



GENERAL BIOSECURITY DUTY

WHAT IS MY DUTY?



**Prevent
biosecurity risks**



**Eliminate
risks**



**Minimise
risks**



As much as is
reasonable

WHEN DO I HAVE A DUTY?

If you deal with, or deal
with a carrier of biosecurity
matter you have a duty

e.g. weeds, animals,
plants or machinery...



And if you
should know
that there is a risk

HOW DO I FULFILL MY DUTY?

By referring to:



- State strategic plans
- Regional strategies
- Local plans
- Guidelines & advisory material
- Codes of practice & industry standards
- Mandatory measures





WEED IMPACT ON YOUR FARM AND PREVENTION

- The impact of **weeds** on **agriculture**. **Weeds** reduce **farm** and forest productivity, they invade crops, smother pastures and in some cases can harm livestock. They aggressively compete for water, nutrients and sunlight, resulting in reduced crop yield and poor pasture quality.



HOW WEEDS CAN BE TRANSPORTED TO YOUR FARM

- FODDER OR FEED
- WILD ANIMALS
- LIVESTOCK
- WATER, WIND AND FLOODS



FARM HYGIENE

- FARM BIOSECURITY PLAN
- WEED MANAGEMENT
- TIMELEY DETECTION



SILVER LEAF NIGHTSHADE

(Solanum elaeagnifolium)



- Silverleaf nightshade is one of the most costly weeds for grain crop producers.
- Silverleaf nightshade contains toxic alkaloids.
- Silverleaf nightshade is upright and branched. It grows up to 60 cm tall.
- Silverleaf nightshade looks like Quena, Western nightshade, and Brazilian nightshade.
- Silverleaf nightshade grows in most parts of NSW. It is native to North America.





CHILEAN NEEDLE GRASS *(Nassella neesiana)*



- Chilean needle grass grows in tussocks about 1 m high.
- injures animals eyes, downgrades wool, pierces hides, can affect meat quality, reduces biodiversity.
- Chilean needle grass is native to South America. It is also found in New Zealand, South Africa and Europe.
- It establishes best on bare ground, and can survive heavy grazing and drought.



AFRICAN LOVEGRASS (*Eragrostis curvula*)

- African lovegrass takes over pastures and disturbed areas.
- It degrades pastures because it's not very nutritious for livestock.
- African lovegrass is a perennial grass that grows in clumps up to 1.2 m tall.
- African lovegrass grows throughout NSW, on roadsides and in grazing land.
- African lovegrass thrives on acidic, sandy soils with low fertility.



Serrated tussock (*Nassella trichotoma*)



- Serrated tussock is not palatable to stock.
- Serrated tussock can completely take over new areas within 4 years.
- Serrated tussock grows in upright tussocks up to 45 cm tall and 25 cm wide
- A single plant can produce up to 140,000 seeds each season.
- The main infestations are in the Central and Southern Tablelands of NSW.



Spiny burrgrass - spinifex (*Cenchrus spinifex*)



- Spiny burrgrass is a weed because of its sharp and clingy burr, ability to spread rapidly and tendency to develop into dense infestations in favourable conditions.
- Spiny burrgrass is commonly found in drier regions with rainfall of 250 to 600 mm.
- It prefers sandy to light soils and is generally not found on heavy clay soils.
- Each plant is capable of producing over 1000 seeds.



Coolatai grass (*Hyparrhenia hirta*)

- Coolatai grass (*Hyparrhenia hirta*) is an invasive drought, fire and herbicide tolerant tussock forming perennial grass.
- Coolatai grass readily invades pastures and dominates them, particularly where ground cover is low (less than 70%)
- plants are long lived
- able to produce fertile seed from a single plant
- seed is mobile – wind, water, animals, vehicles

Blackberry (*Rubus fruticosus*)



- Blackberry has already cost around \$100 million to control and in lost production. Blackberry infests about 9 million hectares of land in Australia.
- Quickly infests large areas
- Forms dense thickets that restrict:
- Blackberry is a shrub with tangled, prickly stems.
- There can be up to 13,000 seeds per square metre



Sweet briar (*Rosa rubiginosa*)

- Sweet briar is a native of Europe that now grows throughout the world.
- The plant is widespread in NSW but is more common in the cooler, high rainfall areas.
- Sweet briar is spread mainly by birds or animals eating the fruit and distributing the viable seed.
- Sweet briar is an erect perennial shrub, commonly growing 1.5 to 2 m high but can be up to 3 m.