

Florida Paleontological Society , Inc.

Newsletter



*Dues are due by Dec. 31!
(See renewal form on last page inside)*

Volume 9 Number 4 Fall Quarter 1992

FLORIDA PALEONTOLOGICAL SOCIETY, INC.

OFFICERS

President:	Frank Rupert, Florida Geological Survey 903 W. Tennessee St. Tallahassee, Florida 32304
President-Elect:	Susan Pendergraft, 17 Jeff Road Largo, Florida 32544
Past President:	Jim Pendergraft, 17 Jeff Road Largo, Florida 32544
Vice President:	Gordon Hubbell, 150 Buttonwood Drive Miami, Florida 33149
Secretary:	Eric Taylor, P.O. Box 3506 Lake City, Florida 32056
Treasurer:	Phil Whisler, 6414 NW 30th Terrace Gainesville, Florida 32606

BOARD OF DIRECTORS

Tom Ahern, Tampa, 1995	Tim Cassady, Marianna, 1993
Helen Cozzini, Tampa, 1994	Don Crissinger, Nichols, 1995
Steve Manchester, Gainesville, 1995	Robyn Miller, Jacksonville, 1995
Rudi Johnson, Tampa, 1994	Bruce MacFadden, Gainesville, 1993
Roger Portell, Gainesville, 1994	Ray Robinson, St. Petersburg, 1993
Marilyn Whetzel, Boca Raton, 1993	

COMMITTEES AND APPOINTMENTS

M. C. Thomas Book: Nominations: Finance: Spring Meeting: Membership: By-Laws: Honorary Members and Awards: Historical: Board of Editors: Museum Representative (appointed): Resident Agent:	B. MacFadden, R. Portell, K. Schindler J. Pendergraft, S. Pendergraft, K. Schindler P. Whisler, K. Schindler, R. Portell Phil Whisler, B. MacFadden, R. Portell Bob Marsh, A. Brown, B. MacFadden A. Brown, Eric Taylor, Robyn Miller D. Webb, J. Pendergraft, C. Jeremiah B. Waller, C. Jeremiah G. Morgan, F. Rupert, A. Brown, E. Taylor Doug Jones S. David Webb
---	--

HONORARY MEMBERS

Margaret C. Thomas, Ben Waller, Anita Brown

INFORMATION, MEMBERSHIP, AND PUBLICATION INFORMATION

Please Address: Secretary, Florida Paleontological Society, Inc.
Florida Museum of Natural History
University of Florida
Gainesville, FL 32611

CONTENTS

Contents 1
Letter from Jim Pendergraft 2
FPS Happenings 3
From the Secretary 4
Ben Waller receives Converse Award 5
Upcoming Events 6
Book Bits 6
News From the Florida Museum of Natural History 7
Fossil Bird research at the FLMNH 8
FPS Student Research Award 10
Fossil Collecting in other states?..Geological Surveys Can Help 11
The Fauna and Paleoecology of the Moss Acres Racetrack Site 13
FPS Revenue and Expense Statement and Statement of Assets 14
Graptoloidea, an eye bird view of its morphology, classification, and geologic history 15
The Fossil and Artifact Collector's Dream 17
Minutes of the FPS Fall Meeting 18
Minutes of the Board of Directors Meeting held during the Fall Meeting 20
FPS Membership Renewal Form 23

Happy
Holidays

Wishing you a Holiday Season
filled with wonderful surprises!



Editor's note: The following letter from Past President Jim Pendergraft is a follow-up to his letter that appeared in the last newsletter. We are printing it to allow Mr. Pendergraft to clarify and correct some points which may have been unclear or in error. Please remember that the views expressed are those of Mr. Pendergraft, and do not necessarily reflect the opinions of the Officers, Board, or membership of the Florida Paleontological Society.

Dear Fellow Fossil Collectors:

This letter is intended to update my previous letter. That letter contained a few errors that, in light of new information, need clarification. Senate Bill #3107, if passed, will not make fossil collecting illegal. It will, however, make it illegal as we now know it.

I have a number of problems with this legislation: 1) It would severely limit the public's ability to collect fossils on public lands; 2) It would require public funds to be spent surveying large tracts of land; 3) The bill prohibits the sale of any vertebrate fossils found on public lands; and 4) The penalties established carry incredibly stiff fines and jail terms for violation of provisions in the bill.

Amateurs would have to apply for a permit to collect any paleontological resource. First, they would have to spend many hours in the field trying to locate a find. Next, they would have to fill out a permit which details the location, who would excavate the remains, and in which suitable institution (ie.: museum, university, federal or state geological survey) the fossil would reside. Then the Federal Land Manager must rule on the qualifications of the applicant. If approved, the State Paleontologist or Federal Regional Advisor may then recommend that the fossils should be excavated. I assume that they will have to personally check each find. This is in itself a monumental job! Once the fossil is unearthed, the amateur or professional would have to file a report. After all this work, money, time and resources are spent, the amateur may be told the fossil must reside in a suitable institution and not remain in their possession. If they are allowed to retain possession, it is under the terms that the fossil is the property of the United States Government and may not be sold! There is no mention of trading. However, suitable institutions (museums) who wish to trade will have to go through the Department of the Interior for permission. The permitting process is cumbersome and includes much red tape. I feel that many fossils will be lost to erosion for lack of amateur incentive. This in turn may result in fewer scientifically valuable specimens being discovered if this legislation is passed.

Senate Bill #3107 would also require that public funds be spent so that public lands could be surveyed to determine the location of fossil bearing lands. I feel this is a waste of taxpayer dollars because erosional processes reveal new localities each year. This means they would have to complete a new survey each year at great expense to the taxpayer. Also, most fossil localities are already documented through scientific literature. Many new ones are reported each year by amateurs and commercial dealers. Will collectors find and report new localities with the same dedication and vigor? I doubt it!

This regulation would prohibit the sale of any fossil found on public lands no matter how insignificant. This would mean the small fossils provided by amateur and commercial collectors for educational purposes would be almost impossible to collect. I for one would not want to face the penalty for picking up a vertebrate remains without a permit no matter how insignificant.

The penalties are so harsh that persons fossil collecting without a permit would face fines and jail terms that equal the penalties for drug dealers. For example, a person unknowingly transporting a fossil found on public lands across state lines could be charged with wrongful trafficking and face a fine of \$10,000 or up to 1 year in prison for the first offense.

In closing, I would like to emphasize that this sort of regulation would not be beneficial to the professional or amateur paleontologists. The legislation is the result of a few radical professionals who envision a severely limited role for amateur collectors and no place for commercial collectors in the field of vertebrate paleontology.

Sincerely,
Jim Pendergraft
Past President, FPS



F.P.S. Happenings

Fall Meeting an Outstanding Success

The Fall Meeting of the Florida Paleontological Society was held in Bartow, Florida on the weekend of October 17-18, 1992. In all measures, the meeting was an outstanding success.

The meeting weekend kicked off Saturday morning with the annual business meeting. During the meeting, the new slate of FPS officers and board members were announced and introduced. These are: **Frank Rupert**, President, **Susan Pendergraft**, President-Elect, **Gordon Hubbell**, Vice President, **Eric Taylor**, Secretary, and **Phil Whisler**, Treasurer. New Board Members are: **Don Crissinger**, **Steven Manchester**, and **Robyn Miller**. An important part of every Fall Meeting is the presentation of the Howard Converse Award. **Bruce MacFadden** and **Gary Morgan** presented this year's award to **Ben Waller** for his numerous contributions to Florida paleontology.

After the meeting we adjourned for lunch, during which a Board of Directors' meeting was held (see the Board Meeting minutes, this issue). After lunch, the gang reconvened in the meeting room for a series of outstanding talks by various fossil experts. Visiting us from California, **Steve Emslie** presented a very interesting talk on his work with the fossil birds of the Quality Aggregates pit in Sarasota County. **Richard Hulbert** showed us his work on recovering a significant species of Eocene whale from a power plant site in Georgia. **Gordon Hubbell** made our mouths water with slides of shark-tooth covered plains in Peru, and **Daryl Domning** provided us with a fascinating overview of Florida's fossil sirenian. All the talks were outstanding, and we appreciate the effort these folks went to in preparing and traveling to present to us.

After the talks, we convened in the Davis Brothers lounge for "Happy Hour". Many of the

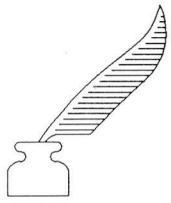
members attending used this time to discuss their latest finds, or to examine Gordon Hubbell's exquisite sharks tooth collection.

A fantastic buffet supper was furnished by the Davis Brothers cafeteria. The all-you-can-eat roast beef and fresh boiled shrimp were particularly enticing, but all the food was great. Hats off to Davis Brothers for the excellent job they did for us!

The high point of our evening Saturday was the fossil auction. A number of generous individuals donated a wide range of great paleo stuff for the sale. Casts of some very unique Florida vertebrate fossils, numerous publications, and miscellaneous sieve screens, fossil shirts, hats, sharks teeth, and Miami Limestone cores were donated to the cause. **Phil Whisler** did a fantastic job as our auctioneer, and **Susan Pendergraft** functioned as our "Vanna", showing off the items for sale. The bidding was fast and furious at times, but some excellent buys were made. Counting a generous last minute cash donation, the auction netted \$2,000...not a bad night at all!

Sunday morning, we split into two groups for the fossil collecting trips. One group drove to the Agrico Fort Payne Phosphate Mine, the other headed for Mobil. The morning's hunting went well. Members found the usual abundant sharks teeth and assorted other vertebrate bone fragments. A whale vertebrae and small fragments of silicified wood were found in the Agrico mine. Some excellent horse teeth were uncovered at Mobil as well. Agrico and Mobil were quite generous in supplying us safety equipment and refreshments, and we thank them for graciously allowing our sojourn into their mines. Around noon, the members began heading homeward with their treasures, ending a truly informative and fun-filled weekend. Many thanks to **Don Crissinger** for his assistance in arranging the mine trips, and kudos to **Kevin Schindler** for the fine job planning the meeting location and logistics.

F.P.S. Happenings, continued:



From the Secretary...

by Eric Taylor

A new enrollment/renewal form is included with this newsletter. It includes the newly approved dues schedule and a brief autobiographical summary sheet. The reasons for the information sheet are severalfold. We are constantly getting requests from people for various kinds of information, and we can be a much more effective referral service if we know who to refer people to. Also, we are going to be very involved in several projects over the coming years and we need to know who among us has knowledge and skills that might be of use.

Please remember...YOUR DUES ARE DUE ON OR BEFORE JANUARY 1, 1993!!!

Thanks to former FPS President Bill Webster for his contribution to the newsletter this month! PLEASE! Write up your story and send it to us! We'll take anything (printing it is another matter, but...)

I hope all of you have a delightful holiday season and that the fossil of your dreams is under your tree!

Member Notes

New Members since 8/16/92:

Botanical Gardens of Volusia, Inc., 1584 Ridgewood Ave., Holly Hill, FL 32117-2835

Florence E. Graham, P.O. Box 428, Frostproof, FL 33843

Bill Flowers III, 3601 Sequoia Way, Valrico, FL 33594

Christopher Gervasi, 411 Covington Rd., Havertown, PA 19083

Kathleen Ketcher, University of South Florida, SCA 203
Tampa, FL 33620

Bobby A. Goodman, 1400 83rd Ave. N., St. Petersburg, FL 33702

Steve Simms, 421 Wilson Street, Fort Meade, FL 33841

Carl J. Williams, 3108 Emerson St., Tampa, FL 33629

Justin Zumbro, 7301 West University Ave., #A68
Gainesville, FL 32605

Robert L. Strouse, 3535 Unique Circle, Ft. Myers, FL 33908

Eric and Randall Ebling, 770 Enfield Court, Delray Beach, FL 32444

Lisa Harding, 7140 Cisco Gardens Rd. East, Jacksonville, FL 32219

Vaughn T. Scott, 1601 Panther Ridge Ct., Jacksonville, FL 32225

Matthew C. Andrea, 1816 13th St. NW, Washington, DC 20009

Perri Wexler, 1536 NW 2nd Ave., Apt. A, Gainesville, FL 32603

Andrew A. Morey, Rt. 2 Box 562-F, Summerland Key, FL 33042

(Note: Andrew is a young man who is interested in fossil corals. If any member has any information they could send him, he would appreciate it!).

Matthew Paul Spizuco, Department of Geology, University of South Florida, Tampa, FL 33620

Eugene Hartstein, 17331 Hughwood Drive, Orland Park, IL 60462

(Gene is President of the Chicago Area Fossil Club. His business card has a Tully Monster on it! He attended the spring meeting, and was quite active in the auction, and then had the good luck to go with Don Crissinger to the Mobile Mine on the Fall Meeting fieldtrip. Gene found one of the most beautiful upper teeth and matching lower from a Neohipparion horse I have ever seen. Don didn't do too badly either, the fink!).

Address Changes and Corrections:

Jolene Taylor, 204 Wild Oats, West Palm Beach, FL 33411-8615

John E. Powell, 240 Post Oak Rd., Kernersville, NC 27284-8027

Suzanne Conner, 3777 NW 78th Ave., Apt. 4H, Hollywood, FL 33024-8345

Dr. and Mrs. R.G. and Davonna Churchill, 36848 8th Ave., Zephyrhills, FL 33541

Margaret J. Winner, 6183 Rowe Street, Englewood, FL 34224-7814

Member Address Changes and Corrections, continued:

Steve Hutchins, HC-1 Box 758, Old Town, FL 32680

(Steve went with Frank Garcia to Nebraska this summer and finished excavating his Brontothere skull. Craig Taylor helped, along with several others. Steve's new place is called "Red Bug Farm"...makes you wonder what he's raising).

Jeffrey L. Grubbs, 4127 Winners Circle, Apt. 226 Sarasota, FL 34238

Michael Arnall, 104 Wild Oats, Royal Palm Beach, FL 33411

Bill Oppermann, 1400 NW 70th Lane, Margate, FL 33063

James E. Ranson, Jr., 10214 N. Connechusett Rd., Tampa, FL 33617-3900

Steve Acree, Rt. 4 Box 142, Ada, OK 74820

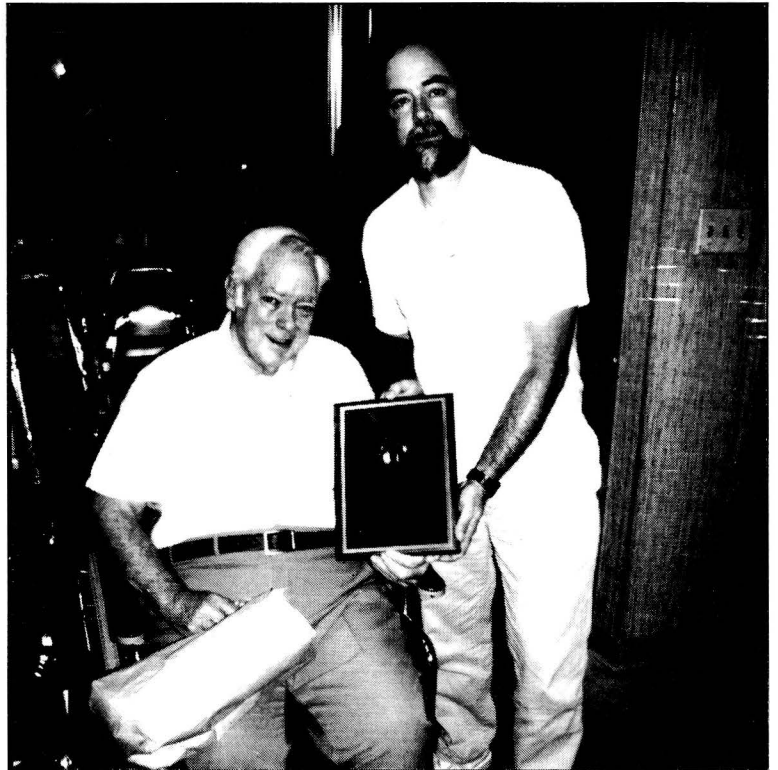
Michael Moore, 2432 Hayes St., Hollywood, FL 33020-3416

Ben Waller receives 1992 Converse Award

The 1992 Howard Converse Award was presented to Ben Waller in recognition of his numerous contributions to Florida Paleontology. Bruce MacFadden and Gary Morgan presented Ben the award at the Florida Paleontological Society's Fall Meeting in Bartow. A plaque sporting a replica of the foot bone of the rare *Titanis walleri*, a giant Pliocene bird named in his honor, was presented to Ben by the Florida Museum of Natural History.

Ben's contributions to our knowledge of Florida's ancient vertebrates span a lifetime of prolific collecting. He personally discovered over 30 new species for the Florida fossil record. Perhaps his most famous find to date was the giant flightless *Titanis walleri* (see Florida fossil bird article, by Bob Chandler - this issue). His enthusiasm and skill as an amateur paleontologist, and his unselfish contributions to the Museum collection have earned the respect of his professional and amateur peers alike. Congratulations Ben!

The Howard Converse Award is presented yearly by the Florida Museum of Natural History to recognize those persons who have made outstanding contributions to further paleontology in the state. Individuals are nominated for the award by the curators and collection managers of the Invertebrate and Vertebrate Paleontology and the Paleobotany Divisions. The recipient is then selected from the pool of nominees by three members from the above-mentioned divisions.



Ben Waller and Gary Morgan at the FPS Fall Meeting (photo courtesy of Tom Harrigan).

Upcoming Events

MULBERRY FOSSIL FAIR - Lew Haag, with the Mulberry Phosphate Museum, is inviting fossil clubs to participate in a fossil fair to be held the first weekend in April, 1993. The fair will be held in conjunction with the city-wide Mulberry Jubilee weekend. Approximately 30 booth spaces will be made available on the Museum grounds for \$10.00 each (payable to the City of Mulberry). The money will provide security for the exhibitors on Friday and Saturday nights.

A fossil hunting trip to the phosphate mines is planned for Saturday, April 3rd, from 8 AM until 12 PM. The trip fee is \$5.00 per person, payable to the Phosphate Museum Foundation. This trip is limited to 100 people. If FPS members are interested in participating in the exhibits or need further information, call Lew at (813) 425-2823 or Gary Hacking at (813) 425-5492.

Florida Shell Shows (from *Southwest Florida Shell News*, 11/92):

- Jan. 15-17** **Greater Miami Shell Show**, call (305) 642-1504 for info.
- Jan. 23-24** **Astronaut Trail Shell Show**, Melbourne, (407) 452-5736.
- Feb. 5-7** **Broward Shell Show**, Pompano Beach, (305) 764-0768.
- Feb. 11-13** **Ft. Myers Festival of Shells**, Fort Myers, (813) 936-4058.
- Feb. 19-21** **Sarasota Shell Show**, Sarasota, (813) 355-2291.
- Feb. 26-28** **Naples Shell Show**, Naples, (813) 597-6115.
- Feb. 26-28** **St. Petersburg Shell Show**, Treasure Island, (813) 360-0586.
- April 1-3** **Southeastern Section, Geological Society of America Meeting**, Tallahassee. Exhibit booth space is available - Call Woody Wise, (904) 644-6265 for info.

Book Bits

For the invertebrate enthusiasts, Lyman Toulmin's *Stratigraphic Distribution of Paleocene and Eocene Fossils in the Eastern Gulf Region* is an excellent reference. This two-volume set was published in 1977 as the Alabama Geological Survey's Monograph 13. It is well illustrated, and has maps of collecting localities in Florida, Georgia, and Alabama. A recent call to the Alabama Survey revealed that it is still available for \$10.25 plus \$3.00 shipping. Make checks payable to "Geological Survey Map Fund", and mail to:

Publication Sales
Geological Survey of Alabama
420 Hackberry Lane
Tuscaloosa, AL 35486

OOPS! No, you're not going crazy...last quarter's newsletter was inadvertently labeled "Fall 1992" on the cover. It should have been "Summer 1992". You now have the correctly labeled Fall issue in your hand.

Our apologies also to **Russ McCarty**. He graciously provided us with the BUTVAR mixing instructions in the last newsletter, and this editor absent-mindedly left his name off of it. Sorry Russ!

Finally, it has been pointed out that the FPS BYLAWS printed in the last issue did not contain the new member categories or the new dues information. Section 1 of Article III should read *Annual dues for the calendar year shall be fifteen (\$15.00) for Members and five (\$5.00) for Associate Members*. The new membership categories include **Couples** (\$20 a year), **Family** (\$30 a year), and **Sustaining** (\$100 a year). We are currently working on an FPS membership booklet, containing a correct version of the BYLAWS, which will be mailed out to all members.

News

from the



The Florida Museum of Natural History has received two major vertebrate fossil collections during the past six months. **Dr. Richard Ohmes** of Bremerton, Washington donated a large number of American mastodon (*Mammut americanum*) and Columbian mammoth (*Mammuthus columbi*) partial skulls, mandibles, tusks, and isolated teeth, as well as several skulls of an extinct bison (*Bison antiquus*), from the Aucilla River on the border between Jefferson and Taylor counties in the eastern Florida panhandle. The Aucilla collection represents the single largest mastodon sample known from Florida. We also received a significant collection from the late Pleistocene Warm Mineral Springs Site donated by **Sonny Cockrell** and the Bureau of Archaeological Research in Tallahassee. Warm Mineral Springs is an underwater site located near North Port in Sarasota County that documents the association of paleoindians and Pleistocene megafauna, in particular skeletons of the saber-toothed cat (*Smilodon floridanus*) and Jefferson's ground sloth (*Megalonyx jeffersonii*). This new collection from Warm Mineral Springs is also very rich in fish, frogs, snakes, birds, and rodents.

The museum VP staff has been busy with a number of field projects this year, which in itself is somewhat of a miracle considering the recent budgetary woes the FLMNH has experienced. **Gary Morgan, Roger Portell**, and graduate student **Bruce Shockey** travelled to Bolivia in May and June to collect fossils from the Oligocene and Miocene Salla Beds. They made a number of good finds, including a partial bird skeleton, two skulls of tiny marsupials, several armadillo skulls, and two skeletons and a number of skulls of the rhino-sized notoungulate *Trachytherus*. As soon as this group returned to Gainesville, **Bruce MacFadden** left for Bolivia, this time to collect fossils and paleomagnetic samples from the Miocene localities of Cerdas and Quehua.

Art Poyer continues to lead monthly expeditions to Surprise Cave, a late Pleistocene cave deposit in Alachua County. Giant tortoises and rabbits are both extremely abundant at Surprise Cave. More than 40 other species of amphibians, reptiles, birds, and mammals also have been identified from the site. Art has been assisted in his efforts by **Erika Simons** of the FLMNH staff, as well as by many volunteers from the Florida Speleological Society, in particular **Al and Mardi Krause** and **Scott Wasdo**. **Mike Stallings, Tony DiCarlo, Janice Brown**, and museum crews have discovered a number of interesting late Pleistocene fossils in the past few months on diving trips to the Oklawaha River and Santa Fe River.

Bruce MacFadden's Fossil Horse Fund and the FLMNH sponsored two weekend digs at the Miocene Thomas Farm Site in Gilchrist County during May. More than 20 people participated in the Thomas Farm digs, including a number of FPS members. The weather cooperated and, based on comments by the participants, a good time was had by all. We are planning more Thomas Farm digs in the future, probably during the Fall and following Spring. Announcements will appear in the FPS Newsletter and Pony Express.

The Leisey Shell Pit monograph is finally nearing completion. We've been saying that for several years now, but it really is true this time. All manuscripts have been received from the authors and are now being sent out for review. The Leisey Volume should be of interest to FPS members, many of whom have dug at Leisey during the past ten years. There are 20 papers in the volume contributed by more than 30 authors on a wide variety of topics ranging from all groups of vertebrates, to molluscs and plants to taphonomy, paleomagnetism, and strontium isotope stratigraphy. The Leisey monograph will appear in the Florida Museum of Natural History Bulletin in late 1992 or early 1993.



Phenacodus, a giant Eocene bird similar to *Titanis*.

CHAS. R. KNIGHT

1901

Fossil Bird Studies at the FLMNH

by Bob Chandler

Florida fossil birds are some of the best studied in the world (see Hulbert, 1992, Papers in Florida Paleontology, No.6, pp.12-18). The reason for this is the legacy left by the late Dr. Pierce Brodkorb. Dr. Brodkorb died recently at the age of 83. For 43 years he was a professor in the Department of Zoology at the University of Florida, and had published more than 65 papers on fossil birds, many of these based on fossils collected in Florida. In addition, some of Dr. Brodkorb's former students continue to describe fossil birds from Florida. Other contributions to ornithology and paleontology by Dr. Brodkorb are the comparative osteology collection of living birds and the fossil bird collection he amassed over his career at UF. In 1989, these collections were transferred from his care to the Florida Museum of Natural History.

Dr. David Webb of Vertebrate Paleontology, FLMNH, has written a National Science Foundation Grant to get funding for transporting, housing, and curating of the Brodkorb collections. Dr. Webb's grant was funded by NSF in June of this year and I have been hired to curate these collections with the help of Gary Morgan in Vertebrate Paleontology and Dr. Tom Webber in Ornithology. Dr. Brodkorb's osteology collection is the fifth largest in the world for diversity of species and eleventh largest in total number of specimens.

Dr. Brodkorb's paleontological credits include his five volume Catalogue of Fossil Birds, and papers on the fossil birds of Thomas Farm, Bone Valley, the West Indies, and numerous Pleistocene localities like Reddick. However, of the 84 fossil species named by Dr. Brodkorb the most extraordinary species is *Titanis walleri*.

Titanis walleri was named in 1963 in honor of its discoverer Ben Waller. *T. walleri* is most closely related to a South American predatory group of fossil birds known as phororhacids. Waller's phororhacid was flightless and approximately six feet tall. It had a laterally compressed beak and skull about eighteen inches long, its feet were equipped with three inch long claws, and it could run-down its prey with bursts of speed up to 50 mph (comparable to that of an ostrich). Waller's phororhacid was a Great American Interchange species walking to Florida from South America sometime before 2.5 million years ago (adding in time to rest along the way).

How much do we know about the skeleton of Waller's phororhacid? The holotype and paratype of this species are the distal end of the right tarsometatarsus and a proximal podial phalanx, respectively. These were found in the Santa Fe River in Columbia County. In addition, we now have a claw, part of the narial opening in the beak, a fibula, and the proximal end and shaft of the tibiotarsus, all from the Santa Fe River. For her dissertation in 1981, Gail Speaker Carr described the paleo-avifauna from Inglis, in which she describes eleven fossils of *T. walleri*. The bones described are: from the wing a complete carpometacarpus, from the neck two cervical vertebrae, and from the leg a portion of the shaft of the tibiotarsus and several phalanges. From the Port Charlotte area there is a single podial phalanx. Most of what we know about Waller's phororhacid is surmised from the fragmentary fossils we have and from comparisons made with better-known phororhacid fossils from South America. Until we have more fossils to flesh-out this big bird our understanding of Waller's phororhacid will remain incomplete.

A new Santa Fe River project is underway to find more fossils of *Titanis* and possibly new localities as well. I will be seeking funding for this project in the near future. Hopefully, this will lead to a new exhibit at the FLMNH and a more complete picture of this South American immigrant.



Announcing the Florida Paleontological Society's

STUDENT RESEARCH AWARD

1ST ANNUAL COMPETITION

Prospectus and General Overview

The Florida Paleontological Society (FPS) is pleased to announce the establishment of the Student Research Award. The purpose of this award is to promote a better understanding of **paleontology and ancient life of Florida** through new research discoveries. Eligible fields of relevance within Florida paleontology include invertebrates, vertebrates, microfossils, and plants. This award is open to any **college student, undergraduate or graduate**, in good standing at a Florida college or university.

For this first competition the FPS has allocated an award of up to \$500. The purpose of this grant is for expenditures such as (but not restricted to) field work, museum research travel, laboratory analyses, research materials, etc. It is not intended to fund travel to scientific meetings, indirect (overhead) costs, or salaries and wages. The **deadline** for receipt of proposals for the first competition is **1 March 1993**.

Applications must be postmarked on or before the deadline and be sent to the Secretary at the address listed below. Applications will be screened by a committee and will be judged based on the following criteria: (1) merit of the proposed research, (2) feasibility of the project, (3) clarity of expression, and (4) the letter of recommendation from a faculty sponsor. The screening/award committee shall consist of professional and hobbyist paleontologists. In order to avoid potential conflicts of interest, students whose advisor serves on this committee are ineligible to apply. The Award will be announced on May 15th and a check for the requested amount (up to \$500) will be sent by the Treasurer to the recipient.

It is expected that during, or after completion of, the research, the recipient will present the results of their discoveries and additions to knowledge in the form of (1) a short article of a non-technical nature to be published in the FPS newsletter and/or (2) a talk presented at a FPS Meeting. In the event of the latter, the student's travel expenses to the meeting will be paid by the FPS (but this does not have to be included in the originally requested budget).

The Application Process and Requirements:

The application proposal is intended to be short--thus, entries 1-4 are limited to two pages (minimum 10-point type, standard 1" margins). The application must include:

1. Title of research project
2. Name, address, and phone number of applicant
3. Current college status (where enrolled, major, degree program, anticipated graduation date).
4. Project description written in **general, i.e., to the extent possible, non-technical**, terms to include description of what he/she plans to study, why it is interesting or important, how and when it will be done, and a short budget of proposed expenditures.
5. Appended to this proposal there must be a letter from a faculty sponsor who will vouch for the qualifications of the applicant as well as the importance of the project, and a statement that he/she will supervise the research.

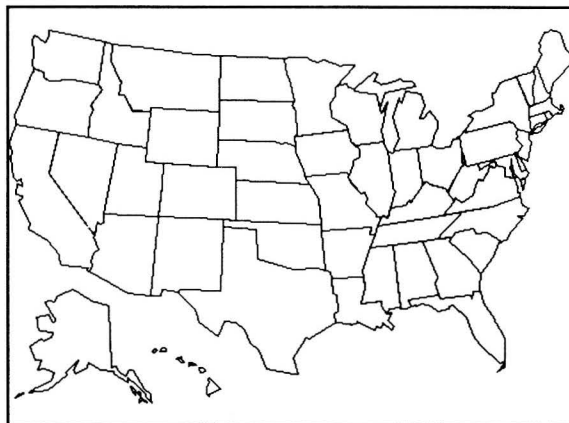
Applications should be submitted by 1 March 1993 to:

Eric Taylor, FPS Secretary
Florida Paleontological Society
Florida Museum of Natural History
University of Florida
Gainesville FL 32611-2035

Please Post and/or Circulate this Announcement

Planning to collect in other States?.... Geological Surveys can help!

By Frank Rupert



The next time you're planning a fossil collecting vacation, check in advance with the Geological Surveys of the states you will be visiting for publications on local fossil sites. Many Surveys publish leaflets, bulletins, and maps on fossil localities and regulations. Most publications are available by mail for a nominal fee. You may contact the state Survey's at the following addresses:

**Geological Survey of
Alabama:**
420 Hackberry Lane,
Tuscaloosa, AL, 35486-9780.
Ph. (205) 349-2852.

**Alaska Division of
Geological and Geophysical
Surveys:** 794 University
Ave., Suite 200, Fairbanks,
AK 99709-3654
Ph. (907) 474-7147.

Arizona Geological Survey:
845 N. Park Ave., Suite 100,
Tucson, AZ 85719. Ph.
(602) 882-4795.

**Arkansas Geological
Commission:**
Vardelle Parham Geology
Center, 3815 W. Roosevelt
Rd., Little Rock, AR 72204.
Ph. (501) 371-1488.

**California Division of Mines
and Geology:**
Department of Conservation,
1416 Ninth St., Room 1341,
Sacramento, CA 95814. Ph.
(916) 445-1923.

Colorado Geological Survey:
1313 Sherman St., Room
715, Denver, CO 80203. Ph.
(303) 866-2611.

**Connecticut Geological and
Natural History Survey:**
165 Capitol Ave., Room 553,
Hartford, CT 06106
Ph. (203) 566-3450.

Delaware Geological Survey:
DGS Bldg., University of
Delaware, Newark, DE
19716. Ph. (302) 451-2833.

**Geologist of Washington,
D.C.:**
Dept. of Environmental
Science, MB 44-04,
University of the District of
Columbia
4200 Connecticut Ave. NW,
Washington, D.C., 20008.
Ph. (202) 282-7380.

Florida Geological Survey:
903 W. Tennessee St.,
Tallahassee, FL 32304. Ph.
(904) 488-4191.

Georgia Geologic Survey
Environmental Protection
Division
Natural Resources, Rm. 400
19 Martin Luther King, Jr.
Dr. SW
Atlanta, GA 30334
Phone: 404-656-3214

Hawaii Geological Survey
Dept. of Land & Natural
Resources
Div. of Water/Land Develop.
P.O. Box 373
Honolulu, HI 96809
Phone: 808-587-0230
FAX: 808-587-0219

Idaho Geological Survey
Room 332, Morrill Hall
University of Idaho
Moscow, ID 83843
Phone: 208-885-7991
FAX: 208-885-5826

**Illinois State Geological
Survey**
121 Natural Resources Bldg.
615 E. Peabody Dr.
Champaign, IL 61820-6964
Phone: 217-333-4747
FAX: 217-244-7004

Indiana Geological Survey
611 N. Walnut Grove
Bloomington, IN 47405
Phone: 812-855-9350
FAX: 812-855-2862

Iowa
Geological Survey Bureau
Iowa Department of Natural
Resources
109 Trowbridge Hall
Iowa City, IA 52242-1319
Phone: 319-335-1575
FAX: 319-335-2754

Kansas Geological Survey
1930 Constant Ave., West
Campus
The University of Kansas
Lawrence, KS 66047
Phone: 913-864-3965
FAX: 913-864-5317

Kentucky Geological Survey
228 Mining and Mineral Res.
Building
University of Kentucky
Lexington, KY 40506-0107
Phone: 606-257-5500
FAX: 606-257-1147

Louisiana Geological Survey
P.O. Box 2827
University Station
Baton Rouge, LA 70821-
2827
Phone: 504-338-5320
FAX: 504-388-5328

Maine Geological Survey
Department of Conservation
State House Station 22
Augusta, ME 04333
Phone: 207-287-2801
FAX: 207-287-2353

Maryland Geological Survey
2300 St. Paul Street
Baltimore, MD 21218-5210
Phone: 410-554-5500
FAX: 410-554-5502

**Massachusetts Geological
Survey**
Commonwealth of
Massachusetts
Exec. Environmental Aff.
100 Cambridge Street
Boston, MA 02202
Phone: 617-727-9800
FAX: 617-727-2754

Michigan Geological Survey
Department of Natural
Resources
Geological Survey Div.
P.O. Box 30256
Lansing, MI 48909
Phone: 517-334-6923
FAX: 517-334-6038

Minnesota Geological Survey
University of Minnesota
2642 University Avenue
St. Paul, MN 55114-1057
Phone: 612-627-4780
FAX: 612-627-4778

Mississippi Office of Geology
Department of
Environmental Quality
P.O. Box 20307
Jackson, MS 39289-1307
Phone: 601-961-5500
FAX: 601-961-5521

Missouri Geological Survey
Department of Natural
Resources
Division of Geology & Land
Survey
P.O. Box 250
Rolla, MO 65401

STATE SURVEYS, Continued

Missouri, continued:

Phone: 314-368-2100
FAX: 314-368-2111

Montana Bureau of Mines & Geology

West Park St.
Montana Tech.
Main Hall
Butte, MT 59701
Phone: 406-496-4180
FAX: 406-496-4451

Nebraska Geological Survey

Conservation & Survey Div.
University of Nebraska
113 Nebraska Hall
901 N. 17th St.
Lincoln, NE 68588-0517
Phone: 402-472-3471
FAX: 402-472-2410

Nevada Geological Survey

Bureau of Mines & Geology
University of Nevada-Reno
Mail Stop 178
Reno, NV 89557-0088
Phone: 702-784-6691
FAX: 702-784-1709

New Hampshire Geological Survey

Dept. of Earth Science
117 James Hall
University of New
Hampshire
Durham, NH 03824-3589
Phone: 603-435-2975
FAX: 603-862-2030

New Jersey Geological Survey

Div. of Science & Research
Dept. of Environmental
Protection & Energy
P.O. Box 427
Trenton, NJ 08625
Phone: 609-292-1185
FAX: 609-633-1004

New Mexico Bureau of Mines & Mineral Resources

Campus Station
Socorro, NM 87801
Phone: 505-835-5420 or
5302
FAX: 505-835-6333

New York Geological Survey

State Museum
Empire State Plaza
3136 Cultural Education
Center
Albany, NY 12230
Phone: 518-474-5816
FAX: 518-473-8496

North Carolina Geological Survey

Dept. of Environ/Health/
Natural Res.
Division of Land Resources
P.O. Box 27687
Raleigh, NC 27611-7687
Phone: 919-733-3833
FAX: 919-733-4407

North Dakota Geological Survey

600 East Boulevard
Bismarck, ND 58505-0840
Phone: 701-224-4109
FAX: 701-224-3682

Ohio Geological Survey

Dept. of Natural Resources
4383 Fountain Sq. Drive,
Bldg. B
Columbus, OH 43224-1362
Phone: 614-265-6576
FAX: 614-447-1918

Oklahoma Geological Survey

100 East Boyd, Rm. N-131
Norman, OK 73019-0628
Phone: 405-325-3031
FAX: 405-325-7069

Oregon Dept. of Geology & Mineral Industries

Suite 965
800 NE Oregon St. #28
Portland, OR 97232-2162
Phone: 503-731-4600
FAX: 503-731-4066

Pennsylvania Bureau of Topo. & Geologic Survey

Dept. of Environmental
Resources
P.O. Box 2357
Harrisburg, PA 17105-2357
Phone: 717-787-2169
FAX: 717-783-7267

Puerto Rico Department of Natural Resources

Division of Geology
P.O. Box 5887
Puerta de Tierra, PR 00906
Phone: 809-722-2526
FAX: 809-724-0365

Rhode Island

Department of Geology
University of Rhode Island
315 Green Hall
Kingston, RI 02881
Phone: 401-792-2265
FAX: 401-792-2190

South Carolina Geological Survey

5 Geology Road
Columbia, SC 29210-9998
Phone: 803-737-9440
FAX: 803-737-9487

South Dakota Geological Survey

Dept. of Water & Natural
Resources
University of South Dakota
Science Center Vermillion,
SD 57069-2390
Phone: 605-677-5227
FAX: 605-677-5895

Tennessee Division of Geology

Department of Environment
& Conservation
13th Floor, L & C Tower
401 Church St.
Nashville, TN 37243-0445
Phone: 615-532-1500
FAX: 615-532-0120

Texas

Bureau of Economic
Geology
The University of Texas
@Austin
Box X, University Station
Austin, TX 78713-7508
Phone: 512-471-7721
FAX: 512-471-0140

Utah Geological Survey

2363 S. Foothill Dr.
Salt Lake City, UT 84109-
1491 Phone: 801-467-7970
FAX: 801-467-4070

Vermont Geological Survey

Agency of Natural Resources
103 South Main St. - Center
Bldg.
Waterbury, VT 05671-03016
Phone: 802-244-5164
FAX: 802-244-1102

Virginia Dept. of Mines, Minerals, & Energy

Division of Mineral
Resources
Natural Resources Bldg.,
McCormick Rd.
P.O. Box 3667
Charlottesville, VA 22903
Phone: 804-293-5121
FAX: 804-293-2239

Washington Geological Survey

Department of Natural
Resources
Geology and Earth
Resources
P.O. Box 47007
Olympia, WA 98504-7007
Phone: 206-902-1450
FAX: 206-902-1442

West Virginia Geological & Economic Survey

Mount Chateau Research
Center
P.O. Box 879
Morgantown, WV 26507-
0879
Phone: 304-594-2331
FAX: 304-594-2575

Wisconsin Geological & Natural History Survey

3817 Mineral Point Road
Madison, WI 53705-5100
Phone: 608-262-1705
FAX: 608-262-8086

Geological Survey of Wyoming

P.O. Box 3008
University Station
Laramie, WY 82071-3008
Phone: 307-766-2286
FAX: 307-766-2605

The Fauna and Paleoecology of the Moss Acres Racetrack Site (Late Early Hemphillian, Late Miocene) in Northcentral Florida

by W. David Lambert
Florida Museum of Natural History

The Moss Acres Racetrack site is a clay-filled sinkhole formed in Eocene Ocala Limestone (approximately 45 million years old) in Marion County, northcentral Florida, close to the small town of Morriston. This site has been dated as being about 7.5 million years old on the basis of faunal correlation with sites on the Great Plains, for which radiometric dates have been obtained from volcanic ash deposits. The geological evidence, particularly the purity of the clay and the presence of peat pockets, indicates that Moss Acres Racetrack was originally a quiet, low energy habitat such as a pond or marsh without significant current inflow when vertebrate fossils accumulated here.

Moss Acres Racetrack is remarkable for the quality of its specimens, the circumstances of their preservation, and unusual faunal biases rather than sheer quantity of specimens. One of the most unusual aspects of Moss Acres Racetrack is the strong tendency for specimens (particularly limb elements) to be found associated and occasionally even articulated, a rare situation in most Florida sites. The abundance of associated specimens and geological nature of the enclosing sediments all indicate that no faunal mixing occurred during the preservation process, and therefore that the Moss Acres Racetrack represents a "true" local community in which all of the animals died in a single place.

The Moss Acres Racetrack fauna is relatively diverse, but contains some strange biases. Small aquatic vertebrates (e.g., fish, amphibians, water snakes, etc.) are almost completely absent from the site, though indirect evidence indicates that they must have been present in the flourishing aquatic ecology at the site. Relatively large reptiles are abundant at the site, including pond turtles (*Pseudemys*), soft-shelled turtles (*Trionyx*), and alligators (whose numerous coprolites reinforce the idea that this was a low energy habitat). The mammal component of the Moss Acres Racetrack fauna consists almost entirely of large herbivores; rodents were present at the site, but their presence is indicated only by a few trace fossils (some gnawed bones). The most impressive animal found at Moss Acres Racetrack is the giant shovel-tusked mastodont (family Gomphotheriidae) *Amebelodon* for which this may be the richest site in the world, rivaled only by the Rhino Hill site in Kansas. *Amebelodon* material recovered from Moss Acres Racetrack includes an assortment of post-cranial elements including some associated limbs, two mandibles, an assortment of upper and lower tusks with some completely intact, and most impressive three reasonably intact skulls recovered in the summer of 1991. These skulls represent the first well preserved skulls ever found for this genus; two *Amebelodon* skulls were found in the Bone Valley, but unfortunately they were so badly crushed as to yield little in the way of useful information regarding cranial anatomy. Another giant herbivore found at the site is a partial skeleton of the ground sloth *Pliometanastes*, possibly the ancestor of *Megalonyx*. Horses are both extremely abundant and diverse, with three-toed horses including *Calippus*, *Neohipparion*, *Hipparion*, *Cormohipparion* (two species), and *Nannippus* (two species), with the one monodactyl horse being *Dinohippus*. The rhinoceros *Aphelops* is also abundant, with an unusual number of juvenile individuals

present. Present but relatively rare are peccaries (a single individual known on the basis of a broken milk premolar), camels (one a long-necked giant, either Apycamelus or Megatylopus, and the other lama-like and probably referable to Hemiauchenia), and a deer-like, hornless ruminant close to Pseudoceras. Only a single ruminant is well represented at the site, a strange, vaguely antelope-like animal called Pediomeryx, which had not only two ordinary frontal horns but also a single horn growing out the back of its head (the first Pediomeryx skull ever found came from Moss Acres Racetrack). Despite all of the large herbivores present at the site however, terrestrial carnivores are almost completely unknown, the only one ever found being a small Osteoborus species (O. orc) represented by a single set of associated metapodials and a single cuboid. The only well known carnivore this site is the aquatic giant otter Enhydritherium, whose partial skeleton found at Moss Acres Racetrack represents the most complete specimen known in the world for this animal.

Paleoecologically, Moss Acres Racetrack is significant for two major reasons. First, it preserves the major part of one aspect of a true local community, namely the large herbivores, and thus provides the potential for increasing the understanding of the community relationships of these animals. And secondly, the Moss Acres Racetrack site represents a privileged period in time, immediately prior to a mass extinction event that wiped out most of the hooved mammals in both North America and Eurasia. Understanding the community relationships of the hooved mammals at this crucial time in the faunal history of North America may provide insight into the causal factors that lead to this extinction, insight that may have potential application to the conservation of hooved mammals in Africa that are currently under considerable ecological stress from human activity.

FLORIDA PALEONTOLOGICAL SOCIETY, INC.
REVENUE AND EXPENSE REPORT
11 OCTOBER 1991 - 15 OCTOBER 1992

REVENUE		
Membership Dues	2857.00	
Sales		
Publications		
Beach and Bank Collecting	8000.29	
Handbook of Paleo. Prep.	1024.66	
Plaster Jacket	125.00	
Papers in Fla. Paleo.	30.00	
Butvar	518.50	
Miscellaneous		
Meetings	1890.78	
Donations	224.75	
Other	100.00	
Total Revenue	14770.98	
EXPENSES		
Publications		
Beach and Bank Collecting	5215.55	
Newsletter	1908.96	
Hulbert Book	173.80	
Papers in Florida Paleontology	3479.00	
Postage	1279.40	
Butvar	608.31	
Miscellaneous		
Meetings	3090.43	
Office Supplies	344.97	
Donation	500.00	
Other	244.00	
Total Expenses	16844.42	
Income Over(Under) Expenses	(2073.44)	

FLORIDA PALEONTOLOGICAL SOCIETY, INC.
STATEMENT OF ASSETS
15 OCTOBER 1991

ASSETS		
Cash		
Checking		5253.44
Saving		11112.93
Credit		65.43
Total Cash and Credit		16431.80
Inventory		
Beach and Bank Collecting		5625.00
(1500 @ \$3.75)		
Handbook of Paleo. Prep.		2047.50
(315 @ \$6.50)		
Papers in Fla. Paleo.		3003.00
(1001 @ \$3.00)		
Plaster Jacket		2910.00
(2910 @ \$1.00)		
Butvar		675.00
(90 lbs. @ \$7.50)		
Total Inventory		14260.50
Total Assets		30692.30

Editor's note: From time to time, the newsletter features articles written by FPS members or other specialists on specific groups of fossil organisms. Although we tend to emphasize fossil forms found in Florida, our readership spans many areas of paleontological interest. The graptolites are an interesting group of fossil animals familiar to those who have collected in other parts of the United States. The following article was prepared by FPS member Dr. Atta Sobh, of the American University of Beirut, Lebanon.

Graptoloidea: An eye bird view of its morphology, classification, and geological history.

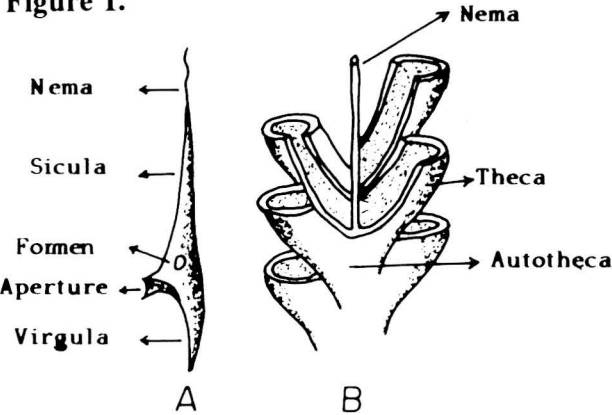
By Dr. Atta Y. Sobh

Morphology

The hemichordates belonging to the order *graptoloidea* constitute an extinct group of marine animals which used to live in the form of colonies during the earlier half of the Paleozoic era, and are at present known only as fossils. These ancient marine animals, known commonly as the *Graptolites*, were provided with chitinous exoskeletons, which were generally carbonized and preserved mostly in black carbonaceous shales. The whole skeleton of a simple colony of graptolites is known as the *rhabdosome* (stock), while that of a compound or complex colony is described as the *synrhabdosome*. The *synrhabdosome* may be made up of one or more *stipes* or branches (Figure 1).

canal. On the dorsal side of the rhabdosome, opposite to the series of theca, there exists a hollow chitinous thread within the wall (or *periderm*) of the common canal. This thread is described as the *nema* (or *nemacaulus*) and one of its ends is attached to a small and hollow chitinous cone known as the *sicula*. The other end of the nema is generally attached either to the sea bottom or to some organism floating in the sea. The *proximal end* of the rhabdosome accomodates the sicula, while the other extremity of the exoskeleton is described commonly as the *distal end*. In graptolites with two stipes, the angle subtended between the ventral (or thecal) sides of the two branches is known as the *angle of divergence*. In some forms, several stipes appear to radiate in all directions. The proximal ends of all the stipes, in such cases, are enclosed in a horny *central disc*. A rhabdosome with only one row of theca on the stipes is said to be *uniserial*. In some genera, however, two rows of theca exist on either side of each branch. Such forms are known as *biserial*. The rhabdosomes and the thecae of graptolites commonly exhibit a distinct bilateral symmetry.

Figure 1.



Detail of Sicula (A) and biserial stiple(B)

In its simplest form, the rhabdosome may have one stipe only. Upon the ventral side of this stipe, there exists a row of *cups* (or *theca*), which are tubular in form and open at both ends. The other opening of each individual theca is known as the *mouth*, while the other opening joins the theca with the *common*

Classification

It has been stated earlier that no graptolites at present live on the surface of the globe. As a consequence, paleontologists do not have dependable information regarding the soft parts of the animal.

In view of the limitations stated above, the biological affinities of the graptolites could not be established conclusively until, in the year 1948, Kozlowski assigned them to the subphylum *Hemichordata*. At one time or another in the past, graptolites have been looked upon as plants, coelenterates, bryozoans and cephalopods. Kozlowski's studies have, however, proved beyond doubt that the graptolites are hemichordates and, in

Graptoloidea, Continued

their form and structure, are similar to the *pterobranchs*. On the basis of presence or absence of a virgula, the order *Graptoloidea* was previously classified into two suborders known as *Axonolipa* and *Axonophora*. Later on, however, this classification was abandoned and the order divided into nine distinct families known as: 1) Dichograptidae, 2) Corynograptidae, 3) Leptograptidae, 4) Dicranograptidae, 5) Diplograptidae, 6) Glossograptidae, 7) Retiolitidae, 8) Dimorphograptidae, and 9) Monograptidae.



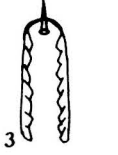
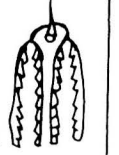
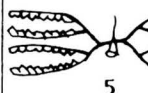








Geological History

Graptolites were essentially marine animals. Some of them were attached to the ocean floor, while many others used to float in the sea. The floating forms were distributed all over the world during the Ordovician and Silurian periods, and are useful as index fossils (Figure 2).

The most ancient graptolites, so far known, have been found to occur within the rocks of Upper Cambrian age. *Tetragraptus*, *Colongraptus*, and *Bryograptus* are the three well-known forms, which existed during the Upper Cambrian period. The graptolites attained the maximum development during the Ordovician period, when *Didymograptus*, *Dichograptus*, *Diplograptus*, *Climacograptus*, and many other new forms were gradually developed. Towards the close of the Ordovician, graptolites were a bit less important. Only three genera (*Diplograptus*, *Climacograptus*, and *Retiolites*) are known to have passed up from the Ordovician to the Silurian period. During the Silurian, the graptolites once again became very important and they were extinct towards the close of the Silurian period. The rocks of Silurian age are characterized by the presence of uniserial forms.

The extinction of the Graptoloidea was possibly due to the advent of the fishes, which thickly populated the marine environment towards the close of the Silurian period. In view of their wide geographic distribution and very small range in geologic time, graptolites are extremely valuable as zone fossils, and efficiently mark the different subdivisions of the Lower Paleozoic age.

Figure 2: Major Graptolite genera in the Paleozoic Era.

ERA	PERIOD	GRAPTOLITES	LEGEND
P A L E O Z O I C	Cambrian		1. Dictyonema
	Ordovician	  	2. Bryograptus 3. Didymograptus 4. Tetragraptus
		Lower Ordovician	 
O Z O I C	Middle-Upper Ordovician	   	7. Leptograptus 8. Azygograptus 9. Dicranograptus 10. Diplograptus
	Silurian	  	11. Crytograptus 12. Monograptus 13. Dimorphograptus

The Fossil and Artifact Collector's Dream

by William J. Webster

Having been an artifact collector since a young lad in the 1930's, and residing on the St. Johns River, I became quite familiar with the Indian middens and artifact hunting areas. Even before most points and pottery were given names of identification or categorized, I knew what type (shape) of point, tool, or pottery to expect from a given area. I also remember finding my first mammoth tooth (and calling it a dinosaur tooth) along the St. Johns River.

I am sure by now that you members of the Society know that for the past year or so I have been working in Tallahassee and commuting to my home in Mandarin, south of Jacksonville. It was during one of my trips home that my wife told me the city had put in a new waterfront park and boat ramp near the bridge over Julington Creek - I felt this was a site I needed to check out, having done quite well in this area in years past when it was open shoreline and accessible.

As I proceeded to the site it began to drizzle rain; undaunted, I continued on to the park. When I arrived, the sky had darkened and the drizzle had turned to a light rain. I noticed a pile of mucky sand and roots near the ramp and went to investigate. I immediately found the basal end of a well-made fluted paleo point some four inches long and an inch and a half wide. The break looked new and I searched closer; a minute later I found the point end. Together they measured some seven inches long!

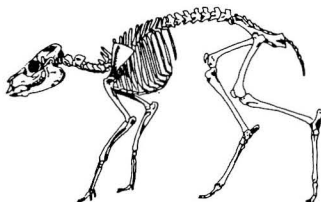
By this time it was pouring rain, but I didn't care. When it became quite dark I would use the lightening flashes to search by. With each flash I found more paleo points, not quite as large but extremely well made. All together I found thirty eight, and I felt that they were a cache because of their abundance and excellent condition. I was singing in the rain!

I made another trip around the pile but didn't see any more points. Just as I was turning to leave I noticed a carving in what appeared to be a piece of wood. Upon closer inspection, it turned out to be part of a mammoth leg bone. This really excited me, even more than the points, due to the rarity of such items. I went to my car and drove it around so that the headlights lit up the pile. I couldn't believe the number of fossil bones exposed...most of what I thought were roots turned out to be bone. I quickly filled a five gallon bucket, wrapped other pieces in aluminum foil, and carried the larger ones to the trunk of the car.

On my way to the car with the last load, I was pondering the best method for preserving the bone items upon my return home at daybreak. Not watching where I was walking, I suddenly tripped on a root and fell in a puddle of rain water - then I woke up.

Editor's note: Bill adds as a postscript to his amazing tale that the first paragraph is true...the rest is a dream!

HANDBOOK OF PALEO-PREPARATION TECHNIQUES



Howard H. Converse, Jr.

FLORIDA PALEONTOLOGICAL SOCIETY, INC.
FLORIDA MUSEUM OF NATURAL HISTORY
UNIVERSITY OF FLORIDA
GAINESVILLE, FLORIDA 32611

PURCHASE ORDER NO. _____ DATE _____
BILL TO: _____ SHIP TO: _____

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
_____	HANDBOOK OF PALEO-PREPARATION TECHNIQUES	\$6.50	_____
_____	SHIPPING AND HANDLING	_____	\$3.75

TERMS: 30 DAYS NET FROM DATE OF BILLING
MINIMUM ORDER 10 BOOKS PER ORDER



florida paleontological society, inc.

Florida Museum Of Natural History
University Of Florida Gainesville, Florida 32611

Minutes

The fall meeting of the Florida Paleontological Society Inc. was called to order by President Jim Pendergraft at 11:50 AM October 17, 1992.

Minutes of the previous meeting having been published in the newsletter were not read.

Richard Hulbert reported on the status of the Plaster Jacket book. Bearing a working title of "The Fossil Vertebrates of Florida- The Plaster Jacket Series", he reported that the text and line drawings are complete, all photographs taken but not yet developed or selected. He plans to complete that part of the work following the end of the current academic semester.

Kevin Schindler gave the treasurers report. A copy is attached.

Roger Portell reported that the pexiglass has been ordered for the showcase approved for purchase at the Board of Director's meeting in August. He reminded the members that once the SE Geological Society meeting in Tallahassee was completed, the showcase will be used to honor contributions by FPS members to the Florida Museum of Natural History. He also reported that work has started on the editing and cover design for the Brayfield Shell book.

Bruce MacFadden introduced Gary Morgan who presented the Howard Converse award to Society Honorary Member Ben Waller for a lifetime of contributions to the field. The plaque included a cast of the type specimen for Titanus Walleri, also known as "Waller's Killer Crane" the giant carnivorous bird from the Pleistocene of Florida that Ben discovered along the Santa Fe river.

Eric Taylor presented the report on the revisions to the Society's By Laws. Anita Brown moved to accept the revisions. Rudi Johnson seconded and the revisions passed unanimously.

The new slate of officers was unanimously elected according to the report given by Anita Brown, elections chairman. The new officers are:

President	Frank Ruppert
Vice President	Gordon Hubble
President Elect	Susan Pendergraft
Treasurer	Phil Whisler
Secretary	Eric Taylor

Board of Directors
expiring in 1995 Don Crissinger, Steven Manchester, Bill Ahern, and Robyn Miller

To fill vacancies: Rudi Johnson and Helen Cozzini



FLORIDA PALEONTOLOGICAL SOCIETY, INC.

Florida Museum Of Natural History
University Of Florida Gainesville, Florida 32611

Dr. MacFadden reported on the proposed grant program for student research at the college/university level.

His committee proposed:

1. That one award be made per year.
2. That the minimum award be \$500.00
3. Eligible students include those working on Bachelor through PhD. at any College or University in Florida who is studying Florida Fossils in any branch of the science.
4. Request to be considered for the award be submitted in a one page format with an outline of the proposed use of the grant.
5. Announcements will be mailed out in the fall with requests due back by March 1 of the next year.
6. A committee ideally of 5 persons will make the decision by May 15 of the year and award the grant immediately.

A suggestion was made that the proposal be modified to require that a report on the research be made either in an article to be published in the Newsletter or at the Fall Meeting or both.

A motion to accept the proposal was made by Susan Pendergraft and seconded by Anita Brown. The proposal was unanimously accepted.

A question was asked about the attempt to secure the Moss Acres site that had been brought up at the last fall meeting. Eric Taylor reported that the absence of Dr. Webb during the past year had prevented further progress on the project.

There being no further business, the meeting was adjourned at 12:20 PM.

Respectfully submitted,


Eric G. Taylor
Secretary



florida paleontological society, inc.

Florida Museum Of Natural History
University Of Florida Gainesville, Florida 32611

Minutes Board of Directors Meeting

The meeting of the Board of Directors of the Florida Paleontological Society, Inc. was called to order at 1:15 PM October 17, 1992 by President Frank Ruppert.

Attending were:

Frank Ruppert	President
Gordon Hubble	Vice President
Jim Pendergraft	Past President
Susan Pendergraft	President Elect
Phil Whisler	Treasurer
Eric Taylor	Secretary
Don Crissinger	
Bruce MacFadden	
Steven Manchester	
Roger Portell	
Helen Cozzini	
Robyn Miller	
Tom Ahern	
Rudi Johnson	
Tim Cassady	Members of Board
Anita Brown	Honorary Member
Bill Brayfield	Member
Kevin Schindler	Member
Bill Webster	Member

After discussion, it was decided that Bruce MacFadden, Rudi Johnson and Bill Webster would make up the research scholarship committee until two additional members could be indentified and invited to join.

Roger Portell asked for \$150 to pay transportation costs for the display box to the Tallahassee meeting it was intended for. Susan Pendergraft moved acceptance. Carried.

Eric Taylor asked that any information regarding names and addresses of shell or fossil clubs be sent to him ASAP for a new list in preparation.

Gordon Hubble asked about the status of the project to fund a State Paleontologist's position. Eric Taylor pointed out that the dues change was the first step in the fund raising process that would now go forward. After considerable discussion it was tentatively decided to present briefings to organizations around the state in order to alleviate any fears of "Fossil Police", obtain their input and make fund raising contacts.



florida paleontological society, inc.

Florida Museum Of Natural History
University Of Florida Gainesville, Florida 32611

Eric Taylor volunteered to make these visits. It was decided that a booth would be set up at the Florida Fossils Fair in Orlando in November. Eric was directed to set up and man the booth with reimbursed expenses and following that, present a plan for accomplishing the other visits. Bruce MacFadden moved this plan be implemented. Gordon Hubble seconded. Carried.

Appointment of a Spring Meeting Committee and other standing committees was postponed due to the immanent start of the lectures.

The meeting was adjourned at 2:05 PM

Respectfully submitted,

Eric G. Taylor
Secretary

Special offer for Fossil Horse Enthusiasts ...

Fossil Horses Systematics, Paleobiology, and Evolution of the Family Equidae

Bruce J. MacFadden, *Florida Museum of Natural History,
University of Florida*

The family Equidae have an extensive fossil record spanning the past 57 million years, and the evolution of the horse has frequently been used as a classic example of long term evolution. In recent years, however, many new and important discoveries of fossil horses have been made, and these, in conjunction with such new methods as cladistics and techniques such as precise geochronology, have allowed us to obtain a much greater understanding of the evolution and biology of this important group.

This book synthesizes the large body of data and research relevant to an understanding of fossil horses from several disciplines including paleontology, geology and biology. Using horses as the central theme, the author weaves together in the text topics such as modern geochronology, paleobiogeography, climate change, evolution and extinction, functional morphology and population biology during the Cenozoic period.

This is the first major treatise on fossil horses since Simpson's 1951 work. It should become a standard reference book for fossil horse enthusiasts, paleobiologists, and vertebrate paleontologists.

SPECIAL 20% DISCOUNT ORDER FORM

Offer valid through December 31, 1992

___34041-1 *MacFadden: Fossil Horses* (HC) List: \$74.95* Discount: \$59.96*

TERMS OF THE OFFER. All individual orders must be prepaid by check or money order or charged on VISA or MasterCard (libraries excepted). The use of a credit card will expedite your order. Canadian residents please add 7% GST. Shipping and handling charges in North America are \$2.00 for the first book; \$0.75 for each additional book. Outside North America the charges are \$4.00 for the first book, \$2.00 for each additional book.

Name _____	Total disc. prices from	\$ _____
Address _____	above	\$ _____
City _____	Add NY/Calif. sales tax	\$ _____
State/Prov. _____ ZIP _____	Canadians add 7% GST	\$ _____
Institution/Affiliation _____	Add shipping charge	\$ _____
<input type="checkbox"/> Payment Enclosed \$ _____ <input type="checkbox"/> VISA <input type="checkbox"/> Mastercard	Net total	\$ _____
Charge Card Number _____ - _____ - _____ - _____		
Expiration Date _____		

Please allow six to eight weeks for book rate delivery.

Return to: Dept. PJL
CAMBRIDGE UNIVERSITY PRESS * 40 W. 20th Street * New York, NY 10011-4211

APPLICATION FOR MEMBERSHIP
FLORIDA PALEONTOLOGICAL SOCIETY, INC.

NEW _____ RENEWAL _____ MEMBER NUMBER (From Label) _____

NAME _____
ADDRESS _____
CITY _____
STATE _____ ZIP CODE _____ TELEPHONE () - - _____

TYPE OF MEMBERSHIP

1. INDIVIDUAL ACTIVE (\$15.00) _____ 2. SUBSCRIBER (\$15.00) _____
3. INSTITUTIONAL (\$15.00) _____ 4. GIFT (Mark Type) _____
5. FAMILY (3 or more. \$25.00) _____ 6. COUPLES (\$20.00) _____
7. SUSTAINING (\$50.00) _____ 8. ASSOCIATE (Under 18
\$5.00) _____

FAMILY AND COUPLES PLEASE LIST NAMES OF ALL APPLICANTS IF NEW.
PLEASE COMPLETE PERSONAL FACT SHEET BELOW IF NEW OR CHANGES
HAVE OCCURRED SINCE PREVIOUS YEAR.

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:

	<u>VERTEBRATE</u>	<u>INVERTEBRATE</u>	<u>BOTANY</u>	<u>MICRO</u>
PLEISTOCENE	___	___	___	___
PLIOCENE	___	___	___	___
MIOCENE	___	___	___	___
OLIGOCENE	___	___	___	___
EOCENE	___	___	___	___
EARLIER	___	___	___	___

4. LIST ANY PREFERRED TYPES (Horses, Sloths, Echinoids 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, PREPARATION, 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!

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 cooperation 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 IX

- 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.

ANNUAL DUES for the FPS are \$5.00 for Associate Membership (persons under age 18) and \$15.00 for Full Membership (persons over age 18) and Institutional Subscriptions. Couples may join for \$20.00, and Family memberships (3 or more persons) are available for \$25.00. A Sustaining membership is also available for \$100. Persons interested in FPS membership need only send their names, addresses, and appropriate dues to the Secretary, Florida Paleontological Society, Inc., at the address inside the front cover. Please make checks payable to the FPS. Members receive a membership card, the FPS newsletter, the Papers in Florida Paleontology, 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.