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improving farm profits
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GRAZING NATIVE PASTURES IN TASMANIA

The best way to manage grassy weeds in native pastures

The appearance of weeds is often related to inappropriate grazing management such as overgrazing which creates bare areas suitable for weed invasion. It is important to control weeds as they compete with native pasture species and reduce the productivity and condition of native pastures.

Once a native pasture is invaded by a weed species, it is usually impossible to eliminate it from the pasture and it can be difficult and time consuming to control. Minimising bare ground through good grazing management is your best insurance against weed invasion. If weeds become established, increasing the cover of desirable pasture species through strategic grazing management can help control them.

Key Points

- Weeds can markedly reduce the productivity and condition of native pastures.
- The best control for weeds is to prevent them becoming established in the first place by maintaining a healthy and productive native pasture.
- Pastures can be grazed strategically so that competition and seed production from pasture weed species is reduced.
- Use management to benefit the desirable species - grazing and rest can be timed so that they benefit the desirable species and act against the undesirable species.
- Avoid overgrazing - native grasses need time to recover after grazing, and if they are overgrazed they may weaken and eventually die.



Land, Water & Wool (LWW) is a joint investment between the wool industry's peak research and development body, Australian Wool Innovation Limited, and the nation's premier investor in natural resource management research, Land & Water Australia.

Native Vegetation and Biodiversity is one of eight *Land, Water & Wool* sub-programs. The others include:



Benchmarking and Evaluation



Sustainable Grazing on Saline Land (SGSL)



River management and water quality



Managing climate variability



Managing pastoral country



Future woolscapes



Sustainable Grazing Systems Harvest Year

Native Vegetation and Biodiversity

The *Native Vegetation and Biodiversity* Sub-program of Land, Water & Wool is exploring ways of managing landscapes so as to maintain enterprise profitability while meeting natural resource management objectives. It is achieving this by working closely with woolgrowers, drawing on the research already undertaken through the Native Vegetation R&D Program managed by Land & Water Australia and undertaking new research on the links between wool production and biodiversity.

The Tasmanian regional project, *Biodiversity conservation integrated into sustainable grazing systems*, is looking at how woolgrowers currently manage their native vegetation for conservation and production purposes on-farm.

This fact sheet aims to describe the forage characteristics and qualities of native grasses and how best to graze them to get the most from them.



Annual grass weeds

Annual grass weeds, such as vulpia, brome grasses, quaking grass and hair grass, grow from seed in spring each year. They have poor nutritional value and compete with more productive species. The following grazing management strategy may help to control or reduce the abundance of annual grasses in a native pasture.

| Timing | Action |
|--------|---|
| Autumn | Light grazing or spelling helps to maintain ground cover through to the autumn break, which restricts germination and establishment of annual grasses after the break. |
| Winter | Light to moderate grazing pressure maintains the cover and vigour of native grasses, which increases their ability to compete with annual grasses. Maintaining a dense pasture cover restricts tillering in annual grasses and reduces the number of seed heads they produce. |
| Spring | Heavy grazing for short periods or burning when the stems of annual grasses begin to grow reduces seed production. |
| Summer | Light grazing or spelling in early summer allows native grasses to seed and regain their dominance. |

The germination and growth of annual grasses depends on rainfall and temperature conditions, so every grazing strategy needs to be adjusted depending on the seasonal conditions.

Perennial grass weeds

Perennial grass weeds are long-lived mat or tussock forming species, such as browntop and Yorkshire fog grass. They are usually a problem in areas of higher rainfall, higher soil fertility or where fertiliser has been added. Once they become established in a pasture, perennial grass weeds can be difficult to control. These weeds mainly favour non-competitive pastures and low stocking rates, although once established they tolerate a wide range of conditions. Management strategies that can help to control perennial grass weeds include crash grazing, weed control and promoting a competitive pasture.

The general aim of grazing management for perennial grass weeds is to break up the mats they form and reduce their seed production. They are relatively unpalatable to stock, therefore crash grazing may be necessary. Tasmanian research suggests that burning may be a useful management tool for controlling perennial grass weeds in native pastures, as they are probably less adapted to fire than the native grasses. Increased spring grazing pressure may also help control perennial grass weeds by limiting the production of seed heads and therefore the number and size of seeds they produce.

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Further reading:

Managing grazing on native pastures in Tasmania (fact sheet)

Grazing native pastures in Tasmania – managing kangaroo grass pastures (fact sheet)

Grazing native pastures in Tasmania – the forage characteristics and qualities of native grasses (fact sheet)

Grazing native pastures in Tasmania – managing wallaby grass pastures (fact sheet)

Common grasses of Tasmania: an Agriculturists Guide, by P. Lane et al 1999

Native grasses: An identification handbook for temperate Australia, by M. Mitchell, Landlink Press 2002

Acknowledgements:

Information from *Managing Tasmanian Native Pastures – a graziers guide* by K. Mokany, D. Friend, J. Kirkpatrick, L. Gilfedder, F. O'Connor (currently in production) and *Native grasses: An identification handbook for temperate Australia* by M. Mitchell, Landlink Press 2002 were used for this fact sheet.

Comments were provided by Doug Friend (doug.friend@dipwe.tas.gov.au).

Photographs were taken by Kerry Bridle, Louise Gilfedder and Matt Appleby.

Stay informed

If you are interested in receiving regular research and other updates from the Native Vegetation and Biodiversity Tasmanian project, please complete the section below and fax this entire page to:

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