CURRICULUM VITAE

Rachel M. Fricke

Incoming Master's student, University of Washington School of Aquatic & Fishery Sciences
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EDUCATION

University of Washington — Seattle, WA
- Aquatic & Fishery Sciences, B.S. and Environmental Studies, B.A. — *January 2017 – June 2019*
- 3.90 GPA, Departmental Honors in both majors
- Quantitative Science minor

RESEARCH INTERESTS

Applied freshwater ecology, conservation biology, community ecology, hydroecology, invasion ecology, environmental flows, statistics, ecological modeling, science communication

EXPERIENCE

Mount Rainier National Park, *Future Park Leaders of Emerging Change Intern* — Seattle, WA
June 2019 – Sept. 2019
Modeled future park visitation, water use, and surface water supplies - accounting for climate-impacted flows - to assess the need for and potential alternatives to current park water supply systems.

Olden Lab, UW School of Aquatic & Fishery Sciences, *Capstone Researcher* — Seattle, WA
Dec. 2017 – June 2019
Modeled angler movement across continental U.S. using data from ReelSonar's iBobber – a personal sonar-enabled fishing bobber – and inferred viable vectors for invasive species from temporal constraints.

Wood Lab, UW School of Aquatic & Fishery Sciences, *Capstone Researcher* — Seattle, WA
March 2017 – June 2019
Designed and executed experiments to test for behavioral differences in infected and uninfected intermediate host snails of the human parasite *Schistosoma spp.*

Olden Lab, UW School of Aquatic & Fishery Sciences, *Field Technician* — Cascade Range, WA
June 2018 – Sept. 2018
Sampled zooplankton, phytoplankton, rainbow trout, and benthic macroinvertebrates at high alpine lakes for stable isotope analysis. Collected depth data and prepared bathymetric maps in ArcGIS.

Upstream Alliance, *Field Technician & DeLeo Lab Intern* — Saint Louis, Senegal & Monterey, CA
June 2017 – Aug. 2017
Sampled and dissected snails along Senegal River to identify trematode parasite infections. Conducted literature review to identify observed trematodes to species-level.

PRESENTATIONS

Fricke, R.M., Wood, S.A., and Olden, J.D., Social media data reveals angler movement networks and risk of species invasions. Talk. Society for Freshwater Science 2019.

Fricke, R.M., Messager, M.L., Martin, D., and Olden, J.D., A bobber's perspective on angler-driven vectors of invasive species transmission. Talk. Society for Freshwater Science 2018.

Fricke, R.M., Wood C.L., Changing prevalence of *Fasciola hepatica* in response to damming. Poster. Ecology and Evolution of Infectious Diseases 2017.

PUBLICATIONS

IN PREP:

Fricke, R.M., Wood, S.A., Martin, D., and Olden, J.D., A bobber's perspective on angler-driven vectors of invasive species transmission.

GRANTS & FUNDING

2019	U.S. Fulbright Scholar, Germany	$11,000
2019	C.H. Campbell Endowed Scholarship in Fishery Sciences	$5,000
2019	UW School of Aquatic and Fishery Sciences Capstone Fund	$800
2018	UW SAFS Edward Allen Power Scholarship	$4,000
2018	SFS Endowment	$500
2017	Mary Gates Endowment	$5,000
2017	UW SAFS W.F. Thompson Scholarship	$3,000

AWARDS

2019	Honorable Mention, NSF Graduate Research Fellowship Program
2019	Runner-up Oral Presentation in Applied Research, Society for Freshwater Science
2019	Undergraduate Dean's Medalist, UW College of the Environment
2019	Faculty Merit Award, UW School of Aquatic and Fishery Sciences
2017-2019	UW Annual Dean's List

SERVICE AND OUTREACH

FieldNotes: Insights from Student Ecologists, *Co-Founder & Editor-In-Chief* — Seattle, WA
Jan. 2018 – June 2019

Established undergraduate-run journal of ecology and digital storytelling platform (https://fieldnotesjournal.org/).

Earth Tones Podcast, *Co-Host & Producer* — Seattle, WA
Dec. 2018 – March 2019

Co-hosted limited run weekly podcast on humans, the environment, and applied research (http://uwpodcast.com/earth-tones/).

Pipeline Project, *Classroom Assistant* — Seattle, WA
Jan. 2018 – June 2018

Taught in Garfield HS environmental science classroom – facilitated lab exercises and developed curriculum on invasive species.

College of the Environment Student Advisory Council — Seattle, WA
May 2017 – June 2019

Student representative from School of Aquatic and Fishery Sciences to Dean's Office, provided input on budget decisions and programming.

PROGRAMMING SKILLS

Languages: Highly proficient in R and Python.
Software: Highly proficient in Microsoft Office Suite and ArcGIS.

CERTIFICATIONS

Wilderness First Responder — expires 1/2022