





WEEDS OF





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The Tasmanian Farmers & Graziers Association (TFGA), with the funding and support of the State Government, are helping to educate farmers and the wider Tasmanian community about on-farm biosecurity and why it is so important to follow on-farm biosecurity practices.

Declared weeds are a major threat to our unique natural environment, community spaces and world class agricultural industries. Property managers <u>are required by law to</u> <u>control</u> declared weeds.

This booklet has been prepared as a handy reference guide to just some of the major weed species present within Tasmania which have the potential to impact greatly on agriculture and our environment.

To find out more about which weeds are declared in Tasmania visit: *https://dpipwe.tas.gov.au/invasive-species/weeds/weeds-index/declared-weeds-index*

OR contact Biosecurity Tasmania on 03 6165 3777 or email Biosecurity.Tasmania@dpipwe.tas.gov.au

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African boxthorn (Lycium ferocissimum)

AFRICAN BOXTHORN

(Lycium ferocissimum)

How to identify:

- African boxthorn is a woody shrub reaching up to 4 metres in height
- The trunk and branches are light brown and smooth when young, turning darker brown or grey with age
- Glossy leaves
- The twigs end in hard, sharp spikes or thorns
- White flowers in summer
- Berry fruit begins as green then changes to red when ripe

Visit the DPIPWE weed index for further information: dpipwe.tas.gov.au/invasive-species/weeds/weeds-index/declaredweeds-index

Key advice

Don't rely on one go at removal; follow-up treatment is essential to avoid re-infestation.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

African boxthorn is found throughout most agricultural areas of Tasmania, including King Island and Cape Barren Island. It is commonly found along fence-lines and beneath overhead wires, as well as along roadsides, railways and waterways.

African feather grass (Cenchrus macrourus)

AFRICAN FEATHER GRASS

(Cenchrus macrourus)

If you locate African feather grass anywhere in Tasmania, or if you find a plant that you think could be African feather grass, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- African feather grass is a large tussock-forming grass growing to 2 metres high
- The leaves are light green above and grey-green below, and the leaf edge has fine serrations which can be felt as the finger is drawn from the tip to the base
- African feather grass produces a long thin flower head in late spring to summer which is pale brown to straw colour, often with a purplish tinge
- Prominent bristles approximately 10 mm long protrude out from the stem of the flower head

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weeds-index/declaredweeds-index

Key advice

There are many ornamental species that look like African feather grass which are not declared in Tasmania. Please keep this in mind when identifying African feather grass. If in doubt, please contact Biosecurity Tasmania.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

African feather grass has been found in the Derwent and Huon Valleys, particularly near New Norfolk.

Bathurst burr (Xanthium spinosum)

BATHURST BURR

If you locate Bathurst burr anywhere in Tasmania, or if you find a plant that you think could be Bathurst burr, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- Bathurst burr is a branching, perennial (longlived) plant growing to a height of about 80 cm
- The stems and lower surface of the leaves are covered with white woolly hairs, giving the plant a silvery appearance
- The leaves have a "crinkly" appearance and the leaf margins have rounded teeth
- The white flower clusters are densely packed, forming balls of flowers that surround the upper stems at each leaf node

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Plan your control program, this will save time and money in the longrun. Consider the impact of your control methods on off-target species, especially if herbicides are used.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Burr species (Xanthium spp.) have the capacity to grow throughout much of Tasmania. Burrs are most troublesome in grazing areas. Infestations occur on roadsides, waste areas, stockyards, dry banks, near farm buildings and on the site of old homesteads.

Blackberry (Rubus fruticosus agg.)

BLACKBERRY

(Rubus fruticosus agg.)

How to identify:

- Blackberries are spiny, perennial (long-lived) shrubs with trailing stems which can produce dense thickets
- Blackberry thickets can reach two or more metres in height and cover many square metres in area
- The canes may be erect, arching or trailing and they can reach 6 metres in length
- The fruit is in the form of a berry

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Get in early - for new infestations, eradicate before the plants reach the flowering stage. Once plants begin seeding, control becomes more difficult and expensive.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Blackberries occur in all settled areas of Tasmania. Blackberries prefer open situations and occur as a weed in disturbed bush, along stream-sides, roadsides, tracks and fence lines and in degraded pasture and neglected areas.

Broom (Cytisus scoparius)

BROOM

(Cytisus scoparius)

How to identify:

- English, flax-leaf, and Montpellier broom are small to medium sized shrubs which can grow up to a height of 3 metres
- The leaves are trifoliate, (each leaf divided into 3 leaflets), with the central leaflet being longer than the outer two leaflets
- Leaflets and young stems of flax-leaf broom are covered in woolly, grey hairs, giving the plant a silvery look when viewed from afar
- Broom flowers are bright yellow, growing in dense clusters

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Coordinate your control program with neighboring landholders where your weed problem crosses property boundaries.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Brooms were originally introduced to Tasmania as garden plants. English broom occurs throughout the settled areas of the state, being locally abundant on roadsides, waste / other disturbed areas, poor quality pastures and in disturbed bushland. Montpellier broom is widely distributed in Tasmania's north, north-east and in the south.

Californian thistle (Cirsium arvense)

CALIFORNIAN THISTLE (Cirsium arvense)

How to identify:

- Californian thistle stems are usually hairless
- The bracts which surround the flower heads are green with purple tips
- Each flower head contains a large number of rose-purple to lavender florets
- Californian thistle can grow to 1 metre in height
- This weed spreads from the root system, distinguishing it from other common thistles

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Expect your control program to last at least two to three years. Established infestations cannot be eliminated in one season.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Californian thistle occurs in most parts of Tasmania. It competes with pasture species and a heavy infestation can significantly reduce production.

Capeweed (Arctotheca calendula)

CAPEWEED

(Arctotheca calendula)

How to identify:

- Capeweed is an autumn-germinating annual plant, with seedlings appearing from late February through to late April
- As plants mature they develop into a rosette, or whorl of leaves close to the ground
- Flowering occurs in late spring and early summer; the masses of yellow, daisy-like flowers with dark, almost black centers are conspicuous from a considerable distance
- Capeweed dies off in late summer

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/non-declared-weeds-index

Key advice

When physically removing, use a fork as Capeweed can be difficult to pull by hand. First loosen the soil around the plant then lift, taking care to remove as much of the root system as possible.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Capeweed is not declared in Tasmania. Capeweed is distributed throughout Tasmania, particularly on light sandy soils.

Chilean needle grass (Nassella neesiana)

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CHILEAN NEEDLE GRASS

If you locate Chilean needle grass anywhere in Tasmania, or if you find a plant that you think could be Chilean needle grass, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- Chilean needle grass is a perennial (long-lived) tussock-forming grass growing to 1 metre in height
- The leaves are 1 to 5 mm wide, flat and strongly ribbed on their upper surface, with leaf edges that are rough to touch
- The flowering seed heads are a distinctive purplish colour and the seeds are very sharp at the point
- Chilean needle grass flowers mainly from September to December but can flower year round

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Chilean needle grass has a damaging effect on sheep as long, sharp seeds injure the animals, downgrading lamb and sheep meat, wool, skins and hides.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Currently Chilean needle grass populations are found in urban areas around Hobart, particularly the Eastern shore, where it can be found along roadside reserves and nature strips. It is also known in rural areas in the south of the state and on Flinders Island.

Datura (Datura species)



If you locate Datura anywhere in Tasmania, or if you find a plant that you think could be Datura, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- Daturas are bushy annual herbs growing to 1.5 metres high but more commonly from 30 to 60 cm
- Daturas have distinctive erect, trumpet-shaped flowers with pointed lobes which grow singly from a fork of the stem
- Flowers may be white, pink or purple, and the fruit is also distinctive, being a globular capsule covered in spines
- The leaves are large (up to 20-35 cm long) with bluntly toothed margins, and have an unpleasant odour when crushed

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Don't carelessly discard Datura plants or soil removed from the infestation site, as this can spread the plant to new areas. All parts of the plant are toxic to humans and livestock and care should be taken when removing.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

The distribution of Datura in Tasmania is limited. Datura occurs as an occasional weed of roadsides and neglected areas on the north-west coast and in the north-east. Daturas are also occasionally found in older or abandoned gardens.

Espartillo (Amelichloa caudata, syn. Achnatherum caudatum).

(Amelichloa caudata, syn. Achnatherum caudatum)

If you locate Espartillo anywhere in Tasmania, or if you find a plant that you think could be Espartillo, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- Espartillo is a perennial (long-lived), tussock-forming grass that grows from 75 cm to 100 cm high
- It is similar to native spear grasses and is not easy to identify, so that a new infestation of Espartillo may only be recognised once it has reached a large size
- Espartillo leaves are sheath-like and tightly pressed to the stems, loosening as they grow upwards
- The stiff leaf blades are strongly ribbed on both sides

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Slashing and mowing is not effective as it can spread the hard, resistant stem-seeds. Digging out is more effective. Espartillo can be confused with other natives . If in doubt, please contact Biosecurity Tasmania.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

The distribution of Espartillo in Tasmania is relatively limited, with localised infestations on Flinders Island and around Brighton. Espartillo occurs on disturbed soils and is found as a weed of roadsides, stream-banks and neglected areas.

Gorse (Ulex europaeus)

GORSE

(Ulex europaeus)

How to identify:

- Gorse is a prickly evergreen shrub which may grow to a height and diameter in excess of 3 metres
- All the stems and leaves end in a sharp spine
- Gorse flowers are bright yellow pea-like flowers, and are borne all over the plant
- The buds develop during February and March, although flowering tends to occur in spring and autumn

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Preventing the introduction of gorse to gorse-free areas is the best means of control. Good machinery and equipment hygienepractices are vital.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Gorse is widely distributed in Tasmania and is found in most municipalities.

Horehound (Marrubium vulgare

HOREHOUND

(Marrubium vulgare)

How to identify:

- Horehound is a branching, perennial (long-lived) plant growing to a height of about 80 cm
- The stems and lower surface of the leaves are covered with white woolly hairs, giving the plant a silvery appearance
- The leaves have a "crinkly" appearance and the leaf margins have rounded teeth
- The white flower clusters are densely packed, forming balls of flowers that surround the upper stems at each leaf node

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Small infestations can be controlled by grubbing plants.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Horehound is found throughout Tasmania, and is most troublesome in the Midlands grazing areas. Infestations of horehound occur on roadsides, waste areas, stockyards, dry banks, near farm buildings and on the site of old homesteads.

Paterson's curse (Echium plantagineum)

PATERSON'S CURSE

If you locate Paterson's curse anywhere in Tasmania, or if you find a plant that you think could be Paterson's curse, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

How to identify:

- Paterson's curse is an erect plant around 60 to 90 cm high
- Seedlings appear in autumn and develop into a rosette (a flat whorl of leaves close to the ground) in winter
- One or several flowering stems are produced in late winter and flowering occurs in spring
- Flowers are trumpet shaped and usually blue/purple, but may be pink or white

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Hand hoeing, pulling, and cutting can be used to remove isolated plants provided the growing tip and the top 20 to 40 cm of the tap root are removed, otherwise regrowth may occur. Paterson's curse is poisonous to grazing animals.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Paterson's curse occurs in all agricultural areas of Tasmania as small scattered infestations. It is most common near old homesteads, on housing blocks in suburbs, in rural areas where poultry are kept, and along roadsides.

Ragwort (Senecio jacobaed)

RAGWORT

(Senecio jacobaea)

How to identify:

- Ragwort lives for two years if left undisturbed
- Most seed germination occurs in autumn, and the plant forms a rosette (in its first year a cluster of leaves close to the ground), and in its second year an erect plant up to 1.5 metres in height with convoluted dark green leaves and bright yellow flowers
- The flowers are formed at the end of small branchlets resulting in a characteristic flat-topped flower arrangement

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Pulling or grubbing ragwort can be effective but only if the crown and larger roots are completely removed from the ground. Ragwort is poisonous to stock, especially cattle and horses.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Ragwort is widely distributed throughout the grazing areas of Tasmania, with the exception of the Midlands where it occurs only in small patches. Ragwort also occurs on the shores of several lakes on the Central Plateau, and along roadsides in many areas of the state.

Servated tussock (Nassella trichotoma)

SERRATED TUSSOCK (Nassella trichotoma)

Serrated tussock is similar to several of Tasmania's native tussock grasses, and is frequently overlooked until it begins to flower, at which time it is easily recognisable. To distinguish the difference from native tussock grasses, visit https://dpipwe.tas.gov.au/invasive-species/weeds/weeds-index/declared-weedsindex/serrated- tussock

How to identify:

- Serrated tussock is a perennial (long-lived) tussockforming grass with a deep root system
- The leaves of serrated tussock feel rough (or serrated) if the finger and thumb are drawn down the blade
- Flower stalks usually appear in spring, but may appear earlier in dry years and later in wetter years
- A tussock in full flower presents a distinctly purple appearance due to the large number of purple florets

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds-index/declared-weeds-index If you locate Serrated tussock anywhere in Tasmania, or if you find a plant that you think could be Serrated tussock, immediately contact Biosecurity Tasmania on 03 6165 3777 to report this weed.

Key advice

For long term control, vigorous improved pastures must be established to compete with serrated tussock to help prevent re-invasion. Ploughing or spraying alone without pasture establishment is not effective because serrated tussock will regenerate from seed reserves in the soil.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Large, established populations of Serrated tussock are located in the south east of Tasmania, particularly around Rokeby, South Arm, Sandford and Richmond. Other populations are known on the east coast at Swansea and Little Swanport, King Island and more recently recorded infestations are in the southern and northern Midland grazing areas.



SPANISH HEATH

(E. lusitanica)

How to identify:

- Spanish heath, (Heaths, Heathers or Ericas), are commonly believed to be native plants as they have a similar shape and size to native heaths with their stiff, narrow leaves
- In winter and spring, they may be covered in flowers, making them popular for the cut-flower industry
- All are perennial (long-lived) shrubs, growing to a height of between 1.5 to 2 metres and occasionally reaching 3.5 metres
- Flowers are either bell-shaped, tubular or globular with 4 lobes

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Large plants can have very extensive root systems, and digging out or mechanical removal may result in soil erosion. Alternative control options should be considered.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Erica has been introduced in Tasmania almost exclusively as garden plants. The seven Erica species currently known to have populations across Tasmania are: Tree Heath (*E. arborea*), Berry Heath (*E. baccans*), Water Heath (*E. caffra*), Bicolored Heath (*E. discolor*), Erica Holosericea, Spanish Heath (*E. lusitanica*), and Besom Heath (*E. Scoparia*).

St john's wort (Hypericum perforatum)

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ST JOHN'S WORT

(Hypericum perforatum)

How to identify:

- St john's wort is a perennial (long-lived) herb growing between 30 and 70 cm and occasionally to 1.2 metres high
- The reddish stems arise from the rootstock or woody crown
- The leaves are stalkless and hairless and have numerous small oil glands that give the leaf a perforated appearance when held up to the light
- The flowers are bright yellow with black glands dotted along the margins of the petals

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

St john's wort is easy to identify when in flower, and small isolated infestations should be removed as soon as possible, preventing further spread. Livestock grazing St John's wort can lead to low productivity and sometimes death.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

St john's wort occurs as a localised weed of roadsides, poorly managed grazing land, neglected areas and disturbed bush-land areas of Tasmania, particularly in the northern Midlands, north-east, central north coast and the south east.

Whiteweed (Lepidium draba)

WHITEWEED

(Lepidium draba)

How to identify:

- Whiteweed is closely related to crop plants such as cabbages and rapeseed
- It is an erect, herbaceous (non-woody) plant growing to 90 cm high with white, umbrella shaped flower heads which appear in October and November
- Individual flowers are 4mm in diameter with 4 white petals

Visit the DPIPWE weed index for further information: https://dpipwe.tas.gov.au/invasive-species/weeds/weedsindex/declared-weeds-index

Key advice

Don't expect sheep grazing to remove whiteweed from an infested area - whiteweed roots will remain in the soil and regenerate when sheep are removed.

For control options, please refer to the DPIPWE website: dpipwe.tas.gov.au

Where in Tasmania?

Whiteweed is common in the southeastern and Midlands areas of Tasmania and occurs occasionally in the north of the State. Whiteweed appears to be spreading in the Midlands and Derwent Valley, especially along roadsides.