

In the Pond

-Fanwort (*Cabomba caroliniana*)

The **stems** are up to 6.5 ft long. The feather-like **leaves** are 0.75-2 inches wide and whorled. The **flowers** are 1-4 inches and white with a yellow center.



-Brazilian Elodea (*Egeria densa*)

Dense bushy plant. The **leaves** are approximately 1-inch, bright green, and whorled in groups of four.



-Hydrilla (*Hydrilla verticillata*)

The **stems** are up to 26 ft long. The **leaves** are bright green (usually with streaks of red), the upper leaves are 0.4-1.2 inches long, in whorls of 4-6, and have forward pointing teeth. Lower leaves are smaller and in pairs. The **flowers** are solitary, 0.12 inches across, and float on the surface.



-European Frogbit (*Hydrocharis morsus-ranae*)

The **stems** can be up to 8 inches. The plant is free floating (not attached to the pond bed). The **leaves** are 0.5-2.5 inches wide, leathery, a rounded-heart shape, green on the upper side and purple on the underside. The **flowers** are 0.4 inches wide, white with a yellow center, and have 3 petals.



-Parrot's Feather (*Myriophyllum aquaticum*)

The **leaves** are feather-like and are in whorls of 4-6. Leaves above the surface are stiff, bright green, 1-2 inches long and have 10-18 segments per leaf. Can grow up to a foot above the water surface.



-Variable Milfoil (*Myriophyllum heterophyllum*)*

The **leaves** are feather-like, in whorls of 4-6, and are on a thick reddish **stem**. Emergent leaves are highly variable. The **flowers** have small green leaves and reddish oval-shaped petals. *(see end of booklet for comparison to native milfoil)



-Eurasian Watermilfoil (*Myriophyllum spicatum*)*

Can grow up to 33 ft long, but typically 3-10 ft, and form dense mats. The **leaves** are feather-like, have 12-21 leaflets per leaf, and the **stem** is reddish-brown to pale pink. The stems are leafless toward the base. The **flowers** are 4-6 mm, reddish, four sectioned, and grow on an emergent stem 2-4 inches above the surface. *(see end of booklet for comparison to native milfoil)



-Brittle Naiad (*Najas minor*)

Grows in dense clusters. The **stems** are 4-7.75 inches long and are highly branched. The **leaves** are 0.2-1.25 inches long, are very thin, and recurve as they age. The **flowers** are small and grow right alongside the stem.



-Yellow floating heart (*Nymphoides peltata*)

Waterlily-like plant that carpets the water surface. The **leaves** are heart-shaped, grow from long **stems**, have a purple underside, and slightly wavy edges. The **flowers** grow from long stalks a few inches above the water, are yellow with 5 petals, and the petals have a fringed edge.



-Curly-leaf pondweed (*Potamogeton crispus*)

Grows 1-2.5 ft long. The **leaves** are oblong, are up to 3 inches long, 0.5 inches wide, have a wavy edge, and are green to reddish brown. The **stems** are flat and have the leaves positioned spirally around them.



-Water chestnut (*Trapa natans*)

The **stems** are typically 3 ft but can be up to 16.5 ft and are rooted in the mud. The **leaves** are arranged in a circular pattern. Individual leaves are approximately 0.5 inches wide, have four sides, and are toothed. There can be **submerged leaves** along the stem that are feather-like. The **flowers** are white with a pale-yellow center, have four petals, and are 0.3 inches wide.



On the Shoreline

-Flowering rush (*Butomus umbellatus*)

The **leaves** are 2-3 ft long and are erect or floating on the water surface. The **flowers** are in umbrella shaped clusters and each has 3 white-pink petals. The **stems** have a triangular cross-section.



-Water-flag Iris (*Iris pseudacorus*)

Grows 3-4 ft tall. The **leaves** are tall, erect, and dark green. The **flowers** are on the end of a 3-4 ft tall stalk and are bright yellow.



-Purple loosestrife (*Lythrum salicaria*)

Grows 3-7 ft tall in a dense bush of up to 50 stems. The **stems** range from green to purple. The **flowers** are arranged oppositely on spikes at the end of stems, are purple to magenta, and have 5-6 petals.



-Common Reed (*Phragmites australis*)

A stout grass that grows 6.5-13 ft tall. The **leaves** are smooth, gray-green, 10-20 inches long, and 1 inch wide. The **flowering head** is light brown to purple and 7.5-15 inches long.



-Japanese knotweed (*Polygonum cuspidatum*)

Shrub-like and can grow over 10 ft tall. The **stems** are smooth and swollen at joints. The **leaves** are normally 6 inches long, 3-4 inches wide, and broadly oval or slightly triangular. The **flowers** are tiny and greenish yellow.



In the Surrounding Area

-Garlic mustard (*Alliaria petiolata*)

Grows 1-4 ft tall. The basal **leaves** are dark green and kidney shaped, while the upper leaves are triangular and deeply toothed. The upper leaves are 2-3 inches wide. The **flowers** are small, white, and on a single stalk.



-European barberry (*Berberis vulgaris*)

Bushy shrub 3-10 ft tall. The **branches** are gray to yellow gray, have sharp tri branched spines, and are smooth. The **leaves** are in clusters on the branches and have fine teeth. The **flowers** are bright yellow, grow in clusters of 10-20, and the **berries** are bright red.



-Oriental bittersweet (*Celastrus orbiculatus*)

A woody vine or trailing shrub. The **stems** can be up to 4 inches in diameter and **bark** is brown to dark brown. The **leaves** spiral around the stem, are light green, and widely elliptical to circular. The **flowers** are in clusters and light green. The **fruits** are yellow until maturity when they split open and show bright red seeds.



-Black Swallow-wort (*Cynanchum louiseae*)

A vine that grows 3-6.5 ft long. The **leaves** are 2-5 inches long, 0.5-2.5 inches wide, have a tapered point, are oppositely placed, and shiny dark green. The **flowers** are small, dark purple to brown, have fine white hairs, are in clusters of 6-10, and have five fleshy lobes.



-Pale Swallow-wort (*Cynanchum rossicum*)

A vine that grows 2-6 ft long. The **leaves** are 2.5-4.5 inches long, 2-2.75 inches wide, glossy green but yellow green in summer, they are oppositely arranged, and oval to wedge shaped. The **flowers** are small, pink to maroon, grow in loose clusters, and have five lobes.



-Giant hogweed (*Heracleum mantegazzianum*)

Grows up to 15 ft tall. The **leaves** are deeply lobed and up to 5 ft wide. The **stems** are hollow and are 2-4 inches in diameter. The **flowers** are white and grow in an umbrella shaped cluster that is 2.5 ft across.



- Common buckthorn (*Rhamnus cathartica*)

A shrub or small tree that grows up to 22 ft tall with a 10-inch-wide trunk. The **bark** is gray to brown, rough when matured, yellow inner bark, and pink to orange heart wood. The **twigs** are tipped with a spine. The **leaves** are broadly oval with a pointed tip and a rounded bottom, fine teeth, and are a dark glossy green. The **flowers** are four petaled, yellow green, and in dense clusters. The **fruits** are small and black.



-Multiflora Rose (*Rosa multiflora*)

A thorny shrub with arching stems. The **leaves** are in 5-11 sharp toothed leaflets. The base of each leaf stalk has fringe. The **flowers** are white to pink and approximately 1 inch across. Produces small bright red rosehips.



Native Milfoils v. Invasive Milfoils

Native Water-Milfoil
(*Myriophyllum farwellii*)



Variable Water-Milfoil
(*Myriophyllum heterophyllum*)



Key difference:

- This Native Water-Milfoil has submerged flowers, while the Variable Water-Milfoil has emergent flowers

Native Water-Milfoil
(*Myriophyllum sibiricum*)



Eurasian Water-Milfoil
(*Myriophyllum spicatum*)



Key difference:

- The Native Water-Milfoil species has 11 or fewer leaflet pairs per leaf. Eurasian Water-Milfoil has 12 or more pairs of leaflets per leaf.