FLORIDA PALEONTOLOGICAL SOCIETY

NEWSLETTER

VOLUME 28 NO. 1 WINTER 2011

Florida Paleontological Society, Inc. Fall Meeting - October 15-17, 2010 Marianna, Florida

Members began arriving in Marianna, Florida early Friday Afternoon. Some members had even arrived a day earlier so they could take advantage of the low water levels on the local rivers and do some collecting. Many remarked that they had never seen the Chipola and Apalachicola rivers so low before. Many of our southern Florida members had a long haul to reach the panhandle. Luckily, they were helped out by the time change when crossing over the Apalachicola River. Although for some it was difficult to get used to the Central Time Zone.

That evening many of the members took advantage of the dining options along Interstate 10. A large group made their way over to the Ruby Tuesday's. This was a great chance for people to catch up with old friends and to share their latest adventures fossil collecting throughout the state.

Saturday morning the group gathered outside of the lobby for the caravan to Farley Creek. Farley Creek is a spring fed tributary to the Chipola River, so we waited a little later than usual to go into the water. Luckily it warmed up nicely and no one got too much of a shock when entering the creek.

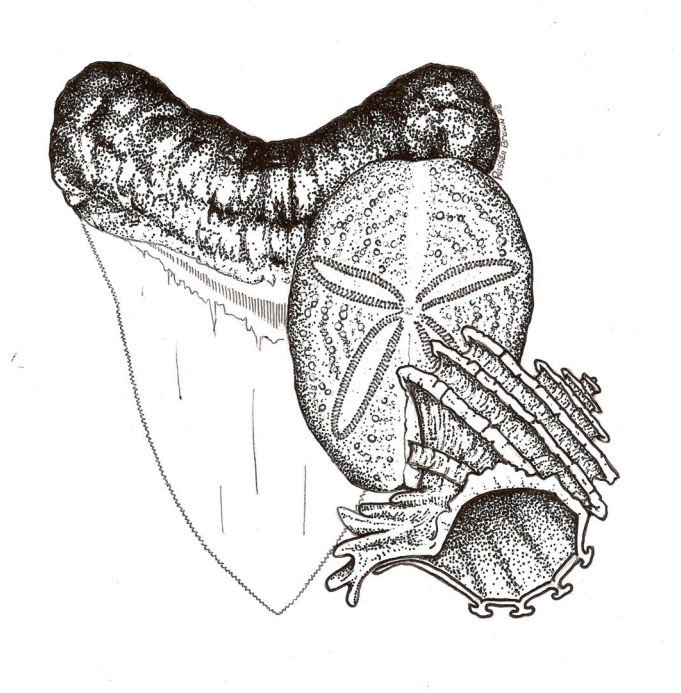
Continued on page 3...

FPS members braved the cold waters of Farley creek to collect the famed Chipola Formation.

SAVE THE DATE!
FPS Spring Meeting April 8-10

The spring meeting will be held near Bradenton, FL and will include a field trip to SMR Aggregates on the Sarasota-Manatee County Line. The quarry exposes the Pliocene Tamiami Formation and is a great place for shelling and collecting both marine and terrestrial vertebrates.

T-SHIRTS NOW AVAILABLE!



Original artwork by Russell Brown appears on back with FPS logo on the front pocket. Get your order in today. Available in adult small to XXL for $14.00. Remember to add 6.25% sales tax for Florida Residents. + S&H. The T-shirt will also be available at the spring meeting.

Continued from page 1...

Along the banks of Farley Creek the early Miocene Chipola Formation is exposed. It is a highly fossiliferous marine deposit exposed at several locations in Florida's Panhandle. Each location represents a unique depositional environment and the composition of the fauna varies from locality to locality. With a little digging and screening of the matrix many people on our trip were able to find an abundance of fossil sea shells and other marine life.

While mollusks are the most ubiquitous component of the fauna, some members were able to find vertebrate remains along the creek banks. George and Margo Williams even found a shark tooth among the countless shells. Also hidden amongst all the charismatic mega fauna were an abundance of delicate and beautiful microfossils. Member John Baker has already reported finding over 46 species of Forams and 22 species of Ostracods in the bulk samples he recovered from Farley Creek. It was a productive collecting trip for all.

FPS Members use shovels and screens to uncover the abundant fossils found in the banks of Farley Creek.

Afterwards the group gathered for dinner and the evening's events. Even though the dinner service got off to a slow start members did enjoy the new fossil raffle, thanks to Gary Schmelz. Each member was given a random number that represented the order in which you were able to choose a fossil or prize from a great selection. The prizes included trilobites, some of the rarer Chipola mollusks, a few mineral specimens, paleontology books, and even some vertebrates.

Later that evening we were treated to a presentation from Fabiany Herrera, one of last year's recipients of the Gary Morgan Award. Fabiany is a Ph.D. candidate in the UF biology department and at the FLMNH. His Morgan Award was used for supplies on his fossil collecting trips in South America. He is researching the origins and evolution of neotropical rainforests. Fabiany shared his recent work on a fauna from the Cerrejon Formation in Colombia and some exciting new discoveries from his field work this past summer. (See News from the Florida Museum of Natural History's Paleobotany and Palynogy Division this issue.)

The evening soon concluded with an auction to benefit the Gary Morgan Award. It turned out to be a wonderful evening. It is always great to get together and share fossiling stories, learn about the most current research, and just enjoy the company of other paleo people. Thanks to everyone who made it such an enjoyable weekend.

FLORIDA PALEONTOLOGICAL SOCIETY, INC.

As stated in the Articles of Incorporation, "The purposes of this Corporation shall be to advance the science of Paleontology, especially in Florida, to disseminate knowledge of this subject and to facilitate cooperations of all persons concerned with the history, stratigraphy, evolution, ecology, anatomy, and taxonomy of Florida's past fauna and flora. The Corporation shall also be concerned with the collection and preservation of Florida fossils." (Article III, Section 1).

CODE OF ETHICS

ARTICLE X

Section 1. Members of the Florida Paleontological Society, Inc., are expected to respect all private and public properties.

Section 2. No member shall collect without appropriate permission on private or public properties.

Section 3. Members should make a sincere effort to keep themselves informed of laws, regulations, and rules on collecting on private or public properties.

Section 4. Members shall not use firearms, blasting equipment or dredging apparatuses without appropriate licenses and permits.

Section 5. Members shall dispose of litter properly.

Section 6. Members shall report to proper state offices any seemingly important paleontological and archaeological sites.

Section 7. Members shall respect and cooperate with field trip leaders or designated authorities in all collecting areas.

Section 8. Members shall appreciate and protect our heritage of natural resources.

Section 9. Members shall conduct themselves in a manner that best represents the Florida Paleontological Society, Inc.

Florida Paleontological Society, Inc.
Board Meeting Minutes
October 17, 2010
8:15 AM
Marianna, Florida

President, Marge Fantozzi, called the meeting to order and distributed the agenda. Those present were: Gary Schmelz, Alex Kittle, Roger Portell, Harley Means, Phil Whisler, Melissa Cole, Wallace Ward, Sara Morey, and Marcia Wright.

The first order of business was to find out the progress on the FPS tee shirt design and order. Roger Portell reported that he received the art design from Russell Brown. It will go on the back of the shirt and the FPS logo will be on the front pocket. Colors were discussed, but no firm decision was made. Russell Brown will probably do a sand color and burnt orange color. The number to order will be determined by the cost breaks. Russell will do the ordering from his vendor.

Our business website is not yet done, and Joan Herrera was not present. We currently have GoDaddy as our host and will soon be off the Florida Museum of Natural History (FLMNH) server. Harley Means suggested that the site designer used by the Southeast Geological Society was affordable and would probably be glad to do a website for FPS. Roger Portell made a motion to earmark $300 for that purpose and Melissa Cole seconded the same. The motion passed.

ANNUAL DUES for the FPS are $10.00 for Associate Membership (persons under age 18) and $20.00 for Full Membership (persons over age 18) and Institutional Subscriptions. Couples may join for $25.00, and Family Memberships (3 or more persons) are available for $30.00. Persons interested in FPS membership need only send their names, addresses, and appropriate dues to the Secretary, Florida Paleontological Society, Inc., at the address on page 2. Please make checks payable to the FPS. Members receive the FPS newsletter, Florida Fossil Invertebrates, Fossil Species of Florida, and other random publications entitled to members.

NEWSLETTER POLICY: All worthy news items, art work, and photographs related to paleontology and various clubs in Florida are welcome. The editors reserve the right not to publish submissions and to edit those which are published. Please address submissions to the Editors, Florida Paleontological Society, Inc. Newsletter, at the address inside the front cover.

Alex Kittle reported that he did not buy new membership software, but did buy a Microsoft Office 2007 handbook for about $25 and will use Excel and Access to maintain the membership list.

Melissa Cole made a motion – seconded by Gary Schmelz – that Roger Portell should have two complete sets of Florida Fossil Invertebrates professionally bound. All other FPS publications already have two sets that have library quality binding. The motion passed.

Roger Portell purchased a large new cooler and a sturdy hand truck for society field trips as per motion passed at last meeting.

Member Paul Roth's fossil material has been installed in our display case at Powell Hall (FLMNH). Thank you, Paul, for the loan of the items.

Discussion of board changes followed. Wallace Ward will take over as president for the Spring, 2011 meeting. Harley Means will be president-elect. We need nominations for a vice president, and 3 board members. The terms of directors Phyllis Diegel, Gary Schmelz, and Jonathan Bloch are also due to end at the close of 2010. Melissa Cole will contact prospective candidates and send out ballots for a general election. We also appointed Roger Portell as our new resident agent.

Treasurer, Phil Whisler, gave his report which he set up using Quick Books. Discussion followed about publications and the pricing of same. These are the changes that were made.

Publication	**wholesale**	**retail**
Thomas, M. C., Fossil Vertebrates		
Beach and Bank Collecting for Amateurs	5.00 ea	7.50 ea
Converse, Howard H., Handbook of Paleo-Preparation Techniques (FREE to new members)	3.25 ea	5.00 ea
Olsson, Axel A. and Anne Harbison, Pliocene Mollusca of Southern Florida	15.00 ea	20.00 ea
Fossil Species of Florida (#1 and #2)	1.00 ea	2.00 ea

A motion was made by Harley Means and seconded by Melissa Cole to adopt the new publication prices (as listed above). The motion passed.

Gary Schmelz made the motion to accept the treasurer's report and was seconded by Roger Portell. The motion passed.

We have probably lost about $1,300.00 on the Vinac that we purchased for resale. The Vinac preservative will no longer be sold by FPS due to problems with stability in storage. Efforts are being made to salvage what we have. Vinac is no longer being produced and for the present, FPS will not be selling a preservative.

There has been great interest in returning to Bradenton, FL and the SMR Aggregates site for a field trip. Possible dates of April 2 or April 9, 20011 were suggested for our spring meeting. Harley Means moved that we do the trip in Bradenton, and Gary Schmelz seconded. The motion passed.

Alex Kittle reported that Paleobotany will be responsible for the next range report for the winter 2011 newsletter.

Melissa Cole moved and Harley Means seconded that we allot $200.00 (or more if needed) to preserve and frame the original artwork for the FPS logo. The motion passed.

Roger Portell asked for monies to purchase 4 or more traffic cones to mark boundaries for FPS members at fieldtrip sites. This was so moved by Marcia Wright and seconded by Melissa Cole. The motion passed.

A motion to adjourn was made by Melissa Cole and seconded by Harley Means. The motion carried.

Respectfully submitted,
Marcia Wright, Secretary

News from the Florida Museum of Natural History's Paleobotany and Palynology Division

Compiled by Terry Lott

Currently, the Paleobotany and Palynology Laboratory has four research scientists, four graduate students, two visiting scientists, and two recent alumni exploring the history of various plant groups through time (from Cretaceous to present) and geography (from Florida, Tennessee, the Western Interior of North America, Northern South America, Hungary, and China).

Our most recent field trip was to western Wyoming in June, 2010 to collect Eocene fossil plants. The team included Steven Manchester, Terry Lott, Sarah Allen, Nareerat Boonchai, Jia Hui, Keith McCall, and Grant Godden. Keith is a history major and Grant is a graduate student in the molecular lab, both wanted a taste of fossil collecting. On the way out, we picked up Sarah at the Denver Airport, visited the Denver Museum of Natural History, and then drove out to Rock Springs. Here we met James Stichka, an amateur collector who introduced us to several great collecting sites around Rock Springs. Aside from collecting, we spent a number of days primitive camping, and visited the Wyoming Dinosaur Center in Thermopolis. From the early Middle Eocene Bridger Formation, we collected a diverse array of leaf, seed and flower fossils, which Sarah is currently analyzing, and a large number of silicified wood specimens. One of the flowers collected, has yielded well preserved pollen inside the stamens, and represents a new angiosperm genus that Sarah and Steve are currently investigating. Although the beautiful petrified woods of Eden Valley have long been collected and polished by rockhounds, the botanical affinities of the plants have remained unknown. This has led to a detailed investigation on the anatomy and botanical affinities of these petrified woods, by Nareerat. She has found woods of the palm, and the cashew families to be particularly abundant.

Steve continues his research on fossil Grapes, sponsored by the National Science Foundation, with the project title "Evolution via the grape vine: Phylogeny and biogeographic history of the Vitaceae". Judy Chen successfully completed her PhD with a dissertation surveying the morphology of all modern genera of the grape family from around the globe, as a basis for evaluating the extensive fossil record of this family. Judy and Steve have an article summarizing their work on grape seeds in the upcoming issue of International Journal of Plant Sciences.

Dr. Hongshan Wang, in addition to the day-to-day curatorial activities as the Paleobotany and Palynology Collections Manager, continues his research on the angiosperm floras of the Cretaceous Dakota Formation of Kansas and Nebraska. Volunteer, Jane Blanchard is helping Hongshan in sorting and photographing fossil flowers and fruits in our collections from the Eocene of Tennessee.

Terry works with the preparation and analysis of fossil plant specimens at the museum and is currently helping Dr. Steven Manchester's research projects after the recent retirement of Dr. David Dilcher. Terry also assists the Herbarium Collection Manager at the Florida Museum of Natural History, and is the Collections Manager for the Genetics Repository. He has recently traveled to Cuba, China, and Tennessee, studying fossil plants from the Eocene and Cretaceous. He continues to assist in plant identifications for a colleague in Iran. Speaking of the Middle East, a colleague of the laboratory, Mohamid Ibrahim of Egypt, was mistaken for another person who was caught carrying a weapon in an Egyptian airport. This story was picked up by the Gainesville Sun, which led to an examination of his association with the museum. Shortly afterwards, our valued palynological colleague, Mohamid was cleared of any suspicion.

Dr. David M. Jarzen completed a two-year study of the diatom flora recovered from three fossil shell midden sites on St. Catherines Island, Georgia. The field and laboratory processing, carried out with the cooperation of Irvy Quitmyer and Susan Jarzen, was funded by a grant from the Edward Noble Foundation (New York) and the American Museum of Natural History. The study was the first of its kind, designed to better understand the source of the marine shellfish in the midden deposits. With Steve Manchester and Sarah Corbett, David reinvestigated the pollen and spore flora from the Miocene, Alum Bluff Group sediments in the panhandle of Florida. This palynoflora is the first thoroughly studied section of Miocene age in Florida and adds significantly to the study of plant life in the Neogene of the southeastern United States. With Curtis Klug of Entrix (Ft. Myers, FL), David completed an investigation of the palynoflora recovered from core sediments of the Oldsmar Formation (Oligocene) on Pine Island, Florida, again adding a new chapter to the oldest land flora in Florida.

Fabiany Herrera is a PhD student, and has been working on Paleocene leaves and fruits collected from northern Colombia and fruits and seeds from the Miocene of Panama. His research focuses on the evolutionary origin of the South American rainforests by looking

at the plant macrofossils. He is interested to know when and how the tropical rainforests appeared in the Neotropics, and what mechanisms have produced the high species diversity and the characteristic family composition. He would also like to reconstruct the paleoclimatic, paleoecological, and paleobiogeographical conditions under which the ancient Neotropical rainforest flourished, particularly during the Late Cretaceous, Paleogene and Middle Miocene.

Fabiany and Steve traveled to Talara, Peru in May, 2010, to revisit a significant fossil seed locality which had been mostly forgotten since its initial discovery more than eighty years ago. Relocating the site, within a few km of the Parinas Point on the Pacific Coast, proved to be a challenge at first because the settlements mentioned in the prior literature published in the 1920s and 30s vanished after the petroleum wells that supported them were exhausted, and do not appear on modern maps. By chance, we found the ruins of an old train station, which allowed us to triangulate back to the former site of Belen, and then the nearby sedimentary strata with abundant silicified seeds. Among these fossils, we collected seeds that are known fossil grapes from South America, and a variety of other plants that no longer live in this desert region today. The age of the site, once thought to be as old as Eocene, now appears to be much younger, possibly Miocene, and records a moister climate that supported members of the custard apple (Annonaceae), grape (Vitaceae), and palm (Arecaceae) families. Some of the fossils belong to plant groups that no longer occur in South America, but have closer living relatives in Africa and Asia.

Paula Mejia is a PhD student, and is interested in determining the floristic patterns of angiosperms and other groups of plants on tropical latitudes during the early radiation of angiosperms using palynology (Lower and Mid Cretaceous), and to infer how those patterns may be related to climate.

The paleobotany team summer of 2010. Field work in Wyoming.

Greg Stull, a first-year graduate student under the mentorship of Steven Manchester and Pam Soltis, is broadly interested in the evolutionary history of flowering plants. For his research, he is interested in using a variety of data types (molecular, morphological, paleobotanical) to reveal the phylogeny and biogeographic history of specific flowering plant groups. He is currently working on a variety of projects involving two pantropical families, Annonaceae and Icacinaceae, including a phylogenetic reconstruction of Xylopia (Annonaceae) and systematic evaluations of icacinaceous and annonaceous fossils from southeastern North America and South America. **Continued on page 10...**

New study first to directly measure body temperatures of extinct species

By Vilma Jarvinen - vjarvinen@flmnh.ufl.edu

GAINESVILLE, Fla. — A new study by researchers from five institutions including the University of Florida introduces the first method to directly measure body temperatures of extinct vertebrates and help reconstruct temperatures of ancient environments.

The study, appearing in this week's online early edition of Proceedings of the National Academy of Sciences, describes how scientists could use carbon and oxygen isotopes from fossils to more accurately determine whether extinct animals were warm-blooded or cold-blooded and better estimate temperature ranges during the times these animals lived.

"Without a time machine, it has previously been impossible to directly take the temperature of extinct animals such as dinosaurs or megalodon sharks," said study co-author Richard Hulbert, a vertebrate paleontologist at the Florida Museum of Natural History on the UF campus. "The method described in the study has been shown to work with 12-million-year-old fossils from Florida and the next step is to look at even older fossils. For example, we have no teeth of Titanoboa, the largest snake ever discovered, but we could use 60-million-year-old crocodylian teeth from the same deposit to find out more about the snake's environment."

Funded in part by the National Science Foundation, the new "clumped-isotope" paleothermometer method used in the study analyzes two rare heavy isotopes, carbon-13 and oxygen-18, found in tooth enamel, bones and eggshells.

"Clumping is temperature dependent, so at low temperatures you get more clumping together in a mineral while high temperatures mean less clumping," said lead author and California Institute of Technology postdoctoral scholar Robert Eagle. "If you can measure the clumping accurately enough, you can work out the temperature at which a mineral formed. In the case of teeth and bone, this will be the body temperature of the organism."

The researchers first tested the method on modern species: the white rhinoceros, Indian elephant, Nile crocodile, American alligator and sand tiger shark. The study confirmed the rhinoceros and elephant, like all mammals, are warm-blooded, and their tooth enamel forms at about 37 degrees Celsius. Researchers confirmed the accuracy within 2 degrees Celsius by measuring teeth of modern sharks from temperature-controlled aquariums. In the next stage of the study, researchers tested fossils of mammoths and older extinct Florida alligator and rhinoceros species.

"The method we present is a big advance because it allows a direct measurement of the body temperature of extinct species, free from the assumptions required with other approaches," Eagle said.

Hulbert said previous research to measure body temperatures of extinct species by comparing concentrations of oxygen-16 and oxygen-18 involved making several assumptions about climate during mineral formation including average humidity of a region, the degree of seasonality and distance from nearest ocean.

The study authors concede there are limitations to the clumped isotope analysis method for studying the evolution of thermoregulation. The results are not a lifelong record and only provide a snapshot of temperature of that animal's body part at the time of formation. Hulbert also said if the tooth enamel has been significantly altered or chemically changed over geologic time, the method will not work.

Eagle said further testing of different-sized dinosaurs and other extinct vertebrates will provide more evidence about whether they were warm- or cold-blooded.

"Temperatures in the range of 26 to 30 degrees Celsius would suggest dinosaurs were similar to alligators and crocodiles," Eagle said. "Temperatures of 36 degrees or higher would be interesting but would not necessarily mean that they were warm-blooded like mammals. It's possible the higher body temperature could be a result of their large body mass, which allows greater heat retention than smaller cold-blooded animals like alligators. This question will be

better answered after measuring dinosaurs of different sizes."

Other study authors are John Eiler of the California Institute of Technology; Edwin Schauble of the University of California, Los Angeles; Thomas Tütken of the Universität Bonn in Germany and Aradhna Tripati, who has appointments at the California Institute of Technology, UCLA and the University of Cambridge.

This photo, shows specimens of 12-million-year old alligator and rhinoceros fossil teeth from the Florida Museum of Natural History collections similar to those used in a new study appearing the Proceedings of the National Academy of Sciences. The study introduces the first method of directly measuring body temperatures of extinct vertebrates using carbon and oxygen isotopes in fossil teeth. The method also could help researchers reconstruct temperatures of ancient environments.
Florida Museum of Natural History photo by Jeff Gage

Continued from page 7...

Sarah Allen is a first year graduate student advised by Steven Manchester. As an undergraduate, she completed a project on a Late Cretaceous macrofossil florule from the Hell Creek Formation in Montana. Her work included both systematic and paleoclimate analyses. She presented this research in Cincinnati, OH at NAPC in 2009 and a manuscript, co-authored by her undergraduate advisor, Nan C. Arens, has been submitted. Currently, she is studying a fossil flora from the Blue Rim Site of the Eocene Bridger Formation in southwestern Wyoming. This flora contains both leaves and reproductive structures from multiple horizons. In contrast to the nearby Green River Formation, little paleontological work has been done in this area of the Bridger Formation. The flora allows for research opportunities in many facets of paleobotany including systematics, paleoclimate and paleoecology. In addition, temporal and geographic comparisons both within the stratigraphic section and throughout the Greater Green River Basin can be made.

Dr. Boglárka Erdei is a Visiting Scientist as a Fulbright Scholar, from the Hungarian Natural History Museum, Hungary. She is here from October 2010 to February 2011, working on the fossil history of cycads from various Eocene sites in North America for comparison with those that she has studied previously from Eastern Europe.

Hui Jia is a visiting research scholar from Dr. Sun Bainian's lab at Lanzhou University, China. She is here from December 2009 to December 2010. She is studying the fossil history of Cercis (redbud, a legume) leaves and pods from the Eocene of western North America, and identifying the late Eocene Teater Road flora of Oregon where most of the Cercis fossils originate.

Nareerat Boonchai is from Nakhon Ratchasima Rajabhat University, Thailand, and joins us as a Visiting Research Scholar from Dr. Sun Ge's lab, Jilin University, China. She was here from August 2009 to May 2010, and worked on fossil wood from the Eocene of Wyoming and fossil leaf cuticle of Lauraceae from Puryear clay pit, Tennessee. She plans to complete her dissertation on this fossil wood from Wyoming. She arranged our visit to the Wyoming Dinosaur Center.

`Qi Wang is a Visiting Scientist from the Research Center for Systematic and Evolutionary Botany, China. He and his family were here from August 2009 to August 2010. He was here working on manuscripts with Steven Manchester, one involving the fossil history of Kudzu.

FPS Product Sales
Prices are for current FPS members only
Shipping and Handling Extra

MC Thomas, Beach and Bank Collecting	$5.00
H Converse, Paleo Preperation Techniques	$5.00
Hulbert, Fossil Vertebrates of Florida	$31.00
Olsson & Harbison, Pliocene Mollusca	$15.00
Florida Fossil Invertebrates	
Part 1, Eocene Echinoids	$7.00
Part 2, Oligocene and Miocene Echinoids	$7.00
Part 3, Pliocene and Pleistocene Echinoids	$7.00
Part 4, Pliocene and Pleistocene Decapod Crustaceans	$7.00
Part 5, Eocene, Oligocene, and Miocene Decapod Crustaceans	$7.00
Part 6, Larger Foraminifera (Introduction)	$7.00
Part 7, Larger Foraminifera (Common Taxa)	$7.00
Part 8, Brachiopods	$7.00
Part 9, Mollusca (Shoal River Formation)	$12.00
Part 10, Mollusca (Anastasia Formation)	$10.00
Part 11, Eocene and Oligocene Corals	TBA
Part 12, Mollusca (Fort Thompson Formation)	$10.00
Part 13, Mollusca (Bermont Formation)	$10.00
Fossil Species of Florida	
Number 1, *Mammut americanum*	$1.00
Number 2, *Tapirus veroensis*	$1.00
T-shirt (Small - XXL)	$14.00
Coffee Mug	$4.00
Sales Tax (Florida residents) add	6.25%

To purchase the above items, please contact:

fps@flmnh.ufl.edu

or

Roger Portell
Florida Museum of Natural History
Box 117800
University of Florida
Gainesville, Florida 32611-7800

BIG SUWANNEE LIMESTONE CORAL DISCOVERED

By Barbara Fite

While on a collecting trip to the Vulcan Brooksville Mine this past the spring hunting season, on an extremely warm June day, I took a break from the echinoids and urchins and looked around for some rocks specimens with crystal in them. These types of rocks are rarely dug up but can contain crystals of either quartz or calcite and come in a variety of colors and sizes.

After hiking around I found a pile of large rocks, and upon inspecting them closer, discovered a boulder that had broken open revealing a large crystallized coral head. Since it was time to leave and it would take numerous very strong people to pick it up, I asked Alan Pagels, the mine representative, that if the Florida Museum of Natural History was interested in the specimen, would he secure it until I could make a return trip with others to help get it out.

These rocks need to be protected from the elements because rain dulls the crystals and sunlight can fade them, not to mention the erosion on the soft limestone affecting the details of the fossils. The museum was definitely interested in the specimen and it with help coordinating from Paul Roth, we returned several weeks later and finally had them loaded into my truck, along with the other two pieces, and some other specimens. This could never have been accomplished without the generous help of Alan Pagels, Paul Roth and Wayne Simmons on one of the hottest July days ever.

Roger Portell, Collections Manager for Invertebrate Paleontology, was very happy to receive the coral because of its size and the bonus of the beautiful root-beer colored crystals. This donation makes it one of the largest coral heads from the Suwannee formation to be cataloged into the Florida Museum of Natural History collections. Other experts will be looking it over for an exact identification but we do know it is early Oligocene. Other specimens recovered that day were molds and casts of mollusks including Turbinella sp. (Chanks) and Pyrazisinus sp. (Mud Creepers), and from families including Lucinidae (clam), Cerithiidae (snail), and Fissurellidae, a very productive day indeed! I can't wait to see what interesting specimens the fall hunting season produces.

Barbara's spectacular find is hidden beneath a pile of riprap.

FLORIDA PALEONTOLOGICAL SOCIETY, INC.
APPLICATION FOR MEMBERSHIP

Mail completed form to :
Florida Paleontological Society
University of Florida, Box 117800
Gainesville, FL 32611-7800

New_____ Renewal_____

Name _____

Address _____

City _____ State _____ Zip Code _____

Email address _____Phone Number _____

TYPE OF MEMBERSHIP

1. INDIVIDUAL ACTIVE ($20.00) _____
2. INSTITUTIONAL ($20.00) _____
3. COUPLES ($25.00) _____
4. FAMILY (3 or more $30.00) _____
5. LIFE ($500.00) _____
6. ASSOCIATE (under 18 $10.00) _____

NOTE!! MEMBERSHIPS ARE FOR A CALENDAR YEAR AND ARE DUE NO LATER THAN JANUARY 1 EACH YEAR! PLEASE RENEW ON TIME!

BIOGRAPHICAL FACT SHEET

1. NUMBER OF YEARS OF INTEREST IN PALEONTOLOGY_____

2. WHICH BEST DESCRIBES YOUR STATUS: COLLECTOR ___ OCCASIONAL DEALER ___ FULL TIME DEALER ___ PROFESSIONAL POSITION ___ JUST STARTING ___

3. PRIMARY AREAS OF INTEREST:

	VERTEBRATE	INVERTEBRATE	BOTANY	MICRO
PLEISTOCENE	____	____	____	____
PLIOCENE	____	____	____	____
MIOCENE	____	____	____	____
OLIGOCENE	____	____	____	____
EARLIER	____	____	____	____

4. LIST ANY PREFERRED TYPES (Echinoids, Crabs, Horses, Sloths, Plants, etc.).

5. LIST ANY PUBLISHED WORKS ON PALEONTOLOGICAL SUBJECTS.

6. DO YOU BUY _____ TRADE _____ FIND _____ FOSSILS?

7. LIST ANY SKILLS OR ABILITIES THAT MAY BE OF USE TO THE SOCIETY'S PROJECTS (RESTORATION, PERPARATION, COMPUTER USE, GRAPHICS SKILLS, SPEAKING, PHOTOGRAPHY, PUBLIC RELATIONS, WRITING, FUND RAISING, ETC.).

8. LIST ANY UNUSUAL SPECIMENS FOUND, CIRCUMSTANCES UNDER WHICH THEY WERE LOCATED AND THEIR DISPOSITION.

PLEASE USE AN ADDITIONAL SHEET IF REQUIRED. THANK YOU!

Payments, contributions, or gifts to the Florida Paleontological Society are not deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as ordinary or necessary business expenses. We recommend that you consult with your tax advisor.