NEANS
NORTHEAST AQUATIC
NUISANCE SPECIES PANEL

The NEANS Panel

The Northeast Aquatic Nuisance Species (NEANS) Panel was established in 2001 under the auspices of the federal Aquatic Nuisance Species Task Force. It is the Panel's mission to protect the marine and freshwater resources of the Northeast from invasive aquatic nuisance species through commitment and cohesive coordinated action. The Panel was created to prevent the introduction, establishment, and dispersal of new ANS in the Northeast and to control the spread of ANS already established in the Northeast. Utilizing cooperative efforts among government agencies and private entities throughout the Northeast states and provinces, the Panel strives to mitigate the harmful ecological, economic, social, and public health impacts associated with the introduction, establishment, and spread of invasive ANS in the Northeast.

Geographic Coverage of the Panel

The NEANS Panel addresses issues and concerns relative to the freshwater and marine resources of the states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York, and the Canadian provinces of Quebec, New Brunswick, and Nova Scotia.

Panel Membership

Panel members represent state, federal, and provincial governments; academia; commercial and recreational fishing; recreational boaters and commercial shipping; power and drinking water utilities; environmental organizations; aquaculture, nursery and aquarium trades; tribes and first nations; lake associations; and, the live bait industry, among others.

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Panel Goals and Activities

The Panel provides regional coordination and leadership to its members conducting invasive ANS programs and activities. The Panel responds to requests from the federal ANS Task Force to provide regional perspectives and recommendations on aquatic invasive species issues. The Panel encourages partnerships among its member agencies and organizations to enhance efforts limited by financial or staff resources and stimulate partnerships with various regional stakeholders. The Panel supports the development and coordination of regional ANS policies.

The Panel also works to increase ANS awareness among all sectors of the public, emphasizing the need for and importance of prevention and how stakeholders can play a critical role in the prevention and control of ANS. It is important to the Panel to increase ANS awareness among the general public to advance general understanding of the harmful impacts associated with invasive species, to promote support from the public for increased funding to prevent and control aquatic invasive species, and to advance early detection and surveillance efforts through volunteer efforts.

Contact Us

For more information on the NEANS Panel, please contact Michele L. Tremblay, Program Manager, at 603.796.2615, send an email to: info@NortheastANS.org, or visit our Web site: www.NortheastANS.org.

This brochure was produced by the Communications, Education and Outreach Committee of the Northeast Aquatic Nuisance Species Panel through a grant from the U. S. Fish & Wildlife Service.

Biological Pollution in the Northeast: The Aquatic Nuisance Species Invasion

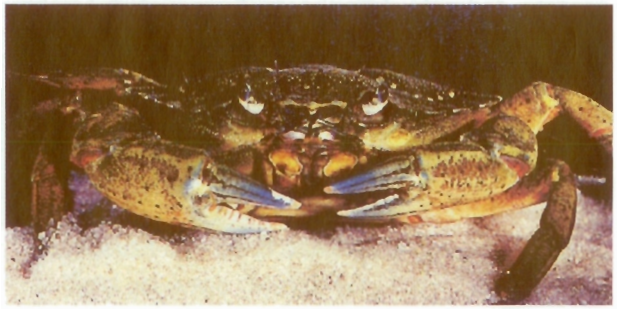
The Problem

Northeastern North America is being invaded. Not by a foreign army or terrorists; this is an invasion by non-native aquatic plants and animals transplanted from around the world. These organisms, introduced both intentionally and accidentally, are causing dramatic changes to the region's native ecosystems. They are preying on native species, outcompeting natives for food and habitat, transmitting diseases, and restructuring energy flows in entire ecosystems. Not all non-native plants and animals are invasive; those that cause (or have the potential to cause) significant harm, however, are known as aquatic invasive species or aquatic nuisance species (ANS).

There are many aquatic invasive species that could easily be introduced into the Northeast in the near future if preventive action isn't taken. Potentially damaging introductions could include the New Zealand mud snail, flathead catfish, snakehead fish, giant salvinia and others.

Hydrilla. Photo: Brian Nelson, Southwest Florida Water Management District

Water chestnut. Photo: Mark Malchoff, Lake Champlain Sea Grant Project



European green crab. Photo: USGS

The Impacts

- Invasive species result in more than $100 billion in damages and control costs annually in North America.
- Hydrilla (*Hydrilla verticillata*), one of the most invasive plants to have been introduced into North America, costs the State of Florida millions of dollars for control annually. Hydrilla has now been found in Connecticut, Massachusetts and Maine and could conceivably thrive as far north as the U.S./ Canadian border.
- Water chestnut (*Trapa natans*) management in the Lake Champlain Basin (1982 - 2005) cost more than $6 million, excluding countless volunteer hours. This invasive plant has also been found in other waterbodies in New York and Vermont, as well as in Massachusetts, New Hampshire and Connecticut.
- The invasive European green crab (*Carcinus maenas* Linnaeus) preys on commercially valuable shellfish in the Atlantic Ocean, resulting in an estimated annual loss of $44 million to New England and the Maritime Provinces.
- An economic study in New Hampshire indicated that the value of lakeshore property is reduced by 10-20% if the waters are choked with invasive aquatic weeds.
- A pilot inspection program conducted by the State of Maine found more than 1,200 recreational boats transporting aquatic weeds around the state. This could easily lead to numerous new infestations. Hundreds of thousands of recreational boats move throughout the Northeast annually.
- Zebra and quagga mussels (*Dreissena* spp.) have cost industry, navigation, power plants and public drinking water treatment plants more than a billion dollars in lost production and control costs since the mussels' discovery in Lake St. Clair in 1988. In the Northeast, zebra mussels are now found in New York, Vermont, Connecticut, and Quebec.
- Invasive tunicates (sea squirts) have become abundant along coastlines and on offshore fishing grounds. They can alter existing ecological relationships and cause fouling problems on boats, docks, buoys and aquaculture structures.

Eurasian water milfoil. Photo: Alison Fox, University of Florida, www.forestryimages.org

Weed infested boat. Photo: Dr. Ladd Johnson, Laval University

Zebra mussel. Photo: Scott Camazine, NY Sea Grant