

TERESA IVETTE SCHUELLER

Associate Professor of Biological Sciences
Field Station Director
University of Wisconsin-Milwaukee at Waukesha
College of General Studies
Department of Mathematics and Natural Sciences



EDUCATION

PhD. Zoology and Entomology (Ecology, Animal Behavior). University of Wisconsin-Madison, Madison, WI. 2012.

M.S. Zoology (Ecology, Evolution, and Conservation Biology). University of Hawai'i at Manoa, Honolulu, HI. 2000.

B.S. with Distinction and Honors. Biological Sciences (Ecology, Evolution, and Population Biology). Purdue University, West Lafayette, IN. 1993.

TEACHING AND OTHER ACADEMIC POSITIONS

2014-Present Director of UW-Milwaukee at Waukesha Field Station, Oconomowoc, WI.

2014-present Associate Professor, University of Wisconsin-Milwaukee at Waukesha, Waukesha, WI.
Courses taught: Environmental Science (F2F, Online, Accelerated Online, Flex), Concepts of Biology (F2F, Online, Accelerated Online), Ecology (F2F).

2011-2014 Lecturer, University of Wisconsin-Richland, Richland Center, WI. Courses taught: Environmental Science, Ecology, Animal Biology, Concepts of Biology, Human Sexuality and Reproduction, Animal Behavior, Natural Resources, Prealgebra, Algebra.

2004-2016 Adjunct Instructor, Cardinal Stritch University, Madison, WI. Course taught: Environmental Studies (Accelerated, Accelerated Online, Hybrid).

RESEARCH

2006-12; 2023-present Colony integration and learning in social insects. UW-Madison; UWM at Waukesha. Field experiments and modeling are used to analyze learning abilities and coordination of specialized workers during foraging, nest construction and defensive reactions in a tropical wasp, *Polybia occidentalis*.

2015-present Plant and invertebrate diversity in a restored prairie. UWM at Waukesha. Field investigation to assess the diversity of plants and invertebrates, with special emphasis on prairie specialist and restricted species, including the Silphium wasps (*Cynipoidea* sp).

2019-20 Buckthorn allelopathy with UWM Honor's student.

2015-17 SoTL Research. UWM at Waukesha in collaboration with other UW Colleges professors and research team at UW-Madison, the Partnership for Undergraduate Life Science Education (PULSE). Investigation of effectiveness of interventions in increasing learning, engagement, and success in introductory biology and psychology courses

1995-2000 Hawaiian *Lycosa* sp. adaptive radiation behavior. University of Hawai'i. Collection and rearing of Hawaiian lycosid spiders; mating behavior observations, recordings and analysis.

1999-2000 Impact of environmental stressors on micromollusc populations. University of Hawai'i. Investigation of water quality using micromolluscs as indicators.

1996-1999 Host/parasitoid observations and laboratory manipulations. University of Hawai'i. Investigation on the effects of the tachinid fly (*Trichopoda pennipes*) on the life history of the green stink bug (*Nezara viridula*).

1991-93 Anuran mating behavior. Purdue University. Field studies, laboratory mate choice experiments, aging through use of skeletochronology, and sound analysis of *Anaxyrus americanus* and *Lithobates pipiens*.

PUBLICATIONS

Schueller, T. I., R. L. Jeanne, and C. N. Cook. Visual learning in a social wasp: *Polybia occidentalis* foragers are efficient but inflexible learners of color, but not shape. *Insectes Sociaux*, in prep.

Schueller, T. I. and R. L. Jeanne. 2012. Cue-mediated recruitment in a swarm-founding wasp—foragers induce nest mates to search off-nest for a scented resource. *Psyche*, vol. 2012, Article ID 585014, 10 pages, doi:10.1155/2012/585014.

Taylor, B. J., E. V. Nordheim, T. I. Schueller, and R. L. Jeanne. 2011. Recruitment in swarm-founding wasps: *Polybia occidentalis* does not actively scent-mark carbohydrate food sources. *Psyche*, vol. 2011, Article ID 378576, 7 pages, doi:10.1155/2011/378576.

Schueller, T. I., E. V. Nordheim, B. J., Taylor, and R. L. Jeanne. 2010. The cues have it; nest-based, cue-mediated recruitment to carbohydrate resources in a swarm-founding social wasp. *Naturwissenschaften* 97(11), 1017-1022.

Howard, R. D., H. H. Whiteman, and T. I. Schueller. 1994. Sexual selection in *Bufo americanus*; a test of a good genes hypothesis. *Evolution*, 48(4), 1286-1300.

Schueller, T. I. 2000. Behavioral observations of mating displays in some Hawaiian lycosid spiders (Araneae: Lycosidae) from Hawai'i Island. Master's Thesis, University of Hawai'i.

SELECTED PRESENTATIONS

2023 Incorporating Field Station 360 videos into educational experiences. Organization of Biological Field Stations annual meeting, La Selva Biological Station, Sarapiquí, CR.

2022 Undergraduate Field Experiences Research Network (UFERN) Understanding and Evaluating Outcomes of Undergraduate Field Learning Experiences. Organization of Biological Field Stations annual meeting, Beaver Island, MI.

2018 Featured on *Outdoor Wisconsin*, Season 34, Episode 13. UWM at Waukesha Field Station and Bio 191 (Environmental Science) were highlighted.

2015 Integration of foraging in colonies of a highly eusocial wasp through cue-based learning and recruitment. Oral presentation at the national meeting of the Entomological Society of America, Minneapolis, MN.

2010 The cues have it: nest-based, cue-mediated recruitment to carbohydrate resources in the swarm-founding social wasp, *Polybia occidentalis*. Poster presented at International Congress of the International Union for the Study of Social Insects (IUSSI), Copenhagen, Denmark.

2008 Nest building in *Polybia occidentalis*: using a model to understand task coordination. Presented at IUSSI breakout meetings, Puerto Rico.

SELECTED GRANTS

- 2023 Southeastern Wisconsin Invasive Species Consortium Grant. \$2,000.
- 2021 Southeastern Wisconsin Invasive Species Consortium Grant. \$1,500.
- 2018-20 PI for National Science Foundation Field Station and Marine Lab Improvement Grant, “Developing a Strategic Vision for the University of Wisconsin-Waukesha Field Station,” (Co-PIs: Suzanne Joneson, Bill Schneider, Ada Duffey, Quintin Bendixen). \$25,000.
- Jan 2019 Environmental Data Initiative, Data Management Fellowship Program Grant, \$5,000.
- Jan 2019 UWM Support for Undergraduate Research Fellows Grant. Funds to support student research. \$1,500.
- July 2017 Peterson Foundation Grant, submitted with Lillian Boese, on behalf of the UWM at Waukesha Field Station. \$5,000.
- 2016 UW-Colleges Summer Research Grant. “Rapid assessment of the flora and fauna of the Marlin Johnson Prairie at UW-Waukesha field station, with particular interest in prairie-restricted and fire-sensitive species, as a proxy for ecosystem health and function.” \$4000
- May 2016 Waukesha Community Development Block Grant. \$18,500.

SELECTED UNIVERSITY AND DISCIPLINE-RELATED SERVICE

- 2022-2023 Organization of Biological Field Stations Board.
- 2021-Present Virtual Field 360 Project contributor.
- 2021-Present UWM College of General Studies Divisional Committee.
- 2020-Present UWM College of General Studies Math and Natural Sciences Executive Committee.
- 2019-Present Water Action Volunteer stream monitoring volunteer, Scuppernong Creek.
- 2016-Present DNR Snapshot trail Camera Host, UWM at Waukesha Field Station.
- 2014-Present UW System Alliance for Inclusion, Diversity, Equity & Advancement in STEM Advisory Board.
- 2014-present UW-Waukesha Field Station Committee and Chair (2014-18).
- 2020-2023 UWM Nominations Committee.
- 2019-2023 UWM Institutional Animal Care and Use Committee.
- 2020-2022 UWM College of General Studies Academic Policy Committee and Chair (2021-22).
- 2018-2020 UWM College of General Studies Steering Committee.

SELECTED AWARDS

- 2017 Arthur A. Kaplan Award, for faculty or academic staff that has or is making significant and innovative improvement in instruction or service for students. UW-Waukesha Campus. \$500
- 2007-10 NSF Graduate Research Fellowship, \$30,000/yr. stipend, tuition, benefits.
- 2005-07, 2011-12 Dickie Family Sauk County Educational Fellowship, \$22,000/yr. stipend, tuition, benefits.

PROFESSIONAL SOCIETIES

- Entomological Society of America
- International Union for the Study of Social Insects
- The Prairie Enthusiasts, Glacial Prairie Chapter
- Organization of Biological Field Stations