The predominant good, and not so good, **Aquatic Plants in Lake** Wandawega.



Cover illustration, Large-leaf pondweed drawing and plant information from Wisconsin Department of Natural Resources Publication FH-173 99Rev, Guide to Wisconsin aquatic plants and other sources.

Drawings of Watershield, Chara, Pickerelweed, White waterlily, Curly-leaf pondweed and Eurasian water milfoil drawings provided by the University of Florida/IFAS Center for Aquatic and Invasive Plants. http://plants.ifas.ufl.edu Used with permission. The IFAS web site is an excellent resource for information on aquatic plants and various lake studies.



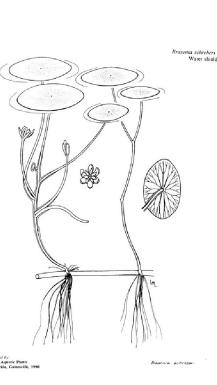
GOOD

Large-leaf pondweed (Potamogeton amplifolius) Location: Fresh water to 20 feet deep

Description: Entirely or almost entirely below water surface; may grow to 15 feet long; firmly rooted thick stems; leaves 2 to 8 inches long; leaves under water are typically thin and slender, may also have ovalshaped floating leaves; flowers or seeds may extend above water surface; plants usually stiff when out of the water.

Hints to Identify: Look for many small seed heads crowded into spikes, often above water from June through August.

Value of Plant: Broad-leaved pondweeds provide cover for panfish, largemouth bass, muskellunge and northern pike; bluegills nest near them and eat insects found on the leaves; supports insects valuable as food for fish and ducklings. Often grow near drop-offs, making attractive cover for fish. Broad-leafed pondweeds are important plants for fish. Removing them may allow less-desirable aquatic plants to move



GOOD

Watershield (Brasenia schreberi) *Location:* Clear water to 10 feet deep

Description: Floating on water surface; oval-shaped leaves 2 to 5 inches long, green on top, reddish underneath; firmly rooted long purplish stems; thick coating of gelatinous slime covers young stems and the underside of young leaves.; one-inch red flower, blooms June through August.

Hints to identify: Related to the water lily. Watershield's leaves are unnotched and its flowers are smaller than the water lily; stems are attached to the center of the leaves. Commonly found in soft water, seepage lakes.

Value of plant: Provides shade and cover for panfish, largemouth bass and northern pike; occasionally important as waterfowl food. Watershield is good for fishing – don't remove all of it.







GOOD

Chara (Characeae)

Location: Usually in clear water

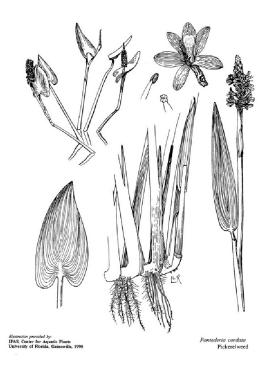
Description: Often called muskgrass because of its foul, musty almost garlic-like odor; gray-green branched multicellular algae that is often confused with submerged flowering plants; has no flower, will not extend above the water surface, and often has a "grainy" or "crunchy" texture.

Hints to identify: Chara has a hollow stem, roughtextured leaves and smells similar to musk when crushed. It is sometimes mistaken for milfoil.

Value of plant: Stabilizes bottom sediments; softens water by removing lime and carbon dioxide; provides cover for fish and food for waterfowl. Chara supports insects, which are valuable as food for bluegills, small and largemouth bass; crappies nest nearby. These forms may cover the entire bottom of the pond and are considered in most cases to be beneficial promoting water clarity, enhanced fish habitat, bottom sediment stabilization, and plant population stabilization by crowding out less desired species.

Management strategy: It's best to leave native plants growing close to the bottom alone if they don't interfere with water uses. Removal may allow more obnoxious, alien plants (such as Eurasian water milfoil) to move in. Hand pulling and cutting work well to control growth.

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OKAY - BUT CAN BE INVASIVE

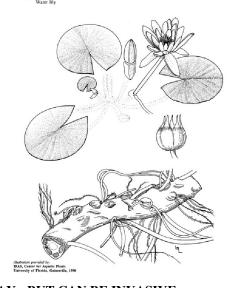
Pickerelweed (Pontederia cordata L.)

Location: Shallow fresh water, usually 3 feet or less in depth

Description: It requires clear water prior to emergence. Leaves are long petiole, and usually a firm broadly heart-shaped blade to 7 inch. A narrow leaved form is rare. Most leaves arise from the base of the plant. Emergent parts are up to 3 feet tall. Its flower cluster is a crowded spike, to 4 inches long, on a long stalk arising from the rhizome. Flowers are violet (rarely ever white), 2-lipped, with each of the lips 3-lobed. Blooms late June to September. Known to grow in large colonies.

Hints to identify: Leaves are fleshy and appear sometimes as inverted heart-shaped or lance-shaped. Often found growing near white water lily and bulrush.

Management strategy: Limited to growth in shallow waters, but may grow into large colonies. Restrict growth by removal of the rhizome.



OKAY - BUT CAN BE INVASIVE

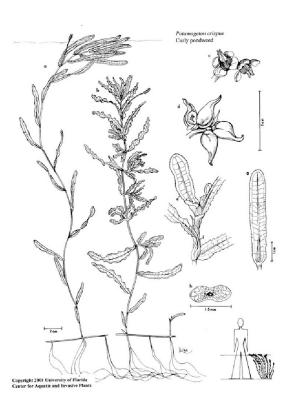
White waterlily (Nymphaea odorata) Common name: Fragrant water lily Location: Fresh water up to 7 feet deep

Description: Large, smooth leaves up to 10 inches across with cleft (split) at the base. Leaves attach to flexible underwater stalks connecting to thick fleshy rhizomes. Flowers rise on separate stalks, have brilliant white petals (25 or more per flower) with yellow centers. The flowers may float or stick above the water and each opens in the morning and close in the afternoon. It prefers quiet waters such as ponds, lake margins, and slow streams.

Hints to identify: Mature leaves are often spherical, green on water surface, often purple on lower plant, with most of the leaves floating. Leaves are pointed at the cleft instead of smooth or rounded.

Value of plant: Waterlilies provide excellent cover for largemouth bass, sunfish, and frogs.

Management strategy: Responds to carbohydrate depletion, cutting, harvesting, and some chemical treatments. Water lilies grow in dense patches, excluding other species and even creating stagnant areas with low oxygen levels underneath the floating mats. These mats make it difficult to fish, water ski, swim, or even paddle a canoe through. Although relatively slow-spreading, water lilies will eventually colonize shallow water depths to six feet deep and dominate the shorelines of shallow lakes.



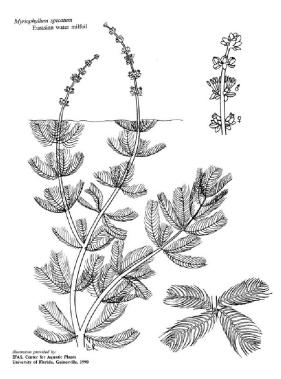
BAD – HIGHLY INVASIVE

Curly-leaf pondweed (Potamogeton crispus) *Location:* Fresh water to 12 feet deep

Description: Grows below water surface; firmly rooted sturdy stems; thin leaves with wavy edges; leaves approximately one-half inch wide and 2 to 3 inches long; stems and leaves moderately stiff.

Hints to identify: Leaves are reddish-green, oblong, and about 3 inches long, with distinct wavy edges that are finely toothed; the stem of the plant is flat, reddish-brown and grows from 1 to 3 feet long. Begins growing early in spring crowding out most other pondweeds and dies back during midsummer.

Management strategy: Physical removal methods such as hand pulling, raking, dragging and mechanical harvesting work well to control problem patches. Spreads through burr-like winter buds (turions), which are moved among waterways. Curly-leaf pondweed forms surface mats that interfere with aquatic recreation.



BAD – HIGHLY INVASIVE

Eurasian water milfoil (Myriophyllum spicatum) *Location:* Fresh water to 20 feet deep

Description: Grows entirely below water surface; grass-green color; may grow to 20 feet long; rooted stem with few branches; feathery leaves in whorls around stem; small pinkish-colored flowers may extend above water surface during summer.

Hints to identify: Water milfoil is sometimes mistaken for coontail or chara. Look for water milfoil's flat, feather-like soft leaves.

Value of plant: Provides some cover for bluegills, crappies, perch, walleyes and muskellunge (however, most prefer broad-leaved pondweeds instead).

Management strategy: Eurasian water milfoil, not native to the United States, is a major water weed in many southern Wisconsin lakes. Hand pulling is a simple and effective control method for small problem areas. Harvesting, raking or screening the bottom also works well. Remove broken pieces of plants from the water – they can regenerate into new plants.