

Berit E. Batterton

Address: 750 Channelview Dr
Port Aransas, TX 78373
Email: b.batterton@utexas.edu
Bluesky: botanyberit
ORCID: 0000-0002-3606-6517

EDUCATION

- Ph.D., Marine Science** 2020–Present
University of Texas at Austin, Marine Science Institute Port Aransas, TX
- Dissertation: Climate change impacts on carbon and water dynamics in Texas’ estuarine marshes
 - Advisor: Dr. Ken Dunton
- B.A., Environmental Science and Biology with Honors** 2016–2020
University of Pennsylvania Philadelphia, PA
Magna cum laude; Certificate in Spanish Language; Varsity Athlete
- Thesis: Using remote sensing to study effects of dam sediment capacity on seagrass in the Chesapeake Bay
 - Advisor: Dr. Jane Dmochowski

PROFESSIONAL EXPERIENCE

- Marine Science Institute (UT)** Port Aransas, Texas
Graduate Research Assistant 2020–2025
- Dmochowski Lab (UPenn)** Philadelphia, Pennsylvania
Undergraduate Research Scientist 2019–2020
- I led analysis of coupled remote sensing and in-situ data collected for seagrass and water quality in the Chesapeake Bay. My undergraduate honors thesis was composed of two projects that I worked on independently: 1) Writing a script in Google Earth Engine for classifying water quality based on MODIS images and 2) Analyzing the impacts of reduced upstream dam sediment capacity on seagrass.
- Betley Lab (UPenn)** Philadelphia, Pennsylvania
Undergraduate Research Assistant 2018–2019
- I was responsible for performing behavioral assays and preparing brain slices of mice exposed to various survival stimuli. Data were used as part of a larger study that aimed to determine how the brain senses, processes, and prioritizes sensory information.

PEER-REVIEWED PUBLICATIONS

NOTE: * = Equal Contribution; + = UT Undergraduate Student; # = UT Graduate Student

- Batterton, B. E.**, & Dunton, K. H. (*In prep*-a). Climate-driven alterations in freshwater inflows impact a Texas delta marsh.
- Batterton, B. E.**, & Dunton, K. H. (*In prep*-b). Long-term marsh vegetation community dynamics in the Nueces Delta (TX, USA) are driven by climate change.
- Batterton***, **B. E.**, Neill*[#], C. M., Biggs, C. R., & Rempel[#], H. S. (2024). A framework for training graduate students and campus communities in inclusive teaching. *Journal of Microbiology & Biology Education*, 25(3), e00125–24. <https://doi.org/10.1128/jmbe.00125-24>

OTHER PUBLICATIONS (REPORTS, CHAPTERS, ETC.)

- Capistrant-Fossa[#], K. A., **Batterton, B. E.**, & Dunton, K. H. (2025). Submerged aquatic vegetation, marshes, and mangroves. In P. A. Montagna & A. R. Douglas (Eds.), *Freshwater Inflows to Texas Bays and Estuaries: A Regional-Scale Review, Synthesis, and Recommendations*. Springer Cham. https://doi.org/10.1007/978-3-031-70882-4_10
- Batterton, B. E.**, Person⁺, M., & Dunton, K. H. (2024). *Use of Historical Data to Assess Climate Change Effects: Nueces Delta*. Coastal Bend Bays and Estuaries Program.
- Batterton, B. E.**, Swanson, K., & Dunton, K. H. (2024). *Relative Sea Level Rise and Habitat Assessment in the Nueces Delta*. Coastal Bend Bays and Estuaries Program.
- Batterton, B. E.**, Swanson, K., & Dunton, K. H. (2023). *Relative Sea Level Rise and Habitat Assessment in the Nueces Delta*. Coastal Bend Bays and Estuaries Program.
- Batterton, B. E.**, & Dunton, K. H. (2022b). *Lavaca River Delta Marsh Assessment*. Texas Water Development Board.

MISCELLANEOUS WORKS

- Rempel[#], H. S., **Batterton, B. E.**, Neill[#], C. M., & Biggs, C. R. (2024). “4-5th Grade Lesson on the Amazing Adaptations of Earth’s Organisms”. *OER Commons*. <https://oercommons.org/courseware/lesson/117333>
- Batterton, B. E.** (2023a, September). “Joys of marsh field work”. *Port Aransas South Jetty*. <https://www.portasouthjetty.com/articles/joys-of-marsh-field-work/>
- Batterton, B. E.** (2023b, May). “Please send my thanks to the kids”. *Port Aransas South Jetty*. <https://www.portasouthjetty.com/articles/please-send-my-thanks-to-the-kids/>

PRESENTATIONS

NOTE: * = Co-Presenters; + = UT Undergraduate Student; # = UT Graduate Student

- Batterton, B. E.**, & Dunton, K. H. (2025a). *Salt marsh functional diversity: Integrating intraspecific trait variation in functional traits to understand plant carbon responses to environmental change* [Oral]. Coastal and Estuarine Research Federation Meeting. Richmond, VA.
- Batterton, B. E.**, & Dunton, K. H. (2025b). *Salt marsh functional diversity: Integrating intraspecific trait variation in functional traits to understand plant carbon responses to environmental change* [Oral]. Ecological Society of America Meeting. Baltimore, MD.
- Rempel^{*#}, H. S., **Batterton***, **B. E.**, & Neill^{*#}, C. M. (2025). *Inclusive Teaching and Outreach Workshop*. Texas Chapter of the Society for Women in Marine Science. Virtual.
- Batterton, B. E.**, & Dunton, K. H. (2024a). *Beyond a reasonable drought: Monitoring the health of Texas’ salt marshes* [Invited talk]. UTMSI Marine Science Advisory Council Meeting. Port Aransas, TX.
- Batterton, B. E.**, & Dunton, K. H. (2024b). *Impacts of regional climate change on South Texas marsh vegetation dynamics* [Oral]. Texas Bays and Estuaries Meeting. Port Aransas, TX.
- Batterton, B. E.** (2023c). *Shifts in vegetation diversity and abundance in a Texas Coastal Bend marsh* [Invited lightning talk]. National Association of Marine Laboratories Annual Meeting. Virtual.
- Batterton, B. E.**, & Dunton, K. H. (2023). *Long-term marsh vegetation community dynamics in the Nueces Delta (TX, USA) are driven by climate change* [Oral]. Coastal and Estuarine Research Federation Meeting. Portland, OR.
- Batterton, B. E.**, Rempel[#], H. S., & Dunton, K. H. (2023). *Benefits of a long-term university and K-12 partnership for coastal science education* [Oral]. Coastal and Estuarine Research Federation Meeting. Portland, OR.

- Batterton, B. E., & Dunton, K. H. (2022a).** *Climate-driven alterations in freshwater inflows impact Texas coastal marshes* [Oral]. Joint Aquatic Sciences Meeting. Grand Rapids, MI.
- Batterton, B. E., & Dunton, K. H. (2022c).** *Long-term lack of liquids limits leafy life in Lavaca marsh* [Poster]. Texas Bays and Estuaries Meeting. Port Aransas, TX.
- Batterton, B. E., & Dmochowski, J. E. (2020).** *Impacts of upstream dam sediment capacity on seagrass through coupled remote sensing and in-situ data* [Oral]. University of Pennsylvania Department of Earth & Environmental Sciences Honors Symposium. Philadelphia, PA.
- Batterton, B. E., & Dmochowski, J. E. (2019).** *Using seagrass as an indicator of the health of the Chesapeake Bay* [Oral]. University of Pennsylvania Hayden Scholars Summer Research Symposium, Philadelphia, PA.

FUNDING ACQUIRED (TOTAL: \$214,500)

- **Coastal Bend Bays and Estuaries Program, lead scientist** 2024–2025
Climate and restoration-driven habitat change: Nueces Delta (\$55,500)
- **Coastal Bend Bays and Estuaries Program, lead scientist** 2024–2025
Relative sea level rise and habitat assessment in the Nueces Delta (\$7,100)
- **Coastal Bend Bays and Estuaries Program, lead scientist** 2023–2024
Use of historical data to assess climate change effects on marsh vegetation: Nueces Delta (\$54,000)
- **Coastal Bend Bays and Estuaries Program, lead scientist** 2023–2024
Relative sea level rise and habitat assessment in the Nueces Delta (\$7,000)
- **UT Austin Center for Teaching and Learning, co-lead organizer** 2023
Instructor Learning Community Grant- Developing inclusive teaching frameworks for campus and community STEAM education (\$2,500)
- **Coastal Bend Bays and Estuaries Program, lead scientist** 2022–2023
Relative sea level rise and habitat assessment in the Nueces Delta (\$7,000)
- **UT Austin Center for Teaching and Learning, student partner** 2022–2023
Students as Partners Grant- Revising undergraduate research curriculum at the UT Austin Marine Science Institute (\$1,000)
- **Lower Colorado River Authority, lead scientist** 2022
Small pond inventory pilot study (\$7,000)
- **Texas Water Development Board, lead scientist** 2020–2022
Lavaca River Delta marsh assessment (\$75,000)

SCHOLARSHIPS AND AWARDS (TOTAL: \$402,900)

- The Honor Society of Phi Kappa Phi 2025–present
- APS Lewis & Clark Fund for Exploration & Field Research Grant (\$5,000) 2024–2025
- UT Austin University Graduate Continuing Fellowship (\$52,000) 2024–2025
- Texas Gulf Coast Research Center Predoctoral Award (\$20,000) 2024–2025
- UTMSI Marine Science Endowed Fellowship (\$50,000) 2022–2024
- UTMSI Student Research Excellence Award 2025
- Coastal and Estuarine Research Federation Conference Travel Grant (\$450) 2023
- Coastal Conservation Association Scholarship (\$5,000) 2023
- UT Austin Graduate School Summer Fellowship (\$11,000) 2023
- Texas Chapter of the American Fisheries Society Student Scholarship (\$1,500) 2023

- Southern Association of Marine Laboratories Larry Pomeroy Student Support Award (\$500) 2023
- UTMSI Graduate Travel Award (\$2,000) 2022–2023
- National Science Foundation GRFP Honorable Mention 2022
- UT Austin Graduate School Professional Development Award (\$500) 2022
- Coastal and Estuarine Research Federation Conference Travel Grant (\$450) 2022
- University of Pennsylvania Rosalie Gilles Scholarship (\$50,000) 2018–2020
- University of Pennsylvania James & Gail Riepe Scholarship (\$100,000) 2016–2020
- University of Pennsylvania Fritz K. Hallock Scholarship (\$100,000) 2016–2020
- University of Pennsylvania Hayden Scholars Research Fellowship (\$4,500) 2019
- National Fastpitch Coaches Association Scholar-Athlete All-America 2017, 2019

TEACHING EXPERIENCE

- **Guest Lecturer** at The University of Texas Spring 2025
Science Communication (MNS 191)
- **Teaching Assistant** at The University of Texas Summer 2023
Biology of Fishes (MNS 354C)
- **Teaching Assistant** at The University of Texas Spring 2023
Marine Phytoplankton Diversity (MNS 357)
- **Teaching Assistant and Guest Lecturer** at The University of Texas Summer 2022
Estuarine Ecology (MNS 352C)
- **Teaching Assistant** at The University of Texas Spring 2021 & 2022
Field Methods in Marine Ecology (MNS 120L)
- **Scientist-in-Residence Fellow** at Port Aransas Independent School District 2021–2022
Fourth, Fifth, and Eighth Grade Science
- **Teaching Assistant** at The University of Texas Fall 2020
Introduction to Oceanography (MNS 307) and Marine Science Seminar (MNS 101)
- **Teaching Assistant** at The University of Pennsylvania Fall 2019
Introduction to Geology (GEOL 100)
- **Tutor** at The University of Pennsylvania 2016–2020
Department of Recreation and Intercollegiate Athletics (BIOL 101, 102, GEOL 100, ENVS 100, PHYS 101, SPAN 110-219)

UNDERGRADUATE MENTORING

- **Sophia McKelvey**, UT Austin Semester by the Sea 2024
Project: Salt marsh plant functional trait variation as an indicator of drought resilience (Presented at 2024 Texas Aquatic Plant Management Society Meeting)
- **Danica Larwill, Delaney Smith, & Dakota Farmer** 2023–2024
University of Pennsylvania Young Alumni Mentorship Program
- **Carole-Lynna E. Benhamou**, UT Austin Environmental Science Capstone 2023
*Project: Primary productivity of *Spartina alterniflora* following freeze-induced mangrove loss in south Texas (Presented at 2023 Coastal and Estuarine Research Federation Meeting)*
- **Malvika Patil**, UT Austin Independent Research 2023
Project: Decadal changes in Nueces Delta marsh abiotic conditions in response to local climatic change
- **Mona Birgisson**, UT Austin Semester by the Sea 2021–2022

Project: Freeze responses of marsh and mangrove communities: A biogeochemical and ecological assessment

- **Technician Supervision:** Courtney Bass, Katie Wiley, Monroe Person, Malvika Patil 2021–present

SERVICE

- Letters to a Pre-Scientist Pen Pal 2024–present
- Ad-Hoc Reviewer, Aquatic Botany 2023–present
- UTMSI Summer Science Camp Instructor 2022–present
- Port Aransas ISD 4/5th Grade Science Fair Judge 2021–present
- Port Aransas ISD 8th Grade Science Fair Judge 2021–present
- Texas Bays and Estuaries Meeting Volunteer 2025
- UTMSI Women in Marine Science Day Volunteer 2025
- UTMSI Graduate Education Improvement Committee 2024
- Abstract Review Committee, Society for Wetland Scientists Student Virtual Conference 2023–2024
- UTMSI GSA President 2023–2024
- UT Austin Dean’s Office Graduate Council 2023–2024
- “Emerging Voices in Botany” Special Issue Award Review Panel, Annals of Botany Plants 2023–2024
- UTMSI Coordinator for STEM Girl Day Community Partnership 2023–2024
- Texas Bays and Estuaries Meeting Planning Committee 2022–2024
- Texas SWMS Mentorship/Career Development/Outreach Committee 2023
- UT Austin Undergraduate Research Forum Judge 2023
- UTMSI Student-Led Seminar Series Coordinator 2023
- UTMSI GSA Vice President 2022–2023
- UT Austin Society for the Advancement of Gender Equity in STEM Mentor 2022
- UT Austin Interim Marine Science Coordinator 2022
- UTMSI Representative for Whooping Crane Festival 2022
- UTMSI GSA Social Chair 2021–2022
- Big Brothers Big Sisters Mentor 2018–2020
- West Philadelphia Tutoring Project Tutor 2018–2020

PROFESSIONAL DEVELOPMENT

- **Concentration in Teaching and Mentoring** 2020–2025
UT Austin College of Natural Sciences
- **Advanced Teaching Preparation Series** 2024
UT Austin Center for Teaching and Learning
- **Science Communication Certification** 2024
UWyoming Science Communication Initiative
- **Course Curriculum Development** 2023–2024
UT Marine Science Institute
- **Phys Fest 4 Plant Ecophysiology Workshop** 2023
Hosted by Sevilleta National Wildlife Refuge
- **Inclusive Classrooms Leadership Certification** 2023
UT Austin Division of Diversity & Community Engagement

- **Concentration in Science and Public Policy** 2022
UT Austin College of Natural Sciences
- **Fundamentals of Teaching (GRS 097)** 2020
UT Austin Center for Teaching and Learning

PROFESSIONAL SOCIETIES

- Ecological Society of America
- Association for the Sciences of Limnology and Oceanography
- Coastal and Estuarine Research Federation
- Ecological Forecasting Initiative
- Society for Wetland Scientists
- International Association for Vegetation Science
- National Marine Educators Association
- Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology
- Society for Women in Marine Science