# NATHALIE R. SOMMER

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### **EDUCATION**

Ph.D Yale University, School of the Environment	2019 – present New Haven, CT
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MPhil.	2021
Yale University, School of the Environment	New Haven, CT
MESc.	2019
Yale University, School of the Environment	New Haven, CT
B.S. Biology, B.S. Environmental Science and Policy	2017
College of William & Mary	Williamsburg, VA
Grants, Fellowships, Awards	
Grants	Total:\$31,070
*Co-awarded	0001
John F. Enders Research Grant (\$1,500)*	2021
Law, Ethics, and Animals Program (LEAP) Grant (\$2,500)* Yale Environment and Biospheric Studies Doctoral Grant (\$7,750)	2021 2021
Kohlberg-Donohoe Research Grant (\$3,000)	2021
Yale Institute for Biospheric Studies Doctoral Pilot Grant (\$3,000)	2020
Kohlberg-Donohoe Research Grant (\$3,000)	2018
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:\$148,000
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 Experence for Students (IRES) Fellow (\$3,000)	2014
Awards	
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

# **PUBLICATIONS**

\*High-school coauthor

- 6. **Sommer, N.R.** & Schmitz, O.J. (2020) Differences in prey personality mediate trophic cascades. *Ecology and Evolution*. doi.org/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.org/10.7717/peerj.9184

- 4. Nelson, J.A., Johnson, D.S., Deegan, L.A., Spivak, A.C. <u>Sommer, N.R.</u> (2019) Feedbacks between nutrient enrichment and geomorphology alter bottom-up control on food webs. *Ecosystems*. doi.org/10.1007/s10021-018-0265-x
- 3. Hill, T.D., <u>Sommer, N.R.</u>, 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.org/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.org/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.org/10.1111/aec.12629

## **PRESENTATIONS**

#### **Invited Talks**

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

#### **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.

# TEACHING EXPERIENCE

Certifications and Courses  Yale Certificate of College Teaching Preparation (CCTP)	In progress
Teaching Assistantships	
Visual Communication (Professional Skills Module)	Spring 2021
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 201
Evolution of Organisms, College of William & Mary	Spring 2016, 2017
Guest Lectures	
Reproducibility: From Data to Viz - Yale School of the Environment	Spring 202
Philosophy and Ethics in Science - Yale School of the Environment	Fall 2020
Data Management and Workflow - Yale School of the Environment	Fall 2020
Introduction to GitHub - Yale School of the Environment	Fall 2019
Game Theory, Cooperation, and ESS - College of William & Mary	Spring 201
Workshops	
Introduction to GitHub and RProjects Yale School of the Environment R-rodeo	Fall 202
Perils of Collaborative Coding Yale School of the Environment R-rodeo	Fall 202
Introduction to R Yale-Myers Field Ecologist Internship	Summer 201
Public Speaking Green Careers Women Leaders: A Conference for High School Women	Spring 2018
Mentoring and Outreach	
Research Mentorship	
Yale School of the Environment, MESc students (2)	2020-
Yale Sustainability Office, Undergraduate Research Ecologist (1)	2019
Yale-Myers Forest Summer Ecologist Interns (8)	2018
Yale College Undergraduate, Independent Research Project (1)	2018
Schmitz Lab High School Interns, Independent Research Projects (3)	2018
Professional Mentorship	2020
Small Pond Science EEB Mentee-Match (1)	2020-
Women in Science at Yale, Undergraduate Mentee-Match (3)	2017-
Public Outreach New Haven Science Fair, Volunteer	2020
National Student Leadership Conference, Environmental Sciences at Yale-Myers Forest	2020-
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Green Careers, Women Leaders: A Conference for New Haven High School Women Environmental Protection Agency Atlantic Ecology Division Community Outreach	2010
PROFESSIONAL SERVICE	
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Ad Hoc Reviewer: *BMC Ecology, Journal of Animal Ecology, The American Naturalist, Journal of Thermal Biology* Conference Organizer: 35th Annual Research Conference Yale School of the Environment (2019)

Commitees: Yale School Forests Research Committee (2019-); Yale Environment Anti-Racism Network (2020-); 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 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**: Yale Law, Ethics, & Animals Program (2020-2021)

# TECHNICAL SKILLS

Programming Languages: R, Git

Software and Tools: GitHub, LaTex, SPSS, ArcGIS, Mathematica, Distance

Research and Technical:

- Field: Radio telemetry, GPS, mist netting, flume netting, sediment coring, plant ID, arthropod collection and ID, avian bleeding and banding, vegetation and transect surveys, soil sampling
- Lab: Gut content analysis of fish, denitrification assays, plant root identification, soil processing
- Instrumentation: Isotope-radio mass spectrometry (Isoprime100), direct mercury analysis (DMA80), field greenhouse gas analysis (Picarro, LI-COR)