

## **Steven William Gougherty**

Boston University  
Department of Biology  
5 Cummington Mall, 101  
Boston, MA  
02215

Telephone: 734-558-0456

Email: [gougher@bu.edu](mailto:gougher@bu.edu)

### **Education**

- 2018-Pres    PhD. Biology and Certificate Program in Biogeoscience, Boston University  
2012-2015    M.S. Evolution Ecology and Organismal Biology, The Ohio State University  
2007-2011    B.S. Environmental Science, Wayne State University

### **Research Positions**

- 2018-Pres    Graduate Research Assistant, Boston University, PI: Adrien Finzi  
2019-2020    Visiting Fellow, Arnold Arboretum of Harvard University  
2018          Field Research Technician, Rocky Mountain Biological Lab, PI: Brad Taylor  
2016-2018    Research Technologist II, W.K. Kellogg Biological Station, Michigan State University, PI: Sarah Evans  
2012-2015    Graduate Associate, The Ohio State University, PI: James Bauer  
2012          Associate in Research, Duke University, PI: Emily Bernhardt  
2011          Undergraduate Research Assistant, Wayne State University PI: Lawrence Lemke

### **Publications**

1. DelVecchia A.G., **Gougherty, S.W.**, Taylor, B.W. and Wissinger S.A. (2020) Biogeochemical characteristics and hydroperiod affect carbon dioxide flux rates from exposed high-elevation pond sediments. *Limnology and Oceanography*. <https://doi.org/10.1002/lno.11663>
2. Calhoon, E.A., E.C. Pieterse, and **S.W. Gougherty** (2019). Plant Growth and Climate Change: Urban Trees' Role as a Carbon Sink. *Tested Studies for Laboratory Teaching*, 40 (3)
3. Gougherty, A.V. and **S.W. Gougherty** (2018). Sequence of flower and leaf emergence in deciduous trees is linked to ecological traits, phylogenetics, and climate. *New Phytologist*. <https://doi.org/10.1111/nph.15270>  
\*Both authors contributed equally to the above work\*
4. **Gougherty, S.W.**, Bauer, J. E., & Pohlman, J. W. (2018). Exudation rates and  $\delta^{13}\text{C}$  signatures of tree root soluble organic carbon in a riparian forest. *Biogeochemistry*, 137(1-2), 235-252. <https://doi.org/10.1007/s10533-017-0415-9>

## **Awards**

Boston University Biogeoscience Graduate Student Research Award. 2020. **\$300**

*Comparing reproductive nutrient use efficiency across samara producing tree species.* Deland Award for Student Research. The Arnold Arboretum of Harvard University. 2019-2020. **\$5,625**

## **Presentations** (presenter in *italics*)

ESA Annual Meeting. Louisville, KY. August 2019. ***Gougherty, S.W.*** and A.C. Finzi. Expanding nutrient use efficiency as a framework to reveal mechanisms that couple biogeochemical cycles. Contributed Talk.

Society for Freshwater Science Annual Meeting. Salt Lake City, UT. 2019. *DelVecchia, A., B. Taylor, S. Gougherty.* Carbon dioxide efflux from alpine pond soils varies with soil nutrient content and hydrology. Presentation.

Midwest Ecology and Evolution Conference. Hickory Corners, MI. April 7, 2018. ***Gougherty, S.W.*** Influence of nitrogen fertilization on mycorrhizal relationships and soil biogeochemistry in hybrid poplar (*Populus nigra* x *P. maximowiczii*) stands. Presentation.

Genomic Sciences Program Annual Principal Investigator Meeting. Tysons, VA, Feb. 25-28, 2018. *Evans, S., J. Cole, M. Friesen, S. Gougherty, L. Tiemann.* Plant and Biogeochemical Controls on the Switchgrass Microbiome: Perspectives from a fine-scale time series. Invited Presentation and Poster.

ESA Annual Meeting. Portland, OR. Aug. 11, 2017. ***Gougherty, S.W.*** and A.V. Gougherty. Sequence of phenological events: Order of flowering and leaf emergence in temperate deciduous trees is linked to phylogenetics, functional traits and the physical environment. Poster.

AGU Fall Meeting. San Francisco, CA. Dec. 18, 2015. ***Gougherty, S.W.,*** J.E. Bauer and J.W. Pohlman. Variability of Root Exudate  $\delta^{13}\text{C}$  and Fluxes in Relation to Environmental Conditions and Plant Characteristics in a Bottomland Temperate Forest. Poster.

## **Mentoring Experience**

Bailey Cowart (Spring 2019- current, Undergrad Research Assistant at BU)

Khalilah Smith (Summer 2017, URA and DOW STEM Scholar at MSU)

Jordan Myers (Summer 2014-Spring 2015 Undergrad Research Assistant)

## **Teaching Experience**

**Boston University, Boston, MA**

*Department of Biology*

Teaching Fellow for the following courses:

- BI 107 (Au 2019, Au 2020)
- BI 108 (Sp 2019, Sp 2020)

**The Ohio State University, Columbus, OH**

*Department of Evolution, Ecology and Organismal Biology*

Teaching Assistant/ Lab Instructor for the following courses:

- EEOB 5420 (Ecology of Inland Waters) (Au 2014)
- EEOB 4430 (Ecological Methods) (Su 2014)
- EEOB 3410 (Ecology) (Su 2013, Sp 2014, Sp 2015, Au 2015)

*Center for Life Science Education*

Teaching Assistant/Lab Instructor for the following course:

- BIO 1113 (Energy Transformation and Development) (Au 2012, Sp 2013, Au 2013)

**Internship and Volunteer Positions**

**Battelle Darby Creek Metro Park, Galloway, OH (2014-2015)**

*Volunteer*

- Assisted park naturalists with programs including winter hikes, and worked shifts in the nature center.

**Michigan Department of Natural Resources and Environment, Warren, MI (Su 2010)**

*Water Bureau Intern*

- Researched pertinent regulations relating to storage requirements of road salt and brine and drafted on an outreach document for operators to encourage compliance.

**Service**

- ESA Annual Meeting Student Volunteer (2019)
- Professional Development Committee for Boston University's Biogeoscience Program. Identify, plan, and facilitate professional development opportunities for students affiliated with BU's Biogeoscience Program. (2018)
- Master Plant Science Team through Planting Science. Remote mentoring of 2-3 groups of students (K-12) per semester to develop plant science related inquiry based projects. Work closely with teachers to reach learning objectives and goals. (2018)
- Oral presentation moderator. Midwest Ecology and Evolution Conference. Hickory Corners, MI (April 7-8, 2018)

**Journal Reviewer**

Functional Ecology (2019)

**Professional Affiliations**

- New England Botanical Club (2019-present)
- Ecological Society of America (2013-present)