“Given the importance of Long Island Sound, collecting scientific data which can be used to make future decisions regarding the health and cleanup of the Sound is important,” says NYSG Director Jack Mattice. “The fact that we can partner to do this is a plus.”

Restoring coastal ecosystems, such as those of Long Island Sound and the Hudson River, is a relatively new science, one in which research is needed to guide communities toward their restoration goals. According to the National Research Council, “A new emphasis on resource stewardship and restoration cannot succeed without public understanding and support. Thus, educational programs aimed at raising the level of public knowledge and comprehension of aquatic ecosystem restoration rationales, goals, and methods should receive adequate government funding.”

The Hudson River, an estuary below the Troy Dam where fresh water and salt water from the ocean mix, is another rich ecological environment providing food and shelter to diverse plants and animals. A spawning ground for major species of Atlantic coast fish and the flyway for many migratory birds, the Hudson River is also home to dense beds of shallow water plants. Called submerged aquatic vegetation (SAV), these beds are located throughout the river but are mostly abundant in the mid reaches, especially between Catskill and Kingston, the latter of which is the location of NYSG’s Hudson Valley Specialist Nordica Holochuck.

One related project involving Sea Grant researchers conducted by the Institute for Ecosystem Studies, Cornell University, and the Hudson River National Estuarine Research Reserve addressed the concern that SAV beds are being lost in many estuaries throughout the northeast, including the Hudson River. These underwater plant beds provide critical habitat for a variety of finfish and shellfish, and feeding habitat for many species of waterfowl. Good information on SAV abundance, distribution, and ecological functions will make improved understanding and managing of the resource possible. More information on this topic is available in NYSG’s brochure: What Boaters Should Know About Hudson River Underwater Plant Beds.

In a separate study, NYSG-funded researchers at Cornell University collaborated with two Sea Grant specialists to analyze public and community leader perceptions of and support for coastal ecosystem restoration. The study demonstrated that community leaders and state agency staff could not accurately predict views of local residents. Findings showed the importance of economic development and access issues to local residents were overestimated, while concerns were more related to contaminants in the environment. Actions local residents felt should be taken included: reducing danger to humans from chemical contaminants in the river, cleaning up contaminated urban waterfront sites called brownfields and monitoring levels of the river’s contaminated fish. NYSG extension staff is working with the researchers to develop fact sheets to summarize study findings for distribution to agency staff, environmental groups and the public.

—Paul C. Feeazio

You Can Restore Habitat

Want more information on habitat restoration-friendly grasses for planting? NYSG has made available fact sheets on Native Grasses, Smooth Cord Grass, and American Beach Grass. These types of relatively simple-habitat-restoration projects were identified for citizen participation thanks to NYSG, Cornell Cooperative Extension’s marine program, and the USDA’s Natural Resources Conservation Service.