

Florida Fossil horse Newsletter

Volume 9, Number 2, 2nd Half 2000

What's Inside?

- Thomas Farm digger discovers new leg bone of browsing horse Anchitherium
- Why dig fossils in Nebraska?
- Y2K Pony Express Adventures
- We aim to please: Feedback from *Pony Express* sessions
- Research Grant
- Richard C. Hulbert, Jr., new Vertebrate Paleontology Collections Manager
- Thomas Farm Bats
- <u>Book reviews</u> The Eocene-Oligocene Transition: Nebraska GSA Memoir, Paradise Lost and Ice Age Giants of the South
- 2001 Pony Express Adventures

Thomas Farm digger discovers new leg bone of browsing horse Anchitherium

Three extinct species of horses are found at the 18-million-year-old Thomas Farm site. The three-toed *Parahippus leonensis* is very common, accounting for about 80% of all fossils found there. The tiny *Archaeohippus blackbergi* is rare, accounting for about 5% of all fossils found there. The third horse *Anchitherium clarencei* is exceedingly rare. In the 70



Kimberly Garner (left)shows Richard Hulbert (middle) and Erika Simons (right) her progress on the Anchitherium humerus she discovered during session 1 of the Y2K Thomas Farm digs. Russel McCarty Photo

years of digging at Thomas Farm, only about 50 specimens of *Anchitherium* have been found. *Anchitherium* was the largest of the horses at Thomas Farm, about the size of a modern donkey. It had three-toes and its teeth indicate that it probably was a browser, feeding on leafy vegetation.

Every year the *Pony* Express spring digs at Thomas Farm yield extraordinary discoveries. This year, Kimberly Garner of Baton Rouge, LA jacketed a large leg bone that she collected. During the recent laboratory session in August, Kim had the opportunity to work on this plaster jacket and once it was prepared out, we realized that it represented a front leg bone (humerus) of Anchitherium. In all of

our *Pony Express* digs at Thomas Farm, we had never collected a complete humerus of this rare horse. We thank Kim for making this rare discovery and then ably preparing it for us back in the lab. Kim is otherwise famous for her fabulous cajun meals that she has prepared over the past two years at Thomas Farm. Back in Baton Rouge, Kim manages an apartment complex and, like many of us, finds Florida and Thomas Farm a great get-away from all the everyday stress.

Some people ask us why we return to Thomas Farm when we already have thousands of fossils from this site? One of the prime reasons (in addition to the fact that it is just pure fun) is so that we can collect important specimens of the rare animals represented there, like the humerus of Anchitherium collected by Kimberly. Bruce Mac-Fadden currently has a paper in press describing all the teeth and bones of Thomas Farm *Anchitherium* and Kim's new humerus can now be added to the list of specimens in that publication. *Bruce J. MacFadden*

Why Dig Fossils in Nebraska?

A previous issue of the *Pony Express* (vol. 7, no. 1, page 3, 1st half 1998) discussed why the FLMNH is building a collection of fossil mammals



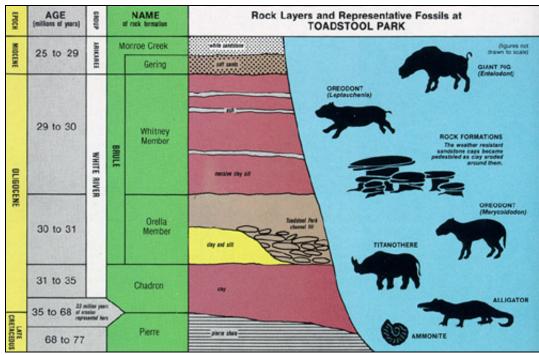
Entrance trail in Toadstool Park, NE. The light sedimentary unit mid way up the hill (arrow) is the PWL (purplish white layer), an ancient volcanic ash. The PWL is a dominant marker horizon that can be seen throughout the High Plains Badlands. It lies close to the transition between the underlying Chadron Formation (below) and the overlying Orella Member (above) of the Brule Formation. (Bruce MacFadden photo)

from the Nebraska badlands. In short, many of the abundant fossil animals represented in Nebraska are older (about 30 to 35 million years ago), yet they are close relatives, of forms found in Florida during the Miocene (about 20 million years ago). When paleontologists want to know what the ancestors of the Florida mammals looked like, they now can study the Eocene and

Oligocene western collection in our museum. For example, in his study of the evolution of the tiny horse *Archaeohippus* from the Florida Miocene, UF zoology Ph. D. candidate Jay O'Sullivan compared the Florida fossil horses with ancestral forms like *Mesohippus* and *Miohippus* collected from the Nebraska badlands. Similarly, when Gary Morgan (of the New Mexico Museum of Natural History) and I have been studying a Miocene oreodont (an extinct group of odd-toed hoofed mammals related to sheep and pigs) from Florida, its close relative is *Merycoidodon*, the common badlands oreodont. There is no doubt that our new Nebraska collection, which now numbers a few thousand catalogued entries, will also be used for scientific study in the future.

Another reason why the Pony Express sponsors the Western Adventure is because of the fundamentally different geological setting of Nebraska. Most Florida localities. such as the ancient Thomas Farm sinkhole. represent a virtual instant in geological time

(probably about 10,000 years, or less) separated from other fossil localities. In contrast, the arid badlands of the High Plains afford the opportunity to study, in one geographic location, the sequence of layered sedimentary rocks and fossil horizons spanning millions of years, which is the essence of stratigraphy.



Adapted from National Park Service, Nebraskaland Magazine Vol. 64, No. 1 Jan-Feb 1996

Thus, a person

hiking up the rock layers in Toadstool Park (see illustration on page 3) can begin in the 35 million-year-old Chadron Formation at the bottom and walk "up section," or through 5 million years of geological time, reaching the 30 million-year-old Whitney Member at the top. Along the way, the astute observer can traverse paleontological events such as the time when titanotheres became extinct (at the transition between the Chadron and Orella units) about 31 million years ago. Stratigraphy relates to the rocks ("litho-stratigraphy"), fossils ("bio-stratigraphy"), and nomenclature, or the names of geological units. Geological units are divided into groups (most inclusive), formations, and members (least inclusive). In the area of Toadstool Park, the stratigraphic nomenclature consists of the White River Group, which in turn is divided into the underlying Chadron Formation and overlying Brule Formation. Locally, the Brule Formation is further subdivided into the underlying Orella Member and overlying Whitney Member. These stratigraphic names usually take their origin from nearby landmarks, such as the city of Chadron to the SE of Toadstool Park.

Just as an historian talks about people that lived during the Victorian age, a paleontologist talks about animals that lived during the Chadronian age, the latter of which is the geological time interval between about 31 to 35 million years ago. Chadronian-aged collections have distinctive kinds of fossils represented in this "land-mammal age," such as the titanothere Brontops. When Brontops is found at other geological localities elsewhere in the U.S., then its distinctive occurrence there allows paleontologists to correlate (establish age equivalency) between this new locality and the original area where the Chadronian was first recognized. We know that the Chadronian age is between about 31 and 35 million years old because of the presence of precisely dated volcanic ash deposits that occur within this formation. The stratigraphic sequence of sediments and fossils in western Nebraska is unique in North America. Within a 50 mile radius of Toadstool Park, five established land-mammal ages take their names, including the Chadronian, Orellan, Whitneyan, Arikareean, and Hemingfordian (not shown on the illustration), a time spanning some 20 million years. To place this sequence in a Florida context, on the one hand, the earliest-known land mammals in our state are from the Whitneyan I-75 locality near Gainesville and, on the other hand, the Thomas Farm locality is Hemingfordian age; it includes the horses Parahippus, Archaeohippus, and Anchitherium that are also known from sediments that outcrop around the town of Hemingford in the Nebraska panhandle south of Toadstool Park.

Fossils are not just beautiful objects to be placed on display, but every one tells a wonderful story.

The story is not complete without knowledge of the exact stratigraphic context of the fossil. The value of the sequence in the western Nebraska badlands, such as is represented by the rock layers at Toadstool Park, is the opportunity to see, for yourself, the kinds of animals that lived, were abundant, and became extinct between 35 and 29 million years ago. Geology is a journey in space and time and the more you see, the more you understand. Many of the principles of stratigraphy that are fundamental to the science of geology can be seen on the *Pony Express* Western Adventure in Nebraska.

Bruce J. MacFadden

"Y2K Pony Express Adventures"

9th Annual Thomas Farm sessions (13-16 April and 27-30 April, 2000)

This year's digging included two full sessions, with 20 participants and four museum staff. During one evening lecture we were treated to a fascinating talk by Doug Jones, FLMNH Director, about a field trip to Morocco. Over the course of the two weekends, about two dozen plaster jackets were collected representing the horses Parahippus, Archaeohippus, and rare Anchitherium. Exceptional finds this year included a humerus (upper front leg bone) of the browsing horse Anchitherium clarencei (Kimberly Garner, Baton Rouge, LA, see lead article), a tusk from a male Floridaceras whitei, the larger Thomas Farm rhinoceros (Sheila Brodbeck, Wellington, FL), an ulna (lower front leg bone) of F. whitei (Bill Lee, Baton Rouge, LA), and a claw of an eagle sized raptor bird (Martha Ivey, Birmingham, AL). Each of these bones has the distinction of being the first in our collection and the bird claw was a hidden surprise in a plaster jacket intended for a Parahippus femur.

Participants included:

Session 1

- Bruce J. MacFadden, Field Leader
- Erika Simons, "Pit Boss"
- Brian Beatty, Pit Assistant
- Jay O'Sullivan, Pit Assistant
- Tom Ahern, Temple Terrace, FL
- Fernando & Isabel Betancourt, Ft. Myers, FL
- Sheila Brodbeck, Wellington, FL
- Audrey Carter, Winter Garden, FL
- Merald Clark & Cindy Moncrief, Gainesville, FL
- Melissa Cole, Altamonte Springs, FL
- Wiley V. Dykes, Jr., Orlando, FL
- Kimberly Garner, Baton Rouge, LA
- Beth Rogers, Tallahassee, FL
- Glyniss Hudson, Winter Springs, FL
- Terry Johnson, Glenwood, FL
- David Karlen, Brandon, FL
- Bill Lee, Baton Rouge, LA
- Pamela Platt, Baltimore, MD
- Paulette Stone, Clermont, FL
- Pamela Sufi, Oakland, CA
- Marcia Wright, Winter Park, FL

Session 2

- Bruce J. MacFadden, Field Leader
- Erika Simons, "Pit Boss"
- Brian Beatty, Pit Assistant
- Julie Meachen, Pit Assistant
- Sheila Bilak, Gaineville, FL

- Anne Bowen, New Port Richey, FL
- David Whiddon, Newport, NC
- Will Edmunds, Berlin, MD
- L.S. Larry Ferguson, III Tallahassee, FL
- John Freund, Gainesville, FL
- Robert Hammond, Westbrook, ME
- Martha Ivey, Birmingham, AL
- Elizabeth B. Juergensmeyer, Elgin, IL
- Margaret Juergensmeyer, Manhatten, MT
- Bill & Sarah Killingsworth, Leeds, AL
- Bill Krause, Orlando, FL
- Teri L. Lear, Lexington, KY
- Judy M. Lundquist, Lexington, KY
- Beverly & James Rawlings, Apopka, FL
- Scott Stuart, Orlando, Fl
- Rebecca Terry, Lexington, KY

2nd Annual Family Day (6 May, 2000)

Family Day at Thomas Farm was once again a hit as young fossil enthusiasts and their parents enjoyed finding numerous fossil treasures in the Thomas Farm spoil piles. Participants included:

- Erika Simons, Staff
- Jay O'Sullivan, Staff
- Myron, Sheila, Andy & Michael Bilak, Gainesville
- Alix & Will Baxter, Gainesville
- Holly & Walker Hillegass, Jacksonville Beach, FL
- Maralee A. & Corey Romfh, Gainesville, FL
- Sarah & Hayley Singleton, Gainesville, FL
- Robert & Eric Williams, Winter Haven, FL
- Jackie Warren, Emily & Jennifer, Gainesville, FL
- Jeff & Stacey Huber, Gainesville, FL

3rd Annual Western Adventure (16-23 June, 2000)

As in previous years, we were blessed with wonderful weather, western hospitality, spectacular scenery, and excellent fossil collecting in the Oligocene badlands of NW Nebraska. We are very appreciative of the warm hospitality offered to us by the Toomeys. The highlights of our trip included a dinner with the local ranchers and a joint field trip collecting fossils with a field archaeology class from Colorado State University, under the direction of Dr. Larry Todd, who were otherwise



A student from Colorado State University watches as Western Adventure

excavating fossil Bison participants Jim Toomey (left) and Jeannette MacFadden (right) prepare to make a plaster jacket over an oreodont skull. Erika Simons Photo

Bone Bed. As for the fossil

bones of titanotheres, oreodonts, horses, and tiny rodents and rabbits were recovered, as well as the ubiquitous fossil tortoise, Stylemys.

Participants included:

collecting, many teeth and

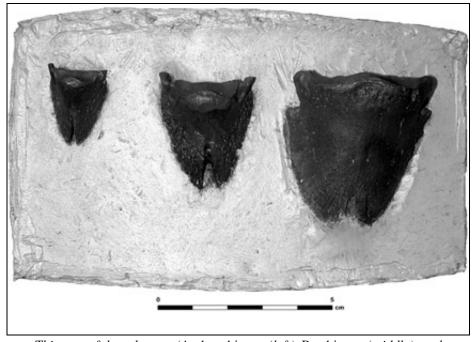
- Bruce J. MacFadden, Field trip leader
- Erika Simons, Field trip assistant
- Barbara & Reed Toomey, local hosts
- Anne Bowen, New Port Richey, FL
- Jim Buckner (teacher scholarship recipient), Ocala, FL
- Sue & Steve Hutchens, Old Town, FL
- Jeannette MacFadden, Gainesville, FL
- Phyllis & Arthur Saarinen, Gainesville, FL
- Valerie Shutterly & Josh Roberts, Micanopy, FL
- Jim Toomey, Bradenton, FL
- Marcia Wright, Winter Park, FL

3rd Annual Paleontology Lab Session (10-12 August, 2000)

The Y2K Lab Session was another great success, thanks in part to the expert assistance by our new collection manager, Richard Hulbert and a new twist cooked up by our senior preparator, Russell McCarty. Richard added many details to the osteology class and the fossil identification portion of the lab. In response to feedback from previous Lab Session participants, Russ prepared an entire learning module on how to cast fossil specimens. Participants had the opportunity to make their own casts (see photo) that they could take home with them as a memento of their experience.

Participants included:

- Erika Simons, Laboratory session leader
- Russ McCarty, Prep and casting
- Richard Hulbert, VP curation
- Jay O'Sullivan, Graduate Assistant
- John Freund, Gainesville, FL
- Kimberly Garner, Baton Rouge, LA
- Mona M. Nowlin, Melbourne, FL
- Holley & Walker Hillegass, Jacksonville Beach, FL
- Valerie Shutterly, Micanopy, FL
- Sarah & Haley Singleton, Gainesville, FL
- Gainesville, FLBeth Ann Tucker, Titusville, FL



This cast of three hooves (Archaeohippus (left), Parahippus (middle), and Anchitherium (right), was one of 4 casts made for the Y2K Paleontology Lab Session participants. (Erika Simons photo)

We aim to please: Feedback from *Pony Express* sessions

Every year we try to improve on the *Pony Express* digs as a result of participant feedback. Some of the improvements that we will make for 2001 include: **At Thomas Farm, we will:**

- Produce a photographic album of the "best" finds over the years so that diggers can see the variety and quality of fossil discoveries.
- In sessions with a large number of repeat diggers (from previous years), give different talks than sessions with mostly newcomers. Show some videos about paleontology.
- Have one guest lecturer per session to come and talk about some other aspect of paleontology.
- Hand out outline drawings of skeletons of the horses Parahippus and Archaeohippus so that each digger can color in which bones they find during the weekend.

On the Western Adventure, we will:

- Produce a photographic album of the "best" finds over the years so that diggers can see the variety and quality of fossil discoveries.
- On the first day in the field, and using comparative fossil materials on hand, go over the common kinds of fossils that the digger can expect to find.

New Research Grant

Bruce MacFadden recently received a grant of \$176,812 from the National Science Foundation (award EAR-9909186). This 3.5-year project will analyze the chemical signals preserved in fossil horse and bison teeth to reconstruct climates throughout North America during the Last Glacial Maximum (20,000 years ago) as compared to Late Glacial times (12,000 years ago). Dr. Pennilynn Higgins, who recently received her Ph. D. in vertebrate paleontology from the geology department at the University of Wyoming, has been hired as the Postdoctoral Research Assistant on this project.

Richard C. Hulbert, Jr., new Vertebrate Paleontology Collections Manager

We are delighted to welcome Dr. Richard C. Hulbert, Jr. as the new vertebrate paleontology Collections Manager at the Florida Museum of Natural History. Richard is no stranger to the collection, having worked here extensively while obtaining his Ph.D. from UF in 1987. His bachelor's and master's degrees are from the University of Texas at Austin. From 1990 to July 2000 he was professor of geology and curator of paleontology at Georgia

Southern University. His research interests are broad and cover a wide array of late Cenozoic mammals as well as archaeocete whales and Coastal Plain stratigraphy/geochronology. Of special interest to the members of *Pony Express* is that much of his published work has been on fossil horses, mostly Miocene and Pliocene species from Florida. He has named a number of new species of horses, including Calippus maccartyi, Cormohipparion emsliei, Nannippus morgani, Pseudhipparion simpsoni, and Protohippus gidleyi, analyzed the evolutionary relationships of a number of horse genera, and studied the paleoecology of large fossil horse populations, including Parahippus leonensis from Thomas Farm. Richard edited and is the major author of a forthcoming book on the fossil vertebrates of Florida, to be published in early 2001 by the University Press of Florida. Current research projects of his include faunal studies of the land mammals of the Bone Valley region (with Dave Webb and Gary Morgan), Moss Acres horses, Florida Tapirus, and new records of the fossil horse Pseudhipparion simpsoni. He is also currently the editor for mammal papers for the Journal of Vertebrate



Richard Hulbert holding the tibia of a giant ground sloth, Eremotherium eomigrans. Erika Simons Photo

Paleontology. Richard plans for an active VP collection, with emphasis on field work and interaction with the avocational paleontologic community. Richard wasted no time getting established in the VP collection and even found time to lend invaluable assistance during the *Pony Express* 3rd Annual Paleontology Lab session.

Thomas Farm Bats

Editor's Note: Bats are so tiny and delicate that they are rarely preserved or collected in fossil deposits. An exception to this rule is Thomas Farm, where because it was a cave/sinkhole 18 million-years-ago and thus a logical home for Miocene bats to roost, and also because of intensive screenwashing efforts, it preserves the most diverse assemblage of pre-Pleistocene (before 2 million years ago) bats in North America. The systematics (classification and interrelationships) of the Thomas Farm bats fauna is the theme of a National Science Foundation research grant recently awarded to Gary Morgan (formerly FLMNH VP Collection Manager, now Curator at the New Mexico Museum of Natural History) and Dr. Nicholas Czaplewski, VP Curator at the Oklahoma Museum of Natural History.



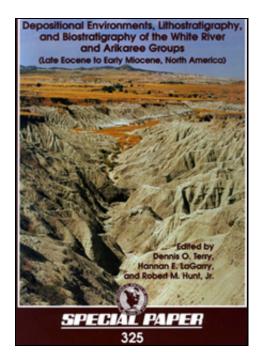
Gary Morgan (right) hanging out with batty friend (photo illustration by Erika Simons

Thomas Farm has the most abundant and diverse sample of bats known from any pre-Pleistocene fossil site in the New World, with over 2,000 specimens representing at least nine different species. The Thomas Farm bat fauna is currently under study by Gary Morgan, now of the New Mexico Museum of Natural History and formerly collection manager at the Florida Museum of Natural History (FLMNH), and Nick Czaplewski of the Oklahoma Museum of Natural History, as part of their larger study on the Cenozoic evolution of North American bats. Bats were first reported from Thomas Farm by Barbara Lawrence of Harvard University in the early 1940s. However, it was not until the early 1980s that large numbers of bat fossils were recovered from Thomas Farm through a large-scale microvertebrate screenwashing program undertaken by Ann Pratt, then a graduate student in zoology at the University of Florida, and Art Poyer of the FLMNH. In her Ph.D. dissertation and several subsequent publications, Ann hypothesized that in the early Miocene Thomas Farm was a deep sinkhole with vertical limestone walls containing large caves, which would explain the abundance of cave-roosting bats. The nine species of bats from Thomas Farm are all insectivorous, and include

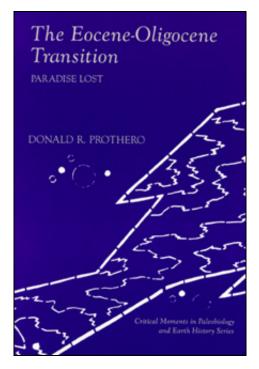
representatives of five different families. Five species belong to the family Vespertilionidae, small insectivorous bats that are common today throughout much of North America. About 75% of the bat fossils from Thomas Farm belong to the extinct vespertilionid, *Suaptenos floridanus*, a species similar in size to the living big brown bat, Eptesicus fuscus. The other four vespertilionids are fairly rare, including a smaller species *Miomyotis floridanus*, a very large species currently being described, and two undescribed species, one related to living tree bats of the genus *Lasiurus* and the other related to big-eared bats of the genus *Plecotus*. Several teeth represent the family Molossidae (free-tailed bats), a primarily tropical group that includes several living species in Florida. The other three bats from Thomas Farm belong to tropical families that no longer occur in Florida or elsewhere in temperate North America, including one undescribed genus and species each in the families Emballonuridae (sac-winged bats), Natalidae (funnel-eared bats), and Mormoopidae (ghost-faced bats). The occurrence of these tropical families suggests that the climate of northern Florida during the early Miocene was similar to that of present-day Central America. *Gary Morgan*

Book reviews - The Eocene-Oligocene Transition: Nebraska GSA Memoir, Paradise Lost and Ice Age Giants of the South

Depositional Environments, Lithostratigraphy, and Biostratigraphy of the White River and Arikaree Groups (late Eocene to early Miocene, North America), Edited by D. O. Terry, H. E. LaGarry, and R. M. Hunt, Jr. 1998. Geological Society of America Special Paper no. 325. Published by the Geological Society of America, Boulder Colorado. 216 pages. ISBN 0-8137-2325-6, List price \$69.00, available at the GSA on-line bookstore at http://www.geosociety.org. This special volume brings together 10 professional papers dealing with the geology and



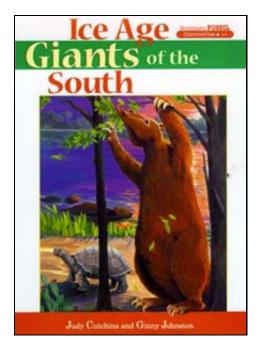
paleontology of the Eocene through Miocene badlands, mostly concentrating on the High Plains of Nebraska and the Dakotas. It is a highly technical book, written for people with a geological or paleontological background. Even so, it is required reading for anyone interested in the most recent, upto-date scientific research on the stratigraphy and paleontology of the badlands.



The Eocene-**Oligocene Transition:** Paradise Lost, by Donald Prothero. New York, Columbia University Press, 291 pp. ~\$28.50 (Paperback). Available as a special order from most major book stores or on-line book suppliers. Fifty million years ago, the Earth was a very different place. Tropical land plants and animals extended into high latitudes (as far north as Canada) and the climate was much hotter with less pronounced seasonality

than today. By the end of the Eocene, there was a major global climate change that had a profound impact on the world's biota, so that the Earth transitioned in a matter of several million years from a more equable "hothouse" to a cooler and more seasonal "icehouse" climate. Prothero, a vertebrate paleontologist and Occidental College geology professor, documents the history of investigation and evidence related to this major global change and biotic extinctions that occurred between 40 to 35 million years ago during the late Eocene and early Oligocene. The book is written for the informed layperson and is very readable. It has excellent illustrations and explains some complicated scientific concepts, theories, and interpretations in a "reader-friendly" manner. Anyone who ever wondered why titanotheres became extinct at the top of the Chadron Formation in the badlands, but didn't realize this relates to this major Eocene-Oligocene transition, should read this book.

Ice Age Giants of the South, by Judy Cutchins and Ginny Johnston. Pineapple Press, Inc., 48 pp., 33 photographs, 11 illustrations. ISBN 1-56164-195-2, List price \$14.95, available at Pineapple press.com, BarnesNoble.com and Amazon.com. This delightful volume aimed at young readers



ages 8-12, is as educational as it is enjoyable to read. It tells about giant animals that lived in the southern United States during the last Ice Age, 2 million to 10,000 years ago and gives the reader an idea about the climate, geology and life during that time. The authors spent much time with experts in the field of paleontology to make this book as accurate as possible. If your child has any interest in fossils, this book is a must.

2001 Pony Express Adventures

4th Annual Nebraska Adventure (16-23 June, 2001) FILLED - HAPPY HUNTING!

4th Annual Paleontology Lab Session (9-11, August, 2001)

THERE'S STILL ROOM, REGISTER NOW!

Learn from professionals how to prepare and identify fossils from Thomas Farm. Make your own cast of Thomas Farm fossils.

To register for this *Pony Express* event please print out the registration form on the *Pony Express* Adventures page and return to Erika Simons at the Florida Museum of Natural History P.O. Box 112710, Gainesville FL 32611-2710. Questions? - call Erika at (352)846-2000 x 255

Pony Express

Florida Fossil Horse Newsletter Volume 9, Number 2 2nd Half 2000 ISSN# 1065-285X; Indexed in the Zoological Record

Editorial Staff:

- Bruce J. MacFadden Program Director
- Erika H. Simons, Editor and Program Coordinator

Direct all Correspondence to:

Pony Express

Exhibits & Public Programs
Florida Museum of Natural History
Powell Hall -- P.O. Box 112710
Gainesville, FL 32611-2710
Phone: (352) 846-2000 extention 25

Phone: (352) 846-2000 extention 255

You can receive future issues of the *Pony Express* with a one-time new-member fee of \$25 made payable to the **UF Foundation**

Contributions and Support: All supporters receive *Pony Express* and invitations to related activities that promote the research, exhibition, and education about Florida fossil horses.

Support Categories

- Contributor \$25-99
- Friend \$100-249
- Sustainer \$250-499
- Patron \$500-999
- Benefactor \$1000+

New-member fee and other contributions should be made payable to:

UF Foundation and sent to the address listed above

Editor's email address: esimons@flmnh.ufl.edu

Pony Express--Statement of Purpose:

The purpose of this newsletter is to communicate news and information and disseminate knowledge about fossil horses, particularly in Florida, and to develop a state-wide constituency that will support and enhance the research, exhibition, and educational programs offered at the FLMNH that pertain to fossil horses. Contributions to the Fossil Horse Fund are deposited into an account at the University of Florida Foundation, Inc., a tax-exempt entity, and will be used for the purposes stated here.

Donations to the Fossil Horse Fund -- 2000-2001

All contributions received between August 30, 1999 and April 30, 2000

Benefactors (\$1000+)

- MacFadden, Bruce J.: Gainesville
- Toomey, Barbara & Reed: Sanibel
- Toomey, Jim: Bradenton

Patrons (\$500-999)

- GTE Matching Contributions
- Hillegass, Helen N.: Jacksonville Beach
- Rooney, James: Queenstown, MD
- Simons, Erika H.: Gainesville
- Toomey, Jim & Lori: Bradenton

Sustainer (\$249-499)

• Ahern, Tom: Temple Terrace

Friends (\$100-249)

- Claussen, Earlene A.: Salem, OR
- Hammond, Robert J.: Westbrook, ME
- Jackson-Poulton, Joyce: Ponte Vedra
- Johnson, Terry: Glenwood
- McPherson, A. Bradley: Shreveport, LA

Contributors (\$20-99)

- Anderson, Jon: Gainesville
- Ashby, Wallace L. Port Republic, MD
- Beatty, Brian L.: Gainesville
- Beeker, Donna, Emmet & Barbara: Bloomington, IN
- The Bilaks: Gainesville
- Bowen, Anne: New Port Richey
- Bridell, Albert M.: Sanibel

- Broach, Ellen L.: Macon, GA
- The Causeys: Liberty, NC
- Flanigan, Valerie: Naples
- Dumas, Ernest M.: Jupiter
- Hickey, John J.: Tampa
- Hutchens, Steve & Sue: Oldtown
- Johnson, Barbara M.: Vero Beach
- Jones, Richard S.: Waterville, MD
- Maier, Joseph: St. Petersburg
- Manchester, Stephen: Gainesville
- Miller, R.: Jacksonville Beach
- Nafus, Benjamin E.: Bakersfield, CA
- Nowlin, Mona M.: Melbourne
- Ober, Lewis D.: Plantation
- Rigas, Bridget M.: Ithaca, NY
- Roberts, Betty L.: Port republic, MD
- Sinibaldi, Robert.: St. Petersburg
- Tabor, Margaret: Orlando
- Thayer, LAura: Jupiter

PONY EXPRESS BACK ISSUES AVAILABLE!

Printed back issues of this newsletter are available at a cost of \$8.00 per volume, or \$3.00 per issue. Issues 1 and 2 of Vol. 1 are only available as photocopies. Other issues, which are available in their original printing, are: Vol. 1, # 3, 4; Vol. 2, # 1-4; Vol. 3, #1-3/4; Vol. 4, # 1 and 2; Vol. 5, # 1 and 2; Vol. 6, #1 and 2; Vol. 7, #1 and 2; Vol. 8 # 1 and 2; Vol. 9 #1 Please make checks out to **UF Foundation** and send your request to Erika H. Simons, editor and *Pony Express* Program Coordinator at the above address.

Your tax-deductible contributions keep this highly popular program alive! All contributions at any of the above levels are valued and your support is sincerely appreciated. If your employer has a matching funds program your contribution can work twice as hard.