NATHALIE R. SOMMER

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EDUCATION

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| 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 | |
| John F. Enders Research Grant (\$1,500) | 2021 |
| Law, Ethics, and Animals Program (LEAP) Grant (\$2,500)* | 2021 |
| Yale Environment and Biospheric Studies Doctoral Grant (\$7,750) | 2021 |
| Kohlberg-Donohoe Research Grant (\$3,000) | 2020 |
| Yale Institute for Biospheric Studies Doctoral Pilot Grant (\$3,000) | 2020 2018 |
| Kohlberg-Donohoe Research Grant (\$3,000) 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

- 7. Ferraro, K.M, Ferraro, A.L., <u>Sommer, N.R.</u> (2021) Challenges facing cross-disciplinary collaboration in conservation ethics. *Conservation Science and Practice*. doi.org/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. <u>Sommer, N.R.</u> (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., <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: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

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 2017 |
| Evolution of Organisms, College of William & Mary | Spring 2016, 2017 |
| Guest Lectures | |
| Reproducibility: From Data to Viz - Yale School of the Environment | Spring 2021 |
| 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 2016 |
| Workshops | |
| Introduction to GitHub and RProjects Yale School of the Environment R-rodeo | Fall 2020 |
| Perils of Collaborative Coding Yale School of the Environment R-rodeo | Fall 2020 |
| Introduction to R Yale-Myers Field Ecologist Internship | Summer 2018 |
| 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 | |
| Small Pond Science EEB Mentee-Match (2) | 2020- |
| Women in Science at Yale, Undergraduate Mentee-Match (3) | 2017- |
| Public Outreach | 222 |
| Flanders Nature Center Summer Camps | 2021 |
| New Haven Science Fair | 2020- |
| National Student Leadership Conference, Environmental Sciences at Yale-Myers Forest | 2019- |
| Green Careers, Women Leaders: A Conference for New Haven High School Women | 2018 |
| Environmental Protection Agency Atlantic Ecology Division Community Outreach | 2016 |
| Professional Service | |

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)

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)