

Grass Clippings

Native grasslands and grassy woodlands newsletter

Special Edition – Grassy Ecosystems Grants

June 2000

WWF/NHT Devolved Grant for Grassy Ecosystems

\$1.5 million over three years from the Natural Heritage Trust will be invested in the Grassy Ecosystems Grants Program. The Program operates in partnership with the World Wide Fund for Nature, who are responsible for administering the grants on a day-to-day basis.

This edition of Grass Clippings follow hard on the heels of last month's, but we wanted to devote some attention to the relatively new Grassy Ecosystem Grants.

The projects funded by the first round of grants have just been released and this edition is to congratulate the successful applicants, discuss the process and

urge many more people and organisations to apply for the next round.

The press release announcing the successful bids was issued on 26 May. It announced that the round one grants totalled over \$298,500 and will fund 26 locally based projects in Victoria, South Australia, New South Wales and the Australian Capital Territory. The press release said "These projects will improve the management of more than 2150ha of grasslands through establishing long term agreements with landholders and state authorities and on-ground conservation activities, including 51km of fencing works".



Successful Projects:

Victoria has been funded to conduct 13 projects:

Project Title	Approved funding
Grassland Conservers (Trust for Nature, Victoria)	\$33,000
Hindmarsh Shire Grassland Flora and Fauna Reserve Project	\$14,200
Protection of Remnant Native Grassland at Truganina Cemetery	\$4,500
Conservation of Snow Gum/Black Casuarina Grassy Woodland	\$5,760
Protection of National Estate Listed Grasslands in SW Victoria	\$19,500
Protection of Plains Grasslands (Greens Swamp Road, Dandenong)	\$1,595
Conservation of Grassy Ecosystem Roadsides in Moorabool Shire	\$7,000
Grassland Restoration – Mornington-Baxter Rail Reserve	\$2,700
Empowering Community Managers in Best Practice Conservation Management	\$23,000
Bush's Paddock: Implementing and Demonstrating Best Practice Management	\$11,600
Fingerboards Grassy Woodlands Project	\$12,000
Fencing Railway Remnants at Bannockburn	\$1,000
Fencing of the Woodend Racecourse Reserve Native Grasslands	\$4,000
TOTAL	\$139,855

South Australia has been funded to conduct 8 projects:

Northern Areas Council: Grassy Ecosystems Biodiversity Management Plan	\$21,560
Burra Mine Site National Trust Native Grasslands Project	\$5,465
Conservation of Yacka Cemetery Native Grasslands	\$1,010
Preserving Keynetons Heritage Hilltops	\$1,200
Preservation of 1.5 sq km "New World" Grassy Woodlands	\$300
Yeldulknie Creek Grassland Conservation Project	\$4,900
Western Ridge Grassy Woodland Conservation Project	\$3,320
Macclesfield Bushcare Group: Day Paddock Reserve Plan	\$3,050
TOTAL	\$40,805

NSW has been funded to conduct 4 projects:

Riverina Grasslands	\$73,800
Restoration of Remnant Vegetation on Middlingbank Peninsula	\$9,125
Bega Valley Remnant Grassland Management Plans	\$10,000

Old Portion of Bombala Cemetery	\$3,000
TOTAL	\$95,925

The ACT has been funded to conduct 1 project:

Production of a Grassy Ecosystem Management Implementation Kit for Land Managers	\$22,000
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Exemplary Projects in Each State/Territory

New South Wales

Riverina Grasslands - Western Riverina Regional Vegetation Committee

The Riverina region is high priority for grassland conservation due to the enormous land use changes in the region. This project meets the best model for grassland conservation identified by WWF. The project aims to increase the area of native grasslands in the Riverina under conservation management by targeting identified high priority sites for negotiation of long-term conservation agreements, providing on ground works (fencing, pest plant and animal control) and increasing community involvement in grassland conservation.

South Australia

Northern Areas Council: Grassy Ecosystems Biodiversity Management Plan - Northern Areas Council

Northern Areas Council covers much of the mid-north of South Australia. The original vegetation was predominantly grassy woodlands and native grasslands. This project will enable development and application of conservation management guidelines along 500km of important roadsides by Council employees and contractors.

ACT

Production of a Grassy Ecosystem Management Implementation Kit for Land Managers - Environment ACT

This project addresses an identified gap in materials available to assist private grassland managers in the identification of grassland remnants and in management and monitoring of pastures for biodiversity conservation. The project has strong links to existing site-based conservation projects and on-ground environmental outcomes.

Victoria

Grassland Conservers - Trust for Nature, Victoria

The activities associated with this project follow from TfN's successful Grassland Stewards and Grassland Advisers projects and will employ a range of incentives (rate rebates, fencing, whole farm plans etc) to ensure key grassy remnants are permanently protected. Some sites link with existing reserves and other conservation land and are critically important for the development and sustainable management of Protected Area Networks (eg Perry River in East Gippsland). Other high quality sites are isolated on commercial farms and permanent protection of these sites will help promote grassland conservation in the context of sustainable agriculture. The project is in partnership with NRE.

Other Victorian projects

Hindmarsh Shire Grassland Flora and Fauna Reserve Project – Hindmarsh Shire

This project provides for the costs associated with acquiring and managing privately owned residential blocks, which support a remnant native grassland habitat in the township of Nhill. Populations of the endangered Golden and Pale Sun Moths are found on these blocks, along with nationally endangered native plants and many other species of grassland flora and fauna will be conserved. The project is in partnership with Nhill College.

Protection of Remnant Native Grassland at Truganina Cemetery – NRE

Truganina Cemetery supports a highly significant remnant of Western Basalt Plains grassland, containing the second largest population in Victoria of the nationally endangered Button Wrinklewort (*Rutidosis leptorrhynchoides*). Fencing, weed and rabbit control will be undertaken to control the threats to this grassland, and a Public Management Agreement will be established to provide long-term security for the site.

Protection of Plains Grassland at Greens Road Swamp - City of Greater Dandenong / Greater Dandenong Environment Group

Greens Road Swamp consists of two FFG-listed communities, Plains Grassland (South Gippsland) and Herb-rich Plains Grassy Wetland (West Gippsland). The project provides for fencing and pest plant and animal control. Volunteers will be provided with guidance and education in flora and fauna identification, habitat restoration and monitoring techniques.

Conservation of Snow Gum/ Black Casuarina Grassy Woodland - Break O'Day & Forest Environment Group

This privately owned site contains the only known intact remnant of Snow Gum-Black Casuarina Grassy Woodland in Western Victoria. The project will provide for fencing, signposting, ecological burns and other trials to manage the native grassland and control weed invasion. A conservation covenant will be established and the owner will use the land as a grassland demonstration site.

Protection of national estate listed grasslands in SW Victoria – Glen Thompson Catchment Group

This project will undertake urgently needed weed control works on the National Estate listed road reserves (238ha) in the Moyne Shire which are being threatened by weed invasion. Public Authority Management Agreements will be prepared with the shire to ensure the long-term protection of these roadsides. Shire staff and contractors will undertake roadside conservation management training, and volunteers will undertake works including trials into Phalaris control.

Background and History of the Grassy Ecosystems Grants

The Grant proposal was developed by an informal group of grassy ecosystem enthusiasts across the SE States during early 1999. The World Wide Fund for Nature, which runs the extremely successful Threatened Species Network Program, agreed to be the project proponent and to administer the grants. In August 1999 the Federal Environment Minister, Senator Hill, announced that \$1,500,000 would be allocated to the grant over a three year period.

Applications opened in November 1999 and closed on 16 December. Sixty-one projects were submitted – one from ACT, 14 from NSW, 12 from SA, 1 from Tasmania and 33 from Victoria. Projects were first assessed at Statewide level, then results were pooled and all projects assessed by a National Assessment Panel, consisting of one government and one non-government representative from each State. The Panel members were:

Convenor: Jamie Pittock (WWF)

ACT: Sarah Sharp (Environment ACT), Geoff Robertson (Friends of Grasslands)

NSW: Linda Bell (National Parks & Wildlife Service), Ian Lunt (Charles Sturt University)

SA: Ann Prescott (WWF), Neil Collins (Dept Environment & Heritage)

Tasmania: Philip Barker (Dept Primary Industries, Water & Environment), Alistair Graham (Tasmanian Conservation Trust)

Victoria: Vanessa Craigie (NRE), James Ross (consultant)

Rural representative: Robert Carrail (Corangamite CMA)

Observers: Helen Ryan (Bushcare Project Officer, Grassy Ecosystems, SE Australia), Roberta Thorburn (EA), Tanya Stacpoole (EA), Philippa Walsh (WWF SE states coordinator), Wendy Godden (WWF Grants Administrator).

The assessment process favoured projects that focussed on the conservation and management of

the best existing remnants, and provided for increased long-term protection. Projects that were primarily revegetation and seed collection were rejected. Ineligible items were:

- land purchase
- activities deemed to be government core business
- control of declared noxious weeds.

The Panel agreed to fund projects solely on their merits. No state quotas were to be set. It was acknowledged that Victoria had by far the greatest number of successful projects, but all members of the Panel agreed that:

- The Victorian bids were in general better written, with clearer performance criteria and more specific references to plans and strategies.
- They focussed more on long-term protection, such as covenants and management agreements.
- Victoria has undertaken more grassland surveys, mapping, plans, strategies etc so had a better strategic framework.

Some of these advantages were put down to Victoria having more experience in preparing bids, but most of them seemed to be a result of better promotion, information networks and contacts e.g. clear contacts within NRE, the SE grassy ecosystems Bushcare Networker, the GERG process, Trust for Nature and the Grassland Stewards/Advisers, and past efforts of VNPA grassland officers. The other states have taken these lessons to heart, so Victorians had better expect some stiff competition in the second round!

Round Two of the Grassy Ecosystems Grants

Provisional dates are:

4 August Applications open

1 September Provide expressions of interest to state contacts, to seek advice, remedy overlaps and provide opportunities to make joint applications with other groups. This is an **optional** requirement.

13 October Applications close.

For further information, contact Helen Ryan, Vanessa Craigie, James Ross, or your local Trust for Nature coordinators or Bushcare facilitators.



Research report

Another report from the final round of Research Advisory Group projects has just been received. "Effects of Population Size on Reproductive Success in a Fragmented Grassland Species: What can demography and mating systems tell us about how plants cope with fragmentation?" has been prepared by researchers from the Department of Botany, La Trobe University and the Centre for Plant Biodiversity Research, CSIRO. Co-author John Morgan says that their research suggests that the reproductive output of *Leucochrysum albicans* is NOT affected negatively by declining population size. This is a first for Australian studies (and possibly amongst the first in the world); most studies predictably show that output declines as populations get small). John notes that this seems to go against what we would normally

expect. The breeding system is outcrossing (i.e. it cannot breed with itself but requires pollen from other plants). Mating system analysis done by co-author Andrew Young showed that the species was maintaining "normal" outcrossing rates, even where populations were only 74 plants.

So the authors suggest (tentatively) that *L. albicans* survives as well as it does because it is in the richest sites where pollinators may still be present in sufficient numbers to "do their business". Rather than population size per se being important, population "quality" may be a really important parameter that we have all intuitively thought was important.

They suggest that maintaining populations is primarily about maintaining the processes that have allowed them to persist up till now (i.e. frequent burning and minimising soil disturbance). So, their

research provides some concrete foundations for the general feelings about grassland survival that have been around for more than 20 years.

New Conference

11th Australian Rangeland Conference: “**Past Achievements, Future Challenges**”. Broken Hill 21-24 August, 2000

Draft recommendations for grazing management of a basalt plains native pasture paddock

Rod Bird, Agriculture Victoria, PVI Hamilton

The Pastoral & Veterinary Institute (PVI) has a 8 ha native pasture reserve which requires sensitive management to restore it. The reserve was part of a cleared native pasture paddock that had been grazed probably since settlement in 1840, but without much (or any) addition of fertiliser. There were blue pincushions (*Brunonia australis*) in an adjacent paddock, although not present now. Species now present include *Danthonia* spp., *Themeda triandra*, *Elymus scabrus*, *Agrostis avenacea*, *Microlaena stipoides*, *Microtis* sp., *Thelymitra pauciflora*, *Tricoryne elatior*, *Arthropodium strictus*, *Lomandra* spp., *Wahlenbergia* spp., *Convolvulus erubescens*, *Acaena* spp., *Asperula conferta*, *Opercularia varia*, *Oxalis perennans*, *Drosera* spp., *Pratia pedunculata*, *Isotoma fluviatilis*, *Schoenus* spp., *Glycine latrobeana* and others. The paddock is typical of the undulating parts of the basalt plains.

The stocking has been intermittent - at times the area would have been grazed fairly hard. The pasture has been invaded to some extent by typical pasture weeds such as bent grass (*Agrostis* sp.), *Phalaris aquatica*, *Romulea* sp. (Onion grass) and annuals such as barley grass (*Hordeum* sp.), silver grass (*Vulpia* sp.), *Plantago* spp. etc.

Our tentative effort to improve the grazing management has been based on a reading of the references given below and an interpretation to hopefully, suit local conditions. There has been too little time to see what effects, if any, the new grazing regime might have had. We would be keen to have any comments from others with more experience of regeneration and management of native pastures. Some other strategies are going to be needed to reduce the content of phalaris and bent grass, which looks to be the major difficulty, as it has established at a moderate density throughout the area.

Recommended management

Winter maintain a low stocking rate (2 sheep/ha), or defer grazing, to encourage the perennial grasses. (This might also increase the clover content.)

Early spring graze at low to moderate rates (2-4 sheep/ha) when seed heads of introduced species emerge.

To reduce annual grasses - use *short-term, high density* grazing before native grasses head. Remove up to 80% of pasture mass.

To reduce clover content (if it looks like shading out the perennial grass in a good season) - use *short-*

term, high density grazing (avoid pugging in very wet weather).

Remove grazing when native grass stems start to elongate and seed heads begin to emerge. The aim is to encourage seed-set of native grasses (*and herbs – eds.*). No grazing from late September-mid January.

Summer: sheep from other paddocks must be “emptied out” overnight in a yard, *before* bringing on site, to reduce weed seed transfer. From mid January, maintain low-moderate grazing (2-4 sheep/ha) until seed set is complete.

Autumn: reduce dead residues *before* the break; but avoid seedling damage *after* the break. Sheep from other paddocks must be “emptied out” *before* bringing on site. Before the “break”, continue grazing at moderate to high stocking rates (4-8 sheep/ha) to remove most of the dead plant residues.

After the “break” – *lightly* graze pasture on a rotation but give 6-week spells to protect the establishing native grass seedlings.

References:

- Land for Wildlife (1998) Native grasslands of the basalt plains - an introduction to management for landholders. *LfW Note No. 41*.
- Trust For Nature (1998) Grasslands and grassy woodlands of the western plains. brochure
- Barlow, T (1998) *Grassy guidelines - how to manage native grasslands and grassy woodlands on your property*. Trust for Nature.
- Lunt, I, Ross, J & Barlow, T (1998) *A field guide to the native grasslands and grassy woodlands of south eastern Australia* VNPA & Trust for Nature.
- MRC/SGS (1998) Grazing management of *Danthonia* and *Microlaena*-based pastures. *In* Tips and Tools No. 005, (based on p. 43 of NSW Agriculture Technical Bulletin 47 –eds. R D FitzGerald & G.M. Lodge (1997).
- Buchanan, D (2000) Grazing effects on native pastures. *Landcare News*, NRE. Dec 1999/Jan 2000 issue.

New Books

Ian Lunt reports on Hobbs R. & Yates, C. (eds.) *Temperate Eucalypt Woodlands in Australia: Biology, Conservation, Management and Restoration*. Surrey Beatty, \$90.

The book contains good overview chapters on woodland conservation status and threats in each state, plus a range of chapters on woodland ecology, threats, management and restoration. This is certainly the best available information source for a national perspective on temperate woodlands.

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