

Prior Lake—Spring Lake Watershed District

AQUATIC PLANT REFERENCE CHART

Aquatic plants play a vital role in lake ecosystems, providing benefits for wildlife, people, and water health. They create valuable habitat for fish and waterfowl, absorb undesirable nutrients, and improve water clarity. Minnesota has nearly 150 species of aquatic plants, most of which are native species. This guide is intended to assist in identifying most of the common aquatic plants present in lakes within the Prior Lake—Spring Lake Watershed District. Plant names in red are invasive species.

Cattails (*Typha* spp.)

Cattails are an emergent (above water) plant, well known for their flowering head. Leaves are flat and wide, rising from the base of the plant's slender stem.



Water Celery (*Vallisneria americana*)

Water celery is submersed, as just the leaf tips trail on the water's surface. Leaves are ribbon-like and range in color from green to reddish. They emerge from basal clusters (or circular arrangement of leaves from the same place) along a creeping rhizome.



Star Watergrass (*Heteranthera dubia*)

Star watergrass is a submersed plant comprised of slender, freely branched stems and narrow leaves. Leaves connect directly to the stem with no leaf stalk and have lots of parallel veins but no prominent mid-vein. Plants can grow up to 6 feet long.



Slender Naiad (*Najas flexilis*)

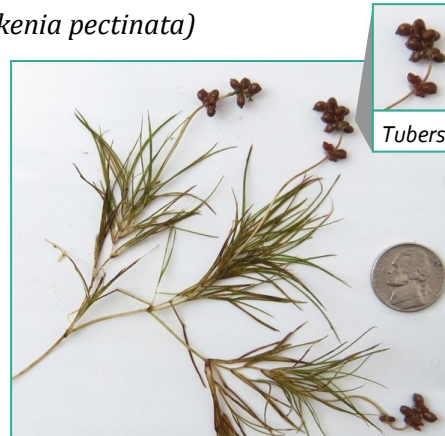
Slender naiad consists of narrow leaves attached directly to narrow, branched stems. Leaf size and spacing is extremely variable, but the plant is always submersed. This plant can be differentiated from Star watergrass, by its leaf shape. Slender naiad's leaves are narrow with a broad base where they attach to the stem, and each leaf edge has fine teeth.



* This photo courtesy of Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database / USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast National Technical Center, Chester.

Sago Pondweed (*Stuckenia pectinata*)

Sago pondweed, is part of a different plant family than most other pondweeds, and is easily identified by the tubers found on leaf tips. This pondweed almost appears bushy due to its branched stems and numerous stiff leaves. The leaves can resemble pine needles and spread in a fan-like fashion.



Tubers

Illinois Pondweed (*Potamogeton illinoensis*)

This plant consists of submersed leaves on thick stems. Leaves are wider than they are long, appearing lance to oval shaped. They can be attached directly or sometimes have a short stalk. A key identifying feature of Illinois pondweed is its stiff stipules (or outgrowths growing from the base of the leafstalk) which have 2 prominent ridges.



Stipules

Flatstem Pondweed (*Potamogeton zosteriformis*)

Flatstem pondweed is one of the most distinct pondweeds. It has strongly flattened stems which are stiff and linear, with a prominent mid-vein and numerous fine parallel veins. Leaves can be up to 8 inches long. Plants are freely branched and have no floating leaves.



Claspingleaf Pondweed (*Potamogeton richardsonii*)

Claspingleaf pondweed can be easily confused with curlyleaf pondweed—both having wavy, submersed leaves. The main difference is that curlyleaf pondweed has serrated or "toothed" edges, while claspingleaf pondweed has smooth edges and a wide base that nearly completely wraps around the stem.



Stringy Pondweed (*Potamogeton pusillus*)

This plant consists of highly branched, somewhat flattened stems and slender, flexible leaves. Leaves are up to 3 inches long, connect directly to the stem, and remain submersed in the water. They have three parallel veins—the mid-vein being the most prominent. Two tiny glands (hard, clear to yellowish round dots) will be present at the base of each leaf.



* This photo courtesy of Christian Fischer.

Whitestem Pondweed (*Potamogeton praelongus*)

Whitestem pondweed is distinguished by its broad, submersed leaves and whitish, zigzag stem. Like other species of pondweed, leaves are shiny and often appear wavy or twisted. However, this species' leaf tips are "boat-shaped" or cupped and leaves do not wrap around the entire stem. This plant has no floating leaves.



Cabbage (*Potamogeton amplifolius*)

Cabbage, also known as large-leaf pondweed has thick, large stems and both submersed and floating leaves. Both leaf types are broad and taper toward the stem. Submersed leaves appear long and gently folded, resembling a crescent moon. Floating leaves are more egg shaped. If the floating leaves have been removed from boat propellers, this plant can be easily confused with Illinois pondweed.



Curlyleaf Pondweed (*Potamogeton crispus*)

This plant is an aquatic invasive species. Leaves are a key identifying feature. They are all submersed and somewhat resemble lasagna noodles, as they are stiff and crinkled. Leaves do not wrap around the stem. Upon closer inspection, a row of "teeth" can be seen along leaf edges, which differentiates them from other aquatic plants.



Eurasian Watermilfoil (*Myriophyllum spicatum*)

Eurasian watermilfoil is an aquatic invasive species which can be easily confused by its native counterpart, northern watermilfoil. Both species are submerged aquatic plants which have four deeply-dissected or "feathery" leaves in a whorl around their stems. However, Eurasian watermilfoil will have more leaflet pairs (12-20) than native milfoils. Leaves of this species will go limp when out of the water.



Northern Watermilfoil (*Myriophyllum sibiricum*)

Northern watermilfoil is a submersed aquatic plant. Leaves are deeply dissected, with 5-10 leaflet pairs per leaf. Four leaves are positioned in whorls around the plants' hollow stems. When removed from water, the leaves of this species are ridged. This species is easily confused with the invasive Eurasian watermilfoil.



Coontail (*Ceratophyllum demersum*)

Coontail is submerged rootless plant. This plant gets its name from the thick and bushy growth of leaves that occurs at stem tips, which resemble a raccoon's tail. There, dark green leaves are whorled around a hollow stem.



Chara (*Chara spp.*)

Chara is commonly known as Stonewort, Skunkweed, Sandgrass, and Muskgrass because of its foul, musty odor. However, these names are somewhat misleading, because the Chara species is actually not a plant, but an advanced form of algae. Chara has cylindrical, whorled branches and has a grainy or crunchy texture. It is commonly mistaken for coontail or milfoil, but has a lighter green color.



Bladderwort/wart (*Utricularia spp.*)

Bladderwort is an annual, floating plant. It actually lacks roots, so stems and flowers float above a six-pronged spur. Underwater, leaf branches are fleshy and inflated with air, allowing the plant to float. Bladderworts are unique in that the underwater leaves bear small oval "bladders" that trap and digest small aquatic creatures.



Elodea (*Elodea canadensis*)

Elodea, sometimes called Common waterweed or Canada waterweed, is a submersed aquatic plant. It has branched stems, with three oval shaped leaves arranged in clusters around them. Leaf clusters are closer together near the tip and spaced farther apart down the stem. This plant's tiny, white flowers bloom during the summer months and are the only part which breach the water's surface. This species is commonly confused the invasive plant, Brazilian Elodea, which has been found in Minnesota.



White Water Lilies (*Nymphaea odorata*)

White water lilies are a floating-leaf species. Leaves are round and six to eight inches in diameter. Leaf tops are varying hues of green, but the underside is reddish-purple. This plant's flowers have individual stalks and are separate from the leaves.



Purple Loosestrife (*Lythrum salicaria*)

Purple Loosestrife is an aquatic invasive species which invades marshes and lakeshores, displacing native species, and destroying the quality of wetlands. Leaves have smooth edges and are usually arranged in pairs opposite each other or groups of three. Stalks are angled (not round) and woody. Flowers are located directly on the stalk. They consist of five to six purple petals surrounding a yellow center.



Greater Duckweed (*Spirodela polyrhiza*)

Duckweeds are tiny, free-floating plants which are often mistaken for algae from afar. It may cover the water's surface with thick, green clusters, but it is not interconnected like algae. Duckweed typically consists of a leaf-like body (frond) with small roots that hang down into the water. This species of Duckweed can be differentiated by examination of frond shape and its red color of the lower surface.



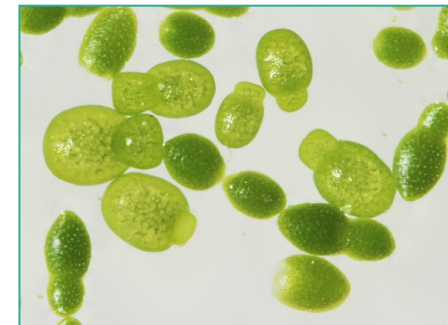
Star Duckweed (*Lemnaceae trisulca*)

Star, or "Forked", duckweed can be distinguished from other duckweeds by the shape of its leaf-like body (frond). In this species, the leaf body is flattened with stalks. Lateral fronds often remain attached to the parent frond, creating a tangled mass.



Watermeal (*Wolffia spp.*)

Watermeal is one of the smallest flowering plants in the world. In fact, this plant's flowers can only be seen with a microscope! Plants are composed of asymmetrical globes—lacking roots, stems, and true leaves. This species may be confused with duckweeds, but it can be distinguished by the absence of roots.



Please Note:

You cannot consistently identify many plant species by comparing a specimen to photographs.

Aquatic plants growing in public waters are property of the state and subject to regulation. Before attempting to control or remove any aquatic plants, contact your local Minnesota Department of Natural Resources office at (952) 496-4141.

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PRIOR LAKE - SPRING LAKE

WATERSHED DISTRICT

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Mission: to manage and preserve the water resources of the Prior Lake-Spring Lake Watershed District to the best of our ability using input from our communities, sound engineering practices, and our ability to efficiently fund beneficial projects.