



Victorian Volcanic Plains Native Vegetation Management Guide

Site Assessment & Planning

Native Grasslands and Grassy Woodlands



In this series

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Summary

- Before changing management of a grassland or grassy woodland remnant, you should observe and record what is in it.
- Take time to know what it is that you are managing.
- The best time to survey is spring or early summer.
- If you don't know what you are looking at get help.
- Use the information collected to develop management aims and techniques. You may not need to do anything differently.
- A plan helps you prioritise what to do.
- Keep records of actions taken and monitor the site regularly.

Why do I need a site assessment and management plan for my grassy community?

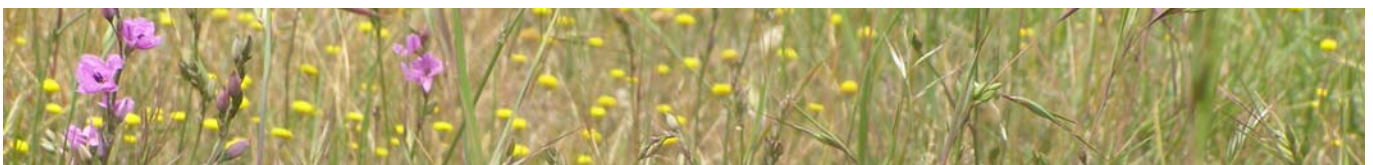
In order to manage your native grassland or grassy woodland remnant successfully, you should know what is in it and how healthy the community is. For example, what is the condition of the vegetation and habitat? What is the conservation value of the remnant and are there significant plant or animal species present? Are there any threats to the conservation values? Understanding these aspects of your remnant can help you make informed decisions about future management.

A survey and assessment of your site will help provide the information you need. You should document the results of the site assessment on a map or site plan, and note how you intend to manage the remnant in the future. It is also useful to note what you have done as you go along and record any changes to your management techniques or to the condition of the site.

What steps do I need to take for successful management planning?

The main steps for planning the future management of your grassland or grassy woodland are:

- Undertake a site assessment to record information about the vegetation and habitat present.
- Draw up a map or site plan showing the features recorded.
- Collect information about previous management of the remnant.
- Work out what your aims are for the remnant.
- Use information collected to determine management actions and decide on priorities.
- Keep ongoing records of your management actions and monitor the outcomes to see if your aims are being achieved.



Carry out a site assessment & draw up a map or site plan

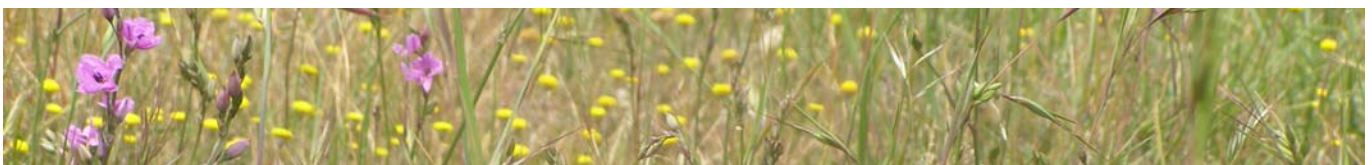
1. Decide if you have the skills to do the survey and assessment of your remnant yourself. You might want to involve others who have more knowledge about the plants and animals of grassy communities.
2. If you can, obtain an aerial photo of the site or a topographic map on which to mark various features. This is a similar process to developing a whole farm plan and you can decide how much detail you want to add and how you want your plan to look. At least mark the boundaries of the remnant on your map or site plan and estimate the area it occupies. You should also try to record as many features as you can. For example,
 - Mark natural features like creeks, gullies, rocky areas, steep slopes or rises, patches of native grassland or woodland trees if present.
 - Note any tracks, drains, fences, gates, weed infestations, erosion areas, highly disturbed areas, water points.
3. Where possible, record all the indigenous and exotic plant species present. It is best to do this during spring or early summer when most plants are in flower and are easier to identify. It is important to know which species are present as some may be rare or threatened and require special protection. Others may be weeds that pose a high threat to the community and would therefore be a priority for control.
4. Record signs of animals within the remnant including birds, mammals, reptiles, and frogs. Note whether foxes or rabbits have been there and mark any active rabbit burrows.
5. Note the condition of the vegetation and habitat. For example:
 - Are there spaces between grass tussocks?
 - How much of the ground is bare or covered by leaf litter, mosses or lichen?
 - Is there a variety of indigenous grasses and wildflowers present or only a few species?

- Are any of the indigenous plants seeding?
- Are the trees indigenous to the site or have they been planted?
- What proportion of the grass cover is indigenous or exotic?
- Are there any woody weeds present, how much area do they cover?



Ptilotus macrocephalus (Feather Heads) in Rokewood Cemetery. Spring or early summer is the best time to do plant surveys.

6. Look to see whether the remnant connects to vegetation on neighbouring private land or public land such as a conservation reserve, a cemetery, or road or rail reserve. Note how this might influence your remnant vegetation. For example, is it likely that weeds or pest animals will invade from a neighbouring property or the roadside? Are there threatened plant or animal species on adjoining properties that could use habitat in your remnant?
7. Using the information you have collected, it is useful to identify different management areas or units within the remnant and mark them on your map or site plan. Units could be based on features such as the type of vegetation present (e.g. grassland, grassy woodland, wetland, stream-side), the condition of the vegetation (good, fair or poor patches), the location of patches (e.g. on different topography or soils), or on the presence of particular plant or animal species (e.g. threatened species or weedy patches).



Investigate the management history

If possible find out about the management history of your grassland or grassy woodland from previous owners, managers, or neighbours. There may even be an old management plan for the site. Some points to consider are:

- Has fertiliser been applied, how often?
- Has the site been ploughed or cropped?
- Have herbicides been used widely?
- Has it been burnt, and if so, how often?
- If grazed, what was the stocking regime?

Develop a management plan

Information collected from the site assessment will help you determine management aims for the whole grassland or grassy woodland remnant, or for particular units within it. For example, you might want to:

- Improve the condition of the native vegetation.
- Increase the variety of habitats present.
- Protect threatened plant or animal species.
- Allow natural regeneration to occur.
- Extend the size of the remnant.
- Balance management of fire fuel hazards with ecological needs of the community.

Once you have decided on your management aims, you will need to choose appropriate management techniques. You should document what you plan to do on your site plan or in a management plan. If your remnant is in very good condition, you may not need to change current management practices much, if at all. Examples of management techniques you can use in your remnant are:

- Fence all or part of the remnant to exclude pest animals, or to control access by vehicles or livestock.
- Conduct weed control programs.
- Run a rabbit and fox control program.
- Remove livestock grazing altogether or change the stocking rate or frequency, or limit access times. For example, allow grazing from the end of summer, but remove

stock by early spring so that native plants can flower and set seed.

- Avoid stocking or use of vehicles and machinery when soils are wet to prevent pugging and soil compaction.
- Avoid slashing or mowing, or only do so at a time when weed seeds can't be spread.
- Undertake an ecological burning program that considers the requirements of native plants and animals present.
- Undertake restoration works. Harvest native seed from the property or nearby and use to revegetate bare areas.
- Prevent or limit the collection of firewood.

Decide which are the most important things to do first. For example, your priority might be to fence the remnant first then control high threat weeds before they flower and set seed. It is usually best to protect and improve better quality sites before restoring poor quality sites.

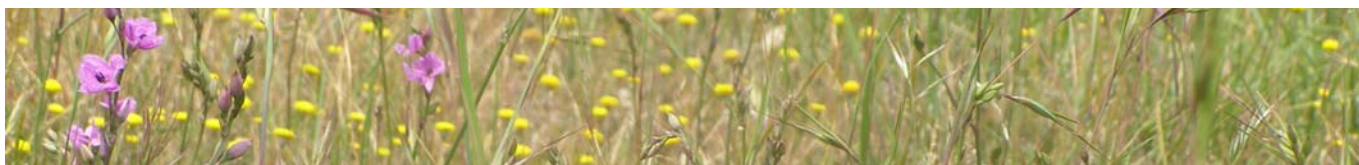
Note: more information about management techniques for grasslands and grassy woodlands can be found in other brochures in this series and in the suggested reading material.

Monitoring

Good record-keeping is an important aspect of any land management. A record of what your remnant was like before and after any actions are taken will help you know whether you are achieving your aims. Keep notes of what has been done and things you see such as animals or plants you haven't noticed before.

A marked monitoring point, or several points in large sites, will help you observe changes over time. The monitoring process should be simple and repeated at regular intervals (1–3 times per year). At each point you could just take several photos of the vegetation or record details like the number of plant species present within a defined area, or the percentage cover of indigenous grasses, wildflowers, and weeds.

Use your observations and monitoring results to determine whether your management aims for the remnant are being achieved or whether you might need to change your actions.



Definitions

Cover	The proportion of ground beneath the foliage or the outside edges of a plant or group of plants.
Exotic plant	A plant species introduced to Australia from overseas.
Indigenous	A plant or animal species native to a particular location, not introduced.
Remnant	Patch of native vegetation remaining after most has been cleared or severely altered.
Threatened species	A plant or animal species considered endangered or vulnerable to extinction in Victoria or Australia in the near future.
Vegetation condition	The health or quality of vegetation compared to a presumed ideal natural state. Often based on factors such as the variety and cover of plant species present, weeds, regeneration potential, and habitats present.

What is a healthy grassy community?

Healthy native grasslands and grassy woodlands usually have a variety of indigenous grasses and wildflowers in the spring. These include lilies, orchids, daisies and peas amongst perennial grass tussocks such as Kangaroo Grass, wallaby-grasses and spear-grasses. In gaps between the tussocks and wildflowers, you should see lichen, mosses, grass or leaf litter, some bare soil, and sometimes small seedlings. Some weeds may be present, but not many. The presence of Kangaroo Grass can indicate that a paddock has had little disturbance and been conservatively grazed.

Further reading

- Barlow, T. (1999). *Grassy Guidelines: How to Manage Native Grasslands and Grassy Woodlands on your Property*. Trust for Nature, Melbourne. www.environment.gov.au/land/publications/grassguide.html
- Department of Environment, Water, Heritage and the Arts (2008). *Natural Temperate Grassland of the Victorian Volcanic Plain. Policy Statement 3.8*. Australian Government, Canberra. www.environment.gov.au/epbc/publications/pubs/grasslands-victoria.pdf
- Dorrrough, J., Stol, J. & McIntyre, S. (2008). *Biodiversity in the Paddock: A Land Managers Guide*. Future Farm Industries CRC. www.csiro.au/resources/biodiversityinthepaddock.html
- Lunt, I., Barlow, T. & Ross, J. (1998). *Plains Wandering*. Victorian National Parks Association and Trust for Nature, Victoria
- Sharp S., Dorrrough, J., Rehwinkel, R., Eddy, D. & Breckwoldt, A. (2005). *Grassy Ecosystem Management Kit: A Guide to Developing Conservation Management Plans*. http://www.tams.act.gov.au/live/environment/native_plants_and_animals/grassy_ecosystems_management_kit

Where to get help

Who can help plan and implement your management program? As well as advice and information from the Department of Sustainability and Environment, a number of environmental organisations, biodiversity consultants and community groups have various skills who may be able to assist. Your local Landcare facilitator or Land for Wildlife extension officer can also provide advice.

Victorian Volcanic Plains Native Vegetation Management Guides are a joint initiative of:



These Grassland and Grassy Woodland guides are based on 'Management of Native Grasslands in the Melbourne Area' information kit produced by Department of Conservation & Environment, Victorian National Parks Association, & Australian Heritage Commission (1992). This publication may be of assistance to you but the Corangamite Catchment Management Authority, its employees and other contributors do not guarantee that the publication is without flaw of any kind or is wholly appropriate for all your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.