

AQUATIC INVADERS



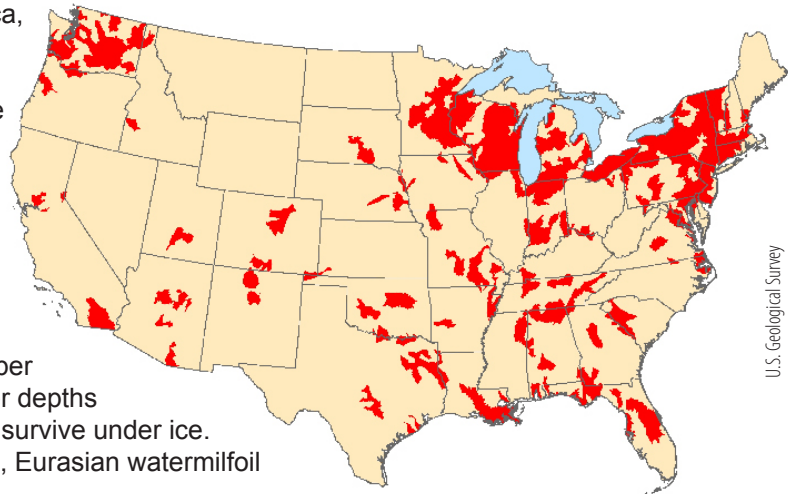
COMMON NAME: Eurasian watermilfoil, Eurasian milfoil, spiked watermilfoil

SCIENTIFIC NAME: *Myriophyllum spicatum* (Linnaeus, 1753)

NATIVE DISTRIBUTION: Europe, Asia, northern Africa and Greenland.

U.S. distribution: In North America, Eurasian watermilfoil is found from Florida to Quebec in the east and California to British Columbia in the west. The species has also been reported in Australia.

Habitat: Eurasian watermilfoil is a submersed perennial plant. An extremely adaptable plant, it can grow in still to flowing waters, can tolerate salinities of up to 15 parts per thousand, pHs from 5.4 to 11, water depths from 1 to 10 meters, and can even survive under ice. Relative to other submersed plants, Eurasian watermilfoil requires high light.



Life cycle: Although Eurasian watermilfoil can potentially spread by both sexual and vegetative means, vegetative spread is considered the major method of reproduction. Fragments are also produced through damage from wind and wave action and boating activities, with each fragment having the potential to develop into a new plant. Eurasian watermilfoil exhibits an annual pattern of growth. In the spring, shoots begin to grow rapidly as water temperatures approach 15 degrees Centigrade. When they near the surface, shoots branch profusely, forming a dense canopy.

Cool facts:

- A number of populations found in Oklahoma were introduced by earthworm farmers who packed their product in Eurasian watermilfoil.
- In Currituck Sound, North Carolina, Eurasian watermilfoil was first reported in 1965 when approximately 40 hectares were densely infested and 200 to 400 hectares were lightly infested. A year later 3,200 hectares were heavily infested and 26,800 hectares had some milfoil plants.

Pathways of invasion: Eurasian watermilfoil may have been introduced to the North American continent at Chesapeake Bay in the 1880s. It appears to be primarily spread from water body to

water body through boating activity, although anglers have been known to deliberately plant this species in lakes. It is also a popular aquarium and water garden ornamental plant.

Impacts: Eurasian watermilfoil adversely impacts aquatic ecosystems by forming dense canopies that shade out native vegetation. These canopies provide poor habitat for waterfowl, fish, and other wildlife and alter water quality by raising pH, decreasing oxygen, increasing temperature and loading the water with phosphorus and nitrogen.

Eurasian watermilfoil impacts power generation and irrigation by clogging dam trash racks and intake pipes. In Washington State, private and government sources spend about \$1,000,000 per year on Eurasian watermilfoil control. Other states and provinces (Minnesota, Wisconsin, Vermont, New York, and British Columbia) spend similar amounts per year to control infestations.

Stagnant water created by Eurasian watermilfoil mats provides good breeding grounds for mosquitoes. Eurasian watermilfoil interferes with recreational activities such as swimming, boating, fishing and water skiing.

Ways to prevent its spread:

- Never release any non-native organism into the environment.
- Good boat hygiene is critical – boats and trailers that have been washed with warm, soapy water or mild bleach are less likely to spread non-natives. Live wells and bilge water should also be drained before you leave the boat access area.
- Make sure that in the event of a flood, the plants from your water garden will not be washed in to adjacent aquatic environments. Water runs down hill!
- Report invasive species to local officials and the USGS online at <http://nas.er.usgs.gov/> or by calling 877-7867-267 (877-STOP-ANS).

These tips apply to ALL non-native species.

Don't forget: Use native ornamental plants, and clean your boat after each use.
