

WATERWEEDS

Elodea canadensis and *Elodea nuttallii*

NATIVE TO MAINE

Habitat: Maine is home to two native waterweed species: common waterweed (*Elodea canadensis*) and slender waterweed (*Elodea nuttallii*). Both are found in the submersed plant community. Preferring fine, nutrient-rich sediment, the plants grow to depths of several meters. (Waterweeds may be found in a wide range of environments, including freshwater ponds, slow moving streams or tidal tributaries.)

Description: Common waterweed and slender waterweed share many common characteristics and it may not always be easy to distinguish between the two. Both have slender stems supporting small, lance-shaped leaves. The stems, anchored to the sediments by shallow roots, grow up to one meter long, often branching profusely and forming dense, tangled stands. The leaves are attached directly to the stem (no petiole) in whorls, with precisely three leaves per whorl. (For both of these species, it would be considered rare to find a whorl of leaves that contained any number other than three.) The leaf edges of both species are finely serrated, visible only with significant magnification. Both species produce small, white flowers with three petals at the tips of long slender stalks and rise to (or above) the water surface at maturity. Female flowers are most often seen; male flowers are rarely produced.

The shape, texture, and proportions of the leaves provide the best means for distinguishing between the two native waterweeds. The



Leaves of common waterweed are generally wider and more blunt at the tip than those of slender waterweed

relatively firm leaves of common waterweed tend to be shorter, stouter (averaging 2 mm in width), and relatively blunt at the tip. The leaves of slender waterweed are typically longer, more flimsy and slender (averaging 1.3 mm in width), and more sharply pointed at the tip. Also, the leaves of common waterweed tend to get more densely crowded toward the tip than those of slender waterweed. Maine's native waterweeds rarely have more than three leaves per whorl which helps to distinguish them from their invasive look alikes: hydrilla and Brazilian waterweed. Both of these invaders typically have four or more leaves per whorl.

US Range: Both of Maine's native waterweeds are native throughout New England and much of the United States.



Elodea canadensis



Elodea nuttallii

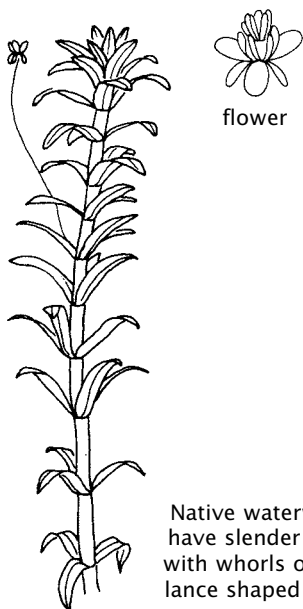
Annual Cycle: Maine's native waterweeds overwinter under the ice as evergreen plants, growing slowly with a reduced rate of photosynthesis. In the spring, faster growth resumes and new shoots appear. Flowering occurs early to midsummer. Reproduction is primarily vegetative through stem fragments. Seeds are rarely produced.

Value to the Aquatic Community: Waterweeds are a source of food and habitat for fish and invertebrates throughout the year. Waterfowl feed upon both the plant and upon the small organisms that inhabit the dense vegetation. Stands of waterweed may become so thick that even fish cannot penetrate the mat.

Look Alikes: May be confused with hydrilla, Brazilian waterweed, and mare's tail.



Dense mat of common waterweed



flower

Native waterweeds have slender stems with whorls of three lance shaped leaves

hydrilla	slender water weed	common water weed	Brazilian water weed

Herbarium specimen comparison of the two native waterweeds and their two invasive look alike; hydrilla (left) and Brazilian waterweed (right)