

**BRYAN B. BOZEMAN, PH.D.**

Postdoctoral Research Associate

Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37820

[bozemanbb@ornl.gov](mailto:bozemanbb@ornl.gov) • 931-200-0953[Scholar](#) • [ResearchGate](#) • [LinkedIn](#)**Education**

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- Ph.D.** Integrative Conservation and Forestry & Natural Resources 2022  
University of Georgia, Athens, Georgia  
Dissertation: “Fish & Films: Multidimensional Conservation of Freshwater Ecosystems Southern Appalachia, USA”
- M.S.** Forest Resources, Fisheries 2017  
University of Georgia, Athens, Georgia  
Thesis: “Velocity, Prey Capture Success, and Microhabitat Selection in Arctic Grayling (*Thymallus arcticus*)”
- B.S.** Honors Geology and Environmental Studies 2014  
University of Tennessee, Knoxville, Tennessee  
Thesis: “Spatial Covariation between Distance from Mining Activity and Water Chemistry on East Tennessee’s Northern Cumberland Plateau”

**Appointments & Research Experience**

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- 2022-present **Postdoctoral Research Associate**, Oak Ridge National Laboratory, Oak Ridge, Tennessee (advisor: P.G. Matson)
- Team member of Energy-Environment Flexibility Tool project within the Biodiversity and Ecosystem Health Group
  - Providing ecological expertise on fish-flow relationships to inform hydropower management strategies
- 2017-2022 **Graduate Research Assistant**, Center for Integrative Conservation Research, University of Georgia, Athens, Georgia (advisor: G.D. Grossman)
- Led research to investigate fish-stream-human relationships in Southern Appalachia, USA, from multiple disciplinary angles across scales of time and space
- 2021 **Consultant**, American Rivers, Athens, Georgia
- Worked with American Rivers’ communications and science teams and independent filmmakers to develop, produce, and promote compelling films about America’s wild and scenic rivers and river basins
- 2015-2017 **Graduate Research Assistant**, Warnell School of Forestry & Natural Resources, University of Georgia, Athens, Georgia (advisor: G.D. Grossman)
- Led research to investigate the foraging behaviour of Arctic Grayling (*Thymallus arcticus*) and Dolly Varden Charr (*Salvelinus malma*) from interior Alaska
  - Conducted hundreds of hours of foraging trials in an experimental stream flume to assess fish foraging mechanics in relation to flow
- 2015 **Research Assistant**, Trout Unlimited, Knoxville, Tennessee (advisor: J.E. Williams)

- Authored both versions of *An Angler's Guide to Water Quality Monitoring*, a citizen science water quality monitoring handbook to support angler stewardship of freshwater resources
- 2014      **Research Assistant**, Department of Earth & Planetary Sciences, University of Tennessee, Knoxville, Tennessee (advisor: M.L. McKinney)
- Conducted research on impacted aquatic ecosystems within the greater Knoxville, TN metro area
  - Projects included water quality monitoring, exploring the use of native mollusks as bioindicators, and mapping mammal activity along urban creek corridors
- 2013-2014      **Undergraduate Research Assistant**, United Mountain Defense, Knoxville, Tennessee
- Collected and analyzed water quality data and conducted primary qualitative research to explore the impacts of acid mine drainage on Cumberland Plateau watersheds and aquatic ecosystems for undergraduate honors thesis
- 2013      **Undergraduate Research Assistant**, Council on International Educational Exchange, Monteverde, Costa Rica
- Studied tropical ecology and conservation throughout Costa Rica
  - Conducted empirical research to investigate the effects of land use transformation on tropical hummingbird-epiphyte relationships in montane cloud forests

## Publications

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### Peer-reviewed

- 5) **Bozeman, B.B.**, Condit, C.M., & Grossman, G.D. (2022). Do Conservation Films Generate Support for Conservation? A Case Study using Transportation Theory and *Hidden Rivers*. *Science Communication*, 44(6), 814-842. <https://doi.org/10.1177/10755470221141460>
- 4) Gerow, K.G., **Bozeman, B.B.**, & Grossman, G.D. (2021). Response Feature Analysis for Repeated Measures in Ecological Research. *The Bulletin of the Ecological Society of America*, 102(3): e01866. <https://doi.org/10.1002/bes2.1866>.
- 3) Grossman, G.D., **Bozeman, B.B.**, Sliger, R.W., Simon, T.N., & Matsumoto, G.I. (2020). Open Educational Resource Exercises for Fisheries Classes. *Fisheries*, 46(2): 76-80. <https://doi.org/10.1002/fsh.10529>.
- 2) **Bozeman, B.B.** & Grossman, G.D. (2019). Foraging behaviour and optimal microhabitat selection in Yukon River Basin nonanadromous Dolly Varden Charr (*Salvelinus malma*). *Ecology of Freshwater Fish*, 28(4): 586-601. <https://doi.org/10.1111/eff.12477>.
- 1) **Bozeman B.B.** & Grossman G.D. (2019). Mechanics of foraging success and optimal microhabitat selection in Alaskan Arctic Grayling (*Thymallus arcticus*). *Canadian Journal of Fisheries and Aquatic Sciences*, 76(5): 815-830. <https://doi.org/10.1139/cjfas-2018-0115>.

### In Progress

**Bozeman, B.B.** & Grossman G.D. (2022). The Use of Net Energy Intake Models to Predict Microhabitat Selection by Drift-Feeding Fishes: Are Common Assumptions Warranted? *Ecology of Stream-Dwelling Salmonids*: New York City, Springer Press. In press.

**Bozeman, B.B.**, Wenger, S.J., Nibbelink, N.N., & Grossman, G.D. (2022). Landscape and Climatic Influences on Trout Sympatry in Southern Appalachia, USA. In preparation for *Ecology of Freshwater Fish*.

## Conference Presentations & Seminars

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- 2022 • Multidimensional Investigations of Freshwater Ecosystems. **Invited seminar** for Biodiversity and Ecosystem Health Group, Oak Ridge National Laboratory, Virtual
- Searching for Success: Coldwater futures in Southern Appalachia. **Invited speaker** for Pisgah Chapter of Trout Unlimited, Hendersonville, North Carolina
- 2021 • Conservation Communication Efficacy: How are films received? **Invited speaker** for Fuse Consulting Ltd., Virtual
- Freshwater Conservation in Southern Appalachia. **Invited speaker** for Oconee Chapter of Trout Unlimited, Athens, Georgia
- Conservation Communication Efficacy: a preliminary analysis. Symposium on Integrative Conservation, Athens, Georgia
- Assessing the Impact of Conservation Messages. **Invited speaker** for American Rivers Executive Communications Team, Virtual
- 2020 • Realism vs. Utility: Evaluating the assumptions of a drift-foraging energetics model for stream fishes. Integrative Conservation Conference, Athens, Georgia
- Realism vs. Utility: Evaluating the assumptions of a drift-foraging energetics model for stream fishes. Warnell Graduate Student Symposium, Athens, Georgia, **Best Oral Presentation Award**
- 2019 • Southern Stream Fish: Communicating Science via Audio and Web Media. Society for Freshwater Science Annual Meeting, Salt Lake City, Utah
- Social Network Analysis & Georgia Fisheries: A Closer Look at Research Collaborations in ICON 8002. Symposium on Integrative Conservation, Athens, Georgia
- 2018 • Storytelling in Science: Crafting your Narrative, a Science Communication Workshop. Integrative Conservation Conference, Athens, Georgia
- 2017 • Velocity, Prey-Capture & Microhabitat Selection in Arctic Grayling (*Thymallus arcticus*). Society for Freshwater Science Annual Meeting, Raleigh, North Carolina

## Research Grants & Awards

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- 2021 • Archie E. Patterson Scholarship, Warnell School of Forestry & Natural Resources (\$3,100)
- Pisgah Trout Unlimited William L. Arbuckle Memorial Scholarship (\$1,000)
- 2020 • Best Oral Presentation, Warnell Graduate Student Symposium (\$300)
- 2019 • Warnell Faculty Graduate Travel Award for Society for Freshwater Science Annual Meeting (\$500)
- University of Georgia Graduate School Travel Award for Society for Freshwater Science Annual Meeting (\$750)
- 2018 • University of Georgia Graduate School Communication of Research & Scholarship Grant (inaugural recipient, \$1,202)
- 2015-2017 • University of Georgia Graduate School Graduate Student Research Fellowship (est. \$25,000)

- 2014 • University of Tennessee Ryan Edwards Environmental Service Award (inaugural recipient, \$1,000)
- 2010-2014 • University of Tennessee Chancellor's Scholar (est. \$40,000)

## Teaching Experience

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- 2021 • Vertebrate Natural History (WILD/ECOL 3580L) Laboratory Instructor
- 2020 • Natural History of Georgia (FANR/GEOG/ECOL 1200) Teaching Assistant
- 2018-2019 • Ecology (ECOL 3500L) Laboratory Instructor

*Overall rating: 99% (94/95) of my students rated my instructor level as very high (84) or high (10) (1 neutral).*

## Outreach, Service, & Strategic Communication

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- 2021-2022 • Conference Chair, 3<sup>rd</sup> Annual Integrative Conservation Conference
  - President, ICON Network and Cooperative Student Organization
- 2020-2022 • Warnell School of Forestry and Natural Resources Teaching Effectiveness Committee
- 2020 • Organizer, University of Georgia Graduate School Science Communication Workshop (**cancelled due to COVID-19**)
- 2018-2021 • Treasurer, ICON Network & Cooperative Student Organization
- 2017-2018 • Vice President, University of Georgia American Fisheries Society Student Chapter

### *Strategic Communication*

Southern Stream Fish. Multimedia science communication project that tells a story of how fish and humans fit together in a complicated Southern Appalachian landscape with the goal of making science and research more accessible and relevant to nonscientists.

Center for Integrative Conservation Research. Designed, built, and managed the website for the University of Georgia's Center for Integrative Conservation Research. Directed visual design, wrote custom CSS site elements, and implemented content production strategies for a highly trafficked university domain.

### *Reviewer*

- *Springer Nature, Scientific Reports, North American Journal of Fisheries Management, Animal Biodiversity and Conservation*