

Everglades Geological Society **BULLETIN**

Volume 12, Number 4

March 2006

March 21, 2006 (Tuesday)

6:00 P.M. at the Quality Hotel - Tropical Sun Room (New Meeting Place!)

2431 Cleveland Avenue

(social hour starts at approximately 5:00)

Speaker: David M. Jarzen, Ph.D.

Topic: The Oldest Land in Florida?

Meeting Sponsored by:

ECT

Environmental Consulting & Technology, Inc.

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Everglades Geological Society
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www.evergladesgeologicalsociety.org

The Everglades Geological Society is an organization which seeks to promote interest in and understanding of Geology and the related Earth Sciences, and to provide a common organization for those individuals interested in geology and the related earth sciences. The Bulletin is a publication of the Everglades Geological Society, Inc.

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TUESDAY
March 21, 2006 (Tuesday)

Quality Hotel - Tropical Sun Room
(New Meeting Place!)
2431 Cleveland Avenue, Fort Myers
(please see map on page 5)

Members and Prospective Members Come Join Us!!



Dues are Due!
Please make your check to:
Everglades Geological Society
Active Member \$18.00
Associate Member \$9.00



PRESIDENT'S MESSAGE

March 2006

by Mike Weinberg

My message for this issue of the newsletter is intended to update you on some of the exciting recent events that pertain to the society. First, I am pleased to announce that the recipient of the 2006 Student Research Grant is Jennifer Sliko of the University of South Florida. Jennifer is using stable oxygen isotope and magnesium/calcium ratio data from lightning whelks (*Busycon contrarium*) to help reconstruct paleoclimate around the Plio-Pleistocene boundary. For those of us old enough to forget much of what we learned in historical geology, a mass extinction occurred at that time.

Jennifer suspects that the extinction may be attributed to changes in ocean circulation patterns and global climate that resulted from closing of the Isthmus of Panama. This hypothesis will be tested by comparing oxygen isotope data and Mg/Ca ratios for whelks collected from the Pliocene-age Pinecrest Member of the Tamiami Formation and the Pleistocene-age Ft. Thompson Formation. Jennifer

will first examine these chemical signatures in shell material from a modern whelk living in Tampa Bay in order to help interpret the fossil results. The \$500 EGS Grant will be used to assist with analytical fees for the project. Jennifer will present her finding to the Society in the coming year. Let's all wish her great success.

I am also pleased to report that we have two new EGS members. Amy Hamm received her bachelors and masters degrees in geology from Oklahoma State University in 1993 and 1997, respectively. Amy is now the owner of Digital Publication Services.

Rahul John has masters in hydrogeology from University of Wisconsin, Madison (2005) and an earlier masters degree in geology from University of New Orleans (2002). Rahul presently works as a staff geologist for Water Resource Solutions. EGS welcomes both of you to the Society.

Join Everglades Geological Society

Application forms are available at meetings, by mail, and on-line.

<http://www.evergladesgeologicalsociety.org>

This Month's Speaker and Topic:

The Oldest Land in Florida?

David M. Jarzen, Ph.D.

The Pollen and spores recovered from the marine Avon Park Formation (mid-Eocene) in Citrus and Levy Counties, in peninsular Florida, suggest the presence of a terrestrial flora near the site of deposition, and represents the oldest land flora described from the state. Although diverse dinoflagellate cysts dominate the palynoflora, twenty-one pollen forms are identified from the Dolime Minerals and Gulf Hammock Quarries. The pollen of *Pelliciera*, *Nypa*, and *Acrostichum*, each representing a mangrove community, are associated with seagrass macrofossils, invertebrate fossils and sedimentary structures, which together suggest that the sediments of the Avon Park Formation, at the quarry sites, were deposited in a shallow marine lagoon, perhaps near the mouth of a river or stream in a protected area that had some tidal influence. This is the earliest report of a pollen flora recording terrestrial, near marine vegetation of Florida.

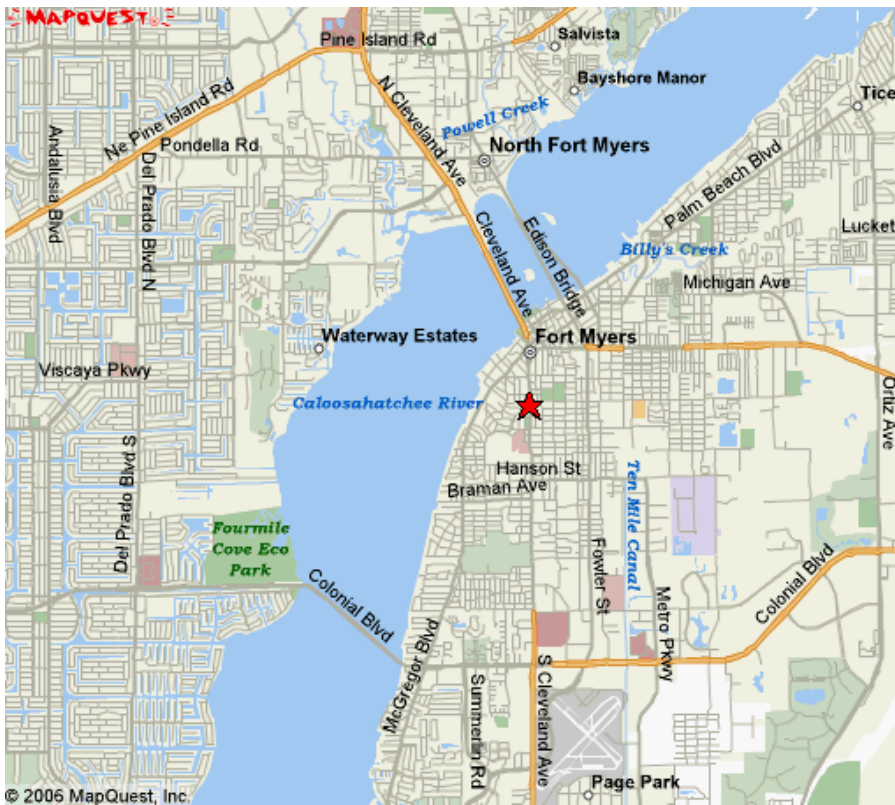
Biography

David M. Jarzen is a Courtesy Research Scientist in Paleobotany and Palynology at the Florida Museum of Natural History, Gainesville, Florida. Born in Cleveland, Ohio, he grew up in northern Ohio gaining an early interest in biology and natural history of the cool temperate environment. He earned his B.S. degree in 1967 from Kent State University majoring in Biological Sciences, and two years later received his M.A. degree in Botany from the same institution. In 1973 he was awarded the Ph.D. in Geology from the University of Toronto.

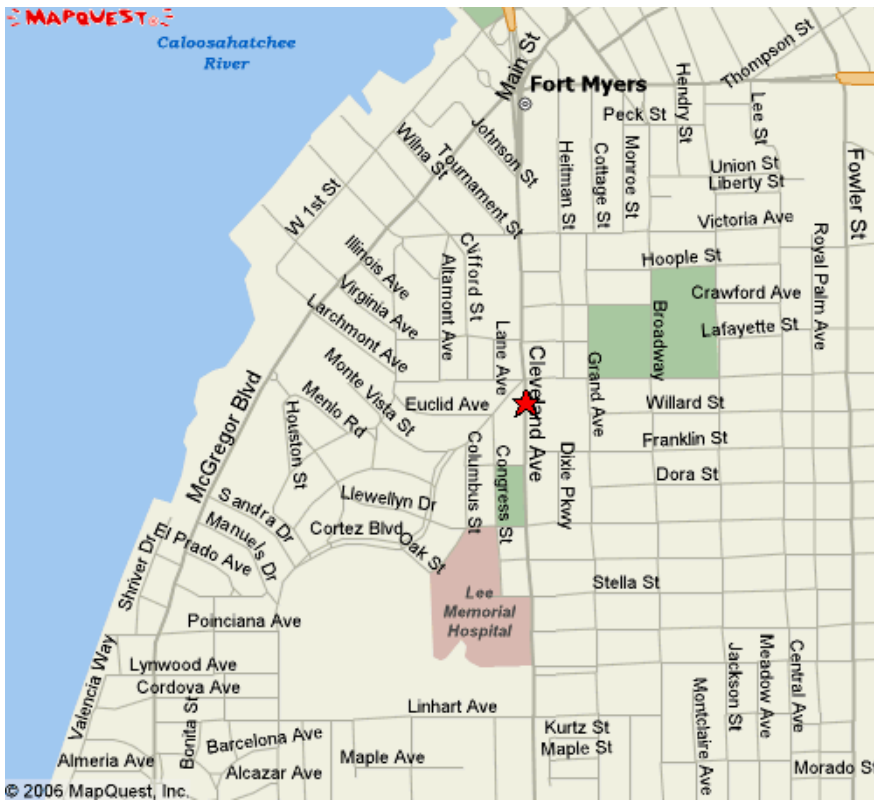
His research interests in the nature of extant and fossil plant life, have provided extensive field work in all regions of Canada and the United States, as well as Europe, Zambia, Cameroon, Panama, Mexico, Colombia, Puerto Rico, New Caledonia, New Zealand, Fiji, and to several localities within Australia. The focus of his work incorporates a global view towards understanding the evolution of major plant life during the Earth's history, with an emphasis on palynofloras recorded from the Cretaceous and Tertiary eras. His publications of scientific papers number over 160, including both professional papers and popular articles.

EGS Field Trip Shaggy Cypress (Winchester) Pit – Sunday March 26, 2006

The Everglades Geological Society will sponsor a field trip to the Shaggy Cypress Pit, located just north of Oil Well Road and about 1.2 miles east of Everglades Boulevard in Collier County, Florida. Although specifics have yet to be ironed out, participants will meet at the entrance to the pit probably at 10:30 am Sunday March 26th and the trip will wrap up at approximately 3:00 pm. The trip is open primarily to paid members of the Everglades Geological Society. Bring your own lunch and drink. The pit features an abundant and diverse marine invertebrate fauna including mollusks, echinoids, barnacles, and crabs, as well as some vertebrate material (primarily whale). An email with further details will be sent out shortly to paid members of the EGS. Questions about the trip can be sent to Curt Klug at crklug@prodigy.net.



EGS MEETING CALENDAR
2005-2006
November 15
January 18
March 21
May 16



Everglades Geological Society
 Meets on the third Tuesday every other month. Social hour starts at 5:00 PM. The meeting begins at 6:00 PM. No meetings are held in June, July or August.

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