

# Maryrose Weatherton, Ph.D.

University of Tennessee-Knoxville, Department of Theory and Practice in Teacher Education

[Email](#) || [Google Scholar](#) || [Website](#)

## Education

<b>Ph.D., Ecology and Evolutionary Biology</b> <i>The University of Tennessee, Knoxville, TN</i> Ph.D. Advisor— Dr. Elisabeth Schussler Dissertation Title: <i>Resource Use and Success in Life Science Graduate Education</i>	August 2023
<b>B.S., Biological Sciences</b> Minor: Environmental Studies <i>Marquette University, Milwaukee, WI</i> Graduated Summa Cum Laude	December 2018

## Professional Positions

<b>Univ. Tennessee SEC Emerging Scholars Program</b> Postdoctoral Fellow, STEM Education	2023 – Present
<b>National Science Foundation</b> Graduate Fellow	2020 – 2023
<b>Univ. Tennessee Dept. Ecology and Evolutionary Biology</b> Graduate Teaching Assistant	2019 – 2020
<b>Marquette Univ. Dept. Biological Sciences</b> Undergraduate Research Assistant <i>Advisors: Dr. Stefan Schnitzer, Dr. Tony Gamble</i>	2016 – 2018
<b>Smithsonian Tropical Research Institute</b> Field Technician	2017 – 2018
<b>Marquette Univ. Dept. Psychology</b> Undergraduate Research Assistant <i>Advisor: Dr. Kristie Nielson</i>	2015 – 2018

## Publications

9. **Weatherton, M.**, Schussler, E.E., Brigati, B.R., Ferguson, H.\* , Boyd, I.\*\* , England, B.J. Support is in the anxiety of the beholder: How anxiety interacts with perceptions of instructor support in introductory biology classes. *International Journal of STEM Education*, *in review*
8. Hubert, M. M., **Weatherton, M.**, & Schussler, E. E. (2024). Emotion, Fact, and Anthropogenic Disturbances: Undergraduate Attitudes Toward Wildfire and Urbanization after a Brief Intervention. *CBE—Life Sciences Education*, 23(1), ar4. <https://doi.org/10.1187/cbe.22-08-0152>
7. **Weatherton, M.**, Schussler EE, Von der Mehden BM\*, (2023) “I couldn’t do a PhD without this”: A qualitative examination of graduate student perceptions of resource value, *CBE LSE*. <https://doi.org/10.1187/cbe.22-11-0241>
6. **Weatherton, M.**, Von der Mehden, B\*, Ferguson, H\*, Horn, S, (2023), Evaluating Informal Science Education Centers in the Southern Appalachians, *Southeastern Geographer*. <https://doi.org/10.1353/sgo.2023.a904513>
5. **Weatherton, M** & Schussler, EE, (2022), Demographics Matter: Nonwhite and white life science graduate students perceive and use resources differently, *CBE LSE*. <https://doi.org/10.1187/cbe.22-06-0112>
4. **Weatherton, M** & Schussler, EE, (2022), What’s in a word? Life science graduate student definitions of success, *CBE*

LSE. <https://doi.org/10.1187/cbe.21-11-0319>

3. **Weatherton, M** & Schussler, EE, (2021), Success for all? A call to reexamine how student success is defined in higher education, *CBE LSE*. <https://doi.org/10.1187/cbe.20-09-0223>
2. Schussler, EE, **Weatherton, M**, Chen Musgrove M, Brigati J, England B, (2021), Student perceptions of more supportive and less supportive instructors: What characteristics make a difference? *CBE LSE*. <https://doi.org/10.1187/cbe.20-10-0238>
1. Gibson et al. (2021), Towards an ecology of disasters: a primer for the pursuit of ecological research on disasters, *Ecology and Society*. <https://doi.org/10.5751/ES-12707-260422>

#### *In Preparation*

**Weatherton, M**, Rocconi L, Lishinski A, Schussler EE, Rosenberg, JM. Utilizing electronic sampling methods to assess emotion in introductory biology courses.

**Weatherton, M**, et al., The time is now: Vertically integrated solutions to equitably define success in STEM higher education. *Invited Manuscript for CBE-LSE Special Issue on Equity, Diversity, Access, and Inclusion*.

\* indicates a graduate student mentee, \*\* indicates an undergraduate student mentee

## Presentations

**Weatherton, M**. 2023. *Unraveling How and Why Graduate Students Utilize Resources*. Invited talk at the University of Tennessee-Knoxville STEM Education Seminar Series.

**Weatherton, M**, EE Schussler. 2023. *Use This, Not That: How Life Science Faculty Members Utilize Resources to Succeed*. Talk at the Society for the Advancement of Biology Education Research (SABER) National Conference.

**Weatherton, M**, EE Schussler. 2023. *Exploring Resource Use and Academic Success in Introductory Biology Courses*. Poster presentation at the Gordon Conference on Undergraduate Biology Education Research.

**Weatherton, M**. 2023. *Unraveling How and Why Graduate Students Utilize Resources*. Invited talk at the University of Toronto, Center for Canadian & International Higher Education.

**Weatherton, M**, JM Rosenberg, A Lishinski, EE Schussler. 2023. *An Examination of the Utility of Experience Sampling Method for Use in Undergraduate Affective Research*. Poster Presentation at the Society for the Advancement of Biology Education Research (SABER) West Conference.

**Weatherton, M**, EE Schussler. 2022. *Used, Useful, Unique: Unraveling How and Why Graduate Students Utilize Resources*. Short talk at the National Meeting of the Society for the Advancement of Biology Education Research (SABER).

**Weatherton, M**. 2021. *How do Graduate Students Define “Success” and How do They Get There?* Invited Talk, University of Washington Department of Biology Education Seminar.

**Weatherton, M**, EE Schussler. 2021. *What’s in a Word? Exploring Graduate Student Definitions of “Success.”* Short talk at the National Virtual Meeting of the Society for the Advancement of Biology Education Research (SABER).

Schussler, EE, **Weatherton, M**, Chen Musgrove, M, Brigati, J, England, B. 2020. *Student perceptions of supportive and non-supportive instructors: What characteristics make a difference?* Short talk at the National Virtual Meeting of the Society for the Advancement of Biology Education Research (SABER).

**Weatherton, M**, *Effects of Competition on Growth, Survival, and Biomass Allocation in Tree and Liana Saplings*,

Smithsonian Tropical Research Institute Capybara Presentation Series, June 2018

**Weatherton, M**, *Competition Trials and Tribulations—Investigating Competition in the Neotropics*, Duke University Marine Lab Student Seminar, April 2018

**Weatherton, M**, *Investigating Species Complexes in Montane Sphaerodactylus*, Marquette University Department of Biological Sciences Research Colloquium, December 2017

**Weatherton, M**, *Effects of Competition on Plant Growth*, Poster presentation, Marquette University Research Fellows' Colloquium, November 2017

## Funding

---

### **Total: \$348,850**

- 2023 University of Tennessee-Knoxville, Open Publishing Support Fund, **\$1,100**
- 2023 University of Tennessee-Knoxville, Faculty Research Assistant Funding, **\$3,000**
- 2023 National Science Foundation, Postdoctoral Research Fellowship, **\$185,000**
- 2023 Howard Hughes Medical Institute Travel Funding, **\$2,500**
- 2023 Soc. for the Advancement of Biology Ed. Research Travel Grant, **\$600**
- 2023 University of Tennessee-Knoxville, Graduate Student Senate Travel Award, **\$1,600**
- 2023 University of Tennessee-Knoxville, Open Publishing Support Fund, **\$950**
- 2023 Graduate Researchers in Evolutionary Biology and Ecology Travel Award, **\$100**
- 2022 Graduate Researchers in Evolutionary Biology and Ecology Travel Award, **\$500**
- 2022 University of Tennessee-Knoxville, Open Publishing Support Fund, **\$1,900**
- 2022 University of Tennessee-Knoxville, Graduate Student Senate Travel Award, **\$1,100**
- 2021 University of Tennessee-Knoxville, Open Publishing Support Fund, **\$1,900**
- 2021 National Science Foundation, Graduate Research Fellowship Program, **\$146,000**
- 2021 Department of Ecology and Evolutionary Biology Research Grant, **\$800**
- 2020 University of Tennessee-Knoxville, Graduate Student Senate Travel Award, **\$1,800**

## Honors & Awards

---

- 2023 Sandy Echternacht Award: Outstanding Graduate Student, UTK EEB Departmental Awards
- 2023 Excellence in Community Service & Outreach, UTK EEB Departmental Awards

- 2023 Nominated for the UTK Graduate Student Senate Graduate Student Outreach Award
- 2023 Jimmy & Eileen Cheek Graduate Student Medal of Excellence
- 2022 Bill Wood Award for Best Graduate Student Presentation, Society for the Advancement of Biology Education Research
- 2022 Best Progress Towards Dissertation, UTK EEB Departmental Awards

## Teaching Experience

---

### ACADEMIC TEACHING EXPERIENCE

**The University of Tennessee, Knoxville, TN**

2023 – Present

*Lecturer*

- Introduction to Data Visualization in R (EDPY 680)
- Current Trends in Science Education (SCED 696)

**The University of Tennessee, Knoxville, TN**

2019 – 2020, 2023

*Graduate Teaching Assistant*

- Organismal and Ecological Biology Biological Literacy Discussion (BIO 150)

**Marquette University, Milwaukee, WI**

2016 – 2018

*Lead Biology & Chemistry Tutor*

- Introductory Biology (BIOL 1001 & 1002), Ecology (BIOL 3005)
- General Chemistry (CHEM 1001 & 1002), Organic Chemistry (CHEM 2111 & 2112)

**Marquette University, Milwaukee, WI**

2016 – 2017

*Undergraduate Teaching Assistant*

- General Chemistry Discussion (CHEM 1001 & 1002)
- Chemistry for Non-Majors Discussion (CHEM 1008 & 1009)

### CURRICULUM DEVELOPMENT

**The University of Tennessee, Knoxville, TN**

May 2020

- Honors Organismal and Ecological Biology Biological Literacy Discussion (BIO 158)

### INFORMAL TEACHING EXPERIENCE

**Zoo Knoxville, Knoxville, TN**

Summers 2020, '21, '22

*Community Programs Educator*

**Urban Ecology Center, Milwaukee, WI**

2018 – 2019

*Community Programs Manager*

**Discovery World Science Center, Milwaukee, WI**

2016 – 2018

*Field Trip Educator*

## Service & Leadership Positions

---

### DEPARTMENTAL SERVICE

**EEB Graduate Recruitment Weekend, Organizer**

2022, 2023

**President, Graduate Student Body (GREBE)**

2021 – 2023

**EEB Graduate Mentoring Workshop, Organizer & Facilitator**

2022

**Panelist, UTK Graduate School Demystified Panel**

April 2022

<b>EEB Undergraduate Research Symposium, Organizer</b>	2022, 2021
<b>Director, Departmental Undergraduate Mentoring Program</b>	2020 – 2023
<b>Mentor, Departmental Undergraduate Mentoring Program</b>	2021 – 2023
<b>Teaching and Learning Committee</b>	2020 – 2021
<b>Undergraduate Affairs Committee</b>	2020 – 2021

## UNIVERSITY SERVICE

<b>Darwin Day Annual Celebration, Organizer</b>	2022
<b>Advisory Board, CIRTL, Teaching and Learning Institute</b>	2021 – Present
<b>Panelist, Mock GRFP Panel and Q&amp;A Session</b>	2021 – 2023
<b>Panelist, Graduate Student Welcome Weekend</b>	September 2021
<b>Advisory Board, McClung Museum of Natural History</b>	2019 – 2021

## PROFESSIONAL SERVICE

<b>Reviewer, Science Education</b>	2023 – Present
<b>Reviewer, CBE – Life Sciences Education</b>	2022 – Present
<b>Reviewer, Journal of Biology Education</b>	2022 – Present
<b>Abstract Committee, Soc. for the Advancement of Biology Ed. Research</b>	2022 – Present

## Mentoring Experience

---

### *Undergraduates*

Hannah Higginbotham, University of Tennessee (EEB)	2023 - Present
Kurisma Wallace, The University of Tennessee (EEB)	2023 - Present
Nathan Wagoner, The University of Tennessee (EEB)	2022 – 2023
Morgan Smith, The University of Tennessee (Engineering)	2020 – 2023
Isabel Boyd, The University of Tennessee (Engineering)	2020 – 2023

### *Graduates*

Hope Ferguson, The University of Tennessee (EEB)	2020 – Present
Bailey Von der Mehden, The University of Tennessee (EEB)	2022 – Present

## Skills & Proficiencies

---

- Quantitative analysis in R statistical software including SEM, CFA, Bayesian modeling, and data visualization
- Qualitative data analysis using NVivo and Otter.ai
- Survey creation and distribution in Qualtrics
- Human Subjects Certified

### *Relevant Courses*

- Structural Equation Modeling for Social Sciences
- Qualitative Research Methods in Education
- Education Research Methods Qual/Quant/Mixed
- Evaluation Project and Grant Management
- Scientific Writing