

## European frog-bit

### *Hydrocharis morsus-ranae*

#### Description

This species is listed as a prohibited noxious weed by the Michigan Department of Agriculture; most plants are dioecious and many populations consist of only one sex; in mixed populations, most plants are male and little seed is produced.

#### Habit

Perennial, free-floating aquatic herb that forms large colonies, creating dense mats with tangled roots.

#### Leaves

Usually floating, kidney shaped with long stems, dark purple below, resemble tiny water lilies, 1-6 cm (0.5-2.25 in) across.

#### Stems

Strong; cord-like stolons.

#### Flowers

White in color, cup-shaped, three-petaled with yellow dots at the base.





### **Fruits and Seeds**

Fruit is a globose berry, fruit / seed set uncommon.

### **Habitat**

Occurs in shallow, slow-moving water on the edges of lakes, rivers, streams, swamps, marshes and ditches.

### **Reproduction**

Primarily vegetative, through long stolons and turions (winter buds that are produced on the stolons); in fall, turions drop off and remain dormant until spring when they begin to grow; one plant can produce over 100 turions a year.

### **Similar**

Water lilies (*Nymphaea* spp., *Nuphar* spp.) are much larger. Water-shield (*Brasenia schreberi*) leaves oval, not kidney-shaped. Also similar to American frog-bit (*Limnobium spongia*).

### **Monitoring and Rapid Response**

Monitor for new populations. No control measures have been reported for this species. Hand pulling or raking out colonies before fall, when turions drop off, seems advisable. Permits are usually required for herbicide use in water bodies and wetlands. See MDEQs Aquatic Nuisance Control website at: [https://www.michigan.gov/egle/0,9429,7-135-3313\\_3681\\_3710---,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_3681_3710---,00.html). As this species has a limited distribution in Michigan, it is important to document new occurrences. Please obtain flowering or fruiting specimens and submit to: Anton Reznicek, Curator (Vascular Plants), University of Michigan Herbarium, 3600 Varsity Drive, Ann Arbor, MI 48108-2287.

### **Credits**

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Invasive Plants of Aquatic and Wetland Habitats for Michigan.