

# Invasive Species Alert

## European Water-clover

(*Marsilea quadrifolia*)

\*Detected in Michigan\*

### Identification:

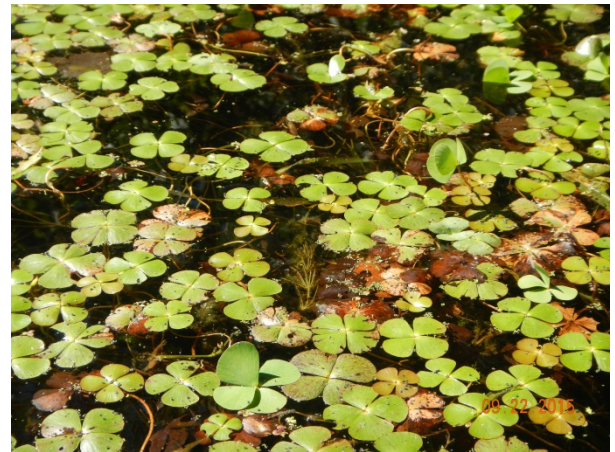
- Resembles a four leaf clover
- Leaves are smooth and can be floating, submerged, or emergent
- Maximum height: 8 inches
- Thin green stalks bear a single leaf

**Habitat:** This aquatic fern anchors into sediment in shallow, slow-moving waters. Preference is given to sandy and loamy soil environments with semi-shade to full sun.

**Native Range:** Europe and Asia

**U.S. Distribution:** Reported in Ohio, Illinois, Iowa, Michigan, and Missouri with widespread occurrences in the northeastern states.

**Local Concern:** European water-clover has the ability to form dense, monospecific stands by outcompeting native aquatic species. Its ability to adjust the angle of floating leaflets to optimize



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sunlight gives it even more of a competitive edge over native species.

**Other Common Names:** Four-leaf clover, pepperwort, water shamrock

This species is currently allowable for sale and possession in Michigan. If these plants are observed outside of cultivation, please report by visiting [www.michigan.gov/invasivespecies](http://www.michigan.gov/invasivespecies) for contact information. Report online at [www.misin.msu.edu](http://www.misin.msu.edu) or download the MISIN smartphone app and report it from your phone