Serrated Tussock

Serrated tussock is regarded as one of the worst grass weeds within the Mid-western Regional area due to its quick spreading ability and zero grazing value to stock. Infestations result in a significant loss in production and dense infestations can completely dominate pasture.

WHAT IS SERRATED TUSSOCK?

Serrated tussock is not palatable to livestock and has little feed value. Animals forced to graze on serrated tussock can become malnourished and may die with a stomach full of partly digested serrated tussock.

Serrated tussock can:
- Takeover pastures and native vegetation;
- Reduce pasture quality;
- Contaminate hay and grain.

The native vegetation communities at risk include:
- Native grasslands
- Grassy woodlands
- Dry forests

Serrated tussock can completely take over new areas within 4 years. It is similar in appearance to many native species making it difficult to identify when not in flower. Subsequently, it can go unnoticed for many years. A single plant can produce up to 140,000 seeds each season. Serrated tussock is hard to eradicate, control is costly, and herbicides used to control serrated tussock impact other grasses, especially natives.

HOW TO IDENTIFY

Serrated tussock is similar in appearance to some native grasses. Serrated tussock grows in upright tussocks up to 45 cm tall and 25 cm wide.

Key features of serrated tussock are:
- Leaves are rolled rather than folded;
- Leaf base is white;
- Ligule is 1mm long, white and hairless.

The colour of the plant changes over seasons. In:
- Spring, the clumps are light green with brown tips on the leaves;
- Late spring and early summer, the clumps have a purple tinge when the seed heads fully emerge;
- Summer, plants are green when other grasses turn brown;
- Winter, when frosted, the plants turn a golden yellow.

Leaves are:
- Very narrow and tightly rolled;
- Upright and stiff;
- Whitish at the base, looking like shallots;
- Serrated, felt when drawing the leaf between your fingers.

Seeds:
- Are golden brown and hard;
- Are small, 1.5mm long;
- Have a ring of white hairs where they connect to the plant;
- Have an awn 25mm long, offset from the centre at the other end of the seed.

Ligule
The ligule is one of the key identification features for serrated tussock. The ligule can be found at the junction of the leaf sheath and the leaf. Slowly separate and bend the leaf back to see if there is a small, milky coloured, hairless flap 1mm long protruding vertically.

Seedheads
Multiple seedheads are produced and can be present from September to March. Each seedhead:
- Has multiple branches with a single seed at the end of each branch;
- Is up to 35cm long;
- Can break off when mature and be easily blown away by the wind;
- Has a purple tinge when mature due to the reddish brown or purple bracts wrapping around each seed.

Roots are:
- Usually in the top 20cm of soil;
- Fibrous;
- Difficult to pull out of the ground, even when plants are small.

Images: NSW DPI

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CONTROL AND MANAGEMENT

Prevention

- Learn how to identify serrated tussock.
- Control plants quickly; delaying control allows a quick transition to more and more plants. Larger infestations become costly and difficult to control.
- Limit animal movement from infested areas into clean paddocks.
- Quarantine stock from infested areas for at least 10 days to pass seed through the gut before releasing them to clean paddocks.
- Avoid bringing hay, grain, or silage from serrated tussock areas onto your property.
- Inspect hay or fodder (even from clean areas) for weed seeds.
- Plant windbreaks to reduce seeds blowing in.
- Clean vehicles and machinery before moving into clean areas.

Pasture management

- Maintaining healthy pastures and 100% ground cover is the best long-term defence against serrated tussock
- Establishing and maintaining healthy pastures can require different techniques and this will be influenced by many factors such as topography, rainfall, grazing management, and soil type. Further information is available on the Pastures and Rangelands section of NSW DPI website.

Physical removal

- Remove individual plants with a mattock in small, isolated patches. Bag and dispose of the plants. Also dispose of soil attached to roots as it may contain seeds. Tussocks with flowers should be burnt after removal.
- Sow pasture seed where the ground is bare.

Grazing management

Serrated tussock is not very palatable and has little feed value. Animals can graze it for short periods but will lose condition. Animals favour other pasture species over serrated tussock. This promotes the dominance of the weed. Pastures will deteriorate with continuous grazing.

Chemical control

- Most herbicides used to control serrated tussock contain either glyphosate or flupropanate.
- Pasture species have variable tolerance to these herbicides. Check which pasture species are present before determining which chemical control option can be used.
- Herbicides are most effective in combination with healthy, competitive pastures. Repeated use of the same herbicide can lead to herbicide resistance.
- Always observe grazing withholding periods following herbicide treatments in pastures.

YOUR RESPONSIBILITY

Landowners under the Biosecurity Act 2015 have a General Biosecurity Duty (GBD) are expected to, within reason, know about any weeds which may impact their land.

Regional Recommended Measure – ASSET PROTECTION

Land managers should mitigate the risk of the plant being introduced to their land. Land managers should mitigate the spread of the plant from their land. A person should not buy, sell, move, carry or release the plant into the environment. Land managers should reduce the impact of the plant on assets of high economic, environmental and/or social value.

GET THE FREE WEEDS APP

NSW Department of Primary Industries have developed an app that provides key information to help users reduce the impact of over 320 weeds in NSW, called NSW WeedWise.

Users can search or browse weed names (common or scientific), recognise a weed by its physical description and image gallery, and find out about its impacts, where it occurs, how it spreads and its preferred habitat.

NSW WeedWise is a free smartphone app through the app stores

FOR MORE INFORMATION Visit Council's website *www.midwestern.nsw.gov.au*, or the Department of Primary Industries website *www.dpi.nsw.gov.au* and search 'weeds'. Council's Weeds Team are available to assist on 6378 2939 or at *weeds.admin@midwestern.nsw.gov.au*.

Reference: NSW DPI