## Pet Industry Association Pet Care Is Our Affair PIJAC NEW ZEALAND

## **Prohibited Aquatic Plants**

## for NZ Aquarium Trade

The plants in this file are all listed in the MAF Plant Accord list of Noxious Weeds.

http://www.maf.govt.nz/biosecurity/pests\_diseases/plants/accord.html

Plants NOT Listed at this Site may be considered legal for sale in NZ.

Other Web Sites that may assist you in identifying plants:

http://www.niwa.co.nz/rc/prog/aquaticplants/species/

We recommend that you only purchase plants from established and reputable suppliers to avoid any problems

This document was prepared with the assistance of: Dr John Clayton of NIWA. Hamilton

## Oxygen Weed:

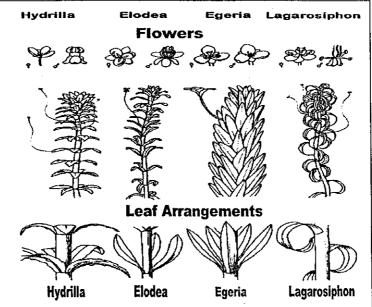
Please Note that while there are Many different plants that are loosely referred to as

Oxygen Weed ELODEA CANADENSIS

is the only one that it is legal to sell.

Hydrilla Verticillata
Lagarosiphon Major
& Egeria Densa

Are all listed as noxious weeds



Plant Name	Plant Description	Life Form	Line Drawing
Alternanthera philoxeroides alligator weed	Alligator weed stems are long, branched, hollow, and rooting at nodes. Leaves are bright green, waxy, up to 10 cm long, opposite, simple, elliptic to lanceolate in shape, with smooth margins. The white clover-like flowers grow on long stalks. Plants can grow up to 1m tall as floating marginal mats beside drains or flowing water or on damp and even dry ground. Common in Northland & Auckland, and scattered in Waikato, Bay of Plenty and Manawatu-Wanganui Regions.		
Caulerpa taxifolia	A green marine macroalga with regularly spaced feather-like fronds that grow along a running stolon attached to the bottom. Frond length varies widely according to light level. A <i>Caulerpa</i> species (possibly of Australian origin) was found in Auckland Zoo marine aquarium and safely disposed.	The state of the s	
Ceratophyllum demersum hornwort coontail	Feathery fan-shaped leaves arranged in whorls on the stem. Forked leaves have finely toothed margin on one side. No roots are formed and flowers are inconspicuous. Hornwort grows submerged in water and is found throughout the N.I. and recently in a stream and ponds in Marlborough. This weed is a major problem in Waikato hydrolakes and presents a serious threat to S.I. waterways. A major effort is underway to eradicate hornwort from all S.I. sites.	Weeker State of the State of th	
Egeria densa oxygen weed egeria giant elodea anacharis	A submerged plant with stems that can grow several metres long. Leaves 10 to 30 mm long, narrowing to an acute tip, in whorls of normally 4-5 around the stem. Flowers have three white petals, are about 20mm wide that protrude slightly above the water in summer. Distributed widely around N.I. but only in Marlborough and around Christchurch in the S.I.	See	O.CM.

Eichhornia crassipes water hyacinth	A large free-floating plant with spongy swollen leaf stalks, bright green glossy leaves and thick fleshy stolons. Showy distinctive, bluish-purple flowers with central yellow blotch on the upper petal, produced on long spikes with up to 10 flowers. Prolific purple coloured feathery roots. Most field sites have been eradicated. May still be found occasionally in private ponds.		
Equisetum arvense Equisetum hyemale field horsetail rough horsetail	Erect marginal plant up to 1 m tall. Rush- like in appearance with distinctly jointed thin hollow stems with longitudinal groves. May also have whorls of needle- like branches. Stems break easily at the joints. Leaves inconspicuous and reduced to a ring of small scales at each joint. Fertile shoots have seed heads like a miniature pine cone at the tip. Creeping rhizomes and can have deep roots. Scattered local sites occur around NZ		
Gunnera tinctoria Chilean rhubarb	Common garden and pond plant with giant umbrella-like leaves up to 2m tall. Coarse prickly petioles and underside of leaves.		
Gymnocoronis spilanthoides senegal tea temple plant costata (N.B. could be sold incorrectly as Hygrophila costata)	A semi-aquatic herb with scrambling or erect hollow stems, 6 to 8 angled and up to 1 m tall. Dark-green shiny leaves 5-20 cm long with serrate margins, and in opposite pairs. Clusters of white thistle-like flowers. Field sites only known from Northern N.I., but likely to occur in garden ponds scattered around NZ.	William Willia	

chameleon plant	A hardy, deciduous ground cover plant that can reach 1 m height. Heart shaped variegated leaves, often green with cream or red edges and peppery scent when crushed. Small white flowers at stem tip in early summer. Only found in gardens so far, but a big risk to margins of waterways		
Hydrilla verticillata hydrilla oxygen weed	A submerged oxygen weed with thin branching stems that may grow >6 m long. Small leaves (6-20mm long) with serrated margins normally in whorls of four or five around the stem. Small inconspicuous flowers. May produce small turions in the leaf axils and tubers in the mud. Known only from a few lakes in Hakes Bay.	Aces States Stat	
Hydrocleys nymphoides water poppy	Submerged or floating elastic stems rooted to sediment, with floating and emergent leaves. Thick, shiny, deep green, heart shaped oval leaves (5-10cm) with inflated main vein on underside. Flowers (8cm wide) with 3 light yellow petals and a dark center.		O 1 cm )
<i>Iris</i> pseudacorus yellow flag iris	A tall (<1.5 m) erect perennial iris that dies back to rhizomes during winter.  Leaves are erect, dark green and swordshaped. Flowers in clusters of (2 - 5) sulphur to pale yellow in colour and up to 12 cm across. Grows at margins of water or on damp ground. Scattered throughout New Zealand, common in the Waikato. Often found in garden ponds.		

Lagarosiphon major oxygen weed	A submerged oxygen weed with thin branching stems that may grow several metres long. Leaves (up to 20 mm long) are alternate in spirals around the stem and curved downwards towards the stem. Tiny pinkish flowers reach the surface on long, thin tubes. Scattered throughout the N.I. and local areas of S.I. Still common in garden ponds	Secretary with the secretary wit	
Ludwigia peploides  primrose willow  water primrose	A semi-aquatic plant with creeping or floating stems. Swollen white roots common at nodes when hanging in water. Leaves glossy, alternate obtuse, up to 6 cm long. Flowers are conspicuous (2 cm diameter), with 5 bright yellow petals, produced singly on upper shoots. Common in N.I. from Northland to Waikato and local in Manawatu.		
Lythrum salicaria purple loosetrife	An erect (<2m tall) hairy plant often with squarish stems, pink towards the base. Stems die back in winter. Leaves 5-12 cm long, wider and rounded or heart-shaped at the base and often opposite, but shape and arrangement variable. Conspicuous six-petalled pink/purple flowers in groups of 3 to 15 on dense terminal spikes. A garden escape, rare in N.I. (Manawatu), with local S.I. sites in Nelson, Canterbury, Otago and Southland.		
Menyanthes trifoliata bogbean	Sprawling marginal plant with thick (1cm) corky stems, rooting at the nodes. Leaves alternate, bright green, eggshaped, 10 to 20 cm long, with 3 leaflets on a long stalk (like broad beans). Leaves float or emerge from water. Flowers produced in clusters with five pinkishwhite petals and long white hairs on top. Was in Canterbury, now believed to be eradicated.		

Myriophyllum aquaticum parrot's feather	Sprawling marginal plant with erect terminal shoots giving the appearance of small fir trees. Can form floating mats. Emergent leaves are feather-like, pale bluish-green, up to 3.5 cm long and arranged in groups of 5 to 8. Small white flowers without petals. Common in ponds, drains and still spreading. Field sites are widespread, locally common in N.I. and scattered in Canterbury, Westland and northern S.I.	Signal Annual An	
Nuphar lutea yellow water lily spatterdock brandy bottle cow lily	A robust water lily with thick (up to 20cm) tuberous rhizomes. Large (30-40 cm) oval to heart-shaped leaves, floating or emergent. Submerged leaves are thin and lettuce like. Flowers golden yellow with 6 petals and up to 6 cm across with a strong alcoholic aroma. Flowers at or above the water surface appear to be only half-opened. Only one site in Hawkes Bay, almost eradicated.		
Nymphoides geminata mashwort	A small water lily with submerged or floating sprawling stems. Roots and attached floating leaves arising from nodes. Leaves are heart-shaped, up to 10 cm across and bright green on upper surface and often pinkish on the underside. Flowers held above surface, bright yellow with 5 petals and fringed hairy marginal wings. Scattered from Waikato to Canterbury, and has been eradicated from many sites.		
Nymphoides peltata fringed waterlily	A small water lily with submerged or floating sprawling stems. Roots and attached floating leaves arising from nodes. Leaves are almost round, up to 10 cm across and with a scalloped margin. Leaves green with purple blotches on upper surface. Flowers golden with 5 petals and solid marginal wings (N.B. solid vs hair-like petal margins distinguish this plant from <i>N. geminata</i> ). Only one site in Auckland, eradicated.		Service of the servic

Osmunda regalis royal fern	A large tufted fern with rhizomes forming a short woody trunk up to 1.5 m high. Large, yellow-green leathery fronds up to 3 m long with well-separated leaflets that give this fern an almost pea-family appearance. Found on damp ground and waterbody margins. Common in Waikato with local sites from Coromandel to Manawatu.		
Phragmites australis phragmites common reed	A tall bamboo-like grass (up to 4 m tall) that dies back to rhizomes during winter. Flowering stems are rigid (up to 1 cm across) with alternate stalk-less leaves. Leaves bluish-green, up to 60 cm long and 3 cm wide, often aligning in one direction in winds. Flower heads form large spikes with purplish, silky florets. Can grow on dry land or in water. Local in Napier, Murchison and Christchurch.		
Pistia stratiotes water lettuce	A free floating that looks a bit like a thick-leaved floating lettuce. Pale green hairy leaves with conspicuous veins and ridges, growing in a rosette. Water lettuce roots are light-colored and feathery. Its flowers are inconspicuous. Historically know from Tauranga and Hokianga, but now probably eradicated.		
Potamogeton perfoliatus clasped pondweed	A submerged pondweed with leafy stems and bottom rooted with thin rhizomes. Has distinctive leaves with bases clasped around the stem. Leaves thin, pale green to bronze, with wavy margins, rounded to ovate, 1-7 cm long and 1-4 cm wide. Flowers and fruit on a short spike at or just above the water surface. May be eradicated, but potential to be found in some ornamental ponds.	Story Control of the	

Sagittaria montevidensis arrowhead	Marginal erect plant up to 1.5 m tall with distinctive large (up to 40 x 20 cm) glossy arrowhead shaped leaves with backward-pointing basal lobes. Leaves held in the air on triangular stalks. Flowers (2.5 cm) with 3 white petals with a basal purple spot. Two known field sites in South Auckland, other garden pond sites in N.I., may be found in drains and swampy areas elsewhere.	
Sagittaria platyphylla sagittaria delta arrowhead	Marginal erect plant up to 1 m tall, but has strap-like submerged leaves (when in water) and above water it has erect lance-shaped leaves on a long petiole (up to 50 cm long) with triangular cross section. Tubers produced at tips of thin creeping rhizomes. Flowers three-petalled, white, (2 cm wide) borne on spikes. Two known field sites in Auckland and Coromandel, other garden pond sites in N.I. and Tasman District in S.I.	
Sagittaria sagittifolia arrowhead Hawaii arrowhead	Marginal erect plant similar to <i>Sagittaria</i> montevidensis, with arrow-shaped leaves, but differs in having rhizomes and tubers. Also no flowers seen in NZ plants. Known only from one Coramandel field site and cultivation in Christchurch. Likely to be ponds or cultivation elsewhere.	(As for Sagittaria montevidensis but with rhizomes, tubers and no flowers)
Salvinia molesta salvinia	A free-floating fern consisting of a horizontal stem with paired rounded bright to brownish green leaves (4 x 5 cm). Young leaves float flat, but adult leaves fold inwards along the centre line. Leaves have distinctive dense hairs forming water resistant cage-like clusters. Lower, submerged leaves are finely divided and look like roots. Once widespread in NI, but most field sites now eradicated. Domestic pond sites still found.	

Schinus terebinthifolius Christmas berry Brazilian pepper	An evergreen shrub up to 6 m tall that grows on dry land or aquatic margins. Forms dense intertwining branches. Leaves are reddish, with 3 to 13 finely toothed leaflets, may have winged midrib. Leaves smell of turpentine when crushed. Flowers are white. The fruits are in clusters, glossy, green and juicy at first, becoming bright red. The red skin dries to become a papery shell surrounding the seed. Uncommon in the wild.		
Utricularia gibba bladderwort	Submerged or floating just below surface. Has entire or simply divided leaves from stringy algal-like filaments with no roots. Has tiny bladders (1.5 mm) that can trap insects. Flowers are commonly produced and are conspicuous, yellow, with upper lip entire up to 1 cm long. Flowers are on long stalks that emerge just above the water. Only known from West Auckland and a few sites in the Waikato. May be found in ponds elsewhere.	**************************************	
Vallisneria gigantea eelgrass	A large submerged plant with ribbon or strap-like leaves arising from a stout bottom rooted rhizome. Leaves up to 5 m long x 2 cm wide in deep water. <i>V. gigantea</i> is only known from lake Pupuke, whereas <i>V. spiralis</i> is restricted to a few sites in Auckland, Wanganui, Wairarapa and Marlborough.	Second Market Ma	
Zizania latifolia Manchurian wild rice	A marginal robust tufted grass up to 3 m tall with stout rhizomes. Grows in wet conditions at the edge of fresh water lakes, streams and on damp ground. Leaves ridged with sharp cutting teeth on edges. Feathery flower heads 40-60 cm long, purplish to reddish in colour. Common around Dargaville, local in South Kaipara Head, Whangarei, Hauraki Plains and near Waikenae.		