

# Florida Paleontological Society, Inc. *Newsletter*



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**Volume 16 Number 1 Winter Quarter 1999**

# FLORIDA PALEONTOLOGICAL SOCIETY, INC

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Fall Meeting	J. Owen, T. Sellari, B. Fite, R. Miller
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## INFORMATION, MEMBERSHIP, AND PUBLICATION INFORMATION

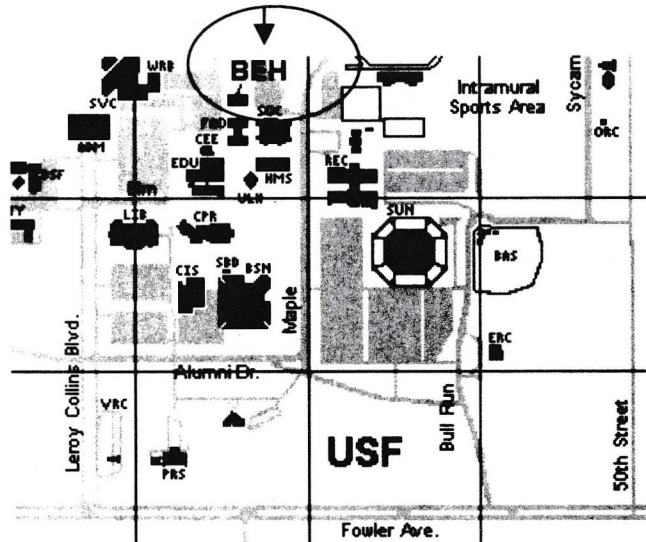
Please Address: Secretary, Florida Paleontological Society, Inc.  
Florida Museum of Natural History  
University of Florida  
Gainesville, FL 32611

*Announcing  
the*

# **Florida Paleontological Society Fall Meeting**

**Saturday, November 20<sup>th</sup>, 1999**

**University of South Florida, Tampa, Florida  
Behavioral Sciences Building (BEH) Room 103**



## *Tentative Schedule of Events*

- |                        |  |
|------------------------|--|
| <b>9:00 – 10:30AM</b>  | <b>Coffee, doughnuts, Board Meeting,</b>   |
| <b>10:30 – 12:00PM</b> | <b>Fall Business Meeting</b>   |
| <b>12:00 – 1:30PM</b>  | <b>Lunch on your own</b>   |
| <b>1:30 – 3:30PM</b>   | <b>Paleontology presentations – guest speakers.</b>                                |
| <b>3:30 – 6:00PM</b>   | <b>Paleo camaraderie, mingling, and show and tell</b>                              |
| <b>6:00 – 7:00Pm</b>   | <b>Catered italian dinner at USF</b>   |
| <b>7:00PM - ??</b>     | <b>Fossil Auction, featuring casts by Tony Estevez (bring your donations too!)</b> |

**Possible mine collecting trip, Sunday, November 21st (TBA)**





# News Notes

## Spring Meeting Summary...

The 1999 FPS Spring was held April 30<sup>th</sup> through May 2<sup>nd</sup> at the Caloosa Nature Center in Ft. Myers. David Cale and his dedicated volunteers from the Paleontological Society of Lee County graciously arranged and hosted the event. We extend our sincere thanks for all their efforts.

The meeting kicked-off with a welcoming reception on Friday night for the twenty early arrivers. FPS President Terry Sellari gave a slide presentation on river diving. Saturday's events included an FPS Board meeting, followed by four presentations: Dr. Gordon Hubbell spoke on fossil sharks, Frank Rupert of the Florida Geological Survey discussed the local geology of Lee County, Terry Sellari presented an interesting insight into pathology in the fossil record, and Dale Stream provided an overview of the invertebrates and fossil finds at the APAC pit in Sarasota. The Saturday evening festivities featured a Barbecue dinner and fossil auction.

Two field trips were conducted on Sunday, May 2<sup>nd</sup>. One group canoed the Brownville run of the Peace River, and a second group hunted fossils at South Bay. A good time was had by all, and once again we thank the tireless volunteers at PSOLC for all the work they put into making this meeting a success.

## FPS Member Gordon Hubbell on Discovery Channel...

For those who may have missed it, a recent episode of the Discovery Channel's "Shark Week" series on *Megalodon* featured our very own Dr. Gordon Hubbell. Dr. Hubbell, past president of the FPS, is a world-renowned expert on fossil sharks. He appeared as one of the program's featured authorities, along with a portion of his fabulous shark teeth collection.

## Website of the Quarter...

<http://www.iwaynet.net/~mperona/fossil.htm>

An interesting summary of public fossil collecting sites in all 50 states. Also features links to related paleontology books offered through Amazon.com.

## Paleontology Books...

*Fossiling in Florida: A Guide for Diggers and Divers* by Mark Renz (see ad this issue).

*Discovering Fossils: How to Find and Identify Remains of the Prehistoric Past* by Frank A. Garcia and Donald S. Miller. Paperback - 176 pages 1st edition (January 1998). 160 drawings, 6" x 9". Complete beginners guide to fossil collecting. Includes lesser-studied vertebrate fossils. Detailed illustrations for identification and comparison. (Local bookstores and Amazon.com,etc.)

*Discovering Fossil Fish* by John G. Maisey, 1996, 224 pages, Henry Holt and Company. (May be ordered through local bookstores or Amazon.com, etc.). This book traces the evolution of fishes over the course of 500 million years, describing the discovery of fossil remains and explaining what ancient fishes tell us about humans' place in the history of life. It offers current scientific information as well as stories about historic and contemporary fieldwork, illustrated with color photos, drawings, and glossary.

*Fossils of South Africa* by Colin MacRae and the Geological Society of South Africa. 11.8 x 9 inches, 380 pages, 350 color photos plus illustrations. This comprehensive and beautifully illustrated book is the first of its type on South African fossils. A collection of maps, excellent diagrams and informative charts guide the reader through the geological events and development of life in the region over the eons. The text, while as free of technical jargon as possible, does not compromise the scientific integrity of the information presented. It is aimed at everyone with an interest in fossils that wish to gain in-depth understanding of the geological history of the region. Most of the excellent photographs were taken by the author from fossil collections throughout South Africa and some of the specimens have never been illustrated in the scientific literature. Available in either Collectors Edition (\$250.00) or Standard Edition (\$70.00) plus \$38 S/H. Copies may be ordered from: The Mineral Corporation, P.O. Box 1346, Cramerview 2060, South Africa; tel. +27-11-463-4867;   
*website:*

[www.wits.ac.za/science/geology/gssa/publ/fossil/index.htm](http://www.wits.ac.za/science/geology/gssa/publ/fossil/index.htm)





## Gary S. Morgan Award...

The 1999 Gary S. Morgan Student Research Award goes to **Matthew Mihlbachler**, a graduate student at the University of Florida Department of Zoology. Recipients are selected each year from university student applicants by an FPS award committee. The \$500 award is presented to a student who is currently studying some aspect of Florida paleontology. A synopsis of Matthew's project follows.

### Biomechanical aspects of the ecology of the Miocene rhinos of Florida.

By Matthew Mihlbachler

The very diverse ungulate fauna of the North American middle and late Miocene is often referred to as the Clarendonian Chronofauna. Many of the ungulates, unique to this fauna, seem ecomorphologically similar to living African species. Among these were two abundantly represented and geographically widespread rhinoceros genera *Teleoceras* and *Aphelops*. The body proportions of *Teleoceras* are nearly identical to a hippopotamus, with extremely shortened limbs and a very broad torso, suggesting that it lived a similar amphibious lifestyle. *Aphelops* more closely resembles a black rhino in its body proportions and is postulated to have lived a similar terrestrial mode of life (Osborn, 1898; Prothero et al., 1989). Matthew (1932) and, more recently, MacFadden (1998) have suggested that a better analogy for *Teleoceras* is the white rhino while the black rhino is an adequate analogy for *Aphelops*. Studies such as these have led to the conclusion that the Clarendonian Chronofauna ecosystem is analogous to present day African savanna faunas (Webb, 1983). Other work shows that Miocene North American ecosystems are unique and not analogous to African ecosystems (Janis, 1982). This issue is important in light of the fact that analogous comparisons suggest that convergence is a powerful component of the evolution of biotic communities. On the other hand, using analogies of this sort would mask the diversity and uniqueness of past organisms and their ecosystems. This study will attempt to reconstruct aspects of the ecology and biology of two Miocene North American rhinos and compare these aspects to the biology and ecology of their hypothesized ecological equivalents.

The aspect of this study that is addressed in this proposal involves the investigation of bone density and limb morphology in relation to locomotion, substrate preference and amphibious versus terrestrial modes of life for the two extinct rhinos. An earlier study (Wall, 1983) of limb bone density in living aquatic mammals suggested that large amphibious mammals, such as hippos, in addition to having shortened limbs, possess significantly denser limb bones than terrestrial mammals of similar body sizes. This increased density is apparently a pachyosteosclerotic response to the increased need for ballast in the limbs to allow the animal to perform its

specialized form of "walking" on river bottoms and lake beds in a fully submerged state (I should note that this form of increased bone density is not analogous to the pachyostotic ribs of sirenians and other fully aquatic mammals that are adapted for swimming.) While Wall's work was promising, his study was confined only to the hippopotamus and white rhino. Other work (Alexander and Pond, 1992) has shown, however, that some rhinos have unusually dense limb bones and that this unusual density functions to support the surprising agility and speed of modern African rhinos. CT scans that I have taken of *Teleoceras* and *Aphelops* limb bones from the Florida fossil record reveal that limb bones of *Teleoceras* are, indeed, significantly denser than the limb bones of *Aphelops*, suggesting an aquatic mode of life for the former and a terrestrial one for the later. Before these results are conclusive, however, a more in-depth survey of limb bone structure and density in all of the species of living rhinos, hippos and other large mammals in relation to their locomotor patterns is necessary in order to determine whether hippos do indeed have denser bones than all other terrestrial forms of similar body size and how this may relate to aquatic locomotion.

This study involves two parts. I will travel to the American Museum of Natural History and the Smithsonian to acquire limb material for CT scanning and investigation of bone density. The second part involves filming the submerged locomotion of hippos at Busch Gardens in Tampa, Florida. This study would allow me to formally describe this unique form of locomotion and offer insights into its evolutionary origin in large amphibious mammals. This study is essential for the elucidation of the paleobehavior of the two most dominant large mammals of the Florida Miocene.

#### References:

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- Wall, W., 1983, The correlation of high limb-bone density and aquatic habits in recent limb mammals: Journal of paleontology, v. 57, p. 197-207.
- Webb, S.D., 1983, The rise and fall of the late Miocene ungulate fauna in North America, in: Nitecki, M., (ed), Coevolution: Chicago, University of Chicago press, p. 267-306.





# NEW FOSSIL BOOK!

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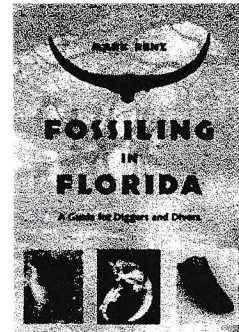
UNIVERSITY PRESS OF

# Florida

Publication Date:

July 1999

Title: **Fossiling in Florida**  
Subtitle: *A Guide for Diggers and Divers*  
Author: Mark Renz  
  
Price: Paper, \$19.95  
ISBN: 0-8130-1677-0  
Orders: Toll Free 1-800-226-3822



From the preface:

"Mr. Renz has assembled a friendly read from the standpoint of a serious, well-read amateur. His work promises to be an excellent educational guide for those interested in paleontology or seeking information about their fortuitous discovery of fossil remains."--James S. Dunbar, archaeological field supervisor, Florida Bureau of Archaeological Research

With boundless enthusiasm, Mark Renz stumbles onto the skeletal remains of fierce saber-toothed cats, gentle sea cows, massive mammoths and mastodons, Volkswagen-size armadillos, and an ancient 5-ton giant ground sloth, and then shares these experiences in a humorous, illustrated book for beginning fossil collectors.

Want to look for fossils yourself but not sure how to get started? Renz tells how and where to hunt and how to preserve your finds for another million years, and he provides more than 250 photographs that help you to identify those bones and teeth and distinguish a prehistoric bison from a farmer's lost cow. He also provides information about what's there to be found, the hurdles and hazards to be overcome, and the legalities to be observed. Guided by an appreciation for the professional paleontologist and also for the laws that regulate his hobby, Renz explains, for example, why it is okay to dig for fossils in a state-owned creek bed (providing one possesses a state permit and does not dig in a state park), and why it is illegal to engage in the same activity in search of artifacts.

With writing that's free of technical jargon but full of love for fossiling, this illustrated book will inspire you to explore the huge number of rich fossil deposits in Florida that can be found with just a shovel and a keen eye.

Mark Renz, writer and amateur paleontologist, has taught continuing education classes geared for beginner fossil collectors at Edison Community College in Fort Myers and leads fossil-finding expeditions in southwest Florida. He is the publisher of "Fossil Expeditions," a bimonthly newsletter for readers throughout the United States (and also the name of his guide service), and was the first president of the Paleontological Society of Lee County, Florida. He lives in Lehigh Acres, Florida.

208 pp. 6 X 9. 2 maps, 250 b&w photos, 23 illustrations, further readings, list of clubs in FL..

**Order book through Fossil Expeditions, 213 Lincoln Avenue, Lehigh Acres, FL 33972. Enclose a check or money order payable to FOSSIL EXPEDITIONS for \$19.95 (plus 3.75 postage & handling for the first book and \$1 for each additional book in the USA, or \$5 for FOREIGN orders and \$1 for each additional book.) Florida residents please add appropriate 6% sales tax to the book cost.**





# Mammoth Hunt

By Mark Renz

Mark Renz operates *Fossil Expeditions* (<http://www.fossilexpeditions.com>) a SW Florida guide service taking beginners to area fossil hot spots. His book "Fossiling in Florida: A Guide for Diggers and Divers" has just been released by University Press of Florida. Signed Copies (with a list of 10 Florida fossil hot spots) can be obtained by sending a check for \$24.90 (includes postage handling and sales tax) to *Fossil Expeditions*, 213 Lincoln Avenue, Lehigh Acres, FL 33972.

I'm a hunter who doesn't use a gun, a bow or a knife. Yet I routinely go after big game. Okay, so the big game I stalk has been dead for at least 10,000 years. But that doesn't mean I embark on my hunt unprepared. Take this morning. I'm up before the sun, neatly packing my "weapons" to pursue one of the largest land animals ever to set foot in Florida.

First, I tuck my mask and snorkel inside my frayed backpack. Then a throw in a 12-inch screwdriver to hold myself in place if the current is strong—or to ward off any overly curious reptiles I might encounter. Next is my shorty wet suit and a pair of Wal-Mart discounted tennis shoes that are great for traipsing around on my underwater missions. And finally, a couple of peanut butter and jelly sandwiches, a package of M&Ms and a small bottle of water for body fuel. Mammoth hunting is serious business.

Although there are many rivers or creeks I could explore, I choose the Peace River in DeSoto County for today's expedition. Native Americans called this watery grave of primitive beasts "Talakhchopchatchee," which means 'river of peas'. Somewhere along the way white settlers changed it to Peace River. Today, 67 miles of the river is a designated canoe trail, beginning at the U.S. Highway 98 bridge just east of Fort Meade and ending downstream at State Road 70 west of Arcadia.

There are countless boat ramps from which to launch my canoe, not only to hunt for fossilized mammoth bones and teeth, but the remains of such ancient creatures as 60-foot sharks, VW-Bug size armadillos, two-story tall sloths, humpless camels, hornless rhinos, saber-toothed cats, jaguars, whales, dolphins and dugongs (cousins to the manatee).

If it seems odd that a person should search for fossils in a river, for Florida it's one of the best places to step back into the wilds of yester-year. Rivers are like time machines, wearing deep groves into the landscape and flushing out these prehistoric creatures. For the sharp-eyed hunter, there are some real trophies to be found.

Consider that next to Nebraska, Florida is richer than any other state when it comes to its vertebrate fossil record over the last 25 million years. No dinosaurs have been found here because our state was under a shallow sea during most of the dinosaur reign, which ended about 65 million years ago. Mammals would later migrate here for the same reason people do today: to get away from the cold (and a chance to play the lottery!). Some animals moved in from the south, following a land corridor along Florida's western coastline connecting to the Caribbean coast of Mexico and Yucatan, then on to South America. When they came, they came in droves and multiplied.

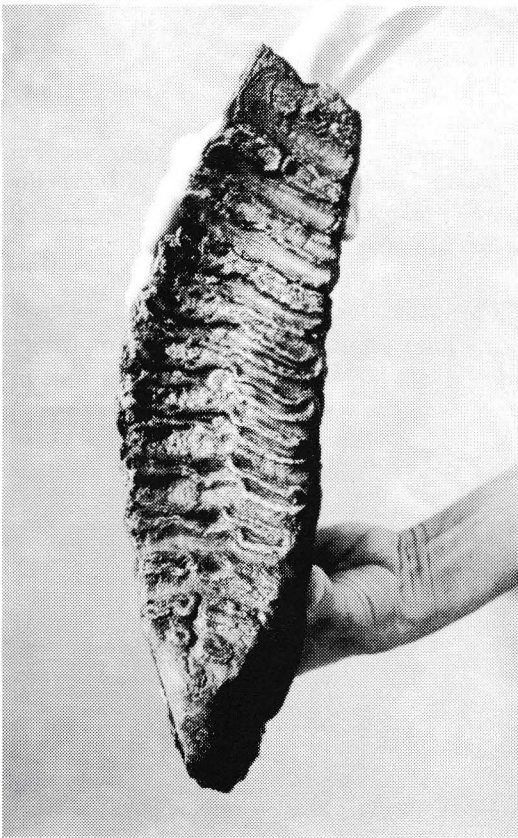
If these animals died and were buried quickly by sand or mud, chances are they would gradually become fossilized and remain protected until some major geological change took place. Fortunately for Florida, we have had no earthquakes, volcanoes or shifting of tectonic plates to erase the fossil record. We have, however, been



Mammoth vertebrae from the Peace River.







**Mammoth tooth from DeSoto County creek.**

covered with ocean countless times, breaking up a lot of the material. In the last two million years alone, the state has been land, then sea at least two dozen times. For that reason, it's not unusual to find a 500,000-year-old horse limb bone next to a million-year-old shark tooth.

Today I'm snorkeling a half-mile stretch of the Peace River, gently fanning through the light brown, tannin-soaked sand to get to the black-colored bones and teeth resting on a white limestone floor below. My wife is next to me in a canoe. It's April and one of the driest months of the year. The river is only two or three feet deep most of the way. This same area during the summer rainy season will raise the water to a depth of 10 feet and occasionally spill over the river's 15 foot-high banks. I come across a few two-inch teeth from an extinct giant white shark, rib fragments from a dugong and slivers of unidentifiable bone. Then I zigzag left and right, slowly moving up river. Logic tells me I may do well just after the next bend where material should get washed out by the increased pressure of the river's southward flow. But there's nothing. Maybe 5000 years ago, the bend was a straightaway and some of the straight-aways were bends.

A few hundred feet further I decide to probe the riverbank itself, just below the water's surface. I check first for cottonmouths or other snakes before sliding up against the bank. Running my hands through the muck, I come up with mucky-looking hands, but no fossils. Then I see several logs and broken tree limbs ahead. I look at each one, just

in case they're an alligator—or better still, a large mammoth leg bone. But when I scrape them with my fingernail, the bark breaks free.

When something does finally catch my eye, I almost don't recognize it for what it is. What appears to be a log poking out of the bank has a texture to it that is slightly smoother than the other logs. I scrape it and hold my fingernails up against my mask. They're still clean. I tap it with the screwdriver. "Clink, clink," just like metal against china. The adrenaline begins to pump. What is it, I wonder, and move my face closer to investigate. The broken end of the "log" has a cross-thread pattern of tiny upside down "V"s, overlapping one another.

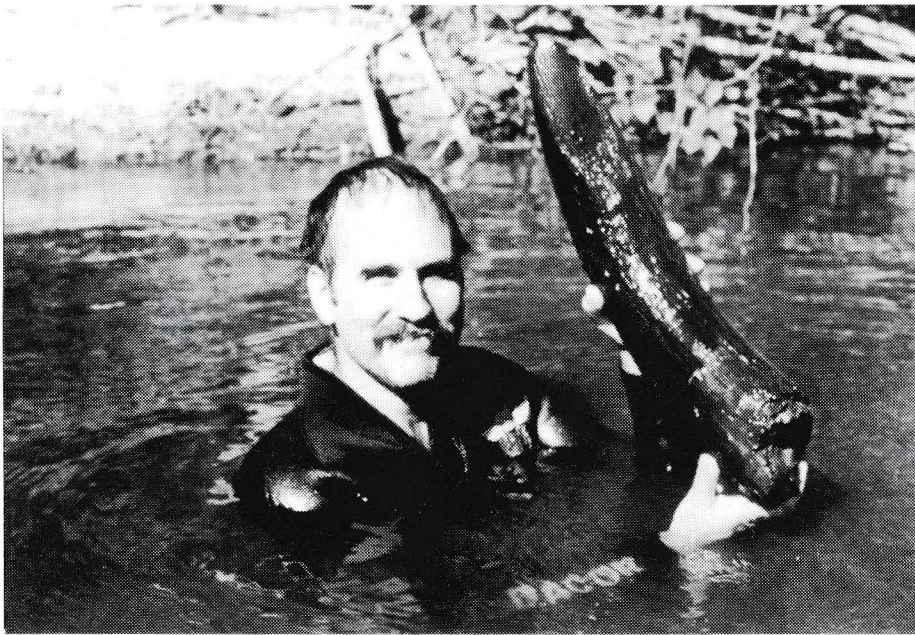
"Oh my God!" I blurt out, losing the grip on my snorkel and taking in a mouthful of water. The log is actually a tusk. I gently work around it with my hand, freeing it up little by little. It feels fairly solid. Before long I'm holding in my hands a 25-inch section of mammoth tusk from an elephant-like animal that stood up to 13 feet high at the shoulders and weighed as much as a professional



**Author's dog "Coonie" with the bone of a lifetime - a 4-foot mammoth femur found in a Hendry County pit.**







**Author with mammoth tusk, Peace River.**

football team. At the broken end, the girth is 16-1/2 inches. The other end is the tip and there are even wear marks where the animal rubbed up against trees to keep it sharp.

I scour the area 50 feet in all directions, poking the screwdriver, fanning through the gravel, scanning the rest of the bank for more of the tusk, a second one, or the entire animal. I find another 5-inch section 10 feet out in the river. Because the tusk was pointing into the bank, chances are most of the skeleton was broken up or washed away thousands of years ago.

### **Mammoth facts and theories**

Mammoths are a member of the mammalian Order Proboscidea, within the family called Elephantidae. Their closest living cousin in Florida are West Indies manatees and dugongs which became extinct here about two and a half million years ago, but still exist in Asian waters. All three evolved from a small herbivore known as a hyrax. Mammoths did not resemble mammoths until about four or five million years ago in Africa, and were only present in Florida during the Pleistocene epoch, stretching from 1.81 million years ago to about 10,000 years ago. Their cousin, the mastodon, has a longer history, expiring about the time mammoths began to show up.

There were no "woolly" mammoths in Florida. Unlike their northern counterparts, Florida's mammoths had no need for long hair. Their ears were probably larger (to stay cooler) and the tusks smaller because there was no snow to plow through to get to the tasty grasses underneath

Why aren't mammoths and other large herbivores and carnivores still here? While there are many theories, most researchers have concluded that extinction was a result of climatic and human factors. Major changes in climate, such as a drastic and quick drop in global temperatures may have wiped out much of the vegetation mammoths depended on. That would force them into smaller areas to feed, making them easy targets for hunters of the two-legged or four-legged variety. Drought too, would drive mammoths to the last water holes, making them more vulnerable to predators.



**Tools for the hunt, Peace River.**





# 1999 FOSSIL FAIR

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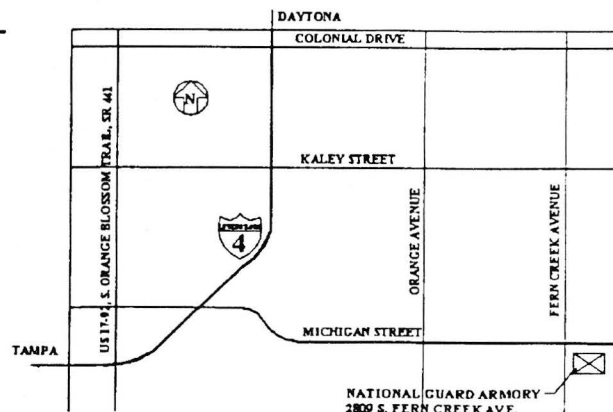
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From Daytona (I-4) - Take exit 34, Michigan St. east to Fern Creek Ave. and turn right. Armory is on the left.

**CONTACT:** Terry Angell (407) 277-8978,  
email: FOSSILFAIR@aol.com





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**FPS Board of Director's Meeting  
Ft. Myers, Florida  
May 1,1999**

The meeting was called to order at 10:40 A.M. by President Terry Sellari.

Members in attendance: T. Sellari, F. Rupert, R. Portell, G. Hubbell, B. Fite with D. Dew, B. Toomey and J. Toomey voting by proxy.

**Old Business:**

- a. There is an audit in process on the financial records. A resort should be available by the Fall meeting.
- b. The text for the Plaster Jacket book is done and Richard Hulbert will complete the photography this summer. Roger Portell will contact publishers after conversion of the text, and the Book Committee will make final decisions necessary. B. Fite moved that up to \$2000 be budgeted for Richard Hulbert's expenses in completing the photography, etc. Gordon Hubbell seconded and the motion passed.
- c. The Paleofest mailing list will be combined with the current Membership list to make sure all are receiving FPS information. A brochure will be developed to advertise FPS, and membership cards sent to dues-paying members. Complimentary copies of the FPS Bulletins will be sent to clubs and organizations and both Barbara and Roger will mail lists to Erica Dew for that purpose.
- d. There will be two FPS meetings per year with the Fall 1999 meeting hosted in Tampa, tentatively Nov. 13. The Paleofest 2000 will be in April at Gainesville, with Stephen J. Gould the potential speaker.

**New Business:**

- a. A \$50 speaker's fee was approved by the board plus expenses in some situations-banquet and mileage if over 50 miles, and accommodations G. Hubbell moved and B. Fite seconded.
- b. All board members are requested to look over the by laws for any proposed changes and send to Terry Sellari by July 1.
- c. B. Fite moved and G. Hubbell seconded a proposal to pay up to \$300 to hire a UF student to sort through the mail to fulfill book and butvar orders, send memberships and inquiries to the proper FPS personnel.
- d. Discussion was held on the duties of officers and board members.
- e. No new books at this time.
- f. Posters and papers on Invertebrate Paleontology are coming out hopefully for the Fall meeting from R Portell, along with more about his book.
- g. The Morgan Award with \$500 given to a graduate or undergraduate student for a paleontology project, to assist with their expenses, has had the deadline extended to July 1, 1999 for applications.

The meeting was adjourned at 12:05 P.M.



# FPS Books and Supplies

**New Edition!**

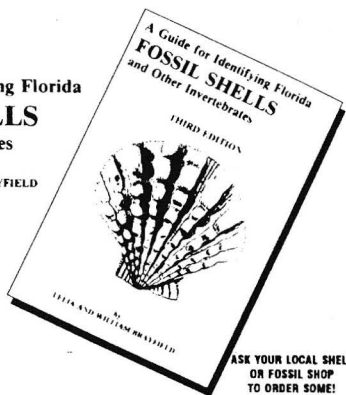
## A Guide for Identifying Florida FOSSIL SHELLS and Other Invertebrates

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## Paleontology and Geology of the Leisey Shell Pits, Early Pleistocene of Florida

### Volume Editors:

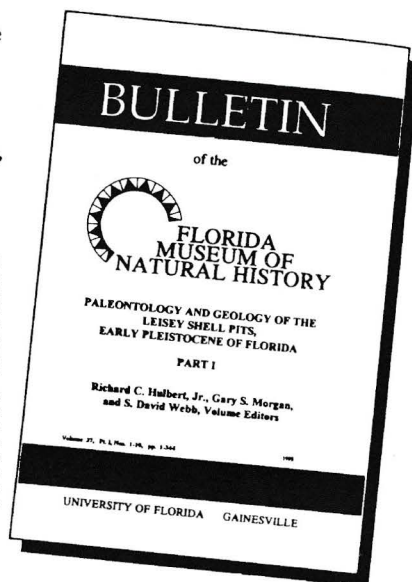
Richard C. Hulbert, Jr., Gary S. Morgan, and S. David Webb

### Bulletin Editors:

F. Wayne King and Rhoda J. Bryant

For the last two decades the Leisey Shell Corporation has operated several pits along Tampa Bay. Draglines unearthed numerous invertebrate fossils and, occasionally, vertebrate fossils. The spoil piles and quarry walls were periodically explored by several avocational paleontologists. In 1983 a tremendous concentration of fossil bones was exposed. Quarrying in the area ceased, thanks to the cooperation of the owner, C.E. "Bud" Leisey, Jr., and manager, Eric Hunter. In 1984, after meetings among representatives of the Florida Museum of Natural History (FLMNH), Leisey Shell Corporation and avocational paleontologists, a major operation was planned. The owners subsequently transferred ownership of the fossils to FLMNH. That Spring major excavations resumed as a cooperative effort among the FLMNH, the Tampa Bay Mineral and Science Club, and the Leisey Shell Corporation. The dig has attracted the attention of local, state, and national news media, including a spot on NBC's "Today Show", an article in Newsweek magazine, and a lengthy Sunday feature in the Tampa Tribune.

Publication Date: March 1995



This volume is printed in two parts, including twenty papers which cover birds, fishes, invertebrates, mammals, plants, and reptiles and amphibians, as well as the taphonomy of terrestrial mammals and geology of this Early Pleistocene site. Several new species are described.

### Bibliographic Data

1995 Volume 37, Part I	352 pages	21 halftones	40 line diagrams	numerous tables
1995 Volume 37, Part II	324 pages	40 halftones	26 line diagrams	numerous tables

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OLIGOCENE _____	_____	_____	_____
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5. LIST ANY PUBLISHED WORKS ON PALEONTOLOGICAL SUBJECTS.

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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).

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#### 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.
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- 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.
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**NEWSLETTER POLICY:** All worthy slews 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.