

Tyler Treakle

School of Sustainability
Arizona State University

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[Website](#)

Education

Arizona State University

2021 – Spring 2026 (Expected)

- Ph.D. Candidate in Sustainability

- Title: *The Economics of Ecosystem Management and Degradation*
- Certificate: Environmental & Sustainability Economics
- Committee: Joshua Abbott (co-chair), Kailin Kroetz (co-chair), Leah Gerber
- Key coursework: ECN Ph.D. Core: Microeconomics I-II, Econometrics I-II
ECN Ph.D. Topics: Advanced Econometrics, Environmental Economics

The College of William & Mary

2014 – 2018

- B.A. in Environmental Economics, B.S. in Biology (*Magna Cum Laude*)

Professional Experience

- *School of Sustainability, Arizona State University*
Graduate Research & Teaching Assistant

2021 – Present

- *Resources for the Future*
Research Assistant

2018 – 2021

- *School of Arts & Sciences, The College of William & Mary*
Research Assistant

2017 – 2018

- *National Science Foundation & Michigan State University*
Research Experience for Undergraduates

2017

Research

Peer-Reviewed Publications

8. Stanley, A. E., Epanchin-Niell, R., **Treakle, T.**, & Iacona, G. D. (2024). [Attributes of preemptive conservation efforts for species precluded from listing under the US Endangered Species Act](#). *Conservation Biology*, 38(2), e14200.
7. **Treakle, T.**, Epanchin-Niell, R., & Iacona, G. D. (2023). [Factors associated with preemptive conservation under the US Endangered Species Act](#). *Conservation Biology*, 37(5), e14104.
6. **Treakle, T.**, Abbott, J. K., & Holland, D. S. (2023). [Not by fishing alone: Non-fishing employment and income for US West Coast fishers](#). *Ocean & Coastal Management*, 243, 106763.
5. Epanchin-Niell, R. S., Jackson-Smith, D. B., Wilson, R. S., Ashenfarb, M., Dayer, A. A., Hillis, V., ... & **Treakle, T.** (2022). [Private land conservation decision-making: An integrative social science model](#). *Journal of Environmental Management*, 302, 113961.
4. Epanchin-Niell, R., Thompson, A. L., & **Treakle, T.** (2021). [Public contributions to early detection of new invasive pests](#). *Conservation Science and Practice*, 3(6), e422.

3. Haines, A. M., Leu, M., Costante, D. M., **Treakle, T. C.**, Parenti, C., Miller, J. R., & Malcom, J. W. (2021). [Benchmark for the ESA: having a backbone is good for recovery.](#) *Frontiers in Conservation Science*, 2, 630490.
2. Twardochleb, L. A., **Treakle, T. C.**, & Zarnetske, P. L. (2020). [Foraging strategy mediates ectotherm predator-prey responses to climate warming.](#) *Ecology*, 101(11), e03146.
1. Leu, M., Haines, A. M., Check, C. E., Costante, D. M., Evans, J. C., Hollingsworth, M. A., ... & **Treakle, T. C.** (2019). [Temporal analysis of threats causing species endangerment in the United States.](#) *Conservation Science and Practice*, 1(8), e78.

Under Review

- Kuwayama, Y., Rayl, J., & **Treakle, T.** [Does the Value of Reliability Capitalize in Water Markets?](#) (*Economics Letters*)
- Kroetz, K., Leonard, B., **Treakle, T.**, Gigliotti, L., & Middleton, A. [The high value of satellite data in terrestrial habitat corridor design for large migratory species.](#) (*Nature Sustainability*)

Working Papers

- [Labor Market Impacts of U.S. Endangered Species Act Regulations](#) (with J.K. Abbott)

Work in Progress

- [Invasive Species, Insecticide Use, and Infant Mortality](#)
- [The Cost of Connectivity: Managing Habitat for Seasonally Migratory Species](#) (with K. Kroetz, B. Leonard, L. Gigliotti, A. Middleton)
- [Bioeconomic Modeling of Linked Natural Resource Users](#) (with J. Ashander, Y. Kuwayama, K. Kroetz, C. Speir)

Reports and Other Writings

- Bradford, M.A., Oldfield, E.E., Arredondo, M.G., Black, H.I.J., Forbes, E.S., ..., **Treakle, T.**, Tully, K., Kuebbing, S.E. and the Synthesizing Science Lab (2025) [Agricultural soil carbon: A call for improved evidence of climate mitigation.](#) Yale Applied Science Synthesis Program and Environmental Defense Fund white paper.
- Burnett, J.W., Donaldson, D., Wallander, S., **Treakle, T.** (2024) [System of Environmental Economic Accounting: Soil Health.](#) London Group Meeting 2024 Issue Paper.
- Blog Post: [Hot Water & Faster Species](#)

Presentations

Conference Presentations

- Berkeley/Sloan Summer School in Environmental and Energy Economics 2025
- Association of Environmental & Resource Economists (AERE) Summer Conference 2025
Labor Market Impacts of U.S. Endangered Species Act Regulations
- Northeastern Agricultural & Resource Economics Association (NAREA) Annual Conference 2025
Labor Market Impacts of U.S. Endangered Species Act Regulations
- Agricultural & Applied Economics Association (AAEA) Summer Conference 2024
Assessing the Heterogenous Labor Market Impacts of U.S. Endangered Species Act Regulations
- North American Congress for Conservation Biology (NACCB) Summer Conference 2022
Factors associated with preemptive conservation under the U.S. Endangered Species Act

- Ecological Society of America (ESA) Annual Conference 2018
Climate change, faster species, and food webs
- 22nd Annual Conference of the Wildlife Society 2016
Quantifying threats that impact federally listed threatened and endangered species

Teaching & Mentoring

Teaching (sole instructor, + TA, ^o online, ^g graduate level) - Arizona State University*

- SOS 325: Economics of Sustainability*^o Summer 2025
- SOS 540: Statistical Modeling for Sustainability^{+g} (Dr. Joshua Abbott) Spring 2025
- SOS 325: Economics of Sustainability*^o Summer 2024
- SOS 325: Economics of Sustainability⁺ (Dr. Michael Hanemann) Spring 2024
- SOS 325: Economics of Sustainability⁺ (Dr. Bryan Leonard) Fall 2023

Mentoring

- Rozetta Locksa: ASU [Sustainability Undergraduate Research Experience](#) Spring 2025 - Present
 Project title: Using Large Language Models to Assess Threats to Endangered Species.
- Annabelle Stanley: Intern at Resources for the Future Summer 2019
 Project title: Attributes of preemptive conservation efforts for species precluded from listing under the US Endangered Species Act.

Awards & Fellowships

- ASU Graduate and Professional Student Association Travel Grant Award 2025
- AERE Travel Scholarship 2025
- ASU Graduate College Travel Award 2025
- [Agricultural Scholars Fellowship](#) (USDA & Farm Foundation) 2024
- ASU Global Futures Teaching Fellow Award (with K. Kroetz) 2023
- ASU Graduate and Professional Student Association Travel Grant Award 2022
- NSF Research Experience for Undergraduates - Michigan State University 2017
- “Best Undergraduate Project” at the 22nd Annual Conference of the Wildlife Society 2016
- Federal Water Quality Association’s Richard Barber Scholarship; MENSA Sylvia Scholarship 2014

Service & Miscellany

Service

- Referee: Scientific Reports, AERE Summer Conference Abstracts
- Community: collaboration with Central Arizona Conservation Alliance to build [Rshiny](#) application to track real time invasive species observations and prioritize management decisions (2021 - present)
- Hiring committees: Resources for the Future RA representative on hiring committee (2020)

Programming & Software

- R, Rshiny, Python, ArcGIS, Matlab, Stata, [GitHub](#), \LaTeX