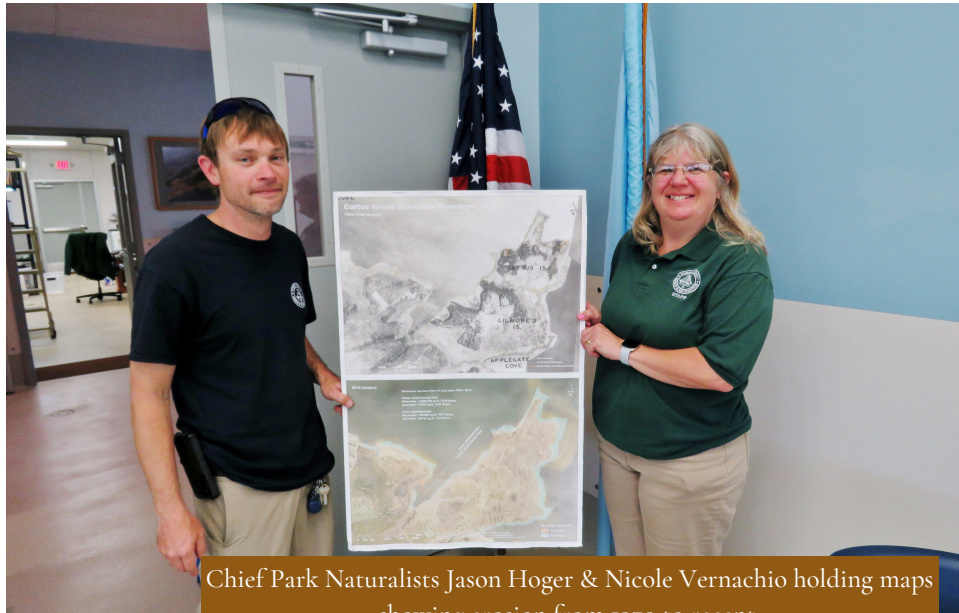


Spotlight on Cattus Island County Park

By Pat Johnson

Cattus Island County Park located just north of Toms River is one of the largest salt marsh areas in northern Barnegat Bay. Its 530 acres of natural wonder are surrounded by a densely populated area. “We’re such an important piece of nature,” said Chief Park Naturalist Nicole Vernachio.

“People are here from dawn to dusk. We have early morning walkers, runners, dog walkers, bicyclers, and high school teams use it as workout—it gets a lot of different uses throughout the day.”



Chief Park Naturalists Jason Hoyer & Nicole Vernachio holding maps showing erosion from 1970 to recent.
Photo credit: Ocean County Parks

Vernachio started working at Cattus Island when in high school and college. After leaving to raise her family, Vernachio returned to the Parks Department and is now in her 30th year there.

“When the park opened in 1980 my grandmother used to take me and my brother here for walks. Mr. A. Morton Cooper would take us on naturalist walks. He and his wife Betty were conservationists and they were active in the Ocean Nature and Conservation Society that helped to steer preservation of the park.

“The Cooper Nature Center was started with volunteers and we still continue with their traditions. Our volunteers are adults, junior and teen naturalists plus kids interested in the environment.” she said.

“We have a wonderful staff that work here and we’re very passionate—we work together to run festivals and develop programs.”

Last year they purchased ten paddle boards to start a stand-up paddle-boarding program. Certified instructors teach the intro to paddle-boarding around Cattus Island. The park offers kayak tours in the summer. Birding trips, sunset trips, cruises to waterfront restaurants are offered on their pontoon boat. Birders find Cattus Island a paradise with waterfowl in the winter, salt marsh wading birds in the summer and spring, and fall warblers in the forested areas. There are 14 osprey nests within the park.

Programs for families and children abound. A Winter Solstice Celebration is the next large event scheduled for December 14 from 11 a.m. to 2 p.m. It’s a family-friendly holiday with free horse and carriage rides, family crafts, kids games and a visit from Santa. The nature center is decorated festively and if conditions permit, a campfire. Programs can be found on the Ocean County Parks and Recreation website. www.oceancountyparks.org/

But in the last 85 years the park has lost 300 feet of shoreline due to higher sea level and more intense storms. Cattus Island is uplands and marsh with a peninsula jutting into Barnegat Bay.

The peninsula is Pages Point, named for the first settler, Timothy Page who was a privateer during the Revolutionary War. This peninsula takes the brunt force of wind and waves. “We are losing a couple of feet a year. We are the protector for all of Silver Bay,” she noted. “Without Cattus Island, they would be feeling the full force of storms.”

Another area of concern is Yellowbank. Yellowbank is a cultural and historic area where the Lenape had an encampment. For these reasons, Pages Point and Yellowbank will be the first two phases of a plan to stabilize the shoreline and restore salt marsh in Cattus Island Park.

Recently the park has been experiencing frequent flooding along the mile-long trail to Pages Point. “We think that back when the Cattus Family had their farm, maybe it flooded once a year,” said Vernachio. The first six months of 2024, the park had to close the main trail 18 times. “With that amount of saltwater, plants start to change, habitats start to change.”

Chief Park Naturalist Jason Hoger is Project Manager for the living shoreline. It will be a phased project partly paid for through a \$3 million grant from the New Jersey Department of Environmental Protection’s Division of Water Monitoring and Standards and the remaining balance from Ocean County Parks and Recreation. Additional in-kind services will come from the Barnegat Bay Partnership.

Maps and engineering plans drawn up by Colliers Engineering and Design show “T” shaped or ‘whale’s tail’ rock sills anchored in the island and forming a protective rock barrier from the pounding waves. The project started with a conceptual design by Stevens Institute of Technology, the same college that worked on the living shoreline at John C. Bartlett Jr. County Park at Berkeley Island. Normandeau Associates, a subcontractor of Colliers, also plotted where the submerged aquatic vegetation

is — a great habitat for fish and shellfish—so as to minimize the impact of the project.

“The rock sills intercept the wave energy, dissipate it and protects the shoreline behind it,” said Hoger.

“Primarily wind comes out of the west and severe storms, called Northeasters produce an easterly flow with the longest fetches (a fetch is the distance that wind travels across open water and builds up wave power), higher than normal tides and energy. When it hits Pages Point it does lots of damage. Also wind can blow waves between Silver Bay and Pages Point and displace hundreds of tons of sand from Yellowbank.”

That’s why Phase One will focus on Pages Point and Yellowbank, with bids for the project going out this fall once permitting is granted. Approximately 1710 feet of living shoreline restoration will circle Pages Point.

The rock sills are a unique solution, said Hoger. While facing and dissipating the power of the waves, behind it the rock face slopes downward to beach sand. There will also be openings in the rocks to allow tidal flushing and provide access to the beach for horseshoe crabs and terrapin nesting.



Photo credit: Ocean County Parks.