Michael K. Gillis

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About

Passionate about environmental protection and outreach. Graduated *Magna Cum Laude* from the University of Massachusetts Amherst in 2013 (Major: Natural Resources Conservation). Completed doctorate at the University of Texas Arlington in 2019. Studied eco-evolutionary dynamics in lakes under the supervision of Dr. Matthew Walsh. Seeking a career in limnology and ecosystem management that utilizes and expands on a biological background. Offering great work ethic, an eagerness to learn more, sound leadership ability, and other positive qualities.

Education

2019   Doctor of Philosophy in Quantitative Biology – **University of Texas Arlington**
Advisor: Matthew R. Walsh

2013   Bachelor of Science in Natural Resources Conservation – **University of Massachusetts Amherst**
Advisor: Paige S. Warren

Professional Experience

2014-2019   **Doctoral Researcher** at the University of Texas Arlington – **Duties:** Reviewed literature, formulated hypotheses, submitted proposals, designed and carried out studies, collected data in natural field settings and in the laboratory, analyzed and interpreted data, published findings, presented at conferences, mentored students, engaged in public outreach. Dissertation keywords: *Daphnia*, eco-evolutionary dynamics, harmful algal blooms, invasive species, North Temperate lakes, phenotypic plasticity, predation, rapid evolution, transgenerational plasticity.

2014-2019   **College Instructor** at the University of Texas Arlington – **Duties:** Led classes of approximately 25 students through laboratory activities designed to convey a general understanding of the scientific method and specific knowledge from cell and molecular fields. Ensured the safety of students during potentially dangerous lab exercises. Answered questions. Fostered a fun learning environment. Graded students by their performance on quizzes, exams, and assignments.

2013-2019   **Field/Lab Technician** – Participated in a range of ecological studies as an undergraduate and graduate student through different organizations (e.g. UMass Amherst, Virginia Tech, U.S. Geological Survey, University of Texas Arlington). **Duties:** Maintained and operated specialized equipment, traveled domestically and internationally, traversed rugged terrain, followed crew leader instructions, collected data, reached out to local stakeholders. Habitats surveyed: streams, lakes, rainforest. Taxa studied: fish, mammals, zooplankton.

Publications

Gillis MK and MR Walsh. **2017**. Rapid evolution mitigates the ecological consequences of an invasive species (*Bythotrephes longimanus*) in lakes in Wisconsin. *Proceedings of the Royal Society B*. 284, 20170814.

Walsh MR, Beston SM, Funkhouser C, Gillis M, Holmes J, Packer M, and J Goos. **2018**. *Daphnia* as a model for eco-evolutionary research. Natural History of Crustacea: Vol. 5: Life Histories. *Oxford University Press*. p. 403-424.

Gillis MK and MR Walsh. **2019**. Individual variation in plasticity dulls transgenerational responses to stress. *Functional Ecology*. 33, 1993-2002.

Gillis MK and MR Walsh. In Prep. Individual heterogeneity in *Daphnia* strengthens top-down control on cyanobacteria.

Teaching

2015-2019	**Cell and Molecular Biology** – Instructed laboratory sections (class size ~25 students) for this course.
2014	**Human Anatomy and Physiology** – Instructed laboratory sections (class size ~25 students) for this course.
2012	**The Built Environment** – Served as an undergraduate teaching assistant for this lecture (class size >150 students) on sustainable development.

Grants & Awards

2019	**UTA Dissertation Fellow** – Received $7,000 in support from the University of Texas Arlington.
2016 & 2018	**NSF Research Fellow** – Received $12,000 in National Science Foundation funds.
2009-2013	**UMass Dean's List** – Awarded after each term for academic performance.

Talks & Presentations

2017	Gillis MK and MR Walsh. Rapid evolution mitigates the negative consequences of an invasive predator. **Evolution 2017**. Portland, OR.
2016	Gillis MK and MR Walsh. Rapid phenotypic change in response to invasion by a novel predator. **ACES Symposium**. Arlington, TX.