

**School for Environment and Sustainability (SEAS)
University of Michigan
440 Church St., Ann Arbor, MI 48109-1041
(734) 358-0396 / E-mail: schuel@umich.edu**

EDUCATION

University of Michigan, Ann Arbor, MI

Ph.D. in Ecology and Evolutionary Biology (2002)

Dissertation: Hummingbird pollination and floral evolution of introduced *Nicotiana glauca* and native *Epilobium canum*: California island-mainland comparisons. Dissertation committee: Beverly Rathcke (chair), Deborah Goldberg, Brian Hazlett, Terry Root

M.S. in Biology (1998)

Swarthmore College, Swarthmore, PA

B.A. in Biology with Distinction. Phi Beta Kappa (1994)

School for Field Studies, Center for Wildlife Management, Kenya. Fall, 1992

TEACHING EXPERIENCE

Lecturer, School for Environment and Sustainability, University of Michigan

Ecology: Concepts & Applications (NRE 509) – Revised masters-level course and created inquiry-based field labs (Fall 2014 – present)

Conservation Biology (NRE 517) (Winter 2018)

Adjunct Lecturer, Biology Department, Eastern Michigan University (Fall 2008-present)

Ecology Lecture (BIO 310) – For biology majors

Ecology Lab (BIO 311W) – Writing intensive; for biology majors; completely revised labs

Developing Scientific Inquiry Skills (BIOT 278/591) – Created new field course at Fish Lake field station for Michigan K-12 teachers

Lecturer II, Department of Ecology and Evolutionary Biology, University of Michigan. (Fall 2002-2004)

Ecology: Principles and Applications (BIO 103) - For non-majors

General Ecology (BIO 281) – Lecture for biology majors

Ecology Laboratory (BIO 282) – Created new lab manual

Michigan Math and Science Scholars Instructor, University of Michigan. (2002-present)

Explorations of a Field Biologist – Created summer field & research intensive experience for advanced high school students

Graduate Student Instructor, University of Michigan (Fall 1995-Spring 2002)

Practical Botany (BIO 102)

Introductory Biology: Ecology & Evolutionary Biology (BIO 154)

Introductory Biology (BIO 162)

Evolution (BIO 390)

Laboratory in Field Ecology (BIO 477/SNRE 455) – Created new course pack still in use

TRAINING, CONSULTING EXPERIENCE

Academic Program Specialist, School for Environment and Sustainability (May 2017- present)

Advance the school's efforts to increase effective field-based education and engaged learning through a variety of outlets; contribute to innovate teaching and learning efforts; connect the school to practitioners and agencies as advisors, employers, mentors, and clients.

Center for Research on Learning and Teaching, University of Michigan (2000-present).

Preparing Future Faculty seminar, Lead Facilitator (May 2016): Co-designed and led a month-long seminar. Part of a national program for advanced graduate students, it includes campus visits, panel discussions, and guidance in research-based inclusive teaching strategies.

Instructional Consultant (Fall 2000 – present): Facilitate reflection and improvement of graduate and faculty teachers using classroom observations, student feedback, and orientation and practice teaching sessions.

Matthaei Botanical Gardens Docent (2008-9) and **Education Coordinator for Knight Foundation grant** (2009-11). Trained and assisted in docent program and developed web-based and outdoor discovery activities to link public school field trip content with MBG resources.

Evaluation and Adaptive Management Consultant for Natural Resource and Conservation Programs (2003-2007). Led collaborative groups through a workshop-based planning process to develop metrics of progress toward ecological and social goals. Clients included (sample):

Resources Legacy Fund Foundation, California Coastal Marine Initiative (June 2005-07)

Shared Strategy for Puget Sound (March 2005-06)

Seattle Public Utilities, Cedar River Habitat Conservation Plan (March 2005-06)

Sonoran Institute, Community Stewardship Organization Network (March 2005)

Natural Resources Leadership Institute (November 2004)

Packard Foundation Conservation & Science Program, EBM (November 2004)

Ford Foundation Community-Based Forestry Demonstration Program (September 2004)

Blackvan Consulting (June 2002). Co-facilitated an Idea Generation Workshop on ecological networks for Powergen, a utilities company in Nottingham, England.

RESEARCH EXPERIENCE

Post-doctoral Research Fellow (2002-3) & **Senior Associate** (2003-6), **Ecosystem Management Initiative**, School of Natural Resources and the Environment, University of Michigan. Worked with Dr. Steven Yaffee to study practices of nation-wide ecosystem management projects and measures of success.

Ecological Restoration Intern, Catalina Island Conservancy (Spring-Summer 1999). Developed and initiated RESMAP: a GIS map of the rare and ecologically sensitive plants of Catalina Island using Trimble GPS unit and Pathfinder and Arcview software.

Resident Scientist, University of Southern California, Wrigley Institute of Environmental Studies, Santa Catalina Island (Spring, 1998). Conducted research and advised undergraduates engaged in terrestrial and marine independent research projects.

Research Assistant, University of Michigan Museum of Zoology, Insect Division (Fall-Winter, 1996-7). Curated the Odanta collection. Supervisors: Dr. Richard Alexander, Dr. Tom Moore, and Dr. Barry O'Connor.

Sheila K. Schueller, Ph.D.

Research Assistant, Cedar Creek Long Term Ecological Research (LTER) site, University of Minnesota (Summer, 1994 and 1995). Performed soil and vegetation sampling, percent cover estimation, and plant identification. Supervisor: Dr. David Tilman.

AWARDS & FELLOWSHIPS

Teaching

Students for SNRE Outstanding Faculty Teaching Award Nomination (2015-2016, 2016-2017)
Students for SNRE Outstanding Faculty Teaching Award (2014-15)
Golden Apple Award Nomination (2014-15 and 2016-2017)
Michigan Campus Compact Venture Grant (2014 – with Jacqueline Courteau)
Teaching with Technology Grant for Science Instruction (2002)
University of Michigan Teaching Fellow – Preparing Future Faculty Program (2001)
Outstanding Graduate Student Instructor Award (1999)

Research

National Science Foundation Doctoral Dissertation Improvement Grant (May, 2000)
Angeline B. Whittier Fellowship in Plant Biology (April, 2000)
Matthaei Botanical Gardens Student Research Award (April 1998 & January, 2000)
Rackham Dissertation/Thesis Grant (March, 1999)
Biology Department Block Grant (April, 1997, 1998 & 1999)
Emma J. Cole Fellowship in Botany (April, 1996)
Merck Undergraduate Research Award (May, 1993)

PUBLICATIONS & PRESENTATIONS

Conference Presentations

Schueller, S.K. 2017. Michigan Sustainability Case: Alternatives to invasive *Phragmites* management in a community-supported urban wildlife refuge (Detroit International Wildlife Refuge). Ecological Society of America annual conference. Portland, OR.

Carlson, C.M., Sampath, K., and S. K. Schueller. 2016. A study of relative carbon storage of young and old forests on the University of Michigan North Campus. Annual conference, The Stewardship Network, Lansing, MI. Poster.

Courteau, J. S. K. Schueller, and S. Severance. 2014. Ecological Monitoring for Adaptive Management. Annual conference, The Stewardship Network, Lansing, MI.

Yaffee, S., E. McCance and S. Schueller. 2003. How are we doing? The challenges of measuring success in ecosystem management. The Society for Conservation Biology 17th annual meeting. Duluth, MN.

Schueller, S.K. 2003. Island vs. mainland pollination of an invasive and a native hummingbird-pollinated plant: the Channel Islands do not fit the mold. 6th California Islands Symposium. Ventura, CA.

Schueller, S.K. 2000. California mainland vs. Channel Island pollination of *Nicotiana glauca* (Solanaceae): an invasive hummingbird-pollinated plant. The Ecological Society of America annual meeting. Snowbird, UT.

Schueller, S.K. 1994. The effect of intergametophytic competition on pollen performance in the four o'clock, *Mirabilis jalapa*. Pennsylvania Academy of Science annual meeting, PA.

Journal articles, books, & reports

Paul, S., N. Payer, R. Shultze, M. Vikas and S. Schueller. 2017. Magnitude and variety of foliar herbivory on native canopy trees in urbanized vs. forested areas in southeast Michigan. *Urban Ecosystems*. In Prep.

Ollerton, J., S. Watts, S. Connerty, J. Lock, L. Parker, I. Wilson, S. Schueller, J. Nattero, A. Cocucci, I. Izhaki, S. Geerts, A. Pauw, J. Stout. 2012. Pollination ecology of the invasive tree tobacco *Nicotiana*

Sheila K. Schueller, Ph.D.

- glauca*: comparisons across native and non-native ranges. *Journal of Pollination Ecology*, 9(12): 85-95.
- Schueller, G. H. and S.K. Schueller. 2009. *Animal Behavior: Animal Migration*. Chelsea House, New York, New York.
- Schueller, S.K. 2007. Island–mainland difference in *Nicotiana glauca* (Solanaceae) corolla length: a product of pollinator-mediated selection? *Evolutionary Ecology* 21 (1): 81-98.
- Schueller, S.K., 2004. Trends in Collaborative Ecosystem Management. Preliminary Report of EM 2003 Survey Results. . Ecosystem Management Initiative. University of Michigan, Ann Arbor, MI. PDF. http://www.snre.umich.edu/ecomgt/research/em_trends.htm
- Schueller, S.K., S.L. Yaffee, J.M. Wondolleck. 2006. Are we speaking the same language? Ecological goals of ecosystem management in theory and practice. Ecosystem Management Initiative. University of Michigan, Ann Arbor, MI. PDF <http://www.snre.umich.edu/ecomgt/research/index.htm>
- Schueller, S.K., S.L. Yaffee, S. J. Higgs, K. Mogelgaard, and E. A. DeMattia. 2006. *Evaluation Sourcebook: Measures of Progress for Community and Ecosystem-based Projects*. Ecosystem Management Initiative, University of Michigan, Ann Arbor, MI. 226 pp. PDF <http://www.snre.umich.edu/ecomgt/evaluation/sourcebook.htm>
- Yaffee, Steven, Sheila Schueller, Stephen Higgs, Althea Dotzour and Julia Wondolleck. 2004. *Measuring Progress: An Evaluation Guide for Ecosystem and Community-Based Projects*, Ecosystem Management Initiative, School of Natural Resources and Environment, University of Michigan, Ann Arbor MI. 140 pp. PDF <http://www.snre.umich.edu/ecomgt/evaluation/templates.htm>
- Schueller, S.K. 2004. Self-pollination in island and mainland populations of the introduced hummingbird-pollinated plant, *Nicotiana glauca* (Solanaceae). *American Journal of Botany* 91(5): 672-681.
- Niesenbaum, R.A. & S.K. Schueller. 1997. The effect of competitive environment on pollen performance in *Mirabilis jalapa*. *Sex. Plant Reprod.* 10: 101-106.

PROFESSIONAL AFFILIATIONS, SERVICE & COMMUNITY ENGAGEMENT

University of Michigan

- SNRE Properties Committee (January 2017 – present)
- Michigan Sustainability Case (MSC) Curriculum Advisory Board (Fall 2016 – present)
- Information Management System Task Force (September 2016 – present)
- NRE 510 Planning Committee (2015-16)
- Matthaei Botanical Gardens Faculty Associate (Fall 2014-present)
- SNRE Pellston Orientation Activities (2014, 2015)
- Master’s Thesis Co-Advisor (Wan-Chih Cheng. 2015. Impact of Livestock Grazing on Ecosystems Services in a Mediterranean Ecosystem)
- Population Ecologist Search Committee (Winter 2000)
- Curriculum Committee (Winter 2000)
- Ad hoc Committee for the Review of Introductory Biology (Fall 1997)

Reviewer

- New Zealand Journal of Botany
- Journal of the Torrey Botanical Society
- Oxford University Press

Membership

- Sigma Xi
- Ecological Society of America
- Natural Areas Association
- The Stewardship Network

Sheila K. Schueller, Ph.D.

Practitioner and Community-Based Initiatives

Professional Stewards Hikes (2013 to present) – Created together with private ecological consultant and Washtenaw County stewardship coordinators, currently with logistical support from The Stewardship Network. Involves the development and implementation of a series of field-based events throughout the year to foster broader collaboration among private and public resource management and restoration practitioners, educators, and researchers (over 80 local area participants).

College Conservation Collaboration (2012 to present) – Co-created with UM Program in the Environment lecturer and funded by a Michigan Campus Compact Venture Grant for service learning, this effort involved several meetings of working groups and creation of research project ideas and products aimed at connecting field course work in university classes (University of Michigan and Eastern Michigan University) with the data needs of local organizations and restoration efforts, including the City of Ann Arbor Natural Areas Preservation, Washtenaw County, Huron River Watershed Council, and private landscape architect and restoration consultants.

RSSAA Environmental Stewards (2016 to present) – Created and lead an effort, together with landscape architect Celia Larson and grade teachers Carloine Freitag and Celia Tucker, that improves the environment-related purchasing, infrastructure, and curriculum practices of the Rudolf Steiner School of Ann Arbor, including creating Zero Waste Event protocols and improving community involvement in native and sustainable landscaping.

Residents for Livable Neighborhoods (2014 to 2016) – Co-lead a citizen initiative, together with Ecology Center consultant Tracey Easthope, to investigate and manage highway noise in Ann Arbor neighborhoods, schools, and natural areas. Included review of pavement science best practices, meetings and communications with city, county and state officials as well as area experts, and an effort to establish a citizen science program.

Huron River Watershed Council Technical Advisor (2013) – Helped create species identification guide and provided advice on the Bioreserve Assessment Program and associated database.

Languages & Skills

Proficient in German and modern Greek, conversant in French
Master Rain Gardener
ESRI Arc Collector