

# ***SOUTHEASTERN NATURALIST***

**Co-sponsors:** Association of Southeastern Biologists Eagle Hill Institute

Joerg-Henner Lotze, Eagle Hill Institute, Steuben, ME ... **Publisher**

Keith Goldfarb, GoldRush Science Services, Steuben, ME ... **Editor-in-Chief**

Karl E. Miller, Fish & Wildlife Res. Inst., FL Fish & Wildlife Conserv. Comm., Gainesville, FL ... **Managing Editor**

## **Associate Editors**

Roger D. Applegate, Tennessee Wildlife Resources Agency, Ellington Agricultural Center, Nashville, TN

Richard E. Baird, Dept. of Entomology and Plant Pathology, Mississippi State University, Mississippi State, MS

Jane Caffrey, Department of Biology, University of West Florida, Pensacola, FL

Robert Carter, Biology Department, Jacksonville State University, Jacksonville, FL

Kristen Cecala, Department of Biology, Sewanee: The University of the South, Sewanee, TN

Melanie Colón, Naval Air Station Lemoore, Lemoore, CA

L. Michael Conner, J.W. Jones Ecological Research Center, Newton, GA

Jason Davis, Ecophysiology, Radford University, Radford, VA

Alvin R. Diamond, Department of Biological and Environmental Sciences, Troy University, Troy, AL

John J. Dilustro, Biology Department, Chowan University, Murfreesboro, NC

Andrew Edelman, Biology Department, University of West Georgia, Carrollton, GA

Elizabeth Forsys, Environmental Science and Biology, Eckerd College, St. Petersburg, FL

Nathan R. Franssen, US Fish and Wildlife Service, Albuquerque, NM

L. Michelle Gilley, Biology Department, Mars Hill University, Mars Hill, NC

Brad Glorioso, USGS, National Wetlands Research Center, Lafayette, LA

Cathryn Greenberg, Southern Research Stn, Brent Creek Experimental Forest, US Forest Service, Asheville, NC

Matthew Heard, Department of Biology, Belmont University, Nashville, TN

Brian Helms, Department of Biological and Environmental Science, Troy University, Troy, AL

David Jachowski, Department of Forestry and Environmental Conservation, Clemson University, Clemson, SC

Robert M. Jetton, Dept. of Forestry & Environmental Resources, North Carolina State University, Raleigh, NC

Steve A. Johnson, Dept. of Wildlife Ecology & Conservation, University of Florida, Gainesville, FL

Benjamin P. Keck, Division of Biology, University of Tennessee, Knoxville, TN

Matt Kimball, USC Baruch Marine Field Laboratory, Georgetown, SC

David Kremetz, Department of Biological Sciences, University of Arkansas, Fayetteville, AR

Paul Leberg, Department of Biology, University of Louisiana Lafayette, Lafayette, LA

Foster (Frosty) Levy, Department of Biological Sciences, East Tennessee State University, Johnson City, TN

Zachary Loughman, Department of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV

Scott Markwith, Department of Geosciences, Florida Atlantic University, Boca Raton, FL

Richard E. Matheson Jr., Bradenton, FL

Hayden Mattingly, Department of Biology, Tennessee Tech University, Cookeville, TN

Douglas B. McNair, Wellfleet, MA

Matthew L. Niemiller, Department of Biological Sciences, University of Alabama, Huntsville, AL

Katherine Parys, USDA Ag Research Service, Southern Insect Management Research Unit, Stoneville, MS

Roger W. Perry, Southern Research Station, US Forest Service, Hot Springs, AR

Karen E. Powers, Biology Department, Radford University, Radford, VA

Chet Rakocinski, Department of Coastal Sciences, USM Gulf Coast Research Laboratory, Ocean Springs, MS

David A. Steen, Fish & Wildlife Research Inst., Florida Fish & Wildlife Conserv. Comm., Gainesville, FL

The *Southeastern Naturalist* (ISSN 1528-7092 [print], ISSN 1938-5412 [online]) is a collaborative publishing effort that is based at the Eagle Hill Institute, PO Box 9, 59 Eagle Hill Road, Steuben, ME 04680-0009. Phone 207-546-2821, FAX 207-546-3042. E-mail: office@eaglehill.us. Webpage: www.eaglehill.us/sena. Copyright © 2021, all rights reserved. Periodical postage paid in Steuben, ME and additional mailing offices. Published quarterly. **Special issue and monograph proposals are welcome.** Printed by Allen Press, Lawrence, KS. On-line secure subscription ordering: rate per year for individuals at US addresses - \$60 (students, \$48); organizations at US addresses \$250; Canadian addresses, add \$25; other non-US addresses, add \$55. **Postmaster:** Please send address changes to *Southeastern Naturalist*, Eagle Hill Institute, PO Box 9, 59 Eagle Hill Road, Steuben, ME 04680. **Authors:** Submission considerations and formatting guidelines are available at www.eaglehill.us/sena. The Eagle Hill Institute is a tax exempt 501(c)(3) nonprofit corporation of the State of Maine (Federal ID # 010379899).