CURRICULUM VITAE

JEREMY DAVID ASH

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EDUCATION

Graduate – University of Wisconsin-Madison
Degree – Ph.D. in Botany, *current*
Dissertation advisor – Professor Don Waller

Miami University, Oxford, Ohio
Degree – M.S. in Botany, Certificate in Ecology, August 2007
Thesis – Assessment of sustainable harvest of *Chamaedorea radicalis* leaves in the El Cielo Biosphere Reserve, Mexico
Thesis advisor – Professor David Gorchov

Undergraduate – McGill University, Montreal, Quebec
Major – Environmental Science; Specialization: Biodiversity and Conservation
Degree – B.Sc., 2003

PROFESSIONAL EXPERIENCE

Graduate Assistant *Aug. 2012 – Present*
University of Wisconsin-Madison, WI
- Investigation of how variable shifts in temperature and precipitation patterns across Wisconsin have affected the abundance and distributions of forest understory plants
- Characterizing both species and community responses and seeking to link species-specific responses to their geographic ranges and functional traits
- Exploring how including functional traits and phylogenetic relationships in the construction of species distributions models may improve out ability to predict species and community responses to future climate change

Research Specialist *May 2011 – Aug. 2012*
University of Wisconsin-Madison, WI
- Coordinated and convened workshops across the Upper Midwest on climate change and natural resource management to identify regional management priorities
- Collaborated with state, Tribal and federal government entities to identify a list of terrestrial species for detailed vulnerability assessment
- Conducted quantitative vulnerability assessment for a subset of priority species using spatially-explicit simulation models

Conservation Reserve Planner *Nov. 2010 – Mar. 2011*
Ministry of Natural Resources, Bancroft District, ON
- Lead planning process for development of management direction for conservation reserves and serve as a liaison to local First Nations, stakeholders and the public
- Facilitate district and regional review of documents, and aboriginal, public and stakeholder involvement; and revise documents as per planning/regional team decisions

Species at Risk Technician *Nov. 2009 – Feb. 2010*
Ministry of Natural Resources, Aurora District and Toronto and Region Conservation Authority, ON

- Expanded on a species at risk occurrence database for the Greater Toronto Area and fostered data sharing partnerships with naturalist groups and relevant agencies
- Wrote a data reporting protocol to enhance public submission of species at risk data to Ministry of Natural Resources

Internship in Department of Statistics *May 2009 – Aug. 2009*
University of Florida, FL

- Multivariate statistical analysis of long-term ecological monitoring data from coral reef communities in the Florida Keys National Marine Sanctuary
- Identified trends in spatiotemporal dynamics of coral reef community structure, implemented advanced statistical analyses and managed long-term database

Graduate Assistant *Aug. 2007 – May 2009*
University of Florida, FL

- Investigated threatened longleaf pine savanna communities under varying fire regimes
- Developed a monitoring protocol to sample overstory composition and highly diverse herbaceous layer (i.e,, up to 40 species in a 1 m^2 quadrat)
- Established permanent plots and collected baseline data to monitor community composition across a varied fire return interval

Graduate Assistant *Aug. 2005 – Aug. 2007*
Miami University of Ohio, OH

- Collection and demographic modeling of long-term monitoring data to develop sustainable harvest criteria for a threatened palm species in the El Cielo Biosphere Reserve, Mexico
- Installed permanent plots and collected data on over 5,000 individual palms
- Established and maintained partnerships with local communities

Research Assistant *Jan. – July 2005*
Archbold Biological Station, FL

- Investigated reproductive ecology and population dynamics of rare plant species and engaged in extensive monitoring efforts
- Monitored species on both public conservation and private landowner properties, maintaining effective and collaborative conservation partnerships
- Worked on recovery efforts, including large scale reintroductions, best management practices and disturbance ecology of threatened communities

Volunteer Resident Naturalist *Jan. – July 2004*
University of Georgia's Ecolodge San Luis and Research Station, San Luis, Costa Rica

- Environmental education for school groups (all levels) and tourists, with a focus on tropical ecology and natural history
- Duties included: teaching plant/insect workshops and cloud forest ecology lectures; guiding interpretive hikes, bird walks, night hikes and tours of medicinal plant garden; functioning as translator for coffee farm tours; general upkeep of station

Research Experience for Undergraduates (REU) Intern *June – Aug. 2003*
Mountain Lake Biological Station, Pembroke, Virginia

- Pollination ecology and evolution of floral displays in *Silene virginica* and *S. stellata*
- Duties included: monitoring reproductive phenology, pollinator observations and lab work
- Conducted independent research project: The Effects of Bee and Moth Mediated Selection on Floral Trait Combinations in *Silene stellata* (Caryophyllaceae)

Environmental Research Intern *Aug. – Dec. 2002*

McGill University and Nature Conservancy of Canada, QC

- Collaborated in a student team to develop a biodiversity management plan
- Constructed site-specific management recommendations for flora, fauna and habitat
- Co-authored a detailed management plan and presented findings to clients

ADDITIONAL RESEARCH & FIELD EXPERIENCE

Tropical Ethnobotany *July – Aug. 2004*

Institute for Tropical Ecology and Conservation, Bocas del Toro, Panama

- Introduction to ethnobotany, with focus on anthropological field methods, tropical ecology and plant taxonomy
- Conducted research on use of biological indicators for biomedical potential of plants

Environmental Research *Sep. – Dec. 2002*

McGill University, Montreal, Quebec

- Participated in the development of a biodiversity management plan in partial fulfillment of course requirements and in conjunction with the Nature Conservancy of Canada, Quebec Region

Sub-arctic Field Studies *Aug. 2002*

McGill University Northern Field Station, Schefferville, Quebec

- Geography of the sub-arctic with emphasis on application of field methods in physical and biogeography
- Conducted research on micro-topographic influence on plant species richness of a patterned fen

TEACHING EXPERIENCE

Teaching assistant: General Ecology, Department of Botany, University of Wisconsin-Madison, 2012-2014

Lab Instructor: Introductory Botany, Department of Biology, University of Florida, 2008

Lab Instructor: Plant Ecology, Department of Biology, University of Florida, 2008

Teaching assistant: Environmental Principles, Department of Botany, Miami University, 2007

Teaching assistant: Plant Ecology, Department of Botany, Miami University, 2007

Instructor: Field Botany, Department of Botany, Miami University, 2006

PUBLICATIONS & PRESENTATIONS

Ash, J.D. and D.M. Waller. *In prep*. Spatial signals of climate change in the abundance and distribution of understory species in Wisconsin over 50 years.

Ash, J.D., D.L. Gorchov and B.A. Endress. 2013. Rapid assessment of sustainable harvest from non-timber forest products: an example using the understory palm, *Chamaedorea radicalis*. Southwestern Naturalist.

LeDee, O., **J. Ash**, K. Martin and W. Karasov. 2012. Building partnerships and establishing consensus on regional priorities across the Upper Midwest and Great Lakes Landscape Cooperative. Final report (year 1) to U.S. Fish and Wildlife Service for the project titled "Identification of the Most Climate Vulnerable Terrestrial Species and Natural Communities in the Upper Midwest and Great Lakes Landscape Conservation Cooperative."

Callis, K.L., L.R. Christ, J. Resasco, D.W. Armitage, **J.D. Ash**, T.T. Caughlin, S.F. Clemmensen, S.M. Copeland, T.J. Fullman, R.L. Lynch, C. Olson, R.A. Pruner, E.H.M. Vieira-Neto, R. West-Singh, and E.M. Bruna. 2009. Improving Wikipedia: educational opportunity and professional responsibility. Trends in Ecology and Evolution. 24(4): 177-179.

Ash, J.D., D.L. Gorchov and B.A. Endress. Assessment of sustainable leaf harvest from the understory palm, *Chamaedorea radicalis*. Association for Tropical Biology and Conservation, July 2007, Morelia, Mexico.

Danielson, N.D., S. Chakravarty, D.L. Gorchov and **J.D. Ash**. Isocratic liquid chromatography of glucosinolate-derived compounds. Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy. Pittcon, March 2006, Orlando, Florida.

GRANTS & AWARDS

Grinter Fellowship, Department of Botany, University of Florida. 2007-2009.

Heimsch Award in Botany for Outstanding M.S. Student, 2007.

Academic Challenge Grant, Department of Botany, Miami University. 2006. Assessment of sustainable harvest of *Chamaedorea radicalis* leaves in the El Cielo Biosphere Reserve, Mexico.

Academic Challenge Start-up Grant, Department of Botany, Miami University. 2005. Development of a rapid assessment protocol for sustainable leaf harvest from *Chamaedorea radicalis*.

Master's Thesis Research Support, Associate Provost for Research and Dean of Graduate School, Miami University. 2005. Development of a rapid assessment protocol for sustainable leaf harvest from *Chamaedorea radicalis*.

PROFESSIONAL SERVICE

Technology Committee, Department of Botany, University of Wisconsin, 2014-2015

Graduate student representative to the Graduate Student Council, Department of Botany, University of Florida, 2007 – 2009

Graduate student representative to Graduate Student Association, Department of Botany, Miami University, 2005 – 2006

Journal Reviewer: *Ecología en Bolivia* and *Forest Science*