



Local Advisory Committee Meeting
Currituck Banks Coastal Reserve

November 18, 2024 – 1:00 P.M.
Outer Banks Center for Wildlife Education
1160 Village Lane, Corolla NC

Attendance

<u>LAC Partner Organization Members</u>	<u>Present</u>
Currituck County Planning Department, Jennie Turner	N
Currituck County Sheriff's Office, Terrence Sutton	N
Currituck National Wildlife Refuge, Mike Hoff	N
NC Wildlife Resources Commission, Anna Barbosa	Y
NC Wildlife Resources Commission, OBX Center for Wildlife, Sharon Meade	Y
The Nature Conservancy, Lora Eddy	N
Albemarle Pamlico National Estuary Partnership, Jimmy Johnson	N
Natural Heritage Program, Nathan Shepherd	Y
<u>Community Members and Community Organizations Members</u>	
Bo Dame	N
Edward Ponton	N
<u>Others Present</u>	
Erik Alnes, NCCR, Northern Sites Manager	
Jonathan Montague, NC Wildlife Resources Commission	

Reserve-wide Program Business

*** Please see appendix for complete Reserve-wide updates ***

Northern Sites Update (Erik Alnes)

Two interns worked in the northern sites this year. This summer, the Friends of the Reserve sponsored Haley Jenkins, from N.C. State University. She focused on replicating a 20-year-old water quality study in Kitty Hawk Woods, and helped with herpetology monitoring in Buxton Woods, general site maintenance of the northern sites, and developed and installed a new interpretive sign at Currituck Banks. This fall, Kaitlen Harmon worked with us as part of her Outer Banks Field Site semester at the Coastal Studies Institute. She completed the water quality study and drafted a report on change, and assisted staff with general site maintenance at the northern sites. If new internship opportunities arise, staff will notify the LAC to encourage applications. Staff appreciate these interns' help!

In 2023, volunteers completed 37 hours of work at the northern sites. This year, through October 31st, we already have 45 hours reported. Currently, there are four active volunteers in Kitty Hawk Woods, one in Buxton Woods, and no volunteers in Currituck Banks. We thank our volunteers for their service and are always looking to add to our supportive volunteer base. To celebrate National Estuaries Week this year, another marsh cleanup occurred at Kitty Hawk Woods. Staff, along with three volunteers, picked up three 42-gallon bags of trash, consisting of mostly buoys, bottles, and cans. The crew also picked up over 10 boards of treated lumber, lawn chairs, pool floaties, plastic containers, and a cable spool. It was a great way to celebrate and give back to our estuary.

Staff have been monitoring visitation since 2023 at the Currituck Banks Boardwalk and Kitty Hawk Woods Connector Trail; two of the most popular trails at each site. Currituck Banks has peak visitation from June through August and saw 51,035 visitors from October 2023 to October 2024. This is up 0.5% since 2023, indicating relatively uniform visitation from year to year. Kitty Hawk Woods has peak visitation from November through January and saw 3,923 visitors from October 2023 to October 2024. Comparing January through October, between 2023 and 2024, visitation increased 75%, but daily visitation remains generally low, averaging roughly 11 visitors per day.

There are currently 23 active research permits in the northern sites: eight at Currituck Banks, ten at Kitty Hawk Woods, and five at Buxton Woods. Researchers are from four federal and state agencies, and six universities, spanning from the University of Georgia to Chowan University.

Hunting at Currituck Banks and Kitty Hawk Woods is becoming more popular, as hunter authorizations are up 17.5% from 2023. Analyzing demographics, hunters are all Dare and Currituck County residents. Most are deer hunters, but there are four hunters that specifically target the invasive nutria.

In January of 2024, staff developed a tool to document and analyze misuse at all 10 coastal reserve sites. This better helps managers understand "hot" areas of misuse to target monitoring and education, assists in documenting misuse to better understand trends, organize work planning, and inform management decisions through resolution documentation. Since January 2024, 50 instances of misuse have been documented by managers. The highest instances of misuse at the northern sites have been at the Buxton Woods. The most common instances of misuse have been disallowed uses (i.e. infrastructure built on site and interruptions with research), littering and dumping, vandalism, visitor use conflicts, alteration of natural character, abandoned and derelict vessels, and unlawful fires. Staff thank local law enforcement partners for their assistance in resolving some of these misuses.

Individual Reserve Business (Erik Alnes)

- *Submerged Aquatic Vegetation Change Report*

In 2021, three permanent transects were installed in Ships Bay, within the boundaries of Currituck Banks to monitor submerged aquatic vegetation (SAV). These plots were surveyed in 2021, partially in 2023, and in 2024. Overall, average coverage of plots has remained steady, around 50%, from 2021-2024. A storm before the survey in 2023 had a visible impact, resulting in wrack lines of SAV along the marsh, and the average cover data that year (41%) is reflective of that event. *Ruppia maritima* (widgeon grass) and *Chara* (muskgrass) appear to have an ability to outcompete other SAV during events of high wave energy, as their relative abundance peaked with the storm event observed before the 2023 survey. This also may be due to the limitations of water turbidity on researchers; only the four most shallow points along each transect were surveyed in 2023. *Vallisneria* (wild celery) has declined significantly from the initial study in 2021, dropping from 56% relative abundance to 16%. Inversely, *Nitella* (stonewort), and *Stuckenia* (sago pondweed), have increased in relative abundance, from single digit average percentages to 51% and 29% average relative abundance respectively. *Zannichellia* (horned pondweed), *Chara* (muskgrass), and the invasive *Myriophyllum* (Eurasian water milfoil) were not found in any plots in 2024. All studies were done within proximal times of the growing season: 09/27/2021, 09/27/2023, and 09/10/2024. Species diversity between the plots has appeared to decrease since 2021.

- *Horse Fence Installation*

Horses have commonly escaped the southern fence in the winter months due to native food limitations. They have caused resource damage to the marsh area, along the southern boundary of the Reserve. While the Reserve was closed for the boardwalk refurbishment project, a temporary electric fence was installed, which limited the escapes and resource damage. When the site re-opened, a rope fence replaced the electric fence for visitor safety. The horses, again, began escaping and causing damage to the marsh. Staff partnered with the Corolla Wild Horse Fund to install a permanent wooden fence. The fence was installed in the summer of 2024, and no horses have escaped since.

- *Water Hemlock Treatment*

Staff received a complaint from a Reserve visitor that there was water hemlock growing next to the boardwalk. Water hemlock is one of the most toxic plants that grows in North America, and can cause skin irritation if touched, and death if ingested. The visitor expressed worry that his children may accidentally touch the plant. Staff assessed the area and treated the water hemlock with herbicide spot treatments in a 3-foot buffer near the boardwalk. The treatment was successful.

- *LAC Meeting Schedule*

Due to limited agenda items, and often low participation from LAC members, staff asked the LAC if they would prefer to meet once a year in the Fall or meet virtually in the Spring. LAC members did not have a preference. Staff indicated that if an agenda was light, they would reach out to the LAC to assess cancellation of the Spring meeting or meet virtually.

Member Roundtable

Sharon Meade, with the Outer Banks Center for Wildlife Education, noted that they would be closing for maintenance from January 2025 through mid-February. The facility is receiving new I.T. equipment and is adding to its exhibits. The Center is currently looking to hire educators. She also noted that with additional help from new hires, they may be able to reinstate educational programs at Currituck Banks next summer.

Anna Barbosa, with the Wildlife Resources Commission, introduced the new Currituck Officer, Jonathan Montague. She noted that Currituck Banks is still listed as a registered property. She asked about ownership of the Monkey Island Tract, and Sharon Meade informed the group that it was owned by the Wildlife Refuge. Sharon went on to say they conducted a bird inventory last winter and noted that the island was eroding significantly.

Nathan Shepherd, with the Natural Heritage Program, noted that he had conducted some marsh inventory in the area, and was happy to work in the northeast coast. He mentioned that two new eastern biologists were recently hired, and two new temporary staff were hired to conduct peat research in the Alligator River.

Public Input

- No public participation.

Final Comments, Review of Action Items, and Wrap-up

- Staff will send the SAV report and data to Nathan Shepherd.

Adjourn

N.C. Coastal Reserve and National Estuarine Research Reserve Fall 2024 Local Advisory Committee Meetings Reserve-wide Update

Program Highlights

- Reserve **summer camps** were another success this summer. Rising first through tenth graders learned about estuaries and experienced estuarine habitats and plants and animals through hands-on experiences at the Rachel Carson Reserve and in the laboratory to increase understanding and appreciation of coastal resources. Favorite activities include the reserve field trip and squid dissection. Camps are conducted in partnership with the NC Maritime Museum in Beaufort.
- Two thousand two hundred seventy-two students have participated in **field trips** to the Rachel Carson and Masonboro Island Reserves so far this year. Students from Carteret, Onslow, and Craven Counties traversed the Rachel Carson Reserve and the Masonboro Island Explorers program is hosting fifth grade students from nearby counties at the Masonboro Island Reserve in partnership with Masonboro.org and Carolina Ocean Studies.
- The Coastal Training Program offered **workshops and partner engagement meetings** for decision-makers throughout coastal North Carolina this year. Thirteen events served 591 professionals including real estate agents, local government staff, federal and state agency staff, and land use planners delivering science-based information and technical assistance to protect and manage NC's coastal resources.
- The reserve hosted a **Research Symposium** May 8-9, 2024 in Beaufort to highlight work conducted across the reserve sites and gather input on research priorities to inform future work and partnerships. The event kicked off with a field trip to the Rachel Carson Reserve and poster reception with 11 posters at the NC Maritime Museum on May 8 followed by research presentations and breakout group discussions on May 9 focused on water quality, coastal and estuarine ecosystem protection, and coastal habitat resilience. Approximately 65 researchers, students, and resource managers attended. A summary of the symposium will be released shortly.
- The reserve hosted its third stop on the “**Discover the NC Coastal Reserve**” tour at the Rachel Carson Reserve May 17, 2024. The tour is a multi-year campaign spanning 2023-2026 to connect target audiences with the program and places with events to be hosted at reserve sites along the coast. Planning is underway for the fourth tour stop at the Kitty Hawk Woods Reserve. Explore the [Discover the NC Coastal Reserve's Virtual Passport](#) and enjoy short videos from the tour events. Local Advisory Committee members will be invited to the site-based events so stay tuned for upcoming event information.
- The reserve celebrated **National Estuaries Week** September 21-28, 2024 by hosting and participating in a variety of activities in tribute to NC's estuaries; thank you to all who came out to help us celebrate estuaries!
 - A *bioblitz* was held at Masonboro Island, Kitty Hawk Woods, and Rachel Carson Reserves to encourage visitors to photograph flora and fauna at the sites and upload them to iNaturalist. Documentation of species at reserve sites contributes to natural occurrence records and provides baseline data for existing species.
 - On September 28, reserve staff hosted a booth at the *Olde Beaufort Farmers Market* in Beaufort and also hosted a booth at *Femme in STEM at the NC Aquarium at Fort Fisher*. *Femme in STEM* showcases the variety of STEM fields, provides an opportunity to interact with STEM professionals, and celebrates women in working in these fields.
 - The reserve hosted a *marsh cleanup* with volunteers in Kitty Hawk Bay, part of the Kitty Hawk Woods Reserve.

Student Internships

- The reserve had a fantastic group of interns this summer in Manteo, Beaufort, and Wilmington. The students worked on a range of stewardship and education projects including monitoring wildlife use of the Carrot Island living shoreline, counting live and dead oysters in the field and in drone photos and comparing accuracy of counts, leading student summer camp activities, developing interpretive signage, and monitoring fish, turtle, and shorebird populations. These invaluable experiences give the students hands-on experience in research, education and stewardship fields and help inform their future career paths. Thank you to Friends of the Reserve, the N.C. Internship Program, and UNCW for their support and partnership for the internships.
- Student opportunities for summer 2025 in our Manteo, Beaufort, and Wilmington offices will be announced soon on our website.

Research Fellowship Updates

- **2024 NC Coastal Research Fellow**
Grace Loonam, a MS student at East Carolina University is the 2024 North Carolina Coastal Research Fellow. Grace's research will investigate changes in habitat complexity and community assembly in restored versus natural oyster reefs at the Rachel Carson Reserve. [North Carolina Sea Grant](#) and the [N.C. Coastal Reserve and National Estuarine Research Reserve](#) jointly fund this opportunity, which is open to graduate students across North Carolina. With funding for one year, recipients conduct research within one or more of the Coastal Reserve's 10 sites.
- **NOAA Margaret A. Davidson Fellow 2024-2026 Fellow**
Mina Surprenant, a PhD student at the University of North Carolina Wilmington is the 2024-2026 Davidson fellow at the NC Reserve. Mina will evaluate salt marsh responses to sea-level rise at the Masonboro Island and Zeke's Island Reserves by integrating drone technology data with computational models to help predict how marshes adapt to changing sea levels. The [Margaret A. Davidson Graduate Fellowship](#) provides funding to graduate students to conduct research within one of the 30 reserves in NOAA's National Estuarine Research Reserve System. Fellows address a key coastal management question to help reserves, scientists, and communities understand coastal challenges that may influence future policy and management strategies.

Staffing News and Accolades

- **Paula Gillikin** was recently promoted to serve as the reserve's Stewardship Coordinator. Paula has worked with the reserve's stewardship team for the past 17 years, serving the past 12 years as the Central Sites Manager for the Rachel Carson and Permuda Island Reserves. She has a Bachelor's degree in Biology and Environmental Science from UNC Wilmington and a Master's degree in Animals and Public Policy from Tufts University. Paula has also served in leadership roles for the state's work on marine debris and abandoned and derelict vessels. She will continue working from our Beaufort office. Congratulations Paula!
- **Kerryanne Newman** joined the reserve research team this summer and is working on research and monitoring projects at the reserve sites and supporting GIS needs for the program. She recently completed her master's degree in marine biology at the College of Charleston and works at our Beaufort office.
- The reserve's recently released film "Secrets of the Estuary" took home two National Estuarine Research Reserve Association FilmFest awards - the Egret Award for Best Scenery and the Tidal Award for Estuary Ambassador! Watch the film [here](#) and congratulations to reserve filmmakers Communications Specialist **Jillian Daly** and Research Coordinator **Justin Ridge**.
- The Carrot Island Living Shoreline Team received a Department of Environmental Quality Team Achievement Award for its work across divisions to complete the living shoreline at the Rachel Carson Reserve in partnership with Carteret County and Moffatt & Nichol. Division of Coastal Management team members include **reserve staff Paula Gillikin, Justin Ridge, Abby**

Williams, and Rebecca Ellin, and regulatory staff Gregg Bodnar and Wayne Hall. Their teamwork ensured the project was completed on time, met all requirements, and will serve as a model for future resilience strategies in NC.

Federal Budget

- The budget table below is a summary of the status of the federal budget* for fiscal years 2020-2025 as it relates to the NC Reserve. Congress has not passed the FY2025 federal budget, and the federal government is operating under a continuing resolution based on FY2024 allocations until December 2024 when the continuing resolution expires. Thank you to the National Estuarine Research Reserve Association and Friends of the Reserve for their work to educate Congress on the value of the national system and the NCNERR.

Federal Budget Lines	FY2020 Enacted	FY2021 Enacted	FY2022 Enacted	FY2023 Enacted	FY2024 Enacted	FY2025 President's Request	FY2025 House Mark	FY2025 Senate Mark
NERRS Operations	\$27.5M	\$28.5M	\$29.7M	\$32.5M	\$33.3M	\$32.5M	\$32.5M	\$34M
NERRS Procurement, Acquisition, & Construction (PAC)	\$4.5M	\$4.5M	\$6.5M	\$8.5M	\$8.5M	\$3M	\$10M	\$8.5M
CZM Grants	\$77M	\$78.5 M	\$79M	\$81.5M	\$81.5M	\$81.5M	\$80M	\$83M

* The federal fiscal year is October 1-September 30. The National Estuarine Research Reserve System (NERRS) budget line provides funding to the 30 reserves within the System through cooperative agreements that are matched by the states, and supports national coordination of programs and implementation of system-wide and competitive projects. The Coastal Zone Management (CZM) grants budget line provides funding to coastal states with approved coastal management programs through cooperative agreements that are matched by the states. The Division of Coastal Management (DCM) receives funding from both budget lines to operate the N.C. National Estuarine Research Reserve (NCNERR) and N.C. Coastal Management Program. The CZM cooperative agreement that DCM receives provides funding for Reserve staffing, state site operations, and administrative support.