



Golden Sands
Resource Conservation
& Development Council, Inc.



Aquatic Invasive Species Quick Guide

Yellow Floating Heart (*Nymphoides peltata* (S.G. Gmel.) Kuntze)

Description: Yellow floating heart is a perennial, rhizomatous aquatic plant in the Menyanthaceae family. It has small, heart-shaped, floating leaves. Each leaf usually has a wavy edge (margin). The flowers are held on stalks several inches above the water, with one flower per stalk. Each flower is yellow with 5 petals, and each petal has a very thin fringe surrounding it (see photo below). Fruits are green, flattened, and about 1 inch long. Seeds are flattened, gray-black, with dozens of tiny, transparent hairs.



Yellow floating heart has small, floating leaves and yellow flowers held on long stalks.

North American Distribution: Eastern Canada, eastern U.S., Midwestern U.S., southern U.S. from Texas to California.



Flowers are yellow with 5 fringed petals.

Dispersal Vectors: Native to Europe and Asia, yellow floating heart was introduced to North America as an ornamental plant for water gardens. Water gardeners probably released excess plants into local waterways, or the seeds may have been carried to local waters by animals. Yellow floating heart can spread by fragments of the rhizomes or stolons, and by seed. Seeds have a fringe of tiny hairs that allow the seeds to float and cling to animal fur. Nursery shipments of yellow floating heart have been found to contain seeds and fragments of additional invasive species, including Hydrilla.



Fruits are flattened, pointed at one end, and about 1 inch long.

Ecological Impacts: Yellow floating heart can completely cover the water's surface in shallow areas. It can choke out native vegetation and reduce a waterbody's value to wildlife. Dissolved oxygen concentrations are often reduced by thick cover of yellow floating heart, which reduces diversity of aquatic animals. Stagnant areas produced by the dense vegetation can provide ideal breeding conditions for mosquitoes.

Control Options: Many states have prohibited sale or possession of yellow floating heart due to its incredibly invasive nature. Plants or animals should never be released from aquaria or water gardens.

Manual removal is difficult, but effective. All fragments and roots of the plants must be removed. Rhizomes are incredibly strong, and lifting plants from underneath the rhizome is most effective. Manual removal of yellow floating needs to occur multiple times to remove seedlings or new sprouts. Continued monitoring of the site is essential.

Chemical control of yellow floating heart is also difficult. Even at maximum label rates, many aquatic herbicides are ineffective against this species. Its thick, waxy leaves are effective at repelling liquid herbicides. Most states require chemical use permits for any herbicide treatments in standing water or wetland situations.

A successful biological control agent is not known at this time.

Additional Information:

Global Invasive Species Database. *Nymphoides peltata*. <http://plants.usda.gov/core/profile?symbol=NYPE>

Photo credit: Paul Skawinski



Seeds are oblong, 3mm long, and surrounded by tiny, transparent hairs

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