



COMMON AQUATIC INVASIVE PLANTS OF NEW YORK

WHAT ARE INVASIVE SPECIES?

Invasive species are non-native species whose introduction can or is likely to cause harm to the environment, economy, and/or human health. These species can be plants, animals, pests or pathogens.

WHY ARE INVASIVE SPECIES A THREAT?

Invasive species effect nearly every aspect of our world and are one of the greatest threat to New York's biodiversity. The spread of invasive species eventually leads to a reduction in biodiversity, including the loss of native fish, wildlife, plant, and tree species. Invasive species are the greatest threat to endangered plants and animals while also contributing to habitat destruction.

HOW DO INVASIVE SPECIES IMPACT SOCIETY?

Invasive species cost millions of dollars to manage and have devastating consequences on New York State's ecosystems, economy, and human health. Invasive species cause damage to our crops, livestock, and food supply. They have large impacts on our forest industry. Invasive species can cause a decrease in recreational opportunities along with the aesthetic enjoyment of our environment. In rare cases, can cause diseases in humans.

BRITTLE NAIAD (*Najas minor*)

ANNUAL

Leaves: Opposite (in pairs along the stem), but sometimes appear to be in a whorl, or a circle, at the tip. 1-2 inches long, saw toothed, stiff and pointed

Stem: Light to dark brown

Flower: Small and located in the plants axil. The axil is the upper angle located between the upper side of the leaf and the stem

Roots: White and fibrous

Distribution: Most abundant in the Hudson Valley and Central New York. Found in some Adirondack waters



CURLY-LEAF PONDWEED (*Potamogeton crispus*)

SUBMERGED PERENNIAL AQUATIC PLANT

Leaves: Reddish-brown in color, oblong and about 3 inches long. Usually stiff and crinkled and unlike other pondweeds have finely toothed edges

Stem: Stems are branched and somewhat flattened

Distribution: Found throughout New York State





EURASIAN WATER-MILFOIL (*Myriophyllum spicatum*)

HERBACEOUS

Leaves: Feathery textured, bright green in color, and finely divided. They occur in whorls around the stem of the plant. There are 12 to 21 pairs of leaflets on each leaf

Stem: Typically, three to ten feet long. Color ranges from pale pink to reddish brown

Distribution: Most common and widely distributed aquatic invasive plant. Typically found in all watersheds, yet still rare on long Island

Common Look-Alike: Native northern watermilfoil, which only has 5 to 10 pairs of leaflet pairs on each leaf



EUROPEAN FROGBIT (*Hydrocharis morsus-ranae*)

HERBACEOUS

Leaves: Floating heart – shaped leaves with veins on top. The underside is a dark purplish – red color with a spongy textured coating

Roots: Numerous roots that can grow up to twelve inches and float freely underneath the plant itself

Distribution: Originally documented in Lake Ontario, the St. Lawrence River and surrounding adjacent waters, but has spread to Oneida Lake, other surrounding inland waters, and has been documented within the Adirondack State Park

Common Look-Alike: American white water lily. Leaves are the same shape but can grow up to 10 inches in length





EUROPEAN WATER CHESTNUT (*Trapa natans*)

FLOATING AQUATIC ANNUAL

Leaves: Triangular in shape with toothed edges and grow in a circular shaped cluster or a rosette. The leaves float on the surface of the water with the attached inflated petiole, bladder. Smaller feathery textured leaves grow along the part of the stem that is submerged underwater.

Stem: Flexible stems that can grow to be as long as twelve to fifteen feet.

Flower: small, white, four-petaled flower develops in June in the center of the rosette

Fruit: A nut with four half inch barbed spines. Caution, they can pierce through shoes and ATV tires.

Distribution: Primarily found in the Hudson Valley, southern Lake Champlain, and the Mohawk River, and in some western New York water bodies.



Photo Credit to the
NYS Department of
Environmental
Conservation

FANWORT (*Cabomba caroliniana*)

HERBACEOUS PERENNIAL

Leaves: Fanned and short stemmed in opposite arrangement on the stem

Stem: Long and tube shaped

Flower: White to light pink that float on the surface of the water

Distribution: Found in the southern Adirondacks, but most commonly found in southeastern New York



Photo Credit to the
NYS Department of
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Conservation



HYDRILLA (*Hydrilla verticillata*)

HERBACEOUS PERENNIAL

Leaves: Finley toothed with a spiny under leaf texture. Leaves whorled around the stem in groups of 3s or 5s

Stem: Slender and branched, and grow up to about twenty – five feet long

Distribution: Found in all types on water bodies throughout New York State

Flower: Tiny white to light pink flower develops at the tip of the stalk. Floats on the surface of the water

Growth: Can grow as either a whole plant with a root system or can grow as drifting pieces throughout the water body

Common look-alikes: Elodea (invasive) and waterweed (native). Waterweeds leaves are whorled in groups of 3s but the leaves are not toothed



Photo Credit to the NYS DEC

BRAZILIAN ELODEA (*Egeria densa*)

HERBACEOUS FLOWERING PLANT

Leaves: Small lacey leaves that are 1/8' wide and 1.5' long with very small toothed edges, often need a hand lens to see the toothed edges. Arranged in multiple whorls with each whorl having four to six leaves. This number can double and even triple every eight to twelve nodes. These nodes are where the branches on the stem occur

Stem: Numerous branches on the stem which can grow over twenty feet

Distribution: Found in Westchester County but primarily found in Long Island

Common Look – Alike: Similar to hydrilla and native elodea





WATER SOLDIER (*Stratiotes aloides*)

HERBACEOUS AND SHRUBBY WETLAND PLANT



Leaves: Shaped like a sword, colored brightly green, and has very sharp spines. Leaves grow in the form of a rosette, a circled pattern. Leaves can grow as long as 40 centimeters

Surface Visibility: Float on the surface in the summer months

Root: Usually, but not always, rooted in the muddy bottom of the water body. Can be up to 5 meters long when floating on the surface of the water

Flower: White with three petals

Distribution: Found in Westchester County but primarily found in Long Island

Common Look – Alike: Seedlings look similar to those of a spider plant

YELLOW FLOATING HEART (*Nymphoides Peltata*)

HERBACEOUS PERENNIAL



Leaves: Circular / heart shaped and wavy leaves are oppositely arranged with a purple color underneath

Spread: Spreads by seed and vegetative, meaning it can root from just a piece of the plant

Stem: Stems are rooted and are stout and branching out

Flower: Five, bright yellow petals with fringed edges. Flowers are held on stalks, and each stalk has one to five flowers on it

Distribution: Found throughout New York State

Fruit: Small, about 2.5cm, and contains numerous seeds that are oval and flat with a hairy texture