

## Plants Preferred by Grass Carp

Pondweeds (*Potamogeton* spp.)  
 Common elodea (*Elodea canadensis*)  
 Coontail (*Ceratophyllum demersum*)  
 Naiad (*Najas* spp.)  
 Duckweed (*Lemna* spp.)  
 Watermeal (*Wolffia* spp.)  
 Chara or Muskgrass (*Chara* spp.)  
 Watermilfoil (*Myriophyllum* spp.)  
 Bladderwort (*Utricularia* spp.)  
 Water-stargrass (*Heteranthera dubia*)



A thin-leaved pondweed



Naiad, brittle leaves in tufts



A floating-leaved pondweed



Curly-leaf pondweed



Common elodea



Watermeal (fine, granular)  
 Duckweed (large, whorled)



Coontail



Chara, a branched algae



Bladderwort, note sacs



Eurasian watermilfoil

## Plants not Preferred by Grass Carp

Filamentous algae (various species)  
 Large-leaf pondweed (*P. amplifolius*)  
 Cattail (*Typha* spp.)  
 Bulrush (*Scirpus americanus*)  
 Arrowhead (*Sagittaria* spp.)  
 Burreed (*Sparganium eurycarpum*)  
 Watershield (*Brasenia schreberi*)  
 White water lily (*Nymphaea odorata*)  
 Spatterdock (*Nuphar* spp.)



Filamentous algae



Watershield



Large-leaf pondweed



White water lily



Cattail



Spatterdock

## AQUATIC PLANTS COMMON TO NEW YORK PONDS KNOWN TO BE CONTROLLED BY TRIPLOID GRASS CARP

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**COMMON ELODEA** (*Elodea Canadensis*) Densely whorled leaves opposite on stem. Flowers inconspicuously. Reproduce from fragments



**COONTAIL** (*Ceratophyllum demersum*) Leaves whorled at each point. Forked leaflets have toothed edges. Leaves are densely crowded near stem tip giving coon tail appearance. Roots may be absent leaving plant to float. Reproduce from fragments. Found in hard water



**FANWORT** (*Cabomba caroliniana*) Leaves are opposite, whorls or fan shaped. Forked leaflets are wider at tip than base. Have a gelatinous slime. Reproduces by fragments



**NAIAD** (*Najas*) Leaves are whorled or opposite. Very narrow and toothed on edges. Stems are much branched. Can grow in deep water but usually found in 1-4' depths. Reproduces by seed.

**CURLY PONDWEED** (*Potamogeton crispus*) Leaves are alternate with finley toothe, crinkled, or puckered edges. No floating leaves. Flower spike at tip above water. Reproduce by seeds and winter buds. Found in hard water



**LEAFY PONDWEED** (*Potamogeton foliosus*) Narrow grass like leaves with sides essentially parallel. Leaves are about 1/16" wide. Reproduces by seeds and winter buds



## AQUATIC PLANTS COMMON TO NEW YORK PONDS KNOWN TO BE CONTROLLED BY TRIPLOID GRASS CARP

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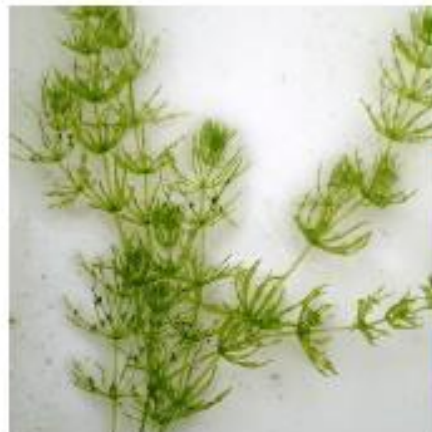
**SAGO PONDWEED** (*Potamogeton pectinatus*) Leaves are fine thread like and spread as a fan, Multi branched stems. Leaves have a sheath base. Flowers born on terminal spike. Tubers grow from horizontal rootstock. Reproduces from tubers and seeds



**FLOATING PONDWEED** (*Potamogeton natans*) Two types of leaves , underwater leqves are narrow grass like, Floating leaves are oval with notched base flowers and seeds born on terminal spike. Reproduces by tubers , seeds and buds

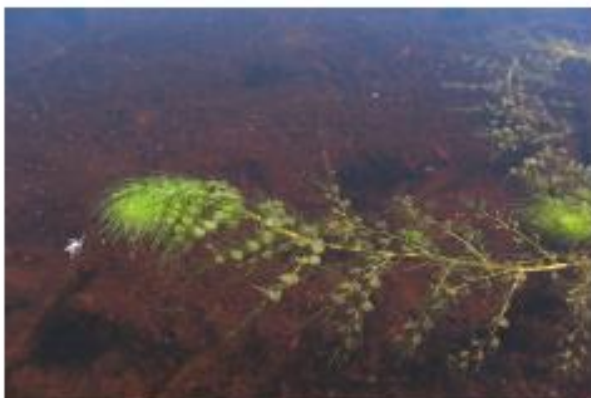


**DUCK WEED** (*Lemna*) Tiny free floating plant bodies that have a single root, Sometimes several plants are attached together. Among the smallest of flowering plants. Reproduces rapidly by plant division. Often forming a floating mat over the pond



**MUSK GRASS** or Stonewort algae have the appearance of flowering plants. Occur in hard water and often gritty to the touch and have a musky oder. An upright plant with whorled branchlets. Each joint consists of a single cell. Reproduce by spores born in cases near branch tips

**BLADDERWORT** (*Utricularia* spp.) Has tiny oval bladders borne near the base of the finely divided leaves. Plant lacks true roots and my float under the water surface, Found in cold acidic water. Reproduce by winter buds



**EURASIAN WATERMILFOIL** (*Myriophyllum* spp.) Whorled leaves on the stem and pinnately divided as a feather. Leaves are not forked as in coon-tail. Flowers on terminal spikes with very short leaves surrounding them. A perennial plant. It reproduces by plant fragments

## AQUATIC PLANTS COMMON TO NEW YORK PONDS KNOWN TO BE CONTROLLED BY TRIPLOID GRASS CARP 8

**WATER STARGRASS** (*Heteranthera dubia*) Resembles some narrow leaved pondweeds but leaves lack a midvein. A yellow star like flower appears on the terminal. It reproduces from plant fragments.



**WILD CELERY** (*Vallisneria americana*) Leaves grow to 6 feet long, ribbon like with tips that float on the surface. Female flowers are on long stalks that float, but retract after pollination. Wild celery reproduces mainly by buds on roostock.



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## AQUATIC PLANTS COMMON TO NEW YORK PONDS NOT CONTROLLED BY TRIPLOID GRASS CARP

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**ARROWHEAD** (*Sagittaria*) Arrow shaped leavers but also has ribbon and tongue like leaves at base and under water. Flowers are white, 3 petaled, whorled and grow on stalk tips. Fruits are tightly packed balls of seeds. Reproduces by rootstock or seeds

**BULRUSH** (*Scirpus americanus*) Rootstock gives rise to stems that are triangular in cross section but round in some bulrushes. Height is 2 to 3 feet. Flowers and seeds are borne in spikes along stem near tip. May form dense stands after several years of establishment.



**BURREED** (*Sparganium eurycarpum*) Leaves are long erect, ribbon like and usually 1 to 3 feet. Stems bear male flowers at tip and female flowers below. Fruiting heads are 1 inch round balls and contain many seeds. Reproduces by seeds and rootstock

**CATTAIL** (*Typha latifolia*) Leaves are long erect and ribbon like, can reach 6 feet tall and taper to a point. Flowers occur on stalks that are taller than the leaves. Male flowers are at the tip Female flowers are below. Grow at waters edge but can be found at depths of 3 to 4 feet. Reproduce from rootstock and seeds



**WATERSHEILD** (*Brasenia schreberi*) Floating leaves are oval to elliptical, entire and have stem attachments at the center. A gelatinous coating occurs on the stems and underside of leaves Flowers are dull red to purple. Grow in acid water. Reproduce by rootstock and seeds

**WHITE WATERLILY** (*Nymphaea odorata*) Floating round leaves grow to 10 inches, are split to the stem at the center and often purple underneath. Flowers are showy white or pink. Reproduces by rootstock and seeds



## AQUATIC PLANTS COMMON TO NEW YORK PONDS NOT CONTROLLED BY TRIPLOID GRASS CARP

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**ALGAE** Plankton algae are minute, free-floating plants that cause water to have a greenish or brownish color. Overabundant plankton referred to as a bloom, give the water a pea soup appearance. Filamentous algae are single algae cells that form long visible chains, threads, or filaments. These filaments intertwine forming a mat that resembles wet wool.

### PLANKTONIC ALGAE



### FILAMENTOUS ALGAE

