



Prohibited Matter



Department of
Primary Industries

No Space for
Weeeeds

The financial impact of weeds on agriculture alone is approximately \$2.5 billion in lost production and \$1.8 billion in control activities every year. Effects on social and environmental values include a decline in native biodiversity due to competition and human health impacts such as triggering hay fever and allergies.

Prohibited Matter is biosecurity matter that is listed in Schedule 2 of the Biosecurity Act 2015, with the objective to prevent the entry of these species into NSW. Under this legislation, it is an offence to deal with or possess prohibited matter, and all persons have a duty to notify the local control authority of the presence or suspected presence of prohibited matter.

If you think you see any of the weeds in this booklet in south east NSW, please contact your local control authority (listed on page 34) or the Biosecurity Helpline on 1800 680 244.

Your Local Biosecurity Officers will work with NSW DPI in assisting landholders to ensure any incursions of these species are eradicated from the South East Region.

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Anchored water hyacinth

Eichhornia azurea



Anchored water hyacinth invades still or slow-moving freshwater bodies. It forms dense mats in and across the top of the water smothering native plants and reducing food and habitat for fish and other aquatic animals

Anchored water hyacinth is usually rooted in soil under the water but can also be free floating. Flowers are mostly white or lavender-blue with deep purple centres and a distinct yellow spot on the top petal clustered along an erect hairy spike 8-12cm above the water.

Black knapweed

Centaurea x moncktonii



Black knapweed invades pastures, crops and natural areas, produces chemicals to suppress other plants and is very difficult to control.

It's growth as a slender, upright, branched perennial herb to 1 m tall. It looks like a thistle but doesn't have spines on the leaves or flowers.

Bridal veil creeper

Asparagus declinatus



Bridal veil creeper can grow very densely at ground and shrub level. It also forms thick tuberous root mats. It is highly invasive and smothers native ground covers and shrubs

Bridal veil creeper is a scrambler or low climber up to 3 m tall with soft very fine needle-like foliage with greenish white flowers and light green egg-shaped fruit. The above ground parts of the plant wither and die back in warm weather, usually in late spring.

Broomrape

Orobranche spp. (all except native species)



Broomrapes can attach to the roots of broadleaf plants and extract their nutrients and water reducing crop yields by up to 70%. They are extremely difficult to eradicate

A characteristic of all broomrapes is they contain no chlorophyll and only the flowering stem can be seen above the ground. Flowers are 1–2.2 cm long, trumpet-shaped, pale-blue to violet in colour occurring in Summer.

Eurasian water milfoil

Myriophyllum spicatum



Eurasian water milfoil grows quickly and shades out and displaces native water plants reducing food and habitat for native fish and other aquatic animals

Leaves are olive green, feather-like and less than 4cm long, occurring in whorls of 4 around the stem. Most of the plant is submerged, however the flower is an upright spike when present.

Frogbit / Spongeplant

Limnobium spp. (all species)



Frogbit is a fast growing, floating fresh water weed that forms dense mats across the water's surface. It prevents light, food and shelter for fish and other aquatic animals.

Leaves are bright glossy green and rounded at the tip up to 4cm across. The young leaves are spongy on the underside and float lying flat on the water surface. The adult leaves becoming more oval shaped and can extend up to 50cm above the water.

Gamba Grass

Andropogon gayanus



Gamba grass is a perennial grass that grows in clumps up to 1 m wide and 4 m high. The clumps grow close together to form dense stands.

Gamba grass grows quickly and forms dense stands. This outcompetes native plants in grasslands, woodlands and along watercourses and can reduce water levels in downstream wetlands and streams. It also reduces available soil nitrogen levels.

Hawkweed

Hieracium or *Pilosella* sp. (all species)



Hawkweeds are highly invasive plants forming dense stands of up to 3800 plants per square metre. This is a major threat to biodiversity in conservation areas and native grasslands. Hawkweeds can also be a problem in pastures, on roadsides and in gardens.

Leaves are stalkless, hairy on both surfaces, with smooth or slightly toothed margins and are sometimes 'sticky' to touch occurring in rosettes. Flowers are yellow, orange or red and 'daisy-like'. They may be solitary or formed in a cluster of 5 to 30 flower heads. The flowers are 10–20 mm in diameter with square-ended petals, and grow on stems up to 40 cm. The flower stems are covered in short, stiff hairs.

Hydrocotyl/Water pennywort

Hydrocotyle ranunculoides



Hydrocotyl forms dense mats that reduce water quality and outcompete native vegetation.

Hydrocotyl is a perennial plant that can grow over water or on the edge of waterways. If on the edge or in shallow water, it has long stolons that creep in the mud. When floating, it forms a tangled mass of roots and leaf stems that can be submerged up to 50 cm into the water.

Leaves are either floating or growing up to 40 cm above the water's surface or muddy bank green up to 18 cm wide circular to kidney-shaped.

Flowers greenish-brown with red mottling circular and flattened 1–3 mm in diameter.

Karoo acacia

Vachellia karroo (syn. *Acacia karoo*)



Karoo acacia grows quickly and forms dense thorny thickets that can injure people, livestock, pets and wildlife.

Karoo grows into a tree or shrub to 12m tall. It is usually evergreen, but can lose its leaves in very dry or cold conditions. Leaves are fern like, light green to 12cm long. Thorns are in pairs at the base of the leaves from 10-25cm long and very strong. Flowers are yellow fluffy in ball-shaped pom-poms.

Kochia

Bassia scoparia



Kochia spreads rapidly and produces chemicals from its roots that inhibit the growth of nearby plants and competes with pastures reducing productivity. Kochia is palatable to livestock but can be toxic in large quantities. Deaths have occurred in cattle, sheep and horses.

Kochia is an annual shrub that grows up to 1.5 m tall and wide. It usually has a main stem with many branches that curl upwards. Leaves and flowers are green then change to yellow, red then brown as the plant ages.

Koster's curse

Clidemia hirta



Koster's curse spreads quickly and forms dense thickets invading forests and smothering native plants. It has the potential to cause widespread damage to sensitive ecosystems as it can grow in under the canopy of undisturbed rainforests.

Koster's curse is a bushy perennial shrub covered in reddish-brown bristly hairs. It usually grows to around 2 m high, although it can grow up to 5 m in moist, shady conditions

Leaves are bright, shiny green on top lighter green underneath 5–14 cm long and 4–7 cm wide oval-shaped with a pointed tip and finely toothed edges. Flowers are white or pinkish with 5 petals.

Lagarosiphon

Lagarosiphon major



Lagarosiphon forms dense mats that can be several metres thick. It can dominate freshwater lakes, dams and slow-moving streams preventing light penetrating the water while reducing water quality and oxygen levels.

Lagarosiphon is a perennial plant that grows underwater. It can be attached to the sediment in the waterway and be fully submerged or free floating.

Leaves are 5–20 mm long and 2–3 mm wide, tapering at the tip have finely toothed margins usually curve downwards towards the stem. Flowers 3.5 to 5.5 mm long with clear-white or pale pink petals on a very thin white stalk that floats.

Mexican feather grass

Nasella tenuissima (syn. *Stipa tenuissima*)



Mexican feather grass takes over pastures and is unpalatable to stock and reduces pasture quality contaminates hay and grain invades native grasslands and woodlands.

Mexican feather grass grows in upright tussocks up to 70 cm tall. The leaves in the centre of the clump are usually the tallest and upright but may droop over at the top. Seed heads are green or purplish and looks similar to Serrated tussock (*Nassella trichotoma*) which has drooping flower heads, rather than erect flower heads.

Miconia

Miconia spp. (all species)



Miconia are fast growing trees or sprawling shrubs that invade moist areas forming dense thickets and completely replacing native understorey plants in rainforests while reducing biodiversity.

Leaves are green on top are often purply-blue underneath from 20-80cm long. Flowers are white to pink in multiple clusters with 1000 or more flowers on each cluster.

Mikania vine

Mikania micrantha



Mikania is a sprawling perennial vine. It can grow up to 20 m high on supporting vegetation. Young shoots twine around the plant's own main stem until it finds something else to grow on. If there is nothing to climb on, it grows along the ground.

Mikania plants can start flowering as young as 4 months of age. Each vine can produce around 40,000 seeds per year which can remain viable in the soil for up to 7 years. Plants can grow from root pieces or stem fragments which form roots at the nodes.

Mimosa

Mimosa pigra



Mimosa forms dense prickly thickets that can invade grazing land, reducing productivity

and restrict livestock's access to water. It outcompetes native plants in grasslands, sedgeland and paperbark swamps.

Mimosa is a branched, prickly, perennial shrub that grows up to 6 m tall. Leaves are bright green

20–31 cm long and arranged alternately along the stem. Flowers are pink-mauve 1–2 cm wide and shaped like a pom-pom containing up to 100 individual florets (tiny flowers).

Parthenium weed

Parthenium hysterophorus



Parthenium weed grows quickly. It outcompetes other plants by competing for nutrients and moisture and by releasing chemicals into the soil that inhibit growth. It is unpalatable to stock, outcompetes degraded or drought affected pastures and causes human health problems causing respiratory problems and severe dermatitis.

Parthenium weed is erect annual herb that usually grows to around 1–1.5m tall. Leaves are pale green ranging from 5–20 cm long that are deeply divided covered in soft fine hair. Flowers are creamy white in clusters at the end of the stems resembling ‘baby’s breath’.

Pond Apple

Annona glabra



Pond apple is a semi-deciduous tree ranging from 3–6 m tall, but they can grow up to 15m. Leaves on mature trees sometimes turn yellow and fall off in the dry season. Pond apple usually have a single trunk with grey bark.

Leaves are 7–12 cm long and up to 6 cm wide, light to dark green on top, paler underneath with a prominent midrib and oval but tapered at the base and pointed at the tip. Flowers are creamy white to light yellow with a bright red center.

Prickly acacia

Vachellia nilotica (syn. *Acacia nilotica*)



Prickly acacia is a small tree that can form dense prickly thickets that can halve livestock productivity and make mustering difficult. It restricts animal access to water and shade and reduces habitat and food for native animals.

Prickly acacia is a thorny, spreading tree usually growing to 4–5 m but occasionally is up to 10 m tall. Leaves are fern like with bright yellow fluffy flowers that resemble wattle flowers. Thorns adorn the stem in pairs below the leaves from 1–5 cm long.

Rubber vine

Cryptostegia grandiflora



Rubber vine is a woody shrub or climber that can form dense thickets. It smothers and kills other plants, invades pastures, waterways and natural areas and is poisonous to people and animals. Rubber vine is a perennial many-stemmed woody shrub or vine that can grow to 3 m tall unsupported. Flowers are trumpet-shaped with five light-purple, pink or white petals up to 5 cm long and wide. Leaves are glossy dark green.



WARNING: Sap from the plant irritates skin and can cause burning, rashes and blisters. Dust from dried plants can cause irritation to the throat, nose and eyes. All parts of the plant are poisonous if eaten.

Siam weed

Chromolaena odorata



Siam weed is a fast-growing plant that forms dense thickets. It is toxic to livestock, can cause skin problems and asthma in allergy-prone people and outcompetes pastures reducing productivity as well as competing with native vegetation.

Siam weed is an upright or sprawling perennial shrub to 2 m tall. Leaves are diamond, teardrop or arrowhead-shaped 5–12 cm long and 3–7 cm wide and pungent smelling when crushed. Flowers are pale blue-lilac in bunches at the end of branches.

Spotted knapweed

Centaurea stoebe subsp. micranthos



Spotted knapweed outcompetes pasture plants and native plants and produces chemicals that suppress the growth of other plants.

Spotted knapweed grows to 1.2 m tall. It is a slender, upright, branched herb that looks like a thistle but without sharp spines on the leaves. All leaves are grey-green and finely hairy to velvety. Flowers are pink to purple on the ends of the stems.

Water caltrop

Trapa species



Water caltrop is a water weed that forms dense mats blocking waterways. Its leaves can float or grow under the water and it produces nuts with sharp spines. Water caltrop produces heavy seeds that are released in winter and quickly sink. Seeds germinate in water over 12°C, usually within the first 2 years, but may stay dormant for up to 12 years. It can also spread when floating parts of the plant break away from the stem.

Water caltrop prefers temperate climates but can grow in tropical regions. It grows best in slow-moving, fresh water bodies up to 5 m deep. Though usually it is in water bodies such as dams, ponds and lakes between 30 cm and 3.6 m deep. *Trapa nutans* grows best in water with high nutrients, but does not tolerate salinity.

Water soldier

Stratiotes aloides



Water soldier forms dense stands in waterways. It outcompetes native aquatic plants reduces food and habitat for fish and other aquatic animals.

Water soldier is a perennial plant that can grow in water up to 5 m deep. For most of the year it grows under water. In summer the plant flowers above the water. Leaves a large rosette that looks a bit like a pineapple top or aloe. The flowers have 3 white roundish petals and have a foul smell.

Witchweed

Striga spp. (except native S. parviflora)



Witchweeds are parasitic plants that take nutrients from host plants stunting or killing them and can completely destroy maize, millet, rice, sugarcane, sorghum and legume crops. They are very difficult to control.

Witchweeds are annual parasitic herbs. They grow near the base of their host plants and can't be seen until they emerge from the soil. Most witchweeds are only 15-20 cm tall when fully grown, but some are up to 60 cm.

Leaves green 6-40 mm long and 1-4 mm wide tapering to a pointed tip. Flowers are attached near the top of the stem, next to a leaf 5-8mm wide colored red, pink, yellow or purple.

Yellow burrhead

Limnocharis flava



Yellow burrhead invades lakes, rivers, dams, wetlands and irrigation channels. Once established, it can cause silt to build up altering or blocking water flow in channels and drains.

Yellow burrhead is an erect plant anchored in mud or sediment. It can grow up to 1 m above the water surface. Leaves are pale green 5-30 cm long and 4-25 cm wide velvety with 11-15 parallel veins. Flowers are pale yellow with 3 petals in a cup shape.

Acknowledgments

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Local Control Authorities in South East Region

- **Bega Valley Shire Council**
Zingel Place, Bega — 02 6499 2222
- **Eurobodalla Shire Council**
Vulcan Street, Moruya — 02 4474 1000
- **Goulburn Mulwaree Council**
184 Bourke Street, Goulburn — 4823 4444
- **Hilltops Council**
6-8 Market Street, Boorowa — 1300 445 586
- **Illawarra Shoalhaven Joint Organisation**
PO Box 148 Kiama NSW 2533 — 4232 3200
- **Queanbeyan Palerang Regional Council**
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- **Upper Lachlan Shire Council**
44 Spring Street Crookwell — 4839 1000
- **Wingecarribee Shire Council**
68 Elizabeth Street Moss Vale — 4868 0888
- **Yass Valley Council**
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