



CHILEAN NEEDLE GRASS

(*Nassella neesiana*)

A major agricultural and environmental weed in Victoria and NSW, Chilean Needle Grass is a tufted perennial to 1 m in height.

It is distinguished by nodes covered with short soft hair, and the bracts enclosing the flower a purplish colour to 25 mm long. Leaves are up to 5 mm wide

Spread is by seeds produced in the seed heads as well as beneath leaf-sheaths above the nodes of flowering shoots and at the stem base. Stem seeds enable the plant to reproduce even if flowering is prevented.

Germination mainly occurs in autumn and spring. Of poor feed value when flowering and seeding. Causes vegetable fault in wool.



BLACKBERRY

(*Rubus fruticosus* (agg.) spp.)

A perennial plant with up to 6 metre long hookspined canes capable of forming new plants where the cane tips contact the ground. The crowns of the plant form new canes each year and 2 year old canes bear white and pink flowers at the ends which develop into black succulent berries.

The plant is widely spread by birds and animals and causes problems in forests, creeks, riverbanks and roadsides. Stock carrying capacity is severely reduced because of the rambling nature of the plant.



SILVERLEAF NIGHTSHADE

(*Solanum elaeagnifolium*)

Silverleaf Nightshade is an erect, deep rooted perennial plant with annual summer top-growth. New shoots are produced in spring from the crowns of vertical and lateral roots and root segments. Flowering begins in November and December and may continue until March. Berries may form in December and usually ripen four to eight weeks after seedset.

Each plant can produce up to sixty berries each containing about 75 seeds.

Cultivation encourages the spread of Silverleaf Nightshade by breaking up the root system and stimulating germination.



SCOTCH THISTLE

(*Onopordum acanthium*)

An erect annual or biennial thistle to 2 metres high, with whitish, woolly stems and leaves and purple flowers.

Spines are not as numerous and coarse on the leaves and stems as they are on Illyrian Thistle. The outer bracts on the flowerheads are yellowish in colour and are reflexed whereas with Illyrian Thistleheads, bracts are broader, reddish purple and are all reflexed.



PARTHENIUM WEED

(*Parthenium hysterophorus*)

This plant grows up to 1.5metres tall. It has creamy-white flowers that grow in clusters, also deeply lobed pale green leaves which branch alternately on stems and are covered with soft, fine hair. It can cause respiratory problems and severe dermatitis in humans and animals. Livestock carrying capacity is reduced. It is found in neglected areas around yards and buildings, roadsides, also in over stocked areas. It is spread by seed through hay and grain, contaminated vehicles and machinery.



NOOGOORA BURR

(*Xanthium* spp.)

A robust summer growing annual plant usually found on creekbeds, river flats or moist flood prone areas. The plant can invade pastures and cultivation, attains a height of 2 metres with spreading branches to cover an area of 2metres. The alternate broad lobed leave are on coarse ribbed branches. The fruit ripens into a spiny burr 2cm. long densely beset with hooked spines at end.

The species is toxic to livestock and can cause dermatitis and mechanical injury to both humans and livestock.



AFRICAN LOVE GRASS

(*Eragrostis curvula*)

A vigorous densely tufted, perennial grass 30 to 120cm high. Generally considered to be unpalatable. Spread is by seeds which are readily moved by stock and machinery. Seeds from January to March.



ST JOHN'S WORT

(*Hypericum perforatum*)

An erect perennial herb or small shrub with a creeping rootstock. Leaves when viewed against light show characteristic oil glands. Flowers in Spring, early Summer bearing bright yellow flowers. The dead brown flower stalks are clearly visible at other times during the year.

Toxins in the leaves can cause photosensitivity, hyposensitivity (heat and cold stress) and infertility in grazing animals. The plant readily invades unimproved overgrazed pastures.



JOHNSON GRASS

(*Sorghum halepense*)

A summer growing perennial sorghum up to 2 metres tall. Has long leaves with prominent white midrib and an open seedhead. Seeds are usually dark brown or black when mature and unlike forage sorghum, has rhizomes (root segments).

Johnson grass like all sorghums can be toxic to livestock especially during periods of new growth. Is a safety hazard along roadsides restricting vision and a pollen contaminant of sorghum and other crops.



DODDER

(*Cuscuta* spp.)

Dodders are annual, leafless flowering plants living as parasites on host plants attached by suckers. They are reliant on the host plant for nutrient, therefore reducing the yield of the crop. The stems are threadlike, usually bright yellow. The flowers are bell shaped in clusters along the stems and are mainly cream-white in appearance.

Dodder is spread by the harvesting with the host crop, flooding and can pass through animals in viable conditions.



NODDING THISTLE

(*Carduus nutans*)

A invasive weed of pastures, particularly in areas with rainfall in excess of 500mm. It is an erect annual or biennial thistle growing to 1.6 metres but commonly 80 to 120 cm.

Flower heads tend to droop over and nod in the breeze. Flower colour ranges from pink to red or mauve.

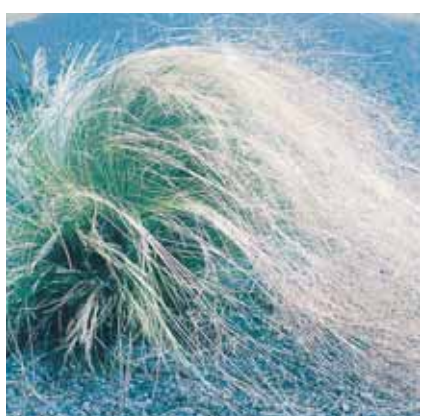


SCOTCH or ENGLISH BROOM

(*Cytisus scoparius*)

An erect shrub to 3 metres, but more commonly to 2 metres high. It is an invasive weed of disturbed soils, roadsides and neglected areas. It tolerates a wide range of soils but not alkaline soils.

Once established it tends to dominate, smothering other species.



SERRATED TUSOCK

(*Nassella trichotoma*)

A perennial tussock forming grass to 50 cm. high and 25 cm. diameter at the base. Only eaten by stock if no other feed available. Animals are unable to digest the plant in most stages of growth. Can dramatically reduce carrying capacity of country.



SPINY BURRGRASS

(*Cenchrus incertus* & *Cenchrus longispinus*)

Erect and spreading annual grass to 60 cm high. Forms a spike like panicle 3 to 8 centimetres long consisting of up to 40 spiny burrs.

Grows most readily in disturbed sandy soil. It is a noxious weed because of its obnoxious burrs which are difficult to extract from skin and clothes.

Can cause lameness in dogs and sheep.



BLUE HELIOTROPE

(*Heliotropium amplexicaule*)

This perennial plant has a deep taproot which allows it to die in winter, then, flower again in spring-autumn.

This plant grows up to 15 centimetres high and its leaves are alternate, dull green soft and tapered at both ends while its flowers which grow in dense clusters are purple or lilac with yellow centres and are less than 5mm diameter. Fresh stems and leaves emit an ill-smelling aroma when crushed.

It is often found along roadsides, degraded and overstocked pastures and reserves. It is dangerous to livestock due to the presence of toxic alkaloids.



PRAIRIE GROUND CHERRY

(*Physalis viscosa* L)

A perennial herb to 60 cm in height. Leaves are a light green colour around 5cm in length and 3cm wide. Flowers are pale yellow with petals joined in a tube to 15mm long.

Distinguished by rhizomatous rootstock, plants are sparsely hairy with a papery and inflated fruiting body. Seeds germinate and plants reshoot from roots in spring, growing over summer. The weed is spread by animals that eat the fruit, water, and by cultivation spreading cut root sections.

Prairie Ground Cherry is currently a weed of irrigated land, railways and roadsides.



BUFFALO BURR

(*Solanum rostratum*)

A deep rooted annual plant to 60cm high producing yellow flowers in the late spring and summer. The fruits are enclosed in the dense prickles and are found on the stems. This plant can be dispersed by sheep due to the construction of the burr as it attaches itself to the wool which as a result in turn causes contamination.



COOLATAI GRASS

(*Hyparrhenia hirta*)

Coolatai Grass is a tufted perennial growing to a height of approximately 1.2 m with leaves 2-4 mm wide. It flowers all year round and develops a seed head of around 90 cm in length. It is distinguished by paired racemes from 1.5-5 cm in length. Locally abundant on the north western slopes of New South Wales where it is becoming dominant on roadsides, displacing most other grasses and herbs. It is now invading pasture areas.



BATHURST BURR

(*Xanthium* spp.)

A robust summer growing annual plant usually found on creekbeds, riverflats or moist flood prone areas. The plant can invade pastures and cultivation, attains a height of 1 metre. Bathurst Burrs' hooked spines make it well adaptable for dispersal and can also be a major source of vegetable fault in wool therefore reducing its value.



AFRICAN BOXTHORN

(*Lycium ferocissimum*)

A tall, erect, thorny perennial shrub, often impenetrable thickets. Branches are stout, sometimes drooping and end in a strong sharp spine. Flowers cream streaked with lilac. Berries are small, bright orange, succulent and globular.

The bushes harbour vermin such as rabbits and the berries are host for fruit fly and other insects.



GREEN CESTRUM

(*Cestrum parqui*)

A woody perennial shrub to 3 m high. Leaves to 12 cm long, producing an unpleasant odour when crushed. Fruit (berry) is egg-shaped about 1 cm long. Flowers are in loose clusters to 3 cm long and yellow to greenish yellow in colour. They have an unpleasant odour by day but are sweet smelling by night.

The weed is shade tolerant and frost hardy and very toxic to stock but generally not palatable. It is spread by seed which can remain dormant in soil for years. It can also be spread by birds excreting seeds, water dispersal, cut root sections and creeping roots. It is still grown in some gardens where it often escapes.



GORSE

(*Ulex Europaeus*)

A dense spiny shrub which can grow over 3.5metres high. Originally introduced from Europe as a hedge plant, it spread vigorously and covers wide areas of Tasmania, Victoria and New South Wales.



WILD RADISH

(*Raphanus raphanistrum*)

This weed is a winter and spring growing annual, but with suitable conditions it can grow and mature throughout the year. It is an erect plant growing up to 50 centimetres tall.

The seeds are produced in pods, has 4 petalled flowers arranged in a cross. The flowers are mostly a creamy-whitecolour. This weed contaminates wheat grain, also other winter cereals, intensive grazing and cutting pastures for hay or silage can assist in reducing seed set for subsequent years.



DEVIL'S CLAW

Purple Flowered

(*Proboscidea louisianica*)

Resembles yellow-flowered Devil's Claw (*Ibicela lutea*) but the flowers are pale lilac. Tinted with yellow and dotted with purple inside. They are borne on stalks in open clusters. The mature capsule has a roughened and pitted surface, and they are summer flowering. It is found on the roadsides, cultivated areas and on river flats. Scattered within the eastern districts. The yellow-flowered Devil's Claw seeds are eaten by the Sulphur Crested Cockatoos.

The Lachlan Valley Noxious Plants Advisory Committee was formed in the mid eighties to coordinate eradication programs for all noxious weeds common to the region.

This committee coordinates weed control over nine Councils and has representation from Rural Lands Protection Boards, Rail Infrastructure Corporation and Belubula Landholders. The importance of these committees is now being recognized at a State level and is being utilized by the Department of Primary Industries to coordinate Regional weed action plans and for implementing the Noxious Weed strategy.

A CO-ORDINATED APPROACH TO WEED CONTROL



Every home owner, landowner, occupier or person(s) leasing or renting properties must be aware of their obligations and responsibilities to control noxious plants.

The person(s) who has the care, control and use of the land is the occupier. They are responsible for the control of noxious plants.

There are many other situations such as watercourses, unenclosed roads, laneways etc, which adjoining owners should enquire at their local Council to determine their responsibilities. Each occupier or subsequent owner/occupier who fails without reasonable excuse to take reasonable and effective measures to control a noxious weed according to the four (4) control categories shall be liable to a penalty in accordance with the Noxious Weeds Act 1993.

OBLIGATION & PENALTIES

SUMMARY OF DECLARED NOXIOUS WEEDS

Common name	Bland	Cabonne	Cootamundra	Cowra	Cobar	Forbes	Lachlan	Parkes	Weddin
AFRICAN BOXTHORN <i>Lycium ferocissimum</i>	4	4	4	4	4	4	4	4	4
ALLIGATOR WEED <i>Alternanthera philoxeroides</i>	2	2	2	2	2	2	2	2	2
BATHURST NOOGORA <i>Xanthium spp.</i>	4	4	4	4	4	4	4	4	4
BLACKBERRY <i>Rubus fruticosus (agg. Spp)</i>	4	4	4	4	4	4	4	4	4
BLUE HELIOTROPE <i>Heliotropium amplexicaule</i>	4	4	4	4	4	4	4	4	4
BUFFALO BURR <i>Solanum rostratum, Morea spp</i>	4	4	4	4	4	4	4	4	4
CHILEAN NEEDLE GRASS <i>Nassella neesiana</i>	3	3	3	3	3	3	3	3	3
COOLTAI GRASS <i>Hyparrhenia hirta</i>	3	3	3	3	3	3	3	3	3
DEVILS CLAW (Yellow flower) <i>Ibicella lutea</i>	4	4	4	4	4	4	4	4	4
DEVILS CLAW (Purple flower) <i>Proboscidea Probooscidea</i>	4	4	4	4	4	4	4	4	4
DODDER <i>Cuscuta spp. Excl native spp</i>	5	5	5	5	5	5	5	5	5
GREEN CESTRUM <i>Cestrum parqui L'Her</i>	3	3	3	3	3	3	3	3	3
HARRISIA CACTUS <i>Harrisia spp.</i>	4	4	4	4	4	4	4	4	4
HORSETAIL <i>Equisetum spp.</i>	1	1	1	1	1	1	1	1	1
JOHNSON GRASS <i>Sorghum halepense</i>	4	4	4	4	4	4	4	4	4
LAGAROSIPHON <i>Lagarosiphon major</i>	1	1	1	1	1	1	1	1	1
MESQUITE <i>Prosopis spp.</i>	2	2	2	2	2	2	2	2	2
PARTHENIUM WEED <i>Parthenium hysterophorus</i>	1	1	1	1	1	1	1	1	1
PERENNIAL GROUND CHERRY <i>Physalis virginiana</i>	4	4	4	4	4	4	4	4	4
PRAIRIE GROUND CHERRY <i>Physalis viscosa</i>	4	4	4	4	4	4	4	4	4
PRICKLY ACACIA <i>Acacia nilotica</i>	1	1	1	1	1	1	1	1	1
PRICKLY PEARS <i>Opuntia & Cylindropuntia spp</i>	4	4	4	4	4	4	4	4	4
RHUS TREE <i>Toxicodendron succedaneum</i>	4	4	4	4	4	4	4	4	4
SALVINA <i>Salvinia molesta</i>	2	2	2	2	2	2	2	2	2
SCOTCH/ILLYRIAN/STEMLESS THISTLES <i>Onopordum spp.</i>	4	4	4	4	4	4	4	4	4
SERRATED TUSSOCK <i>Nassella trichotoma</i>	3	3	3	3	3	3	3	3	3
SIFTON BUSH <i>Cassinia arcuata</i>	4	4	4	4	4	4	4	4	4
SILVER LEAF NIGHTSHADE <i>Solanum elaeagnifolium</i>	4	4	4	4	4	4	4	4	4
SPINY BURR GRASS (Incertus) <i>Cenchrus incertus</i>	4	4	4	4	4	4	4	4	4
SPINY BURR GRASS (Longispinus) <i>Cenchrus longispinus</i>	4	4	4	4	4	4	4	4	4
ST JOHNS WORT <i>Hyperticum perforatum</i>	3	3	3	3	3	3	3	3	3
WATER HYACINTH <i>Eichhornia crassipes</i>	2	2	2	2	2	2	2	2	2
WATER LETTUCE <i>Pistia stratiotes</i>	1	1	1	1	1	1	1	1	1
WILD RADISH <i>Raphanus raphanistrum</i>	4	4	4	4	4	4	4	4	4

Control Classes of Noxious Weeds significant to the following Lachlan Valley Shires

COUNCIL AREAS in the LACHLAN VALLEY NOXIOUS PLANTS ADVISORY COMMITTEE

BLAND SHIRE COUNCIL
Glenn Neyland Noxious Weeds Officer
02 69722266

CABONNE SHIRE COUNCIL
Norm Townsend Noxious Weeds Officer
02 6392 3202

COBAR SHIRE COUNCIL
Noxious Weeds Officer -Waiting on new Weeds Officer
02 6836 5888

COOTAMUNDRA SHIRE COUNCIL
Stuart Moorby Noxious Weeds Officer
02 6940 2116

COWRA SHIRE COUNCIL
Kevin Nelligan Noxious Weeds Officer
02 63402135

FORBES SHIRE COUNCIL
John Ryan Noxious Weeds Officer
02 6850 1300

LACHLAN SHIRE COUNCIL
Alan Dodgson Noxious Weeds Officer
02 6895 4444

PARKES SHIRE COUNCIL
Matt Bailey Noxious Weeds Officer
02 6861 2343

WEDDIN SHIRE COUNCIL
Michael Martins Noxious Weeds Officer
02 6343 1212

Selected Photographs courtesy of NSW Department of Primary Industries



METHODS OF WEED CONTROL

The aim of weed control is to deplete the weed seed reservoir and prevent further replenishment of the seed store by preventing the weed to grow and to remove vegetative plant parts including roots, stems, branches, stolons, tubers or other plant parts which may allow the plant to vegetatively propagate.

The majority of weeds were introduced from other countries including America, Europe, Asia and Africa. Some arrived by accident while others were brought in for various reasons such as food, natural medicines, or for their aesthetic values. Their natural enemies which kept them under control in their native countries were not present here in Australia and as a consequence their spread has been unrestricted.

Technology advancement during the past 50 years has added a new facet to weed control. This is through the use of herbicides. Herbicides are not necessarily the magic answer to weed problems but can be in most cases the cheapest and easiest way to control weeds.

WHAT IS A NOXIOUS WEED

A Noxious Weed is a plant that has been recognised as having an adverse effect on Human health, agriculture and the environment. These plants are generally very hardy and have the capability to rapidly spread. After a prioritisation process they are declared noxious in certain local government areas by the Minister for Primary Industries, and must be controlled by owners and occupiers of land to certain standards.

Noxious Weeds have been divided into five classes according to their distribution, actions required for control and their effects on human health, primary production and the environment:

- Class 1 - State Prohibited Weeds
- Class 2 - Regionally Prohibited Weeds
- Class 3 - Regionally Controlled Weeds
- Class 4 - Locally Controlled Weeds
- Class 5 - Restricted Plants

The characteristics and control measures of each class are as follows:

(a) CLASS 1 noxious weeds are plants that pose a potentially serious threat to primary production or the environment and are not present in the State or are present only to a limited extent.

The plant must be eradicated from the land and the land must be kept free of the weed.

(b) CLASS 2 noxious weeds are plants that pose a potentially serious threat to primary production or the environment of a region to which the order applies and are not present in the region or are present only to a limited extent.

For complete eradication it is usual to adopt more than one or more of the following: Herbicides, natural biological control, manipulated biological control, pulling/grubbing, slashing, ploughing. The methodical arrangement of various weed control techniques to control or eliminate a weed problem is called an Integrated Pest Management (IPM) strategy. IPM generally allows better management of a weed problem.

An IPM strategy must be individual, practical, economically sound and flexible because it will need to be adapted from year to year as the weed problem changes or new control techniques occur. New or recent advances in control techniques include releases of specific biological agents (classical bioagents) use of mycoherbicides (inundative bioagents), controlled grazing strategy and use of grazing animals for brush weed control.

The plant must be eradicated from the land and the land must be kept free of the weed.

(c) CLASS 3 noxious weeds are plants that pose a serious threat to primary production or the environment of an area to which the order applies, are not widely distributed in the area and are likely to spread in the area or to another area. The plant must be fully and continuously suppressed and destroyed.

(d) CLASS 4 noxious weeds are plants that pose a threat to primary production, the environment or human health, are widely distributed in an area to which the order applies and are likely to spread in the area or to another area.

'The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local control authority', (and where applicable) 'and the plant may not be sold, propagated or knowingly distributed'.

(e) CLASS 5 noxious weeds are plants that are likely, by their sale or the sale of their seeds or movement within the State or an area of the State, to spread in the State or outside the State.

The requirements in the Noxious weeds act 1993 for a notifiable weed must be complied with - 'An occupier of land (other than an LCA) on which there is a notifiable weed must notify the local control authority for the land of that fact within 3 days after becoming aware that the notifiable weed is on the land.'

A noxious weed that is classified as a **Class 1, 2 or 5** noxious weed is referred to in this Act as a notifiable weed.