HANNAH HENRY

Earth, Marine, and Environmental Science Ph.D. Candidate | Coastal Environmental Change Lab
University of North Carolina at Chapel Hill | 223 Mitchell Hall, Chapel Hill, NC 27599 USA
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RESEARCH INTERESTS

Barrier island and coastal morphodynamics; coupled human–natural systems modeling (CASCADE, Barrier3D); coastal management strategies, including beach nourishment, dune building, groins, and road relocation; human dimensions of coastal wildlife conservation; and science-informed coastal and wildlife policy.

EDUCATION

2024–present **Ph.D. Earth, Marine, and Environmental Science**, University of North Carolina at Chapel Hill
Dissertation: *Modeling Coupled Dynamics of Mid-Atlantic Barrier Islands for Improved Coastal Management*
Supervisors: Dr. Laura Moore (PI), Dr. Sarah Karpanty, Dr. Katherine Anarde, Dr. Tamlin Pavelsky, Dr. Antonio B. Rodriguez
Chapel Hill, NC, USA – GPA 4.0/4.0

2023–2024 **M.S. Natural Resources**, Auburn University
Thesis: *Conservation Compliance and Public Awareness: Assessing Dolphin and Sea Turtle Interactions in Coastal Alabama*
Supervisors: Dr. Kelly Dunning (PI), Dr. Janna Willoughby, Dr. Todd Steury
Auburn, AL, USA – GPA 4.0/4.0

2018–2022 **B.S. Wildlife Ecology and Conservation**, University of Florida (Summa Cum Laude)
Minors: Economics and International Studies in Agricultural and Life Sciences
Honors Thesis: *Utilizing Bioacoustics for Conservation of the St. Vincent Amazon Parrot (Amazona guildingii)*
Supervisors: Dr. Kathryn Sieving (UF), Dr. Cristina Gomes (FIU)
Gainesville, FL, USA – GPA 3.93/4.0

PUBLICATIONS

Google Scholar; ORCID 0000-0003-0767-8669 *denotes corresponding

Peer-Reviewed Journal Articles

5. **Henry H***, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby JR, & Dunning K. (in press). Residency and ecological knowledge drive willingness to reduce artificial beach lighting among coastal users in Alabama. *Conservation Science and Practice*.
4. **Henry H**, Wheeler I*, Luchauer G, Asay B, Bowles N, Castruccio F, Cole D, Furland T, Krumhardt K, Romashkov L, Scearce SS, Manire H, Mollett S, Moulton M, Willoughby JR, & Dunning KH. (2026). Adaptive governance during an unprecedented marine heatwave: Case study from the Florida Keys National Marine Sanctuary. *Journal of Environmental Planning and Management*, *69*(8), 2426–2442. https://doi.org/10.1080/09640568.2025.2504516
3. Olivas T*, **Henry H**, Gumbleton S, Beckham N, Steury TD, Willoughby JR, & Dunning K. (2026). Assessing marine wildlife interactions with the charter boat fishing industry on Alabama's Gulf Coast, USA. *Human Dimensions of Wildlife*, *31*(3), 283–299. https://doi.org/10.1080/10871209.2025.2511931
2. Dunning K, Olivas T, Camus C, **Henry H**, Gumbleton S, Beckham N, & Willoughby JR. (2026). An analysis of the marine wildlife interactions with the commercial shrimping industry on the Alabama Gulf Coast. *Fisheries Research*, *293*, 107645. https://doi.org/10.1016/j.fishres.2025.107645
1. **Henry H***, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby JR, & Dunning K. (2025). Willingness of Recreational Anglers to Modify Hook and Bait Choices for Sea Turtle Conservation in Mobile Bay, Alabama, Gulf of Mexico. *Fisheries Management and Ecology*, *32*(2), e12766. https://doi.org/10.1111/fme.12766

Manuscripts in Review

1. **Henry H***, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby JR, & Dunning K. Conservation support and variable adherence to marine mammal protections among dolphin-watching tour operators in coastal Alabama. Submitted October 2026 *[Under review with Human Dimensions of Wildlife]*

Manuscripts in Preparation

1. **Henry H***, Moore LJ, Franklin B, Anarde K, Sahraei R, Murray AB, & Dalyander S. Parameterizing and testing implementation of groins in CASCADE facilitates projections of developed barrier island evolution. *[In preparation for Proceedings of Coastal Sediments 2027]*

RESEARCH GRANTS AND FUNDING ($54,150 total)

Nationally competitive grants and fellowships ($40,000 total)

2026 The Earth Surface Processes Institute, Community Surface Dynamics Modeling System ($2,800)
2025 DELTA H & SINAGEO Travel Award, CUNY – NSF Award ($3,000)
2025 NSF-ASI Indonesia Fellow, Boston University – NSF Award ($3,500)
2024 Ronald F. Labisky Graduate Fellowship in Wildlife Policy, The Wildlife Society ($10,000)
2023 Bridge to GVP Program, U.S. National Center for Atmospheric Research ($1,500)
2023 SWIMM Program, Harte Research Institute – NSF Award ($3,200)
2023 Ronald F. Labisky Graduate Fellowship in Wildlife Policy, The Wildlife Society ($10,000)
2022 International Research Experiences for Students, FIU – NSF Award ($6,000)

State competitive grants and fellowships ($10,000 total)

2026 Mountains to Sea Graduate Research Fellowship, NC WRRI and North Carolina Sea Grant ($10,000)

University-wide competitive grants and fellowships ($4,150 total)

2024 Graduate Student Council Travel Fellowship, Auburn University ($400)
2022 Reubin Askew Public Policy Research Scholar, University of Florida ($2,000)
2021 University Scholars Program, University of Florida ($1,750)

AWARDS AND SCHOLARSHIPS ($54,350 total)

Awards ($11,700 total)

2024 Trailblazing Work in Science Policy, Ecological Society of America ($700)
2024 Best Graduate Student Oral Presentation, 75th Atlantic Estuarine Research Society Conference
2024 Katherine S. McCarter Graduate Student Policy Award, Ecological Society of America
2023 Best Graduate Student Oral Presentation, 27th Biennial CERF Conference
2023 Rising TIDES Scholar, Coastal and Estuarine Research Federation ($7,500)
2022 UF Wildlife Ecology and Conservation: Outstanding Undergraduate Research, UF
2022 UF CALS Outstanding Senior Award: The J. Wayne Reitz Medal of Excellence, UF ($1,500)
2022 Summa cum laude (with highest honors) in Wildlife Ecology and Conservation, UF
2021 Florida Blue Key: Keystone Cohort 2, UF ($2,000)
2020 College of Agricultural and Life Sciences Leadership Institute: Cohort 12, UF

Scholarships ($42,650 total)

2024 Bodie McDowell Scholarship, Outdoor Writers Association of America ($1,900)
2023 The Life Membership Fund Scholarship, Wild Sheep Foundation ($1,250)
2023 Greater Everglades Student Memorial Scholarship, Florida Chapter of The Wildlife Society ($1,500)
2022 Doris Lowe and Earl and Verna Lowe Scholarship, UF ($1,200)
2021, 2022 Hobe and Gertrude Hooser Scholarship, UF ($1,000)
2021 Florida Wildlife Federation Scholarship, UF ($1,000)
2020–2022 Central Florida Fair Scholarship, UF ($2,000)
2020 Florida Wildlife Federation Scholarship, UF ($1,000)
2020 Will Courtney Foundation Scholarship ($2,000)
2020 The Wildlife Ecology and Conservation Jennings Scholarship, UF ($1,500)
2019 Sharon Fitz-Coy Memorial Scholarship, UF ($1,000)
2018 Bright Futures Florida Academic Scholarship, FL Dept. of Education ($27,300)

RESEARCH POSITIONS

2024 **Bridge to GVP Program,** *National Center for Atmospheric Research*
- Modeled coral reef bleaching in NOAA National Marine Sanctuaries with the Climate and Global Dynamics Lab.
- Refined a Python-based model, improving code efficiency, organization, and documentation for future users.
- Analyzed climate and ecological data to improve simulation accuracy and model outputs.

2023–2024 **Harte Research Institute for Gulf of Mexico Studies,** *Texas A&M University*
- Designed and led a multinational project with U.S., Cuban, and Mexican partners to build a database of economic assessment methods for recreational fisheries.
- Conducted bilingual (Spanish and English) stakeholder surveys with standardized data collection across regions.
- Synthesized data to estimate the economic value of Gulf of Mexico recreational fisheries for management and policy.

2021–2022 **NSF IRES Wildlife Conservation Training Program,** *Florida International University*
- Designed field and social science surveys on the status of the St. Vincent Amazon Parrot, processing over 150 surveys for statistical analysis.
- Developed the region's first passive bioacoustic monitoring method and automatic detection model with the FIU Tropical Conservation Institute, St. Vincent and the Grenadines agency partners, and the Cornell Lab of Ornithology.
- Analyzed over 12,000 audio recordings in Raven Pro to inform species conservation and management.

2020–2022 **Undergraduate Researcher,** *UF Avian Behavioral Ecology and Conservation Lab*
- Collected, processed, and analyzed 434 bioacoustic samples to train a machine learning model of avian communication across the U.S. and Europe.
- Standardized and cleaned data to improve model accuracy for automated acoustic monitoring.

2019–2020 **Undergraduate Researcher,** *Sea Turtle Conservancy*
- Conducted fieldwork along 250 km of Florida's Big Bend on sea turtle distribution and habitat use.
- Recorded species identification, location, and water quality data.
- Collected blood and tissue samples and attached GPS satellite tags to track movement and seasonal migration.

FIELD EXPERIENCE (146 days total)

2025 **NSF ASI Coastal Hazards Training**, *Semarang & Yogyakarta, Indonesia*
Fellow · 21 days
Techniques: Coastal hazard assessment, geospatial analysis, remote sensing applications
Collaborators: Boston University, Universitas Diponegoro, Universitas Gadjah Mada, University of Alaska Fairbanks

2025 **Shorebird Habitat & Geomorphic Surveying**, *Virginia Coast Reserve, VA, USA*
Collaborator · 7 days
Techniques: Avian point counts, sediment core sampling, microclimate monitoring with Kestrel sensors
Collaborators: Virginia Tech, The Nature Conservancy

2025 **Barrier Island Processes Field Course**, *NC & SC Barrier Islands, USA*
Student · 6 days
Techniques: Coastal geomorphology, beach profiling, sediment transport monitoring
Collaborators: Duke University Earth & Ocean Sciences Department

2023–2024 **Human–Wildlife Interaction Research**, *Mobile Bay, AL, USA*
Project Lead · 46 days
Techniques: Onboard stakeholder surveys, intercept interviews, participant observation aboard commercial vessels
Collaborators: Alabama Department of Conservation and Natural Resources, Auburn University

2023 **TAMU-CC SWIMM Program**, *Yucatán Peninsula, Mexico*
Project Lead · 9 days
Techniques: Socio-ecological systems assessment, stakeholder engagement, cross-border coastal policy analysis
Collaborators: Harte Research Institute (Texas A&M University–Corpus Christi), Universidad Nacional Autónoma de México (UNAM), Universidad de La Habana

2022 **NSF Wildlife Conservation IRES**, *St. Vincent and the Grenadines*
Project Lead · 39 days
Techniques: Avian point counts, passive acoustic monitoring (PAM unit deployment), community interviews
Collaborators: FIU Tropical Conservation Institute, St. Vincent Forestry Department, Cornell Lab of Ornithology

2019–2020 **Sea Turtle Research**, *Big Bend, FL, USA*
Field Assistant · 18 days
Techniques: In-water turtle capture (hand, dip net, tangle net), blood and tissue sampling, satellite tag attachment
Collaborators: Sea Turtle Conservancy, University of Florida

TEACHING AND MENTORSHIP

Teaching Positions

Term	School	Course Title	Course Code	Role	Enrollment
Spring 2026	UNC Chapel Hill	Science Fiction, the Environment, and Vulnerable Communities	IDST 114	Teaching Assistant	30 (2 sections) 104 (Lecture)
Spring 2026	UNC Chapel Hill	Analysis and Solutions for Environmental Problems	ENEC 698	Graduate Research Consultant	12
Spring 2025	UNC Chapel Hill	Planet Earth Laboratory	EMES101L	Laboratory TA	40 (3 sections)
Spring 2021	University of Florida	Integrated Principles of Biology II Laboratory	BSC2011L	Laboratory TA	50 (3 sections)
Fall 2020 Spring 2021	University of Florida	Integrated Principles of Biology II	BSC2011	Learning Assistant	40 (2 sections)

Professional Education Experience

2021–2022 **Ocala Conservation Center Assistant Director,** *FL Fish & Wildlife Conservation Commission*
- Led daily operations, including scheduling, hiring, training, and supervising 30 seasonal educators.
- Designed and launched 4 educational programs on wildlife conservation, ecosystem stewardship, and hunter safety.
- Gave public presentations and outreach to promote conservation awareness.

2020 **Science Instructor,** *Alachua County Public Schools*
- Redesigned and taught an interactive environmental science curriculum at Norton Elementary for over 30 students weekly.
- Led classroom instruction independently, using hands-on activities and real-world examples.

2019 **Education Specialist,** *SeaWorld Entertainment*
- Managed daily operations of a summer camp program for groups of up to 24 children, adults, and families.
- Designed and led hands-on activities on marine ecosystems, species conservation, and ocean stewardship.

2018–2019 **Nature Coast Biological Station Educator,** *University of Florida*
- Designed and led salt marsh education programs with fish dissections, wildlife identification, and trawling.
- Translated ecological concepts into hands-on experiences for students and community members.

INVITED TALKS

Webinars

Coastal & Marine Wildlife Working Group, The Wildlife Society

2026 Meet the CMWG Membership series: Meet Your Executive Board
2025 Caribbean Coasts: Partnering with Local Communities to Conserve Tropical Coastal Wildlife

Marine & Coastal Ecology Career Panel

Guest Lectures

2026 Modeling Barrier Island Evolution at Hatteras, NC (ENEC698), UNC–Chapel Hill
2024 Predicting the Future of Hatteras Island (EMES101), UNC–Chapel Hill
2023 Human Dimensions Research Methods (BIO3673), Arkansas State University
2023 Human-Wildlife Interactions on the Alabama Coast (NATR5430) Auburn University
2023 Tuna Industry Bottlenose Dolphin Take Reduction Plan. (NATR5630) Auburn University

ORAL PRESENTATIONS

underline denotes presenter

11. **Henry H**, Moore LJ, Franklin B, Anarde K, Sahraei R, Murray AB, Dalyander S (2027, May). Parameterizing and testing implementation of groins in CASCADE facilitates projections of developed barrier island evolution. *Coastal Sediments 2027*, Charleston, SC, USA.
10. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2025, November). Human impacts on estuarine dolphins: Compliance and perceptions among tour operators. *28th Biennial CERF Conference*, Richmond, VA, USA.
9. **Henry H**. (2025, August). Modelando a mudança em ilhas barreiras: Ilha de Hatteras, EUA / Modeling barrier island change: Hatteras Island, USA. *XV Simpósio Nacional de Geomorfologia (SINAGEO)*, Natal, Rio Grande do Norte, Brazil. (Awarded stipend to attend)
8. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2024, October). Balancing angler practices and sea turtle protection in Alabama. *The 31st Wildlife Society Conference*, Baltimore, MD, USA. (Awarded stipend to attend)
7. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2024, August). Sustainable angling: Protecting sea turtles through conservation practices. *109th Ecological Society of America Annual Meeting*, Long Beach, CA, USA. (Awarded stipend to attend)
6. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2024, March). Adapting angling for sea turtle conservation. *75th Atlantic Estuarine Research Society Conference*, Gloucester Point, VA, USA. (Best Graduate Student Oral Presentation)
5. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2023, November). Angler–sea turtle dynamics on the Alabama Coast. *27th Biennial CERF Conference,* Portland, OR, USA. (Best Graduate Student Oral Presentation)
4. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2023, November). What predicts willingness to comply with the Marine Mammal Protection Act? *The 30th Wildlife Society Conference*, Louisville, KY, USA. (Awarded stipend to attend)
3. Olivas T, **Henry H**, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2023, September). Angler conflict with wildlife on the Alabama Coast: Protecting sea turtles with greater awareness. *2023 Alabama Water Resources Conference*, Orange Beach, AL, USA.
2. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2023, September). The state of cetacean tourism in Mobile Bay, AL, USA. *2023 Alabama Water Resources Conference*, Orange Beach, AL, USA.
1. **Henry H**, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2023, March). Utilizing social science to manage human–wildlife interactions of bottlenose dolphins in the Gulf of Mexico. *2023 Florida Chapter of The Wildlife Society Conference*, Jacksonville, FL, USA. (Awarded stipend to attend)

POSTER PRESENTATIONS

underline denotes presenter

10. Sahraei R, **Henry H**, Fiegelist A, Rachunok B, Moore LJ, Murray AB, Anarde K (2026, December). The future of roadway access to the North Carolina Outer Banks: developing a suite of geomorphic simulations for adaptive decision making under uncertainty. *American Geophysical Union Fall Meeting*, San Francisco, CA, USA. (Presentation format pending)
9. **Henry H,** Moore LJ, Franklin B, Anarde K, Sahraei R, Murray AB, Dalyander S (2026, April). The effect of climate and management strategies on developed barrier island evolution. *2026 Earth, Marine and Environmental Science Research Symposium*, Chapel Hill, NC, USA.
8. Sahraei R, Anarde K, Moore L, Franklin B, **Henry H**, Reide C (2026, May). The effects of large-scale roadway adaptations on barrier evolution. *39th International Conference on Coastal Engineering*, Galveston, TX, USA.

7. **Henry H**, Moore LJ, Franklin B, Anarde K, Sahraei R, Murray AB, Dalyander S (2026, February 24). The effect of climate and management strategies on developed barrier island evolution: Insights from a case study of Hatteras Island. *Ocean Sciences Meeting 2026*, Glasgow, United Kingdom. (Awarded stipend to attend)
6. Koch M, Gezovich LJ, Weathers M, **Henry H**, Grossman J, Thelen T, Lynn T, McNamara S, Entner S, Hauser C, Gonzalez-Lugo E, Gopal S, Regalla C, Wirasatriya A, Helmi M, Ismanto A, Almunawir MFK, Shulhan M, Al Fajrin MN, Surya S, Wahyuni HI, Harijoko A, Marliyani G (2025, December 19). Global coastal hazard perspectives: Insights from the 2025 Advanced Studies Institute Graduate Training Program on multidisciplinary coastal zone hazards in Java, Indonesia. *American Geophysical Union Fall Meeting*, New Orleans, LA, USA.
5. **Henry H**, Moore L, Franklin B, Anarde K, Murray B, Dalyander S (2025, May). The effect of climate and management strategies on barrier island evolution: Insights from a case study of Hatteras Island. *Community Surface Dynamics Modeling System Meeting*, Boulder, CO, USA. (Awarded stipend to attend)
4. **Henry H**, Olivas T, Gumbleton S, Beckham N, Steury TD, Willoughby J, Dunning K (2024, October). Public awareness and compliance with dolphin conservation laws in Mobile Bay, AL, USA. *Restore America's Estuaries Summit*, Washington, DC, USA. (Awarded stipend to attend)
3. Olmo L, **Henry H**, Coffill-Rivera M, Costa S, Gallardo JB, Peña GM, Islas FN, Castillo D, Hernández LV, Besonen M (2024, September). Economic valuation of recreational fisheries in the Gulf of Mexico / Valoración económica de la pesca recreativa en el Golfo de México. *154th Annual Meeting of the American Fisheries Society*, Honolulu, HI, USA.
2. Casanova A, Sabol A, **Henry H**, Gomes C (2023, November). Investigating human–parrot conflicts: A case study for the St. Vincent Amazon parrot. *The 30th Wildlife Society Conference*, Louisville, KY, USA.
1. **Henry H**, Sieving K (2022, April). Understanding the complex vocal system of the chick-a-dee call in two Floridian species. *UF Spring Undergraduate Research Symposium*, Gainesville, FL, USA.

SCIENCE COMMUNICATION, POLICY, AND MEDIA COVERAGE

Work Experience

2025–present **Social Media Campus Representative,** *UNC EMES Department*
- Lead digital communications for EMES with the Institute of Marine Sciences (IMS) and the Environment, Ecology, and Energy Program (E3P).
- Manage social media strategy, content, and scheduling across platforms, following UNC branding and accessibility policies.
- Supervise one undergraduate assistant and coordinate with graduate representatives to promote research, events, and student achievements.

2026 **Science Policy Fellow,** *The Wildlife Society*
- Contract project on Prairie Pothole Region wetland policy, presented at a working session (October 2026) and to the TWS Council (November 2026).

2024 **Joe Burns Memorial Wildlife Policy Intern,** *The Wildlife Society*
- Researched emerging wildlife conservation policies and drafted background materials for testimonies, communications, and advocacy.
- Wrote and updated policy briefings, position statements, and online resources.
- Represented The Wildlife Society at coalition meetings, legislative hearings, and agency briefings.

Print Articles

2024 Policy Perspectives: Informing energy policy on public lands, The Wildlife Professional Vol.18 No.3, May/June 2024, 58-59

Online Articles

2024 **The Wildlife Society**
10. TWS submits testimony supporting critical federal conservation programs, May 29
9. TWS supports increased funding for USDA conservation programs, May 24
8. Interior finalizes Endangered Species Act rulemaking, May 22
7. BLM begins conservation planning updates for greater sage-grouse, May 15
6. TWS comments on utility-scale solar installations, April 29
5. USFWS begins grizzly bear restoration assessment in the Bitterroot ecosystem, April 15
4. TWS comments on National Wildlife Refuge System management, April 8
3. U.S. House of Representatives Passes WILD Act, March 21
2. The EXPLORE Act aims to revolutionize recreation, Feb 28
1. Legislation to fortify USFWS Coastal Program introduced in US House & Senate, Feb 23

Media Coverage

2026 Recognized as a Mountains to Sea Graduate Fellow by North Carolina Sea Grant.
2024 Interviewed by The Wildlife Society about the Coastal and Marine Wildlife Working Group.
Featured for receiving the Graduate Fellowship in Wildlife Policy by The Wildlife Society.
Selected as the Joe Burns Memorial Wildlife Policy Intern by The Wildlife Society.
2023 Recognized as a TWS 2023 Award Recipient in Vol.17 No.6 of The Wildlife Professional.
2022 Interviewed by the University of Florida Wildlife Ecology and Conservation Department regarding the UF/IFAS CALS Top 10 Senior Award.

SERVICE AND OUTREACH

To the Profession

2025 Virginia Coast Reserve Graduate Representative, NSF LTER (Community working group)
2024–2026 Founder & Chair of the Coastal and Marine Wildlife Working Group, The Wildlife Society

- Founded the working group within The Wildlife Society, defining its mission, executive team, and strategic goals.
- Led a mentorship program, educational webinars, and a newsletter on research and policy updates.
- Organized conference sessions to connect professionals in coastal and marine conservation.

Reviewer for: *Fisheries Research* (1); *Discover Sustainability* (1)

Conference Sessions Organized

Nov. 2025 **Co-organizer**, "Estuaries and Coasts as Wildlife Habitat." 2025 CERF biennial conference. Richmond, VA, USA.
Oct. 2025 **Organizer**, "Coastal and Marine Wildlife Conservation: Challenges, Innovations, and Future Directions." The 32nd Wildlife Society Conference. Edmonton, Canada.
Oct. 2024 **Organizer**, "Inaugural Meeting of the Coastal and Marine Wildlife Working Group." The 31st Wildlife Society Conference. Baltimore, MD, USA.
May 2023 **Co-organizer**, "Characterizing Gulf and Caribbean Marine Recreational Fisheries: Current Management and Future Challenges." Latin American and Caribbean Fisheries Congress. Cancun, Mexico.

To the Institution

2025–present Elected geology senator for Graduate and Professional Student Government, UNC EMES
2025 Treasurer of the Committee for Graduate Advocacy, UNC EMES
2020–2022 College of Agricultural and Life Sciences Ambassador, University of Florida
2020–2022 College of Agricultural and Life Sciences Leadership Institute: Cohort 12, University of Florida
2019–2020 Aquatic Animal Health Volunteer, College of Veterinary Medicine, University of Florida
2018–2020 Events Coordinator, Sustainable Ocean Alliance Chapter, University of Florida

To the Community

2025 Science Fair Judge, Accawmacke Elementary and Eastern Shore Regional Science Fairs
2023–2024 Educational outreach, Alabama Department of Conservation and Natural Resources
2022–2023 Educational outreach, Florida Fish and Wildlife Conservation Commission
2018–2019 Nature Coast Biological Station Educator, University of Florida
2018 Kids in the Woods Educator, University of Florida

SOFTWARE AND MODELS

2024–present **CASCADE**, *contributor*. Developing groin and dune-collision modules for the CASCADE coastal community-landscape evolution model, which couples the Barrier3D and BRIE barrier models, and applying it to Hatteras Island, NC. github.com/UNC-CECL/CASCADE
2025–present **CASCADE Tools**, *developer*. ArcGIS Python toolboxes that prepare elevation and dune inputs for CASCADE model domains. github.com/HannahAline/CASCADE-Tools

TECHNICAL SKILLS

ArcGIS Pro Spatial analysis, LiDAR data preparation, and geospatial visualization.
CoastSat Python toolkit to obtain time-series of shoreline position at any coastline worldwide.
GitHub Version control, collaborative software development, and workflow management.

Python	Object-oriented programming and numerical modeling for environmental data applications (NumPy, pandas, SciPy, Matplotlib, GeoPandas, Rasterio, Shapely).
QGIS	Open-source spatial analysis and mapping for interdisciplinary research projects.
Qualtrics	Survey design, distribution, and quantitative/qualitative data analysis for social science research.
R	Advanced statistical analysis, agent-based modeling, and data visualization for large datasets.
Raven Pro	Acquiring, processing, and analyzing bioacoustic data for wildlife monitoring/behavioral studies.

LANGUAGES

English	Native proficiency.
Portuguese	Elementary conversational proficiency (A1–A2); formal coursework (Portuguese I–II).

CERTIFICATIONS

2025–2028	Responsible Conduct of Research for STEM and Non-STEM Programs, **CITI**
2023	Social and Behavioral Research (IRB) and Internet Research, **CITI** (Auburn University)
2022	Wildlife Research: Working with the IACUC (Field Studies), **CITI** (Florida International University)
2021	FERPA Basics, **University of Florida**
2020	Open Water Diver certification, **SSI** (Scuba Schools International)

AFFILIATIONS

2025–present	American Geophysical Union
2024–present	Ecological Society of America
2023–present	Coastal and Estuarine Research Federation
2019–present	The Wildlife Society