

Samantha Hamilton

School for Environment & Sustainability (SEAS), University of Michigan
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EDUCATION

- University of Michigan, Ann Arbor, MI** 2025 – present
Ph.D. in Environment and Sustainability
Advisor: Dr. Neil Carter
- Johns Hopkins University, Washington, D.C.** 2021 – 2023
M.S. in Environmental Sciences and Policy
Capstone: Predicting top predator recovery using a habitat-specific predator-prey model
Advisors: Dr. Brent Hughes, Dr. Daniel Zachary
- San José State University, San José, CA** 2020 – 2021
Master's in Library and Information Science (MLIS)
- University of Nevada, Las Vegas, Las Vegas, NV** 2017 – 2019
B.S. in Biology (Concentration in microbiology)
Magna cum laude
- Arizona State University, Tempe, AZ** 2014 – 2017
B.A. in History (Concentration in European history)
B.S. in Political Science
Summa cum laude

PUBLICATIONS

1. **Hamilton, S. N. M.**, Tinker, M. T., Jackson, J., Tomoleoni, J., Kenner, M., Yee, J., Bell, T., Castorani, M. C. N., & Hughes, B. B. (2024). Modeling coupled dynamics of an empirical predator-prey system to predict top predator recovery. *Biological Conservation*, 294, 110623. <https://doi.org/10.1016/j.biocon.2024.110623>
2. **Hamilton, S. N. M.** (2024). From small to large pup: A sea otter's childhood in Monterey Bay, California, USA. *Journal of the International Otter Survival Fund*, 10, 57-67. https://www.researchgate.net/publication/383444466_ISSN_2520-6850_OTTER_Broadford
3. **Hamilton, S.** (2021). Book review: Rebekkah Smith Aldrich's sustainable thinking: Ensuring your library's future in an uncertain world. *School of Information Student Research Journal*, 11(1). <https://doi.org/10.31979/2575-2499.110107>
4. **Hamilton, S.** (2021). What's mine is yours: The history of U.S. tool-lending libraries. *School of Information Student Research Journal*, 11(1). <https://doi.org/10.31979/2575-2499.110104>

MANUSCRIPTS IN REVIEW/PREPARATION

1. **Hamilton, S. N. M.**, Bentall, G. B., & Barrett, H. E. (in preparation) Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) in Central California.
2. **Hamilton, S. N. M.**, Bentall, G. B., Barrett, H. E., & Johnson, A. (in preparation) Assessing the impact of marine recreation user numbers on anthropogenic disturbance to southern sea otters (*Enhydra lutris nereis*) in Elkhorn Slough, California.
3. **Hamilton, S. N. M.** (in preparation) Sea otter research in Japan: Trends and future directions. *Integrative and Comparative Biology*.

OTHER WORKS

- [Sea Otter Savvy Takes Japan: A Research Intern's Journey to the Otter Side of the World](#) 03/2024
Sea Otter Savvy Blog
- [Wizards and Prophets of the Everglades: A Graduate Student's Conference Reflections](#) 01/2022
Johns Hopkins Environmental Sciences & Policy Blog
- [From Print to Pixels \(and Back\): The Environmental Costs of Archival Digitization](#) 05/2021
Archeota

WORK & INTERNSHIPS

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- Environmental Scientist (Limited Term)**, California Department of Fish and Wildlife 01/2025 – 07/2025
- Coordinate oil spill readiness at the Marine Wildlife Veterinary Care and Research Center for sea otters, including coordination with the Oiled Wildlife Care network and assisting in development of protocols, trainings, and drills.
 - Assist the Veterinary Specialist with pathology studies on sea otters, including oversight of Scientific Aids, maintenance of a database related to this work, and participation in original scientific research.
- ESA Section 7 Analyst II**, Astor Environmental 07/2024 – 01/2025
- Supported NOAA's National Marine Fisheries Service, Office of Protected Resources for the Alaska Region with consultations for and compliance with Section 7 of the Endangered Species Act.

- Conducted research and analysis to provide biological assessments and opinions of proposed actions on endangered species and their critical habitat.

Marine Mammal Regulatory Biologist, *Integrated Statistics*

03/2023 – 10/2023

- Supported the U.S. Fish and Wildlife Service Alaska Region, Marine Mammals Management program with data entry and organization.
- Organized and maintained the Letters of Authorization database and scientific literature used to support regulatory actions.

Data Technician, *Lindahl Reed*

01/2022 – 10/2022

- Supported the U.S. Fish and Wildlife Service Alaska Region, Fisheries and Ecological Services program in achieving data management goals.
- Developed and presented monthly workshops on data management best practices.
- Reviewed data management plans for completeness and accuracy.
- Created and edited metadata for projects and data products.

Photo and Film Curation Intern, *NOAA*

09/2021 – 03/2022

- Created and organized metadata for underwater photos and videos taken by Gray's Reef National Marine Sanctuary. Identified and labeled fish and invertebrate species in photo collections.

Animal Registrar Intern, *Dallas Zoo*

01/2021 – 04/2021

- Created and edited both modern and historic animal husbandry and medical records using ZIMS.

Library & Archives Intern, *Wildlife Conservation Society*

10/2020 – 05/2022

- Created and edited metadata for research publications, videos, and photos.

Archives & Records Intern, *National Park Service*

10/2020 – 05/2021

- Inventoried, organized, and described archival collections by entering catalog records. Transcribed handwritten letters and oral history interview recordings.

Digital Archives Intern, *Busy Beaver Button Museum*

08/2020 – 12/2020

- Performed historical research to describe and catalog buttons. Inputted data into museum database using Drupal content management system.

RESEARCH

- Research Intern**, Richard E. Grewelle, *Stanford University* 08/2022 – 12/2022
- Research project assessing disease risk to sea otters (*Enhydra lutris nereis*) for reintroduction in San Francisco Bay, CA.
- Field Research Intern and Volunteer**, *Monterey Bay Aquarium* 06/2022 – 12/2023
- Collected southern sea otter foraging and behavioral data from shore using radio telemetry equipment and spotting scopes. Monitored released sea otters from surrogacy/rehabilitation program.
 - Digitized historical foraging data using Microsoft Access.
 - Research project analyzing cases of sea otters infected with acanthocephalan peritonitis to estimate timeline for disease progression and hypothesize behavioral influences that increase disease risk. Project also included mapping risk hotspots for acanthocephalan peritonitis based on sea otter movement, diet preference, and habitat use.
- Research Intern**, *Wild Otters* 05/2022 – 06/2022
- Wrote a literature review on smooth-coated otter (*Lutrogale perspicillata*) behavior. Designed and presented study analyzing vigilance behavior in smooth-coated otters from camera trap footage.
- Research Assistant and Volunteer**, *Sea Otter Savvy* 09/2021 – present
- Conduct analyses on southern sea otter observational and disturbance data using Microsoft Access queries and Excel pivot tables.
 - Collect sea otter observational and disturbance data using spotting scopes, and enter data into Microsoft Access database weekly.
 - Participated in U.S. Geological Survey's San Nicolas Island sea otter survey in July 2023 and April 2025.
 - Served as data recorder and shore spotter for Elkhorn Slough sea otter captures in November/December 2022 and October/November 2023.
 - Add metadata to camera trap photos for Elkhorn Slough sea otter disturbance project.
 - Table outreach events to educate locals on sea otters and foster awareness about energetic costs of anthropogenic disturbance.
- Research Intern**, Jessie R. Hale, *University of Washington* 08/2021 – 09/2021
- Entered and organized historical data on sea otter prey abundance and sizes from the Olympic Coast using Microsoft Excel.

SERVICE & LEADERSHIP

Student Representative, SEAS Ph.D. Admissions Committee <ul style="list-style-type: none">• Support faculty and staff in reviewing PhD student applications.	01/2026
Professional Ambassador, Surf-fur <ul style="list-style-type: none">• Represent Surf-fur through brand promotion and contributing to the watersports community.	10/2025 – present
Science Communication Fellows Program, UM History of Natural Museum <ul style="list-style-type: none">• The program “uses the NSF-supported Portal to the Public guiding framework to bring scientists and public audiences together in face-to-face interactions that promote appreciation and understanding of current scientific research.”	09/2025 – 12/2025
Doctoral Organizing Committee, SEAS <ul style="list-style-type: none">• Seminar volunteer (09/2025 – present)	09/2025 – present
Society for Conservation Biology Chapter at UM <ul style="list-style-type: none">• Secretary (09/2025 – present)• Record meeting notes and maintain mailing list.	09/2025 – present
Formal Mentorship Program, SEAS <ul style="list-style-type: none">• Receive coaching on career goals, advancement, and networking from experienced UM alumni and professionals.	09/2025 – present
Graduate Women in Science <ul style="list-style-type: none">• Recording and Corresponding Secretary (06/2025 – present)• National Programming Committee member (04/2025 – present)• Record meeting minutes for national meetings and serve as a member on the Editorial Board to select materials for publication• Support execution of virtual mentoring webinars and research seminars.	04/2025 – present
Mentorship Program, Society for Women in Marine Science <ul style="list-style-type: none">• Provide one-on-one mentorship to marine biology undergraduate students and offer regular support in job/internship searches.	02/2025 – present
Pen Pal Program, Letters to a Pre-Scientist	08/2024 – present

- Paired with a K-12 student and exchange letters during the academic year to broaden awareness of STEM professionals and inspire a future in science.

Helping Paw Program, *Peace of Mind Dog Rescue*

08/2024 – 08/2025

- Member of Walking Brigade and provide short-term dog-walking support for senior pet guardians.

Women of Wildlife, *The Wildlife Society*

07/2024 – present

- Volunteer to organize conference booth, seminars, and other events.
- Develop and send emails of WOW news to members using Brevo.

Coastal and Marine Wildlife Working Group, *The Wildlife Society*

06/2024 – present

- Communications & Outreach Committee Chair (07/2024 – present)
- Lead Communications Committee charged with broadcasting Working Group updates through various digital channels.
- Create social media posts, newsletters, and blog posts to advertise organizational news and successes.

Volunteer Tortoise Monitor, *Red Rock National Conservation Area*

05/2024 – 08/2024

- Soaked and fed 9 desert tortoises (*Gopherus agassizii*) on exhibit.
- Cleaned tortoise habitats and ensured integrity of burrows.
- Educated visitors on tortoise biology and natural history.

University Ambassador, *Women in Ocean Science*

03/2024 – present

- Lead organizer of networking events, workshops, and development opportunities for young women participating in marine science.

Green Labs Working Group, *Sustainability Leadership Council, Johns Hopkins University*

06/2021 – 08/2022

- Served as graduate student representative promoting recycling and energy-saving practices across campus labs.

Women of Whiting, *Johns Hopkins University*

06/2021 – 05/2023

- Newsletter Chair and Marketing Chair (08/2021 – 05/2022)
- Planning Committee member for Women in STEM Symposium (04/2022)

College of Professional & Global Education Online Conference, San José State University <ul style="list-style-type: none"> Served as marketing lead on the Organizing Committee. 	06/2021 – 02/2022
National Museum of Forest Service History <ul style="list-style-type: none"> Archives volunteer in charge of formatting Ranger Roll Calls and preparing them for upload into PastPerfect software. 	09/2020 – 12/2023
Society of American Archivists Student Chapter, San José State University <ul style="list-style-type: none"> Vice Chair (08/2020 – 05/2021) Organized, marketed, and hosted monthly events. Collaborated with other student chapters to organize and promote joint events. 	08/2020 – 05/2021
First Generation Student Group, San José State University <ul style="list-style-type: none"> Secretary (08/2020 – 05/2021) Generated membership statistics, created monthly newsletters, and kept meeting minutes. 	08/2020 – 05/2021
Special Library Association Student Chapter, San José State University <ul style="list-style-type: none"> Second Assistant Membership Director (08/2020 – 05/2021) Oversaw organization's email communications and created monthly newsletters. 	08/2020 – 05/2021

AWARDS & FELLOWSHIPS

Japan Business Society of Detroit Foundation Grant (\$750.00) <ul style="list-style-type: none"> "[E]mphasis on grantees in the Greater Detroit community which are committed to one or more of the Foundation's objectives, including community enhancement, education and research, and U.S. Japan relations." 	12/2025
UM SEAS Conference Travel Grant (\$200.00) <ul style="list-style-type: none"> "[A]ssists graduate students in defraying travel costs when attending professional meetings." 	11/2025
UM Rackham Conference Travel Funding (\$900.00) <ul style="list-style-type: none"> "[P]rovide[s] opportunities for Rackham graduate students to become familiar with, and participate in the life of, their academic professions." 	11/2025
CERF Student/Early Career Participation Award (\$425.00)	11/2025

- A “travel grant to support student and early career members attending and presenting at CERF 2025 in Richmond, Virginia.”

Letters to a Pre-Scientist Compassionate Connections Award 06/2025

- Identified as a pen pal “who went above and beyond to cultivate a great relationship with their pre-scientist and inspire them to explore a future in STEM.”

The Explorers Club Rolex grant (\$10,000.00) 05/2024

- “[P]romotes the significant role that exploration plays in addressing cutting-edge scientific questions, understanding our environment and the world we live in, and learning more about our history to protect our future.”

American Society of Mammalogists Grant-in-Aid Award (\$2,000.00) 05/2024

- “Support[s] field or laboratory work in any area of mammalogy...for the purchase of supplies and small items of equipment related to such research.”

The Wildlife Society Trailblazer grant (\$130.00) 05/2024

- “Support[s] aspiring wildlife professionals in need by providing...donations of essential field gear for their wildlife science and conservation endeavors.”

IUCN/SSC Otter Specialist Group 50 Year Anniversary Photo Contest 05/2024

- Received Special Mention for the contest’s “Interactions” category.

Sigma Xi Student Research Showcase Award (\$250.00) 04/2024

- Received 2nd place in Graduate Student Division.

The Explorers Club Exploration Fund grant (\$4,950.00) 03/2024

- “Support[s] graduate/post-graduate students and early career field scientists across a variety of disciplines.”

PADI Foundation grant (\$2,000.00) 03/2024

- Provided for research focused on “enrich[ing] mankind’s understanding of aquatic environments and encourage sensitivity to and protection of ecosystems”.

NOAA “Get Into Your Sanctuary!” Photo Contest 12/2023

- Received Honorable Mention for the sea otter photo and caption I submitted for the annual public contest.

Western Society of Naturalists Student Poster Award 11/2023

- Received Honorable Mention for Best Graduate Poster at the 104th Annual Meeting.

The Otter Project Photo Contest 06/2023

- Received 1st place for the sea otter photo and caption I submitted for the annual public contest.

NOAA Gray's Reef National Marine Sanctuary Volunteer of the Year 2023

- Received award for internship work on photo and film curation.

National Parks Conservation Association Biodiversity Research Fellowship 02/2021– 02/2022

- Worked on policy and research related to conserving and restoring the Greater Everglades ecosystem with a particular focus on threatened and endangered species and invasive species.

Ken Haycock Award for Exceptional Professional Promise (\$1,000.00) 05/2021

- "[G]iven annually to the [San José State University] iSchool student who, in the opinion of the faculty, exhibits the most exceptional professional promise for leadership. The recipient demonstrates flexibility in program delivery modes, excellence in academic performance, ability to think theoretically and practically and ability to analyze and communicate the results of knowledge gained."
- Served as the student speaker for the iSchool's spring 2021 [convocation](#).

Arizona State University President's Scholarship (~\$12,000.00) 2014 – 2017

- Awarded to first-year undergraduate students based on academic merit.

CERTIFICATIONS

8 Hour HAZWOPER First Responder Operations, Northern Industrial Training, LLC. 03/2025 – 03/2026

TEACHING

Graduate Teaching Assistant, University of Michigan 01/2026 – present

- EAS 509: Ecology Concepts and Applications

- Led discussion session, held office hours, and graded assignments.

Peer Mentor, San José State University

12/2020 – 02/2021

- INFO 203: Online Learning Tools and Strategies for Success
- Led information sessions and graded assignments, including quizzes and papers.

Undergraduate Teaching Assistant, University of Nevada, Las Vegas

08/2018 – 12/2018

- BIOL 356: Microbiology
- Participated in laboratory preparation and instruction and proctored exams.

PRESENTATIONS

28th Biennial Conference

11/2025

- Coastal and Estuarine Research Federation
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

Sea Otter Conservation Workshop XIV

03/2025

- Seattle Aquarium
- Titled “Sea otter (*Enhydra lutris lutris*) foraging ecology and behavior in Eastern Hokkaido, Japan”

25th Biennial Conference on the Biology of Marine Mammals

11/2024

- Society for Marine Mammalogy
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

2024 Sea Otter Awareness Week

09/2024

- The Marine Mammal Center, Sea Otter Savvy
- Titled “Retrofit, Rehabilitate, Reintroduce”

Student Research Showcase

04/2024

- Sigma Xi
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

Southern Sea Otter Research Update Meeting

03/2024

- Defenders of Wildlife

- Titled “Assessing the impact of marine recreation user numbers on human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) in Elkhorn Slough, CA”

9th Annual California Coastal Wildlife Disturbance Symposium

11/2023

- Respect Wildlife
- Titled “Getting the Shot: The Effect of Camera Usage on Probability of Human-Caused Disturbance to Southern Sea Otters (*Enhydra lutris nereis*) Central California”

104th Annual Meeting

11/2023

- Western Society of Naturalists
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

Women in STEM Symposium

04/2023

- Women of Whiting, Johns Hopkins University
- Titled “Social drivers of increased sea otter harvest by Alaska Natives (1988-2015)”

Sea Otter Conservation Workshop XIII

03/2023

- Seattle Aquarium
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

8th Annual California Coastal Wildlife Disturbance Symposium

11/2022

- Respect Wildlife
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

Annual Wildlife Symposium

10/2022

- The Wildlife Society, California Central Coast Chapter
- Titled “Getting the shot: The effect of camera usage on probability of human-caused disturbance to southern sea otters (*Enhydra lutris nereis*) Central California”

15th International Otter Congress

09/2022

- IUCN Otter Specialist Group
- Titled “Social drivers of increased sea otter harvest by Alaska Natives (1988-2015)”

ARCHIVES*RECORDS: Together/Apart Conference

08/2021

- Society of American Archivists
- Titled “Our pandemic year: An online student chapter experience”

PROFESSIONAL MEMBERSHIPS

Field Inclusive	12/2025 – present
Coastal and Estuarine Research Federation	04/2025 – present
Society for Women in Marine Science	11/2024 – present
Society for Marine Mammalogy	05/2024 – present
The Wildlife Society	04/2024 – present
American Society of Mammalogists	02/2024 – present
Animal Behavior Society	12/2023 – present
Women in Ocean Science	11/2023 – present
Asian Society of Otter Conservation Japan	10/2023 – present
Women in Science Japan	10/2023 – present
Society of Conservation Biology	02/2023 – present
IUCN/SSC Otter Specialist Group	01/2023 – present
Graduate Women in Science	01/2023 – present