Coming Soon to an Ecosystem Near You: Sea Grant Helps New York Cope with Invasive Species

New Yorkers enjoy more than 7,000 lakes and ponds, 1,300 miles of Great Lakes and marine shoreline, 70,000 miles of rivers and streams, 2 million acres of fresh- and saltwater wetlands, and 1,500 square miles of estuaries, bays and harbors. Eighteen million of the state’s 30 million acres are forested; a quarter of the state is in agricultural production. The state is home to more than 500 populations of state endangered or threatened species.

All of these important resources and NY’s quality of life are at risk from invasive species. New Yorkers pay a significant price to deal with invasives — measured in dollars, damaged crops, power failures, environmental impacts, and diseases. For example, controlling the Asian long-horned beetle (Anoplophora glabripennis) in New York City and Long Island has cost as much as $480 million since its introduction in 1996. Other species, such as zebra mussels (Dreissena polymorpha), Asian shore crabs (Hemigrapsus sanguineus), purple loosestrife (Lythrum salicaria), and West Nile virus (Flavivirus) cause hundreds of millions of dollars of additional impacts.

A well-informed, educated public is the first line of defense against new invasions and is essential to the management of existing invaders. In 2008, building on 20 years of aquatic invasive species outreach experience, New York Sea Grant (NYSG) applied this same outreach philosophy to all taxa of invaders, aquatic and terrestrial, founding the NY Invasive Species Clearinghouse. The Clearinghouse website, NYIS.INFO, is the public’s portal to all things invasive in NY, providing research-based information to all stakeholders impacted by invasive species.

The state-funded Clearinghouse bridges the gap between invasive species research and the agencies, grassroots organizations and citizens working to prevent and control biological invaders. In particular, the Clearinghouse is supporting eight new Partnerships for Regional Invasive Species Management (PRISMs) as they develop regional invasive species management efforts. As one PRISM leader put it, “Without NYSG and the Clearinghouse, we wouldn’t know where to turn for the scientific information we need for the battle against invasive species.”

The invasive diatom Didymosphenia geminata, also known as “rock snot,” was recently found in NY. This algae grows on the bottom of streams and can form thick mats, even in fast-flowing trout streams. Didymo reduces the abundance of native benthic organisms and threatens the sustainability of trout and other fish species that feed on those organisms. Photo: US EPA Region 8.