Jaret C. Daniels

Associate Professor



Contact

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Education

- o B.S., Biology, St. John's University, Collegeville, Minnesota, 1990
- o Ph.D., Entomology, University of Florida, Gainesville, Florida, 1999

Relevant Employment History

- o Associate Professor (2012- Present), University of Florida
- Assistant Director of Exhibits and Public Programs (2011-present), Florida Museum of Natural History, University of Florida
- o Assistant Professor (2006-2012), University of Florida

Research

- Insect ecology, population dynamics and conservation, with particular emphasis on Lepidoptera and native insect pollinators.
- Integrated crop pollination
- Road ecology
- Imperiled species recovery

Teaching

- o ALS6046, Grant Writing
- ENY6934, Insect Conservation

Current Research Projects

- Developing sustainable pollination strategies for U.S. specialty crops.
- Evaluating the importance of roadside mowing regimes for native insect pollinators.
- Occurrence, distribution and ecological Studies for the federally endangered Schaus Swallowtail butterfly (Heraclides aristodemus ponceanus).
- "Plant for Wildlife" evaluating the ability of three types of Florida urban/suburban landscapes native plants, Florida-Friendly LandscapingTM, and exotic plants - to support native wildlife, including insect pollinators.
- Ecology and conservation of the Florida atala butterfly (*Eumaeus atala*).
- Remote surveys of the federally endangered Miami blue butterfly (Cyclargus thomasi bethunebakeri).
- Evaluation of native and non-native plants (seed mixtures) in agricultural landscapes for the conservation of insect pollinators.

Selected Publications

Books and Book Chapters

- Daniels, J.C. 2012. Gardening and landscape modification: butterfly gardens. In R.H. Lemelin (ed.) The Management of Insects in Recreation and Tourism. Cambridge University Press, Cambridge, U.K. 365 pp.
- Daniels, J.C. and S. Takiela 2012. Wildflowers of the Southeast: Field Guide. Adventure Publications, Cambridge, MN.
- Daniels, J. C. 2010. Reintroduction of the Miami blue butterfly, Florida, USA. In Soorae, P. S. (ed.) Global Reintroduction Perspectives: Additional case-studies from around the globe (pp. 25-28). IUCN/ SSC Reintroduction Specialist Group, Abu Dhabi, UAE, xii + 352 pp.
- Daniels, J.C. and S. Takiela. 2010. Wildflowers of Florida: Field Guide. Adventure Publications, Cambridge, MN. 428 pp.
- Daniels, J.C. 2008. Butterfly Gardening. in J.L. Capinera (ed) Encyclopedia of Entomology Vol. 2, Kluwer Academic Publishers, Dordrecht, The Netherlands. pp. 675-683.
- Daniels, J.C. 2005. Butterflies of Michigan: Field Guide. Adventure Publications, Cambridge, MN. 414 pp.
- Daniels, J.C. 2004. Butterflies of the Carolinas: Field Guide. Adventure Publications, Cambridge, MN. 428 pp.
- Daniels, J.C. 2004. Butterflies of Georgia: Field Guide. Adventure Publications, Cambridge, MN. 414 pp.
- Daniels, J.C. 2004. Butterflies of Ohio: Field Guide. Adventure Publications, Cambridge, MN. 344 pp.
- Daniels, J.C. 2003. Butterflies of Florida: Field Guide. Adventure Publications, Cambridge, MN. 256 pp.

Peer-Reviewed Publications

Saarinen E.V. and J. C. Daniels. 2012. Using museum specimens to assess historical distribution and genetic diversity in an endangered butterfly. Animal Biology 62: 337-350

- Warren, V., J.C. Daniels and D.A. Hahn. 2011. Aquatic Respiration as a Potential Survival Mechanism of Brephidium pseudofea (Lepidoptera: Lycaenidae) Larvae to Intertidal Environments. Environmental Entomology 40:1295-1302.
- Trager, M.D. and J.C. Daniels. 2011. Size effects on mating and egg production in the Miami blue butterfly. Journal of Insect Behavior. 24:34-43.
- Saarinen E.V., J. D. Austin and J. C. Daniels. 2010 Genetic estimates of contemporary effective population size in an endangered butterfly indicate a role for genetic compensation. Evolutionary Applications 3: 28-39.
- Zhong, H., L.J. Hribar, J.C. Daniels, M.A. Feken, C. Brock and M.D. Trager. 2010. Aerial ultra-low-volume application of naled: Impact on non-target imperiled butterfly larvae (Cyclargus thomasi bethunebakeri) and efficacy against adult mosquitoes (Aedes taeniorhynchus). Environmental Entomology 39: 1961-1972.
- Daniels, J.C., 2010. Review of Insect Species Conservation, by T.R. New, Florida Entomologist 93: 663.
- Saarinen, E.V., J.C. Daniels and J.E. Maruniak. 2009. Development and characterization of polymorphic microsatellite loci in the endangered Miami blue butterfly (Cyclargus thomasi bethunebakeri). Molecular Ecology Resources 9: 242-244.
- Daniels, J.C. 2009. Cooperative conservation efforts to help recover and endangered south Florida butterfly. Insect Conservation and Diversity 2: 62-64.
- Trager, M. and J.C. Daniels. 2009 Ant tending of Miami blue butterfly larvae (Lepidoptera: Lycaenidae): Partner diversity and effects on larval performance. Florida Entomologist 92: 474-482.
- Trager, M. D., B. M. Boyd, J. C. Daniels and J. A. Pence. 2009. Host plant selection, larval survival and reproductive phenology in Megathymus yuccae (Lepidoptera: Hesperiidae). Environmental Entomology 38: 1211-1218.
- Daniels, J.C., E. Rodriguez and J.C. Whelan. 2008. The biology and immature stages of Panacea procilla lysimache (Lepidoptera: Nymphalidae) from Costa Rica, with the report of a new locality record. Tropical Lepidoptera Research 18: 80-83.
- Miller, J.Y., J.C. Daniels and T.C. Emmel. 2008. Planning for tomorrow: The future of entomological investments. Florida Entomologist 91: 139-144.
- Boyd, B. M., J.C. Daniels and G.T. Austin, G. T. 2008. Predaceous behavior by Helicoverpa zea (Boddie) (Lepidoptera: Noctuidae: Heliothinae). Journal of Insect Behavior 21: 143-146.
- Daniels, J.C. 2007. Courtship solicitation by females of the barred sulphur butterfly, Eurema daira (Lepidoptera: Pieridae). Journal of Insect Behavior 20: 129-135.
- Saarinen, E. V. and J.C. Daniels. 2006. Miami blue butterfly larvae (Lepidoptera: Lycaenidae) and ants (Hymenoptera: Formicidae): New information on the symbionts of an endangered taxon. Florida Entomologist 89: 69-74.