

Evan A. Perkowski

PhD Student
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Education

- Ph.D. Biology** **Aug. 2018 - 2023**
Texas Tech University, Lubbock, TX
Advisor: Dr. Nicholas G. Smith
Dissertation: "The influence of nutrient acquisition and nutrient allocation on plant responses to environmental change"
- B.S. Biology** **May 2018**
Widener University, Chester, PA
Advisor: Dr. Janice L. Krumm
Thesis: "Fungal endophyte complex affects *Capsicum annuum* growth and drought tolerance"
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Professional Appointments

Graduate Teaching Assistant, Texas Tech University – Department of Biological Sciences, 2018 to present.
Georeferencing Assistant, Delaware Museum of Natural History, 2018.

Research Interests

Microbial symbioses, aboveground-belowground interactions, global change biology, plant physiology, ecosystem ecology, Earth system and terrestrial biosphere modeling

Awards

Graduate Research Fellowship Program – Honorable Mention (2019). National Science Foundation.
Second Place Oral Presentation – Proposal (2019). Texas Tech Annual Biological Sciences Sym.
Outstanding Undergraduate Researcher (2018). Widener University.
First Place Undergraduate Poster Presentation (2018). Mid-Atlantic Ecological Society of America.
First Place Undergraduate Biology Poster Presentation (2017). Widener University Summer Research Sym.
William R. Bailey Scholarship and Research Award (2017). Widener University.
Nicholas D. Caputo Student-Faculty Research Collaboration Award (2016). Widener University.

Research and Travel Grants

Ecological Society of America – Student Section Real/Brown Travel Grant (2020). Funding to cover registration fees to participate in the 2020 Virtual Ecological Society of America Annual Meeting. \$60.

Mid-Atlantic Ecological Society of America Travel Grant (2017). Partial travel funding to attend the 2017 Ecological Society of America Annual Meeting in Portland, OR. \$750.

Strategies for Ecology Education, Diversity and Sustainability (SEEDS) Travel Grant (2017). Partial travel funding to attend 2017 Ecological Society of America Annual Meeting in Portland, OR. \$400.

Beta Beta Beta Undergraduate Research Grant (2017). "How do monophagous host plant diets affect lipid storage and water content in the polyphagous moth *Epimecis hortaria*." Primary author of grant. Principal Investigator: Janice L. Krumm. \$360.

Clinton Global Initiative Grant (2016). "Entomopathogenic fungi as a biocontrol method of insect pests: the use of entomopathogens for improved human health and a cleaner environment". Primary author of grant. PI: Janice L. Krumm. \$2,000.

Publications in preparation

Perkowski EA, EF Waring, NG Smith. Nitrogen demand shifts carbon belowground allocation but not nutrient acquisition in cotton (*Gossypium hirsutum*) and soybean (*Glycine max*).

Perkowski EA, AN Myers, KE Fisher, C Moir, JL Krumm. Host plant diet affects life history traits, but not survivorship, in *Epimecis hortaria* (Lepidoptera: Geometridae).

Publications

Krumm JL, **EA Perkowski**, KE Mecouch, JL Woods, EK Shea, I Goraya, T Tran. (2018). Teaching and mentoring across traditional boundaries: 2 institutions, 3 mentors, 10 students, and 1 global data set. *Perspectives on Undergraduate Research and Mentoring* Special Issue: Mentoring Undergraduate Research in Global Contexts. ([link to paper](#))

Selected Oral Presentations (presenter indicated by an asterisk if other than self)

Waring EF*, **EA Perkowski**, NG Smith. (2020). Nitrogen acquisition strategy and photosynthetic demand drive allocation responses in cotton and soybean. Botanical Society of America. Remote meeting due to COVID-19.

Perkowski EA, NG Smith. (2019). The influence of microbial symbioses on leaf- and whole-plant acclimation to global change. Texas Tech Annual Biological Sciences Symposium. Texas Tech University, Lubbock, TX.

Perkowski EA, D Politz, FE Weaver, JL Krumm. (2018). Fungal endophyte complex affects pepper (*Capsicum annuum*) seedling growth and drought response. Student Projects Day. Widener University, Chester, PA.

Perkowski EA, AN Myers, JL Krumm. (2018). Consequences of monophagy on fat storage and development of a polyphagous caterpillar (*Epimecis hortaria*). Honor's Week Seminar Series. Widener University, Chester, PA.

Perkowski EA, AN Myers, JL Krumm. (2018). Effects of monophagous host plant diets on lipid and water content in the polyphagous moth *Epimecis hortaria*. Eastern Branch of the Entomological Society of America Meeting. Annapolis, MD.

Selected Poster Presentations (presenter indicated by an asterisk if other than self)

Perkowski EA, EF Waring, NG Smith. (2020). Nitrogen demand shifts carbon belowground allocation, but not nutrient acquisition in cotton and soybean. Annual meeting of the Ecological Society of America. Remote meeting due to COVID-19.

Shea, EK*, J Woods, I Goraya, T Tran, KE Mecouch, **EA Perkowski**, JL Krumm. (2018). Swimming in the deep end: designing and completing one-semester original research projects using digitized natural history collections. (2018). Second Annual Digital Data in Biodiversity Research Conference. University of California-Berkeley, Berkeley, CA.

Perkowski EA, AN Myers, JL Krumm. (2018). Effects of monophagous host plant diets on lipid and water content in the polyphagous moth *Epimecis hortaria*. Annual meeting of the Ecological Society of America. New Orleans, LA.

Perkowski EA, KE Mecouch, JL Krumm. (2018). Unionid mollusk and freshwater fish species diversity of the Duck River watershed, Tennessee. Mid-Atlantic Ecological Society of America Meeting. Rutgers University – Newark, Newark, NJ.

Myers AN*, **EA Perkowski**, JL Krumm. (2018). Effects of monophagous host plant diets on lipid and water content in the polyphagous moth *Epimecis hortaria*. Mid-Atlantic Ecological Society of America Meeting. Rutgers University – Newark campus, Newark, NJ.

Perkowski EA, D Politz, RW Morris, JL Krumm. (2017). Fungal endophyte complex affects pepper plant (*Capsicum annuum*) seedling growth and drought response. Annual meeting of the Ecological Society of America. Portland, OR.

Myers AN*, **EA Perkowski**, I Elkhatab, JL Krumm. (2017). Consequences of monophagy in caterpillars of the polyphagous moth *Epimecis hortaria*. Annual meeting of the Ecological Society of America. Portland, OR.

Perkowski EA, D Politz, RW Morris, JL Krumm. (2017). Effects of fungal endophyte colonization on *Capiscum annuum* seedling growth. Mid-Atlantic Ecological Society of America Meeting. Stockton University, Galloway, NJ

Teaching and Mentoring

Courses:

Biology of Plants Laboratory (BIOL 1401). Texas Tech University: Spring 2020, Summer 2019, Summer2019, Fall 2019, and Fall 2018. Solo-taught teaching assistantship, 2 lab sections per semester, 25 students per lab section.

General Biology II Laboratory (BIOL 1404). Texas Tech University: Spring 2019. Solo-taught teaching assistantship, two lab sections per semester, 25 students per lab section.

Undergraduate Mentees:

Christine Vaginault. Southwestern University. 2020. Undergraduate lab volunteer.

Aneesa Harper. Texas Tech University. 2019-2020. BIOL 1404 student.

Amariany Gomez. Texas Tech University. 2019-2020. BIOL 1404 student.

Abigail Bell. Texas Tech University. 2018-2020. Undergraduate research for credit.

Jorge Ochoa. Texas Tech University. 2018-2020. Undergraduate lab volunteer.

Mitej Dongarkar. Texas Tech University. 2019. Undergraduate research for credit.

Leah Hernandez (Ortiz). Texas Tech University. 2018-2019. Undergraduate research for credit.

Societal Memberships

Ecological Society of America

Entomological Society of America (2018)

Beta Beta Beta

Texas Tech University Association of Biologists