

Jason M. Martin

PhD Candidate, Dept. of Wildlife Ecology & Conservation
University of Florida
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Research Interests

Conservation biology, community ecology, predator-prey ecology, biology of raptors, landscape ecology, adaptive management, environmental education

Education

University of Florida, Gainesville, FL

Doctor of Philosophy, Wildlife Ecology and Conservation – August 2003-present
Dissertation: “Barn owls as biological controllers of rodents in the Everglades Agricultural Area”

University of Illinois, Champaign, IL

Master of Science, Natural Resources and Environmental Sciences – May 2003
Concentration: *Fish and Wildlife Ecology*
Thesis: “Status and ecology of Franklin’s ground squirrel (*Spermophilus franklinii*) in Illinois”

Ramapo College of New Jersey, Mahwah, NJ

Bachelor of Science, Biology – May 1998
Ramapo Presidential Scholarship: 1994-1998

Software

- MS Office (Word, Excel, PowerPoint, FrontPage)
- ArcView GIS 3.2
- ArcGIS
- SAS
- Program MARK
- ArcSoft PhotoStudio

Work History

Research

Graduate Research Assistant, University of Florida..... 8/03-present

- Captured (using mist nets and hand nets) and banded adult and juvenile barn owls (*Tyto alba*)
- Monitored nesting success of barn owls

- Analyzed diet of barn owl population via pellet dissection
- Manipulated barn owl density via nesting boxes
- Estimated and compared population abundance of cotton rats (*Sigmodon hispidus*), roof rats (*Rattus rattus*), and rice rats (*Oryzomys palustris*) in areas with and without barn owls using capture-recapture techniques
- Conducted feeding trial experiment to determine the relative impact of cotton rats, roof rats, and rice rats on sugarcane crops
- Hired, trained, and supervised employees and volunteers

Avian Field Assistant, University of Illinois, Champaign, IL..... 5/03- 8/03

- Conducted point count surveys of riparian passerines
- Located and monitored passerine nests
- Supervised field crews

Graduate Research Assistant, University of Illinois / Illinois Natural History Survey, Champaign, IL..... 9/01- 5/03

- Performed a statewide status assessment and examined the ecology of Franklin's ground squirrel (*Spermophilus franklinii*)
 - Conducted mail survey and state-wide live-trapping survey
 - GIS analysis of potential Franklin's ground squirrel habitat using ArcView 3.2
 - Used radio-telemetry and GPS/GIS techniques to examine juvenile dispersal
 - Monitored habitat use and performed population census of a single colony
- Monitored the small mammal community of a restored portion of the Illinois River floodplain
- Used ArcView 3.2 to prepare twenty years of spotlight survey data for analysis

Rufous-tailed Jacamar Field Assistant, Cornell University, Venezuela..... 11/01-1/02

- Assisted with a study examining the interactions of rufous-tailed jacamars (*Galbula ruficauda*) and *Heliconius* butterflies in the Venezuelan llanos
 - Delineated jacamar territories
 - Mist-netted and banded birds
 - Conducted cage experiments to monitor jacamar predation on butterflies

Barn Swallow Field Assistant, Cornell University, Ithaca, NY..... 5/00-8/00

- Assisted with a barn swallow (*Hirundo rustica*) behavioral ecology study
 - Mist-netted and banded birds
 - Collected morphological data and blood samples from adults and hatchlings
 - Performed intensive behavioral observations of nest activity

Blanding's Turtle Field Assistant, Hudsonia Ltd. – Bard College Field Station, Annandale, NY..... 5/99-6/99, 2/00

- Monitored a Blanding's turtle (*Emydoidea blandingii*) population in a mitigated wetland
 - Trapped, tagged, and collected morphological data on individual turtles
 - Monitored nesting activities using radio-telemetry
 - Constructed predator exclosures around nests

Teaching

Teaching Assistant – University of Florida, Conservation Genetics Spring 08

Teaching Assistant – University of Florida, Wildlife Techniques..... Spring 07

- Guest Lecturer** (“Biological Control: In Theory and In Practice”) – University of Illinois, Champaign-Urbana, NRES100 Fundamentals of Environmental Science..... 12/5/06
- Teaching Assistant** – University of Florida, Wildlife Habitat Management..... Spring 04
- Teaching Assistant** – University of Florida, Perspectives in Wildlife Ecology and Conservation, Fall 03
- Environmental Educator**, Anita Purves Nature Center, Urbana, IL.....8/01-11/01
- Taught classes including: owls, reptiles, insects, forest ecology, prairie ecology
- Naturalist**, Queens College Center for Environmental Teaching and Research, Huntington, NY..... 10/99-12/00
- Taught classes including: mammals, birds, reptiles, raptors, endangered species, forest ecology, salt marsh ecology, stream/pond ecology, sea shore ecology
 - Cared for and handled raptors and reptiles including: Barred owl, great-horned owl, screech owl, red-tailed hawk, kestrel, peregrine falcon, double-crested cormorant, red-tailed boa constrictor, Burmese python, green iguana, various turtles
- AmeriCorps Environmental Educator**, Dutchess Land Conservancy / Institute of Ecosystem Studies, Millbrook, NY..... 9/98-7/99
- Attended Project WILD, Project WILD Aquatic, Project WET, and Project Learning Tree environmental education workshops
 - Taught classes including: stream ecology, watershed ecology, and ecologically sound community planning
 - Co-Authored “Wandering the Wappinger Creek: An Interpretive Guide to a Watershed”

Peer Reviewed Publications

- 2007 **Martin, J.M.**, R.N. Raid, and L.C. Branch. Quantifying damage potential of three rodent species on sugarcane. *Journal of the American Society of Sugarcane Technologists* 27:48-54.
- 2005 **Martin, J.M.** and E.J. Heske. Juvenile dispersal of Franklin’s ground squirrel (*Spermophilus franklinii*) from a prairie island. *American Midland Naturalist* 153:444-449.
- 2004 **Martin, J.M.** and E.J. Heske. Cover and soil drainage influence burrow location of Franklin’s ground squirrel (*Spermophilus franklinii*) in Champaign County, Illinois. *Trans. of the Illinois State Academy of Science* 97(3&4):227-233.
- 2003 **Martin, J.M.**, E.J. Heske, and J.E. Hofmann. Franklin’s ground squirrel in Illinois: A declining prairie mammal? *American Midland Naturalist* 150(1):130-138.

Non-Peer Reviewed Publications

- 2007 Heske, E.J., **J.M. Martin**, and T. Hobson. Small mammals: You built it, they came *in* Spunky Bottoms: restoration of a big-river floodplain. *Proceedings of the Spunky Bottoms Restoration Symposium*, May 2003 (E.J. Heske, J.R. Herkert, K.D. Blodgett, and A.M. Lemke, eds.). *Illinois Natural History Survey Special Publication* 29, Champaign, IL.
- 2006 **Martin, J.M.** University of Florida Barn Owl Project Website (<http://erec.ifas.ufl.edu/barnowl/owlindex.htm>)

2005 **Martin, J.M.** Status assessment of gopher tortoise (*Gopherus polyphemus*) in Okeehchee County Park, West Palm Beach, Florida. (Report prepared for Palm Beach County Parks and Recreation Department)

2005 **Martin, J.M.** Barn owl (*Tyto alba*). Electronic Data Information Source (EDIS), University of Florida/Institute of Food and Agricultural Sciences Extension (<http://edis.ifas.ufl.edu/UW216>)

2002 **Martin, J.M.** What happened to Franklin's ground squirrel? Illinois Natural History Survey Reports, Summer 2002 (No. 372)

2001 **Martin, J.M.**, E.J. Heske, and J.E. Hofmann. A status survey of the Franklin's ground squirrel (*Spermophilus franklinii*) in Illinois. Illinois Natural History Survey Technical Report No. 15

Presentations

2008 **Martin, J.M.** Consequences of using Barn Owls as biological controllers of pest rodents in the Everglades Agricultural Area. Everglades Research & Education Center's "First Friday Seminar Series", University of Florida, Belle Glade, FL, March 7.

2007 **Martin, J.M.** Barn owl management in the Everglades Agricultural Area: A biological control case study. University of Florida Student Chapter of the Wildlife Society meeting, September 24.

2007 **Martin, J.M.**, R.N. Raid, and L.C. Branch. Can Barn Owls reduce rodent abundance in sugarcane? 37th Annual Joint Meeting of the American Society of Sugar Cane Technologists, New Orleans, LA, June 13-15 (*Best Presentation Award – Agricultural Section*).

2007 **Martin, J.M.**, R.N. Raid, and L.C. Branch. Consequences of utilizing barn owls as bio-controllers of rodents. 13th Annual Florida Ecology & Evolution Symposium, Lake Placid, FL, April 13-15.

2007 **Martin, J.M.** Are Barn Owls biological controllers of rodents in the Everglades Agricultural Area? University of Florida, Department of Wildlife Ecology & Conservation, Eco-Think-tank, January 17.

2006 **Martin, J.M.** Are Barn Owls biological controllers of rodents in the Everglades Agricultural Area? Palm Beach County UF-IFAS Extension Unit Agricultural Bus Tour, Belle Glade, FL, November 9.

2006 **Martin, J.M.** Are Barn Owls biological controllers of rodents in the Everglades Agricultural Area? Florida Wildlife Rehabilitators Association 17th Annual Symposium, Brooksville, FL September 27-29.

2006 **Martin, J.M.** Barn Owls in the Everglades Agricultural Area. Okeehchee Nature Center, West Palm Beach, FL March 10.

2006 **Martin, J.M.** Barn Owls in the Everglades Agricultural Area. Glades/Hendry Chapter of the Audubon Society, La Belle, FL February 14.

2006 **Martin, J.M.** Are Barn Owls impacting pest rodents in south Florida sugarcane? Big "O" Birding Festival, Clewiston, FL January 29.

2004 **Martin, J.M.** and E.J. Heske. Juvenile dispersal of Franklin's ground squirrel (*Spermophilus franklinii*) from a prairie "island". Illinois Chapter of The Wildlife Society, Collinsville, IL March 2-4.

2003 **Martin, J. M.** and E. J. Heske. Habitat use and juvenile dispersal of Franklin's ground squirrel (*Spermophilus franklinii*) in Champaign County, Illinois. Midwest Fish and Wildlife Conference

Posters

2006 **Martin, J.M.**, R.N. Raid and L.C. Branch. Quantifying the rodent community in the Everglades Agricultural Area and the relative impact of individual rodent species on sugar cane. 36th Annual Joint Meeting of the American Society of Sugar Cane Technologists, St. Petersburg, FL, June 14-16.

2006 **Martin, J.M.** Biological control or ecological trap: Management of Barn Owls (*Tyto alba*) in south Florida agriculture. Florida Chapter of The Wildlife Society annual conference, Cocoa Beach, FL, April 5-7.

2004 **Martin, J.M.** and R.N. Raid. Barn Owls as a sustainable means of rodent control in south Florida agriculture. 1st World Congress of Agroforestry, Orlando, FL, June 28, 2004.

2004 Raid, R.N., **J.M. Martin**, J.Teets, and J. Collins. An analysis of Barn Owl (*Tyto alba*) prey diversity in the Everglades Agricultural Area of South Florida. 34th Annual Joint Meeting of the American Society of Sugar Cane Technologists, St. Petersburg, FL

2001 **Martin, J.M.**, E.J. Heske, and J.E. Hofmann. A status survey of the Franklin's ground squirrel (*Spermophilus franklinii*) in Illinois. Midwest Fish and Wildlife Conference, Des Moines, IA

2001 Heske, E.J., T.R. Van Deelen, C. Hoffman, **J. Martin**, R. Bluett, and G. Hubert. Twenty years of spotlight surveys: variation in abundance of four species of mammalian predators in Illinois. American Society of Mammalogists

Informal Education Programs

1/26/08 - Space Coast Birding Festival, Titusville, FL (owl pellet dissection program and barn owl nest box building workshop)

1/27/07 – Space Coast Birding Festival, Titusville, FL (owl pellet dissection program and barn owl nest box building workshop)

11/19/06 – Owl pellet dissection program at Okeeheelee Nature Center, West Palm Beach, FL

11/5/06 – Naturalist badge barn owl program for Boy Scout Pack 150, Palm Beach Gardens, FL

5/26/06 – Science fair judge, Eckerd Youth Camp, Clewiston, FL

5/12/06 – Owl pellet dissection program at Eckerd Youth Camp, Clewiston, FL

4/22/06 – Okeeheelee Nature Center's Earth Day Festival (owl pellet dissection program), West Palm Beach, FL

4/06 – Designed gopher tortoise educational poster for Okeeheelee Nature Center

4/13/06 – Owl pellet dissection program for Wellington home school group, Wellington, FL

3/11/06 – H.L. Johnson Elementary School Barn Owl Day

1/29/06 – Big “O” Birding Festival (owl pellet dissection program, barn owl tour/banding demonstration), Clewiston, FL

1/13-1/29/06 – Designed barn owl education program for the South Florida Fair

11/10/05 – Space Coast Birding Festival, Titusville, FL (owl pellet dissection program and barn owl nest box building workshop)

5/17/05 – Farm/barn owl program at King Ranch, Belle Glade, FL

5/10/05 – Barn owl box building workshop, Lantana Elementary School, West Palm Beach, FL

4/30/05 – H.L. Johnson Elementary School Barn Owl Day

1/29/05 – Big “O” Birding Festival (barn owl tour), Clewiston, FL

11/20/04 – Owl prowl for the Florida Trail Association

10/28/04 – Owl ecology/pellet dissection program for Lake Butler Elementary School, Gainesville, FL

10/9/04 – Florida Birding Festival, owl pellet dissection program, St. Petersburg, FL

7/8/04 – Owl pellet dissection program at Eckerd Youth Camp, Clewiston, FL

Research Support

2007 Martin, JM. University of Florida Graduate Student Council Travel Grant (\$250)

2007 Martin, JM. Florida Wildlife Federation Scholarship (\$500)

2006 Martin, JM. University of Florida, Dept. of Wildlife Ecology and Conservation Travel Grant (\$120)

2006 Martin, JM. Florida Sugar Cane League – Agricultural Research Grant. (\$10,000)

2005 Martin, JM. Florida Ornithological Society Research Award. (\$1500)

2005 Martin, JM. Florida Sugar Cane League – Agricultural Research Grant. (\$10,000)

2004 Martin, JM. William and Else Jennings Scholarship Fund. Department of Wildlife Ecology and Conservation, University of Florida. (\$1500)

2003 Martin, JM and EJ Heske. Population ecology of Franklin’s ground squirrel (*Spermophilus franklinii*) in east-central Illinois. Illinois Wildlife Preservation Fund. (\$550)

Memberships in Professional Organizations

The Wildlife Society, National Chapter, 1999-present
University of Illinois Chapter, 2001-present
Chair – Education Committee, 2001-2002
Stewardship Committee, 2001-2002
American Society of Mammalogists, 2004
Raptor Research Foundation, 2005-present
American Ornithologists' Union, 2006
American Society of Sugar Cane Technologists, Florida Division, 2007

Other Organizational Involvement

Wildlife Graduate Student Association, University of Florida, 2003-present
Secretary - Spring 2004
Treasurer – Spring 2007

References

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