

Queens Chronicle - Wildlife and progress return to Jamaica Bay

A few years ago, the U.S. Army Corps of Engineers and partnering agencies restored Elders Point East, a marsh island in Jamaica Bay that had been deteriorating. Last summer, Melissa Alvarez, a senior project biologist with the Army Corps' New York District, made a few interesting discoveries while inspecting the island. "I saw movement in the water as the tide was draining one of the creeks," Alvarez said. "I looked closer and saw something I've never seen — there were dozens of juvenile horseshoe crabs swimming within the tidal creek. They were the size of a quarter, but this meant so much more. It means that the restored island is now providing successful breeding for horseshoe crabs."

Later in the year, Alvarez also found a nest of diamondback terrapins, a New York State-protected species of turtle — yet another indication of the success she says they've had at Elders Point East and will soon have at Elders Point West. Elders Point East and Elders Point West are marsh island complexes located within the 26-square mile Jamaica Bay Park and Wildlife Refuge that was the country's first national urban park and one of the Gateway National Recreation Areas. The once-vibrant marsh islands were once a single 132-acre piece of land named Elders Point, but years of degradation split them into separate islands now connected by muddy land. Over the last century, the islands have been disappearing at a rate of 44 acres per year, even faster in the last decade. It's believed that a great deal of the degradation is due to regional urbanization and that if it is not halted, it could cause the islands to be eliminated by 2012.

According to Alvarez, maintaining the health of the marsh islands is critical to the well-being of the wildlife and the 20 million people that live and work in the greater New York region. "From a smaller scale perspective, the marsh islands are a home for a variety of wildlife, including fish and shellfish, which are an important food source for birds and help improve water quality by removing things like nitrogen and phosphates," Alvarez said. "From a larger perspective, the marsh islands provide stability and water storage during storm and flood events." The islands also act as filters or natural cleansers for the bay as the plants capture and cycle different nutrients and particles out of the water, she added. By restoring Elders Point, and other marsh islands, the more interior islands may also be protected, resulting in less erosion to personal property, more species available for recreational fisheries, better water quality and preservation of the Gateway National Recreation Area that is visited by millions of people each year. To restore the islands, the Corps of Engineers' New York District has teamed up with agencies including the National Park Service, Natural Resource Conservation Service, New York City Department of Environmental Protection, Port Authority of New York & New Jersey and the New York State Department of Environmental Conservation. In 2006, the agencies restored East by pumping 250,000 cubic yards of dredged sand onto the island, shaping it to simulate the proper elevations of a marsh island, and hand-planting native species of grass including saltmarsh cordgrass, salt hay and spike grass that were grown from seed collected within Jamaica Bay. The team began work on West last fall, pumping 240,000 cubic yards of beneficially used dredged sand onto the island, which is primarily composed of mud, and grading it to the appropriate elevations for a marsh. Work on West is expected to be completed by early summer. The Army Corps and its partnering agencies may return to Jamaica Bay, says Mark Lulka, project manager for the New York Districts' Harbor Branch. "As we obtain additional experience and funding, we hope to build a few other marsh islands as the years go by," Lulka said. To learn more about the Elders Point restoration and other projects including the Hudson-Raritan Estuary Comprehensive Restoration Plan, visit harborestuary.org/watersweshare/. — JoAnne Castagna is a technical writer and editor with the Army Corps of Engineers.