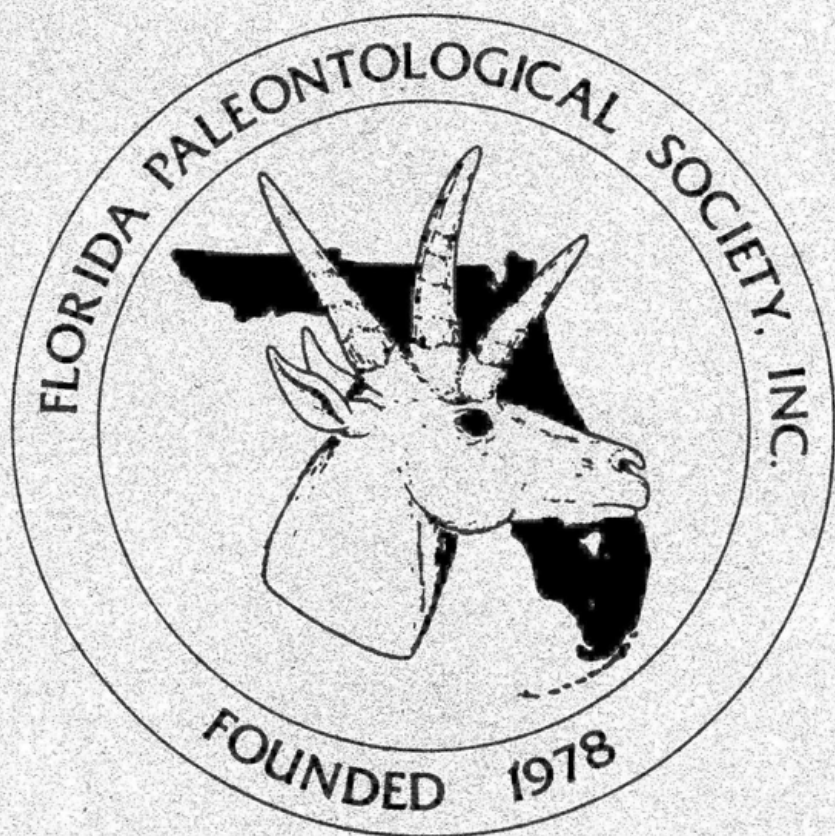


Florida Paleontological Society, Inc.  
**Newsletter**



**Volume 10 Number 1 Winter Quarter 1993**

# FLORIDA PALEONTOLOGICAL SOCIETY, INC.

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|                  |  |
|------------------|--|
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| President-Elect: | Susan Pendergraft, 17 Jeff Road<br>Largo, Florida 32544  |
| Past President:  | Jim Pendergraft, 17 Jeff Road<br>Largo, Florida 32544  |
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|                                    |   |
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| Spring Meeting:                    | R. Portell, M. Whetzel                          |
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## INFORMATION, MEMBERSHIP, AND PUBLICATION INFORMATION

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

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*Announcing the*  
**Florida Paleontological Society**  
**SPRING MEETING**

**April 16 and 17, 1993**  
**K.O.A. Campground - Clewiston, Florida**

*Featuring*

**Social and Outdoor Pig Roast Banquet**  
**Guest Speaker: Dr. Ed Petuch, F.A.U.**  
**Collecting trip to Bergeron Co. Star Pit**  
**Clewiston Sugar Festival**

**SEE PAGES 12-15 INSIDE FOR DETAILS**

## Letter from the President

As both FPS President and newsletter editor, I am in a rather unique position of having to reflect on both the FPS and its activities as a whole, as well as what I would like to accomplish with the newsletter. For the reader's sake, I will try to keep my comments on both subjects brief.

I'm sure most of you have already noticed several changes to our club structure which are intended to improve the functioning of our organization and allow the FPS to continue in its chartered goal of advancing both amateur and professional paleontology in Florida. You may have noticed that we lengthened the term of the officers to two years, and established several new membership categories. Perhaps the most painful change, however, was the increase in individual annual dues. No time is a good time for such things, and whenever dues go up, we run the risk of losing members. However, the FPS Board is convinced it will allow us to accomplish some significant goals. Last year, your dues provided what we hope is an ever-improving newsletter, as well as Richard Hulbert's "Checklist of Fossil Vertebrates of Florida in the "Papers in Florida Paleontology" series. They also allowed us to publish the newly revised edition of "Beach and Bank Collecting", by M.C. Thomas. This book has long been a classic with amateur collectors.

With the advent of a new year, we have laid the groundwork for more exciting projects which should come to fruition this year. First, the new edition of the Brayfield's book is currently in press, and should be available soon. This book has been a popular reference for invertebrate fossil enthusiasts in Florida, and our republishing it assures its continued availability.

The FPS also initiated a new scholarship award, to be awarded for the first time this year, which is intended to assist graduate students who are working on Florida paleontology studies. Although initially funded at a modest level out of general revenues, we hope to eventually build this scholarship fund through our annual fossil auctions.

Finally, the FPS Board has long recognized the need for active interchange, consultation and cooperation with our fellow fossil and shell clubs around the state. Such interaction would greatly improve communications between groups and enhance the working relationships between professional and amateur paleontologists, and perhaps help in the healing of some old wounds. We have discussed the possibility of having a full-time person to function as a liaison between the FPS and other clubs. However, this is obviously well beyond the means of our budget. Therefore, we are trying an experimental program of paying the expenses of a volunteer to attend the annual shows of various fossil clubs around Florida, to represent the FPS, display our publications, answer questions and distribute information on our club, and to meet and talk with the membership of fellow organizations. We believe this is an important step in developing public awareness of the Society and to build rapport with the other clubs statewide. Therefore, we hope that you will consider your dues well spent as we strive to advance the FPS and Florida paleontology in what we hope are constructive directions.

Now for the newsletter. Unfortunately, each new year prompts me to make the same tired pleas for input from our readership. As our chronicle, the newsletter should reflect what we, as group, accomplish, what our interests are, what's going on in Florida paleontology, and, in large part, how we want the outside world to perceive us. For the editors' part, we have attempted to improve the visual impact of the newsletter and standardize its format. Still lacking though is flavor from the membership. We know that there are latent writers out there, waiting to tell of their favorite collecting adventures, send us photos of their collections, or relate interesting Florida paleontological anecdotes. Articles from two of our members are included in this issue, but we usually are not so fortunate. We can't make this stuff up...it has to come from you! And without it, your newsletter might get pretty skinny. We are receptive to just about anything on geology, paleontology, or even archeology. So get out your pencils and give it a try. We also welcome your thoughts and ideas on improving the newsletter. Send your submissions to me or to Eric Taylor at the Museum address.

Best wishes to you all for a prosperous 1993.

Sincerely,



Frank R. Rupert  
President



# F.P.S. Happenings



## 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.

Thanks to FPS member Mike Wisenbaker for his interesting article on the fossil mammal tooth from Venture Sink. PLEASE! Write up your story and send it to us!

Gene Hartstein reports that the folks in the Chicago area are resorting to taking their buckets of concretions from the Mazon Creek area outside in the morning and bringing them in at night. When they get up the next morning they are all cracked and ready to investigate. Don't even have to put them in the freezer! (I'd commiserate with him but my sunburn is too painful!)

It has been my pleasure to have some correspondence with Ed Armentrout who owns the Village Rock Shop in Hot Springs, South Dakota, right in the heart of the Oligocene Mammal deposits in that state and neighboring Nebraska. Ed has sold our books for a number of years and many of our members have had the experience of visiting him and his shop while fossiling that area.

Ed reports that his health is not good and that he would be interested in talking to people who might be interested in buying him out. So if your dream has always been to live in the midst of more fossils than you ever dreamed of and run a rock and fossil shop, contact Ed. I will be glad to furnish addresses and phone numbers on request.

The autobiographical data sheets attached to this year's membership forms have been a wonder to read! The levels and kinds of expertise in our organization is astonishing! Please make sure you complete one and update if anything changes!

As a result of my holiday visit to the Austin, Texas area, I made contact with the presidents of the two fossil societies from that area and have arranged to exchange newsletters and information with them. If any member is aware of fossil societies and clubs in other areas of the United States, please let me know about them (with as much contact information as you can give me!) One of the things that I am working on is a referral exchange where people wishing to hunt fossils while visiting Florida can meet local experts and FPS members have a way to contact people in other states or localities when traveling. So far we have information on TX, NC, GA, SD, and Northern CA. We need a lot more! Help out!

## Member Notes

*A report of news about our membership. It includes new members, address corrections, awards and decorations, published material, etc. Please send information appropriate to this column to either Eric G. Taylor, Secretary or Frank Rupert, Newsletter Editor.*

### *In Memoriam:*

With sadness, we report the death of member Robert E. Badger of Grove City Florida. Details are not known.

### *New Members:*

Lee Tillis  
1574 Damask Lane  
Sebastian Highlands, FL 32958

Miss Janet Walker  
Box 565  
Winter Park, FL 32790

Chris T. Paulk  
P.O. Box 355  
Bristol, FL 32321

***New Members, continued:***

Cynthia Dean  
300 Lexington Ave.  
North Babylon, NY 11704

Blake Scott  
1310 College Pt.  
Winter Park, FL 32789

James J. Jines  
P.O. Box 642  
Sneads, FL 32460

Harriet T. Conway  
10471 Regent Circle  
Naples, FL 33942

Bone Valley Fossil Society  
Attn. Lou Harvey  
2102 Monastery Circle  
Orlando, FL 33822

Michael Waldron  
6601-C Marks Town Dr.  
Tampa, FL 33617

Diana L. Searcy  
Rt. 1 Box 952  
Lawty, FL 32058

Scott L. Pichard  
Dept. Marine Science  
Univ. of South Fla.  
140 7th Ave. S.  
St. Petersburg, FL 33701-5016

Rob Merrill  
263 Shady Oaks Circle  
Lake Mary, FL 32746

Cheri Barberi  
2555 Vespero St.  
Deltona, FL 32738

Shawn Patrick Zack  
1115 Brentwood Dr.  
Plano, TX 75075

Bill Hosko  
Rt. 4 Box 4283-A  
Bangor, PA 18013

Sidney M. Hostetter  
93 Bacton Hill Rd. D-12  
Frazer, PA 19355

Suzanne Brost  
6070 Valeria Rd.

Bokeelia, FL 33922

Barbara Lee Marks  
25100 Sandhill Blvd., Apt. V-104  
Port Charlotte, FL 33983

Kenton Cornish  
195 Davison Street  
Pensacola, FL 32505-7815

Nancy Mathura  
3925 Lake Oakland Shore Dr.  
Drayton Plains, MI 48329

Mrs. Jenny Gilbert  
4075 Berry Rd.  
Palm Bay, FL 32905

***Address Changes and Corrections:***

Botanical Gardens of Volusia, Inc.  
1084 Ridgewood Ave.  
Holly Hill, FL 32117-2835

Tampa Bay Fossil Club  
P.O. Box 290561  
Tampa, FL 33687-0561

Heather Truitt  
1620 Ferry Ave #3  
Niagara Falls, NY 14301-2252

Dr. R.G. and Davona Churchill  
36868 8th Ave.  
Zephyrhills, FL 33541-6952

Richard Jones  
5715 Hickson Rd.  
Jacksonville, FL 32207

Fort Myers Beach Shell Club  
2904-A Estero Blvd.  
Fort Myers Beach, FL 33931

Naples Shell Club  
P.O. Box 1991  
Naples, FL 33939

Harry R. Matheny  
1706 New Bedford Dr.  
Ruskin, FL 33573-5748

Northwest Florida Shell Club  
P.O. Box 68  
Shalimar, FL 32579

Eugene Hartstein  
17331 Highwood Drive  
Orland Park, IL 60462

**Address changes and corrections,  
continued:**

The Treasure Coast  
Shell Club  
99 Yacht Club PL  
Tequesta, FL 33458

# Upcoming Events

**March 20-21 Tampa Bay Fossil Club 6th Annual Fossil Fair, Ft. Homer Hesterly Armory, 504 N. Howard Ave., Tampa, FL. Call Rudi Johnson for info: (813) 839-2291.**

**April 1-3 Southeastern Section, Geological Society of America Meeting, Tallahassee, FL.**

**April 16-17 Florida Paleontological Society Spring Meeting, Clewiston (see info this issue).**

## Book Bits

Two upcoming publications of the Florida Geological Survey should be of interest to the invertebrate collectors among us...First, Tom Scott and Warren Allmon are the editors of a special publication on the *Plio-Pleistocene Stratigraphy and Paleontology of south Florida*, which includes illustrated articles by various authors on the complex units of the southern Florida peninsula. It should be available this spring (\$1.00 by mail, check made out to State of Florida); ask for Special Publication No. 36.

Second, Roger Portell, Craig Oyen, and Frank Rupert teamed up on a poster illustrating the *Common Cenozoic Echinoids from Florida*. If all goes well, the poster should be available this spring or early summer. Send inquiries to: *Publication Office, Florida Geological Survey, 903 West Tennessee St., Tallahassee, FL 32304.*

## FOREIGN TRADE OPPORTUNITY...

*The following letter was spotted in the December '92 issue of the Southwest Florida Fossil Club Newsletter:*

**ATTENTION: COLLECTORS OF FOSSIL SHELLS**

Dear fossil collector:

I found your address in the COA membership list. I collect fossil molluscs since twenty years and living shells since 5 years. I should be very happy to hear from U.S. fossil mollusc collectors who in view to do some exchange with them. I can offer approximately 1000 species from the French Eocene and Miocene.

Sincerely yours,

*Jean-Claude Six  
1012 Routes Nationale  
62231 Sangatte  
France*

## Paleo Stamps



For several years, I have requested that the postal service issue four stamps depicting some of our early fossils. In 1974 a beautiful block of stamps showing minerals were issued. In 1989, four prehistoric animals of the Mesozoic Era were issued. In 1992, a second set of four mineral stamps were issued.

I feel that stamps depicting the early, small fossils should be the next step. Common fossils such as ferns, trilobites, crinoids, ammonites and brachiopods should be considered. These could be shown in early reconstructed scenes or as a fossil of today.

I ask interested collectors (stamps and rocks) to write to the Postal Service's Citizens stamps Committee and request that our fossil heritage be recognized.

Thank you,  
Tony Verdi  
1225 Ledge Road  
Hinckley, OH 44233

Write to:  
U.S. Postal Service  
Citizens Stamp Advisory Committee  
Room 5800  
475 L'Enfant Plaza West, SW  
Washington, D.C., 20260-6352



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# News

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from the



## UF given \$3 Million towards new museum

Thanks to the generosity of two Ft. Lauderdale brothers, the FLMNH is three million dollars closer to getting a new museum education and exhibition center. Steve and Bob Powell, UF alumni and owners of Powell Brothers Barge Terminal, Inc., recently donated the money for construction of the center.

A new, larger museum has been in the planning stage for some time. With matching funds from the State, the new museum building will be built between the Harn Museum of Art and the Center for Performing Arts on the west edge of the UF campus. The larger facility will allow display of more of the Museum's natural history collections and cultural exhibits, as well as alleviate the current museum's parking shortage.

The Powells decided to donate the money because they felt the education center would create an opportunity for greater understanding of Florida's natural and human history, and they wanted to help communicate that important perspective to as many people as possible.

As such, the new center will enable the public, including thousands of school children and tourists, to see more of the museum's collections. Planned for the new museum are displays containing a replica of Columbus' ship *Nina*, a reconstruction of a 2,000 year old Calusa Indian village, fossils, Native American artifacts, and other items from Florida and the Carribean.

Naturally, the FLMNH paleontology collection managers are eagerly looking forward to the expanded collection facilities which will be available in the new center. The FLMNH staff has recently been busy obtaining more collections, and

space is becoming a problem. Read on to learn of the latest acquisitions.

## Florida Geological Survey Invertebrate Collection transferred to FLMNH

February was a busy month for the staff of the Invertebrate Paleontology Division. In addition to their regular curatorial duties, Roger Portell, Kevin Schindler and Craig Oyen transferred the invertebrate collections of the Florida Geological Survey (FGS) in Tallahassee to the FLMNH in Gainesville. This collection contains fossil specimens collected over much of the last century, by a variety of famous names. Included are molluscs, echinoids, and crustaceans collected and or identified by workers such as Sellards, Gunter, Locklin, Fargo, Ponton, Palmer, and Dubar. The FGS collection was started in the early 1900's, shortly after the establishment of the Survey. Many of the specimens are from classic sites statewide, and some have been on display in past decades in the various FGS museums that once existed.

In recent years, the collection has been in dire need of updating and proper curation. Attempts to obtain funding from DNR for a full time collection curator were unsuccessful. It was decided to donate the collection to the FLMNH, were it could be properly cataloged and maintained as the FGS Collection.

Roger Portell and the others packed over 13,000 lots (approximately 100,000 specimens) and loaded them into a moving van for the trip to Gainesville. Contained in the collection are over seventy types (holotypes and paratypes). The FLMNH staff thanks Walt Schmidt, Tom Scott, and Frank Rupert for their efforts in transferring this historically important collection to the FLMNH.



## Journey into the Jurassic...

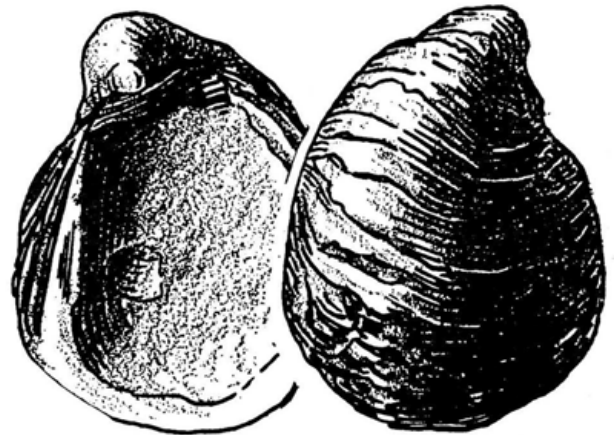
Dr. Douglas Jones, Curator of Fossil Invertebrates at the FLMNH, returned last month from a half-year sabbatical spent in Great Britain, primarily at the Department of Earth Sciences and the Sedgwick Museum of the University of Cambridge. Doug and his wife moved to Cambridge last summer and lived there until January 1993. Cambridge served as a base of operations from which excursions were made into all areas of the British Isles. These excursions involved trips to other universities, museums, and most importantly to collect fossils from the classic marine sequences of the British Jurassic.

Doug is involved in a project to study the patterns of evolution in *Gryphaea*, an oyster-like bivalve mollusc which was particularly common in Jurassic seas (ca. 200 m.y. ago). Much has been written over the years by paleontologists concerning evolution in the *Gryphaea* lineage, so much that Dr. Stephen J. Gould of Harvard has referred to *Gryphaea* as, "...the *Drosophila* of paleontology. For instance, some investigators have argued that the tempo and mode of evolution in this organism support the old notion of phyletic gradualism (i.e., slow, steady directional change through time) whereas others see evidence for punctuated equilibrium (i.e., long episodes of morphological stasis punctuated by brief intervals of rapid change) within the same sequence. All investigators concur, however, that the lineage clearly displays a case of phyletic size increase. Drs. Jones and Gould are attempting to figure out whether the larger sizes of the descendants are due to more rapid growth rates, longer life spans, or a combination of the two. Assembling a reference collection of stratigraphically arranged specimens was an important first step.

Collecting suitable specimens from throughout the British Jurassic took Doug and Sheila to the Dorset coast (Lyme Regis-home of Mary Anning, perhaps the most famous amateur fossil collector of all time), the Somerset coast, the Isles of Skye and Raasay in Scotland, the southern coast of Wales (Vale of Glamorgan), as well as the Yorkshire coast. Inland sections in the Middle to Upper Jurassic (e.g. Oxford Clay) were also visited. All of this fieldwork resulted in a sizable collection

of *Gryphaea* specimens for the FLMNH, many of which will be sectioned and analyzed for growth rate information. Comparisons with specimens borrowed from the British Museum (Natural History), the Sedgwick Museum, the University Museum (Oxford), and elsewhere will help to interpret the data which will be produced throughout the next year.

Lest we think that it was all work, Doug and Sheila also found time to visit sites of notable scenic and historic interest such as Stonehenge, Edinburgh Castle, the White Cliffs of Dover, Hadrian's wall, Westminster Abbey, Downe House, Canterbury Cathedral, etc., as well as London and Paris. While they report it was a wonderful experience abroad, the warmth of the Florida sunshine and their friends in Gainesville made it good to return to Florida.



*Gryphaea*





# Prep Talk

by Russ McCarty

Greetings from the bone lab. Although many operations occur in the prep lab here at the museum, I suppose the attention of most people who walk through the lab is focused on the assortment of bones, skulls, jaws, and other skeletal elements in various stages of preparation. Current visitors can see the, almost completed, lower jaw of the big, newly named and described, gomphothere, *Amebelodon britti*. After 18 months of on-again off-again work, it is now ready for exhibit--or will be--once we add the flat shovel tusks which we are now casting.

In the past three Prep Talk columns, I have discussed ways to get your specimen out of the ground, and the first stages of preparing fossils. Let's now digress a bit and discuss these large specimens such as gomphothere jaws. The basic concepts of preparation discussed in earlier columns apply to all fossil specimens, regardless of size; however, specimens on the magnitude of gomphotheres do present their own unique set of problems, the foremost being, obviously, the sheer size and weight of such specimens. Rigid protective jackets are mandatory requirements for large specimens since a two or three hundred pound skull or jaw will most likely break under its own weight if you try to remove it from the ground unprotected.

The gomphothere jaw was found in clay sediments at Moss Acres Racetrack in April 1991. After being exposed and pedestaled, FLMNH field crews constructed a plaster jacket from burlap strips cut from feed bags and 150 - 200 pounds of plaster of paris. For more strength and rigidity, pieces of wooden 2"X4"s were added between layers of burlap. The specimen alone weighed in at around 100 pounds. Add 200 pounds of plaster and wood, five or six hundred pounds of matrix removed with the specimen (the matrix is left around the specimen to protect it in transit, and

also to insure that associated bone fragments are not discarded in the field), and the total weight of the plaster jacketed specimen approaches one thousand pounds. Unless you've got the Refrigerator, Haystack Calhoun, and Andre the Giant on your field crew, gravity will be a relentless foe. Incorporating lifting poles into the plaster jacket will help, up to a point; but, when you reach the half-ton mark, carrying such loads out of a pit and up a hill becomes harmful to the health. It's time for reinforcements, namely, front-end loaders, backhoes, helicopters or whatever. If lifting straps, chains, rope, or cable can be placed around and under the specimen, it is possible for these machines to lift your specimen out of the ground and up to a truck or trailer. An alternative method, especially useful if collectors make many large jackets, would be to construct a sturdy sled on the which the jackets could be placed, and then have a winch (vehicle mounted?) pull the sled and specimen out of the site. But, unless you could put wheels on the sled and tow it home (a possibility), there would still be a problem of raising the sled to a trailer or truck bed. At Moss Acres, we had a front-end loader lift and drag our 1000 pound jacket out of the pit, up a hill, and on to a flatbed trailer. Needless to say, the jacket wasn't sturdy enough for this kind of treatment (notwithstanding the fact that 200 pounds of plaster were used), and the specimen did suffer damage.

Once you get big jackets back to the lab or workshop, the unique problems of large specimens continue. Often they must be stored temporarily in an out-of-the way location, a place where they can't be prepared. This means they must be moved again and subjected to further damage. We should probably take a lesson from the dinosaur collectors out West. Since their specimens are so large and heavy, their jackets are also extremely thick and heavy. Of course, they often have to truck their specimens long distances over rough roads and store them for years in a warehouse before they are ever prepared, and with more than a 100 years of practice, they have refined the techniques and equipment for removing extra large specimens from the field. Our approach to the large Moss Acres gomphothere jackets, which we

stored in a pole barn, was to try to lighten one side of the plaster jacket (while it was still in storage) by cutting away the top half of the jacket and removing half of the matrix. At this point, we applied a thinner, form fitting jacket over the exposed specimen and then flipped the jacket over. We then removed the remainder of the original plaster jacket, and the remaining matrix from obverse side. The new jacket and specimen now weighed in at two-hundred fifty pounds, much less than the original one thousand pounds, and could now be moved into the lab for preparation. I am trying to get a local boat manufacturing company to come out and spray a two-foot thick coat of industrial urethane foam on one of the other jackets in storage. This should lighten the jackets by another 50 to a 100 pounds.

Once the gomphothere jacket was brought into the lab, the serious work of preparation began.

The first step was to carefully cut away more of the plaster jacket so that any remaining matrix could be removed. This allowed us to see most of the exposed bone and make our first decisions about how we would prepare the jaw. As an aid in later reconstruction and also to document the process of preparation, we photographed the exposed jaw. In the next bulletin, I will continue with techniques and materials used in preparation and reconstruction of this specimen.

*Send your preparation questions to:*

**Russ McCarty**  
VP Prep Lab  
Florida Museum of Natural History  
University of Florida Campus  
Gainesville, FL 32611

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Edition**

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for Amateurs**

By M. C. Thomas



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Florida Museum of Natural History  
University of Florida  
Gainesville, FL 32611**

**A NOTE FROM RUSS McCARTY:** *It was recently brought to my attention by FPS member, Eugene Hartstein from Orland Park, IL that the instructions I had given for mixing Butvar failed to inform users of the dangers of the solvents, acetone and ethyl alcohol, especially when made up with a sparking device such as an electrical drill used as a mixer. My eyes had been closed for the past 12 years, but thanks to Mr. Hartstein, they are now open. I have incorporated his suggestions in the amended directions which appear below. Please use them.*

*Russ McCarty  
VP Prep Lab*

## AMENDED DIRECTIONS FOR MIXING AND USING BUTVAR B76

Russ McCarty

Butvar, Monsanto's trade name for polyvinyl butyral, is a white crystalline plastic related to PVC. B76, the grade of Butvar sold by the FPS, can be dissolved in acetone or ethyl alcohol (not isopropyl, methyl, or any other type of alcohol). Acetone is the preferred solvent for most uses because it dries quicker than alcohol. If a vat of preservative is needed to soak large specimens, health considerations might dictate the use of the less toxic solvent, ethyl alcohol. In its dry state, Butvar poses few health hazards (unless you try to eat it), however, when it is made into a glue or preservative, the solvents can be hazardous, especially acetone. When used in large quantities (e.g. brushing a gallon of preservative on a mastodon skull), the fumes will cause health problems if adequate ventilation is not provided. Acetone is also **EXTREMELY FLAMMABLE** and its fumes can be explosive, therefore it should never be used around open flame, cigarettes, or spark producing electrical stirring devices.

1) To make Butvar into a glue, fill an empty wide-mouth jar about 3/4 full with acetone. At the Florida Museum of Natural History, Russ McCarty uses a one-gallon glass jar like those in which restaurants get pickles (note that acetone will dissolve most plastics except lab grade plastics like Nalgene). The 1 lb. bag of Butvar sold by FPS will make about a gallon of glue, or two gallons of preservative.

2) While continually stirring, add Butvar crystals until a viscous consistency is obtained (like model airplane cement). A one-pound bag will produce this consistency when mixed with 3/4 of a gallon of acetone. Even with constant stirring, there will be clumps of undissolved Butvar in the glue; however, if you cap the jar and let it set overnight, these

clumps will dissolve. The mixture may be thinned or thickened by adding acetone or Butvar crystals.

3) To use as a glue, apply to both dry surfaces to be glued and blow on them or allow to air dry for 30 seconds. Press the pieces together firmly and hold for a minute or two. A sand box, clay, or a piece of tape can be used to hold pieces together while drying. Butvar glue is good for repairing small bones, but where strength is needed for large specimens, or for small specimens with minimal contacts, a stronger glue such as epoxy is recommended.

4) To use as a preservative or hardener, the user must first determine that the specimen is dry. When applied to wet specimens, Butvar hardener forms a white film on the surface of the specimen, and will not preserve the specimen. To be an effective preservative, the mixture must be thin enough to penetrate the bone and get the dissolved Butvar deep into the specimen. Overly thick hardener will merely form a skin on the bone surface and will peel off later. Brush several coats of preservative onto the specimen. An alternative method is to make a wire-mesh cradle and dip the specimen into a container of hardener.

5) It is often more convenient for the user to mix the Butvar first as a glue and store this as a stock solution in a jar. When hardener is required, a portion of the glue stock can be poured off into another jar and mixed 50/50 (or to the proper consistency) with acetone. Since acetone readily evaporates from the mixtures, it is necessary to periodically replace the lost acetone in order to maintain the desired consistency. Butvar glue and hardener can be removed with acetone.

The  
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Tampa, FL**



**Saturday March 20 9:00am - 6:00pm  
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**Admission:**

Adults \$3.00  
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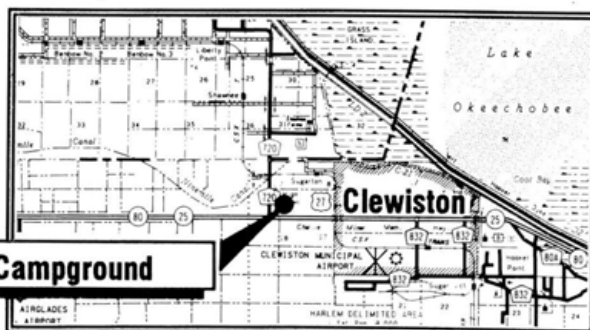
Tampa Bay Fossil Club  
P.O. Box 290561  
Tampa, Fl. 33687-0561  
or call: Rudi Johnson  
(813) 839-2291

# F.P.S. SPRING MEETING INFORMATION

**When:** Friday, April 16 and Saturday, April 17, 1993

**Where:** K.O.A. Campground, 5 miles west of Clewiston, U.S. 27

**PLEASE RSVP WITH THE ATTACHED FORM BY APRIL 5, 1993**



## SCHEDULE OF EVENTS

### Friday, April 16:

**F.P.S. Social**, 6:30 - 9:00 P.M., in the Meeting Hall, K.O.A. Campground, Clewiston, Florida. The campground will cater chicken wings, steamed shrimp with mild cajun seasoning, veggie platter, meat and cheese platters, crackers, and breads. Beer, wine and soft drinks will be available.

### Saturday, April 17:

**Collecting trip to Bergeron Star Pit**, 9:00 A.M. - 3:00 P.M. Trip attendees will meet at the K.O.A. Campground between 7:30 and 8:00 A.M....we will drive our own vehicles and/or carpool to the pit. Distance from K.O.A. to Bergeron is approximately 29 miles on U.S. 27. Bergeron requires fossil hunters to sign a "Hold Harmless" waiver, which will be provided at the pit entrance. Additionally, **each individual must have proof of medical insurance (a card or copy of policy), in case of accident or injury. PLEASE bring this with you.** For tag-alongs not interested in fossiling, the annual Sugar Festival will be in full swing in downtown Clewiston.

**Outdoor Banquet**, 7:00 - 9:00 P.M., Meeting Hall at the K.O.A. Campground. Banquet fare: the famous Buchanan "Pig Pickins" (whole pig in outside grill), grilled chicken, cole slaw, hot vegetable, barbecued potatoes, cornbread, pies. Cash bar for beer and soft drinks.

**Banquet Program**, 9:00 P.M. - ?, in the K.O.A. Meeting Hall. Dr. Edward Petuch of Florida Atlantic University will speak on a topic to be announced.

### Costs:

**Fee for Social and Banquet:** \$12.00 for adults, \$8.00 for children 12 and under.  
(see page following registration form for accommodation options)

# Spring Meeting Registration Form

Florida Paleontological Society Spring Meeting  
April 16 & 17, 1993, Clewiston. FL

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone: Home \_\_\_\_\_ Work \_\_\_\_\_

## **PLEASE INDICATE THE FOLLOWING:**

(FOR OUR PLANNING PURPOSES)

Number of persons in your party attending Social on Friday evening \_\_\_\_\_

Number of persons attending collecting trip to Bergeron Pit Saturday \_\_\_\_\_

Number of persons attending Banquet Saturday evening \_\_\_\_\_

***The Social Friday and the Banquet Saturday, one or both, are covered by the food fee:***

Number of adults attending Social/Banquet: \_\_\_\_\_ X \$12.00 = \_\_\_\_\_

Number of children attending Social/Banquet: \_\_\_\_\_ X \$8.00 = \_\_\_\_\_

TOTAL to enclose: \_\_\_\_\_

For food planning purposes, indicate each attendee's meat preference  
(please put a number of persons in each category):

\_\_\_\_\_ Pork \_\_\_\_\_ Chicken

***Please complete form and send with check for  
appropriate amount, by April 5th, to:***

**(Make checks payable to Florida Paleontological Society)**

**Phil Whisler, Treasurer  
Florida Paleontological Society  
Florida Museum of Natural History  
Gainesville, FL 32611**

# F.P.S. Spring Meeting information, continued

## Accommodation Options

The meeting headquarters will be the K.O.A. Campground, 5 miles west of Clewiston at the US 27 and SR 720 intersections (turn north on 720 off 27, campground is 700 feet in from 27.). The campground has RV sites (\$21.00/dy), tent sites (\$16.00), log cabins (AC, but w/o bathrooms-\$27.00/day), apartments, and rental trailers. Store, heated pool, playground and laundry on site. Call owners Stuart or Joyce Buchanan for info and reservations: (800) 457-7078 or (813) 983-7078.

Additional accommodations are available in Clewiston:


**Clewiston Inn** -bed and Breakfast, uptown Clewiston. Single: \$50-\$60/night; double: \$55-\$75. Dining room, tennis courts. Is adjacent to community park where Sugar Festival is held. Call (800) 749-4466 for reservations.

**Motel 27**, in Clewiston on US 27. No restaurant on site, but food nearby. (813) 983-4115.

**Cane Court Motel**, same as Motel 27. (813) 983-3141.

**Angler's Marina and Motel**, off US 27, east side of Clewiston. Limited motel rooms and RV sites, which at last checking were going fast. Has store, tackle shop, campground and marina. (800) 741-3141.

***It is advisable to make your reservations early. This should be a fun-filled weekend, and we look forward to seeing all of you there!***

|  |   |  |                |        |
|--|---|--|----------------|--------|
| HANDBOOK OF<br>PALEO-PREPARATION<br>TECHNIQUES                                     | FLORIDA PALEONTOLOGICAL SOCIETY, INC.<br>FLORIDA MUSEUM OF NATURAL HISTORY<br>UNIVERSITY OF FLORIDA<br>GAINESVILLE, FLORIDA 32611 |  |                |        |
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|  | BILL TO: _____  |  | SHIP TO: _____ |        |
|  | QUANTITY  | DESCRIPTION                              | UNIT PRICE     | TOTAL  |
|  | _____   | HANDBOOK OF PALEO-PREPARATION TECHNIQUES | \$6.50         | _____  |
|  | _____   | SHIPPING AND HANDLING                    | _____          | \$3.75 |
|  | _____   | _____                                    | _____          | _____  |
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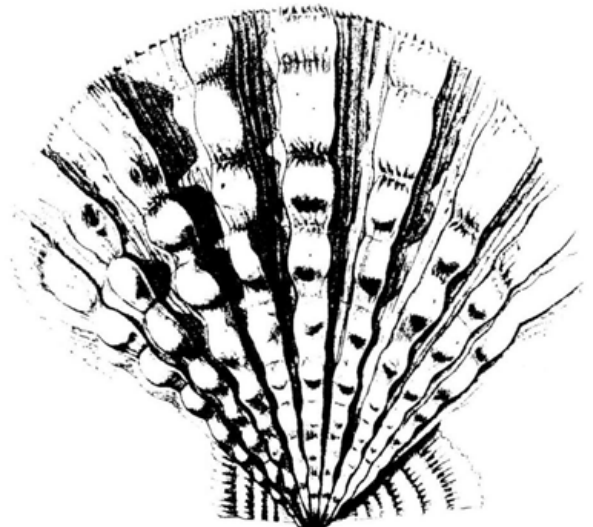
PREFACE TO THE THIRD EDITION

As the second edition of their very popular book was selling out, authors Lelia and William Brayfield realized that another printing was soon necessary. Recognizing that certain portions of their book were also in need of revision, Lelia and Bill decided to transfer the copyright to the Florida Paleontological Society, Inc. in January 1993 and defer the task of revision to the Invertebrate Paleontology staff at the Florida Museum of Natural History (FLMNH). In accepting this challenge, our goal has been to alter the text as little as possible so as to preserve the original intent and expression of the authors. Bill and Lelia's insights and impressions regarding, for example, the geology of southern Florida or the problems with paleontological nomenclature remain their own. We slightly modified the book's title to more accurately reflect its content. Other changes to this edition primarily involve the taxonomic section where identifications, scientific names, and systematic classification were updated to reflect current usage at the FLMNH. Vertebrate fossils as well as examples of invertebrate taxa from elsewhere in Florida were eliminated in order to focus more consistently on southwest Florida. Few species were added, most represent those already included in previous editions. Our hope is that collectors of Florida fossils will continue to enjoy the Brayfields' book, find this edition more useful than ever in identifying their specimens, and feel that we have been faithful to the authors with our revision.

Douglas S. Jones, Ph.D., Roger W. Portell and Kevin S. Schindler  
Invertebrate Paleontology Division  
Florida Museum of Natural History  
University of Florida  
Gainesville, Florida 32611  
January 1993

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FOSSIL SHELLS  
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by  
**LELIA AND WILLIAM BRAYFIELD**

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## The Mulberry Jubilee

A Celebration of Springtime

Don't miss the Mulberry Jubilee on April 2, 3 and 4 in beautiful downtown Mulberry. There's something for everybody. Just mosey on down to the Mulberry Civic Center on Fifth Street and bring your family to one of Florida's favorite festivals.

Call 425-2823 for more information.

**Fossil Fair, Collectibles and Arts & Crafts Show**

**April 3 and 4 from 10:00 am to 5:00 pm**

Fossil Fair in parking lot of the Mulberry Civic Center. Fossil hunt buses leave at 8:00 A.M. Saturday.

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# FOSSILS ARE WHERE YOU FIND THEM

*Note: This quarter we have two FAWYFT articles: my own brief work below, intended to provide further guidance to our readers on the type of items we are looking for, and Mike Wisenbaker's interesting and informative article which follows. PLEASE! Take a moment or two and send us your experiences!*

## Weird Tales or Is This a Comic Book or What?

by Eric Taylor

Those who have been active in paleontology in and around west central Florida have probably met or heard of Eric Prokopi of Land 'O' Lakes Florida (just north of Tampa.) Eric, currently a second semester freshman at the University of Florida at Gainesville, is well known for his prowess as a competitive swimmer (he is a non-scholarship member of the University of Florida swim team, one of the best in the country) and his history of academic excellence in high school as well as his success in his paleontological pursuits.

Eric began fossil collecting at an early age and while still in secondary school had made significant discoveries that enriched not only his personal collection but expanded scientific knowledge of the fossil communities of central Florida as well. Perhaps his most important contribution came when he discovered a suite of material in the Withalacoochee River that dated from the late Miocene.

Eric is a very quiet individual. Getting information from him is a drawn out process at times. Over the past couple of years it has been my pleasure to work with him on numerous occasions on both underwater and dry land collecting trips. He is one of the best spoil-pile collectors I have ever seen, covering territory rapidly and thoroughly as well as being an excellent diver and underwater collector. Two of the things that have happened to him stand out from our conversations.

While digging in the Leisey Shell Pits made famous by Frank Garcia, Eric dug up a very strange looking bone. It obviously was from a large animal, but no one there the day he found it knew what it was and over the next few months, no one he showed it to knew either.

About 6 months later someone identified it as part of an Elephant jaw. Eric went back to Leisey, went back to the area where he had found the bone and started poking around with his shovel. Within minutes, he had hit something and when it was uncovered proved to be a mandible from *Cuviemonius tropicus*, the early Pleistocene Gomphothere! While excavating around this nice little item to jacket it, the opposite mandible showed up and when assembled PERFECTLY MATCHED THE PORTION OF THE JAW HE FOUND SIX MONTHS EARLIER! This from one of the most heavily excavated sites ever found in Florida!

A weirder story is more recent. Approximately a year ago, while hunting in a phosphate mine in Hardee County, Eric found part of the left mandible from a Miocene tapir. This piece included the front of the jaw, a portion of the right mandible, and several of the molars. It is a beautiful specimen that anyone would be proud to find. The jaw is a light tan, the teeth dark and the material does not show any significant signs of water wear. In addition, the species is little known from the Bone Valley. He had left the material with Gary Morgan from the Florida Museum of Natural History for study and casting. I had marveled over the find several times when there to pick up mail.

Over the holidays in December 1992, Eric and a friend went to visit someone who lives in Fort Meade, Florida. He works in one of the mines near there. While admiring his collection, Eric noticed a piece of tapir mandible that looked quite similar to the mandible he had found earlier. Negotiations commenced and when Eric left, the item was in his car. The more he looked at it, the

more familiar it looked. Same coloration, same condition, back of the left mandible, could it be???? Naw! Couldn't be!

Eric and I were both in the Museum when he showed his new acquisition to Gary Morgan. The modeling requested earlier on his mandibular fragment hadn't been done yet, so the two pieces, one a year older, were brought together. They were a perfect match, perfect fit. Both items were from the same jaw! The place where they had broken is almost indistinguishable when they are

placed together. If one of the molars hadn't been broken by whatever force had separated the two in the first place, it wouldn't be possible to tell there was a break.

The casting of this fossil is now complete. If you ever get to the Vertebrate Paleontology Range in the Florida Museum of Natural History, ask Gary or Russ to show you this remarkable item. Or if you ask very nicely, Eric might let you see the real thing! It's worth the effort!

## **Florida Paleontological Society** *Membership Information*

Dues to the Florida Paleontological Society, Inc. are payable on or before January 1 of the year. Membership is open to any individual or organization and (since October 1992) to certain multiple groupings.

Membership categories, dues amounts and definitions are as follow:

| <b>MEMBERSHIP CATEGORY</b> | <b>ANNUAL DUES</b>    | <b>DEFINITION</b>  |
|----------------------------|-----------------------|--|
| <b>Individual Active</b>   | <b>\$15.00</b>        | Over age 18. Full rights. Label shows "A".   |
| <b>Juvenile</b>            | <b>\$5.00</b>         | Under age 18. Receive publications. Attend meetings. No vote. Label shows "J".   |
| <b>Subscriber</b>          | <b>\$15.00</b>        | Publications only. Label shows "S".  |
| <b>Institutional</b>       | <b>\$15.00</b>        | Receive publications. Representative may attend meetings. Label shows "I".   |
| <b>Couples</b>             | <b>\$20.00</b>        | Maximum 2 related persons, both over 18. Both on label. Label shows "C".   |
| <b>Family</b>              | <b>\$30.00</b>        | More than 2 related persons. Adults must be identified. If two are over 18, 2 votes. One set of publications. Label shows "F". |
| <b>Honorary</b>            | <b>None</b>           | Full rights. May not hold office.  |
| <b>Sustaining</b>          | <b>\$50.00 and up</b> | Full rights. May select Individual, Couple, or Subscriber status. Special recognition by FPS.                                  |

Certain details of the various membership categories will require technical changes in the By Laws of the Corporation. This should be completed by the Spring Membership meeting.

A full membership list of those who have paid dues for 1993 will be published in the next Newsletter. **IF YOU DO NOT WANT YOUR TELEPHONE NUMBER TO APPEAR IN THIS LIST YOU MUST ADVISE THE SECRETARY PRIOR TO PUBLICATION!**

# A Mastodon Tooth from Venture Sink, Wakulla County, Florida

by  
Michael Wisenbaker

On the afternoon of June 14, 1986, my buddy and I made a cavern dive in Venture Sink\* several miles south of Tallahassee, Florida. Venture is one of 26 known openings into one of the world's longest underwater caves known as the Leon Sinks Cave System. According to Steve Irving, project cartographer and an exploration cave diver for the Woodville Karst Plain Project, this network of subterranean caves currently has 54,870 feet (over ten miles) of mapped passages. Some speculate this hidden stream eventually resurges at Wakulla Springs.

As it happened, fortune had smiled on us that day since normally by this time of year north Florida has been soaked by rains. When the surface water runoff from these summer monsoons reaches clear groundwater aquifers, the water changes to the color of a strong brew of coffee. If these events occur, divers may as well await the customary fall droughts for the water in this system to clear.

On this dive, though, we had about 50 feet of visibility. As we began swimming out of the cavern, my light illuminated a dark object lying on the floor beside a massive breakdown boulder. It rested on the bottom at a depth of 45 feet, just beyond the reach of a strong current that swirled downstream into the cave's siphon. Upon picking it up, I almost swallowed my regulator when I realized that it was a molar from a mastodon (*Mammot americanum*). Though mastodon and mammoth teeth are purportedly the most common fossil mammal remains in Florida, the find excited me.

While fossils of these huge creatures and other members of the Pleistocene zoo often have been preserved in the state's springs, sinkholes, fissure fillings and caves, to my knowledge, this tooth represents the first and only evidence of Ice Age megafauna recovered from this cave system.

Perhaps one day the floors of the karst windows in the Leon Sinks Cave System--now mostly covered with heavy deposits of silt--may be as productive as sites like Devil's Den near Williston and Little Salt Spring and Warm Mineral Springs in Sarasota County. These prominent sites have long served as time capsules of Florida's late Ice Age flora and fauna.

In any event, the tooth weighed 8.05 ounces (250.3 grams) being 2.91 inches (74 mm) long and 1.3 inches (33 mm) wide. It did not appear to have any unusual wear patterns. Unlike mammoths, closely related to modern elephants, mastodons had somewhat simpler, higher cusped teeth with fewer ridges. Interestingly, the common name for this animal derives from the Greek words *mastos* meaning breast or nipple and *odont* meaning tooth.

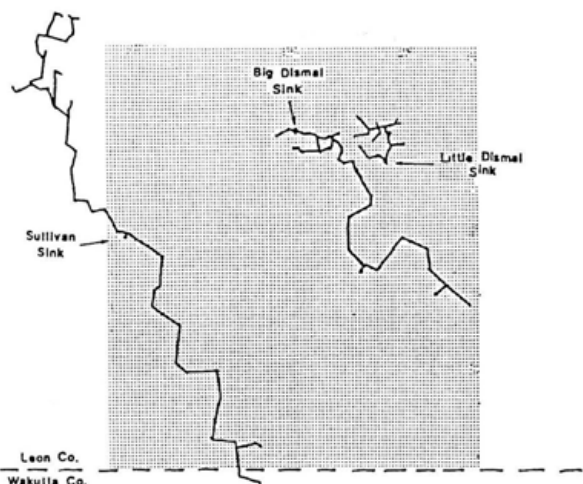
In bulk, mammoths weighed up to three tons and stood as high as about 12 or 13 feet at the shoulders. Mastodons were shorter and more solidly built than mammoths. Since the two behemoths ate different types of food, you can distinguish between them by examining their teeth. Based on their dentition, we know that mammoths grazed over vast prairies, grasslands and coastal wetlands. The mastodons, on the other hand, thrived near inland streams, springs and sinkholes. They browsed on trees and shrubs that grew by the edge of the water.

At nearby Wakulla Springs, three almost entire but jumbled skeletons of mastodons were recovered. One has been reconstructed and greets visitors at the Museum of Florida History in Tallahassee. Ivory tusks from both mammoths and mastodons may have been used as tools and ornaments by Paleo-Indians (Florida's first residents who lived in the region some 12,000 to 10,000 years ago).

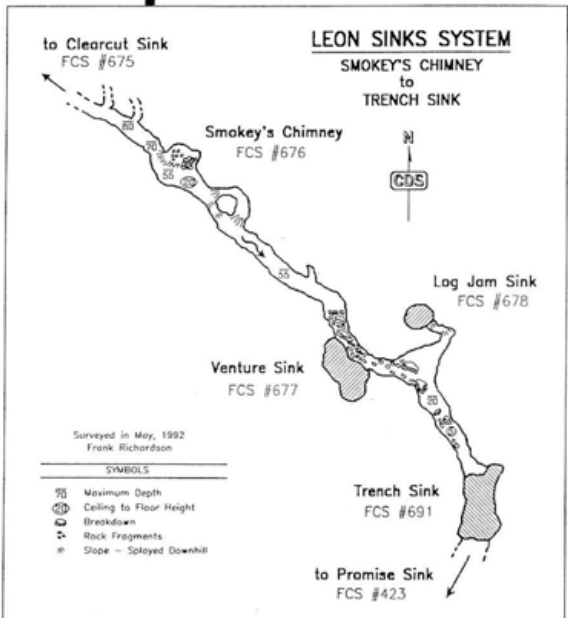
Although I have no clue whether the tooth

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\* *In a hydrogeologic sense, Venture Sink and other such features technically should be labeled karst windows rather than sinkholes. Karst windows occur where the roofs of underground streams have collapsed. This leaves gaps that allow water issuing from caves to spring to the earth's surface. The water briefly flows through open channels before vanishing into natural drains known as siphons.*



LEON SINKS  
GEOLOGICAL AREA



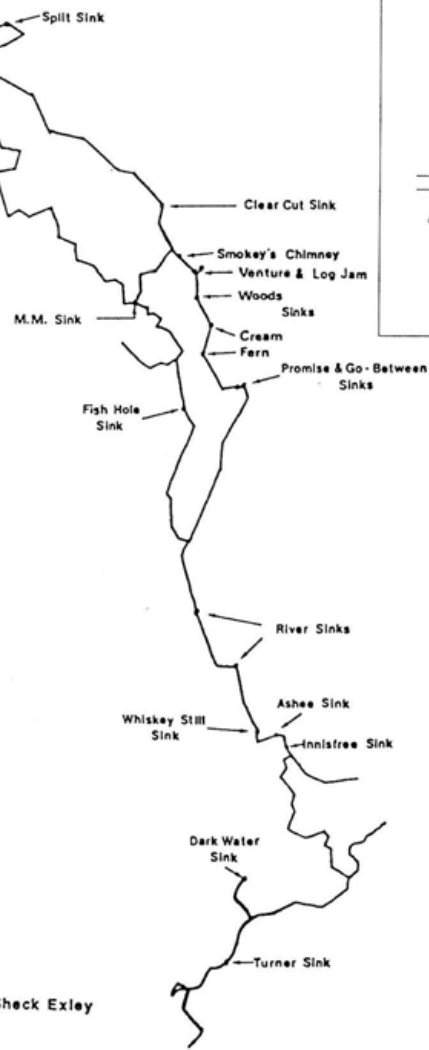
# LEON SINKS CAVE

TOTAL SURVED PASSAGE  
6-7-92  
54,870'



0 1200' 2400'

CAVE IS COMPLETELY UNDERWATER



The National Speleological Society's  
**Woodville  
Karst Plain Project**

This map is compiled from maps drawn by: Shek Exley  
Steve Irving Bill McFaden John Zumrck

© 1991 WOODVILLE KARST PLAIN PROJECT & STEVE IRVING  
CARTOGRAPHY BY STEVE IRVING

from Venture Sink dates closer to two million than 10,000 years old, being an archaeologist I am much more intrigued by the latter possibility. Unfortunately, it even remains conjectural whether the animal lost the tooth while looking for water near the grotto entrance when it was dry, perhaps with a small stream coursing through it, or if the tooth was secondarily deposited by another means. We do know that this part of the conduit is carved into St. Marks Formation (lower Miocene) limestone that formed sometime between 24 and 20 million years ago. The cave itself, however, most likely dates to the Pleistocene Epoch (ca. 2,000,000 to 10,000 years ago).

Based on years of work by geologists, paleontologists, palynologists, archaeologists and others, peninsular Florida's climate and ecosystems 12,000 to 10,000 years ago contrasted sharply with today's. Grasslands or savannahs, covered with a few tree islands, carpeted most of the state. Other studies have revealed that sealevel started rising about 14,000 years ago. It reached no closer than 100 feet of its present stand until after the glaciers melted--since much of the earth's water remained frozen. Florida then occupied nearly twice its present size. A wide corridor of land stretched along the coast from the eastern Gulf of Mexico to Central America.

While the four major glacial episodes of the Pleistocene epoch surely affected Florida's climate, the last ice sheet only touched as far south as Ohio. Freshwater lakes were scarce because of sparser rainfall. Rising water tables from more frequent rains and higher sealevel stands did not reach current levels until 5,000 years ago. Our weather during the late Ice Age must have been ideal. Temperatures especially in north and central Florida, were less seasonal with cooler summers and warmer frost-free winters. If this climate ever returns, our utility bills should drop while the cost of water would rise.

With less climatic stress than most of the continent, the region from Charleston, South Carolina, southward served as a refuge for many warm-adapted species. As a result, Florida may possess the best record of Ice Age fossils in the world. Although most modern forms existed, according to the late George Gaylord Simpson,

"the present fauna of Florida are only a poor and colorless remnant of that which it once supported." The Melbourne Bone Bed along the central Atlantic coast alone held more kinds of land animals than live in all North America today. Near the end of the Ice Age, an alluring menagerie of migrants from the tropical South, the arid West and the temperate North gathered in the peninsula.

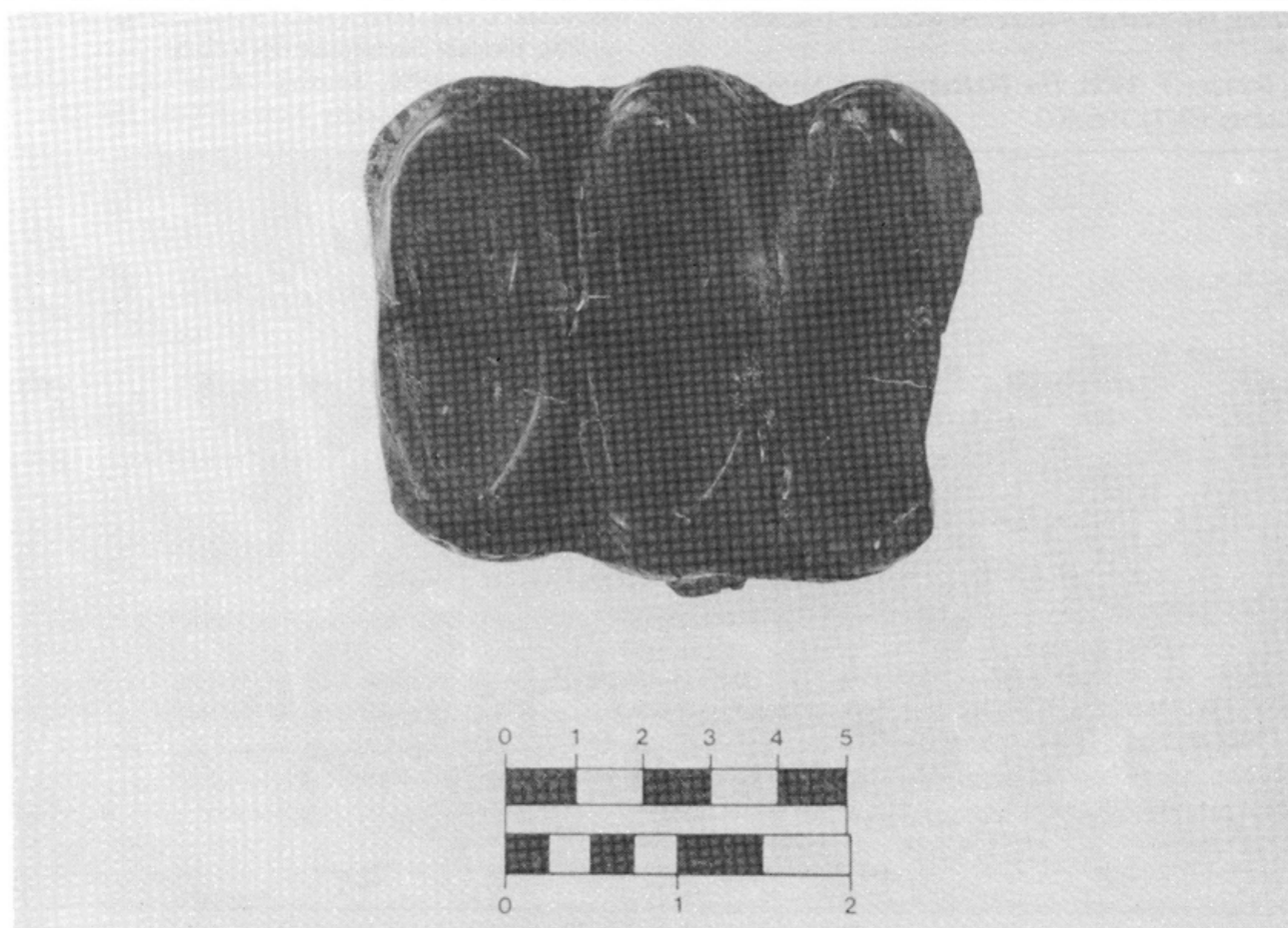
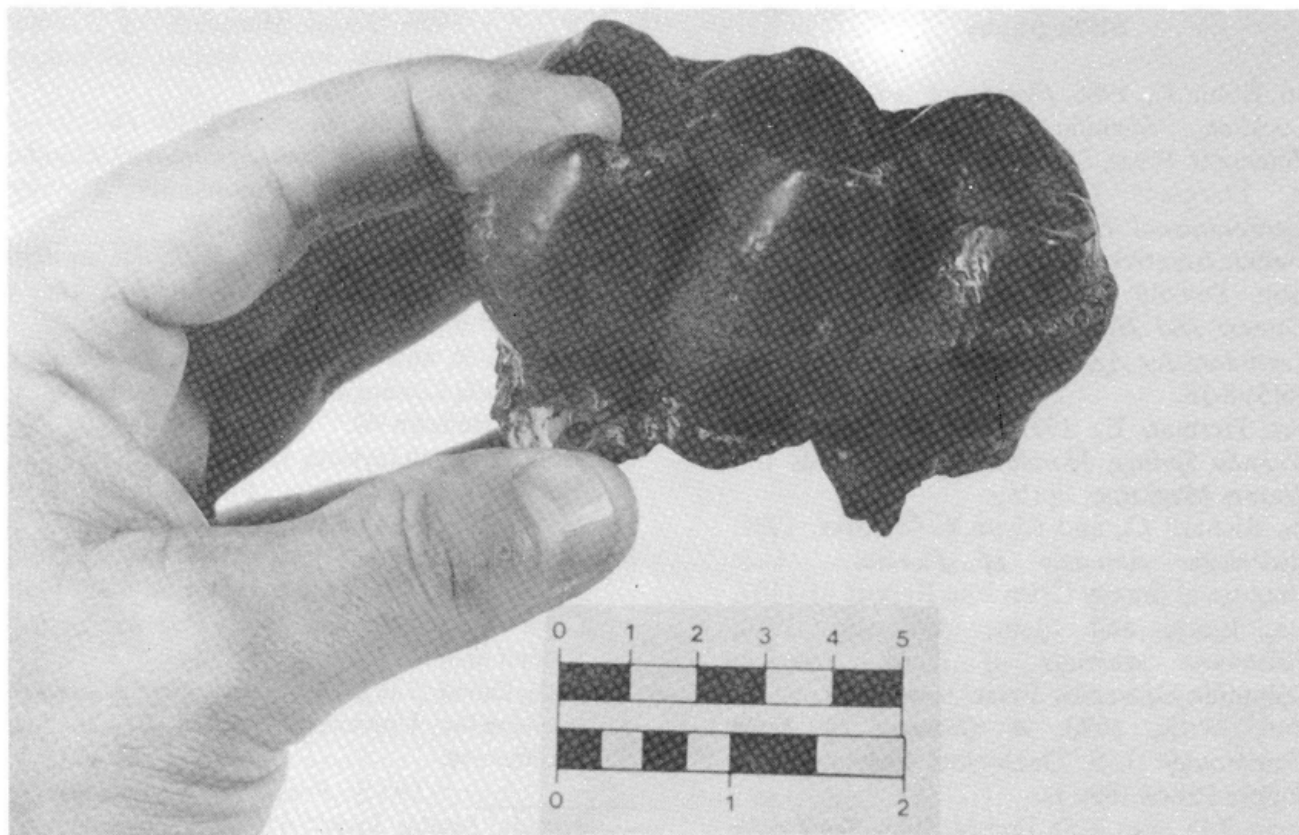
Along with mastodons and mammoths, animals included grand bears, big cats, horses, peccaries, tapirs, llamas, antelope, bison, dire wolves and hugh land tortoises. Giant armadillos and sloths, glyptodonts, enormous rodents known as capybaras and a beaver that would dwarf his modern cousins joined in this parade of Goliaths. Native Americans who arrived in North America some 12,000 or so years ago must have been astounded when they first saw these burly beasts.

By the end of the Ice Age, at least two dozen kinds of animals, including the mastodons, had become extinct in Florida. A dozen or so others such as tapirs, peccaries and muskrats, that still exist elsewhere, had left the state. We do not know what caused these extinctions. Explanations range from dramatic environmental changes to over-hunting by the newly-arrived Paleo-Indian "hunters."

Whatever the case may be, later we returned to Venture Sink thinking we might find the rest of the critter--hoping perhaps even to observe a clovis point imbedded in one of its ribs. At present, our knowledge of how early humans interacted with Ice Age beasts in Florida leaves much to be desired. While river divers have scoured streams and collected a plethora of artifacts and fossils since the advent of SCUBA, most such finds have little, if any, provenience.

The caves riddling the state's limestone basement, however, may hold the key to providing solid contextual data that will allow us to gain a better understanding of the relationship between Pleistocene animals and early man. With the help of exploratory cave divers--such as the Woodville Karst Plain Project team--scientists may soon begin to unravel the many mysteries that lie buried near openings into Florida's underground karst.

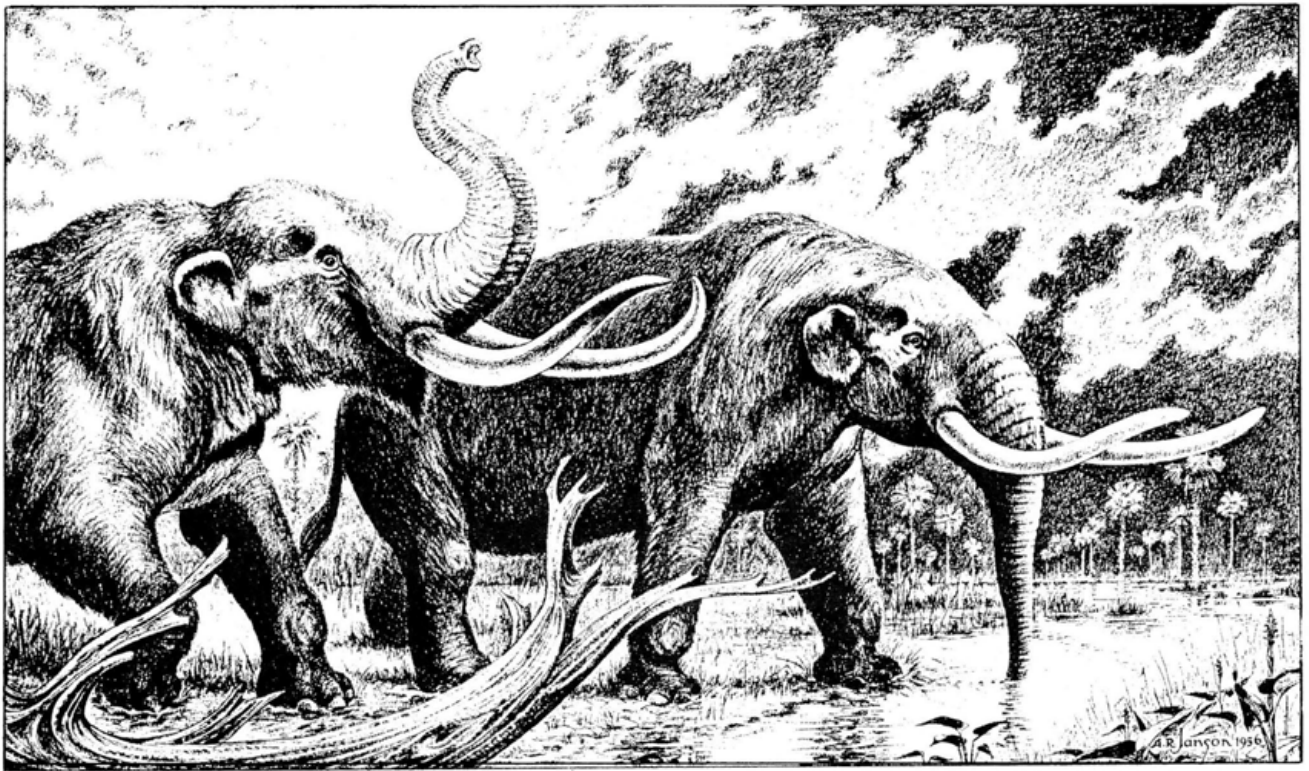
**Pleistocene mastodon tooth from Venture Sink (photos by Roy Lett).**





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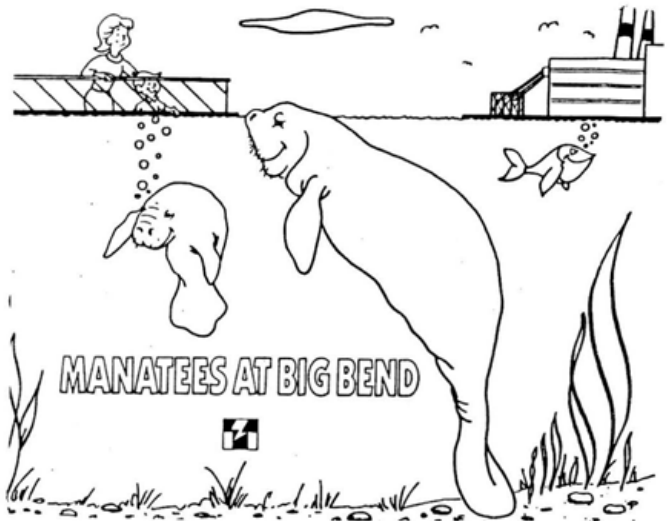
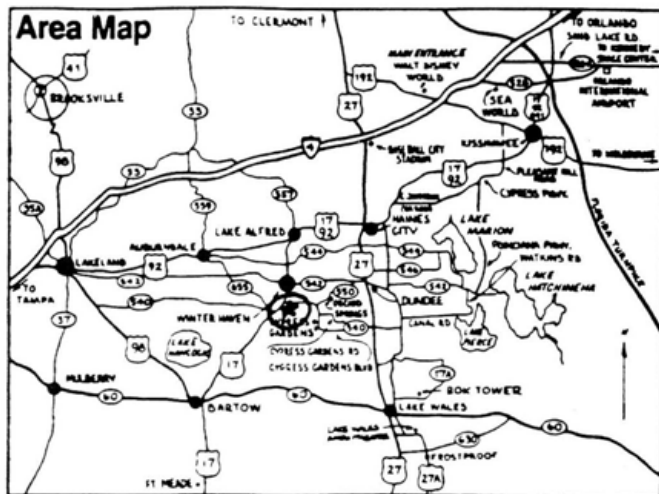
Pleistocene mastodons (from Olsen, 1958).

# 10th Annual BVFS Florida Fossil Fair

## Year of the Manatee



Sponsored by the Bone Valley Fossil Society, Inc.  
Affiliated with the Eastern Federation and American Federation of Mineralogical Societies



### Featuring

**Fossils, Minerals & Artifacts** for sale by world class dealers

**Program:**

Lecture by **Dave Letasi**, Paleontologist & Curator at the Great Exploration Hands on Museum in St. Petersburg. Time of lecture is scheduled for Saturday, Oct. 9, 1993 @ 3:00 pm

**Exhibits:**

Fossil exhibits from well know collectors & Institutions.

**Silent Auction:**

Around the clock on Saturday, October 9, 1993

**DOOR PRIZES • RAFFLE DRAWING • FOOD • GAMES  
CONTINUOUS FOSSIL HUNTING IN SAND BOX  
PLUS A LOT MORE!!**



AT THE  
**WINTER HAVEN COMPLEX**

IN THE GYMNASIUM  
210 Cypress Gardens Blvd.

S.E. Corner of Cypress Gardens Blvd. & US 17

**Saturday October 9, 1993 - 9:00 a.m. - 7:00 p.m.**

**Sunday October 10, 1993 - 9:00 a.m. - 5:00 p.m.**



**Admission:**

Adults - \$2.50

School children - **FREE**

**For Information Phone:**

813/665-3426 or 813/644-3778



# 1993 - Tenth Annual "BVFS" FLORIDA FOSSIL FAIR

*The South's Largest International Fossil Fair*



Sponsored by the Bone Valley Fossil Society, Inc.  
Affiliated with the Eastern Federation and American Federation of Mineralogical Societies

## FOSSILS, MINERALS & ARTIFACTS

**NOTE:** Our fair has been moved indoors to better serve our dealers and the public. It's located in a A/C Gym with excellent lighting.

Further information contact:

**SHOW CHAIRMAN**  
Ed Holman  
2704 Dixie Road  
Lakeland, FL 33801  
Phone: 813/665-3426



**SHOW PUBLICITY**  
Marcia Kehler  
910 Pointview Lane  
Lakeland, FL 33813  
Phone: 813/644-3778

## Dealer Registration

**Exhibit:**

If you have an exhibit you want to display contact:  
Ed Holman, **Exhibit Chairperson**, 2704 Dixie Rd., Lakeland, FL 33801  
or phone 813-665-3426

**Lodging:**

There are many motels and hotels in the area. Rates are reasonable at this time of year.

**Camping:**

Camping is available behind the Winter Haven Complex. Price: **\$8.00** a day/includes water and electricity. If you register to camp, please pick-up camping ticket at Headquarters table. Then place on Driver's side front window.

**Set Up:**

Dealers must be set up prior to opening of show. Door will be open at 7:00 a.m. each morning. (Sat. and Sunday)

**Electricity:**

Electricity is available for those desiring table lighting.

**Table rental:**

**(Maximum 4 tables)** Price: **\$15.00** a day per table.

**MAKE CHECK/MONEY ORDER PAYABLE TO:** Bone Valley Fossil Society, Inc.

**Deadline for registration: SEPTEMBER 1, 1993**

### BVFS FLORIDA FOSSIL FAIR BOOTH REGISTRATION FORM

NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE # \_\_\_\_\_

Tables desired \_\_\_\_\_ @ \$15.00 per day = \$ \_\_\_\_\_

Indicate days setting up:

\_\_\_\_\_ Saturday (10/9) @ \$ \_\_\_\_\_

Number of Chairs Needed \_\_\_\_\_

\_\_\_\_\_ Sunday (10/10) @ \$ \_\_\_\_\_

Will you need Electric? \_\_\_\_\_

**Camping:** # of days camping \_\_\_\_\_ @ \$8.00 per day \$ \_\_\_\_\_

**TOTAL \$** \_\_\_\_\_

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!

(cut out and return form)



## F. P. S. MOURNS BEN WALLER

Surely anyone who knew Ben Waller must now deeply mourn his absence. That goes a hundredfold for anyone who spent time telling stories and studying fossils and artifacts with Ben; and a thousandfold for anyone fortunate enough to have dived with that wonderful person. Florida paleontologists, and especially that unique clan of Florida Underwater Paleontologists, have lost their finest.

We have all seen Ben in the field, in collections, in meetings and in his own fossil shop, and always he was joyous about fossils and friends. My own favorite memory was printed at the beginning of the last chapter in Robin Brown's great book on FLORIDA'S FOSSILS. My first experience with the Florida underwater fossil scene took place nearly three decades ago on the Santa Fe River. And who was the key person who made that site available to me and to the Florida Museum? Let me quote the punch line from page 182:

"And of course Ben was right there with his high sign, cheering each Pliocene fossil I found, and showing me each specimen he found."

Nobody has done as much as Ben did to foster good relationships between amateur and professional paleontologists in Florida. He helped us all focus on good fellowship and good science. He saw with ultimate clarity and profound wisdom that nothing else really mattered. Nobody shared scientific insights and specimens more freely with the Florida Museum. It is altogether fitting that Titanis walleri is a very large and a very rare old bird from the Santa Fe River.

Ben always gave good council on how we could all work together to foster Florida paleontology and archaeology. He was one of the key people that helped conceive the PLASTER JACKET in 1965. And Ben was one of the founders and the second president of the Florida Paleontological Society a decade later. He was an especially strong advocate of young paleontologists in this organization, and started the first scholarship fund. In recent years, Ben was elevated to Honorary Membership in the F. P. S. Throughout his life Ben kept his eye on the science and the humanity of our organization.

While we mourn the loss of Ben Waller, let us also pledge to continue the work he urged us to carry forward, in the collaborative spirit that he taught us by his own magnificent example. One of the obvious ways to respond is to mail a contribution to the Ben Waller Paleo Scholarship Fund care of the Tampa Bay Fossil Club.

S. David Webb,  
Florida Museum