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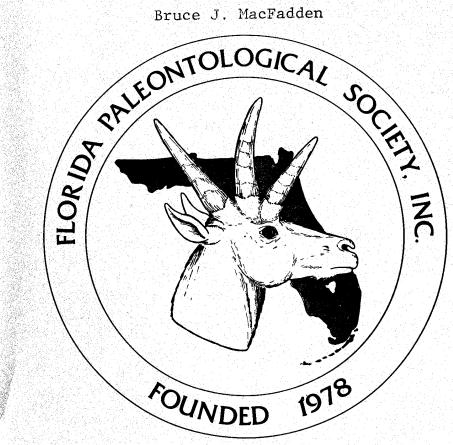
THE PLASTER JACKET

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NOV 1982

THE 1982 THOMAS FARM FOSSIL DIG

Bruce J. MacFadden



A Publication of the Florida Paleontological Society, Inc. Florida State Museum, University of Florida Gainesville, Florida 32611

THE PLASTER JACKET

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OFFICIAL NEWS

FLORIDA PALEONTOLOGICAL SOCIETY, INC.

ANNUAL MEETING PROGRAM

This issue is printed to coincide with the 7th Annual Meeting of the FPS, Inc. on November 6, 1982, in Gainesville, Florida. The program follows.

FLORIDA PALEONTOLOGICAL SOCIETY, INC.

PROGRAM

7TH ANNUAL MEETING

MORNING: REITZ UNION AUDITORIUM

8:00 AM REGISTRATION

8:30 AM FOSSIL POCKET GOPHERS OF FLORIDA

Ken Wilkins Florida State Museum

9:00 AM FOSSILS AND STRATIGRAPHY OF THE TOY TOWN DUMP SITE

Brian Ridgeway St. Petersburg, Florida

9:30 AM PALEOECOLOGY AND SYSTEMATICS OF FLORIDA MIOCENE HORSES

Richard Hulbert Florida State Museum 10:00 AM COFFEE BREAK

10:30 AM RHAPSODY IN ROCK

Frank Garcia

Riverview, Florida

11:00 AM BUSINESS MEETING

12:00 PM CAFETERIA LUNCH

Board of Directors Meeting

AFTERNOON: FLORIDA STATE MUSEUM

(Paleontology Range)

2:00 PM RECENT ACCESSIONS AND FOSSIL CLINIC

PLASTER JACKET FUND

We trust each member will give careful thought to the following letter from Clifford J. Jeremiah, our New President of FPS, Inc. (letter reprinted verbatim)

Clifford J. Jeremiah, M.D. 6749 Fincannon Road Jacksonville, Florida 32211

9 September, 1982

To Florida Paleontological Society Members:

As Florida Paleontological Society fund raiser for a new book based on the "Plaster Jacket" I am soliciting your donations to make this project come true. Much rewriting and improved photographic work needs to be done. Our initial goal is \$5,000.00. I know you are as anxious as I am to have a copy for reference. This book will not replace, but will go one step beyond Margaret Thomas' fine book introducing the amateur to Florida beach and spoil bank fossil collecting.

Please send your donations to Clifford J. Jeremiah, M.D., 6749 Fincannon Road, Jacksonville, Florida 32211. Make checks payable to The Florida Paleontological Society.

Thank you for your kind cooperation.

Sincerely,

Clifford J. Jeremiah, M.D.

CJJ:FLS

SCHOLARSHIP FUND

Ben Waller, chairman of the Scholarship Fund, reports healthy progress with that fund, and urges further contributions to build for the future of paleontology.

THE BONE VALLEY BALLAD

Anyone who has ever heard JOE LARNED, the Fossil Man of Bradley Junction, recite this special ballad will appreciate seeing it in print. Of course it falls far short of the live performance, which many enjoyed at this year's Spring Meeting in the Bone Valley. You aficionados will be glad to know that a live tape of Joe's recitation is preserved in the FPS archives.

* * * * * * * * * * * * *

WHEN you were a tadpole and I was a fish In the Paleozoic time,
And side by side on the ebbing tide
We sprawled through the ooze and the slime,
Or skittered with many a caudal flip
Through the depths of the Cambrian fen,
My heart was rife with the joy of life,
For I loved you even then.

MINDLESS we lived and mindless we loved
And mindless, at last, we died;
And deep in the rift of a phosphate drift
We slumbered side by side.
The world turned on in the lathe of time,
The hot lands heaved amain,
Til we caught our breath from the womb of death
And crept into light again.

WE were amphibians, scaled and tailed,
And drab as a dead man's hand;
We coiled at ease 'neath the dripping trees
Or trailed through the mud and sand.
Croaking and blind, with our three-clawed feet
Writing a language dumb,
With never a spark in the empty dark
To hint at a life to come.

YET happy we lived and happy we loved, And happy we died once more; Our forms were rolled in the clinging mold Of some Polk County shore. The eons came and the eons fled, And the sleep that wrapped us fast Was driven away in a newer day, And the night of death was past. THEN light and swift through the jungle trees We swung in our airy flights,
Or breathed in the boughs of the fronded palms
In the hush of the moonless nights.
And, oh, what beautiful years were there
When our hearts clung each to each;
When life was filled and our senses thrilled
In the first faint dawn of speech.

THUS life by life and love by love
We passed through the cycle strange,
And breath by breath and death by death
We followed the chain of change.
Till there came a time in the law of life
When over the nursing sod,
The shadows broke and our soul awoke
In a strange, dim dream of God.

I was thewed like an Auroch bull
And tusked like the great cave bear;
And you, my sweet, from head to feet,
Were gowned in your glorious hair.
Deep in the gloom of a fireless cave,
When night fell o'er the plain
And the moon hung red over the river bed,
We gnawed on the bones of the slain.

I flaked a flint to a cutting edge
And shaped it with brutish craft;
I broke a shank from the woodland lank
And fitted it, head and haft;
I hid me close to the reedy tarn,
Where the mammouth came to drink;
Through the brawn and bone I drove the stone
And slew him upon the brink.

LOUD I howled through the moonlit wastes, Loud answered our kith and kin; From west and east to the crimson feast The clan came tramping in.
O'er joint and gristle and padded hoof We fought and clawed and tore,
And cheek by jowl with many a growl We talked the marvel o'er.

I carved that fight on a reindeer bone With rude and hairy hand;
I pictured his fall on a cavern wall
That men might understand.
For we lived by blood and the right of might
'Ere human laws were drawn,
And the age of sin did not begin
'Til our brutal tusks were gone.

AND that was a million years ago
In a time that no man knows.
Yet here tonight in the mellow light
We sit at Delmonico's.
Your eyes are as deep as Lithia Springs,
Your hair is dark as jet,
Your years are few, your life is new,
Your soul untried, and yet--

Our trail is on the Hawthorne clay
And the scarp of the Fort Meade flags;
We've left our bones on the phosphate stones
And deep in the limestone crags;
Our love is old, our lives are old,
And death shall come amain;
Should it come today, what man may say
We shall not live again?

GOD wrought our souls from the phosphate beds And furnished them wings to fly; He sowed our spawn in the world's dim dawn, And I know that I shall not die, Though mulberry has sprung above the graves Where the crookbone men made war And the oxwain creaks o'er the buried caves Where the mummified mammoths are.

THEN as we linger at luncheon here O'er many a dainty dish,
Let us drink anew to the time when you Were a tadpole and I was a fish.

(Adapted from Langdon Smith's [1858-1908] poem, Evolution.)

* * * * * * * * * * * * *

NEW BLM REGULATIONS ON COLLECTING

The following excerpts include key features of the new regulations promulgated by the Bureau of Land Management in October 1982 to "adequately protect and preserve the public lands and resources including significant fossils, petrified wood and other hobby mineral materials (crystals, agate, geodes, etc.)" under the authority of the Federal Land Management and Policy Act of 1976. Any person who knowingly violates the provisions of these regulations is subject to a fine of not more than \$1000 or to imprisonment for not more than 12 months, or both.

The crux of the regulations follows the definition of "Casual use," for which no permit is required: "Casual use" means activities ordinarily resulting in only negligible disturbance of the public lands and resources. Activities that are generally considered casual use include geologic mapping and reconnaissance, incidental collection of exposed surface materials and other such activities when they: (1) Do not involve the use of mechanized earth moving equipment or explosives; (2) do not involve the use of motorized vehicles in areas where such use is prohibited by off-road vehicle designation; (3) do not involve the excavation of more than 2 cubic meters of sample material per location or outcrop; (4) do not occur in a protected area; or (5) do not require the establishment of base camps or field stations."

On the other hand, a permit shall be required for any of the following four activities:

- (1) Taking fossils of significant interest;
- (2) Collecting fossils and geologic materials in protected areas;
- (3) Taking of any fossils or hobby mineral material for commercial purposes; and

(4) The establishment of base camps, field stations; the use of explosives or mechanized earth moving equipment; large scale excavations; and other such activities that constitute more than a "casual use" of the public lands.

An application may be made for either of two kinds of permit:

- 1) a "Scientific free use permit, or
- 2) a Commercial permit,

although there is also a blanket authorization to the U.S. Geological Survey and the Smithsonian Institution for Federally sponsored research on public lands. Each kind of permit requires certain reports and may require bonding.

1) SCIENTIFIC FREE USE PERMIT.

- (a) A scientific free use permit may be issued by the authorized officer for a period not to exceed 2 years for the purpose of:
 - (1) Excavating more than 2 cubic meters of material at any location or outcrop.
 - (2) Collecting fossils of significant interest ("Fossil of Significant Scientific Interest"means a fossil which is unique, rare or particularly well-preserved; is an unusual assemblage of common fossils; is of high scientific interest; or provides important new data concerning:
 - (1) Evolutionary trends;
 - (2) Development of biological communities or interaction between organisms;
 - (3) Unusual or spectacular circumstances in the history of life; or
 - (4) Anatomical structure)

- (3) Collecting fossils or geologic materials in protected areas; and
- (4) Collecting museum pieces of petrified wood (defined as weighing over 250 pounds).
- (b) A scientific free use permit issued by the authorized officer may contain such terms and conditions as he/she deems necessary to protect the public lands and their resources and:
 - (1) Shall not convey ownership of collected materials to the permittee; and
 - (2) Shall specify that the collected materials remain the property of the United States; and
 - (3) Shall require that a report of findings and results be submitted to the authorized officer within 6 months of the expiration of the permit; and
 - (4) Shall require that all materials collected under the permit be made available for study by other scientists within 2 years after the expiration of the permit.
- (c) An application for a scientific free use permit requires no special form and shall be filed in the State, District or Area office of the Bureau of Land Management having jurisdiction over the lands in which the fossils or geologic materials are located. The application shall not be filed less than 6 months prior to the proposed commencement of activities and shall provide the following: name, legal mailing address, telephone number and professional affiliation of the person responsible for the operations covered by the application; a map or maps at a scale of

1:250,000 or larger delineating the proposed area of operations; a description of the major geologic features of the proposed area of operations; including rock formation names and ages; detailed plans for the extraction of the fossils or other geologic materials and reclamation of the lands; the approximate dates of commencement and termination of the operations; and a description of the purposes of the investigation or activity. Each application shall be accompanied by a non-refundable filing fee of \$25.

2) COMMERCIAL PERMIT.

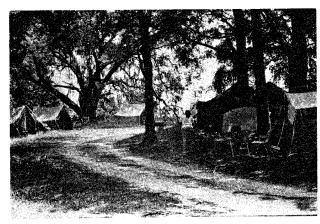
- (a) The authorized officer may issue a commercial permit for a period of not more than 3 years that contains terms and conditions he/she deems necessary to protect the public lands and other resources, including those resources and uses outside of the permit area and shall specify that any discovered fossils of significant interest shall remain the property of the United States.
- (b) An application for a commercial permit requires no special form, and shall be filed in the State, District or Area office of the Bureau of Land Management having jurisdiction over the lands in which the fossils and hobby mineral materials are located. The application shall not be filed less than 6 months prior to the proposed commencement of activities and shall provide the following: name, legal mailing address and telephone number of the person responsible for the operations covered by the application; a map or maps at a scale of 1:250,000 or larger delineating the proposed area of operations; a description of the major geologic features of the proposed area of operations, including rock formation names and ages; detailed plans for the extraction of fossils or other hobby mineral materials and reclamation of the lands; and the approximate dates of commencement and termination of the operations; and a description of the types of fossils or other materials sought.

- (c) Each application shall be accompanied by a non-refundable filing fee of \$25.
- (d) In the case of commercial permits, the authorized officer shall set a fee based on the estimated fair market value of the fossils or other hobby mineral materials taken for commercial purposes.
- (e) Where the authorized officer determines that there is evidence of competitive commercial interest in the fossils or other hobby mineral materials, tracts may be offered by the authorized officer with bids beginning at the minimum appraised price.

These applications shall be acted upon within 30 days after receipt and the applicant notified in writing, although this time may be extended another 30 days if the reasons why additional time is necessary are set forth.

Two further provisions include:

- (1) Materials collected under scientific free use permits or for hobby or recreational use shall not be used for sale. Such use constitutes unauthorized use.
- (2) When found by hobby collectors, a specimen on public lands that is suspected or known to be a fossil of significant scientific interest shall be reported to the nearest Bureau of Land Management office. The specimen, upon confirmation of its significance, shall be donated to a museum, university or other scientific institution of the finder's choice for proper care and study.



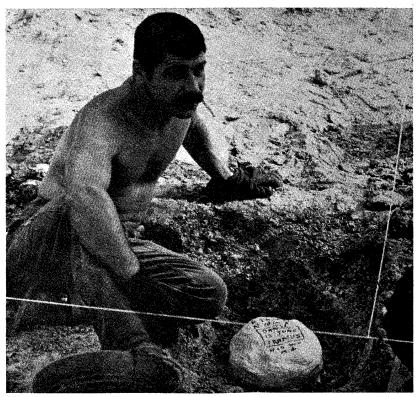
Our campsite was located in a nicely shaded grove of oaks about 1/4 mile from the dig.



A view of the crew in action during one of the morning sessions at the site.



A shot of the crew hard at work at the site. The strings were used to indicate the squares for digging.



Dan Tomasulo of Norfolk, Virginia, with an oriented plaster jacket. Detailed locality data will aid subsequent paleoecological interpretations about the site.

The versatile dining area also served as a respite from the sun during the afternoon matrix picking session or an open-air "lecture hall" (with Dr. Webb at the chalkboard).



The afternoon screenwashing session provided an opportunity to work, cool-off, and wash up before dinner.

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THE 1982 THOMAS FARM FOSSIL DIG

Bruce J. MacFadden1

The Miocene Thomas Farm site located in northern Gilchrist County is one of the most important localities for Tertiary terrestrial vertebrates in the eastern United States (see Webb, <u>Plaster Jacket No.</u> 37, 1981). After a false start in 1981, the FPS-FSM sponsored field camp at Thomas Farm was a complete success in many ways. The week of June 15, 1982, was a remarkable experience for the 22 persons that attended this excavation. In this report I would like to highlight this experience and extend thanks to those who made it possible.

In the months before the dig many hours were spent in planning and preparation. I thank fellow

¹ Bruce J. MacFadden is Associate Curator of Fossil Vertebrates at the Florida State Museum. He is the outgoing President of the FPS and also serves as Secretary-Treasurer of the Society of Vertebrate Paleontology.

Committee Members Ed Brown (Chairman), Dave Webb, and Howard Converse for all their efforts. This venture could never have become a reality without the financial and moral support of the FPS and the Florida State Museum Associates.

The group of avid bone diggers assembled at the FSM on Sunday, June 14. Individual transportation was left at the University, and we travelled in vans to Thomas Farm, some 1 1/4 hours away. Our first order of business after arriving was to get settled at the dig site. There we set up large tents to provide shade during the dig. The first evening we were introduced to what was certainly one of the high points of our week's stay; the fantastic cooking of Richard and Carol Herring. None of us will ever forget the barbecues, steaks, linguine with clam sauce, salad bar, desserts, and congenial nature generated around meal time. (Sounds more like the food served on a luxury liner, doesn't it?). We all are indebted to Richard and Carol who graciously volunteered their time and talents. By the way, they have also consented to provide an encore during the next field session.

FIELD CAMP ROSTER

CO-ORGANIZERS AND PALEONTOLOGICAL SUPERVISORS:

S. David Webb, Bruce J. MacFadden, and Howard Converse

GRADUATE STUDENT ASSISTANTS:

Ann Pratt and Richard Hulbert of the FSM CHEFS EXTRAORDINAIRES:

Richard and Carol Herring, Live Oak

COURIERS:

Diderot Gicca and Russell McCarty of FSM

PARTICIPANTS:

Ft. Myers

Jonathan R. Bryan	Phyllis A. Snyder
Tallahassee	Lake Placid
Roberta R. Angell	Joyce A. Walker
Orlando	Gainesville
Jeff A. Walker	Gypsy C. Graves
Gainesville	Ft. Lauderdale
Cathy J. Miller-Sellers	Kim A. Miller
Joseph M. Latvis	Steven H. Scott
Dover	Norfolk VA
Daniel Tomasulo	Wesley Smith
Norfolk VA	Tampa
Frank D. Williamson	Robin Brown
Titusville	Ft. Myers
Jan Brown	Elizabeth W. Furlow

The participants included a physician, dentist, nurses, teachers, disc-jockey, banker, some of whom were avid bone diggers, others of whom went along for the adventure.

Gainesville

From Monday to Saturday we all rose from our tents, and breakfast was served in the newly constructed pole barn. By 8:00 we were at the site digging. Each participant was given a meter-square

grid to painstakingly excavate with dental picks and trowels. As bones were extracted from the ground, each was given a field number and certain bones were measured for their orientation. These exacting data are necessary for interpretation about the ancient ecological setting of the site. Ann Pratt, a UF Zoology Ph.D. student, is presently engaged in a paleoecological study at Thomas Farm. The detailed excavations done by the participants during June enhanced Ann's data base for subsequent interpretations. Important new fossil specimens were excavated that further increase our knowledge of the Thomas Farm fauna. When fossil-bearing sandy units were encountered during digging, the matrix was placed into burlap bags for subsequent screenwashing. With 16 people digging continuously during the morning, the co-leaders and graduate assistants were kept busy answering questions, making plaster jackets, recording data, and providing encouragement. As important specimens were uncovered by one person, the others shared in the excitement. A special esprit de corps was developed despite the intense heat and rain showers.

After lunch, an hour or so was spent each day carefully sorting through the screenwashed matrix in an attempt to discover new microvertebrate specimens. Many important specimens were recovered in this manner; probably one of the most exciting finds was of a tiny upper premolar of a rare artiodactyl made by Jeff Walker.

In the mid to late afternoon we ventured to the Santa Fe River to obtain relief from the heat and to screenwash the sand that we had bagged-up during the morning's excavations. After work, a swim, and washing up at the river, we would return back to the camp with blissful anticipation of the evening's sumptuous culinary offerings. Despite the fact that Richard and Carol always prepared more food than they

thought this hungry crew could consume, they rarely had leftovers!

During the evening sessions we assembled in the trailer, which doubled as a lecture hall to hear talks about Florida geology and paleontology. Dave, Howard, Ann, Richard, and I took turns with the lectures. Despite the long days and warm weather, each evening session was enthusiastically attended by the participants.

At mid-week we broke our routine for a ride down the Ichetucknee in the morning and a visit to other fossil sites in the afternoon. That evening we enjoyed a banquet at Sandy Point Restaurant on the Santa Fe River. On Saturday we broke camp and returned to Gainesville. In the afternoon we had a preparation and identification session at the Museum, after which the field camp was brought to an end.

The Thomas Farm dig was a fantastic success, even beyond our expectations. The participants learned what it is like to be on a dig, knowing that their meticulous work has advanced science. They were introduced to many techniques that are used by professional paleontologists. Some of the participants also elected to receive continuous education credits. The co-organizers are firmly convinced that a group of amateur bone diggers, working in coordination with professionals, can make major contributions to paleontology. In addition, a special camaraderie was developed within the group that enhanced the entire experience. Many of these same persons already plan to attend next year's session!

In closing, I would also like to thank other persons who made the dig more enjoyable. Mr. Leland Thomas allowed us to camp on his property. Mr. David W. Chandler of Live Oak facilitated the setup of our

kitchen appliances. Mrs. Anita Brown kindly donated a refrigerator for our use during the field camp. And, Sylvia Kahler of Mayo baked a beautiful welcome cake decorated with the insignia of the FPS. Bill and Laura Boardman deserve special thanks for their duties as caretakers of the site (and for digging the author's mired van out of the sand late one night!).