

PUBLICATIONS FOR SALEby the *Florida Academy of Sciences*

Complete sets. Broken sets. Individual numbers. Immediate delivery. A few numbers reprinted by photo-offset. All prices strictly net. Prices quoted include domestic postage. Some issues may not be available. All are \$25 per volume or \$6 per issue, except for symposium issues.

PROCEEDINGS OF THE FLORIDA ACADEMY OF SCIENCES (1936–1944)

Volumes 1–7

QUARTERLY JOURNAL OF THE FLORIDA ACADEMY OF SCIENCES (1945–1972)

Volumes 8–35

FLORIDA SCIENTIST (1973–)

Florida's Estuaries—Management or Mismanagement?—Academy Symposium

FLORIDA SCIENTIST 37(4)—\$5.00

Land Spreading of Secondary Effluent—Academy Symposium

FLORIDA SCIENTIST 38(4)—\$5.00

Solar Energy—Academy Symposium

FLORIDA SCIENTIST 39(3)—\$5.00 (includes do-it-yourself instructions)

Anthropology—Academy Symposium

FLORIDA SCIENTIST 43(3)—\$7.50

Shark Biology—Academy Symposium

FLORIDA SCIENTIST 45(1)—\$8.00

Future of the Indian River System—Academy Symposium

FLORIDA SCIENTIST 46(3/4)—\$15.00

Second Indian River Research Symposium—Academy Symposium

FLORIDA SCIENTIST 53(3)—\$15.00

Human Impacts on the Environment of Tampa Bay—Academy Symposium

FLORIDA SCIENTIST 58(2)—\$15.00

Lessons Learned from Transferring Science to Watershed Management—Charlotte Harbor NEP Special Issue

FLORIDA SCIENTIST 69(Suppl. 2)—\$15.00

“Future of the Indian River Symposium” Revisited—Academy Symposium

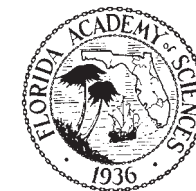
FLORIDA SCIENTIST 70(4)—\$15.00

From Data to Policy: Our Partnership in Action—Charlotte Harbor NEP Special Issue

FLORIDA SCIENTIST 72(4)—\$15.00

Please send payment with order. If required, an invoice will be sent on purchases over \$20 from a recognized institution. Please include Florida sales tax if shipped to a Florida address, unless a copy of a valid Florida Consumer's Sales Tax Certificate is enclosed.

Florida Scientist



Volume 74

Winter, 2011

Number 1

CONTENTS

Impacts from 2004 Hurricanes Frances and Jeanne on the Floodplain Forest Communities of the Loxahatchee River	1
Richard E. Roberts, Marion Y. Hedgepeth, and Rachel R. Gross	
An Effect of Burmese Pythons (<i>Python molurus bivittatus</i>) on Mammal Populations in Southern Florida	17
Joshua Holbrook and Thomas Chesnes	
Site Fidelity and Movement of Bottlenose Dolphins (<i>Tursiops truncatus</i>) on Florida's East Coast: Atlantic Ocean and Indian River Lagoon Estuary	25
Marilyn Mazzoil, M. Elizabeth Murdoch, John S. Reif, Sarah E. Bechdel, Elisabeth Howells, Malcolm de Sieyes, Colby Lawrence, Gregory D. Bossart, and Stephen D. McCulloch	
Collection Records for Some Gall Midges From the Florida Keys (Diptera: Cecidomyiidae).....	38
Lawrence J. Hribar and John D. Plakidas	
Metals in Sediments and Clams From the Indian River Lagoon, Florida: 2006–7 Versus 1992.....	43
John H. Trefry and Robert P. Trocine	
Evaluating Everglades Peat Carbon Loss Using Geospatial Techniques	63
Sumanjit Aich and Thomas W. Dreschel	

FLORIDA SCIENTIST

QUARTERLY JOURNAL OF THE FLORIDA ACADEMY OF SCIENCES

Copyright © by the Florida Academy of Sciences, Inc. 2011

Editor: Dr. Thomas J. Manning Co-Editor: Dr. Donna Gosnell

Department of Chemistry, Valdosta State University

Valdosta, Georgia 31698 (229) 333-7178, e-mail: tmanning@valdosta.edu

Business Manager: Dr. Richard L. Turner

Department of Biological Sciences, Florida Institute of Technology,

150 West University Boulevard, Melbourne, Florida 32901-6975

Phone: (321) 674-8196, e-mail: rturner@fit.edu

<http://www.floridaacademyofsciences.org>

The *Florida Scientist* is published quarterly by the Florida Academy of Sciences, Inc., a non-profit scientific and educational association. Membership is open to individuals or institutions interested in supporting science in its broadest sense. Applications may be obtained from the website.

Original articles containing new knowledge, or new interpretations of knowledge, are welcomed in any field of science as represented by the sections of the Academy, viz., Biological Sciences, Conservation, Earth and Planetary Sciences, Medical Sciences, Physical Sciences, Science Teaching, and Social Sciences. Also, contributions will be considered which present new applications of scientific knowledge to practical problems within fields of interest to the Academy. Articles must not duplicate in any substantial way material that is published elsewhere. Contributions are accepted only from members of the Academy and so papers submitted by non-members will be accepted only after the authors join the Academy. Instructions for preparations of manuscripts are inside the back cover.

Officers for 2010–2011

FLORIDA ACADEMY OF SCIENCES

Founded 1936

President: Dr. Richard L. Turner
Department of Biological Sciences
Florida Institute of Technology
150 West University Boulevard
Melbourne, FL 32901-6975

Secretary: Mr. Barry Wharton
HDR Engineering, Inc.
2202 N. Westshore Boulevard
Suite 250
Tampa, FL 33607-5711

President-Elect: Dr. David Karlen
Environmental Protection Commission
Hillsborough County
3629 Queen Palm Dr.
Tampa, FL 33619

Treasurer: Dr. Ramon Ruiz-Carus
3600 W. Leona St.
Tampa, FL 33629

Executive Director: Edward A. Haddad
e-mail: floridaacademyofsciences@osc.org

Past-President: Dr. Daniel K. Odell
HSWRI
6295 Sea Harbor Drive
Orlando, FL 32821

Program Chair: Dr. Jeremy Montague
Department of Natural and Health Sciences
Barry University
Miami Shores, FL 33161

INSTRUCTION TO AUTHORS

This information is available at a web site:

FAS site: <http://www.floridaacademyofsciences.org> (select "Florida Scientist").

The Florida Academy of Sciences Web page, indicated above, allows interested persons to join the Florida Academy of Sciences and pay dues.

FLORIDA ACADEMY OF SCIENCES

SPONSORS

HDR Engineering, Inc., Tampa

Membership applications, subscriptions, renewals, and changes of address should be addressed to Florida Academy of Sciences, Orlando Science Center, 777 East Princeton St., Orlando, FL 32803. Phone: (407) 514-2079

Send purchase orders, payments for reprints and publication charges, orders for back issues and other journal business matters to the Business Manager, Dr. Richard L. Turner, Department of Biological Sciences, FIT, 150 W. University Blvd., Melbourne, FL 32901-6975 [(321) 674-8196; e-mail rturner@fit.edu].

Florida Scientist is included in the following Abstracting and Indexing sources (active, electronic)

Ageline
Agricola (Agricultural OnLine Access)
Animal Behavior Abstracts
Aquatic Sciences & Fisheries Abstracts
Biological Abstracts
Biology Digest
BIOSIS Previews
C S A Sustainability Science Abstracts (Cambridge Scientific Abstracts)
Chemical Abstracts
Ecology Abstracts (Bethesda)
Entomology Abstracts
Environmental Engineering Abstracts (Online Edition)
Environmental Sciences and Pollution Management
FISHLIT (Grahamstown, South Africa)
GeoRef
Oceanic Abstracts
Pollution Abstracts
ProQuest
Referativnyi Zhurnal
Speleological Abstracts
State Academies of Sciences Abstracts (1985-)
Water Resources Abstracts (Online, Bethesda)
Wildlife Review Abstracts
Zoological Record