Delaware National Estuarine Research Reserve

Location: Two components: St. Jones Reserve, 6 miles southeast of Dover in Kent County; Blackbird Creek Reserve in southern New Castle County

Date Designated: 1993

Area Protected: 6,364 acres

Web Address: de.gov/dnerr

Management: Daily oversight is provided by the Delaware Department of Natural Resources and Environmental Control. NOAA’s Office for Coastal Management provides funding, national guidance, and technical assistance.

Access and Infrastructure

- The St. Jones location houses the reserve's offices, classroom space, laboratories, conference rooms, dormitory rooms, and exhibits. The site has a one-mile nature trail with a quarter-mile salt marsh boardwalk that connects the reserve with the adjacent Ted Harvey Wildlife Management Area.

- The Blackbird Creek location contains several miles of trails, a canoe and kayak launch, conference space, and an outdoor classroom pavilion.

The Delaware National Estuarine Research Reserve protects 1,245 acres of freshwater wetlands, ponds, and forest lands in Blackbird Creek, and 5,119 acres of salt marsh and open water habitats on the St. Jones River on the Delaware Bay. The Blackbird Creek watershed is a predominantly rural area. Urbanized Dover dominates the middle and upper portion of the St. Jones River watershed, while the downstream area remains primarily agricultural. These water bodies flow into a bay famous for having the largest spawning population of horseshoe crabs in the world. Development issues in this watershed led to the creation of the state’s Coastal Zone Act in 1971, predating the federal Coastal Zone Management Act in 1972.

This research reserve protects estuaries, monitors environmental conditions, offers educational and training programs, and undertakes the scientific research needed by Delaware and the nation. Study focus areas include the effects of climate variability on natural and human coastal communities, coastal and estuarine ecosystem protection, and coastal hazards resilience.

NOAA Office for Coastal Management
Interesting Things to Know

• The Blackbird Creek Fall Festival is one of many creative ways the public is enticed to enjoy the site's picturesque natural setting and cultural traditions.

• The reserve organizes popular citizen scientist events to investigate horseshoe crab spawning and survey the secretive marsh birds. Annually, over 200 volunteers participate.

• Water quality data for the research reserve are used in tandem with various monitoring activities, including zooplankton monitoring and carbon studies, to document and better understand short- and long-term environmental changes.

• A national park lies within the reserve’s boundaries. The John Dickinson Plantation is home to one of the fathers of the American Revolution and is now part of the First State National Historical Park.

About the Programs

The nation’s 30 research reserves represent a tremendous asset, protecting nearly 1.4 million acres and providing habitat where plants and wildlife thrive. Community benefits include recreation, flood protection, and water filtration. Because the following programs are offered at each reserve, the system is able to make a positive environmental impact at the local level, as well as nationally.

Stewardship. Site protection and enhancement are part of every research reserve. Activities may include managing land and water resources, restoring habitat, controlling invasive species, maintaining biodiversity, and reducing environmental stressors.

Research. Reserve research is focused on how environmental factors—such as nutrient loading, climate change, invasive species, and storms—impact coastal ecosystems. The System-Wide Monitoring Program, or SWMP, provides long-term data on water quality, weather, biological communities, habitat, and land-use and land-cover characteristics. This combination of research and data provides a strong, science-based foundation for addressing coastal management challenges.

Training. To provide the community with the information and skills needed to integrate coastal science into local decision-making and everyday lives, reserves provide specialized courses and information. Reserve training professionals are active in community planning and improvement initiatives.

Education. Local data generated at the reserve provide students with a firsthand experience of local environmental conditions. Educators lead student, teacher, and citizen field trips that are life-changing experiences, as participants see, feel, and smell what makes an estuary one of the most remarkable places in the world.

To learn more, visit coast.noaa.gov/nerrs.