



THE NORTH CAROLINA COASTAL RESERVE AND NATIONAL ESTUARINE RESEARCH RESERVE'S

Research at the Reserve Symposium

Wednesday & Thursday, May 8-9, 2024

Beaufort, NC

Workshop Objectives – Participants will:

- Share and learn about research at the Reserve
- Learn more about the NC Reserve system, available data streams, and funding opportunities
- Provide thoughts on future research avenues and Reserve management priorities
- Network with researchers and coastal managers throughout the NC coast

Agenda

Wednesday, May 8

1:45pm Registration required: **Rachel Carson Reserve Field Trip**, Island Ferry Adventures, 610 Front St, Beaufort

5:30pm **Poster Reception at the N.C. Maritime Museum**, 315 Front St, Beaufort

Thursday, May 9 – Research Symposium, NOAA Beaufort Lab Auditorium, 101 Pivers Island Rd

8:30am **Check-In**, coffee and breakfast snacks

9:00am **Introduction**
Rebecca Ellin, N.C. Coastal Reserve & NERR

9:20am **Research and Stewardship at the Reserve**
Paula Gillikin and Justin Ridge, N.C. Coastal Reserve & NERR

9:45am **The What and How of Collaborative Science**
Whitney Jenkins and Justin Ridge, N.C. Coastal Reserve & NERR

10:00am Break

10:15am **Breakout: Collaborative Science Discussion**
Discuss experience with collaborative projects and lessons learned.

10:45am **Research Presentations: Water Quality (10-minute presentations)**
Madison Lytle, University of North Carolina Wilmington, *Effects of cold temperature stress and water clarity on Halodule wrightii persistence*
Byron Toothman, NC Coastal Reserve & NERR, *The NERRS System-Wide Monitoring Program*
11:05am - Q & A with the Speakers

11:15am **Breakout: Water Quality Discussion**

- What are the top water quality research questions we should pursue?
- What water quality information or products would improve utility of our different sites for research and/or management?

11:50am Lunch (Provided)

- 12:35pm** **Research Presentations:** Coastal and Estuarine Ecosystem Protection (10-minute presentations)
 Amanda Williard, University of North Carolina Wilmington, *Physiological ecology of the estuarine diamond-backed terrapin*
 April Blakeslee, East Carolina University, *Parasites as Biodiversity Surrogates in Oyster Reef Restoration*
 Heather McGuire, Chowan University, *A Bird in the Hand: Breeding Ecology of the Prothonotary Warbler in Northeastern North Carolina*
 Matthew Godfrey, NC Wildlife Resources Commission, *Collaborative research between NCWRC & NC Coastal Reserves*
 1:15pm – Q & A with the Speakers
- 1:25pm** **Breakout:** Coastal and Estuarine Ecosystem Protection Discussion
- Are there Ecosystem and Ecosystem Service research questions we should be pursuing to best manage our reserve sites and coastal resources more broadly?
 - What Ecosystem/Ecosystem Services information (data) or products would improve utility of our different sites for research and/or management?
- 1:55pm** Break
- 2:10pm** **Research Presentations:** Coastal Hazards Resilience (10-minute presentations)
 Celso Castro-Bolinaga, North Carolina State University, *Improved Understanding of Sediment Dynamics for the Rachel Carson Reserve*
 Andrea Hawkes, University of North Carolina Wilmington, *A review of observations and modeling of erosion and recovery of a coupled barrier island beach-dune system, Masonboro Island, NC*
 Taylor Mattioli, University of North Carolina Wilmington, *Bridging the Research-Action Gap: a "How-To Guide" for Conducting Marsh Organ Experiments*
 Katherine Anarde, North Carolina State University, *Tracking beach state changes daily at Masonboro Island Reserve*
 3:00pm - Q&A with the Speakers
- 3:00pm** **Breakout:** Coastal Hazards Resilience Discussion
- Are there Coastal Hazards Resilience research questions we should be pursuing to best manage our reserve sites and coastal resources more broadly?
 - What Coastal Hazards Resilience information (data) or products would improve utility of our different sites for research and/or management?
- 3:30pm** Break
- 3:45pm** **Final Discussion**
- How could we make the most of our 10 sites as a networked research platform?
 - Any themes or other observations from the breakout groups that folks would like to raise to the large group
- 4:20pm** **Next Steps & Wrap Up**
- 4:30pm** **Adjourn**



Oral Presentation Information