CATHERINE L. WOODWARD

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EDUCATION

Ph.D., Botany, University of Wisconsin-Madison, 1999-2005.

Research interests: Gene flow and reproductive success of tropical trees in a fragmented Costa Rican landscape. Graduation date: December 2005.

Master of Science, Botany, University of Florida-Gainesville 1992-1995.

Thesis research: The effect of soil compaction and topsoil removal on soil physical and chemical properties and growth of planted seedlings. Fieldwork conducted in Napo Province, Ecuador. Coursework in botany, ecology, statistics, plant taxonomy, and soil science.

Bachelor of Science, Psychology, University of Wisconsin-Madison 1986-1990.

TEACHING EXPERIENCE

- Faculty Associate/Lecturer, University of Wisconsin Madison, August 2004 present. Currently teach Dendrology (Botany 402). Obtained funding for, co-developed, and taught upper level online course in botany and environmental studies, Botany 575: "Tropical ecology and conservation".
- **Professor, Boston University Tropical Ecology Program, Jan. May 2005.** Team taught undergraduate semester abroad ecology program in Ecuador, South America. Gave lectures, co-led field trips to sites countrywide, advised and evaluated students.
- Field Course Instructor, Ceiba Foundation for Tropical Conservation, Chicago, IL, 1999 present. Codeveloped and currently co-teach tropical ecology field course each summer in Ecuador. Coordinate all educational and logistical aspects of the course, present lectures, lead field trips to many ecosystems around Ecuador, and teach ecological research methods to international undergraduate students. (http://www.ceiba.org/courses.htm)
- Project and Teaching Assistant, Department of Botany, Madison, WI, August 2003 May 2004. Codeveloped interdisciplinary web course on Midwestern environmental issues during fall semester. Wrote curriculum material and designed website. Acted as teaching assistant and webmaster for the course during Spring '04 semester. (http://www.botany.wisc.edu/courses/botany_450)
- Graduate Teaching Assistant, Departments of Botany, Zoology and Biological Core Curriculum, University of Wisconsin-Madison, various semesters in 1998, 1999, 2000, 2001, 2004. Taught laboratory sections and discussions for: General Ecology 460, Vegetation of Wisconsin 455, Ecology, Evolution and Genetics 332, Introductory Botany 130, and Zoology 101.
- Graduate Teaching Assistant, Biological Sciences, University of Florida, Gainesville, FL 1992-1994.

 Taught laboratory sections and discussions for Plant Physiology and Introductory Biology (for majors).

Field Course Instructor, Costa Rica and Panama, Summer 1995 & 1996. Taught and assistant-taught field courses in primatology (with Estación Biológica La Suerte), coral reef ecology (with Institute for Tropical Ecology and Conservation), and rainforest ecology (with Save the Rainforest and the Smithsonian Tropical Research Institute) at the highschool and college level (in English and Spanish).

RESEARCH AND CONSERVATION EXPERIENCE

President/Co-founder, Ceiba Foundation for Tropical Conservation, Chicago, IL, June 1997 - present. Plan, execute and oversee conservation projects on a voluntary basis for this 501(c)(3) organization dedicated to conservation, research and environmental education in the tropics, primarily in Ecuador. Wrote and implemented the second conservation easement in South America to protect cloud forest in Pichincha province. (http://www.ceiba.org)

Predoctoral Fellow, Smithsonian Tropical Research Institute, Panamá. January – May 2001. Assessed, compared and optimized AFLP and microsatellite protocols for detection of genetic variation in several species of tropical understory trees, as well as their mycoendophytic symbionts.

Project Assistant, Livestock/Natural Resource Interface Project, UW – Madison, Fall 1998. Assisted in all aspects of planning and coordination of this multidisciplinary, USAID funded international project focused on sustainable livestock management in Ecuador and Bolivia. Evaluated, recruited and communicated with in-country project partners, wrote and translated project documents, organized international meetings.

Research Assistant, Smithsonian Migratory Bird Center, Panamá, Central America, August 1997 - March 1998. Assisted in a study of use of forest fragments by nearctic migratory birds. Conducted over 1000 hours of mist-netting and banding of resident and migratory birds, digitized aerial photos to map forest fragments and surrounding landuse using GPS/GIS.

GRANTS AND AWARDS

- Vilas Travel Award to present at ATBC conference, \$1500. 2004.
- National Science Foundation, Doctoral Dissertation Improvement Grant, \$9,950. 2002
- OTS/STRI Collaborative Research Fellowship, \$9,940. August 2001.
- Garden Club of America, Award in Tropical Botany, \$5,500. June 2001.
- Sigma Delta Epsilon/Graduate Women in Science Ruth Dickie Scholarship, \$3000. September 2000.
- Organization for Tropical Studies Fellowship, \$3,000. November 1999, renewed in 2001.
- Smithsonian Tropical Research Institute, Short-term Research Fellowship, \$2,750. March 2000.
- Travel grant, Institute for Environmental Studies, UW-Madison, \$900, June 1996.
- Graduate Excellence in Teaching Award, University of Florida-Gainesville, \$500, 1993.
- Wildlife Conservation Society grant for Master's research, May 1993, renewed January 1994.
- Scholarship, Northeastern University, 1990, for field study in Ecuador.

PUBLICATIONS AND PUBLIC PRESENTATIONS

Woodward, C., P. E. Berry and H. Maas-van de Kamer. 2006. *Tiputinia foetida*, a new mycoheterotrophic genus of Burmanniaceae (subfamily Thismioideae) from Amazonian Ecuador, and a likely case of deceit pollination. Taxon, 56(1).

Herre, E.A., S. A.Van Bael, Maynard, Z., Robbins, N., Bischoff, J., Arnold, A. E., Rojas, E., Mejia, L.C.,
R. A. Cordero, C. Woodward, and D.A.Kyllo. 2005 (in press). Tropical plants as chimera: some implications of foliar endophytic fungi for the study of host plant defense, physiology, and genetics. *In:* Burslem, D.F.R.P., Pinard, M.A. & Hartley, S.E. (eds). *Biotic Interactions in the Tropics*.
Cambridge University Press.

- Woodward, C. 2005. Reproductive and genetic consequences of forest fragmentation on two tropical understory trees species. Ph.D. Dissertation. University of Wisconsin Madison.
- Woodward, C. 2004. "Reproductive consequences of forest fragmentation on two tropical understory trees". Presented at the Association for Tropical Biology and Conservation conference, Miami, FL. July 2004.
- Meisel, J. and C. Woodward. 2004. Andean orchid conservation and the role of private lands: A case study from Ecuador. Proceedings of the IV International Orchid Conservation Congress. Marie Selby Botanical Gardens. May 16-23, Sarasota, FL.
- Woodward, C. 2001. "Forest fragmentation and private lands conservation in Ecuador". Invited speaker at the Docent's Meeting of the Olbrich Botanical Garden, Madison, Wisconsin.
- Woodward, C. (representing the Ceiba Foundation for Tropical Conservation) 1999. "Conservation Easements in Latin America Case Study: The El Pahuma Orchid Reserve, Ecuador". Presented at the Land Trust Rally, October 14-15, Snowmass, Colorado.
- Woodward, C. (representing the Ceiba Foundation for Tropical Conservation) 1999. "Conservación de Tierras Privadas en Latino America. Las servidumbres ecológicas en Ecuador". Presented at the Segundo Congreso de Conservación de Tierras Privadas, November 4, Sarapiquí, Costa Rica.
- Woodward, C. 1995. Soil compaction and topsoil effects on soil properties and seedling growth in Amazonian Ecuador. Forest Ecology and Management, 82: 197-209.
- Woodward, C. 1995. "Indigenous people and oil development in Amazonian Ecuador". Invited presentation for the Special Seminar Series. Botany Department, University of Wisconsin, Madison.
- Woodward, C. 1994. "El efecto de remocíon del topsoil y compactación del subsuelo sobre el crecimiento de plántulas de tres especies tropicales". Invited presentation at the Simposio Cientifico del Componente de Investigación y Monitoreo del Proyecto Subir. CARE/INEFAN/USAID, Quito. June.

SPECIAL SKILLS and ABILITIES

- Foreign Languages: Fluent in Spanish, intermediate in French
- Extensive knowledge of flora and fauna of the neotropics and ecological field research methods.
- Experienced in molecular genetics laboratory techniques including PCR, AFLP, SSR, and automated DNA sequencing/genotyping using Li-Cor, ABI and MJ BaseStation sequencers.
- Computer proficiency: Windows and Mac OS, Office applications, Macromedia Dreamweaver, Flash, HTML programming, SAS, ArcGIS, GeneScan, Arlequin, GenePop, PHYLIP and other genetic analysis programs, desktop publishing, Internet and email applications.
- Outdoor enthusiast with hobbies including gardening, birdwatching, swimming, spelunking, scuba diving, mountain biking and canoeing.