

# NEW ZEALAND FRESHWATER WEED AND PEST VISUAL GUIDE



NOVEMBER 2024



# DID YOU KNOW?

*There are plenty of facts and stories you can share about these invasive freshwater weeds and pests and their impacts. Following are some examples.*

Some people think of water hyacinth as a pretty pond plant, but internationally it's regarded as the world's worst freshwater weed. It creates large floating mats that clog water intakes and cause power blackouts in some countries.

The aquatic fern *Salvinia* can double in weight every two days. It's found north of Waikato but could live as far south as Wellington.

Catfish can survive out of water for 2 or 3 days, so can easily be accidentally transported and settle into another waterway where they compete with natives and reduce water quality.

There's no locked gate protecting our lakes, rivers and wetlands. In Bay of Plenty people can move within minutes from a lake that is heavily infested with hornwort, to one of the most pristine which is still hornwort-free.

## FURTHER INFORMATION

To find out more information, including which invasive freshwater weeds and pests are in your local area, see your local regional council website.

## ACKNOWLEDGEMENT

"Thanks very much" to the National Institute for Water and Atmosphere Research (NIWA) for the images and information.



# THIS IS WHY WE CHECK CLEAN DRY

These are invasive species that we know are typically spread by human activity. This is why we ask people who go into lakes, rivers or wetlands to Check Clean Dry.

**These weeds and pests can spread on gear that makes contact with water.**

*What to do when moving between lakes and rivers...*



## CHECK

Remove any plant or soil matter from your gear.



## CLEAN

### **North Island lakes and rivers**

Blast your gear & craft with tap water.

For absorbent materials either:

- 55°C hot water for 5 minutes OR,
- 5% Bleach for 60 minutes OR,
- Freeze overnight.

### **South Island lakes and rivers**

Use 10% dishwashing detergent mixed with water and leave the item wet for 10 minutes.



## DRY

Make sure gear is completely dry to touch, inside and out. And then leave for another 48 hours.

# HOW TO FOLLOW UP ON SOMETHING INTERESTING OR SUSPICIOUS

If you are aware of an interesting or suspicious weed or pest, get some photos of it where you found it and try not to disturb it. Get a close-up of it and also a photo that shows the surroundings.

Record the location as precisely as possible, including in relation to landmarks. Use this table to determine what to do with your photos and information.

## DO YOU:

*Feel curious and want to find out more – but have no reason to suspect it’s an important freshwater weed or pest?*

Use i-Naturalist – Mātaki Taiao – an online, open-source community of nature-watchers that includes scientists and experienced naturalists. You will be able to see their comments.

*Suspect it’s an important freshwater weed or pest that has not been found in New Zealand before or has not been found in this water body?*

Use the Pest and Disease Online Notification form on this page <https://report.mpi.govt.nz/pest/> or call the Pest and Disease hotline:

**0800 80 99 66.**

The information you provide will be logged and assessed, and if warranted, looked into by an incursion investigator. You will be informed of the outcome.



## ALLIGATOR WEED

*Alternanthera philoxeroides*

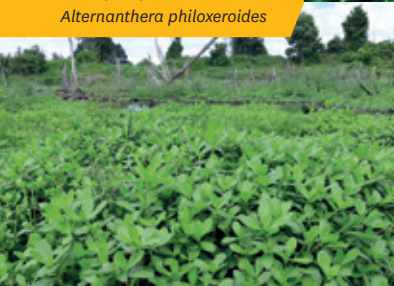
## DESCRIPTION

- A sprawling long-lived plant that grows on land and in water
- Stems are thick, soft and hollow, often with a reddish tinge
- Leaves are bright-green, waxy and oval-shaped, 5cm-10cm long
- White flowers, papery to touch
- Unwanted Organism under the Biosecurity Act 1993.



### ALLIGATOR WEED

*Alternanthera philoxeroides*



## IMPACTS

Alligator weed forms dense mats and takes over aquatic areas as well as arable and pastoral land. It's a major problem in many countries with a temperate climate similar to Aotearoa New Zealand

## HOW IT SPREADS

It spreads in New Zealand by simply sprawling sideways or growing from broken-off bits that can be moved by machinery, with contaminated soil or grass clippings, or by a flood.



# CABOMBA

*Cabomba caroliniana*

## DESCRIPTION

- Cabomba is an underwater, long-lived, rooted plant
- It lives in still and slow-flowing water up to 6m deep
- It has grass-green to olive-green shoots and two types of leaves – underwater ones and floating ones that may appear when it's flowering
- The underwater leaves are fine, have a pale underside and are arranged in pairs on the stem forming a distinctive fan shape; the floating leaves are up to 3cm long and narrow
- It produces small white flowers (1–2cm) that float on the water surface in summer
- It is currently found in one site in the Henderson area of Auckland, but could survive in any part of New Zealand
- Unwanted Organism under the Biosecurity Act 1993.



### CABOMBA

*Cabomba caroliniana*



## IMPACTS

Cabomba grows quickly and forms dense stands, outcompeting other species, disrupting native ecosystems and affecting water quality. It also impedes recreational activities and activities that rely on water intake, such as hydropower generation and irrigation.

## HOW IT SPREADS

Cabomba is spread via stem fragments that get snagged on contaminated boats and trailers, fishing nets or drainage machinery, or by deliberate introduction.

# CATFISH (BROWN BULLHEAD CATFISH)

*Ameiurus nebulosus*



## DESCRIPTION

- Bullhead catfish have grey to black, smooth skin and are up to 40cm long
- They have small eyes and use 8 whisker-like barbels around their mouth to smell, taste and find food
- Bullhead catfish scavenge along the bottom, eating dead animal matter, small insects and fish
- They prefer slow-flowing, shallow waters with silty or muddy bottoms, such as lakes, ponds, rivers, streams or wetlands
- They have no legal status under the Biosecurity Act 1993, but fishing regulations require that catfish must be killed if captured.



### **BROWN BULLHEAD CATFISH**

*Ameiurus nebulosus*



## IMPACTS

Bullhead catfish stir up sediment and change the nutrient status of waterways. They also compete with natives like kōura (crayfish) and tuna (eels) and prey on small insects and fish.

## HOW IT SPREADS

Bullhead catfish spread in eel fishers' nets and on boats and trailers, and possibly via intentional introductions or with water movement during floods.

# DIDYMO

*Didymosphenia geminata*



## DESCRIPTION

- Didymo is an algae that grows on rocks and aquatic plants, producing a brown, woolly mass often called “rock snot”
- It grows in nutrient-poor waters ranging from fast-flowing to still
- Unwanted Organism under the Biosecurity Act 1993.



### DIDYMO

*Didymosphenia geminata*



## IMPACTS

Didymo is invasive and causes numerous problems in waterways where it has established, including affecting water quality, habitat disruption for native plants and animals, being a nuisance for recreation and industries like hydroelectric power generation and activities like irrigation.

## HOW IT SPREADS

Shed didymo cells can survive for weeks in cool, wet conditions and be spread on things like fishing gear, felt-soled waders, kayaks and 4WD vehicles.

# EGERIA

*Egeria densa*



## DESCRIPTION

- Egeria is a large long-lived underwater plant
- It has leafy, dark grey-green shoots
- Its leaves are a few centimetres long with a sharp-pointed round tip and arranged in circles around the stem
- In summer it produces small white flowers with a yellow centre that float on the surface
- It prefers to grow in moderate flowing to still and nutrient-rich water
- Unwanted Organism under the Biosecurity Act 1993.



### EGERIA

*Egeria densa*



## IMPACTS

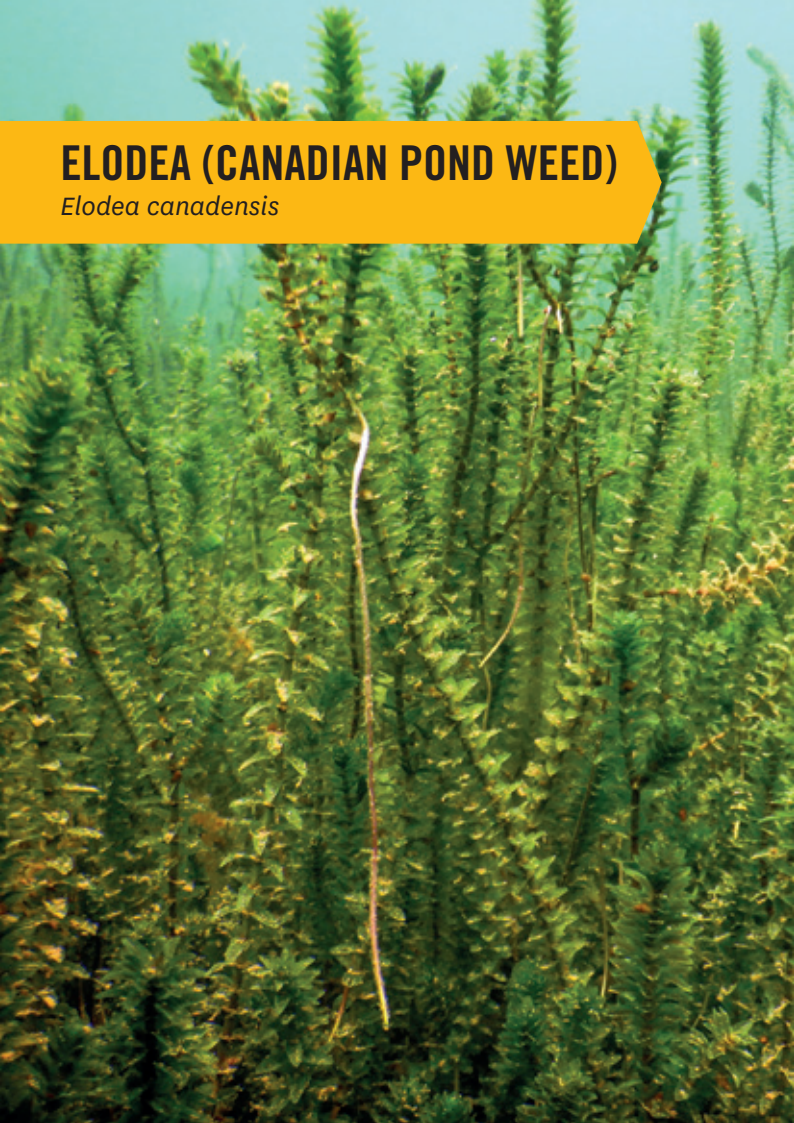
It forms dense underwater beds that disrupt native ecosystems, as well as recreation, power generation, irrigation and flood protection.

## HOW IT SPREADS

It is spread when fragments are carried by boats and trailers, fishing nets or drainage machinery.

# ELODEA (CANADIAN POND WEED)

*Elodea canadensis*



## DESCRIPTION

- Elodea is an underwater, bottom-rooting and long-lived plant
- It can grow in rivers and lakes
- It has narrow, translucent, dark-green leaves, in sets of three on slender, brittle stems
- It produces tiny (up to 5mm) white flowers tinged with purple that sit on the surface of the water during the summer, but these do not set seed
- No legal status under the Biosecurity Act 1993.



### ELODEA (CANADIAN POND WEED)

*Elodea canadensis*

## IMPACTS

It forms dense underwater beds that crowd out other species such as small natives and disrupt native ecosystems. Stems break easily and get taken downstream where they can cause blockages or create a rotting mass that stagnates water.

## HOW IT SPREADS

Stem fragments root easily and are spread when snagged on boats and trailers, fishing gear, eel nets or diggers.

# EURASIAN WATERMILFOIL

*Myriophyllum spicatum*



## DESCRIPTION

- Eurasian Watermilfoil is an underwater, bottom-rooting and long-lived plant that typically grows 1 to 3 metres, and up to 6 metres high
- It is not known to be present in New Zealand
- It can grow in still or slow-moving water in lakes or rivers
- It has feather-like leaves in circles of four around the brown or pink stem, and thin, white roots that are sometimes in clumps under the plant
- It produces tiny pink flowers on flower spikes that protrude above the water surface
- It dies back in the autumn leaving only the root system, and begins growing again in spring
- New Zealand has native milfoils, and overseas the Eurasian Watermilfoil can hybridise with native milfoil species
- Unwanted Organism under the Biosecurity Act 1993.



### EURASIAN WATERMILFOIL

*Myriophyllum spicatum*

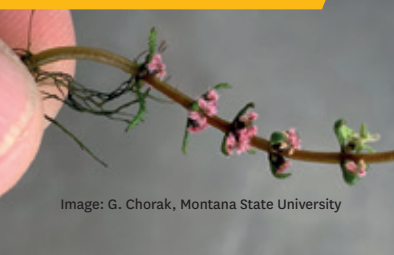


Image: G. Chorak, Montana State University

## IMPACTS

It forms dense mats on the water surface, outcompeting and crowding out native species and disrupts native ecosystems. It's also disruptive for recreation and any activity depending on water intakes, such as hydropower generation or irrigation.

## HOW IT SPREADS

It usually spreads via broken-off stem fragments that get moved when snagged on boats and trailers, fishing gear, eel nets, diggers or other gear used in lakes or rivers.

# FRESHWATER GOLD CLAM

*Corbicula fluminea*



## DESCRIPTION

- Adult clams 2 to 3 cm long, although clams found in the Waikato River are often smaller
- They are typically dirty white, yellow or tan, with an obvious ribbed texture on the shell
- They are a typical clam shape and unlike other shellfish in New Zealand waterways
- They are found in freshwater (or brackish water such as near river mouths), sitting on top of sandy or muddy surfaces, or buried shallowly within them
- They are self-fertile and can reproduce rapidly, producing up to 400 juveniles a day
- As of August 2023 this is an unwanted organism under the Biosecurity Act 1993.

For more information, including clam-specific Check Clean Dry guidelines and any updates to the legal status, visit: <https://www.biosecurity.govt.nz/clam>



### FRESHWATER GOLD CLAM

*Corbicula fluminea*



## IMPACTS

Due to their high reproduction rate, gold clams can quickly form large groups which can clog water pipes – such as for hydropower generation and irrigation, and potentially out-compete native species.

## SPREAD

The freshwater gold clam can be spread to another river or lake via accidental transport by boaties or other users of lakes or rivers.



# HORNWORT

*Ceratophyllum demersum*

## DESCRIPTION

- Tiny horn-like teeth on its leaves give hornwort its name
- It is a tall, fast-growing and long-lived underwater plant
- It prefers to grow in moderate flowing to still lakes and can grow at more than 10 metres depth in clear water
- Hornwort has no roots and can live as a free-floating mat
- It has stiff dark green shoots and leaves 10cm-40cm long in a circle around the stem
- It produces tiny white or green flowers but is not known to produce seed in New Zealand
- Hornwort established in the South Island but was successfully eradicated
- Unwanted Organism under the Biosecurity Act 1993.



### HORNWORT

*Ceratophyllum demersum*



## IMPACTS

Hornwort disrupts native ecosystems, as well as power generation, irrigation and flood protection activities.

## HOW IT SPREADS

Hornwort is spread between catchments by contaminated boats and trailers, fishing nets and drainage machinery.



# HYDRILLA

*Hydrilla verticillata*



## DESCRIPTION

- Hydrilla is a long-lived plant that grows completely underwater
- It forms dense stands, outcompeting all other plants, and can grow to water depths of 9 metres
- It has leafy, dark-green shoots with leaves of varying lengths half to 1cm long, generally green but possibly red on the midrib, often with small teeth along the leaf margin and leaves are arranged in circles around the stem
- In New Zealand it has only been found in lakes, but in other countries it occurs in flowing waters
- The plants in New Zealand are male only and in summer have tiny white flowers that detach from the stem and float on the water surface
- Unwanted Organism under the Biosecurity Act 1993.



### HYDRILLA

*Hydrilla verticillata*



## IMPACTS

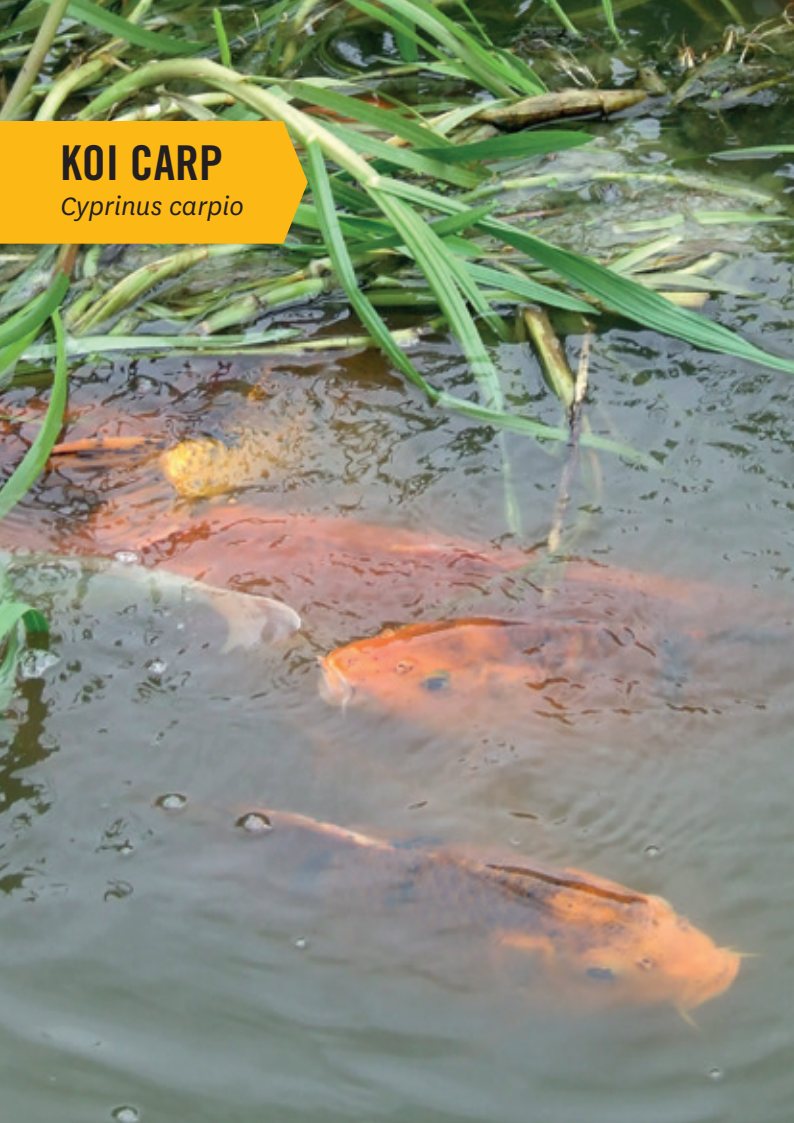
In New Zealand hydrilla lives in lakes and can potentially cause problems for power generation, irrigation, flood protection systems and recreation. It also disrupts native underwater plants.

## HOW IT SPREADS

It spreads between catchments via plant fragments or possibly a kind of tuber (pictured left above) on boats and trailers, fishing nets or drainage machinery.

# KOI CARP

*Cyprinus carpio*



## DESCRIPTION

- Koi carp are an ornamental strain of the common carp
- They look like large goldfish but can grow to more than a half a metre long and differ from goldfish by having two pairs of barbels at the corners of their mouth
- They have large scales coloured orange, black or red, gold or white, often in patches
- They prefer lakes, ponds, wetlands and slow-flowing river back-waters
- Unwanted Organism under the Biosecurity Act 1993.



### KOI CARP

*Cyprinus carpio*



Image: Bruno David, Waikato Regional Council

## IMPACTS

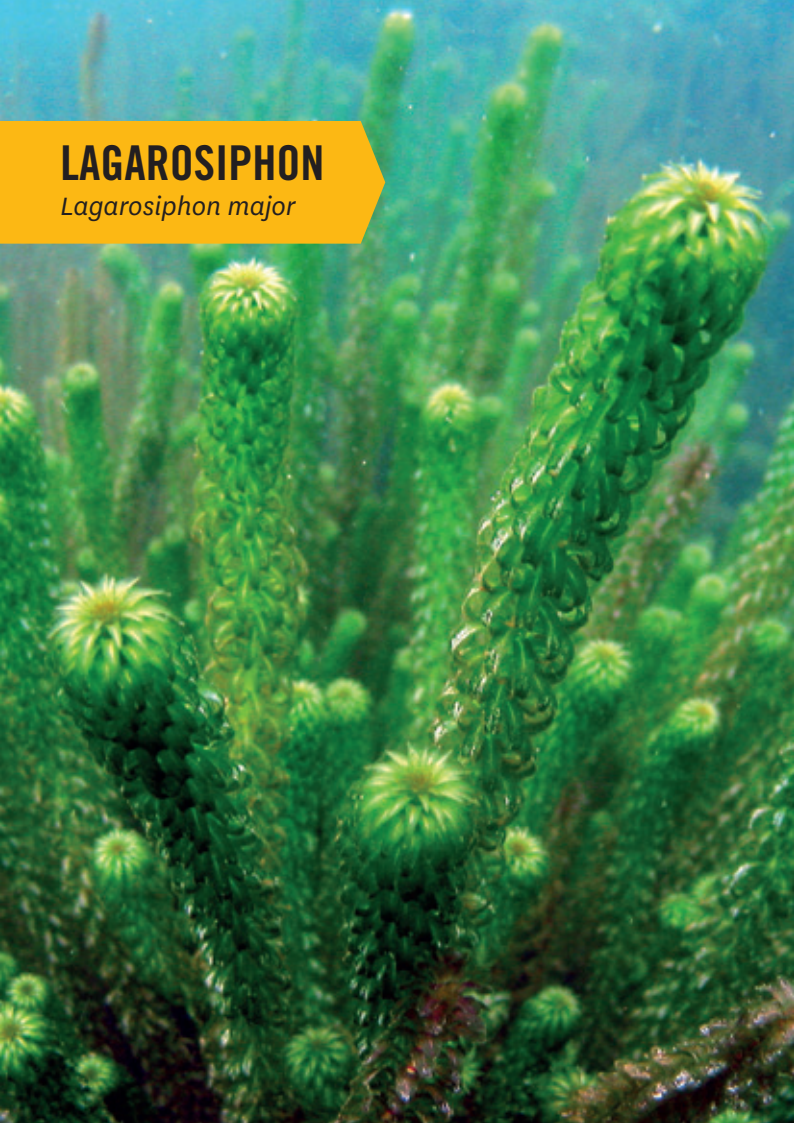
Koi carp eat a wide range of food and compete with and in some cases eat other fish including natives. They feed like a vacuum cleaner, sucking up everything and blowing out what isn't wanted, churning up sediment, dislodging plants and undermining riverbanks. Koi change areas of shallow, warm, nutrient-rich water by increasing water turbidity and disturbing the vegetation, making it less possible for other species to live there.

## HOW THEY SPREAD

Koi carp are spread by people on contaminated gear or deliberate introductions as a source of food or ornamental species and spread locally during floods.

# LAGAROSIPHON

*Lagarosiphon major*



## DESCRIPTION

- Lagarosiphon is a tall, long-lived underwater plant
- It has brittle, leafy, dark-green shoots
- Leaves are half to 2 cm long, typically curving downwards, and arranged alternately and in a spiral around the stem
- It prefers to grow in moderately fast-flowing to still water, including low-nutrient environments
- Unwanted Organism under the Biosecurity Act 1993.



### LAGAROSIPHON

*Lagarosiphon major*

## IMPACTS

It forms vast meadows that shade out natives. Stems break off easily and wash ashore resulting in smelly rotting clumps. Plants can also cause blockages for water intake structures and impede hydropower generation, irrigation, flood protection or recreational water use.

## HOW IT SPREADS

Plant fragments get spread by boats and trailers, fishing nets or drainage machinery.

# LAKE SNOW

*Lindavia intermedia*



## DESCRIPTION

- Lake snow is the name for slimy, sticky strands sometimes produced by a type of algae called *Lindavia intermedia*, typically in low-nutrient conditions
- It's formed by a microscopic diatom – an algae with silica cell walls
- It prefers to live in still water bodies
- No legal status.

Image: Genesis Energy



### LAKE SNOW

*Lindavia intermedia*

## IMPACTS

Mucus-like strands hang and drift under the water, sticking to fishing gear, boat hulls and swimmers, and clogging filters for boats, town water supplies and industrial purposes.

## HOW IT SPREADS

It spreads through shed algal cells on gear such as fishing gear.



# MANCHURIAN WILD RICE

*Zizania latifolia*

## DESCRIPTION

- Manchurian wild rice is a giant erect grass that form dense stands and grows up to 4 metres tall – twice the height of a tall person
- It is tolerant of a range of conditions, such as the margins of fresh or salt water and in wetland areas, and withstanding drought and frost
- It can live in lagoons, riverbanks, tidal flats, roadside ditches, damp pasture and cropping land
- It has dull-green and coarse leaves more than 1 metre long and 1 to 2cm wide, and grows in fans
- Purplish or red-brown flower heads 40 to 60cm long are produced from November to December
- Unwanted and Notifiable Organism under the Biosecurity Act 1993.



### MANCHURIAN WILD RICE

*Zizania latifolia*



## IMPACTS

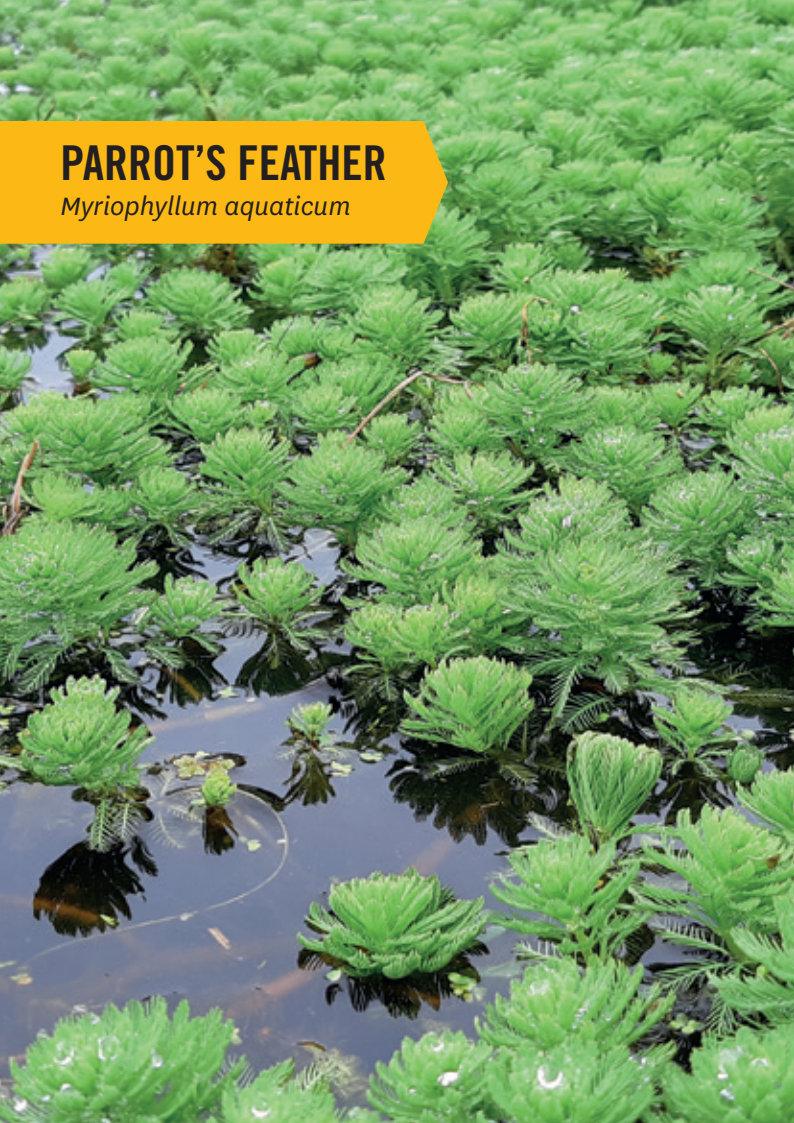
A stand of Manchurian wild rice will spread through underground roots and quickly take over ungrazed areas.

## HOW IT SPREADS

It can spread through underground roots, or seed or plant fragments moved by contaminated machinery.

# PARROT'S FEATHER

*Myriophyllum aquaticum*



## DESCRIPTION

- Parrot's feather is a sprawling long-lived plant with long stems that go to about 10cm above the water
- Its leaves are pale blue-green, up to 3.5cm long and divided, giving a feathery appearance, and arranged in circles on a rubbery stem
- It produces tiny white flowers at the leaf junction
- It grows in wetlands and other still to moderate-flowing waters
- Unwanted Organism under the Biosecurity Act 1993.



### PARROT'S FEATHER

*Myriophyllum aquaticum*



## IMPACTS

It grows big and sprawling so it takes over habitats and also blocks drains.

## HOW IT SPREADS

It is often spread by flooding or by contaminated machinery.

A close-up photograph of Purple Loosestrife (Lythrum salicaria) showing several tall, upright stems with dense clusters of small, vibrant purple flowers. The leaves are green and lance-shaped. The background is slightly blurred, showing more of the same plant.

# PURPLE LOOSESTRIFE

*Lythrum salicaria*

## DESCRIPTION

- Purple loosestrife is a tall, summer-green and long-lived plant
- It grows in wetlands and on the margin of other still or slow-flowing waters
- In spring and summer it produces masses of foliage, usually half to a metre high, and then showy purple flowers in tall dense terminal spikes
- It dies back to a root crown in winter
- Unwanted Organism under the Biosecurity Act 1993.



### PURPLE LOOSESTRIFE

*Lythrum salicaria*



## IMPACTS

This aggressive weed takes over wetlands and areas on the margin of still and flowing waters.

## HOW IT SPREADS

It can spread via rhizomes or the masses of long-lived seed, which can be spread by water movement. It has been spread deliberately by people who grow it as an ornamental garden plant and accidentally with drainage equipment.

# RED-EARED SLIDER

*Trachemys scripta elegans*



## DESCRIPTION

- Red patches either side of the head and the way it slides into the water when alarmed give this turtle its name
- Medium-sized with a shell up to 30cm long, its shell and skin are olive to brown with yellow stripes or spots
- Red-eared sliders are quick-moving and difficult to catch
- They can live up to 50 years and produce around 400 offspring
- They will live in lakes, reservoirs, ponds and still-water areas of rivers, streams and estuaries
- They feed on aquatic plants and small aquatic creatures
- No legal status in NZ, except Auckland Council is banning their sale.



### RED-EARED SLIDER

*Trachemys scripta elegans*



## IMPACTS

Their feeding and other activities disrupt the freshwater ecosystems and reduce water quality.

## HOW IT SPREADS

They spread by escaping captivity or being deliberately released into the wild by humans. Current climatic conditions are not suitable for red-eared slider reproduction, but warming temperatures mean this may occur in the future.

# RUDD

*Scardinius erythrophthalmus*



## DESCRIPTION

- Red to orange-coloured fish; more silver when young
- Red fins
- Typically 20 to 25cm long, but can grow up to 40cm in New Zealand
- Unlike koi carp they have no barbels, unlike goldfish they lack stout spines on the front edge of the dorsal fin and unlike orfe they have projections at the bases of their pectoral and pelvic fins
- Prefer still waters
- Although legally designated a Noxious Fish in most regions, rudd are a Sports Fish in the Auckland/Waikato Fish and Game Region.



### RUDD

*Scardinius erythrophthalmus*



## IMPACTS

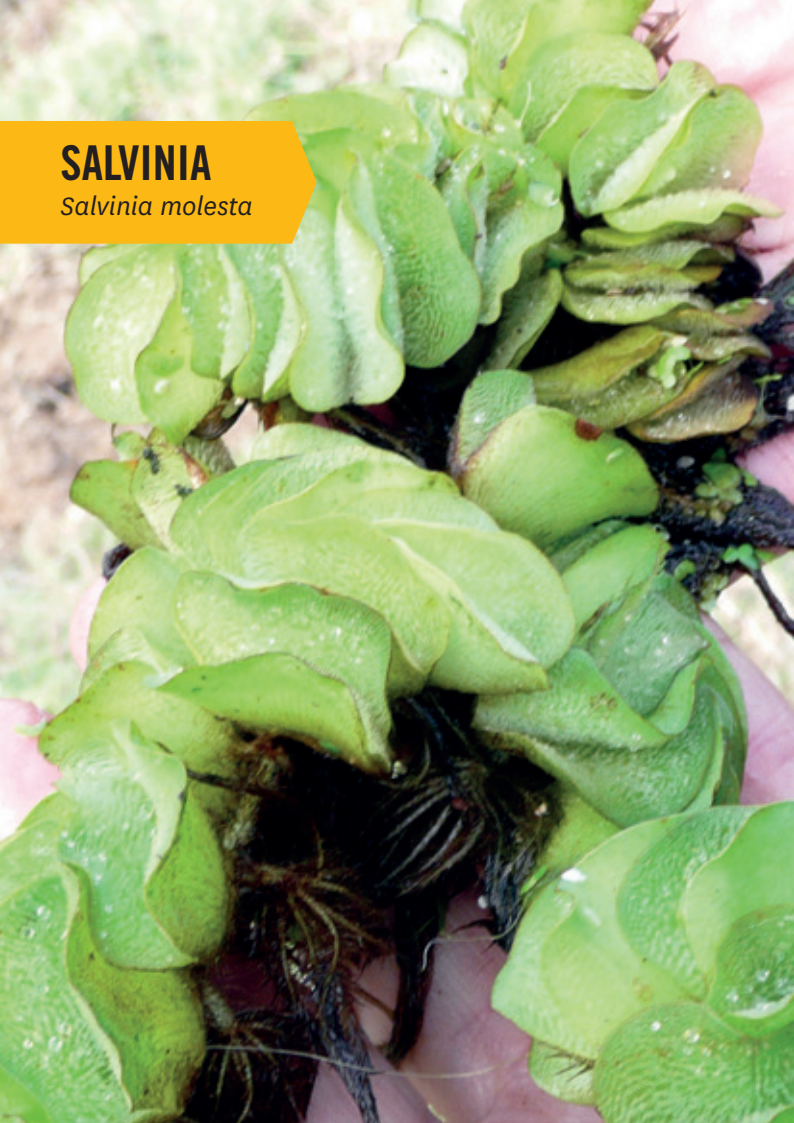
Young rudd feed on zooplankton – then as they mature they increasingly feed on freshwater plants, disrupting food webs in lakes, wetlands and rivers.

## HOW THEY SPREAD

Imported and spread illegally by people who want to establish English-style coarse fishing in New Zealand.

# SALVINIA

*Salvinia molesta*



## DESCRIPTION

- Salvinia is an unusual-looking, free-floating perennial fern that forms dense mats on the water surface
- It has paired aerial leaves that are flat when young and folded when older, and covered in hairs shaped like egg-beaters
- It grows very quickly
- Unwanted and Notifiable Organism under the Biosecurity Act 1993.



### SALVINIA

*Salvinia molesta*



## IMPACTS

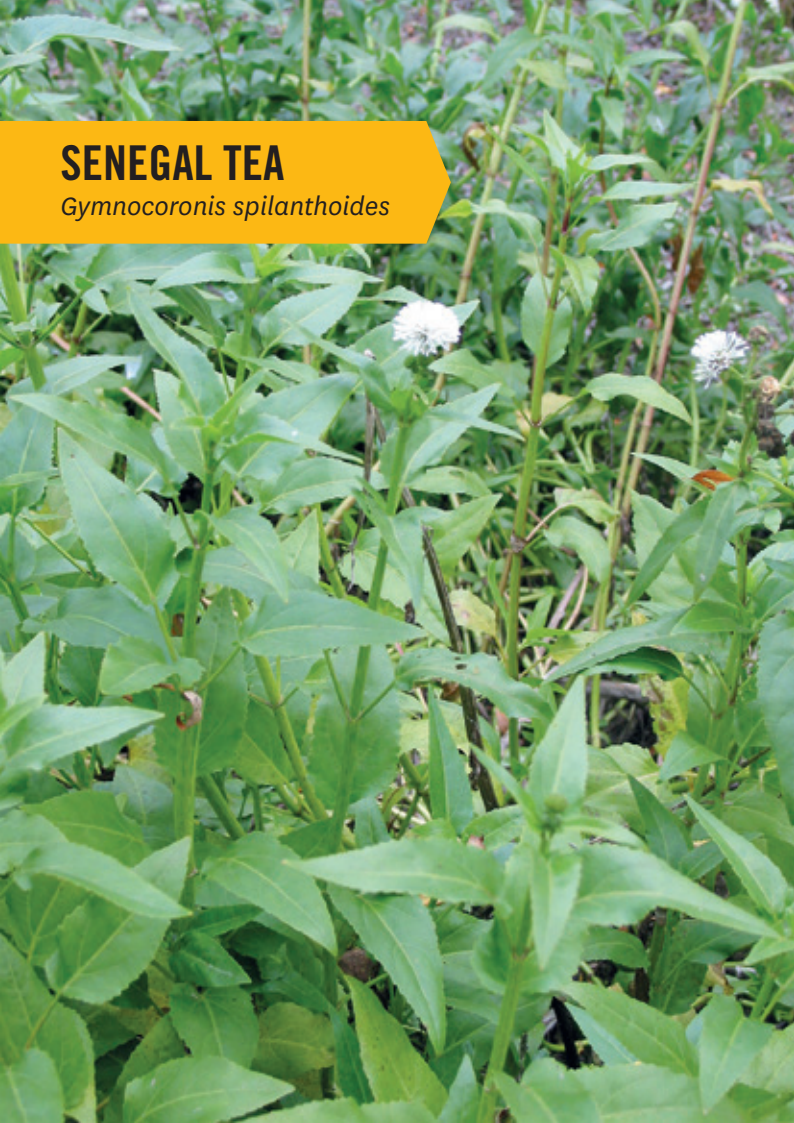
It forms very dense mats that smother the surface of freshwater areas, out-competing other plants. It has caused power cuts overseas by blocking water intakes and similarly disrupts irrigation, flood protection and recreation. When the water surface is completely obscured by dense Salvinia growth, it poses a drowning hazard because ponds can be mistaken for land.

## HOW IT SPREADS

Salvinia can be spread to another waterway via fragments accidentally carried by boaties or other users of lakes and rivers, and through water movement through connected systems, such as during floods.

# SENEGAL TEA

*Gymnocoronis spilanthoides*



## DESCRIPTION

- Senegal tea is a long-lived sprawling emergent leafy plant
- It prefers to live in still or slow-flowing water, including wetlands
- Its leaves are dark green and oval with a pointed tip, from 5 to 20cm long and 2.5 to 5cm wide, with a toothed and slightly wavy margin, and opposite each other on shortish hollow stalks
- Senegal tea has whitish and highly scented flower heads in Summer and autumn
- When its sprawling, Senegal tea looks like alligator weed but can be known by its serrated leaf margins
- Unwanted Organism under the Biosecurity Act 1993.



### SENEGAL TEA

*Gymnocoronis spilanthoides*

## IMPACTS

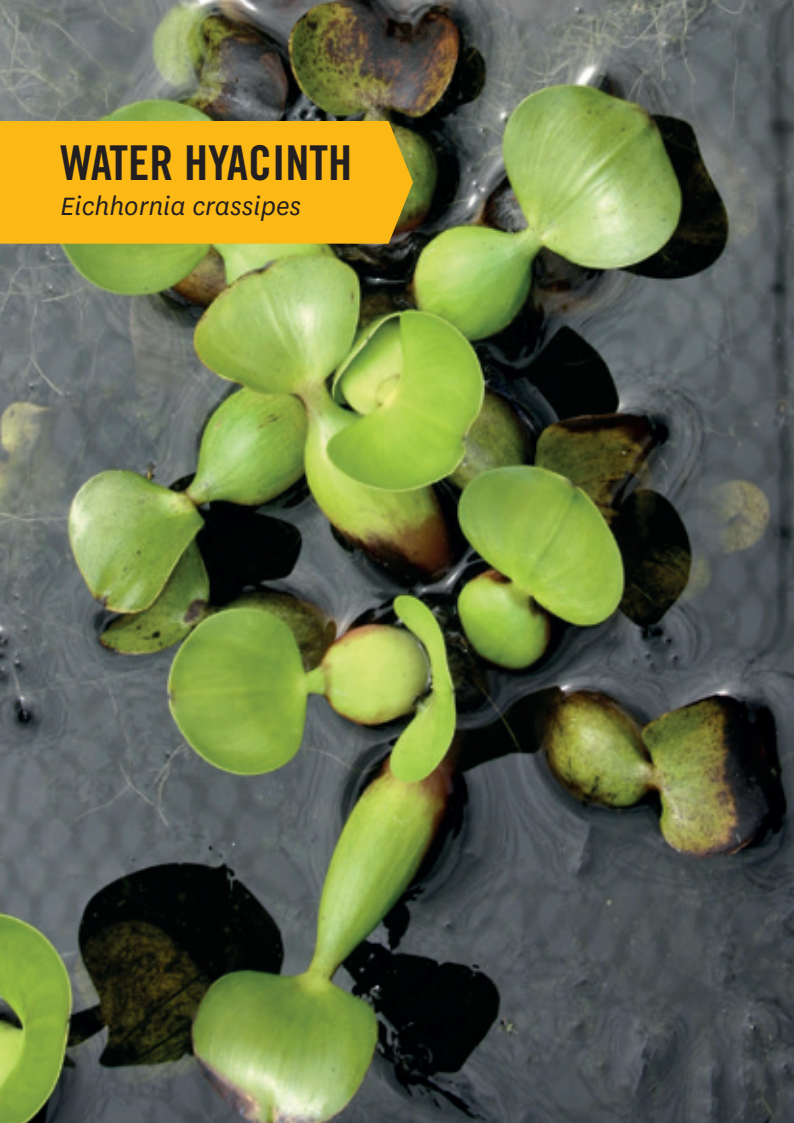
It forms mats that smother the surface of freshwater areas, out-competing other plants and disrupting ecosystems, as well as blocking water flow and clogging drains.

## HOW IT SPREADS

Senegal tea can establish in new areas from stem fragments, which readily form new roots, or the large amounts of seed produced. It is usually spread by human activity – through deliberate introduction or during pond or drain maintenance. It may also spread via water movement.

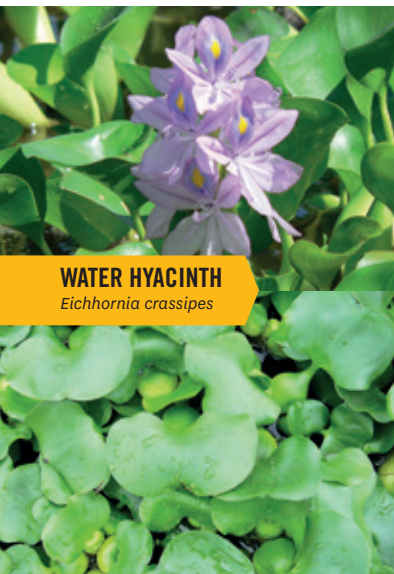
# WATER HYACINTH

*Eichhornia crassipes*



## DESCRIPTION

- Water hyacinth is a free-floating long-lived herb that forms dense mats on the water surface
- The plant has bright-green leaves and the leaf stalk is often spongy and inflated
- It has creeping stems and often has new young plants attached
- Its floating roots are bright purple when young and then black
- It flowers in summer, producing a spike of up to 10 large blue-purple flowers with a central yellow eye and blue ring on the uppermost petal
- It lives in still and slow-flowing warmer and moderately to highly nutrient-enriched waters
- It grows very quickly
- It is an Unwanted and Notifiable Organism under the Biosecurity Act.



### WATER HYACINTH

*Eichhornia crassipes*

## IMPACTS

This is widely regarded as the world's worst aquatic weed. It forms mats that completely smother the surface of freshwater areas, outcompeting any other plants and disrupting a range of activities, including recreation, flood protection and water intake for hydropower generation or irrigation.

## HOW IT SPREADS

Water hyacinth is most often spread to another waterway through activity of aquarium and pond enthusiasts, or via water movement.

# YELLOW FLAG IRIS

*Iris pseudacorus*



## DESCRIPTION

- Yellow Flag Iris is a tall, long-lived plant that lives on the water margins
- It can live in still and slow-flowing water, including in wetlands, and can tolerate some saltiness such as in salt marshes
- It produces sword-shaped leaves 2 to 3cm wide in the summer, that shred to just the fibres as they age
- Yellow Flag Iris plants growing over water can form rafts of floating stalks, strong enough to support the weight of a human
- The yellow, iris-type flowers are up to 12cm across and form on stout stalks, that develop into drooping green seed capsules about 5cm long
- It is widespread and locally common through much of New Zealand, but rare in Northland where it is targeted for regional eradication
- Unwanted Organism under the Biosecurity Act.



### YELLOW FLAG IRIS

*Iris pseudacorus*



## IMPACTS

It out-competes other plants in areas like swamps and marshes and takes over. It is potentially toxic to livestock.

## HOW IT SPREADS

A Yellow Flag Iris clump will spread through underground roots. It spreads to new areas via movement of broken-off pieces and through producing a large amount of floating seed. It can be spread during drain maintenance through contaminated machinery, and also gets spread in New Zealand through deliberate planting as a garden plant or as a garden discard.

# ZEBRA AND QUAGGA MUSSELS

Quagga *Dreissena rostriformis bugensis*; Zebra *Dreissena polymorpha*



## DESCRIPTION

- These two tiny mussel species are aggressive invaders of freshwater and have been spreading around the world – but are not known to have established in New Zealand
- They have striped markings and typically grow to the size of a fingernail
- They attach to both hard and soft surfaces in freshwater
- They can survive 3 to 5 days out of water
- They live for 3 to 5 years.



### ZEBRA AND QUAGGA MUSSELS

Quagga *Dreissena rostriformis bugensis*;  
Zebra *Dreissena polymorpha*



## IMPACTS

These two mussel species have caused collapse of ecosystems where they have established. They can kill native freshwater mussels by attaching to their shells or outcompeting them and other filter feeders for food. They also clog any water intake structures and disrupt human recreation in a number of ways, from their sharp shells that cut skin to encrusting gear.

## HOW IT SPREADS

These invasive mussels are believed to have spread between and within countries overseas on contaminated boat hulls. The likelihood of introduction here is considered lower as New Zealand does not have any freshwater ports.

# LEGAL STATUS OF FRESHWATER WEEDS AND PESTS

Some weeds and pests have specific legal requirements to help us stop their spread and prevent them doing harm. Here's what you need to know for the weeds and pests in these cards:

## UNWANTED ORGANISM

Under the Biosecurity Act 1993, an unwanted organism is one that is capable of causing harm to natural or physical resources (like waterways) or human health. Several introduced freshwater weeds and pests in New Zealand are classed as unwanted as they have the potential to cause serious environmental harm if allowed to spread. It's an offence to breed, sell or release these. The Ministry for Primary Industries holds a register which can be found online.

## NOTIFIABLE ORGANISM

Some organisms must be notified to Biosecurity New Zealand (a business unit of the Ministry for Primary Industries) if they're spotted in Aotearoa New Zealand. If a notifiable organism established in this country, it could severely affect our primary production or trade and market access. These include some invasive freshwater weeds like hydrilla, water hyacinth and Manchurian wild rice.

If you spot a notifiable organism, you have a legal obligation under section 44 of the Biosecurity Act 1993 to tell Biosecurity New Zealand (a business unit of the Ministry for Primary Industries). **Call the pests-and-diseases hotline on 0800 80 99 66** or use the form on this page <https://report.mpi.govt.nz/pest/>.

# SCAN ME



North Island lake and river users



South Island lake and river users

Produced by Biosecurity New Zealand (a business unit of the Ministry for Primary Industries) with the assistance of NIWA and on behalf of the Check Clean Dry Partners.

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