

South East

# Priority Weed Species



SOUTH EAST  
**No Space for  
Weeds**

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# Regional priority weed species

Priority weed species are identified under State, Regional and/or Local management plans. This booklet lists invasive weed species outlined in the South East Regional Strategic Weed Management Plan 2023-2027, and the requirements for control in the South East Region.

Under the Biosecurity Act 2015, landholders have a General Biosecurity Duty to control these species or regulatory action (including penalty infringements) may be applied.

## General Biosecurity Duty (GBD)

All plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.

For more information about any of the weed species in this booklet, State Priority Weeds and their outcomes, or your General Biosecurity Duty, please see [weeds.dpi.nsw.gov.au](https://weeds.dpi.nsw.gov.au)

# Protecting your property

- Install a biosecurity sign on your front gate, asking visitors not to bring weed material onto your property. If you have a wash bay available, direct vehicles to use this.
- Have dedicated vehicle tracks and parking areas on your property to prevent the potential of weed spread.
- Be aware of and be able to identify weed risks to your property and how you can prevent them, i.e. via fodder, in livestock and on machinery.
- Quarantine new livestock to a small paddock for 6 to 7 days to allow any ingested weed material to bypass their gut. Then treat this area thoroughly if new weeds emerge.
- Keep a copy of this book handy in your glovebox, and if you find a weed you're not sure of, send through a photo to [add your council email address]

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## What to do if you find a 'priority weed'

**Visit Council's website:** [add your website URL]

**Email Council:** [add your email address]

**Phone Council:** [add your council phone number]

# Priority weed categories

The South East Regional Strategic Weed Management Plan 2023-2027 aims to achieve the following objectives when managing invasive weed species. As such, weed species are categorised as:

## Prevention

These are currently not found in the Bega Valley and pose a significant biosecurity risk. Plants should be **eradicated** from the land and the land kept free of the plant. The Local Control Authority (Council) must be made aware the plant has been found on the land.

## Eradication

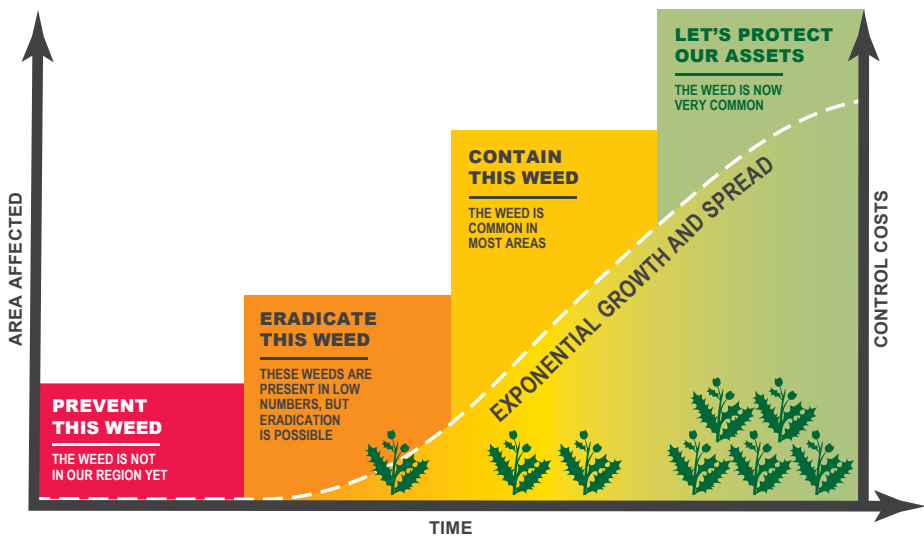
These weeds are present in limited distribution and abundance. The plant should be **eradicated** where practicable, or as much of the plant as practicable should be destroyed and the spread of the remaining plant suppressed

## Containment

Elimination is not practicable for these weeds, and they should be **controlled** in a manner that continuously inhibits the ability of the plant to spread. Plants or parts of the plant should not be sold, transported or knowingly distributed.

## Asset Protection

These weeds are widely distributed and broadscale elimination or containment is not practical. Landholders are to prevent spread to priority assets (eg those with high environmental, economical and/or social value) and reduce impact on priority assets by the weed.



This booklet provides information regarding priority weed species that are categorised for **prevention**, **eradication** and **containment** in the South East Region. For information about other weed species visit [weeds.dpi.nsw.gov.au](http://weeds.dpi.nsw.gov.au)

# Further weed categorisation

**Prohibited Matter** — Biosecurity matter listed in Schedule 2, Part 1 of the NSW Biosecurity Act 2015 for the purpose of preventing entry of that matter into NSW or a part of NSW. Prohibited matter includes weeds nationally targeted for eradication and presently not in NSW.

**Control Order** — Establishes one or more control zones and related measures to prevent, eliminate, minimise or manage a biosecurity risk or impact. Control orders are for managing weeds under approved eradication programs and last for five years (or can be renewed for longer-term eradication programs).

**Biosecurity Zone** — A biosecurity zone may be used for the long-term management of an ongoing key biosecurity risk or impact. It is a specific geographic area where certain weed control actions must be taken under the Biosecurity Act 2015. Biosecurity zones are used when complete eradication of biosecurity matter is not feasible, but the risk is still high so regulatory actions for ongoing prevention, elimination and minimisation of impacts are necessary. In our region, Bitou bush, Alligator weed and Water hyacinth are the only weeds with a biosecurity zone.



# Prohibited matter

## Weed species that are prohibited matter in NSW include:

Anchored water hyacinth	<i>Eichhornia azurea</i>
Black knapweed	<i>Centaurea x moncktonii</i>
Bridal veil creeper	<i>Asparagus declinatus</i>
Broomrape	<i>Orobanche</i> spp. (all species except the native <i>O. cernua</i> var. <i>australiana</i> and <i>O. minor</i> )
Eurasian water milfoil	<i>Myriophyllum spicatum</i>
Frogbit/Spongeplant	<i>Limnobium</i> spp. (all species)
Gamba grass	<i>Andropogon gayanus</i>
Hawkweed	<i>Hieracium</i> spp. (all species except <i>H. murorum</i> )
Hawkweed	<i>Pilosella</i> spp. (all species)
Hydrocotyl/Water pennywort	<i>Hydrocotyle ranunculoides</i>
Karoo acacia	<i>Vachellia karroo</i> (syn. <i>Acacia karroo</i> )
Kochia	<i>Bassia scoparia</i> (excluding subsp. <i>trichophylla</i> )
Koster's curse	<i>Clidemia hirta</i>
Lagarosiphon	<i>Lagarosiphon major</i>
Mexican feather grass	<i>Nassella tenuissima</i> (syn. <i>Stipa tenuissima</i> )

Miconia	Miconia spp. (all species)
Mikania vine	Mikania micrantha
Mimosa	Mimosa pigra
Parthenium weed	Parthenium hysterophorus
Pond apple	Annona glabra
Prickly acacia	Vachellia nilotica (syn. Acacia nilotica)
Rubber vine	Cryptostegia grandiflora
Siam weed	Chromolaena odorata
Spotted knapweed	Centaurea stoebe subsp. micranthos
Water caltrop	Trapa spp. (all species)
Water soldier	Stratiotes aloides
Witchweed	Striga spp. (except the native <i>S. parviflora</i> )
Yellow burrhead	Limnocharis flava

### More detail on each of these species

(as listed in Schedule 2, Part 1 of the Biosecurity Act 2015) can be found online at [weeds.dpi.nsw.gov.au](http://weeds.dpi.nsw.gov.au) or within the South East Regional Guide to Prohibited Matter, available from Bega Valley Shire Council [begavalley.nsw.gov.au/services/prohibited-matter](http://begavalley.nsw.gov.au/services/prohibited-matter)

# Prevention

**These weeds are currently not found in the region and/or locally and pose significant biosecurity risk.**

Plants should be eradicated from the land and the land kept free of the plant. The Local Control Authority (Council) must be made aware the plant has been found on the land.

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## **Outcomes to demonstrate compliance with General Biosecurity Duty**

- Land managers should mitigate the risk of the plant being introduced to their land.
- Land managers should eradicate the plant from the land and keep the land free of the plant.
- A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, moving, carrying or releasing the plant
- Notify local control authority if found.

# Sickle thorn

(*Asparagus falcatus*)



**Description** A robust climber to 6m tall, with a root system that has short rhizomes and forms swollen tubers.

**Dispersal** Primarily from seed, but can also spread vegetatively from tubers.

**Environment** Prefers moist, semi-shaded conditions; riparian habitats, wet sclerophyll forest, swamp oak and subtropical rainforest.



# Coral creeper

(*Barleria repens*)



**Description** Perennial scrambling herb with dark green and shiny leaves. Red, salmon or pinkish tubular flowers up to 60mm long.

**Dispersal** Seed capsule splits open and ejects four seeds up to several metres away. Stems can root when they touch the ground.

**Environment** Tropical, subtropical and temperate areas. Shade-tolerant and mostly found growing on sandy soils.



# Kidney-leaf mud platain

*(Heteranthera  
reniformis)*



**Description** An annual or perennial plant that can either grow along the mud, under the water or the whole plant can float. Roots form at nodes along the stems.

**Dispersal** Wind and water disperse the winged seeds. Any stem fragment containing one or more nodes is capable of producing a new plant.

**Environment** Will grow in freshwater less than 15 cm deep and in damp soil at the edge of water bodies. It grows in rivers, drains, ditches, rice fields, irrigation channels and wetlands.



# Water star grass

*(Heteranthera zosterifolia)*



**Description** These plants look like star-shaped grass and send out long stems to the water's surface. Water star grass forms thick mats on the water's surface that smother and outcompete native plants, reduce light, oxygen levels and water quality. This in turn reduces food and habitat for fish and other aquatic animals, limits water flow, and limits access to water for recreational use.



**Dispersal** Spread is most likely caused when pond or aquarium waste is dumped in wetlands and waterways. Seed could also spread by wind, waterflow out of ponds or by animals especially water birds. Stem fragments can break off adult plants and start new infestations. Broken stem fragments can be moved by floods, birds and sticking to boats, machinery and people.

**Environment** Water star grass is native to South America. It grows near Port Macquarie on the North Coast and at Morrisset in the Hunter region. It has not been found anywhere else in Australia.

# Holly leaved senecio

(*Senecio glastifolius*)



**Description** A stout medium-lived perennial (sometimes annual) with stems 1.0–1.5m, occasionally to 2m, tall.

**Dispersal** Reproduces from cuttings, fallen branches and wind-dispersed seed. Seeds may remain viable in the soil for extended periods of time and germination is encouraged by fire.

**Environment** In shrubland and near waterways and more often in open, wet areas in its native habitat. It grows frequently on hillsides, coastal dunes and disturbed areas such as roadsides.





# Eradication

**These weeds have been recorded in the South East region in limited distribution and abundance.**

The plant should be **eradicated** where practicable, or as much of the plant as practicable should be destroyed and the spread of the remaining plant suppressed.

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## **Outcomes to demonstrate compliance with General Biosecurity Duty**

- Land managers should mitigate the risk of the plant being introduced to their land.
- Land managers should eradicate the plant from the land and keep the land free of the plant.
- A person should not deal with the plant, where dealings include but are not limited to buying, selling, growing, keeping, moving, carrying or releasing the plant.
- Notify local control authority if found.
- A person must not import into the State or sell.

# Ming/Pompom asparagus

(*Asparagus macowanii*  
*var. zuluensis*)



**Description** Shrubby plant with a fern-like appearance, usually growing 1-2m tall; root system consists of relatively short, fleshy, tuberous roots

**Dispersal** Primarily reproduces from seed, but can also spread vegetatively from the roots.

**Environment** Ming asparagus fern prefers semi-shaded situations. Primarily found in the understorey of drier forests, but has the potential to invade riparian areas, forest margins, open woodlands, urban bushland, coastal environs, roadsides, disturbed sites and waste areas.



# Groundsel bush

(*Baccharis halimifolia*)



**Description** Densely-branched perennial shrub usually 1.5–3 m tall; When in full flower, the female plants are identified by their fluffy white appearance

**Dispersal** Plants mature and produce seed in their second year of growth. Each female groundsel bush plant can produce more than 1.5 million seeds per year. It can also resprout from roots left in the ground

**Environment** Mostly grows in humid warm-temperate to subtropical regions, though it can tolerate frost and snowfalls. It is most common in areas with at least 1000 mm of rain per year



# Cats claw creeper

*(Dolichandra unguis-cati)*



**Description** A woody vine with many stems that can climb as well as creep along the ground forming dense mats. It has yellow, trumpet-shaped flowers and 3-pronged tendrils with stiff tips that form hooks (like a cats claw).



**Dispersal** Seed pods produce winged seeds that can be blown in the wind and spread by water. Detached tubers and stems can also sprout in the right conditions.

**Environment** Subtropical, tropical and warm moist temperate climates. It can tolerate both heavy shade and full sun, and grows in a range of soil types. It does not tolerate waterlogging, but can tolerate heavy frosts, drought conditions and saline soils.



# Kei apple

*(Dovyalis caffra)*



- Description** Tree up to 6 m high with sharp thorns, smooth green leaves and apricot-coloured edible fruit
- Dispersal** Fruit are eaten by birds and new plants often grow under trees or other places where birds perch
- Environment** Prefers full sun and it tolerates frost and drought. It grows well in most soil types, including saline soils but prefers well drained soil.

# Senegal tea plant

*Gymnocoronis spilanthoides*



**Description** Perennial plant that can grow in dense stands or as clumped bushes up to 1 m high, with white, pom-pom-like flowers. Stems are ribbed, pale green and erect, hollow between the nodes and buoyant.

**Dispersal** Reproduces by plant fragments and by seed. Plant fragments develop roots and new stems when they come into contact with soil.

**Environment** Prefers tropical, subtropical and warm temperate regions, and will grow in damp floodplain soils, on the margins of creeks and dams, in wetlands and in still or slow-flowing fresh water.



# Horsetails

(*Equisetum spp.*)



**Description** Pale-brown, unbranched stems that produce fruiting cones; and green, branched, hollow stems that do not produce fruit. Inconspicuous leaves grow in whorls of 6 to 18 on the main shoots forming black-tipped sheaths of teeth around the stems

**Dispersal** Rhizomes produce new stems (shoots). New infestations can result when garden waste containing rhizomes is dumped or when plants are sold illegally for ornamental or medicinal purposes

**Environment** Cold to temperate regions with temperatures ranging from 5°C to 20°C and rainfall between 1000 and 2000 mm, usually in wet areas such as the banks and edges of swamps, rivers and lakes.



# Water poppy

*(Hydrocleys nymphoides)*



**Description** Perennial water weed with floating and emergent leaves. Leaves, roots and flower stems grow from nodes along the stem.

**Dispersal** New plants can grow from nodes along the stem, which can break off from the main plant, float to the surface and move to new areas where they take root in the mud.

**Environment** Both warm temperate and subtropical climates, does not tolerate frost. Mainly found in still to slow moving water bodies up to 2 metres deep. It grows best in full sun and shallow, nutrient rich waterways but will also grow in shade.





# Long-leaf willow primrose

*(Ludwigia longifolia)*



**Description** Upright annual shrub up to 3 m tall that grows in wet areas and in water with stems that are narrow and square shaped often with winged edges

**Dispersal** Mature plants can produce up to 2.45 million seeds per plant that are spread in moving water, wind and by birds. They can also spread by contaminated soil or mud stuck to machinery, vehicles, footwear or clothing.

**Environment** Sandy, silty soil in water bodies, including wetlands and riparian areas, swamps, marshes, drains and channels.



# Water lettuce

(*Pistia stratiotes*)



**Description** Looks like an open head of lettuce floating on the water. Its roots hang in the water and do not attach to the bottom.

**Dispersal** Water lettuce seeds float on the water for a while, before sinking to the bottom. Seeds germinate in early summer once temperatures rise above 20°C and the new seedlings float to the surface.



**Environment** Grows best on still or slow-moving bodies of fresh water such as farm dams, reservoirs, lakes, rivers and creeks. Tolerates temperatures between 15°C and 35°C; however optimum temperatures for growth ranges between 22°C and 30°C.



# Kudzu

*(Pueraria lobata)*



- Description** A semi-woody perennial vine. Leaves are alternate along the stem and are made up of three leaflets. Flowers are pea-like, arranged in a spike, and purple to pink with a yellow spot at the base
- Dispersal** Can grow from stems and tubers and many vines can grow from one tuber. Seed viability is generally low, but occasionally some seeds remain viable for several years. Seeds can be spread by water, contaminated soil or contaminated fodder or mulch.
- Environment** Can grow in a wide range of climates including tropical, subtropical and warm temperate regions. Thrives in deep, loamy, well-drained soils. It does not grow well in waterlogged or highly alkaline soils.

# Salvinia

(*Salvinia molesta*)



**Description** A fast growing floating water fern, with round-to-oval leaves that grow in opposite pairs and have waxy hairs on the upper surface. Roots are hairy and trailing from stem nodes.

**Dispersal** New plants can grow from a plant fragment containing a node. One pair of leaves can start an entire new infestation. Mature plants can also produce buds at the join between sections of the stem and these develop to form daughter plants.

**Environment** Grows best in warm fresh water that is still or slow-flowing and has high nutrient levels. It is very adaptable, survives in many climates and can double in size in less than 3 days in ideal conditions



# Giant devil's fig

(*Solanum chrysotrichum*)



**Description** A shrub or small tree up to 4 m tall with prickly stems and leaves, which are very hairy when young. Small, white flowers grow in clusters from autumn to spring. It has shallow roots.



**Dispersal** Giant devil's fig is spread by seed. Birds, flying foxes and other animals eat the fruit and spread the seed. Seeds spread by water and contaminated soil.

**Environment** Giant devil's fig is able to grow in many soil types and conditions. It is found in pastures (especially overgrazed or drought stressed), waterways, forests (especially on the edges), roadsides, parks and gardens, and disturbed areas.



# Silverleaf nightshade

(*Solanum elaeagnifolium*)



## Description

Upright and branched, this plant grows up to 60cm tall. Leaves are 5 – 10cm long with wavy edges silvery-green on top. Flowers are star-shaped when open with five purple or white petals

## Dispersal

Birds and livestock eat the fruit and spread the seeds. Seed can take up to 2 weeks to pass through the gut. About 10% of seed that passes through the digestive tract remains viable. Seeds can also be spread by water and in contaminated grains and hay.

## Environment

Silverleaf nightshade grows on most soil types. Seedlings grow better in disturbed soil and germinate best at depths between 1 and 3cm, or when soil temperature is above 15°C at 3cm depth.



# Boneseed

(*Chrysanthemoides monilifera subsp. monilifera*)



- Description** Boneseed is an erect, woody, perennial shrub which grows up to 3 m high and has leaves that are oval shaped with irregular toothed edges, and flower that are yellow daisy-like with 4–8 petals.
- Dispersal** Seed are spread when fleshy fruit are eaten by animals especially birds. The seed can be spread by salt or fresh water, in contaminated landscape supplies including soil and gravel if it becomes attached to machinery, or by people dumping garden waste.
- Environment** Prefers regions with winter rainfall and grows best on sandy or medium-textured soils. It tolerates salty conditions and can thrive on the coast but does not tolerate water-logged soils.

## Biosecurity (Boneseed) Control Order 2022 (Part 2, Division 6)

An owner or occupier of land in the boneseed control zone on which there is new infestation of the weed *Chrysanthemoides monilifera subsp. monilifera* (Boneseed) must:

- (1) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6
- (2) The owner or occupier of the land must ensure that the land is kept free of boneseed by immediately destroying all boneseed on the land. This requirement applies to any new infestation as well as any subsequent generations of boneseed on that land.

## Biosecurity (Boneseed) Control Order 2022 (Part 2, Division 7)

A person who deals with a carrier of boneseed on land to which this clause applies, must take all reasonable steps to ensure that the carrier is not moved from the land with any boneseed on it, attached to it, or contained in it, before the carriers is moved from the land.

## Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)

A person should not import into the state or sell.

# Bitou bush

*(Chrysanthemoides monilifera subsp. rotundata)*



## Description

Spreading woody shrub with succulent stems. Leaves are bright green, succulent, oval in shape with a tapering base and irregular teeth along the edge. Mature plants produce lots of bright yellow daisy-like flowers with 11-13 'petals'.



## Dispersal

Seeds are primarily spread by birds and animals, and can also be spread by ocean currents or through coastal creeks and waterways. Germination can be promoted by fire or soil disturbance.

## Environment

Grows in a range of environments from open exposed dunes to shaded forests. It is tolerant of shade, salinity, strong wind, wind-blown sand, salt and water, drought, low nutrients.

### **Bitou Bush Biosecurity Zone (Biosecurity Regulation 2016 - Part 5, Division 3)**

An owner or occupier of land in the Bitou Bush Biosecurity Zone on which there is the weed *Chrysanthemoides monilifera subsp. rotundata* (bitou bush) must:

- (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6
- (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed.

### **Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)**

A person should not import into the state or sell.



# Alligator weed

(*Alternanthera philoxeroides*)



**Description** Summer growing perennial herb. It has small white papery flower heads 8–10 mm in diameter, generally appearing from November to March. The flowers grow at the end of short stalks which rise from the leaf axils. The leaves occur in opposite pairs along the stems. They are shiny, spear-shaped, sessile (no stalk), entire, and about 2–7 cm long and 1–2 cm wide.

**Dispersal** Reproduction is entirely vegetative with new plants able to occur at any stem or root node. Stems break up naturally or with disturbance, creating many fragments capable of forming new plants.

**Environment** Will grow in ponded and flowing waterways, on the banks of waterways, on floodplains and poorly drained land, and less commonly in drier situations above flood level in temperate and subtropical climates, thriving in areas with high summer rainfall. Alligator weed will grow in a range of soils and substrates from sand to heavy clay, and can easily tolerate dry periods.

## Alligator Weed Biosecurity Zone (Biosecurity Regulation 2017 - Part 5, Division 2)

An owner or occupier of land in the Alligator Weed Biosecurity Zone on which there is the weed *Alternanthera philoxeroides* (alligator weed) must:

- (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6
- (b) eradicate the weed or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed.

## Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)

A person should not import into the state or sell.

# Water hyacinth

(*Eichhornia crassipes*)



Except in the local government areas of Eurobodalla, Kiama, City of Shellharbour and City of Wollonong, where the objective is containment

- Description** A floating water weed with light bluish-purple or dark blue flowers that have six distinct petals (the upper petal is darker purple with a yellow mark in the centre). Leaves are bright green, sometimes rusty yellow on their edges, and glossy, smooth and hairless
- Dispersal** Seeds are released from a capsule underwater and sink or accumulate in the floating mat, remaining viable for up to 20 years. Plants also reproduce vegetatively by producing daughter plants which can be spread by movement of contaminated fishing equipment or watercraft, or high water flows and flooding.
- Environment** Tropical, subtropical and warm temperate climates. It grows best in still or slow-flowing fresh water with high nutrient levels. The ideal temperature range is 28-30°C, though it still grows well between 22 and 35°C.

## Water Hyacinth Biosecurity Zone (Biosecurity Regulation 2017 - Part 5, Division 4)

An owner or occupier of land in the Water Hyacinth Biosecurity Zone on which there is the weed *Eichhornia crassipes* (water hyacinth) must:

- (a) if the weed is part of a new infestation of the weed on the land, notify the local control authority for the land as soon as practicable in accordance with Part 6
- (b) eradicate the weed, or if that is not practicable destroy as much of the weed as is practicable and suppress the spread of any remaining weed.

## Mandatory Measure (Division 8, Clause 33, Biosecurity Regulation 2017)

**A person should not import into the State or sell.**

# Ludwigia

(*Ludwigia peruviana*)



**Description** Ludwigia is an upright perennial shrub up to 3 m tall. It is deciduous in cooler climates and evergreen in warmer tropical climates, and can form floating islands on the water surface. Flowers are bright yellow and present during spring to autumn, although each flower lasts for only one day.



**Dispersal** Plants produce seeds that have high viability of about 80% and most germinate in spring. Seeds are mostly spread by flowing water and birds. The sticky seeds are also spread by attaching to clothing, feathers, hair and machinery. Ludwigia can also reproduce vegetatively from roots and stems - fragments can break off and spread downstream.



**Environment** Ludwigia grows in humid, warm temperate, subtropical and tropical climates. It establishes in moist or wet areas along creek banks, in swampy marshes and wetlands. It can grow in still or slow-moving water. In NSW, Ludwigia has mostly been found in creeks and wetland areas of the Greater Sydney region. A few plants have also been found in the Hunter and South Eastern regions.

# Sticky nightshade

(*Solanum sisymbriifolium*)



## Description

Sticky nightshade is an annual or short-lived perennial that is up to 1.5 m high. Most of the plant is hairy and covered in very sharp prickles. The flowers are white or pale bluish-purple, and star-shaped with 5 petals and yellow anthers. Leaves are sticky, hairy and prickly.



## Dispersal

The seeds spread by birds and foxes eating ripe fruit., dead branches with fruit blowing along the ground, movement of contaminated soil and fodder, or in soil on cultivation and earthmoving equipment. Sticky nightshade can grow from root or rhizome fragments and these can be spread through contaminated soil or machinery. Branches develop roots where they touch moist soil.



## Environment

Sticky nightshade grows in full sun and semi shade. It can grow in a wide variety of soil types and environments but grows best in moist soil conditions. Sticky nightshade has been mostly found in Western Sydney and the Central Tablelands, although isolated infestations have also been found in the Central West, South East, Hunter, North Coast, North West and Riverina regions.

# Containment

These weeds should be controlled in a manner that continuously inhibits the ability of the plant to spread. Plants or parts of the plant should not be sold, transported or knowingly distributed.

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## Outcomes to demonstrate compliance with General Biosecurity Duty

- Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value
- Land managers should mitigate spread of the plant from their land.

# Sea spurge

(*Euphorbia paralias*)

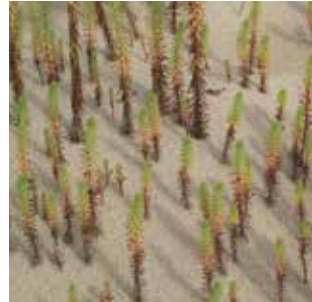


**Description** A small, upright, multi-stemmed shrub that usually grows between 20 and 70 cm tall. It has fleshy, blue-green leaves and small yellow-green flowers.

**Dispersal** Seeds can be spread a few metres from the parent plant when seeds ‘explode’ out of their capsules, or float in sea water for several years. They move around on ocean currents, sometimes washing up on far-away beaches. Seeds can also be spread by vehicles, ballast water or contaminated sand or soil.



**Environment** Sea spurge is a weed of coastal areas. It prefers sandy, free draining soils and is not affected by salt. It is mainly found along beaches, anywhere from the high water mark to rear dunes. It can also invade inland areas of native vegetation near beaches, including native grasslands, coastal heaths and scrublands.



This plant should be **contained** in the whole South East except for specific exclusion zones where the requirement is **eradicated**.

**Exclusion zone:** Wollongong, Shellharbour, Kiama Local Government Areas.

# Mysore thorn

(*Caesalpinia decapetala*)



**Description** Large evergreen shrub growing 2–4m high, or up to 20m high when climbing over supporting vegetation. Branches are covered in fine golden hairs and hooked thorns up to 5mm long.

**Dispersal** Seed is mainly dispersed by animals that feed on the fruit, such as rodents, birds and cattle, but may remain viable in soil for up to 10 years. Seed pods float on water, spreading seeds downstream to new locations.

**Environment** Prefers humid coastal conditions in sub-tropical to tropical climates. Mysore thorn grows on a variety of soil types and will tolerate annual rainfalls from 300 to 3000 mm.



This plant should be **eradicated** in the whole South East except for specific zones where the requirement is **containment**.

**Containment zone:** Wollongong Local Government Area.

**Exclusion zone:** Whole of region except containment zone.

# Spanish heath

(*Erica lusitanica*)



**Description** Upright, woody shrub that usually grows to around 2.5 m tall, but can get as tall as 3.5 m. It has lots of stiff, narrow leaves. From winter to early spring plants are covered in a mass of small white or pale pink, tube-shaped flowers.



**Dispersal** Seeds are produced in spring and new plants grow in spring or autumn.

**Environment** Spanish heath is native to southwestern Europe. It is used in the cut-flower industry and is often grown in gardens.



This plant should be **eradicated** in the whole South East except for specific zones where the requirement is **containment**.

**Containment zone:** Queanbeyan-Palerang, Snowy Monaro, Wingecarribee Local Government Areas.

**Exclusion zone:** Whole of region except containment zone.



# Coolatai grass

(*Hyparrhenia hirta*)



**Description** A long lived summer active perennial that produces short rhizomes that forms a dense grass tussocks and grows to 1.5 m. It has greyish-green leaves that turn orangey-red in winter, particularly after frost. Leaf sheaths are usually hairless and keeled.



**Dispersal** Hairy, awned seeds readily adhere to the hair and wool of animals, clothing and is easily caught on and in vehicles.

**Environment** Will grow on a range of soils but is most active on light to medium textured soils and will grow and increase on heavy clay soils if not waterlogged. It is cold tolerant and is found from sea level to 1500 m altitude.



This plant should be **eradicated** in the whole South East except for specific zones where the requirement is **containment**.

**Containment zone:** Goulburn Mulwaree, Shoalhaven, Snowy Monaro, Wingecarribee, Upper Lachlan, Wollongong, Shellharbour Local Government Area.

**Exclusion zone:** Whole of region except containment zone.

# Lantana

(*Lantana camara*)



## Description

A dense shrub, although it can drop its leaves in dry times. It usually grows from 2 – 4 m high but can scramble up into trees. Stems are square with short, curved prickles. Flowers are in clusters, and can be different colours depending on the type of lantana, age and location.



## Dispersal

A single plant can produce up to 12,000 fruit (and seeds) in a year most of which are spread by birds and animals that eat the fruit. Lantana regrows after cutting back, and cut stems grow new roots when they contact damp soil.

## Environment

Lantana prefers warm weather with more than 900 mm annual rainfall; well-drained, fertile soils; coastal areas and altitudes up to 1000 m. Can survive periods of drought. It tolerates poor soils and sand and will grow on stony hillsides as long as moisture is available.

This plant should be **eradicated** in the whole South East except for specific zones where the requirement is **containment**.

**Containment zone:** Eurobodalla, Shoalhaven, Wollongong, Shellharbour, Kiama Local Government Areas.

**Exclusion zone:** Whole of region except containment zone.

# Gorse

*(Ulex europaeus)*



**Description** Spiny, branched, evergreen, perennial shrub, which commonly grows 1–2.5 m in height. It is long-lived (up to 30 years) and has a deep and extensive root system. Leaves are fiercely spiny and have a waxy coating, are 6–30 mm long and 1.5 mm wide. They are dark green, stiff and stalkless. Flowers are bright yellow and pea-like, 15–25 mm long and have a distinct coconut scent.

**Dispersal** It is spread mainly by water movement and contaminated mud on vehicles, and animal movement may also contribute to dispersal.

**Environment** Highly adaptable and can withstand a variety of rainfall and soil conditions. It grows in a range of areas, including bushlands, pastures, roadsides, creek banks, along railway lines and in neglected areas such as quarries and mine sites.

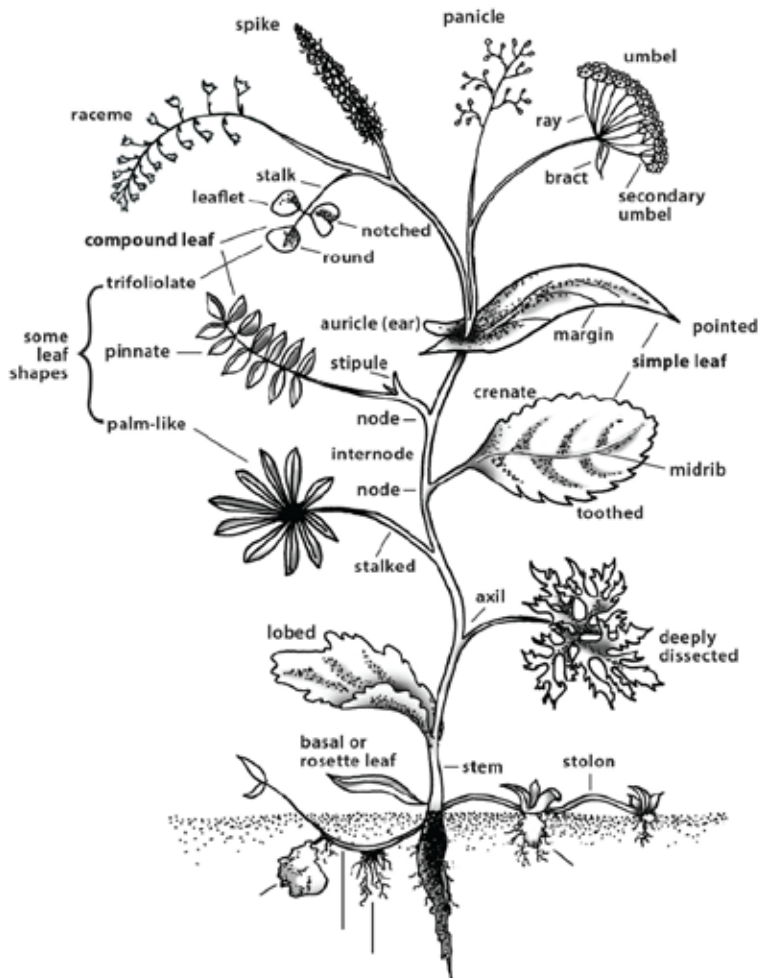
This plant should be **eradicated** in the whole South East except for specific zones where the requirement is **containment**.

**Containment zone:** Goulburn Mulwaree, Queanbeyan-Palerang, Snowy Monaro, Wingecarribee, Yass Valley Local Government Areas.

**Exclusion zone:** Whole of region except containment zone.

# Plant parts - terminology

Illustration adapted from: *Efficient Weed Management, Protecting your investment in the land* (adapted from Healy 1982)





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# Notes

# Notes

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Plant parts

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