



Native vegetation 1: Assessing the condition of remnant vegetation

Remnant vegetation is an important resource with high biodiversity values. For remnant vegetation to persist and provide ongoing habitat, it must be healthy. Protecting existing remnant vegetation is the number one priority for biodiversity.

Tactics

Inspect any remnant vegetation you have on the farm, including patches of scrub, individual trees, native grasslands and wetlands, and check for signs of its condition. Useful indicators of healthy remnant vegetation are:

- Healthy, mature trees
- · Regenerating saplings and shrubs
- Diverse understorey and ground habitat
- Few pests and weeds

If your remnant vegetation is in good condition, keep doing what you have been doing, but be observant of any changes that may indicate decline. If your remnant vegetation is in poor condition, refer to *Native vegetation 2: Improving the value of remnant vegetation*, or if you want to establish more vegetation, refer to *Native vegetation 3: Revegetating the farm*, two further titles in this series of *Tips & Tools*.

Resource management facts

Assessing mature trees

Healthy

It is easy to recognise healthy trees. They have a large canopy of healthy leaves, healthy intact bark, and few dead or dying branches. Several scattered trees per hectare are valuable in otherwise cleared paddocks, and aged and standing dead trees are essential for bird nesting sites.

Degraded

Dieback in mature trees can typically be detected by looking for dead or dying branches in the canopies, and reduced leaves. Regrowth of juvenile foliage from the branches is also common. Dieback can be caused by salinity, nutrient

Key benefits

- Identify the condition of remnant vegetation
- Improve remnant vegetation management practices to maintain biodiversity
- Understand the value of remnant vegetation for ecological sustainability

enrichment (by livestock and fertilisers), insect attack or disease (such as *Phytipphthora*, *Mundulla Yellows*). If you suspect your trees are suffering from dieback, seek local advice. There may be regional issues at play.

Regenerating saplings and shrubs

Healthy

Trees that range in age from saplings to old or mature trees indicate on-going regeneration of the tree population. Understorey species (shrubs and grasses) tend to be much shorter-lived than trees and need to be continuously regenerated to ensure healthy remnant vegetation areas.

Degraded

Remnant vegetation that has been highly degraded for a long time rarely has a store of seeds that can regenerate naturally. More pro-active intervention is needed to re-establish these areas (see *Native vegetation 3: Revegetating the farm*).

Assessing understorey and ground habitat

Healthy

The composition of healthy understoreys will vary, depending on what the original woodland looked like. They can contain native grasses, shrubs, a mixture of both grasses and shrubs, and small, immature trees. The understorey provides cover between the trees and a diverse habitat for woodland fauna. Understorey and ground flora species provide resources, protect soil from erosion and contribute to and trap organic litter in the ecosystem.

Plant litter and fallen branches create a highly active ecosystem on the soil surface, resulting in soft friable soil. The organic litter layer protects soil from erosion, provides habitat for fauna, maintains soil structure and contributes nutrients to the soil for plant growth.

Grazing is restricted to short grazing intervals and long rests. Fencing is generally essential to provide this level of management control.

Degraded

The understorey often provides the first signs of decline in remnant vegetation, particularly on grazing properties. Many of the understorey species are vulnerable to grazing and are shorter-lived than trees.

Livestock grazing and the nutrient build-up associated with stock camps can substantially damage or completely remove understorey species.

Unhealthy understoreys often look 'tidy'. Overgrazing removes most or all the original understorey species, which are replaced by weeds and introduced grasses. Firewood collection and/or stacking/burning removes dead and fallen trees and branches. These dead and fallen trees and branches are an important part of the habitat provided in remnant vegetation.

Assessing pests and weeds

Healthy

If healthy, native plant populations can suppress weeds, helping to keep the desirable ratio of less than 20% weed species. Large blocks of remnant vegetation with a small edge-to-area ratio are able to resist weed invasion better than smaller areas. Weeds often invade along the edges of remnant vegetation and regular patrolling can reduce the need for extensive control programs. Other pests that are potentially attracted to areas of remnant vegetation must be controlled. Neighbourhood control programs are generally effective.

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Further information

This publication is part of a series of *Tips & Tools* on biodiversity that provides further details on managing native species within a grazing enterprise. For a copy of the *Biodiversity Tips & Tools* series call the MLA producer hotline 1800 675 717 or email publications@mla.com.au

Information on how to manage biodiversity and to enhance your longer-term profitability can also be obtained from rural facilities in Universities, Departments of Agriculture, Natural Resources and Land Management.

Degraded

Continuous grazing often causes native species to decline, allowing weeds to quickly move in and choke out more of the native vegetation. Remnant vegetation areas that contain more than 20% weeds will benefit from some change that reduces the weed burden. Pests such as foxes, cats, rabbits, pigs, exotic birds, and sometimes native species such as kangaroos, can benefit from protected patches of remnant vegetation and can seriously affect the number of beneficial fauna attracted to areas of healthy remnant vegetation.

Management tips

- Overgrazing damages native vegetation and fencing is critical to enable management. Fenced areas of vegetation should not be locked up and forgotten – they still require careful management. Strategic grazing may be possible and is often essential for the control of pest, weeds and fire risk.
- All remnant vegetation has some value, even individual trees in grazing paddocks. However, many species cannot survive in small remnants. All farms should aim to have at least one significant area (10 hectares or greater) of native vegetation.
- For ecological sustainability on a regional scale, 30% of a landscape should be under native vegetation.
 Remnant vegetation on farms, as well as roads, waterways and reserves, can all contribute to this 30% target.

Glossary

Remnant vegetation – areas of original (never cleared) and regenerated native vegetation, includes areas of native forest, bush, scrub or grasslands that remain or adjoin farms

Understorey – the plants that grow beneath the canopy of the taller trees, including grasses, herbs and shrubs, and sometimes vines, ferns, mosses, lichens and fungi



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