

# NATHALIE R. SOMMER

Greeley Memorial Laboratory 370 Prospect Street New Haven CT 06511

nathalie.sommer@yale.edu

nathalie-sommer.com

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## EDUCATION

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<b>Ph.D</b> Yale University, School of the Environment	2019 – 2024 (expected) New Haven, CT
<b>MPhil.</b> Yale University, School of the Environment	2021 New Haven, CT
<b>MESc.</b> Yale University, School of the Environment	2019 New Haven, CT
<b>B.S. Biology, B.S. Environmental Science and Policy</b> College of William & Mary	2017 Williamsburg, VA

## PUBLICATIONS

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\*High-school coauthor

10. Ferraro, K.M, Ferraro, A.L., Arietta, A.Z., **Sommer, N.R.** (2023) Revisiting two dogmas of conservation science. *Conservation Biology*. doi:10.1111/cobi.14101
9. **Sommer, N.R.**, Alshwairikh, Y., Arietta, A. Z., Skelly, D.K., Buchkowski, R.B. (2023) Prey metabolic responses to predators depend on predator hunting mode and prey antipredator defenses. *Oikos*. doi:10.1111/oik.09664
8. **Sommer, N.R.**, Ferraro, K.M. (2022) An interest-based rights ethic for wildlife management and applications to behavioral training. *Conservation Science and Practice*. doi:10.1111/csp2.616
7. Ferraro, K.M, Ferraro, A.L., **Sommer, N.R.** (2021) Challenges facing cross-disciplinary collaboration in conservation ethics. *Conservation Science and Practice*. doi:10.1111/csp2.523
6. **Sommer, N.R.** & Schmitz, O.J. (2020) Differences in prey personality mediate trophic cascades. *Ecology and Evolution*. doi:10.1002/ece3.6648
5. Guiliano, S.\*, Karr, C.\*, **Sommer, N.R.**, Buchkowski, R.W. (2020) Woodlice change the habitat use of spiders in a different food chain. *PeerJ*. doi:10.7717/peerj.9184
4. Nelson, J.A., Johnson, D.S., Deegan, L.A., Spivak, A.C. **Sommer, N.R.** (2019) Feedbacks between nutrient enrichment and geomorphology alter bottom-up control on food webs. *Ecosystems*. doi:10.1007/s10021-018-0265-x
3. Hill, T.D., **Sommer, N.R.**, Kanaskie, C.R., Santos, E.A., Oczkowski, A.J. (2018) Nitrogen and carbon concentrations and stable isotope ratios: data from a 15N tracer study in short-form *Spartina alterniflora* and *Distichlis spicata*. *Data in Brief*. doi:10.1016/j.dib.2018.09.133
2. Hill, T.D., **Sommer, N.R.**, Kanaskie, C.R., Santos, E.A., Oczkowski, A.J. (2018) Nitrogen uptake and allocation estimates for *Spartina alterniflora* and *Distichlis spicata*. *Journal of Experimental Marine Biology and Ecology*. doi:10.1016/j.jembe.2018.07.006
1. **Sommer, N.R.**, Moody, N.M., Lantz, S.M., Leu, M., Karubian, J., Swaddle, J.P. (2018) Red-backed fairywrens adjust habitat use in response to dry season fires. *Austral Ecology*. doi:10.1111/aec.12629

## GRANTS, FELLOWSHIPS, AWARDS

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### Grants

Total: \$42,745

\*Co-awarded

American Museum of Natural History, Roosevelt Memorial Grant (\$1,000)	2022
Geological Society of America, Gould Research Grant (\$3,175)	2022
Yale Law, Ethics, and Animals Program (LEAP) Grant (\$5,000)*	2021, 2022
Yale Institute for Biospheric Studies, Dissertation Improvement Grant (\$5,000)	2022
John F. Enders Research Grant (\$1,500)	2021
Yale Environment and Biospheric Studies Doctoral Grant (\$7,750)	2021
Kohlberg-Donohoe Research Grant (\$6,000)	2018, 2020
Yale Institute for Biospheric Studies Doctoral Pilot Grant (\$3,000)	2020
Schiff Fund for Wildlife Habitat and the Environment (\$4,000)	2018
Yale Institute for Biospheric Studies Small Grant (\$3,000)	2018
Jubitz Family Foundation Summer Grant (\$2,120)	2018
Carpenter-Sperry Research Fund (\$1,200)	2018

### Fellowships & Scholarships

Total: \$168,000

PEO International, Scholar Award (\$20,000)	2023-2025
Yale Merit Research Scholarship (\$50,000)	2017-2019
Yale School of Forestry Scholarship (\$40,000)	2017-2019
EPA Greater Research Opportunities (GRO) Fellow (\$50,000)	2015-2017
NSF Research Experience for Undergraduates (REU) Fellow (\$5,000)	2015
NSF International Research Experience for Students (IRES) Fellow (\$3,000)	2014

### Awards & Honors

NSF Graduate Research Fellowship, Honorable Mention	2019
Joy Archer Award for Environmental Research, College of William & Mary	2017
Rankin Prize for Best Student Oral Presentation, New England Estuarine Research Society	2016

## TEACHING EXPERIENCE

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### Certifications and Courses

Yale Certificate of College Teaching Preparation (CCTP)	<i>In progress</i>
Anti-Racist Pedagogy	Fall 2021

### Instructor of Record

Conservation Ethics, Yale School of the Environment	Spring 2023
Natural Science Research Methods, Yale School of the Environment	Fall 2022

### Teaching Assistantships

Professional Skills Module: Visual Communication	Spring 2021, 2022
Environmental Data Visualization & Communication, Yale School of the Environment	Spring 2021
Natural Sciences Research Methods, Yale School of the Environment	Fall 2020
Conservation Biology (Head Teaching Fellow), Yale University	Fall 2019
Conservation Biology, Yale University	Fall 2018
Ornithology, Yale University	Spring 2018
Introduction to Organisms, Ecology, Evolution, College of William & Mary	Fall 2017
Evolution of Organisms, College of William & Mary	Spring 2016, 2017

### Invited Guest Lectures

<i>Ethics in Invasive Species Management</i> - Yale School of the Environment	Spring 2023
<i>Beginners Guide to Soil Carbon Analyses</i> - Yale School of the Environment	Fall 2021
<i>Data Management Best Practices</i> - Yale School of the Environment	Fall 2021
<i>Reproducibility: From Data to Viz</i> - Yale School of the Environment	Spring 2021
<i>Philosophy and Ethics in Science</i> - Yale School of the Environment	Fall 2020

<i>Data Management and Workflow</i> - Yale School of the Environment	Fall 2020
<i>Introduction to GitHub</i> - Yale School of the Environment	Fall 2019
<i>Game Theory, Cooperation, and ESS</i> - College of William & Mary	Spring 2016

## Workshops

<i>Introduction to Databases and SQL</i> Yale School of the Environment SPRY	Fall 2022
<i>Working with GitHub and RProjects</i> Yale School of the Environment	Fall 2020, Fall 2022
<i>Perils of Collaborative Coding</i> Yale School of the Environment R-rodeo	Fall 2020
<i>Introduction to R</i> Yale-Myers Field Ecologist Internship	Summer 2018
<i>Public Speaking</i> Green Careers Women Leaders: A Conference for High School Women	Spring 2018

## PRESENTATIONS

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### Invited Talks

**Sommer, N.R.** Food, fear, and refuge in a bug-eat-bug world. Quiet Corner Initiative Summer Research Series at Yale Myers Forest. June 2021.

**Sommer, N.R.** Field experiments for understanding ecological consequences of global change. Flanders Nature Center and Land Trust, 60th Anniversary Festival. May 2023.

### Contributed Presentations

*Talk.* **Sommer, N.R.** Investigating the refuge-resource paradox in the landscape of fear. Yale School of the Environment Research Conference, New Haven CT. April 2021.

*Talk.* Ferraro, K.M. & **Sommer, N.R.** The need for cross-disciplinary communication to inform conservation ethics. The New School. AnimalHouse: Animals and their Environs, New York NY. April 2021.

*Poster.* **Sommer, N.R.** & Alshwairikh, Y.A. Prey functional types and physiological responses to predation risk. Yale School of the Environment Research Conference, New Haven CT. April 2020. *Canceled due to COVID-19.*

*Talk.* Ferraro, K.M. & **Sommer, N.R.** A call for a new conservation ethic in the age of climate change. The New School AnimalHouse: Animals and their Environs, New York NY. April 2020. *Canceled due to COVID-19.*

*Flash Talk.* **Sommer, N.R.** Herbivore personality and plasticity in trophic interactions. Yale School of the Environment Research Conference, New Haven CT. April 2019.

*Talk.* **Moore, N.R.**, Kanaskie, C.R., Oczkowski, A. J., Hill, T.D. Belowground nitrogen uptake and allocation by *Spartina alterniflora* and *Distichlis spicata*. New England Estuarine Research Society, Block Island RI. October 2016.

*Poster.* **Moore, N.R.**, Leu, M., Swaddle, J. P. How do fire regimes and an invasive grass affect habitat occupancy of an Australian songbird? Ecological Society of America, Baltimore MD. August 2015.

*Talk.* **Moore, N.R.**, Nelson, J.A. Influence of creek bank geomorphology on foraging success of *Fundulus heteroclitus* in a New England salt marsh. Marine Biological Laboratory Research Symposium. Plum Island, MA. August 2015.

*Poster.* **Moore, N.R.**, Swaddle, J.P. Impact of altered fire regimes on tropical passerines. William & Mary Undergraduate Research Symposium, Williamsburg VA. April 2015.

## MENTORING AND OUTREACH

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### Research Mentorship

NSF BIO REPS post-baccalaureate: Tamara Rivera	2021-2022
Yale School of the Environment, MESc students:	
Stan Gosliner, Quint Doan	2020-2022
Amanda Wik	2022-2024
Yale Sustainability Office, Undergraduate Research Ecologist: Mairead Brennan	2019
Yale-Myers Forest Summer Ecologist Interns (8)	2018
Yale College Undergraduate, Ecology Summer Fellow: Trinidad Kechkian	2018
Schmitz Lab High School Interns: Cerina Karr, Stefanie Guiliano	2018

### Professional Mentorship

Small Pond Science EEB Mentee-Match (3)	2020-2022
Women in Science at Yale, Undergraduate Mentee-Match (3)	2017-2021

### Public Outreach

Flanders Nature Center Summer Camps	2021-present
New Haven Science Fair	2020-2022
National Student Leadership Conference, Environmental Sciences at Yale-Myers Forest	2019-2022
Green Careers, Women Leaders: A Conference for New Haven High School Women	2018
Environmental Protection Agency Atlantic Ecology Division Community Outreach	2016

## PROFESSIONAL SERVICE

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**Ad Hoc Reviewer:** *BMC Ecology*, *Journal of Animal Ecology*, *The American Naturalist*, *Journal of Thermal Biology*, *Journal of Arid Environments*

**Conference Organizer:** 35th Annual Research Conference Yale School of the Environment (2019)

**Committees:** Yale School Forests Research Committee (2019-present); Yale Environment Anti-Racism Network (2020-2022); Yale Environment Doctoral Student Recruitment (2020); Yale Environment Doctoral Student Government Bylaws (2020); Yale Environment Doctoral Funding COVID-19 Response (2020); William & Mary STEM Admissions (2015-2017); William & Mary Aquatic Ecology Faculty Hire (2016)

**Consultation:** Yale Alumni Office Data Analyst (2023); Yale Sustainability Office Research Ecologist (2019); William & Mary Residence Life EcoHouse Advisor (2015-2016)

**Departmental Seminar Organizer:** Yale Environment Confluence Research Seminar (2020-2021)

**Learning Communities:** Fellow: Yale Law, Ethics, & Animals Program (2020-2023); Leader: SCOPE for coding and quantitative skill-sharing (2020-2023)