes: 2 paddles & tie down ropes

If you want life jackets I have three I can sell you at a cost of \$10.00 each. You should get closed cell foam roof carrying blocks to carry the canoe on top of your car.

Wiley Dykes, iamafossil@aol.com

Phone #: 407 298-5764 after

7:00 PM or before 9:00 PM

Kids' Fossil Blast

This is the Christmas season so it's a good time to study deer and their cousins, the antelopes and camels.

We'll look at antlers, teeth and bones and after the Kids' Blast, you can join the rest of the club for the fossil auction and holiday party.

See you on December 14th at 6:00 pm.

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, replicas and printed materials. Sometimes the kids even get to take real fossils home. We meet every other month at 6 pm in the cafeteria at Lee Middle School before our regular club meeting.

Bonnie Cronin

Fossil Find: 'Godzilla' Crocodile Had Head of a Dinosaur, Fins Like a Fish

Researchers have discovered evidence of an ancient sea creature that would have made Tyrannosaurus rex, think twice before stepping into the ocean. At the southern tip of South America, they found fossils of an entirely new species of ancient crocodile — one whose massive jaws and jagged teeth would have made it the most fearsome predator in the sea.

Unlike the crocodiles we know today, *Dakosaurus andiniensis* lived entirely in the water, and had fins instead of legs. But that's not all that made it unusual. Two other features — its hefty size and T. rex-like snout — have earned it a unique place in history — and the nickname "Godzilla."

Diego Pol, a postdoctoral researcher at the Mathematical Biosciences Institute and the Department of Biomedical Informatics at Ohio State University, determined that the oddly shaped fossil specimens found in Patagonia belong on the crocodile family tree.

"This species was very unusual, because other marine crocodiles that were around at the same time had very delicate features — long, skinny snouts and needle-like teeth for catching small fish and mollusks," he said. "But this croc was just the opposite. It had a short snout, and large teeth with serrated edges. It was definitely a predator of large sea creatures."

Paleontologists Zulma Gasparini and Luis Spalletti of the National University of La Plata in Argentina uncovered the crocodile's fossil bones in Patagonia; Pol used sophisticated software to map the features of those bones and determine its lineage. Together, they describe the creature in the latest issue of the journal *Science*.

It measured 13 feet from nose to tail. Its jaws were a foot-and-a-half long, with interlocking serrated teeth up to four inches long.

There were many other sizes of marine crocodile species alive 135 million years ago, toward the end of the Jurassic, but all had long snouts and needle-like teeth. None were larger than *D. andiniensis*, and none were as robust.

Yet, Pol found that the gargantuan crocodile was more closely related to the smallest of its brethren than any of the

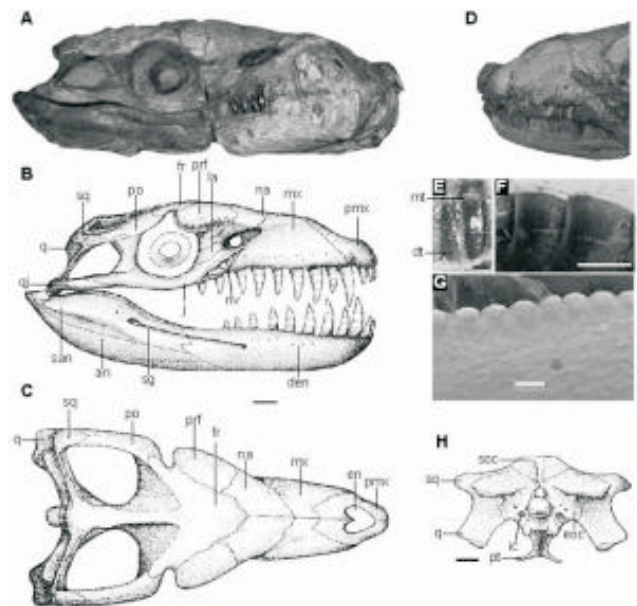
larger species. The shape of the nostrils, eye sockets, and other areas of the skull combined with a telltale groove in its jaw to prove its lineage.

"This is the most remarkable change in the size and shape of the teeth and snout in the history of marine crocs," Pol said.

The three fossil specimens were found in 1996 — one on farmland in the Mendoza province of Patagonia, and two in a rock formation in Neuquén province to the south. During the time that *D. andiniensis* was alive, the region was a deep tropical bay of the Pacific Ocean.

The researchers don't yet know what events triggered the relatively sudden emergence of the large crocodile, but the size and shape of the teeth indicate that it probably fed on other marine reptiles and large sea creatures in the bay instead of small fish.

The National Geographic Society funded this research, and will feature *D. andiniensis* in the December 2005 issue of *National Geographic Magazine*.



Old Bones Unearth New Date for Giant Deer's Last Stand

University College London

October 11, 2004

A new investigation into extinctions caused by climate change has revealed that the giant deer, previously thought to have been wiped out by a cold spell 10,500 years ago, instead survived well into the modern era.

University College London (UCL) scientists scoured the continent to collect dozens of ancient bones and teeth which, when radiocarbon dated, revealed that the Eurasian giant deer survived to 7,000 years ago, much later than previously thought.

Giant deer first appeared about 400,000 years and roamed much of the Eurasian continent alongside the woolly mammoth. The magnificent beasts – 2 metres in shoulder height with antlers spanning 3.5 metres - appear to have made their final stand in the Ural mountains on the boundary of Europe and Asia, possibly the last haven for a species which was being progressively wiped out by climate change and the spread of ice sheets, according to the study by UCL Professors Adrian Lister and Tony Stuart, published in the latest issue of *Nature*.

Unfortunately for these majestic beasts, the extra three thousand years takes them well into the modern era when Stone Age hunting was at its most refined. The question is, did early man develop an appetite for supersized deer?

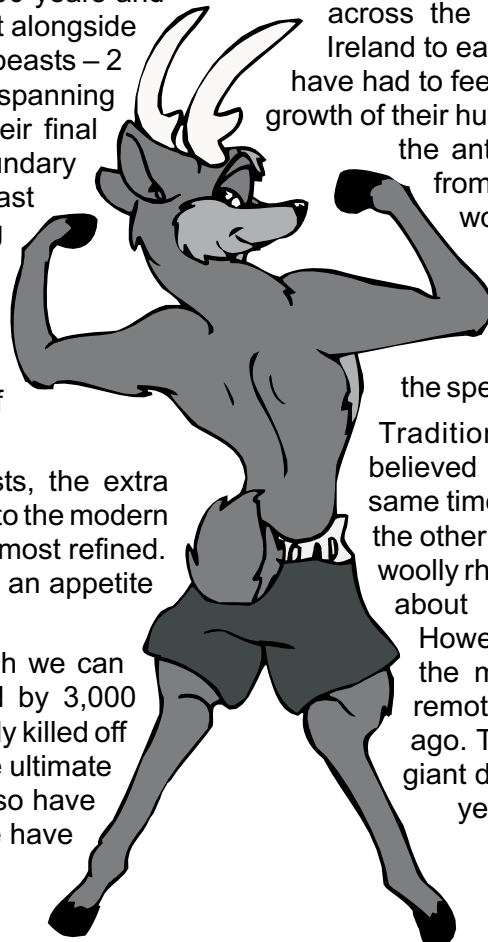
Professor Adrian Lister says: "Although we can now bring the extinction date forward by 3,000 years or so, we still can't tell what actually killed off these beasts. Man could have been the ultimate destroyer, but climate change might also have been the culprit. This is the mystery we have yet to solve.

"A double-whammy of intense cold spells around 20,000 and 10,500 years ago had already taken their toll on these striking beasts. The last of the giant deer, squeezed out of Europe, seem to have taken refuge in the southern Ural mountains near the Black Sea. The next question we need to address is what finally killed them off, whether it was hunting, agricultural clearing of land or changes in climate or vegetation."

Up until 20,000 years ago the giant deer, *Megaloceros giganteus* Blumenbach, was found across the middle latitudes of Eurasia, from Ireland to east of Lake Baikal. The males would have had to feed extensively to sustain the annual growth of their huge antlers. Indeed, it is thought that the antlers would have prevented males from entering even moderately dense woods, at least for part of the year, and one former theory for their extinction was that the seasonal nutrient requirements for the antlers alone might have killed off the species.

Traditionally, woolly mammoths were believed to have gone extinct around the same time as the giant deer, together with all the other extinct 'Ice Age' beasts such as the woolly rhino and saber-toothed cat, between about 12,000 and 10,000 years ago.

However, a recent discovery found that the mammoth survived on Wrangel, a remote arctic island, until 3,600 years ago. The latest discovery shows that the giant deer also broke through this 10,000 year barrier to enter the modern era.



Prehistoric Lizard Called Historic Link

November 17, 2005 10:58AM EST

DALLAS - Amateur fossil hunter Van Turner felt certain he had found something important during his search of earth turned up by bulldozers making way for a new subdivision in Dallas County.

Sixteen years later, scientists finally confirmed that Turner had discovered the first well preserved early mosasaur found in North America - a prehistoric lizard that lived 92 million years ago that evolved into what some call the "T. Rex of the ocean."

"Science marches slowly, and my biggest fear all along has been that another specimen of the same animal would be found, and it would be described, and I would lose any first claim to it," said Turner, an Internet technology manager in the Central Texas town of Mason. "That never happened, and it kind of reassured the rarity of the animal."

The reptile, now known as *Dallasaurus turneri*, is identified in a special issue of the Netherlands Journal of Geosciences published this month. The article was written by paleontologists Michael Polcyn of Southern Methodist University and Gordon Bell Jr. of Guadalupe National Park.

The lizard is an important link in the evolution of mosasaurs, which lived in the age of dinosaurs and evolved fin-like limbs, Polcyn said. *Dallasaurus*, the name given the fossil by Polcyn and Bell, is unusual because it shows an earlier version of the mosasaur with tiny feet and hands. The marine animals later developed paddles.

Before this discovery, only five primitive forms of the animal with land-capable limbs were known, and all of them were found over the last century in the Middle East and the eastern Adriatic, Polcyn said.

"This is exciting to us. It tells us the origin of mosasaurs," said Anthony R. Fiorillo, curator of earth sciences at the Dallas Museum of Natural History, which displays a much larger reconstructed mosasaur with sharp teeth and a massive jaw.

On Wednesday, the museum unveiled a model of *Dallasaurus*, not nearly as threatening as its oversized

descendant with a slim body and only 3 feet of length. It looks somewhat like a Komodo Dragon, its closest living relative.

"I call him Todd," said Ross McMillan, the ponytailed sculptor who worked with Polcyn for months to painstakingly construct the lifelike piece. "When you look at his face, doesn't he look like a Todd?"

Fiorillo and Polcyn said Turner's find, made at Cedar Hill south of Dallas, highlights the importance of contributions made by amateur fossil hunters to science.

"This just goes to show you that what you want is a lot of people looking for stuff," Turner said. "You want them to be able to recognize important finds or have the people who can do it."

Scientists and museum curators hope to reconstruct the more than 100 identifiable skeletal pieces that make up *Dallasaurus* and put them on display within a few years at the Dallas museum, which owns them.

Right now, the skeletal pieces, comprising about 80 percent of the animal, are being kept at SMU for study. A similar specimen, also acquired and donated by Turner, is at the Texas Memorial Museum at the University of Texas at Austin.

Mosasaurs lived in the shallow seas and shores of a stretch of Texas around Dallas and Fort Worth that was mostly under water back then, Polcyn said. The animals evolved into the top predator of their domain before becoming extinct 65 million years ago.

The lizard is not related to the 13-foot oceanic crocodile discovered recently in Argentina, Polcyn said. The discovery of that creature, given the scientific name *Dakosaurus andiniensis* and nicknamed "Godzilla," was reported last week in ScienceExpress, the online edition of the journal Science.

On the Net: <http://www.smu.edu/smunews/dallasaurus>



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).

December 2005 Auction

Items to

Bid on

- 1. Polished Brazilian agate slab with stand
- 2. Dean Quigley print
- 3. Fossil display case with locks
- 4. Oreodont upper
- 5. Indian trade beads in case
- 6. Resin cast of Carcharodon shark tooth
- N 7. Sifter for screen washing
- J 8. Sand shark teeth in case
- 9. Citron crystal
- 10. Book: Digging Dinosaurs by John Horne (donated by Marcia Wright)
- 11. Bottle: Pre-machine curl "Magic Mosquito Bite Cure" donated by G. Groves
- 12. Mosasaur tooth
- 13. Polished Withalacoochee coral
- 14. Sand tiger shark jaw
- N 15. Belemite in matrix
- J 16. Blue, green and yellow calcite crystals
- 17. Bottle: Pre-machine "Florida Water" (donated by Roy Singer)
- 18. Amethyst crystals
- 19. Dean Quigley print
- N 20. T-Rex tooth cast
- J 21. Mammoth woodcraft kit
- J 22. Keyhole sand dollar painted (donated by Art Dreves)
- J 23. Dinosaur coloring book
- 24. Book: "Vertebrate Fossils – A Neophytes Guide" by Frank Kocsis
- 25. Paleo Bond kit
- 26. Acrylic display frame
- J 27. Bison leg bone

J - Junior members (kids under 14)

N - New members (joined the club within the last year)

Mark Your Calendar

*Don't Miss this month's Meeting
One week early – December 14th*

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

Visit our website www.floridafossilhunters.com

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

Florida Fossil Hunters

Post Office Box 540404
Orlando, Florida 32854-040



Florida Fossil Hunters News