

News of Friends of Grasslands

supporting native grassy ecosystems

July – August 1999



FOG'S COMING EVENTS

Saturday 24 July, 2pm - Slide afternoon at Mugga-Mugga, Symonston. We'll have a cosy fire and warm coffee/tea for our winter get together.

Slide presenters include: Frank Ingwersen, Senior Plant Ecologist, from Wildlife Research and Monitoring Unit of Environment ACT, on the flora in the grassy mountain valleys of the Gudgenby area; Anne l'Ons with 'Hard yakka and its joyous rewards', on the various grassland areas on Mt Taylor, with brief reference to the weed problem; and David Eddy with more of his vast collection of grassland flora.

(Mugga-Mugga is on Narrabundah Lane, off Mugga Lane, opposite Therapeutic Goods Admin.)

Wednesday 11 August - FOG Workshop "Pasture Management for Production, Catchment and Biodiversity." Queanbeyan Kangaroo Rugby League Football Club 8am to 5pm. This is FOG's major workshop for the year and it is important on several levels. We have excellent speakers and have kept the cost low. Grassland conservation requires linking conservationists and the rural community and striving for mutual understanding. The workshop (following last year's workshop theme of "win-win") will provide just that opportunity.

The benefits ought to be:

- better understanding of the links between production and conservation
- opportunity for landowners and conservationists throughout the region to exchange ideas
- learning from excellent speakers with strong agricultural and/or conservation backgrounds
- building new and important networks
- promoting good science, values, and
- enhancing FOG's reputation as a serious contributor to finding good outcomes.

A brochure is enclosed so please read it carefully, get your registrations posted before 31 July, and encourage your friends to do likewise. Cost is \$10 and includes lunch, morning and afternoon tea

and registration.

Many sponsors and supporters have come on board, but we still have a lot of work to do and we need your support. Inquiries: Leon Horsnell 6231 6738 or Geoff Robertson 6244 5616 (w).

SPRING 1999

Saturday 30 October - Halloween Cemeteries Tour. We plan to repeat last year's successful northern cemeteries tour.

Sunday 21 November - St Mark's Grassland Open Day. This grassland open day at St Mark's, Barton will bring together church, conservation, government and community groups to focus on the beauty of a grassland and its conservation.

Important notes on COMING EVENTS:

- *Please put firm dates in your calendar.*
- *For outdoor activities, don't forget your hat, sunblock and drinking water.*
- *For insurance purposes, sign in/out at activities.*
- *For any information about activities (including times, venues and carpooling details), please contact Margaret Ning on 6241 4065 (home) or 6252 7374 (work).*
- *To make program suggestions, contact Margaret.*

Saturday 13 November – FOG's fifth birthday. Put this day aside for a FOG activity to celebrate our Fifth Birthday (FOG was launched on 12 November, 1994)

November - Common grasses identification workshop.

4-5 December - Southern Tablelands Grassland Hotspots. We'll do something similar to last year's southern cemeteries tour.

January 2000 - Y2K Bug Identification in the Southern Tablelands.

January or February 2000 – Alpine grassland weekend. Approximate accommodation costs are \$20 each per night at a Perisher lodge; we need 25 people to get this price; and bookings need to be made in the next couple of weeks. Please

IMPORTANT FOG DATES

Wed 11 August – FOG workshop

This is an important step forward for us, so please join us. \$10 includes everything including lunch.

January/February 2000 – Alpine grassland weekend

We need to know soon if you are interested. It's a wonderful opportunity to view the stunning array of alpine flora at this time of the year.

phone me to discuss this and/or make a booking (\$20 deposit) soon.

ALSO OF INTEREST

19-21 August, Bushcare conference: Balancing conservation and production in grassy landscapes, Clare, SA.

This conference will explore the following issues via a program of invited speeches and open forum:

- balancing conservation and production at local and landscape levels
- management of native pastures for stock grazing and biodiversity
- the biodiversity of grassy landscapes
- incentives and mechanisms for conservation
- the economics of farming with native pastures
- land holder perspectives of conservation and production

There is also a post conference field trip to Mt. Cone Nature Reserve at Burra, and other local grassland sites. Copies of the brochure are available from Naarilla Hirsch (phone 6289 8660 (w)).

7th Australasian Conference on Grassland Invertebrate Ecology, Perth, Western Australia, September 1999. Further information: John Matthiessen, CSIRO Entomology, Private Bag P.O., Wembley, WA 6014. Ph 08 9333 6641, fax 08 9333 6646, email johnm@ccmar.csiro.au

Information also available at: <http://www.agric.wa.gov.au:7000/Ento/acgie/Default.htm>

NEWS ROUNDUP

Although there's only been one FOG activity since the last newsletter, there's been plenty on the FOG agenda, as you can see below.

FOG HEADS LIST OF TSN COMMUNITY GRANTS

Did you see Geoff Robertson on national TV accepting a cheque from the Minister for the Environment, Senator Hill?

On Thursday 6 May, Senator Hill announced grants of \$400,000 for 39 community groups to save threatened species. The money was provided through the Threatened Species Network (TSN) Community Grants Program under the Natural Heritage Trust (NHT). Geoff Robertson was asked to accept a cheque for \$18,338 for the project titled "Conservation of the Monaro Golden Daisy Habitat".

Geoff took the opportunity to say a few words about grassland conservation and the importance of the FOG projects at Radio Hill (Cooma) and Adaminaby Golf Course. As an expression of FOG's gratitude he presented the Minister with copies of the newly released *Grassland Flora* and a FOG newsletter. Geoff was seen accepting the cheque and speaking on several commercial TV channels. He was also interviewed by ABC Radio Bega and 2XL Cooma.

FOG's project headed the list of projects for NSW.



GO GEOFF! Geoff Robertson takes an opportunity to personally tell Senator Robert Hill, the national media and an enthusiastic crowd about the importance of grassland conservation!



Now that's a cheque! Senator Robert Hill, Minister for the Environment presents FOG President Geoff Robertson with a \$18,338 cheque for the *Conservation of the Monaro Golden Daisy Habitat* project. (sorry about the light in the pic)

CONDER DEVELOPMENTS

Our last newsletter summarised the situation with FOG's endeavours to set aside two grassy woodland sites at Conder as reserves. Letters from the Minister, Brendan Smyth, state the Government plans to put a road through one site and allow some urban development. A new submission was prepared for Brendan to clarify some issues that had arisen in

discussions with the various stakeholders. This was a joint submission of the Conder Community Landcare Group, Clean Up Australia 2001, and Friends of Grasslands. It was also supported and signed by the Conservation Council, Field Naturalists Association of Canberra, Conder Residents Action Group, Canberra Ornithologists Group and the Canberra Region Society for Growing Australian Plants. Simon Corbell MLA (Opposition Spokesman for Urban Affairs and Environment) and John Hargreaves MLA (Member for Molonglo) are also supporting this submission. Thanks must go to Michael Bedingfield for his hard work organising the new submission.

SITING OF ACT PRISON

The Standing Committee on Justice and Community Safety (ACT Legislative Assembly) recently called for submissions on the possible siting of the ACT Prison. Four sites were suggested. These were located at Symonston, Majura, Kinlyside and Honeysuckle Creek. The site at Symonston is situated at Callum Brae, which has grassland and grassy woodland conservation values – the Grassland Earless Dragon is also resident there. Not

much is known about the possible conservation values at the other sites.

The ACT Branch of the ALP held a seminar on the ACT Prison on 13 April. This was an excellent seminar and the speakers included Professor David Biles (Corrections Policy Researcher), Associate Professor Hugh Smith (Prisoners Aid Society), Pam Burton (Barrister of the Supreme Court of the ACT), Dr. Keith Hamburger (former Corrections Director Queensland) and John Hargreaves MLA. The seminar covered many aspects of the prison, which is a complex issue and as the speakers noted, about which there has been little public debate. Geoff Robertson, who attended the seminar, raised the issue of addressing conservation issues in the siting of the prison.

The FOG committee decided to make a submission on the conservation issues involved in the siting of the prison. This is not a straight-forward issue and some on the committee felt uncomfortable with the siting of the prison on any area with conservation value. But after some discussion the committee was convinced that if the siting choice was sensibly undertaken there could be a "win-win" outcome on the issues of development of a site and conservation. Art Langston prepared the submission and subsequently provided a presentation to the Standing Committee. An article by Art appears on page 8.

PROMOTING FOG

Since March 1999, FOG has had the opportunity to present our display of posters and educational material at five different venues.

- 6 March, Paul Hodgkinson was at Kippax;
- 7 March some members were at the Fisher Parkland Clean-up Day;
- on Canberra Day a few of us attended ACT Alive in the grounds of Old Parliament House;
- a handful of us journeyed to Tidbinbilla's Easter Sunday Extravaganza, and
- 5 June, half a dozen of us were at Garema Place for World Environment Day, along with many other conservation/environmental groups.

The weather was generally extremely good on all these occasions and we have welcomed a few new members to FOG as a result of these activities. We try to attend as many of these occasions as possible as they are our main chance to get the grassland message out to the public.

We now have an impressive display consisting of

- three FOG posters
- native grasses and forbs (kindly loaned by Michael Bedingfield on various occasions)
- two posters with satellite images of the ACT on which the major grassland areas are readily viewed
- FOG's brochure
- FOG's photo album
- a complete set of FOG newsletters, and
- a handful of fact sheets which helps us to answer questions that may be asked (where to buy native grasses, for example)

If any FOG members would like to help out on this type of occasion, each hour or two of your time helps us to present a more effective face to the public. They are relaxed, sociable occasions, so please contact Margaret on 6241 4065 if you are interested in joining us in future.

PROPOSED KUMA RESERVE

The proposed Kuma Nature Reserve is a few kilometres south east of Cooma on the Monaro Highway. It is a site at which the endangered Striped Legless Lizard and Grassland Earless Dragon are both present. It is hoped that the reserve will be proclaimed in the next twelve months. The photo of a Grassland Earless Dragon in our January-February issue was taken at the site on 27 November 1998, when a few FOG members attended the opening day.

The NSW National Parks and Wildlife Service is managing the proposed reserve and has established a Steering Committee for that purpose. The committee consists of grassland species experts and community representatives. FOG was recently asked to nominate community representatives and had much pleasure in nominating FOG

members June and Bob Wilkinson. June and Bob bring excellent qualifications to the Steering Committee. They are long standing pastoralists in the district and their nearby property, which they have grazed conservatively over many years, still retains extensive native grassland areas and the Grassland Earless Dragon is also present. They are also committed to conservation.

PERUNGA RESPONSE

Environment ACT issued a draft action plan on the Perunga Grasshopper (*Perunga ochracea*) and called for responses. Kim Pullen on behalf of the FOG committee put in a submission. He congratulated Environment ACT on the quality of the draft report and made a couple of suggestions including specific mention of foxes and feral cats as likely predators of Perunga. Several other draft action plans were also released recently but FOG decided not to put in submissions as there are no immediate grassland issues involved.

NEWSLETTER TITLE

We are still procrastinating. Good suggestions are still coming in and they are discussed at each committee meeting.

SCIENCE WEEK

If you did not catch up with Science Week in early May you missed some interesting lectures and displays on a range of natural history issues. There was a wealth of material on conservation. We particularly enjoyed the Canberra Herpetologists' reptile and frog exhibition showing many grassland species, and Environment ACT's grassland exhibition.



Report on April Workshop

Geoff Robertson

The Setting

Forty five people attended the FOG Grassland Workshop on 17 April and the weather and setting were perfect. The workshop was held at the Mugga-Mugga Memorial Environmental Education Centre at Symonston, which provided excellent facilities for a workshop of this size. The wide decking around the main room enabled outdoor displays and afternoon tea in the warm autumn sun.

Views from the deck were wonderful, stretching from the natural grassland of Mugga-Mugga to the surrounding rural properties and the distant hills. Some speakers illustrated their talks by pointing to the sites being discussed. Adding colour and visual dimensions were Michael Bedingfield's art and plants, World Wide Fund for Nature posters on grasslands and the Aranda Bushland display.

Workshop aims

The workshop aimed to explore the links between the ACT Government's grassland conservation strategy with on-ground landcare and parkcare activities in the Territory and immediate surrounding area.

The opening paper, by David Shorthouse (Environment ACT), discussed the policy framework, the process of getting ecosystems and species protected, and the importance of community involvement. In the same session, Sarah Sharp (Environment ACT) outlined the importance of establishing management guidelines for grassland sites and Art Langston presented FOG's perspective on grassland conservation.

In the second session, Will Inveen (Mugga-Mugga), Nigel Hall (St Marks), Chris Watson (Umbagogong), Tom Baker (Queanbeyan Landcare), Alison Elvin (Greening Australia), and Kathryn Maxwell (Conservation Council) spoke about various patches of local grasslands and their conservation. Each brought a different perspective. Naarilla Hirsch outlined FOG's project to register sites.

The third session focused on research and new initiatives. Andrew Young (Division of Plant Industry, CSIRO) described some exciting work on examining the genetic variability of small populations of threatened grassland species. David Eddy discussed WWF's Monaro Remnant Native Grassland Project. Rainer Rehwinkel (NSW NPWS) described his work on establishing a framework for grassland conservation in the Southern Tablelands.

The final session was a grassland forum with contributions by Kim Pullen, David Shorthouse, James Ross (Victorian Grassland specialist), Mary Ormay and Art Langston. In a short article it is not possible to convey a complete report on each rich contribution. So I shall just offer a few thoughts on the themes emerging from the workshop.



A warm sunny autumn day at Mugga-Mugga was the perfect setting for this workshop. Participants enjoyed the panoramic views from the verandah between sessions.

contributed to establishing a better framework.

An excellent framework for grassland sites and threatened grassland species exists in the various ACT Government Action Plans and the commitment, both public and private, to implement them. David Shorthouse described the evolution of these action plans which protect endangered species and ecosystems. It is important that conservationists understand and participate in the process. This may help to identify additional ecosystems and species at risk, and threatening processes. It may also help us to understand what is required to implement existing plans and the importance that people outside government may play. Without understanding, important conservation opportunities will be lost.

In NSW work is much less advanced. Hence the importance of Rainer's work, which includes documenting public grassland and grassy woodland sites of high conservation value, particularly cemeteries and travelling stock reserves. Rainer also talked about the important link between conserving threatened species and threatened ecosystems. The next phase of his work will focus on high value conservation sites on private land.

David Eddy's project also involved surveying cemeteries and travelling stock reserves on the Monaro and making recommendations about site management to local Councils and Rural Lands Protection

Boards (RLPBs). Seventy sites have been surveyed and many good remnants identified. Councils and RLPBs have been receptive to his recommendations. This work has led indirectly to production of the *Grassland Flora* book and proposals to undertake the Radio Hill Cooma and Aaminaby Golf Course projects involving protection of grasslands and threatened species.

Each site needs active management

Each grassland site needs a manager and a

Framework for grassland conservation

Grassland conservationists attempt to understand grasslands and how to conserve them. But our understanding is very incomplete and our experiences of grasslands may not readily fit simple mental models. We require a good framework (or model) of grasslands and their conservation. This takes a lot of angst and anxiety to get it all together as there are many dimensions to a framework. Each workshop presentation

management plan to protect it from over exploitation and threats, and/or to restore it. FOG's project to register grassland sites, as explained by Naarilla Hirsch, is aimed at those with interest in a grassland site (even sites of lesser conservation value) to record key features and conservation plans for individual sites. In turn this may provide examples to assist others get started.

Sarah's work on site management plans provides a comprehensive scientific dimension. She described the processes involved in preparing a management plan, and documentation that should be prepared and maintained. Formal management plans have an added dimension when many stakeholders are involved at a particular site.

Variety of patches and approaches

Will Inveen explained how Mugga-Mugga has become an important cultural and grassland site. The Education Centre provides important contact with schools. Will has an obvious rapport with students and related how they find visits to Mugga-Mugga, and discovering grassland plants, exciting.

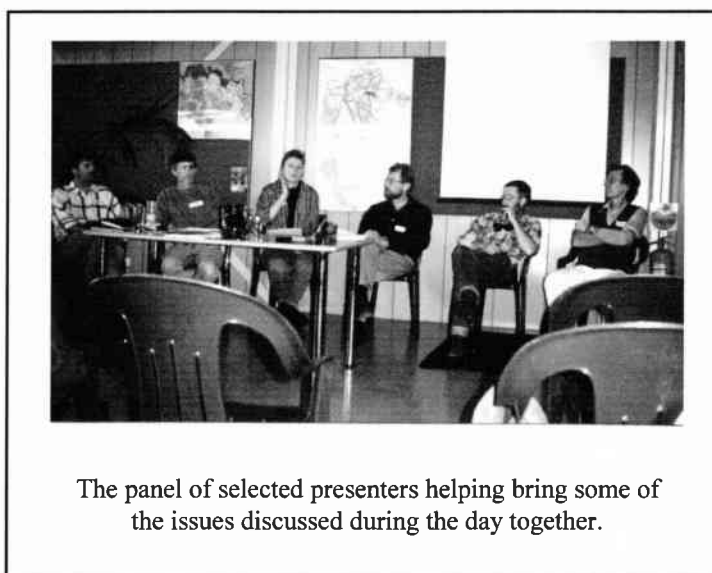
Nigel Hall described how God moves in mysterious ways. Setting aside land for a cathedral and not using it has led to the preservation of one of Canberra's most central and richest grassland sites at St Mark's in Barton. Nigel described the steps in getting a grassland conservation group established, working with other stakeholders and the multi-purposes of the site. The Button Wrinklewort (the endangered plant species at the site) may be the first Oz grassland plant honoured with a tapestry.

Chris Watson spoke about the Umbagog grassland site, work to manage, weed, restore and document the site, and wider Ginninderra Catchment issues. He talked of human threats to grassland sites within urban areas. A while ago he saw someone removing rocks (habitat) but was unable to get any redress – such sites should have rangers assigned. Official attitudes, which in the past regarded the site as “a bloody field of wild oats”, have prevented the site from acquiring reserve status. He said that we need to focus on schools and encouraging the study of science. He also warned against landcare groups “getting

too bogged down in getting government grants”.

Linking patches

Alison Elvin spoke about the need to think of corridors, and spoke of Greening Australia's Vegetation Investment Project (VIP) which is examining how to link conservation sites across North Canberra and nearby NSW. VIP will use “focal species” (currently limited to birds) to monitor progress over three years. The



The panel of selected presenters helping bring some of the issues discussed during the day together.

project will identify areas requiring fencing and or revegetation to promote corridors. This offers a challenge – how does one include grassland conservation in this type of project?

Tom Baker described the approach of Queanbeyan Landcare, which takes a regional approach and works closely with the Queanbeyan Council and other stakeholders, including the Ngannawal people, on a range of sites and conservation issues. Sites include a number of grassland and grassy woodland areas. His presentation offered many insights into a successful conservation group.

Working at many levels

Kathryn Maxwell explained the organisation of the Conservation Council, which works at a number of levels to get good conservation outcomes. Major contributions on grassland conservation have included: the 1991 ACT Native Grassland Workshop, achieving reserve status for Mulligans Flat in 1992,

establishing the Gungahlin Grassland Reserve (and moving the Gungahlin Town Centre) in 1995, and publication of *Neighbours in Trouble* in 1995. This work has involved organising active coalitions. The Conservation Council continues an active involvement in grassland issues through its submissions on Action Plans, active involvement on grassland sites (e.g. Conder), and regular meetings with the Minister for Urban

Planning and Environment. An issue which also requires attention, is the use of Property Management Agreements to protect grasslands on private property in the ACT.

Art Langston talked on the role of community groups, using FOG as his focus. He argued that it is

important to break down false perceptions (by community of government and vice versa), and by working together to get win-win outcomes. He spoke of how different groups may work at different levels and complement each other. He stressed the importance of community groups working in official processes. The balance between thinking and doing had to be got right – “think global and act local”. He outlined the new modes of doing things. However he was concerned about “burn-out” of volunteers. Current and emerging hot issues are Canberra Airport, Majura Valley transport links, rural urban development, siting of ACT prison, Isaac Ridge, buffers, ecotones, and Jerrabomberra Valley urban development.

Importance of research

Sarah's, Rainer's and David Eddy's work all reinforce the need for good science. Andrew Young delighted us (especially those with an interest in statistics) with some of his findings. His

work on plant genetics may lead to a greater understanding of the genetic diversity of small populations and offer insights into the likely survival of particular threatened species and/or possibilities for their wider establishment.

Bringing it together

The panel members added some of their

own experiences and reflected on the workshop. Mary Ormay outlined some of the practical experiences facing landcare workers trying to reestablish areas. James Ross spoke about Victorian experiences. While in Victoria there have been many advances in understanding grasslands, Victoria was also well ahead in grassland destruction.

Many other workshop participants contributed insights and useful suggestions. The lively discussion helped bring things together.

Many stayed for the evening BBQ. The warm weather and the feeling of having accomplished a good workshop combined to make this a very pleasant conclusion.

NATIVE GRASS GERMINATION

Andrew Paget

(In our January/February newsletter, there was an article on native grass seed germination. Recently I attended a presentation by Andrew Paget (a lecturer at the Uni of Canberra) about native grasses, including seed setting dormancy problems. He has kindly given us the following information on native grass germination for our newsletter. Question marks indicate that data to date are not conclusive. Margaret Ning)

NATIVE GRASSES AND DORMANCY PROBLEMS - SUMMARY TABLE

GENUS	AFTER-RIPENING/DORMANCY	GERM REQUIRES	SOW
Agrostis	Nil	Cool Temps, Light	Autumn
Aristida	Often complex seed-coat dormancy	Warm Temps?	Spring?
Austrofestuca (see Festuca)			
Austrostipa (see Stipa)			
Bothriochloa	Nil	Warm Temps	Spring
Chloris	Nil	Warm Temps	Spring
Cymbopogon			
Danthonia	Minimal, 2-4 months slightly reduced	Cool Temps, Light	Autumn
Dicanthium	Nil	Warm Temps, Light	Spring
Dichelachne	Minimal 2-4 months slightly reduced	Cool Temps, Light	Autumn
Echinopogon	Minimal 2-4 months slightly reduced	Cool Temps, Light	Autumn
Elymus	Nil to Minimal	Cool Temps, Light	Autumn
Enteropogon	Untested	Warm Temps	Spring
Eragrostis	Nil	Warm Temps, Light	Spring
Festuca	Untested	Cool Temps	Autumn
Hemarthria	Untested. Rarely produces seed	Warm Temps	Spring
Homopholis (see Panicum)			
Imperata	Untested	Warm Temps, Light	Spring
Joycea	Untested	Cool Temps, Light	Autumn
Microlaena	Nil	Uncertain, year-round?	?
Panicum	Sometimes complex seedcoat dormancy		
Poa	Minimal 2-4 months slightly reduced	Cool Temps, Light	Autumn
Rytidosperma (see Danthonia)			
Stipa	Some have complex dormancy		
Themeda	2-4 months Slightly lower germ	Warm Temps	
Tragus	Untested	Warm Temps?	Spring
Tripogon	Untested	Warm Temps?	Spring

GENERAL COMMENTS

- Native grasses are more sensitive to moisture stress during germination, and seeds are likely to die if constant and adequate moisture levels are not maintained.
- Almost all native grasses require red-light to trigger germination, so must not be covered too deeply when sown. Shallowly covered seeds will sense the light and will germinate.
- The recommended sowing times relate to the germination requirements and the commencement of the active growth period for the grass. Grasses are either Warm-season or Cool-season, and sowing at the commencement of their growth period will ensure the maximum period for successful germination and establishment.

AUSTRALIA OVERPOPULATED - BIODIVERSITY EXPERT

Edwina Barton

Australia is already overpopulated and is failing to halt loss of its biological diversity, according to Dr Harry Recher who is Foundation Professor of Environmental Management at Edith Cowan University (WA) and chair of the National Biodiversity Council.

"Policies are urgently needed to limit any increase in the population", says Dr Recher. "The faster the rate of population growth declines, the better all our lives will be and the more likelihood that fewer species will go to extinction."

Dr Recher warns that "Present and projected patterns of human use of the continent are not sustainable. We demand too much from a continent that cannot provide it. We consume and produce too much to conserve the continent's biodiversity, and in the process we compromise the continent's capacity to sustain ourselves."

Dr Recher issued these warnings in his public lecture entitled 'Biodiversity and Human Survival in Australia' at the Australian National University on 17 February 1999.

Dr Recher said that Australia needs to -

- stop land clearing
- put 30 per cent of the Australian continent back under natural vegetation
- use less resources
- reduce its population size, including encouraging Australians to have only one child.

Australia's record of conserving biodiversity was "incredibly poor" for a wealthy, relatively well educated and supposedly democratic country, he said.

Dr Recher slammed Australia's national paradigm of growth and development, which involved more people and more production - particularly since Australians already use, per person, 4.5 times our share of the world's resources, which leaves fewer resources to meet the needs of other people and other species. He

ridiculed as nonsensical the notion, advanced by some, that the solution to Australia's environmental problems was to increase Australia's population size so that we can produce more so we have the money to protect the environment.

"Today, humans are causing the daily extinction of tens, hundreds, thousands of species around the planet", he said. "We're taking away from all the other species on the planet all the things they need to survive. And we're using them to produce more of the things that we desire, and to have more people."

He challenged Australians to accept not only that conserving biodiversity was essential to our own survival, but also that we have a moral obligation to share with, and care about, other organisms - that they have a right to survive, too.

"All of us should take an ethical position concerning biodiversity conservation which places the survival of other species above the immediate needs and desires of all humankind", he said. For the past 10,000 years, as we have developed and extended agriculture around the world, we have maximised ecological efficiencies to maximise human production, but in doing so we have simplified ecosystems. That is what agriculture is: "the business of simplifying ecosystems", Dr Recher said.

Australians must ask themselves what it is that they value. Do they wish to see Australia converted into a land entirely subjugated to human needs, or do they wish to share the continent - and the planet - with other species? He urged the audience to heed Dr Paul Collins' warning (in his book 'God's Earth') that if we choose the former route, we will be seen by future generations as the most despised human generation ever.

Dr Recher has previously argued that -

- Australia's long-term viability is imperiled by its biodiversity loss
- the challenge is to make governments understand that, and to create an Australian society that wants to conserve biodiversity with least

social and economic cost

- Australia's human population size has already exceeded the continent's carrying capacity.

He has said that the major challenges facing us are the need for new political systems and new cultural attitudes towards how we use the planet. The biggest challenge that humanity faces, in his view, is coming to grips with its population size. It's not just the challenge of slowing the rate of population growth. Dr Recher is convinced that, globally, we have already gone beyond the carrying capacity of the planet, and that we are well beyond the carrying capacity of the Australian continent.

He argues that we need to think not just of limiting numbers of people, we need to begin to reduce our population sizes, and that's a huge challenge because we have political systems and politicians who don't even want to talk about that.

The National Biodiversity Council, of which Dr Recher is the current chair, has a membership of 18 scientists selected by their peers from universities and other research institutions. Collectively, the Council has expertise in environmental management, ecology, zoology, botany, and marine, freshwater and terrestrial conservation. The Council seeks to present a scientific view to the community of the needs for conserving biodiversity in Australia.

Dr Recher's 17 February lecture was hosted by Nature and Society Forum Inc. and Australians for an Ecologically Sustainable Population Inc. An audiotape of the lecture is available from AESP for \$12 - contact Edwina Barton on (02) 6247 1142 or email her at aespnat@canberra.teknet.net.au.



ACT PRISON SUBMISSION

Art Langston

Could the siting of a prison near or within a grassland community provide environmental benefit? FOG recently asked this question in both a written and oral submission to the ACT Legislative Assembly. We took the stance that no site should be considered for development where the environmental costs of development are larger than the environmental benefits. Whilst the prison (buildings and associated work areas) is only likely to occupy approximately 40 hectares it may potentially impact on a much larger surrounding area. However, a carefully sited prison with a large broadacre buffer zone around it could provide good conservation outcomes by protecting grassland located within the buffer. Considering the long-term (20 to 30 year) land use options for rural lease land within the ACT it is likely that most will be converted for urban development. Under this scenario a prison seems a better option for achieving conservation outcomes.

The key to ensuring these outcomes would lie in the design and management of the prison and would need both contractual and legislative controls that enforce compliance. It is imperative that any prison operation be limited by the obligation to protect and enhance the natural heritage of the site. Design principles would need to consider siting and composition of buildings, fencing and roads in relation to destruction and fragmentation of habitat, changes to soil hydrology and the risk of weed invasion. Ongoing management would need to consider these things as well as the level or intensity of land use within the buffer zone. There is much evidence to suggest that low intensity grazing of sheep for fine wool production without the use of

fertilisers or exotic grasses can support grasslands with both floral and fauna diversity.

We felt we could not provide a comparative assessment of the sites being considered because we did not know enough about the quality and type of habitat at each site. However, we did use a site at Symonston as a practical example because in this instance we had direct knowledge of the site. We also provided extensive advice on what site

St John's Wort and Paterson's Curse in the ACT and areas of NSW over the past ten years. Five years ago, few plants existed on Mount Taylor and surrounds (such as road verges and pavements), Farrer Ridge, Mt Arawang and the road to Kambah pool. Now we have large infestations visually obvious: less obvious and of greater threat are the numerous scattered clumps or single plants springing up in the native/exotic/revegetating bushland, horse paddocks, farmlands and

recreational areas such as those on the Murrumbidgee.

1998/99 has been a really successful season for the spread and appearance of St John's Wort, and an intensification of Paterson's Curse. According to published information this is due to last year's drought/heat and good rains. The new sites threaten all areas. I have found them in pure native grassland, in wood, marshy ground, road or path gravel. Parks and Conservation and I have sprayed, monitored and despaired this year:

(The grasslands at Yarramundi are a good example of the insidious spread of St John's Wort, and the Mt Taylor horse agistments of Paterson's curse invasion). I have strong evidence that not only are roos the major carriers of St John's Wort seed, but rabbits are also playing their part. Rabbits on Mount Taylor are presenting a serious threat to regenerating bush, and now we have the additional burden of seed spread! Native vegetation corridors linking parks are our big vision, but the spread of exotic soft weeds seems likely to ruin our efforts very quickly.

If we are serious about preserving the integrity of our bushland, and controlling the vegetative pollution of our catchments, then we must have a coordinated approach to the control of St John's Wort and Paterson's Curse, among



Michael Bedingfield's grasses and art work combined with the Aranda Bushland and WWF posters added colour to the workshop at Mugga-Mugga.

characteristics should be considered by the reviewing committee once more information was available.

WHERE IS ACT WEED STRATEGY?

Anne I'Ons

(Friends of Grasslands is aware that many conservationists are concerned by what appears to be the lack of an ACT Government comprehensive weed strategy. Anne proposes that an urgent submission is necessary to address the problem – your responses?)

St John's Wort and Paterson's Curse are major threats to Canberra Nature Park vegetation and river catchments: is all our work about to be undone?

I have observed the exponential spread of

other noxious weeds. This means an integrated approach by Park/Landcare Groups, Friends of Grasslands, Parks and Conservation and Urban Services. We must plan and coordinate our spraying programs, and we must do it as soon as possible. I would like to propose that an urgent submission should go to the relevant authorities or our Minister of Urban Services, outlining our concerns and asking for a consultative approach to the problem before we lose all hope of control.

ORANA PROJECT

Geoff Bartram

In 1997 the Orana School purchased the AME School across the road from its campus in Unwin Place, Weston. The purchase included about 10 hectares of Red Gum/Yellow Box grassy woodland, part of a 100 acre wood which continued up to Iloura Ridge and down to the Tuggeranong Expressway. The AME

School had left the woodland pretty much alone although it had been fastidious about clearing up fallen timber and slashing to the detriment of regrowth eucalypts. It wasn't long before some of the Orana School community saw the tremendous value the woodland had for educational purposes and as a community restoration project. An overstorey vegetation survey of the 10 hectares was done and regular bird watching, as part of Birds Australia's Atlas project, started. Twenty-eight hollow-bearing trees were recorded, an outstanding nesting resource for this suburban area. The woodland restoration project has been named the Iloura Ridge Woodland Restoration Project. At this stage the project is finding direction and getting expert advice on where best to begin work. Geoff Robertson visited the site and confirmed that the grassland had been quite severely degraded but provided excellent advice, support and encouragement. Paul Fennell of Canberra

Ornithologists Group and a representative of ACT Parks have also provided advice. The area's vegetation has been too modified to be considered an endangered community. Nevertheless all agree that with commitment this long term restoration project can make a significant difference not only for the 'other species' that utilise it but also in influencing the way in which this and future generations of Orana community members cherish woodland and grassland. Modest funding has been applied for, initially for survey work especially of the grassland, for some replanting of understorey, to produce some basic educational material for the school and wider community and a management plan. Funded or not the project is off the ground and with the support it has been receiving from the Orana and greater community there is no turning back. For further information please contact Geoffrey Bartram on 6281 6434.

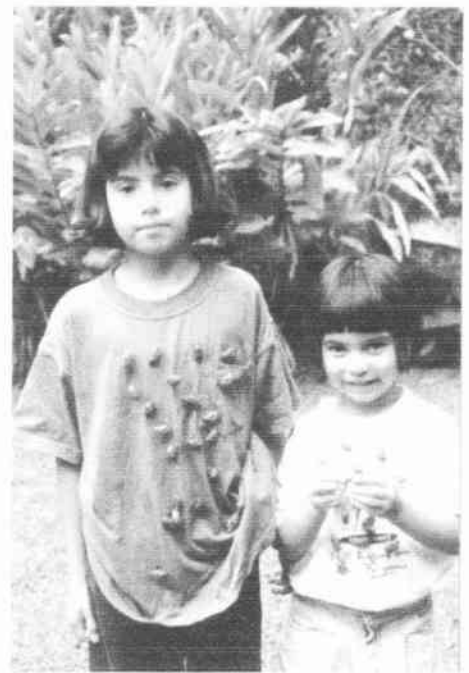
FOG's YOUNGER MEMBERS

Frequent participants in FOG activities are some of our younger members. The youngest is Aislinn Rehwinkel (age 3). She with her older sister, Eilish, often patiently accompany us. They are pictured below enjoying themselves at a FOG outing!



Aislinn (left) and Eilish (right) Rehwinkel, dedicated FOGGERS and so young at the same time! Keep up the good work!

Two other frequent participants are Karla and Yuyila Pullen who share their father's interest in invertebrates. They are often found peering down a wolf spider's hole or looking amongst the dark corners where something interesting may turn up. We hope the four of you continue to join us on our expeditions.



Karla (left) and Yuyila Pullen (right) obviously enjoy being ATTACHED to nature!

NEW QUEENSLAND RESERVE

James Ross

This is fairly old news but for those of you that haven't heard, you may weep with envy at both the size of the block and the speed with which the purchase was executed. A joint statement (26 March 1999) by Federal

Environment and Heritage Minister Robert Hill and Queensland Environment, Heritage and Natural Resources Minister Rod Welford announced "Australia's largest grassland park to protect endangered species". The media releases and speeches stated:

"A rare and endangered grassland is assured of survival in Central Queensland following the purchase of a property near Emerald, which has been earmarked as a national park.

The endangered King Blue Grass, now extinct in southern Queensland, will also be protected on the new 9000 hectare national park, which was purchased using Natural Heritage Trust and Queensland Government funds.

Federal Environment Minister Robert Hill says the purchase of the property, Albinia Downs, is one of several Queensland properties to be added to the National Reserve System with the assistance of the Trust. Of the 9000 hectares, about 7000 contain grassland that are so rare in Queensland their long-term survival is in doubt. In southern Australia temperate grasslands have all but disappeared and this acquisition will help prevent a similar fate for the Central Queensland Downs.

Albinia Downs contains several regional ecosystems of grassland, shrubby open forest, grassy woodland and open forest. Three of these ecosystems are endangered and four are of environmental concern, making this park of immense ecological value. In many parts of the State, the composition of grasslands containing King Blue Grass had been drastically changed due to introduced grasses and non-traditional management practices. With less than 0.5 per cent of the original

distribution of Blue Grass Downs remaining, it is important we act now to conserve such valuable ecological resources.

Queensland Environment and Heritage and Natural Resources Minister, Rod Welford, said the area would be of great scientific interest. "This purchase



The speakers at the Mugga-Mugga workshop kept the audience interested with a wide range of interesting and often thought provoking talks.

demonstrates how conservation partnerships between the State and Commonwealth can work for everyone's benefit," he said. "We were able to work together and act quickly to ensure protection of a unique area. The Queensland Government will be gazetting this property as a national park as soon as possible."

RECENT BUSH REGENERATION COURSE

Several FOG members recently attended Greening Australia's weekend Bush Regeneration Course which was partly funded by Bushcare. Alison Elvin was the presenter. Three sites were visited and all had a grassland or grassy woodland component. For those serious about regeneration or even restoration these courses are essential – they are also highly recommended. Greening Australia have managed to keep the cost low and this course will be re-run later this year. Greening Australia also proposes to re-run the other courses they conducted in late 1998 – Riparian Restoration, Wetland Restoration and Seed Collection.

REMOVING ROCKS REDRESS

Chris Watson has been unable to get redress in the case of someone removing lichen-covered rocks from the Umbagog District Park last year. Despite the fact that Chris saw someone remove the rocks and "it is an offence under the Protection of Lands Act 1997 to remove rocks and other material from unleased Territory land, with a maximum penalty of \$500", the ACT Government decided to take no action. Under the legislation, the perpetrator must be "caught in the act" by an officer authorised to institute proceedings. However, the Government has decided to look at how to restrict vehicle access. Chris considers that like weeds, this is an important issue, but one with a low Government priority. He considers that the legislation needs strengthening, there ought to be some public education on the removal of habitat, and that consideration be given to restoring habitat in such circumstances.

GRASSECOL MAILING LIST

This is a mailing list for the discussion of all aspects of conservation, management and research on temperate, native grasslands and grassy woodlands in southern Australia. When you subscribe to the grassecol list you will be able to send and receive messages and questions to a large number of people interested in grasslands and grassy woodlands. The list is run by Dr Ian Lunt of Charles Sturt University. (ilunt@csu.edu.au)

To SUBSCRIBE to grassecol, the email address is:

Majordomo@life.csu.edu.au

and the message should just say:

subscribe grassecol

end

To UNSUBSCRIBE to grassecol, the email address is:

Majordomo@life.csu.edu.au

and the message should just say:

unsubscribe grassecol

end

To send a message to the grassecol discussion group, the email address is: grassecol@life.csu.edu.au

LATEST ISSUE OF DANTHONIA

Environment Australia and the Land and Water Resources Research and Development Corporation have a national program to assist government agencies, community groups and landholders to better manage and protect remnant native vegetation through the application of improved knowledge and understanding gained from research, with a strong emphasis on practical outcomes. The latest issue of *Danthonia* lists each project and gives contact details. Projects include "Improving market outcomes: the case for native grasslands" (Vic and NSW), "Identifying alternatives to using remnant eucalypt vegetation for firewood in the ACT region through consultation with residents and farmers" (ACT), "Grassy white box woodlands: incentives and barriers to rural conservation" (NSW), and "Effectiveness of incentives in changing landholder attitudes towards remnant vegetation" (WA). Final reports for these projects have been prepared.

Notices of future conferences in the journal include:

Ecological Society of Australia: exploring the relevance of ecology to society at global, regional and local levels. Fremantle, WA, 26 September - 1 October 1999.

Fourth Australian Network for Plant Conservation national conference. Albury/Wodonga, 25-29 November 1999. Biodiversity in Australia. Perth, WA, 6-10 December 1999.

ANPC publications listed include *Guidelines for the translocation of threatened plants in Australia* (1997), and *ANPC Internet directory: a guide for web sites on threatened plant species* (1998).

There is also a letter and list of questions/discussion topics from the Botanic Gardens Conservation International asking for help in revising and updating the Botanic Gardens Conservation Strategy. If anyone has an interest in this area and would like to respond, please contact Naarilla.

For details of any of the above, phone Naarilla Hirsch on 6289 8660 (w).

APOLOGY

Our publisher has apologised profusely for the quality of the photos in our last newsletter. Apparently his photocopier was having a bad-ink day, but it has since been serviced and will be back to its usual high standard in this issue. Accordingly we thought we'd repeat the photo (below) of our ACT Alive display to do Michael Bedingfield's plants justice. Our publisher, Acme Publishing, has done a marvellous job over the last few years with our newsletter. They are very receptive to our requests and always very responsive to all our deadlines.



MAY 1998 WORKSHOP PROCEEDINGS

Proceedings from our workshop, Development and Native Grasslands – Resolving Conflict, will soon be despatched to workshop participants. This is a very impressive 100 page document which comprehensively covers and captures all aspects of the workshop. Extra copies will be available for the cost of postage. Enquiries to Margaret Ning.

PATERSON'S CURSE

On 4 March, CSIRO entomologist Matthew Smyth gave an interesting and comprehensive presentation to the Canberra Field Naturalists on Paterson's Curse. Rosemary Blemings has prepared an excellent summary of his talk and has kindly offered copies to those who are interested. ((h) 6258 4724)

AUTOGRAPHED COPIES OF GRASSLAND FLORA FOR SALE

Sales of Grassland Flora continue to be very impressive – around 1000 copies sold already! FOG is now able to offer copies for sale which have been autographed by all four authors of the book, all of whom are FOG members. The \$15 price includes a species list of all the plants in the book. What a great gift idea! Ring Margaret Ning to secure your copy (copies).

ENVIRONMENT CENTRE BOOKSHOP - DISCOUNT FOR FOG MEMBERS

FOG is a member of the Environment Centre, and the Bookshop there has decided to give a 10% discount to FOG members on presentation of this article. They have a wide range of books on natural history and the environment and are well worth a visit. Their address is Kingsley St, Acton, opposite Toad Hall at the ANU.

STOP PRESS!!!

FOG has a special new member! Thomas Emile Langston, born Monday 21st 1999 at 11:59 3750g (8lb 4.25 oz). Congratulations to Art and Ann from the FOG committee. See our story on junior members on page 9.

FRIENDS OF GRASSLANDS INC***Supporting native grassy ecosystems*****Address: PO Box 987, Civic Square ACT 2608****Web address: <http://www.geocities.com/Rainforest/Vines/7769/index.html>****Your committee:**

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Dierk von Behrens	Vice President	6254 1763 (h)	vbehrens@actonline.com.au
Naarilla Hirsch	Secretary	6289 8660 (w)	
Art Langston	Treasurer	6258 1032 (h)	art.langston@dwe.csiro.au
David Eddy	Committee	6242 8484 (w) 6242 0639 (fax)	deddy@ozemail.com.au
Linda Hodgkinson	Committee		lhodgkinson@student.canberra.edu.au
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Margaret Ning	Committee	6252 7374 (w) 6241 4065 (h & fax)	margaret.ning@abs.gov.au
Kim Pullen	Committee	6246 4263 (w)	kimp@ento.csiro.au
Michael Treanor	Committee	6291 8220 (h)	btreanor@dynamite.com.au

Membership enquiries: Please contact Margaret Ning whose details appear above.

FRIENDS OF GRASSLANDS NEWSLETTER

You have read this far, so we must have kept your interest. If you are not a member of Friends of Grasslands why not subscribe to the newsletter? It comes out six times a year and contains a lot of information on native grassland issues.

You can get the newsletter by joining Friends of Grasslands. You do not need to be an active member - some who join often have many commitments and only wish to receive the newsletter.

However, if you own or lease a property, are a member of a landcare group, or actively interested in grassland conservation or revegetation, we hope we have something to offer you. We may assist

by visiting sites and identifying native species and harmful weeds. We can suggest conservation and revegetation goals as well as management options, help document the site, and sometimes support applications for assistance, etc.

Of course you may wish to increase your own understanding of grasslands, plant identification, etc. and so take a more active interest in our activities. Most activities are free and we also try to arrange transport (or car pool) to activities.

If you are already a member, you might encourage friends to join, or even make a gift of membership to someone else. We will also send one complimentary newsletter to anyone who wants to know more about us.

HOW TO JOIN FRIENDS OF GRASSLANDS

Send us details of your name, address, telephone, fax, and e-mail, etc. You might also indicate your interests in grassland issues. Membership is \$20 for an individual or family; \$5 for students, unemployed or pensioners; and \$50 for corporations or organisations - the latter can request two newsletters be sent. Please make cheques payable to Friends of Grasslands.

If you would like any further information about membership please contact Margaret Ning, or if you would like to talk over FOG issues contact Geoff Robertson. Contact details are given in the box above.

We look forward to hearing from you.

Friends of Grasslands Inc
PO Box 987
Civic Square
ACT 2608