

the animated broomsticks plaguing Mickey Mouse's nightmares in Fantasia. When the sorceror's apprentice chops the attacking broom in two, each half rises up to double the assault. And so on, exponentially. Wake me up!

## **BREAKING HEARTS**

When aquatic flowers take over, Texas lakes get strangled.

BY LARRY D. HODGE

One of the latest threats to Texas waterways comes in two forms and has been found in two water bodies. Yellow floating heart (Nymphoides peltata) infests Moss Lake near Gainesville, and crested floating heart (Nymphoides cristata) has invaded Caddo Lake. Despite their pretty names, they are unwelcome visitors, hitching a ride from Asia through the aquarium business.

The plants are closely related, so they have a lot in common. Both sport showy flowers and somewhat heart-shaped floating leaves, reproduce rapidly, and prefer slow-moving rivers, reservoirs and ponds.

Yellow floating heart flowers resemble those of native species such as little floating heart and spatterdock. Crested floating heart flowers are white and have a ruffle lining the center of each petal, which distinguishes the plant from native species.

Yellow and crested floating heart, like giant salvinia, are capable of rapidly covering the entire surface of



the water, outcompeting native plants and creating areas with low oxygen levels, unsuitable for fish. Thick mats of floating and submerged leaves can make it difficult to swim, ski or paddle in infested areas.

Floating heart reproduces in a variety of ways: daughter plants that break off and float to new areas, rhizomes and tubers that can be spread by boats and anchors, and seeds that can be spread by currents and by attaching to feathers or fur. This plant is determined!

That tenacious ability to spread by fragments makes control of floating heart by physical removal difficult, since cutting or pulling the plants creates small pieces that can escape and spread. There are no known biological controls such as insects, and grass carp (used for giant salvinia) don't feed on the plant. Use of herbicides to control floating heart has shown limited success even with repeated applications. Eradication requires killing the underwater tubers.

Texas Parks and Wildlife Department aquatic invasive species biologists monitor and chemically treat infestations of invasive plants, but prevention is the best method of control. Boaters should clean, drain and dry their boat when moving it from one body of water to another. The only sure way to halt the spread of invasive species is never to introduce them in the first place.

More information on invasive species in Texas can be found at www.texasinvasives.org ★



