

Menyanthaceae

buckbean family

These widespread species are associated with aquatic habitats. Their leaves are alternate and simple, or sometimes growing in threes. Flowers are perfect although sometimes functionally unisexual on dioecious plants. Corolla is sympetalous, with five lobes. Stamens are attached to the corolla, alternating with the lobes. Fruits may be capsules or berries.

Key to genera

Leaves with 3 leaflets; emergent; flowers borne in a raceme. *Menyanthes*

Leaves simple, floating; flowers arranged in an umbel. *Nymphoides*

***Menyanthes* L.**

Buckbean

This is a monotypic genus, circumboreal in range. Leaflets are borne in threes atop a long petiole, sheathing at the base. Flowers are carried on a scape loosely arranged in a raceme, subtended by bracts. Calyx is deeply cleft, its lobes are hirsute. The corolla is distylic.

***Menyanthes trifoliata* L.**

Buckbean; trèfle d'eau



Photo by David Mazerolle

Leaves are of a leathery texture. Whitish flowers ascend in an erect raceme, scape arising from the base of the plant. Corolla is pubescent within.

Flowers in June.

Emergent from stagnant pools and bogs. Often dominant.

Common at Truro, Kentville, Amherst, to northern Cape



Photo by Sean Blaney

Breton. Less frequent southward and known from Sable Island.

NL to AK, south to CA, NM, and NC.

***Nymphoides* Seguiier floating heart**

Truly aquatic, there are 20 species of these herbs worldwide. Our single native species is dioecious. Leaves either arise directly from a rhizome on long floating petioles, or on petioles arising at the base of the inflorescence. Calyx is lobed, the five segments oblong. The corolla is also cleft into five pubescent lobes. There may be a yellow gland at the base of each lobe.

Key to species

Fertile stem with a pair of leaves at the summit subtending the umbel;
calyx >8mm long; flowers yellow.

Nymphoides peltata

Fertile stems with a single leaf at the summit arising at the base of the
umbel; calyx <8mm long; flowers white or creamy.

N. cordata

Nymphoides cordata* (Ell.) Fern.*Floating Heart; faux nymphéa à feuilles cordées***Photo by Ross Hall*

Floating leaves ovate to cordate on long petioles attached at the base of the notch on the lower surface. The tuft of roots floating below the leaves should separate them from water lilies. Flowers are very small and white.

Flowers in July and August.

Quiet waters of lakes and ponds. Often large patches.

Common throughout although more abundant in the southwest.

NF to ON, south to MD; disjunct from NC to FL and LA.

*Photo by Sean Blaney****Nymphoides peltata* (Gmel.) Kuntze****Yellow Floating Heart; faux nymphéa pelté***Photo by Rebecca Douglas*

Leaves are similar to the previous species although somewhat larger, forming dense mats over the water's surface. Flowers are subtended by a pair of leaves, the stems even extending above an umbel producing secondary inflorescences. Flowers are bright yellow and larger than those of the native species.

Flowers appear from July to September throughout its range.



Photo by Rebecca Douglas

Brown-water lakes where competition is low from other aquatics. According to the Global Invasive Species Database: "This species can become extremely invasive (pioneer character) in shallow, slow-moving swamps, rivers, lakes and ponds." It may be that in Nova Scotia it is an indicator plant of polluted and eutrophic lakes as it thrives in the nutrient-rich conditions of that habitat.

So far it is only known from Little Albro Lake, Dartmouth, where it thrives.

Ranges so far from NS; QC to ON south through Appalachian Piedmont to TX; west coast. Introduced as an ornamental from Europe.