

TRACY S. FELDMAN
CURRICULUM VITAE

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POSITIONS HELD:

- **Assistant Professor of Biology** (Plant Biologist), St. Andrews University, Laurinburg, NC (August 2014 – present)
- **Visiting Lecturer**, The University of North Carolina at Chapel Hill (January – March 2014), teaching Comparative Animal Physiology
- **Visiting Lecturer**, The University of North Carolina at Chapel Hill (October – December 2013)—teaching Ecology
- **Visiting Scholar**, The University of North Carolina at Chapel Hill, (March 2013 – August 2014).
- **Contract Editor**, American Journal Experts, Durham, NC, (February 2013 – August 2014)—edit manuscripts for grammatical correctness and style
- **Assistant Professor of Biology** (Plant Ecologist), The University of Wisconsin - Stevens Point, Stevens Point, WI, August 2008 - January 2013.
Projects: demography of Fassett's Locoweed, an endemic plant in WI; morphological evolution in swallowtail caterpillars; biology and diversity of endophytic fungi.
- **Postdoctoral Research Associate**, The Samuel Roberts Noble Foundation, Ardmore, OK, January 2006 - August 2008.
Project: Viruses of plant-associated fungi: their ecology, diversity, and effects on host fungi and plant parasitism (as part of a larger NSF-EPSCoR funded project on plant virus biodiversity).
Supervisor: Dr. Marilyn J. Roossinck

EDUCATION:

- **Ph.D. in Biology**, Duke University, Durham, NC (May 2005).
Dissertation: Can pollination facilitation mitigate the Allee effect?
Advisor: Dr. William F. Morris
- **M.S. in Zoology**, University of Florida, Gainesville, FL (May 1998).
Thesis: Effects of an introduced plant on oviposition choice and larval survival of native butterflies (*Anthanassa* spp.) in Monteverde, Costa Rica
Advisor: Dr. Thomas C. Emmel
- **B.A. in Biology**, Bard College, Annandale-on-Hudson, NY (May 1995).
Thesis: Island biogeography of goldenrod-associated insects
Advisor: Dr. William Maple

TEACHING EXPERIENCE

Course Instructor and Curriculum Development:

- Full-time faculty, St. Andrews Department of Natural Sciences and Mathematics (August 2014-present; responsible for all aspects of these courses):

- **Introductory Topics in Biology** (for Non-Majors): a class and laboratory course for non-majors, covering basic principles and ideas in ecology and evolution, and using the scientific method and natural history
- **Ecology**: an introductory course to the field of ecology, with an emphasis on science as a practice.
- **Botany**: a course in plant evolution and ecology, diversity, form and function.
- **Plant Diversity**: a course covering plant evolution, mechanisms of evolution, and characteristics for identifying major plant groups and several flowering plant families.
- **Zoology**: a survey course covering animal biodiversity
- **Entomology**: a special topics course in the biology of insects
- **Field Botany**: a project-based field course to survey the plants of St. Andrews campus, covering relevant topics in ecology and evolution as needed.
- **Team-taught courses in general education:**
 - **Global issues (SAGE 450)**: a course in ethical issues involving individuals, communities, and the world.
 - **Human Thought and Culture (SAGE 240)**: a course covering influential writers and thinkers from the Renaissance to the Modern era.
- Visiting Lecturer at UNC, teaching the ecology portion of “Ecology and Evolution”, and part of “Comparative Anatomy and Physiology”.
- Full-time faculty, UWSP Department of Biology (August 2008-December 2012; responsible for all aspects of these courses):
 - **Ecology**: a course introducing major subfields of ecology, stressing the scientific method as a way to understand major concepts in ecology
 - **Ecological Methods**: a laboratory course with an emphasis on doing ecological research, in which students design their own experiments, collect and analyze data, write lab reports and present their results
 - **Plant Ecology**: an advanced class and laboratory course on ecological principles applicable to plants, emphasizing scientific writing and literacy
 - **General Biology**: a class and laboratory course for non-majors, covering basic principles and ideas in ecology and evolution, and using the scientific method
 - Seminars for advanced undergraduates in various topics, including “mutualisms”, “virus evolution and ecology”, and “deception in ecological systems”, that involve presentations and in-depth discussions of primary literature
- Part-time faculty, teaching **Introductory Botany** for the Continuing Education Program at Guilford College (fall 2003)
- Co-designed and co-taught an introductory course in insect biology for advanced undergraduates at Elon University (January term 2003, with Dr. Lisa Carloye)
- Teaching Assistant and Laboratory Instructor (**Ecology, Organismal Evolution, Animal Physiology, and Introductory Biology**) at Duke University (fall 2000- fall 2005)

Student Mentoring (supervisory experience):

- Guided Independent Studies with St. Andrews Students:
 - Jared I. Key (fall 2016): effects of artificial light on spider aggregation and catch rate

- Tarryn Holmes (fall 2017): patterns of ant use of extrafloral nectaries on two co-occurring *Chamaecrista* species.
- Lilian Ignatius (spring 2018): effects of urbanization on herbivory patterns
- Brett Shannon (fall 2017-spring 2019): algae of St. Andrews University
- Masters committee member (2 students, UW-SP College of Natural Resources; 2010-11)
- Mentoring undergraduate research students
 - UW-SP (more than 10 students on 4 separate projects; 2009-12)
 - The Samuel Roberts Noble Foundation (2 students; summers 2007 and 2008).
 - Duke University (1 student; summer 2002); the University of Florida (fall 1997)
- Mentored lab members in statistical techniques for analyzing sequence data for studies on virus evolution in the Roossinck lab. (spring-fall 2007)

FACULTY SERVICE, SYNERGISTIC ACTIVITIES AND OUTREACH:

- Member of the St. Andrews University Martin Luther King Jr. Day Committee, fall 2014 – present, and participant in celebrations, playing music for at least 4 events.
- Member “at large” of the Curriculum Outcomes and Assessment Committee at St. Andrews University (fall 2018 – present)
- Member of the General Education NetVUE working group at St. Andrews University (fall 2018 – present)
- Volunteer at Science Olympiad gatherings at St. Andrews University (2015-present)
- Conducted environmental education workshops on herbivory, nature sounds, and plant identification to adults and families at Lake Crabtree County Park, summers 2018 – 2019
- Volunteer at the NC Museum of Life and Science, Insectarium (Feb 2013 – August 2014)
- Volunteer with the Ellerbe Creek Watershed Association, education committee and hike leader (June 2013 – present)
- 5-year review for Fassett’s Locoweed with Wisconsin DNR (summer-fall 2012)
- Panel member, for a panel on Karner Blue Butterfly recovery strategies (spring 2010)
- Reviewed articles for over 15 different scientific journals (2008-present)
- Curriculum committee (chair 2010-11), to review new courses and develop learning outcomes and assessment strategies for the biology department at University of Wisconsin Stevens Point (fall 2009-2012)
- Co-founded the Duke Natural History Society: organized field trips with community members to learn about local natural history. (2000-2005)

FELLOWSHIPS, GRANTS AND AWARDS:

- Awarded funding from the University of St. Andrews to develop a co-taught course on symbiosis (cross-listed biology and theology).
- Awarded funding from the American Society for Plant Taxonomy to purchase a plant drier for the herbarium in the aftermath of Hurricane Florence (fall 2018).
- Award from the Wisconsin Department of Natural Resources, to conduct field work to study demography of Fassett’s Locoweed (*Oxytropis campestris* var. *chartacea*) (2009-12) \$4,700; \$3,400; \$3400; \$3400
- UWSP University Professional Development Committee Grant to study demography of Fassett’s Locoweed (*Oxytropis campestris* var. *chartacea*) (2010) \$1,500

- Laboratory Modification Grant, UWSP, to renovate and purchase equipment for a laboratory space for use in classes and research (fall 2008; partially funded at \$20,000)
- Certificate in Teaching in Biology, Duke University Biology Department, (2003-2004)
- National Science Foundation Doctoral Dissertation Improvement Grant (May 2002)
- Duke University Graduate Student Teaching Mini-grant for Insect Biology (spring 2002)

PUBLICATIONS

Published in Refereed Journals:

- Eiseman C.S., Lonsdale, O, Van der Linden, J., **Feldman T.S.**, and Palmer, M.W. 2021. Thirteen new species of Agromyzidae (Diptera) from the United States, with new host and distribution records for 32 additional species. *Zootaxa* 4931 (1): 001-068.
- Eiseman C.S., Austin, Kyhl A., Blythe, Julia A. and **Feldman T.S.** 2020. New records of leaf-mining Tortricidae (Lepidoptera) in North America, with the description of a new species of *Grapholita*, *Zootaxa* 4748 (3): 514-530.
- Eiseman C.S., Lonsdale O., and **Feldman T.S.** 2019. Nine new species of Agromyzidae from North Carolina, USA, with new host and distribution records for additional species, *Zootaxa* 4571: 301-333.
- Eiseman, C.S., Davis, D.R., Blyth, J.A., Wagner, D.L., Palmer, M.W., and **Feldman, T.S.** 2017. A new species of *Marmara* (Lepidoptera: Gracillariidae: Marmarinae), with an annotated list of known host plants for the genus. *Zootaxa* 4337 (2): 198-222.
- Eiseman, C.S., **Feldman, T.S.**, Lopresti, E.F., and Palmer, M.W. 2017. First North American Records of *Porphyrosela minuta* Clarke (Lepidoptera: Gracillariidae), with notes on its native congener, *P. desmodiella* (Clemens). *Entomological Society of Washington* 119 (1): 18-23.
- Feldman, T.S.**, Morsy, M., and Roossinck, M.J. 2012. Are communities of microbial symbionts more diverse than communities of macrobial hosts? *Fungal Biology* 116(4): 465-477.
- Min, B.E., **Feldman, T.**, Ali, A., Wiley, G., Muthukumar, V., Roe, B., Roossinck M., Melcher, U., Palmer, M.W., and Nelson, R.S. 2011. Molecular characterization, ecology and epidemiology of a novel tymovirus in *Asclepias viridis* from Oklahoma. *Phytopathology* 102(2): 166-176.
- Feldman, T.S.** and Morris, W.F. 2011. Higher survival at low density counteracts lower fecundity to obviate Allee effects in a perennial plant. *Journal of Ecology* 99:1162-1170 online doi: 10.1111/j.1365-2745.2011.01855.x.
- Xu P., Chen F., Mannas J. P., **Feldman T.**, Sumner. L.W., Roossinck M.J. 2008. Virus infection improves drought tolerance. *The New Phytologist* 180(4): 911-921.
- Feldman T.S.** 2008. The plot thickens: Does low density affect visitation and reproductive success in a perennial herb, and are these effects altered in the presence of a co-flowering species? *Oecologia*. 156(4):807-817.
- Feldman T.S.**, O'Brien H.E. and Arnold A.E. 2008. Moths transport fungi associated with *Claviceps paspali* and the grass *Paspalum*. *Microbial Ecology* 56(4):742-750.
- Feldman, T.S.** 2006. Pollinator aggregative and functional responses to flower density: Does pollinator response to patches of plants accelerate at low-densities? *Oikos* 115: 128-140.

Fleet, C.M., Rosser, M.F.N., Zufall, R.A., Pratt, M.C., **Feldman, T.S.**, and Lemons, P.P. 2006. Hiring Criteria in Biology Departments of Academic Institutions. *Bioscience* 56(5):430-436.

Feldman, T.S., Morris, W.F., and Wilson, W.G. 2004. When can two plant species facilitate each other's pollination? *Oikos* 105:197-207.

Feldman, T.S. and Haber, W.A. 1998. Oviposition behavior, host plant use, and diet breadth of *Anthanassa* butterflies using plants in the Acanthaceae in a Costa Rican community. *The Florida Entomol.* 81(3):396-406.

Feldman, T.S. 1998. Fatal Interactions?: when exotic plants are lethal to native insects. *Wildland Weeds*.

PROFESSIONAL PRESENTATIONS (last 7 years):

Feldman, T.S. 2020. It's the little things: biodiversity of leaf-mining insects in North Carolina. NC Environmental Educators lecture series.

Ignatius L., Garner E., Henao E., Johnson C., Mobley J. Parini V. Scatton D., and Feldman T.S. 2019. Effects of urbanization on herbivory patterns. Ecological Society of America meetings.

Key J.I., Jones A.D., and Feldman, T.S. 2016. Does artificial light influence aggregation and catch rate in two web-weaving spiders? Ecological Society of America meetings.

Feldman, T.S. 2012. Teaching labs to engage students in the scientific method: a case study in an ecology lab class. University of Wisconsin System 6th Annual Best Practices in Science Conference.

Feldman, T.S. 2012. Demography and population viability of Fassett's locoweed (*Oxytropis campestris* var. *chartacea*), an endemic plant in WI. Ecological Society of America meetings.

Feldman, T.S. 2012. Science is a process: teaching ecology by engaging students in the scientific method. University of Wisconsin - Stevens Point 15th Annual Teaching Conference.

COLLABORATIONS:

- Charley Eiseman, freelance naturalist in Massachusetts
- Owen Lonsdale, collections manager at the Canadian National Collection of Insects, Arachnids, and Nematodes.
- Michael Palmer, Professor of Biology, Oklahoma State University
- Craig Anderson, Ryan O'Connor, & Thomas Meyer, WI Dept. of Natural Resources
- Cathy Carnes, US Fish and Wildlife Service
- Dr. Marilyn J. Roossinck, Professor of Biology, Pennsylvania State University
- Dr. Richard S. Nelson, Professor of Plant Biology, The Samuel Roberts Noble Foundation
- Dr. Heath E. O'Brien, Department of Cell and Systems Biology, University of Toronto
- Dr. A. Elizabeth Arnold, Professor of Plant Pathology, University of Arizona
- Dr. William F. Morris, Professor of Biology, Duke University
- Dr. William G. Wilson, Professor of Biology, Duke University
- Dr. William A. Haber, Biology, Missouri Botanical Gardens

PROFESSIONAL MEMBERSHIPS:

- Ecological Society of America (1998 – present)
- Sigma Xi Scientific Research Society (2016 – present)