



# Priority Weed Identification Guide

Targeted Species in the Camden Local Government Area

# Priority Weeds management in the Camden LGA.

Camden Council is the local control authority for the regulation of priority weeds and has a legal responsibility for managing weeds across the local government area (LGA) under the *NSW Biosecurity Act 2015*. (Scan QR code to go to the Act).



*NSW Biosecurity  
Act 2015*

Under the Act Council must:

- Appoint staff authorised under the Act to carry out inspections and seek compliance with the Act;
- Provide education about weeds and best practice management;
- Control high risk weeds;
- Submit regulatory reporting; and
- Participate in strategic weed management through their regional weed committee.

## What is a weed?

Simply put, a weed is any plant growing where we don't want it, however, there are several different categories of weeds that can help to explain how to manage weeds.

**Environmental weeds:** Plants that threaten biodiversity of native plants and animals by reducing diversity and abundance of native species and upsetting the balance of ecosystems.

**Agricultural weeds:** Undesirable plants that are persistent, damaging and interfere with the growth of crops or livestock.

**Priority Weeds:** Plants whose status has been determined by State and Regional Weed Committees to have serious economic or environmental impacts. Only plants identified in each regions' Strategic Management Plan are considered priority weeds. This is to ensure that resources are used to the best effect possible.

Camden Council is part of the Greater Sydney Local Land Services Region, and follows a strategic plan that prioritises weeds and provides detailed action plans.

Scan QR code to go to Greater Sydney Regional Strategic Weed Management Plan 2023-2027



**Widespread weeds:** Weeds that are already widespread within the region with a low-risk rating. It's not reasonably practicable to contain or eliminate them under the Act.

**Weeds of National Significance:** Under the National Weeds Strategy, 32 introduced plants have been identified as Weeds of National Significance (WONS). These are regarded as the worst weeds in Australia due to their invasiveness and potential to spread, with significant economic and environmental impacts.



**Weeds of National Significance (WONS)**

### Other weeds to watch out for in Camden LGA.



**Parthenium Weed**



**Mexican Feather Grass**



**Water Caltrop**



**Ming Asparagus Fern**



Photos: Sheldon Navie NSW Government, Clarie Lock, Karel Jakubec, <https://commons.wikimedia.org>, Sheldon Navie.

# Alligator Weed

*Alternanthera philoxeroides*



Mature alligator weed covering a dam.



Plants have small white flowers in summer with opposite leaves and hollow stems.

Photos: Karen Thorogood and Bruce Auld, NSW Department of Primary Industries (DPI)

Alligator weed is a vigorous water weed with opposite leaves, papery white flowers, and a hollow stem. The plant invades waterways and floodplains, is very tolerant of normal control measures and is a major threat to waterways, irrigation systems and rivers. It spreads by plant parts that detach readily and become caught on animals feet, on vehicles, machinery, boats and trailers, contaminated produce and extracted sand and soil.

## This plant is a Weed of National Significance (WONS).

### How does this weed affect you?

Alligator weed can blanket the surface of water impeding light and air, causing anaerobic conditions that can kill aquatic organisms. It out competes other plants in wetlands and rivers and chokes irrigation channels.

Alligator weed can:

- Threaten vegetable and turf farming and the sand and soil extraction industry;
- Restrict access to water points and damages pumps and other irrigation infrastructure;
- Restrict access to waterways for recreation; and
- Contaminate produce or turf causing delays in getting products to market.



Scan to go to the Alligator Weed profile on NSW WeedWise and for more information including management options.

# Bitou Bush/Bone Seed

*Chrysanthemoides monilifera* subsp. *rotundata* and *monilifera*



Bitou bush flower and seeds



Boneseed invades native bushland and disturbed areas.

Photos: Terry Inkson and Annabel Carle

Bitou bush and Bone seed are subspecies of *Chrysanthemoides monilifera*. These plants have been observed to be variable in their habit and appearance. In the Camden Local Government Area (LGA) we have what appears to be a hybrid of both subspecies. They are spreading, woody shrubs with bright green, oval, variably toothed leaves, yellow daisy like flowers and fleshy fruit seeds that ripen from green to black.

## This plant is a Weed of National Significance (WONS).

### How does this weed affect you?

Bitou Bush and Bone Seed invade bushland and disturbed areas.

Bitou bush and bone seed can:

- Outcompete native plants, threaten endangered ecological communities and threatened species, by reducing food and habitat;
- Be spread by animals and birds that eat the fleshy fruit;
- Float in floodwaters; and
- Be moved around in soil and landscape supplies contaminated with seed or stuck to machinery.



Bone seed



Bitou bush

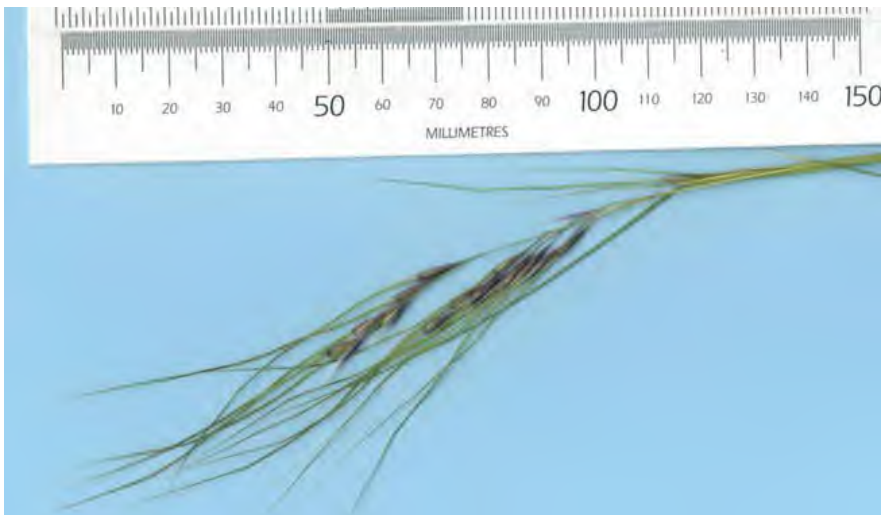
Scan to go to Bone seed or Bitou bush profiles on NSW WeedWise and for more information including management options.

# Chilean needle grass

*Nassella neesiana*



Chilean needle grass cluster growing in pasture.



Chilean needle grass seed heads are about 100mm long.

Photos: John Hosking NSW DPI and Andrew Storrie NSW DPI.



Chilean needle grass is a tussock grass up to 1m high. It can survive heavy grazing and drought and establishes best on bare ground. It invades pastures, native woodlands, creekbanks, parks and roadsides.

**This plant is a Weed of National Significance (WONS).**

### How does this weed affect you?

Chilean needle grass can:

- Halve pasture productivity in summer;
- Injure animal's eyes and pierce hides;
- Reduce biodiversity;
- Downgrade meat and wool quality; and
- Be spread by animals, machinery, and floodwaters.



Scan to go to the Chilean needle grass profile on NSW WeedWise and for more information including management options.

# Coolatai grass

*Hyparrhenia hirta*



Coolatai grass grows in tussocks up to 1m tall.



Mature Coolatai grass seed heads grow in pairs.

Photos: Andrew Storrie NSW DPI and S.Warner NSW DPI.

**Coolatai grass is a summer growing perennial tussock grass that has been spreading into southern Australia. It is drought, fire, and herbicide tolerant.**

## How does this weed affect you?

Coolatai grass spreads by attaching to vehicles, animals and clothing and can also be blown along roadsides by passing vehicles.

Coolatai grass:

- Is long lived and tolerates drought, fire, and herbicide;
- Can dominate pastures reducing their carrying capacity and affecting livestock quality;
- Seeds are very mobile;
- Can germinate over a wide range of temperatures; and
- Can invade undisturbed ecosystems and threaten biodiversity in stock routes, reserves and National Parks.



**Scan to go to the Coolatai grass profile on NSW WeedWise and for more information including management options.**

# Frogbit weed

*Limnobium laevigatum*



Underside of leaves showing air sacs



Floating plants form a thick mat on the water surface.

Photos: Karen Thorogood and S.Warner NSW DPI.

**Frogbit is a floating water weed with small, round glossy leaves. Plants grow very quickly, forming dense mats over water bodies.**

**This plant is Prohibited Matter under the *NSW Biosecurity Act 2015***

### **How does this weed affect you?**

Frogbit:

- Forms large dense mats across the water's surface;
- Prevents native water plants from growing;
- Reduces light, food and shelter for fish and other aquatic animals;
- Can block waterways and irrigation channels;
- Creates dangerous conditions by hiding the water surface and making it appear like firm ground; and
- Can limit recreational activities such as fishing, swimming, or boating.



**Scan to go to the Frogbit profile on NSW WeedWise and for more information including management options.**

# Kidney-leaf mud plantain

*Heteranthera reniformis*



Mature Kidney-leaf mud plantain floating on water surface.



Seedlings have a narrow leaf and germinate in the mud.

Photos: Suzanne Hayward and Charlie Mifsud NSW DPI

**Kidney-leaf mud plantain is a sprawling water weed with kidney-shaped leaves. It can form dense mats in shallow freshwater and on damp soil at the water's edge, and smother other plants.**

## How does this weed affect you?

Kidney leaf mud plantain:

- Chokes dams, drains and water supply channels reducing water flow;
- Prevents native water plants from growing;
- Reduces food for fish and other aquatic life; and
- Can significantly reduce crop yields.



**Scan to go to the Kidney-leaf mud plantain profile on NSW WeedWise for more information including management options.**

# Ludwigia (Peruvian Primrose)

*Ludwigia peruviana*



Ludwigia can dominate wet areas along creek banks and around dams.



Ludwigia seedling growing beside a dam.

Photos: G Pritchard and Karen Thorogood



**Ludwigia is a fast growing. Invasive aquatic plant that forms dense stands in slow moving and static waterways. It can grow to about 3m tall, has bright yellow flowers in late summer/ autumn and is deciduous in areas where there are cool winter temperatures. The plant produces seed pods containing up to 4,000 seeds which spread by water flow, birds, or machinery.**

## How does this weed affect you?

Ludwigia can:

- Reduce/change water flow and increase flood risk;
- Outcompete native plants, reducing shelter for fish and other aquatic organisms;
- Reduce oxygen, light and water temperature; and
- Reduce access to water for stock and recreation.



**Scan to go to the Ludwigia profile on NSW WeedWise for more information including management options.**

# Salvinia

*Salvinia molesta*



Salvinia forms dense mats that can cover entire waterbodies.



Floating Salvinia.

Photos: Colin G. Wilson, B.A. Auld and R.W. Medd NSW DPI

**Salvinia is a fast-growing fern with oval shaped leaves that have waxy hairs on the top of the leaf. It can form dense mats and reduces water quality.**

**This plant is a Weed of National Significance (WONS).**

### **How does this weed affect you?**

Salvinia can:

- Reduce water quality causing stagnant water and unpleasant odours;
- Choke dams, drains, water supply channels and equipment;
- Provide habitat for mosquitoes to breed;
- Reduce food for fish and other aquatic life;
- Reduce the use of waterways for recreation and transport;
- Reduce the visual appeal of waterways; and
- Spread by attaching to boats, vehicles, water birds, turtles, and cattle.



**Scan to go to the Salvinia profile on NSW WeedWise for more information including management options.**

# Tiger pear

*Opuntia aurantiaca*



Tiger pear growing in a paddock.



Tiger pears' sharp spines are up to 5cm long.

Photos: Jen Schabel and Karen Thorogood

Tiger pear is a low spreading cactus with sharp spines that grows to about 40cm high or up to 2m if supported by other plants. It spreads by plant parts attaching to animals' wool/fur, clothing or footwear, vehicle tyres or floating in flood water. It has also been found in dumped material from gardens.

**This plant is a Weed of National Significance (WONS).**

### How does this weed affect you?

Tiger pear can:

- Injure and kill wildlife that become trapped in its spines;
- Form dense thickets that prevent movement of people or animals due to its sharp spines that can cause painful injuries;
- Devalue wool and hides and prevent shearing;
- Get stuck around the mouths of lambs and calves preventing feeding; and
- Prevent or hinder access to water points and restrict recreational activities such as hiking and camping.



**Scan to go to the Tiger pear profile on NSW WeedWise for more information including management options.**

# Water hyacinth

*Eichornia crassipes*



Mature Water hyacinth floating on water surface.



Purple flower with a yellow centre.

Photos: Karen Thorogood and Paul Sullivan NSW DPI

**Water hyacinth is a floating water weed with blueish purple flowers. It can form a dense mat that smothers the surface of waterways, reduces water quality, blocks irrigation pumps and channels and affects native aquatic life. It can double its mass every five days under favourable conditions.**

**This plant is a Weed of National Significance (WONS).**

### **How does this weed affect you?**

Water Hyacinth:

- Reduces water levels and water quality;
- Changes water temperature and pH;
- Reduces oxygen levels and restricts access to water for livestock;
- Damages crops and fences when it becomes mobile during floods; and
- Provides favourable conditions for mosquitoes to breed.



**Scan to go to the Water hyacinth profile on NSW WeedWise for more information including management options.**

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Photo: Karen Thorogood