

FLORIDA SCIENTIST

Quarterly Journal of the Florida Academy of Sciences
Copyright © by the Florida Academy of Sciences, Inc. 2016

Editor: James D. Austin, PhD
Department of Wildlife Ecology and Conservation
Institute of Food and Agricultural Sciences
University of Florida
Gainesville, FL 32611
email: fl.sci.editor@gmail.com

Co-Editor: Mary Vallianatos, MSc, MPA
University of Florida
PO Box 100014
Gainesville, FL 32610

Editors Emeriti: Professor Dean Martin and Mrs. Barbara Martin
Chemistry Department, University of South Florida

Business Manager: 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

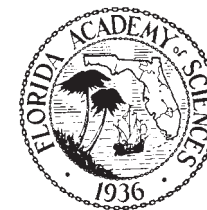
<http://www.floridaacademyofsciences.org>

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., Agricultural and Natural Resources, Anthropological Sciences, Atmospheric and Oceanographic Sciences, Biological Sciences, Computer Science and Mathematics, Engineering, Environmental and Chemical Sciences, Florida Committee on Rare and Endangered Plants and Animals, Geology and Hydrology, Medical Sciences, Physics and Space Sciences, Science Teaching, Social Sciences, and Urban and Regional Planning. Also, contributions will be considered which present new applications of scientific knowledge to practical problems within fields of interest to the Academy.

Back issues of the *Florida Scientist* and its precursors, the *Proceedings of the Florida Academy of Sciences* (1936–1944) and *Quarterly Journal of the Florida Academy* (1945–1972) can be found on the Biodiversity Heritage Library website (<http://www.biodiversitylibrary.org>).

Florida Scientist



Volume 79

Winter, 2016

Number 1

RESEARCH ARTICLES

Reintroduction of the endangered Perdido Key beach mouse
(*Peromyscus polionotus trissyllepsis*): fate and movements of captive-born
animals (pages 1–13)

Daniel U. Greene, Jeffery A. Gore, and Margo A. Stoddard

Green turtles (*Chelonia mydas*) in an urban estuary system: Lake Worth
Lagoon, Florida (pages 14–27)

Jonathan C. Gorham, Michael J. Bresette, Jeffrey R. Guertin, Brian M. Shamblin, and
Campbell J. Nairn

Waterbird use of a coastal beach at Merritt Island National Wildlife
Refuge, Florida (pages 28–38)

Marc B. Epstein

Transport pathways through southern Indian River Lagoon (pages
39–50)

Ned P. Smith

ANNOUNCEMENTS

New UF/IFAS biological station looking for Florida Academy of Sciences
collaborators (pages 51–52)

Jack Payne

2015 Reviewer Acknowledgement (page 53)

Officers for 2015–2016
FLORIDA ACADEMY OF SCIENCES
Founded 1936

President: Jeremy Montague
Department of Natural and Health Sciences
Barry University
Miami Shores, FL 33161

Secretary: Norine Noonan
University of South Florida, St. Petersburg
140 7th Ave. S. TER 407
St. Petersburg, FL 33701

Treasurer: Sumera Ackbarali
College of Nursing and Health Sciences
Barry University
Miami Shores, FL 33161

Program Chair: Kelli A. Hunsucker
Department of Marine & Environmental
Systems
Florida Institute of Technology
150 West University Blvd.
Melbourne, FL 32901-6975

President-Elect: vacant

Past-President: Sanjay Sesodia
Barry University
School of Graduate Medical Sciences
11300 NE 2nd Ave.
Miami Shores, FL 33161

Published by The Florida Academy of Sciences, Inc.
Printing by Allen Press, Inc., Lawrence, Kansas

INSTRUCTION TO AUTHORS

This information is available at the web site: <http://www.floridaacademyofsciences.org> (select "Florida Scientist").
To join the Florida Academy of Sciences visit the Academy web site indicated above.

FLORIDA ACADEMY OF SCIENCES

SPONSORS

HDR Engineering, Inc., Tampa

INSTITUTIONAL MEMBERS FOR 2016

Archbold Biological Station

Florida Polytechnic University

Florida Fish & Wildlife Conservation Commission

Florida Gulf Coast University, W.T. Cox

Harbor Branch Oceanographic Institute

Rice University

South Florida Water Management District

U.S. Army Corps of Engineers, Jacksonville District

University of Florida, Institute of Food & Agricultural Sciences

Walt Disney Imagineering, Craig Duxbury

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

Biodiversity Heritage Library (full text prior to vol. 69, 2006)

Biological Abstracts

Biology Digest

BIOSIS Previews

C S A Sustainability Science Abstracts (Cambridge Scientific Abstracts)

Chemical Abstracts

EBSCO host (full text since vol. 69, 2006)

Ecology Abstracts (Bethesda)

Entomology Abstracts

Environmental Engineering Abstracts (Online Edition)

Environmental Sciences and Pollution Management

FISHLIT (Grahamstown, South Africa)

GeoRef

JSTOR (full text since vol. 1, 1936)

Oceanic Abstracts

Pollution Abstracts

ProQuest (full text since vol. 69, 2006)

Referativnyi Zhurnal

Speleological Abstracts

Water Resources Abstracts (Online, Bethesda)

Wildlife Review Abstracts

Zoological Record