



# Jacques Cousteau

## National Estuarine Research Reserve



**Location:** 8 miles southeast of exit 58 off the Garden State Parkway, in Tuckerton, New Jersey

**Date Designated:** 1997

**Area Protected:** 116,116 acres

**Web Address:** [jcnerr.org](http://jcnerr.org)

**Management:** Daily program management is provided by the New Jersey Agricultural Experiment Station at Rutgers University. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance.

### Access and Infrastructure

- The Jacques Cousteau Coastal Center serves as the hub for the education and outreach programs. This state-of-the-art facility includes a 21-bed dormitory, a classroom equipped with a smart board, and WiFi.
- The reserve's "Life on the Edge" exhibit at the Tuckerton Seaport Museum highlights the ecological and economic importance of estuaries.
- The new "Life on the Edge at the Grassle Marsh" interpretive trail takes visitors through a half-mile transition from uplands to saltwater marsh habitats.
- A new research vessel, the *Resilience*, provides advanced sampling, sensing, and navigation capabilities to support a broad range of scientific studies.

The **Jacques Cousteau National Estuarine Research Reserve** is a network of federal and state lands within the New Jersey pinelands forest ecosystem and on the coastal plain and barrier islands of the Mullica River-Great Bay watershed. The reserve includes diverse terrestrial, wetland, and coastal habitats. With little more than one percent of the area subjected to human development, the reserve encompasses one of the least disturbed estuaries in the densely populated urban corridor of the northeastern United States.

The research reserve not only protects this important estuary, but also monitors environmental change, offers educational and training programs, and undertakes the scientific research needed by New Jersey and the nation. Study focus areas include coastal resilience, the response of the ecosystem to habitat change and alteration, and the connectivity of habitats and communities.

**NOAA Office for Coastal Management**



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### Interesting Things to Know

- An autonomous underwater vehicle is used by this reserve to track fish, the first time this technology has been used for this purpose.
- The long-term effort to monitor environmental change has documented a shift in the fish species found here. Species that historically made their home farther south are increasing in numbers.
- Derelict fishing pots pose a problem for navigation and wildlife in Barnegat Bay. The reserve's education program has worked with the local fishing community to significantly reduce the number of ghost fishing pots in this region.
- The reserve's "Getting to Resilience" program has helped over 40 municipalities assess their vulnerability to coastal hazards and identify strategies to enhance their resilience.

### 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 an environmental impact at the local level, as well as nationally.

**Stewardship.** Site protection and enhancement are part of every research reserve. Activities include the development of decision-support tools, GIS information, and management strategies that help resource managers restore habitat, manage land and water resources, control invasive species, maintain biodiversity, and reduce 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](http://coast.noaa.gov/nerrs).

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