# Florida Paleontological Society, Inc. Newsletter Volume 2 Number 5 Fall Quarter 1985



# FLORIDA PALEONTOLOGICAL SOCIETY, INC.

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# NEWSLETTER

# FLORIDA PALEONTOLOGICAL SOCIETY, INC.

Volume 2, Number 5

Fall Quarter 1985

- A. <u>Dues Increase for 1986.</u> Due to rising costs of services provided to the Florida Paleontological Society, Inc., members voted on and passed a dues increase at the 1985 Business Meeting: \$10.00 for Full Membership (persons over 18 years of age) and Institutional Subscriptions; \$5.00 for persons under 18 years of age. Your 1986 dues notice is on the last page of this newsletter.
- B. Editor's Comments During the FPS Annual Meeting, held in Gainesville, October 5th, the Board of Directors recommended that the Editor revive a technical series on Florida paleontology as well as continue a more frequent News series. Accordingly, the following are planned:
- 1) FPS NEWSLETTER A quarterly publication with simple format (as in this issue) to enhance rapid communication among members of the society. The official business of the FPS will be published in the News as well as any items and/or announcements that you would like to send to us. New items in this publication will be Chapter Highlights and Historians Corner (with anecdotes about Florida paleontology). I would like to emphasize that we encourage you to send us your news of interest to Bruce J. MacFadden, Florida Paleontological Society, Inc., Florida State Museum, University of Florida, Gainesville, FL 32611.
- 2) TECHNICAL SERIES Since The Plaster Jacket was discontinued last year, many members have expressed a desire for some kind of technical publication on Florida paleontology. The available review subjects for the PJ have been essentially exhausted. Accordingly, a new technical series is proposed which will treat selected topics in Florida paleontology. This will be published in a permanent format and distributed to all members as well as selected libraries throughout the U.S. (the latter is a requirement for an official technical publication). Gary Morgan will serve as Editor for this series. We expect two issues per year.

IN SUMMARY, FPS members can now expect two separate series of publications: one a frequent <u>News</u> series, and the other an official technical publication. We seek your comments and suggestions about either of these series. (Bruce J. MacFadden)

C. Notes on Florida's Six-Horned Antelope: The FPS nominee for our State Fossil In its 1985 search for a state fossil, FPS selected the six-horned antelope as its favorite nomination. (see p. 10). During the discussion of this and other nominations, it was noted that little information about these antelopes is widely available. For this reason, a summary of current knowledge about six-horned antelopes follows:

The correct scientific name for Florida's six-horned antelope is <a href="Hexameryx simpsoni">Hexameryx simpsoni</a>. As far as we know, it occurs only in the Bone Valley of Polk and Hillsborough Counties in phosphatic sediments of earliest Pliocene age (about five million years before present). Another species of six-horned antelope, <a href="Hexobelomeryx fricki">Hexobelomeryx fricki</a>, occurs in similar aged deposits in the badlands near Yepomera, <a href="Mexico">Mexico</a>, Department of Chihuahua. These two species are the only six-horned antelopes known to science and are probably closely related.

Hexameryx simpsoni was described and named by Ted White in 1941. White was then at Harvard University, and, with Professor Al Romer, used to make annual visits to the Bone Valley and Thomas (Ted White is better known for his later service as chief paleontologist at Dinosaur National Monument in Vernal, Utah.) year later, White named a second smaller species. Each species was based on one partial horn; no other specimens were described. Each species was named for a collector who donated it to the Harvard collection. Thirty years later, with many additional specimens in the Florida State Museum collection, David Webb reviewed Hexameryx (1973). With about a dozen horns to study, he showed that the larger and smaller specimens differed from one another less than male and female specimens in the modern American pronghorn antelope (Antilocapra americana). Webb therefore proposed that White's two species be synonomized under one name, H. simpsoni, with the presumption that the smaller ones were probably females. first time, he recognized the dentition and found it differed from that of a living pronghorn in its larger size and stronger styles on the outside of the upper premolar. The overall size of the animal, judged by last the size of its molars, was about equal to that of an elk, and thus may have weighed about 85 kg, in contrast to modern pronghorns which seldom exceed 60 kg.

Its horns and dentitions show convincingly that <u>Hexameryx</u> is an extinct member of the exclusively North American family, Antilocapridae. The living American pronghorn is the only surviving representative of the family, although there are over a dozen extinct genera. Many paleobiological features of the sixhorned antelopes may be inferred from a knowledge of the living western pronghorn. Its diet probably included diverse shrubs and grasses, and its members probably formed wide-ranging herds. Each bony horn was probably covered in life by a thin horny sheath which was shed annually as in the modern pronghorn.

The horns are the best known and most interesting part of <a href="Hexameryx simpsoni">Hexameryx simpsoni</a>. They grew from the frontal bone above the orbit as in the living pronghorn, but unlike that species, each horn was separately sheathed. Of the three horns on each side, the longest is the posterior one which reaches a length of over six inches in large males. If the horny sheath were preserved, it would probably add 50 per cent more to the horn length, making an estimated maximum length of more than nine inches.

Each horn tapers from the base toward the tip. Around the base of each, at its greatest circumference, is a ring of grooves and small pockets where blood vessels presumably nourished growth of the new horn sheath as the old one was shed. The horn rack of a very young individual, recently contributed to the Florida State Museum by FPS member Rick Carter, shows that the same pattern occurred even when the horn was only one and a quarter inches long.

Plaster Jacket #46 discusses the occurrence of a second species of Pliocene antilocarpid in the Bone Valley along with Hexameryx simpsoni. This species, Antilocapra (Subantilocapra) garciae, is rarer than Hexameryx and has a single tall based horn above each orbit and teeth indicating an animal smaller than the pronghorn. It is much smaller than Hexameryx simpsoni. Few other pronghorns are known in eastern North America before the early Pleistocene occurrence of the small Capromeryx in Florida. The closest relatives of the six-horned antelopes are probably the four-horned western forms of the genus Stockoceros.

That is the present status of Florida's extinct six-horned antelope.

# REFERENCES CITED:

Webb. S.D. 1973. Pliocene Pronghorns of Florida, <u>Journal of Mammalogy</u>, 4(1):203-221.

\_\_\_\_\_ 1984. A History of Ruminants: Part 2, <u>Plaster</u> Jacket 46:1-16.

White, T.E. 1941. Additions to the Fauna of the Florida Pliocene, Proc. New England Zool. Club, 18:67-70.

# D. New Curator Profile DR. DOUGLAS S. JONES

Doug Jones finds being the new curator of invertebrate paleontology at the Florida State Museum (FSM) "is a challenge because I've been in academic and teaching roles up to now."

Jones, who moved to the FSM July 1st from the University of Florida (UF) Geology Department where he'd taught since 1979,

said he is concentrating on the growth, curation, and computerization of the invertebrate paleontology collection. "We have a tremendous number of specimens of which only 20% are catalogued," said Jones, a 1980 Ph.D. geology graduate of Princeton University. "My first priority is to set the curational process in motion."

Full-time technician Roger Portell, who has business administration and geology undergraduate degrees, and two student assistants, are helping Jones accomplish his goals, the results of which will make the collection "a solid resource for researchers."

Jones said he is very interested in helping FPS members identify their fossil finds. "We want to be accessible to persons with a legitimate interest in invertebrate paleontology," he said. "Visitors are welcome to our collection."

He noted that he would accept members' collections and/or fossils they think are important. "Their donations would stay at the museum, a state repository, as part of Florida's heritage."

Jones' research interests include the Cretaceous-Tertiary Boundary controversy - did dinosaurs become extinct because of a sudden event or gradually? He is assessing whether marine organisms show a catastrophic or a gradual extinction by examining a sedimentary section near Braggs, Alabama. He is also studying the North Florida Eocene coral-boring clams and the paleoecology of large-shelled mollusks from Sarasota's Pinecrest Beds.

E. Chapter Profile: SOUTHWEST FLORIDA FOSSIL CLUB. This club was formed in December 1982 as a non-profit educational organization dedicated to the scientific collection, identification and preservation of fossil remains. The club provides a regional forum for the exchange of knowledge and experience in the field of paleontology as well as opportunities for the educational and social interaction of its members, their families and friends.

The club meets on the second Saturday of each month at the First Federal Savings and Loan of Charlotte County, 3524 Tamiami Trail, Port Charlotte. Our 85 members' dedication and enthusiasm is reflected in the high quality of our exciting, informative programs which most recently have included: "Early Man in Florida" by Mitchell Hope of Sebring, "Three-toed Horses of Florida" by John Waldrop of Lake Wales, "Plate Tectonics and the Florida Peninsula" by Dr. Richard Yarger of Ft. Myers, and "Bone Valley Fossils" by Rick Carter of Lakeland. Upcoming programs will be presented on sloths by Dr. Gordon Edmund of the Royal Ontario Museum, "Diving for Fossils" by Ben Waller of Ocala, marine mammals by Gary Morgan, Florida State Museum, and "Extinctions" by Dr. Doug Jones, Florida State Museum.

Notable club activities have included field trips to the Newburn Pit in Sarasota and Bone Valley (with our friends from the Bone Valley Fossil Society). Also, on two occasions, members have worked with the Royal Ontario Museum excavating local Holocene sites. Members work with local schools on class presentations and our president, Earlene Mitchell, was recently honored by our school board for her donation of 48 sets of Rocks, Minerals and Fossils.

We are proud of what our club offers to its members and the community. We welcome visitors and fellow enthusiasts. Come and meet new friends, learn about Florida's past, and have a good time. (Phil Whisler)

F. Fossil Locales The FPS is putting together a list of fossil collection localities from around the state. We are not asking for your favorite site on private land; rather, we are looking for accessible sites on creeks, rivers and beaches as well as commercial operations with regular times for fossil collecting.

Send a brief description of the location (and a simple map if needed) together with brief information on how the fossils are best found - just walking, screen washing, swimming, scuba, etc. When a sufficient number of sites are available, the list will be distributed to the membership. (Robin Brown)

- G. <u>Member's Collections</u> Those members who are proud of their collections and would enjoy showing them to other members should give us their names, addresses, and some general information about their collections' contents. These could also be published in the <u>FPS Newsletter</u>. (Bruce J. MacFadden)
- H. Member Profile DR. CLIFFORD JEREMIAH (The following is an article written by Ron Word, Associated Press.)

Dr. Clifford Jeremiah doesn't think it's unusual at all to have the bones of triceratops, chasmasaurus or a giant ground sloth sitting in his waiting rooms. But sometimes, his patients wonder if they have accidentally ventured into a museum.

"They think they have come into the wrong place," said Jeremiah, an emergency physician at Memorial Hospital in Jacksonville.

He has the bones of prehistoric critters that inhabited the earth millions of years ago on display at the Arlington and Lakewood Acute Care Centers, which are affiliated with the hospital.

Patients are at first a bit taken aback by the large displays, but after awhile seem to enjoy "the distraction" of the skeletons.

Jeremiah, 46, says the reconstructions are "mainly for the kids."

"Kids learn very early about dinosaurs," said the physician, who also has a slide show on the creatures that is presented to children's groups.

He also gives dinosaur-hunting licenses to his young visitors, a few of whom are uneasy around the large bones.

"I've had one or two who were afraid to go into the waiting room," he said.

He said his clinic waiting rooms may become satellite museums of the Jacksonville Science and Art Museum.

Jeremiah's love affair with old bones stretches back more than four decades to when he was a five year old lad combing the Illinois countryside for Indian artifacts. But he was put on hold until he settled on a medical practice in northeast Florida after medical school and a stint in the Navy.

"Now I can afford to collect rocks," he said.

Fossilized shark teeth rekindled his interest.

"I saw people at the beach with fossil sharks teeth and I knew I wasn't finding anything like that," he said. He learned they were finding the 30 million year old teeth in dredge material from the St. Johns River.

Over the years, he collected enough of the big teeth to recreate several sets of jaws of a 60-foot ocean predator known as the Carchardon megalodon, the ancient ancestor of the great white shark.

Florida, Jeremiah says, is a wonderland for lovers of old bones.

"Florida is the best place in the world to find fossils because it is a sedimentary state," he said. Most of Florida was once covered by ocean.

Prime hunting areas now are phosphate mines and old river banks, he said.

The discovery of the remains of a 13-foot ground sloth by a friend, Don Serbousek, in a Daytona Beach pit spurred Jeremiah into learning how to fashion life-size reproductions of prehistoric skeletons.

They made rubber molds of each bone in the skeleton and then made a fiberglass copy of each. Then they painstakingly pieced the bones together to create a towering figure that stands in the Arlington Acute Care Center. The work took three years of spare time.

Youngsters visiting the center were calling the large bone assemblage a dinosaur, "so I decided to get them some dinosaurs."

He bought reproductions of several dinosaurs from the Museum of Natural History in New York and the Royal Ontario Museum in Canada. It took a few weeks to put them together.

The re-creations he does from actual bones can take months of spare time, because they are more detailed and they require casting from the original bones.

"My whole goal is to learn the story behind or see the animal and then I'm ready to go on to another," said Jeremiah, who is considering rebuilding a mastadon from bones a friend has stored in a garage.

The physician sees his work with bones of prehistoric creatures as natural. "The early paleontologists were early medical doctors," he said.

# I. 1985 FPS MEETING

 PROGRAM University of Florida Saturday, October 5, 1985

8:00 AM REGISTRATION, Reitz Union 2nd floor

8:30 AM INTRODUCTION, Dr. David Webb

8:45 - THE MARINE RECORD ACROSS THE CRETACEOUS/TERTIARY

9:15 AM BOUNDARY Dr. Doug Jones

9:15 - PALEONTOLOGY OF THE SOUTH DAKOTA BADLANDS

9:45 AM Dr. Bill Wall

9:45 - Coffee Break

10:30 AM

10:30 - A NEW LATE MIOCENE VERTEBRATE SITE FROM THE "DUNNELLON

11:00 AM FM." IN MARION COUNTY Dr. David Webb

11:00 AM FPS Business Meeting

12:00 PM Lunch Break (Board of Directors meeting)

1:00 - LAB SESSION: MARION COUNTY FOSSILS Florida State 3:00 PM Museum VP range (downstairs)

2:00 - FOSSIL IDENTIFICATION AND DISCUSSION Florida State

4:00 PM Museum classroom (upstairs)



FPS members had the opportunity to tour the vertebrate fossil collections at the FSM and see the specimens from the important new 7.5 million old site in north-central Florida.

In the photograph below, FPS President Bessie Hall examines remains of a gomphothere foot and rhinoceros skull.



### MINUTES OF FPS GENERAL BUSINESS MEETING

The annual meeting of the Florida Paleontological Society, Inc. was called to order at 10:56 AM on October 5, 1985. Vice President Don Serbousek, presiding, gave a greeting and introduction. All present Board of Directors stood and introduced themselves. Serbousek asked for a quorum and the secretary advised that a quorum was present.

Serbousek asked for approval of the minutes as printed. Secretary-Treasurer Howard Converse gave the Treasurer's Report as prepared by Gionet and Pierstorff, C.P.A.

PUBLIC SUPPORT AND REVENUE (FSM contributions)	\$ 1,167.00
REVENUE	
Fossil Book Sales Annual Dues Thomas Farm Camp Plaster Jacket Sales Butvar B-76 Meeting Contributions	3,153.00 1,763.00 181.00 56.00 49.00 14.00
TOTAL PUBLIC SUPPORT AND REVENUE	\$ 6,383.00
EXPENSES	
Printing Office Supplies & Postage Contract Labor Thomas Farm Field Camp Supplies Meeting Refreshments State of Florida Filing Fee	\$ 2,527.00 1,506.00 944.00 473.00 432.00 79.00 20.00
TOTAL EXPENSES	\$ 6,178.00

S. David Webb gave the Editor's Report with a lengthy discussion of the new society publication "The Newsletter." He explained the format and printing problems as well as opened the discussion to the floor for comments. At the same time, he asked for articles from the members. Bess Hall suggested that the newsletter include advertisements such as books, patches, publications, meetings, and about people in the hobby. Anita Brown asked about membership dues versus publication costs. Webb stated that the current costs were \$8.76 per person for six issues per year or \$5.84 per person for four issues. A suggestion was made to have a scientific paper issued maybe twice a year. It was stated that the membership misses the <u>Plaster Jacket</u>. Gary Morgan suggested that FPS go back to the <u>Plaster Jacket</u> over the newsletter. The membership voted in favor of the <u>Plaster</u>

<u>Jacket</u> format over the newsletter. Bruce MacFadden suggested that we go to two <u>Plaster Jackets</u> and four newsletters per year with the newsletters mimeographed on less expensive paper. It was agreed that the current newsletter was costing too much money. A discussion followed on the dues being raised and that the society have two editions, one for the <u>PJ</u> and one for the newsletter. Bess Hall suggested that invertebrates be covered. The membership was overwhelmingly in favor of raising the membership dues up to as much as \$10.00 per year.

Bruce MacFadden reported on the State Fossil Committee which was formed to offer the legislature a nomination for a state fossil. Larry Lawson and Phil Whisler also served on this committee. The requirements were that the state fossil should be unique to Florida, commonly found, and have a modern analogue. The floor was asked for a straw vote and the floor was open for discussion. Gary Morgan stated that the society logo is good but not common. A discussion followed on a method for legislation introduction and selection. It was mentioned that Frank Garcia had approached Senator Pat Frank to introduce the state fossil.

The floor was asked for additional nominations and a straw vote which was as follows:

	BUSINESS MEETING	MAIL BALLOT
Antelope	18	11
Dugong	10	5
Mammoth	0	2
Mastodon	0	2
Shark	0	3
Sloth	1	5
Alligator	11	. 0
Titanis walleri	0	1

Discussion continued. Bess Hall suggested that the top three be offered to the legislature and change Dugong to Sea Cow.

The Historian and Book reports were not given since Cliff Jeremiah was absent.

Under New Business, Bess Hall was asked to go over the changes in the By-Laws. She stated that several changes needed to be made and these changes had been mailed to the membership. The revised By-Laws will be reprinted this year if the budget allows. A motion was made and seconded to accept the proposed changes in the Articles of the By-Laws. All were in favor and the motion passed.

It was announced that there were two vacancies on the Board of Directors. Bess Hall asked to waive the rules and ask for nominations from the floor. It was seconded and the following nominations were made: Bill Webster and Rick Carter. Jesse Robertson moved the nominations be closed; it was seconded and all

were in favor. The Nominating Committee's selections plus the two nominees from the floor were installed in office. All were in favor of officers nominated.

Phil Whisler introduced the Southwest Fossil Club which has about 75 members.

A motion was made to adjourn at 12:19 PM and it was seconded.

Respectfully submitted,

Howard H. Converse Secretary-Treasurer

FLORIDA PALEONTOLOGICAL SOCIETY, INC.

### 1986 MEMBERSHIP RENEWAL

It's time for you to renew your FPS membership for 1986. In order to remain on the FPS mailing list, please return this completed form with the appropriate dues to: Managing Editor, The Florida Paleontological Society, Inc., Florida State Museum, University of Florida, Gainesville, FL 32611. Please note that dues have increased. Thank you.

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/	/	Institutional	Subscription	(publicat	ions only)	\$1	L0.00	
/	/	Associate Meml	ssociate Membership (under 18 years)					
/	1	Full Membersh	ip (18 years o	or over)		\$1	L0.00	

Please make checks payable to the Florida Paleontological Society.