Grass Clippings

A newsletter of the Grassy Ecosystem Reference Group and other happenings in native grasslands and grassy woodlands

September 1998

Number 7

Grass Clippings is an occasional newsletter to provide brief updates on initiatives and activities aimed at conserving and managing grassy ecosystems.

Please send comments, contributions or requests for further information:

Vanessa Craigie Grassland Coordinator Dept. of Natural Resources and Environment 4/250 Victoria Parade East Melbourne Vic 3002 call (03) 9412 4199 fax (03) 9412 4586. email vanessa.craigie@nre.vic.gov.au or

Tim Barlow c/- Victorian National Parks Association 10 Parliament Place East Melbourne 3002 (03) 9650 8296 fax: (03) 9654 6843 email: *vnpa@vicnet.net.au*

Still clipping ...

Apologies for not having produced the *Grass Clippings* newsletter for a considerable time. A number of events, including the highly successful grasslands management conference, got in the way. But now it's time to look at what the year has brought so far, and where we go from here. We intend to continue to produce this newsletter in the foreseeable future, as there's more than enough to report on in grassy ecosystems, both in Victoria and interstate.

For this issue we have expanded the mailing list to include people who attended the "Down to Grass Roots" conference in July. If you prefer not to be included on the mailing list, please inform Tim or Vanessa.

GERG activities

Please note: GERG is no longer providing funding for projects. The Grassy Ecosystem Reference Group's funding was for a set three year period, and this has now come to an end. Any future funding applications will have to go through the normal NHT application process. Nevertheless, GERG will continue, but with a slightly different role.

1997/98 In GERG was requested by Environment Australia to provide informal input into the selection process for Natural Heritage Trust (NHT) funding. The GERG Project Officers waded through over 600 NHT applications to identify those that appeared to fit in GERG criteria for priority action. These selected projects were then taken to a full meeting of the GERG for further winnowing. The final list of 83 projects, including both regional and statewide, were passed on to the Regional Assessment panels and State and to Environment Australia. When the outcome of the NHT assessment process is announced in the not too distant future, we will find out whether GERG's recommendations carried any weight.

1997/98 projects

Projects identified for the final round of GERG funding were further refined. The project "Roadside conservation value poster for the Rural City of Ararat" was withdrawn by the proponent.

Changes to GERG membership

- Cheryl Dear has replaced Chris Banks as the representative of the Zoological Board.
- The new local government representative is Alistair Phillips, Environmental Coordinator for the City of Moreland.
- Ian Lunt continues his involvement with RAG, but has withdrawn from the GERG executive.

- Roberta Thorburn is the new Environment Australia representative.
- NRE Area representatives are Sue Haddon (Ballarat) and Shirley Diez (Bendigo).

Tim Barlow's position has been restructured so as to cover all of South-eastern Australia. He remains based at VNPA, with the new title of 'Bushcare' Project Officer, Grassy Ecosystems, South-eastern Australia, to reflect the expanded scope. With the Grassland Ecology Program (along with most other of Environment Australia's biodiversity programs) now under the umbrella of 'Bushcare', the position seeks to maintain a high profile for Australia's most threatened ecosystem. As funds for grassy ecosystem work will largely be channelled through the NHT, one of Tim's main challenges will be to work with community groups and government departments to develop guality proposals that reflect the strategic work carried out by GERG to date. If you are considering submitting an NHT proposal that deals with grassy ecosystems, it would pay to discuss your project with Tim at the earliest opportunity.

1998 Research Projects

Once again RAG has been faced with the difficult task of assessing far more research proposals than what can possibly be funded. Seven projects have been selected for funding is this final year, on the following topics:

- tree invasion of grassy woodlands;
- the effect of Serrated Tussock herbicides on a selected range of native forbs; management of introduced slugs and mites;
- the role of P-sorbing sludge in grassland management and restoration;
- the effect of fragmentation to the reproductive success of fragmented plant populations;
- conservation status of the Corangamite Water Skink;

• conservation status of the Swainson's-pea.

As such, RAG believes a diverse range of issues are being examined across a number of regions.

Another workshop will be held later this year (at a time and place to be confirmed) where in the results of all of the previous year's projects will be presented and discussed. Stay tuned.

One of the RAG research applications was picked up for funding by NRE prior to the RAG assessments. This project, entitled An assessment of the potential threat to native grasslands posed by the introduced earthworm, <u>Aporrectodea</u> <u>longa</u> is being run by Dr Paul Dalby, of the University of Adelaide. This exotic worm is highly regarded by some for its ability to increase pasture production by rapidly and extensively turning over soils and litter, and it is being considered for widespread introduction into high rainfall (>600mm/yr) Australian pastures (see Australian Landcare Sept 1998). However, history has taught us the peril of introducing exotic organisms into the Australian environment, and such introductions should be greeted with proper caution. Dr Dalby has noted that the potential impacts of the worm have been tested at only one place on the Australian mainland, (in dry sclerophyll forest), and there is possibility the worm may find native а grasslands to be suitable habitat. If so, this miniearthmoving machine may impact on native grasslands by disturbing the soil surface, increasing organic matter content and nutrient availability, altering soil structure and drainage and displacing other biota, particularly native earthworms. The research project is therefore aimed determining whether the worm will move from exotic to native grasslands, and the shortterm impacts to nutrient regimes and biomass production.

Important Events

"Nassella" workshop

The "Nassella" workshop was held at Victoria University St Albans on 26 February on an unbelievably hot day, thus making inspection of weed control trial plots not as pleasant as it might have been. Papers were presented on the identification, distribution. impacts and management of Nassella and related stipoid weeds. Of particular interest and alarm was the message that Australia now has at least five, possibly more, stipoid grasses of North and South America that have the potential to become weeds at the problem scale of Serrated Tussock and Chilean Needle-grass.

The conference recommended that there was a strong need for increased education; more research into biology and control of these weeds; more resources for management; and better coordination in the prevention and management of infestations. Proceedings of the workshop were published in *Plant Protection Quarterly* (1998), vol. 13, no. 2.

"Down to Grass Roots" conference

On 9 and 10 July 1998 a conference on the management of grassy ecosystems was held at Victoria University St Albans. The conference

was extremely well attended, by people from Victoria, NSW, ACT, SA and Tasmania. In fact, it was so popular that demand exceeded the 200 places and 30 people were turned away so as always it was disappointing that some people who were booked didn't turn up. Speakers included well known locals such as Tim Barlow, Ian Lunt, and John Morgan, and several interstate experts - Rick Davies and Paul Dalby (SA), Sarah Sharp (ACT) and Peter McQuillan (Tas). Feedback has indicated that most people found the conference informative and useful, and everyone complimented the quality of the food! Particularly enjoyable was the conference dinner, where we were entertained by the guest speaker and, among other things, grassland enthusiast Rod Quantock.

Proceedings of the conference are being prepared, and we hope to have them available in November. All those who attended the conference will receive a copy. For those who did not attend, copies will available for purchase. Cost has not yet been determined, but you could express your interest in getting a copy to Vanessa Craigie.

Grassy ecosystem email group

An email-based discussion group has been established to provide a forum for all people interested in the ecology, conservation, and management of grassy ecosystems in south eastern Australia. To subscribe, send an email message:

'subscribe GrassEcol <your email address > (new line) end'

to majordomo@life.csu.edu.au.

If you have trouble subscribing, please contact Dr Ian Lunt, The Johnstone Centre, Charles Sturt University, PO Box 789, Albury NSW 2640. Ph. (02) 6051 97624 fax (02) 6051 9897 *email* ilunt@csu.edu.au.

For further information on *GrassEcol* phone Tim Barlow.

Grassland Ecology course

This three day residential Grassland Ecology Course has been developed by Greening Australia and NRE to enable participants to enhance their understanding of grassland ecological processes, the threats to grassland fauna and flora and contribute to better and more efficient outcomes in managing Victorian grasslands. The course will be based at the "Grampians Retreat", Dunkeld, from Wed 25 -Fri 27 November and costs \$360. The course is being run as a "pilot" and the course coordinators will be seeking feedback from participants as to how the course can be improved and expanded in the future. The course will be applicable to all land managers, both private individuals and representatives of public authorities, as well as interested naturalists.

For further information contact: Mary Trigger, Industry Training Co-ordinator, Greening Australia, P. O. Box 525 Heidelberg, Vic 3054. phone: 9457 3024 *email*: gavic@vicnet.net.au

Box Ironbark Ecology course

This is a field based course in the heart of Box-Ironbark country and will emphasise an ecological understanding of these forests and techniques that improve observation and data collection skills of participants. The course runs from the 26th - 30th October and will be based at Warrenmang in the Pyrenees Ranges.

Course fees include: accommodation, meals, course notes, transport during the course and instruction. Contact Di Marshal, NRE, 250 Victoria Parade East Melbourne 3002. ph. (03) 9412 4608 *email*: d.marshall@nre.vic.gov.au

Both courses have limited space, so book now!

Western Plains Tour

On Saturday 24 October, a tour is planned to the eastern part of the Western Plains. This will be a single day trip from Melbourne. At this stage we plan to visit Rokewood cemetery, Mt Mercer Road, Shelford-Cressy Road and Cressy trotting track. This may be subject to change, depending on numbers and interest. Please contact Vanessa or Tim to book a place and get more information.

Northern Plains Tour

NRE and Parks Victoria have organised a morning at Terrick Terrick Grassland on Sunday 20 September. The focus will be on flora and fauna and management. For details, please call Shirley Diez or Peter Morison at DNRE Bendigo on 5444 6777.

"Grasslands Firing Squad"

The 'Squad will once again be deploying their incendiary devices across the grassy plains this summer. If you have previous experience in fire management and would be available at short notice for day-trips (possibly overnight at some sites) to assist with burning roadsides for both regional fire-protection and better grassland management, please contact Tim at VNPA.

FFG Listings

New final recommendations for Flora and Fauna Guarantee listings include:

Brachyscome gracilis ssp. gracilis (Dookie Daisy), Brachyscome chrysoglossa (Yellowtongue Daisy), Limestone Grassy Woodlands Community, Semi-arid Shrubby Pine-Buloke Woodland Community, Semi-arid Northwest Plains Buloke Grassy Woodland Community, Semi-arid Herbaceous Pine Woodland Community, Semi-arid Herbaceous Pine-Buloke Woodland Community and Grey Box-Buloke Grassy Woodland Community.

Other States

"Recovering The Monaro"

This workshop brought together some 120 and farmers to discuss scientists land management problems on the Monaro. With the excessively dry conditions over the past few years, perhaps the title could well have read Re-covering The Monaro, as it's pretty bare at the moment. Serrated Tussock and African Love-grass are already major weeds and will thrive over the next few years given the current lack of vegetation cover. Ironically, the loss of 'Frenock' herbicide may force many to rethink their weed control programs and develop a more integrated approach, with more emphasis on prevention of invasion through better grazing strategies and less reliance on herbicide. Some landowners were arguing that the Monaro's problems are so substantial (and the socioeconomic implications so great) that truly drastic measures are urgently required - one idea being to establish a regional land management authority with strong powers to enforce compliance or land acquisition. A field trip on the second day involved visits to a number of sites, including the upper-reaches of the oncemighty Snowy River where, with less than 2% of its normal flow, sadly looked more like a rivulet than a river.

For further information and proceedings contact Charlie Litchfield, Upper Snowy Landcare Coordinator, PO Box 26 Cooma NSW 2630.

New Books and Reports

Plains Wandering: Exploring the Grassy Plains of South-eastern Australia by Ian Lunt, Tim Barlow & James Ross 1998. (Trust for Nature and Victorian National Parks Association)

This comprehensive field guide accompanies previous VNPA publications such as *The*

Forgotten Forests: A guide to Victoria's Box and Ironbark Country. The book has three major sections: the first deals with the natural and social history of the Plains; the second details the ecology of each of the major 'grassy regions' in South-eastern Australia; while the third features quality photographs and line drawings of some 280 different species of plants, each with a brief description of the plant, its habitat, distribution and conservation status. This superb book is a must for anyone interested in the biology, conservation and management of native grasslands and grassy woodlands. Available from the VNPA for \$24.95 (add \$2 for p&p).

Marriot, N. & J. (1998) *Grassland Plants of South-Eastern Australia*. Bloomings Books

It never rains but it pours - suddenly there's two excellent field guides on the market. This handy book has clear colour photographs and descriptions of 170 plant species commonly found in grasslands and grassy woodlands across south-eastern Australia. The book concentrates on the smaller and less conspicuous grassland plants and provides a wide representation of grassland genera. Copies are available at the DNRE Bookshop, Greens Bookshop and similar stores, or contact Neil and Jane Marriot, PO Box 107 Stawell 3380. RRP \$26.95. For enquiries ph or fax 5356 2404.

Barlow, T. (1998). *Grassy Guidelines: How to* manage native grasslands and grassy woodlands on your property. Trust for Nature

This excellent booklet covers issues and methods related to the management of native grasslands and grassy woodlands. Providing clear management recommendations for a variety of situations this booklet is a must for the concerned landowner. The book is free to TfN members or covenanters with grassy ecosystems, \$5 to others. Copies are available through Trust for Nature, Level 2, 385 Little Lonsdale St Melbourne 3000. Ph. 9670 9933, fax 9670 9977, *email* trustfornature@tfn.org.au

VNPA (1998) Native Grasslands and Grassy Woodlands Information Kit.

This Kit forms part of a series on endangered ecosystems and is designed to provide information for people and groups interested in Grassland and Grassy Woodland Conservation. The kit is available through Victorian National Parks Association for \$10.00. Bland, R. (1997) *The Grasslands Ecology Program: an evaluation*. Biodiversity Group, Environment Australia, Canberra

This report was released earlier this year. It looks at the successes and failures of the Federal Grasslands Ecology Program (including the GERG model and its achievements) from 1993 to 1997, provides recommendations on arants processes (including the NHT). conservation priorities and institutional arrangements. The report takes a positive view of the GEP but notes that despite enhanced action, grassy ecosystems continued to be destroyed and more effort is needed. copies of the report can be obtained from the Biodiversity Group, Environment Australia, GPO Box 636 Canberra ACT 2601.

CRCWMS (1998) *Weed Navigator*. Cooperative Research Centre for Weed Management Systems, University of Adelaide

The two volume Weed Navigator is being released this month. It lists a huge variety of weed and related info for Australia and New Zealand. The first part of the Navigator, the Contact Directory, lists over 970 contacts (names, address, email, phone, fax, web sites, newsletters) relating to weeds and invasive plants. The second part, the Resource Guide, lists and describes over 1800 publications, brochures, web sites, databases, CDROMs, strategies. legislation, posters, training opportunities etc. (The two volumes are not sold separately.)

The two volumes of the Navigator are available for \$30 (incl. postage and handling) from the Cooperative Research Centre for Weed Management Systems (CRCWMS), Australia at phone (08) 8303 6590, fax (08) 8303 7125

email: crcweeds@waite.adelaide.edu.au

Or post order and payment (cheque made payable to CRCWMS or VISA/Mastercard/ Bankcard details) to:

CRCWMS, University of Adelaide, PMB 1 Glen Osmond, SA 5064

(Thanks to Kate Blood, Environmental Weed Education Coordinator, CRCWMS, Keith Turnbull Research Institute Frankston, ph 9785 0128)

New brochures

New NRE brochures on the conservation and management of threatened species include three species of box ironbark and grassy woodlands - Charming Spider-orchid (*Caladenia amoena*), Swift Parrot (*Lathamus discolor*) and Squirrel Glider (*Petaurus norfolcensis*), and the highly endangered grasslands species Sunshine Diuris (*Diuris fragrantissima*).

Trust for Nature (Victoria) have released 25 new brochures on threatened vegetation communities. Each is a 2-sided A4 page, and includes grassy ecosystem communities such as "Grasslands and Grassy Woodlands of the Western Plains", "Grasslands of the Wimmera", "Buloke Woodlands of the Mallee and Northern Plains", "Grey Box Woodlands of Northern Victoria" "Red Gum Woodlands of the Western Plains", to name just a few. For more information call Trust for Nature (Victoria) on 9670 9933.

WWF and the Threatened Species Network recently released a set of fliers on SA Temperate Native Grasslands. If you would like more information on SA native grassy ecosystems, phone Millie Nicholls on (08) 8846 2183 or Ann Prescott, phone and fax (08) 8269 2429.

Pick of the Lit

This section is designed to bring to your attention a range of literature relevant to grassy ecosystems. If you would like a copy of a paper, send details together with \$5 in stamps to Tim at the VNPA. Tim is also willing to help search for specific information (for a small charge to cover costs), so if there is something you particularly require, let him know.

Blessed are the Darling Downs

Although the Darling Downs in Queensland are not considered part of the lowland temperate grassy ecosystems (LTGE) of SE Australia, the natural vegetation has had a similar history and faces the same crises, with a couple of notable exceptions (Fensham 1998). Although readers would be familiar with much of the native flora, at least at the generic level, the Darling Downs are surely blessed by the fact that only two of the 86 major weeds in LTGE's (see Carr et al. 1992) present any problems on the Downs. The major dominant grass Dicantheum sericeum rapidly recolonises paddocks after cropping where it provides highly valued feed for stock, so its conservation is well supported by graziers. Whilst grazing per se is not considered incompatible with nature conservation, it is emphasised that it is only one of a number of regimes required for conservation management in a fragmented landscape, as there exists a number of threatened taxa for which even light grazing is incompatible with their conservation.

Stipoids and Danthonioids

Contrary to popular belief, taxonomists have very valid reasons for what appears to some to be an endless circle of name changes designed simply to keep the masses confused. All native species of Spear-grasses are now referred to as Austrostipa spp. Although the grounds for the name changes are based in morphological and genetic differences, the review has produced the ecologically-pleasing result of separating the exotic and native Spear-grasses into different genera. McLaren et al. (1998) provide an excellent overview of both the new taxonomic arrangements, as well as an examination of the current and potential distribution of the exotic taxa. The economic and ecological implications of the potential spread of these weeds is highlighted.

On matters taxonomic, the old *Danthonia* has undergone extensive revision, much of it contentiously. We will now be using the term *Austrodanthonia* for most lowland Wallabygrasses in SE Australia, although *Danthonia semiannularis* and *D. longifolia* are now referred to under the genus *Notodanthonia* (Linder 1997). Some readers may be aware of these species being referred to under the genus *Thonandia* (Linder & Verbloom 1996) but this name is invalid (Linder 1997).

Everything you wanted to know about woodlands.....

Not quite, but Yates & Hobbs (1997) have done a fantastic job of condensing so much information (much of it based on Colin's Ph D) into a highly readable paper. As well as providing an overview of the conservation status, the paper describes the processes that have produced this degradation. The authors make an explicit call for a halt to clearing and more research to be focussed on developing solutions to degradative processes occurring in woodlands, rather than identifying problems. The problems are well described, and will send a chill down the spines of those who believe that fencing-off the patch of bush is all one has to do to conserve it - an essential step, but only the first of many.

References:

- Carr G. W., Yugovic J. V. & Robinson K. E. (1992) *Environmental Weed Invasions in Victoria: Conservation and Management Implications.* Ecological Horticulture & Dept of Conservation & Environment
- Fensham R.J. (1998) The grassy vegetation of the Darling Downs, south-eastern Queensland, Australia: floristics and grazing effects. *Biol. Cons.* **84(3):**301-310
- Linder H.P. & Verbloom G.A. (1996) Generic limits in the *Rytidosperma* (Danthonieae, Poaceae) complex. *Telopea* **6(4)**:597-627
- Linder H.P. (1997) Nomenclatural corrections in the *Rytidosperma* complex (Danthonieae, Poaceae). *Telopea* **7(3)**:269-275
- McLaren D.A., Stajsic V. & Gardener M.R. (1998) The distribution and impact of South/North American stipoid grasses (Poaceae: Stipeae) in Australia. *Plant Prot. Quar.* **13(2):**62-70
- Yates C.J. & Hobbs R H. (1997) Temperate eucalypt woodlands: a review of their status, processes threatening their persistence and techniques for restoration. *Aust. J. Bot.* **45:**949-973

Grass Clippings Newsletter c/- Flora and Fauna Program Dept Natural Resources and Environment 4/250 Victoria Parade East Melbourne Victoria 3002