Whittlesea weed fact sheet – Serrated Tussock (Nassella trichotoma)

Weed of national significant. Declared noxious weed regionally controlled in Port Phillip East

Issue

Serrated tussock is renowned as one of the world’s worst weeds. It is a quick growing, tussock-forming grass that has invaded vast areas of native grasslands and agricultural land in south-western Victoria and New South Wales. Without vigilant management, serrated tussock can rapidly degrade pastures, rendering them worthless for grazing.

This drought-hardy grass has little nutritional value to livestock. The coarse leaves have a high fibre content which livestock tend to avoid eating when other grasses are available. However, when serrated tussock dominates pastures, livestock will eat it but there may be dire results. In extreme cases, livestock have been known to starve to death with a full stomach of serrated tussock, as it simply balls up in the stomach of the animal making digestion difficult.

Given the opportunity, serrated tussock will rapidly smother and outcompete native vegetation. Large stands of grasslands dominated by wallaby and kangaroo grass have already been lost in the battle to halt the spread of serrated tussock in parts of Victoria and the New South Wales Tablelands. Grasslands and Grassy Woodlands which are listed as some of Australia’s most threatened ecosystems, including the Basalt Plains Grasslands to the west of the municipality, are also at risk of serrated tussock invasion.

Local scene

Within the City of Whittlesea, serrated tussock infestations are low, however the potential to quickly spread is extremely high.

At present serrated tussock is an uncommon weed locally, with most landowners only being affected by small isolated infestations.

Serrated tussock has the potential to invade prime agricultural land and out-compete large areas of fragile native grasslands. Each mature plant has the ability to produce 100,000 seeds per year which can travel up to 20km via wind.
Within the City of Whittlesea, serrated tussock is most commonly found in:

- the hills surrounding the Whittlesea township
- Eden Park
- Beveridge
- sections of Donnybrook closest to the west of the municipality
- some urban and town gardens (misidentified as an ornamental or native grass)

**Problem land management practices**

Some land management practices contribute to the spread of weeds. Landowners can unintentionally spread serrated tussock by:

- Slashing, especially during the peak flowering season
- Importing soil or fill that is contaminated with weed seed
- Using dirty machinery and vehicles contaminated with soil and/or weedy material/seed
- Purchasing fodder/hay that contains weed seeds
- Importing livestock carrying seeds on their coats and/or within their stomachs
- Allowing pastures to become rundown and Degraded

Selecting the most suitable control technique is crucial. Integrating a number of weed control techniques is often more effective in the longer term. The most important part of any weed management program is to maintain control and prevent re-infestation. Re-planting the treated area with desirable plants and regular monitoring is essential to prevent re-infestation.

Refer to the City’s ‘Seasonal Guide to Weed Management’ for information on integrated weed control options. Visit [www.whittlesea.vic.gov.au](http://www.whittlesea.vic.gov.au) (key word search: seasonal guide) or email [Sustainability@whittlesea.vic.gov.au](mailto:Sustainability@whittlesea.vic.gov.au) for your copy of the Guide.

You may also contact Council’s Sustainable Land Management Officer on (03) 9217 2493 for further advice or for a copy of the Guide.
Identification tips

**Flower/seed:** Large, multi-branched flower-head/inflorence usually held slightly above the leaf canopy during peak flowering periods. Juvenile/smaller, or late flowering plants often retain the seeds within the tussock. Superficially, the flowers appear purple due to the small coloured wings/bracts surrounding the flower/seed. As the flower matures, a small seed similar in size and shape to a sesame seed develops, which has a short awn (tail).

**Leaves:** Are usually light-mid green when actively growing, however older leaves are often straw coloured. Generally the leaves are long and thin with serrations on the edges/margins, which are easily felt if rubbed backwards.

**Important Note:** Other grasses e.g. wallaby grasses can have similar characteristics. The leaves are tightly in-rolled, almost cylindrical and can be rolled between the thumb and index-finger.

*Most other grasses will not roll smoothly as they have blade shaped/flat leaves.*

The leaves of smaller plants are also very bristly when pressed with the palm of your hand from above. Wallaby grasses tend to be soft and will bend with little effort.

Serrated tussock has a ligule, which is a small flap located at the junction of the leaf blade and the leaf sheath. It is about 1mm long, white and hairless.

**Form:** Tussock-forming, grassy plant with a dense, shallow, fibrous root system that can be pulled out easily. Tussocks usually grow to a height of 30–40cm and a width of 30cm depending on its location and management. Heavily grazed or slashed plants will develop a bare centre with age, leaving a ring of living grass around the edge. As plants age, they can develop into large clumps, becoming sprawly. At this stage they can easily smoother/out compete other desirable plants.

Accurate identification is essential. If you are not sure whether you have this weed on your property, contact Council’s Sustainable Land Management Officer for further advice on (03) 9217 2493 or email Sustainability@whittlesea.vic.gov.au.

**Contacts**

Australian Pesticide and Veterinary Medicines Authority (APVMA) [www.apvma.gov.au](http://www.apvma.gov.au) Tel. (02) 6272 5852

City of Whittlesea Sustainability Planning Unit [www.whittlesea.vic.gov.au](http://www.whittlesea.vic.gov.au) Tel. (03) 9217 2493

Department of Primary Industries (DPI) [www.dpi.vic.gov.au](http://www.dpi.vic.gov.au) Tel. 136 186

The Serrated Tussock Working Party Tel. 136 186

**Further reading**

Keith Turnbull Research Institute, Frankston (October 2004) Landcare Notes: Serrated tussock – Identification LC0175

Department of Primary Industries, Frankston (October 2004) Landcare Notes: Serrated tussock – Management LC0370

Department of Primary Industries-Daniel Mudford (July, 2000) Landcare Notes: Serrated tussock: annual control calendar LC0268

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