

Joe E. Meisel, Ph.D.

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Education

Ph.D., Zoology, University of Wisconsin, December 2004
M.Sc., Wildlife Ecology & Conservation, University of Florida, August 1995
Santa Fe Institute of Complex Systems, June 1995
BA., Biology, University of Virginia, May 1988

Publications

Meisel, J.E. 2006. Thermal ecology of the Neotropical army ant *Eciton burchellii*. *Ecological Applications* 16(3): 913-922.
Meisel, J.E. and C.L. Woodward. 2005. Andean orchid conservation and the role of private lands: a case study from Ecuador. *Proc. of the 2nd Int'l Orchid Conservation Congress. Selbyana* 26 (1,2): 49-57.
"Tropical Environments and Ecological Concepts: A Review." 2001. *EcoScience* 8(4): 530-531.
Meisel, J.E., and M.G. Turner. 1998. Application of semivariograms to real and artificial landscapes. *Landscape Ecology* 13: 347-62.
Meisel, J.E. Foraging behavior of the army ant *Eciton burchellii* in tropical forest fragments. In review (*Ecological Entomology*).
Meisel, J.E. Behavior of ant-following birds in tropical forest fragments. In prep.
Rogers, D.W. and J.E. Meisel. Diversity and survivorship of bird populations in banana plantation forest fragments. In prep.

Presentations

"Army Ants in Small Forest Fragments: Keystone Predators in a Human-managed Landscape." Association of Tropical Biology and Conservation Conference, 2004.
"Modern Approaches to Orchid Conservation in the Tropics: the El Pahuma Orchid Reserve, Ecuador." Featured speaker at the annual San Diego County Orchid Society meeting, 2004.
"Bird use of isolated trees in pasture traverses." AFO/ABA Conference, 1997.
"Examination of geostatistical tools in landscape ecology." Landscape Ecology Conference, 1996.
"Simulation of foraging success in animals of varying body mass." Landscape Ecology Conference, 1995.
"Detection of spatial patterns in remotely sensed imagery." Landscape Ecology Conference, 1995.

Professional Experience

December 1997 - present

Vice-president and founder, Ceiba Foundation for Tropical Conservation, dedicated to habitat conservation on private lands, biodiversity surveys and environmental education in Ecuador. Established the El Pahuma Orchid Reserve via South America's first conservation easement involving a local landowner, and the Lalo Loor Dry Forest Reserve protecting one of the last remnants of coastal forest. Other projects include local capacity building and environmental education, and instruction of field courses (summer and semester) in tropical ecology and conservation for US university students.

January 2007 - present

Adjunct Professor, Universidad San Francisco de Quito, Ecuador. Instructor for the Tropical Conservation Experience, an intensive field-based semester abroad program.

July & August 1999 - 2006

Instructor, tropical ecology field courses in Ecuador, Ceiba Foundation. Responsible for all aspects of course development, lectures, logistics, field activities, and grading.

January - June 2005

Instructor, Boston University Tropical Ecology Program, Ecuador. Taught lectures on a range of topics (mammals, insects, birds), lead field activities, advised students, wrote exams, and set grades.

August - December 2004

Co-developer, Tropical Ecology and Conservation online course, University of Wisconsin - Madison. Responsible for course design, syllabus creation, lecture writing and narration, and web programming.

September 1997 - December 2004

Doctoral student, Department of Zoology, University of Wisconsin - Madison. Examined the effects of forest fragmentation on the foraging and thermal ecology of the tropical army ant *Eciton burchellii*, and on the foraging behavior of ant-following birds. Broader interests include enhancement of biodiversity in intensively managed or fragmented landscapes.

July 2003

Mentor, Organization of Tropical Studies Research Education for Teachers program, Costa Rica. Advised visiting high-school teachers conducting independent research projects.

June - August 1999

Field study of the influence of powerline clearings on the movement of forest interior birds in fragmented landscapes in Panama. Research supported by a LAIS/Tinker Foundation award.

April 1998

Co-instructor, Tropical Ecology course, Save The Rainforest and ANCON, Panama. Led high school students in diverse tropical habitats, visited indigenous villages, and gave classroom and field lectures.

November 1997 - April 1998

Crew member, Smithsonian Migratory Bird Center project on Neotropical migrant use of forest patches, Panama. Netted and banded birds, and created GIS database of land uses near field sites.

August - September 1997

Administrator (interim), Tiputini Biodiversity Station, Amazonian Ecuador, a field research and education facility operated by the Universidad San Francisco de Quito.

June - July 1997

Teaching Assistant, Institute of Tropical Ecology and Conservation (ITEC) Coral Reef Ecology field course, Bocas del Toro, Panama.

September 1995 - January 1996

Doctoral student, investigated geostatistical tools such as semivariograms commonly used in landscape ecology, with Dr. Monica Turner. Results published in *Landscape Ecology*, 1998.

July - August 1996

Conducted field research in Costa Rica on the influence of land uses on birds in neighboring forest patches. Research supported by the Zoological Society of Milwaukee County.

June 1995

Supported participant, Santa Fe Institute's Complex Systems Summer School, New Mexico.

September 1992 - May 1995

Tropical Conservation and Development Research Fellow, University of Florida. Drs. Lyn Branch and C.S. Holling, advisors. Investigated the relationship between body masses of tropical avian communities and landscape structural diversity, through development of individual-based computer models and novel remote sensing techniques.

Grants and Awards

San Diego County Orchid Society Orchid Conservation Grants, 1999, 2002, 2004, 2005-2007
University of Wisconsin Zoology Department Graduate Research Awards, 1999-2002
University of Wisconsin Vilas Travel Awards, 2001, 2002, 2004
American Orchid Society Conservation Award, 1999
Fauna & Flora International 100% Fund Award, 1999
University of Wisconsin LAIS/Tinker Foundation Field Research Grant, 1996, 1999
Zoological Society of Milwaukee Conservation Research Grant, summer 1996
Best student presentation (runner-up), International Landscape Ecology Conference, 1996
Santa Fe Institute Complex Systems Summer School supported participant, 1995
University of Florida Tropical Conservation and Development Research Fellow, 1992-1994
University of Virginia Biology Student of the Year (runner-up), 1987

Technical Skills & Languages

Computer skills: GIS (ArcMap, ArcInfo, ERDAS), statistics (SAS, JMP), programming (Visual Basic, Excel macros), web design (Dreamweaver, html, flash), MS Office, operating systems (PC/Mac/Unix).
Field experience: mistnetting and banding, point counts, Berlese funnels, GPS mapping, surveying.
Spanish fluency (written & spoken) with 15 years experience; near fluency in French.