



# Fossil Club of Lee County

January 2008

## From The President;

Brrrrrr!!!!!! Old man winter is upon us!! Oops!! There he goes!!! Another terrible, frigid two days! Oh well, may as well go fossil hunting!!

I will start this month's letter from the president with just that topic--fossil hunting. Bill Shaver, our trips director, has been trying very hard to get us into places to fossil hunt. This is a difficult task!! Pit operators usually shy away from visitors to their pit, because of liability issues and worries about being shut down from rare fossil/Indian discoveries. These fears can sometimes be allayed, however, by Bill, as he explains that we sign release forms, have group insurance and the state of Florida has NEVER shut a pit operation down to recover fossils!! Occasionally, we gain access to hunt a pit, and I hope all of you who take advantage of the chance really appreciate it. The rivers and creeks are at low winter levels, and even though the water's cold (for us!!) it is the right time to hunt those areas. The canoe operators on the Peace River do not offer the trips we would like to take, which is a shorter distance trip giving us time to hunt along the way, so we have not booked a canoe trip for a while now. We can still meet at an agreed upon place and hunt as a group, and this is always a good time had by all!!

I have gained access to a location on the Peace River upriver of Arcadia, and also have permission to bring a club group there. This is an outing booked for **January 26**, a Saturday. We will meet at the boat ramp/park just west of Arcadia and travel in a convoy from there. This park is on hwy 70 and is immediately past the Peace River bridge. We will leave there at 9:30 am. It is at least an hour ride to Arcadia from most places in Ft. Myers/Cape Coral, so leave in enough time to get there by 9:15 am. There is no way for you to find us once we leave there, as we travel on #661 for a ways, but then turn off. We will have a sign up sheet at the meeting. (Please don't sign up to go unless you definitely plan on making it and being on time.) The place we are going to is private property, it is a beautiful, natural, large parcel of land with wildlife and a few older buildings on it and you must agree to not tamper with anything or try to rope a deer or ride an

## Next Meeting

Our next meeting will be held on Thursday, January 17 at 7:00 p.m. at the Calusa Nature Center located at Ortiz and Colonial Blvd.

## Officers

Louis Stieffel, President (239) 458-9818

Or e-mail: Cape187@earthlink.net

Al Govin, Vice President 541-2845

And cell 910-2339

Ray Seguin, Treasurer, 989-1921 or 936=5019

Chuck Ferber, Secretary 489-2891

## Board Members

Leslie Stieffel, 458-9818

Michael Orchin, 574=6318

Sandy Schwartz, 772-8015

Trip Director, Bill Shaver

## Committees

Newsletter: Sandy Schwartz

Speakers: Louis Stieffel

\$1. Raffle: Mike Siciliano

Auction: Louis Stieffel

Web Master: Curtis Klug

armadillo!! This property has a mile of frontage on the Peace. We have easy access to the water, via an old boat ramp and the gravel bars are within 50 feet of the entry place. The water is low, COLD (brrrrr!) and clear and there is a few fossils still left to be found by the lucky hunter!! (the only fee is you need to give me your best find--but the rest is for you!!!) :) More info at the meeting.

The speaker this month is Steve Koski, an underwater archeologist at salt springs. He will discuss discoveries of fossils and manmade artifacts there. I have no one booked yet for Febuary, but March is our annual auction, and April's speaker is Greg Herbert, a paleontologist from the University of South Florida in Tampa. He has spoken to us in the past and is a very entertaining speaker. He, also, is from South Louisiana--GEAUX SAINTS!--so you just got to know he's good!!!

We will vote, this meeting, on choices we will make to donate money to. I speak of this in another article here in this newsletter. Our auction is in March. This is our major fundraiser, (and funraiser !) and if you want to contribute something, bring it to this meeting if possible. The night of the auction is not the time to spring it on me. Please plan on attending and adding to your collection. We make a conscious effort to NOT try and get this advertized or spoken about in the media. The decision is based on thus giving this opportunity to our club members to acquire items for their collections at costs that are reasonable. If the public attends, we not only get too crowded, but the prices get too high for the regular members to buy. So-- Please--support this decision, and show up, and bid!!

Elections will be held, as per our

bylaws, in April, and new officers will take over in May. I encourage all of you to give some thought to getting more involved with the administrative operation of the club and run for an office. The present officers have been in place for 3 years and it is time for others to take over. The club is in very good shape with a strong treasury, abundant club supplies and directors in charge of needed departments. I will not run for another term, as well as the secretary, Chuck Ferber. Al Govin will remain another year as vice-president and Ray Seguin will stay as treasurer. Sandy Schwartz wants a replacement for her newsletter obligation, so please give all of this some serious thought! Bill Shaver will run for president and he could use all the help from the membership that I have received the last 3 years!! It's your club. Support it in whichever way you can!!

See you at the meeting!!

Louis

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**Archaeologist Steve Koski will be the speaker at our January 17, 2008 meeting.** Steve is the site manager and resident archaeologist at the University of Miami's, **Little Salt Spring Research Facility in North Port, Florida.** The topic of his presentation will be "Archaeological and Paleontological Discoveries at the Little Salt Spring Site. Little Salt Spring is a circular, 250-foot deep sinkhole or cenote located in south Sarasota County Florida. The spring lies on a 112-acre parcel owned by the University of Miami. As early as 1959, archaeological discoveries were made in the basin of the spring 10- to 40-feet below the surface dating from 6,000 to 10,500 years ago. Even deeper, on a ledge at 90 feet (27 meters), were the bones of extinct and extant Pleis

tocene faunal, including ground sloth, bison, tortoise, and mammoth remains. Of unprecedented significance was an intentionally sharpened wood stake wedged between the plastron and carapace of an extinct tortoise, radiocarbon dated to 12,030 +/-30 BP. Numerous wooden stakes have also been identified on the lower slope of the basin radiocarbon dated to 10,500 BP. Stone, bone, shell, and other wooden artifacts have been found in the basin of the spring and the upper slope was used as a cemetery site in the Middle Archaic period 6,000 to 7,000 years ago.

Professional research at the site began in 1971 by the Florida Department of State. General Development Corporation, who owned the property at the time, funded a research facility on site from 1975 to 1980 and donated the spring and the surrounding 112 acres to the University of Miami in 1982. The University conducts annual conservation-minded research at the site with the assistance of UM students and maintains the property as an archaeological and environmental preserve. Mr. Koski's presentation will focus on a general background history of the site and current research initiatives.

Steve Koski has a B.A. in Anthropology from the University of Massachusetts, Boston and has completed all but thesis for a M.A. in Anthropology from Arizona State University. Mr. Koski came to Venice Florida in 1985 as an Arizona State University graduate assistant on an NSF funded grant conducting underwater archaeological research in the Gulf of Mexico. He worked as assistant underwater archeologist at the Florida State University's, Warm Mineral Springs Archaeological Research Project from 1986 to 1989. In 1990, he began conducting archaeological surveys in Florida for a cultural resource management firm in Sarasota County. In 1992, he spent five months assisting on a state-funded underwater archaeology project at Little Salt Spring and

continues to assist and conduct research at Little Salt Spring as site manager and resident archaeologist. He also continues to conduct archaeological assessment surveys throughout Florida for a cultural resource management firm based in Stone Mountain, Georgia and St. Augustine, Florida.

## *Refreshments*

January- Mark Cantos

February- Sally Jane Moore and Pat Oakes

March Auction month-several volunteers needed as we feed a lot of people

### **Dear Fellow Fossil Members,**

I just received my Tampa Bay Fossil Club Newsletter and found the information and request for funding that follows on page 4.

Last meeting we discussed having too large a treasury (for a non-profit org) and asked about different ways that we could use this money. The money we previously donated to Gainesville has not all been used. Some other suggestions were not in fossil related fields.

This request comes at a perfect time. We can donate to the Wetlands Archaeology Fund 3693 to start research on dating bone and enamel carbonate apatite. **It would also raise our status as a club to one that really is concerned about education and research of fossils. Please read the article and vote to support this research.**

Sandy

**A Letter to TBFC Members:  
University of Florida Foundation Wetlands Archaeology Fund 3693**

The subject described in the following paragraphs has been of special interest to me for nearly 50 years.

There are two questions in American archaeology that have eluded answers since first pondered more than 150 years ago: WHEN DID PEOPLE ARRIVE IN THE WESTERN HEMISPHERE, AND FROM WHERE? The problems have remained unsolvable because the proper technology to address the problems was not available until the 21st century. The situation is particularly intriguing as it relates to Florida because Florida has ample archaeological and paleontological sites containing bones of extinct late Ice Age animals. Some of these animals were found in association with human remains and artifacts.

Why can't these fossil bones and ivory artifacts be dated by conventional radiocarbon analysis? Because radiocarbon dating only works consistently when organic material has been preserved. These bones are fossilized (i.e., no detectable collagen has survived) which means they do not contain the required organic material. We do not know if their age is 12,000 years or more than

30,000 years (e.g., see attached picture).

Is there a solution to this dilemma? Yes! In addition to recently improved methods to detect datable collagen in seemingly fossilized bone, research needs to be conducted to determine the possibility of dating bone and enamel carbonate apatite. The carbonate of apatite has inherent chemical problems that need to be overcome. If personnel, instrumentation, and space were available and dedicated to this problem, a solution could be forthcoming within 2-3 years. The individual qualified to conduct the research is a prominent geochemist, Dr. Thomas W. Stafford, Jr., whose credentials are impeccable.

The antiquity of the peopling of the Americas is of worldwide interest, but we will never find the answer using antique technology. Finding a solution to dating fossilized bones would have as far-reaching affects on studies of the ancient world as launching the first spacecraft had on the modern world. We humans always want to learn something new. In this case, we want to learn something new about something old. I am seeking funds of \$50,000 as start up money to initiate the project. Contributions can be made to

**University of Florida Foundation  
Wetlands Archaeology Fund 3693  
P.O. Box 14425  
Gainesville, Florida 32604-2425  
Barbara A. Purdy, [bpurdy@ufl.edu](mailto:bpurdy@ufl.edu). 352-373-7204**

## Time to Donate Some Money

At the January meeting we will have a vote by the members for beneficiaries of some club money!! Being a non-profit organization allows us to have a balance in the bank for our operating costs, but at present we have more money on hand than we feel comfortable with, so --- it's time to give some away!! At the December Christmas meeting we discussed organizations and agreed to vote on them in January. I will have ballots ready to hand out **to current members (so renew your dues!!)**. The groups suggested are:

- T.L.C. ORGANIZATION
- BOYS AND GIRLS CLUB
- SHERIFF'S YOUTH RANCH
- CALUSA NATURE CENTER
- UNIVERSITY OF FLORIDA, MUSEUM OF NATURAL HISTORY, PALEONTOLOGICAL DEPARTMENT
- UNIVERSITY OF SOUTH FLORIDA, AT TAMPA, PALEONTOLOGICAL DEPARTMENT
- FLORIDA GULF COAST UNIVERSITY-(SCIENCE DEPARTMENT?)
- **University of Florida Foundation Wetlands Archaeology Fund 3693**

Please bring something to write with, so your vote will count!!!

**Our bylaws state one of the purposes of the club is to further interest and education in the field of Paleontology.**

Also, we should keep in mind that we get speakers from Gainesville, and Tampa universities, so it may be a good idea to reciprocate?? The money would be given for current needs at the non profits and for scholarships at the universities. Personally, I would like to see the money given in three \$1000 donations.

Louis

## Whales descendants of long-legged rat/ study says

The gigantic ocean-dwelling whale may have evolved from a land animal the size of a small racoon, new research suggests.

What might be the missing evolutionary link between whales and land animals is an odd animal that looks like a long-tailed deer without antlers or an overgrown long-legged rat, fossils indicate. The creature is called Indo-hyus, and recently unearthed fossils reveal some crucial evolutionary similarities between it and water-dwelling cetaceans, such as whales, dolphins and porpoises.

For years, the hippo has been the leading candidate for the closest land relative because of its similar DNA and whale-like features. So some scientists were skeptical of the new hypothesis by an Ohio anatomy professor whose work was being published today in the journal Nature. Still, some researchers have been troubled that hippos seem to have lived in the wrong part of the world and popped up too recently to be a whale ancestor.

Newer fossils point to the deer-like Indohyus. The animal is a "missing link" to the sister species to ancient whales, said Hans Thewissen, an anatomy professor at Northeastern Ohio Universities College of Medicine. While it doesn't look like a whale, Thewissen said, when it comes to anatomical features, the Indohyus "is quite strikingly like one."

Thewissen, who had published papers on fossils of what he called the first amphibious whale and the skeleton of the oldest known whale, studied hundreds of Indo-hyus bones unearthed from mudstone in the Kashmir region of India. From that cache of bones he created a composite skeleton of a 48 million-year-old creature. The key finding connecting Indohyus to the whale is its thickened ear bone, something only seen in cetaceans. An

examination of its teeth showed that the land-dwelling creature spent lots of time in the water and may have fed there, like hippos and whales. Also, the specific positioning and shape of certain molars connects Indohyus to the earliest whales, which are about 50 million years old, he said.

**MINUTES OF MEETING OF FOSSIL CLUB OF LEE COUNTY**

A meeting of the membership of the Fossil Club of Lee County was held at the time, date, and place set forth below.

DATE OF MEETING: December 20, 2007

MEETING TIME: 7:00 P.M.

MEETING PLACE: Caloosa Nature Center

Number in attendance: full house

Louis Stieffel presiding.

A brief business meeting was held before we all sat down to eat. The main topic of discussion was what to do with a surplus of funds in our treasury. The discussion revolved around what non-profit organizations to donate to. The non-profit organizations fell into two categories: humanitarian or fossil/science related organizations. A vote will be taken at the January meeting on where the money should go.

Membership dues for **FCOLC for the year 2008** are due now. If you wish to vote on the disposition of the money, remember to bring a check.

Individual	\$15.
Couple	\$17.
Family	\$20.

**Florida Fossil Permit Application**

This application is for a permit that will entitle the person named on the permit to collect, for the period of one (1) year, vertebrate fossils on land owned or leased by the State of Florida. The permittee must abide by all the provisions contained in Florida Statutes § 240.516 and the University of Florida Regulation implementing this law.

**Print out and mail completed application to:** Program of Vertebrate Paleontology, Florida Museum of Natural History, University of Florida, Gainesville, Florida 32611-7800, USA

**The following are to be enclosed with the application:**

- 1. Copy of applicant's identification, either a copy of your driver's license, birth certificate, social security card or passport.
- 2. Check or money order for \$5.00 in U.S. currency payable to the Program of Vertebrate Paleontology. **PLEASE DO NOT SEND CASH.**

**Applicant's Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Telephone (include area code):** \_\_\_\_\_

I, the undersigned, affirm that I will abide by Florida Statutes § 240.516 and the Regulations of the Program of Vertebrate Paleontology, University of Florida Rule 6C1-7.541 F.A.C.

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**New Permit** \_\_\_\_\_ **Renew Permit** \_\_\_\_\_

**If you are renewing your permit, be sure and write a list of fossils that you have found over the past year.**



## ATTRACTIONS

# 'A slice of a rainbow'

A wondrous, pizza-sized fossil from Canada is drawing big crowds in Manhattan

A fossilized Canadian wonder called an ammonite is stopping visitors in their tracks at the Grand Gallery of the American Museum of Natural History in New York.

"They're dazzled by it and drawn to the case almost magnetically," says Neil Landman, the museum's curator for such fossils.

That's been the daily norm since the formal unveiling a month ago. Yet as stunning as the display is visually, the ammonite's back story is equally riveting.

For almost 340 million years, these squid-like creatures cruised the world's oceans and inland seas, cozy inside a whorled shell whose buoyancy they could vary to rise and fall in the water column.

Named after the ram-like horns of Ammon, the Egyptian god of life, the ammonites were prolific and astonishingly diverse, evolving at a fruit-fly pace through an estimated 10,000 species until they vanished at the same time as the dinosaurs. These regular snapshots let ammonites serve as a geological time

clock for palaeontologists.

That's how we know that 80 million years ago, the New York ammonite waved its tentacles for the last time in the inland sea that covered present-day Alberta and drifted lifelessly to the sea bottom. As the animal decomposed, a blanket of fine shale sediment rapidly buried a shell about the size of a large pizza.

Meanwhile the Rockies continued their upward thrust and the inland sea vanished. Under the tectonic

**Named after the ram-like horns of the Egyptian god of life, the ammonites evolved at a fruit-fly pace until they vanished at the same time as the dinosaurs**



CRAIG CHESEK/AMNH

This shimmering sea creature died 80 million years ago and sank to the bottom of the inland sea that covered present-day Alberta. It is now a big draw in an American museum.

the world's gem ammonite — and of the museum's new crowd-stopping ammonite — are deposits along the St. Mary River near Lethbridge Alta., discovered in 1908 by the Geological Survey of Canada.

About 2,000 ammonites with these rainbow surfaces are excavated there every year from as deep as 25 metres by the company Canada Fossils.

Like all fossils, they initially belong to the province. But if the Royal Tyrrell Museum in Drumheller doesn't want them (and it already has hundreds), they're sold to collectors and museums.

"Usually we find them in dozens of pieces, which have to be reassembled with epoxy glue," says Pierre Paré, president of Canada Fossils and also of a sister company, Korite International, which handles the gemstone trade.

Three years ago Landman asked Paré for the donation of a "spectacular" ammonite.

"I said yes if they came up with a really good place to put it on permanent display," Paré says.

The Grand Gallery is easily the museum's choice piece of real estate. Landman is hopeful the ammonite from Canada will be there "forever."

heat and pressure from several kilometres of rock above, the shell was squeezed to a third of its original thickness.

Simultaneously the shell's outer surface was being transformed by this geological alchemy into something truly wondrous.

It started out as mostly aragonite, the same mineral as ordinary clam shells.

In that underground pressure cooker, the shiny surface of this aragonite, called nacre, became impregnated with trace chemicals such as iron, manganese, titanium, barium, strontium and chromium.

The result is what someone once called "a slice of a rainbow," an iridescent layer of mere millimetres that shimmers across the entire spectrum.

Stripped away from the attached rock, it's called ammonite, the rarest of the three organic gemstones (amber and pearls are the other two).

And the source of 90 per cent of

Peter Calamai