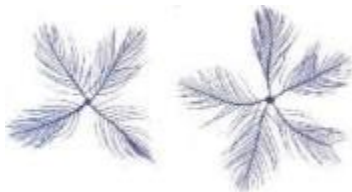


<http://www.fws.gov/contaminants/Issues/InvasiveSpecies.cfm>

Eurasian water milfoil is from Europe, Asia, and northern Africa. In 1942, it was found in a pond in Washington, D.C., and has spread throughout much of the U.S. by the aquarium trade, fishermen, and boaters. Eurasian milfoil out competes native vegetation in lakes, ponds, and reservoirs, thus providing a less nutritious diet for waterfowl. Eurasian water milfoil also supports fewer invertebrates that fish eat. Its dense growth impedes water flow and clogs water intakes.



Eurasian Water Milfoil

The Response

The National Invasive Species Act (NISA) was passed in 1996 amending the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. The 1990 Act established the Aquatic Nuisance Species (ANS) Task Force to direct ANS activities annually. The Task Force is co-chaired by the U.S. Fish and Wildlife Service (Service) and the National Oceanic and Atmospheric Administration. Other members include the National Marine Fisheries Service, Environmental Protection Agency, Department of Agriculture, the U.S. Coast Guard, the U.S. State Department, and the Army Corps of Engineers. NISA furthered ANS activities by calling for ballast water regulations, the development of State management plans and regional panels to combat the spread of ANS, and additional ANS research.

In 1999, President Clinton signed the Executive Order on Invasive Species. This Order established an Invasive Species Council, which will oversee activities of existing organizations that address invasive species. However, even though many current activities combat the invasive species, their negative impact on this country's resources has been recognized for years.

The Lacey Act was passed in 1900 and has since been amended to restrict importation, acquisition, and possession of wildlife deemed injurious. Wildlife are considered injurious if their importation could impact negatively on agriculture, horticulture, forestry, the health and welfare of humans, and the welfare and survival of wildlife and wildlife resources in the U.S.

The Service's Fisheries Program, through its Division of Fish and Wildlife Management Assistance, supports the implementation of these Acts and the Executive Order through its Invasive Species Program (Program). This program provides national leadership preventing, eradicating, and controlling invasive species.

The Program provides funding for ANS Task Force personnel and numerous Task Force activities. It also funds seven FWS regional coordinators and their respective invasive species activities. These coordinators work closely with the public and private sector to develop and implement invasive species activities. Many of the Service's fishery resources offices also provide support for invasive species activities.

The priorities of the Program are as follows:

1. Increase public awareness of invasive species issues through education and outreach programs.
2. Coordinate aquatic nuisance species (ANS) management activities with other Federal and State agencies and private entities.
3. Provide technical assistance for controlling ANS on Federal lands.
4. Coordinate and conduct research activities.
5. Through the regulatory process, prevent the importation of nonindigenous nuisance species.

Increase public awareness of nonindigenous nuisance species issues through education and outreach programs.

This is perhaps the most important priority. If the spread of nonindigenous nuisance species is prevented by an informed public, then efforts to control or eradicate ANS will require fewer resources.

The ANS coordinators conduct numerous workshops and meetings as a means to educate and inform the public about ANS. Workshops target important issues such as State ANS plan development preventing spread of ANS through the New York Canal System, and mitten crab impact on the West Coast. Assistance is provided for national and international meetings.

Coordinators author articles and provide interviews for national publications and news programs.

They also attend boating and sportfishing shows, informing thousands of participants about the definition, biology, and impacts of ANS and what they can do to help prevent their spread.

Coordinate ANS management activities with other Federal and State agencies and private entities.

One of the premier activities that numerous ANS coordinators have worked on with public and private entities is the 100th Meridian Initiative. The coordinators have worked with the Canadians and other partners to develop and implement the 100th Meridian Initiative, which will help prevent the westward spread of zebra mussels and other ANS by boats and personal watercraft. Boat inspections and surveys are conducted in 100th Meridian jurisdictions, including North and South Dakota, Nebraska, Kansas, Oklahoma, and Texas. Through inspections and boaters surveys, partners can determine the impact that transporting boats and personal watercraft has on the spread of zebra mussels and other ANS and whether boats traveling west have been in zebra mussel-infested waters.



Zebra Mussel Sightings

The ANS coordinators organize cooperative sampling efforts with other Federal, State, and municipal governments, universities, and public interest groups to track the distribution of ANS such as round gobies in waters near Chicago. They also assist with integrated pest management and weed issues, which involves public outreach and biocontrol risk assessment.

The Division provides funds to the National Nonindigenous Aquatic Species Information System in Gainesville, FL. Data in this system are used as a clearinghouse for ANS information such as maps of sightings, impacts of ANS, and verification of ANS samples. These data are easily accessible to the public.

Provide technical assistance for controlling ANS on Federal lands.

The Service is the steward of approximately 93 million acres of national wildlife refuge land. Many nonindigenous nuisance species have made their home on these refuges. The Fisheries Program support Fishery Resources Offices which monitor these species on refuges.

The Department of Defense is required to develop and implement integrated natural resource management plans for the 25 million acres that it controls. These plans address prevention and control of nonindigenous nuisance species. The Fishery Resources Offices review and assist with the implementation of these plans.

Coordinate research activities



Ruffe

Ruffe and round goby, originally from Eurasia, have invaded the Great Lakes. Fishery Resources Offices in the Great Lakes continuously work with States and universities to monitor their populations defining their range of invasion. Sampling equipment used for monitoring is developed, tested, and refined. The diets of round gobys are also being studied. For instance, preliminary analysis indicates that they eat zebra mussels, insect larvae, and small fish.

The impact of zebra mussels on native mussels has been studied by fishery resources offices over the past few years. Zebra mussels are removed from native mussels before the natives are returned to their habitats. Zebra mussel populations are monitored.

Sea lamprey, which are native to the North Atlantic, are established in the Great Lakes. They have decimated lake trout populations through their feeding method, in which they attach to fish and extract their body fluid. As participants in the Great Lakes Fisheries Commission, the Fishery Resources Offices assist with controlling sea lampreys. These control methods include testing and applying lampricide, developing and installing lamprey traps, and stocking strains of lake trout that may adapt to surviving a sea lamprey attack. Through these efforts, the battle against sea lamprey is being won.



Sea Lamprey

Prevent the importation of invasive species.

Many invasive species are imported into this country for various reasons such as for pets or for the fur trade. These species may escape or when they are no longer wanted, their owners sometimes release them into the wild, which can negatively impact native plants and animals. The Division identifies and researches imports that could potentially injure native wildlife and wildlife resources, human health and welfare, agriculture, aquaculture, horticulture, or forestry. If an import is deemed injurious, its importation will be denied through the regulatory process.

The Future

More attention is being given to invasive species issues. Through the Division's programs and the assistance of other Federal and State agencies and the private sector, invasions of these species can be reduced and their impact can be minimized. Public knowledge and participation are key effectively combating these invaders.