

## Curriculum Vitae

**Sandra E. Koi, MS**

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**Blog: <http://e-atala.blogspot.com>; <http://e-atala2.blogspot.com>**

### **Education**

Doctorate student, Earth and Environment, Florida International University, Miami FL 33199.

Master of Science, Entomology/Nematology, University of Florida, Gainesville, FL 32607  
(2013). Ecology and Conservation of *Eumaeus atala* Poey 1832. 296 pp.

Bachelor of Science, Environmental Science, Nova Southeastern University, Davie, FL 33314.  
(2008). Environmental Science, Field Studies in Ecuadorian Cloud Forests.

Ivy School of Professional Art, Fine Art, Pittsburgh, PA. (1975) (Defunct)

### **Selected Research Experience**

Institute for Regional Conservation, 100 E. Linton Blvd., Suite 302B, Delray Beach, FL. 33483.  
305-247-6547. Entomologist; butterfly and botanical surveys. 2015-2018.

Tropical Audubon Society, 5530 Sunset Drive, Miami, FL 33143. Entomologist; Education  
Director. 2014-2017.

University of Florida, Tropical Research and Education Center, 18905 SW 208 St., Homestead  
FL 33031. Biological Scientist, Ornamental Entomology Dept. July 2014-April 2015.

University of Florida, Florida Medical Entomology Laboratory, 200 9<sup>th</sup> Street SE, Vero Beach  
FL 32962. Entomologist; non-target insects in mosquito control study. Mar. 2014-June  
2014 (OPS).

USDA/ARS Biocontrol, Doyle-Connor Bldg., Gainesville, FL 32607. Entomologist; biocontrol  
of invasive plants. 2011-2013.

Florida Natural Areas Inventory, southeast Florida. Prepared field surveillance plans,  
performed field surveys for imperiled lepidoptera in southeast Florida and prepared data  
sheets for Florida State University. 2010-11.

Reynolds, Smith and Hills, 3125 West Commercial Blvd., Fort Lauderdale FL 33309. Sea grass  
& tree surveys, environmental impact reports, historical data on survey sites. 2008.

University of Florida, REC/IFAS, Entomology/Nematology Department, Nan-Yao Su, Termite Lab, Davie, FL. Mapped range and distribution of invasive termites in three southeast counties, curated specimens, data research, outreach education programs. 2004-2006

**Formal Teaching Experience:**

Florida International University, 11200 SW 8<sup>th</sup> Street, Miami FL 33199. Everglades Ecology. 2018-Current.

Nova Southeastern University, 3301 College Avenue, Ft. Lauderdale, FL 33314. Biology. 2017.

Temple Shir Shalom, 3855 NW 8th Ave., Gainesville, FL. Hebrew and Judaic studies, elementary levels and adult introduction. 2011-2013.

New Gate Montessori School, 11011 Clark Road, Sarasota, FL. Elementary art and after school nature program. 2008-2009.

Nova Southeastern University, Davie FL. Teaching Assistant Biology. Fall 2007.

Beacon Hill School, 7600 Davie Rd Extension. Hollywood, FL 33024. Visiting science professor. Bi-monthly, elementary school level. 2008.

Temple Sinai, 5545 Forbes Ave., Pittsburgh, PA. 15217. Hebrew and Judaic studies. Elementary grades. 1981-1987.

**Selected Informal Naturalist/Biologist Experience:**

Adult and Community Education Center, Sarasota, FL. Art and environmental awareness classes. 2009-2010.

Everglades Day Safari. Eco-tour guide in the Everglades, Big Cypress, and Chokoloskee Bay. 2007-08.

Dragonfly Expeditions, Inc. "Step-aboard" ecologist for South Florida tours. 2005-2006.

Florida Audubon Society, May 2002-April 2004. Environmental Education Department. Middle through high school level.

Programs throughout South Florida for Bonnet House, Ft. Lauderdale Historical Society, parks and recreation facilities, garden organizations, Miami-Dade and Broward Schools, etc. 1989-2006.

**Statement of Personal Interest: Butterfly Research**

I have mapped the distribution and range, and documented the population dynamics, life-history biology and behavior of adults and larvae, insect associates, host plant use, dispersal movements, integrated pest management practices, and colony sustainability of the Florida-imperiled hairstreak *Eumaeus atala*. I continue with this research.

## Publications

- Koi, S. and C. van der Heiden. 2018. Butterfly diversity on the Homestead Air Reserve military base in southeast Florida. Urban Ecosystems. *In review*.
- Koi, S. 2017. [A Butterfly Picks its Poison: Cycads \(Cycadaceae\), Integrated Pest Management, and \*Eumaeus atala\* Poey \(Lepidoptera: Lycaenidae\)](#). Entomology, Ornithology and Herpetology. 6:191. Doi:10.4172/2161-0983.1000191.
- Koi, S. and Daniels, J. 2017. [Life History Variation and Seasonal Polyphenism in \*Eumaeus atala\* Poey 1832 \(Lepidoptera: Lycaenidae\)](#). Florida Entomologist. 100(2): 219- 229.
- Ramírez-Restrepo, L., S. Koi and I. MacGregor-Fors. 2016. [Tales of Conservation in cities: The case of \*Eumaeus\* butterflies and their threatened cycad hostplants](#). Urban Ecosystems. Urban Ecosystems. Doi: 10.1007/s11252-016-0599-0.
- Koi, S. and D.W. Hall. 2016. [Eumaeus atala, Feature Creature](#). IFAS UF publication EENY-638. Oct.
- Koi, S. and J. Daniels. 2015. [New and revised life history of the Florida hairstreak \*Eumaeus atala\* \(Lepidoptera: Lycaenidae\) with notes on its current conservation status](#). Florida Entomologist. 98(4): 1134-1147. Dec.
- Koi, S. 2013. Ecology and Conservation of *Eumaeus atala* Poey 1832 (Lepidoptera: Lycaenidae). MS thesis, University of Florida. 294 pp.
- Koi, S. 2005-2013. Atala News, dedicated to butterfly conservation in south Florida. <http://e-atala.blogspot.com>; <http://e-atala2.blogspot.com>.
- Koi, S. 2008. [Nectar Sources for \*Eumaeus atala\* \(Lepidoptera: Lycaenidae: Theclinae\)](#). Florida Entomologist. 91(1):118-120. [http://doi.org/10.1653/0015-4040\(2008\)091\[0118:NSFEAL\]2.0CO;2](http://doi.org/10.1653/0015-4040(2008)091[0118:NSFEAL]2.0CO;2).
- Koi, S. 2007. [Removal of Non-Native Plants from John Williams Park in Hollywood, Florida](#). Wildland Weeds. 11(1): 4-5. Winter.
- Koi, S. 2005. Butterflies, Botany and Battlefields: How Florida History Impacted and was Influenced by a Cycad and an Insect. *GoRiverwalk*. 1(12): 92-94. Jan.
- Koi, S. 2004. Establishing Naturally Sustainable Wild Populations of the *Eumaeus atala florida* Röber (Lycaenidae: Lepidoptera) and its Larval Host Plant, Coontie (*Zamia* species) within Historically Documented Florida Sites. Undergraduate grant. National Fish and Wildlife Foundation, Budweiser Conservation Scholarship Program. (FL)#2004-0019-001). 110 pp.

## Relevant Honors and Awards

- Research grant, University of Florida, NATL mini-grant, “Caterpillar Predator Survey: Ecological implications of non-native reptile and amphibian predators of lepidopteran larvae in NATL.” 2013.
- Research grant, Florida Exotic Pest Plant Council, “Exotic Plant Removal at John Williams Park”, Hollywood, FL. 2006
- Research grant, National Fish and Wildlife Federation Grant, “Establishing Naturally Sustainable Wild Populations of the Butterfly *Eumaeus atala florida* (Lepidoptera: Lycaenidae) Röber and its Larval Host Plant, Coontie (*Zamia* species) within Historically Documented Florida Sites” 2004-5
- Alpha Chi Honor Society, ETA Chapter, Florida

Undergraduate Research Award, American Association of University Women, 2006

### **Selected Professional Lecture Experience and Presentations**

“Bucking the Taxonomic System: The *Junonia* Butterfly Clade”

“Ties that Bind: Florida Butterflies and Native Plants”

“Habitat Loss and Imperiled Butterflies”

“Biodiversity and Everglades Restoration: Invertebrate Taxa at Risk”

“An Imperiled Butterfly and Threatened Host Plants in an Endangered Pineland Ecosystem”

“Ecology and Conservation of the Imperiled Butterfly *Eumaeus atala* Poey 1832”

“Endangered, Threatened and Rare Native Plant Diversity in Pine Rocklands”

“Beyond the Monarch: Butterfly Migration in Florida”

“The Little Things that Run the World”

“Winged Jewels: Butterflies, Skippers and Moths”

“Host Plant Specialization in Papilionidae Butterflies”

“Butterflies, Botany and Battlefields”

*A complete list is available on request; special presentations can be developed for your organization!*

### **Memberships:**

Xerces Society for Invertebrate Conservation

North American Butterfly Association

Florida Entomological Society

National Wildlife Habitat Steward

Union of Concerned Scientists

### **Languages:**

English (proficient), Spanish (working knowledge), Hebrew (reading, writing)

### **Volunteer/Community Work**

-Land Acquisition Selection Committee, Miami-Dade County, 2016-current

-Miami Pine Rockland Preservation Coalition, founding member 2014, current

-North American Butterfly Association, 2003-current

-Imperiled Butterfly Work Group, Florida Wildlife Commission, 2007-current

-Everglades National Park, Homestead, FL. Deployed the Atala butterfly in a federally authorized assisted re-establishment project, 2004-2008

- Board of Directors, Broward County Audubon. 2004-06.

- National Wildlife Federation Steward 2001

- Master Gardener 1997