
AUSTRALIAN GRASSES STUDY GROUP NEWSLETTER

Association of Societies for Growing Australian Plants

Summer 1992

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Editorial

I am pleased to present the first newsletter since Spring 1990. Although the group has been in recess over that period, it is clear that the level of interest of members has remained high.

Of course the newsletter is our main means of communication, and will continue to bring together information, articles of interest and exchanges of opinion. This issue, however, is principally concerned with publishing the profiles of current members, based on the survey carried out in October this year. The reply rate of almost 60% was excellent. The accounts which members have provided have been of great value to me as a new leader not previously a member of the group - thank you for your response! I believe you will find the profiles interesting, and remind you that they can be used to enable direct communication with other members if desired.

Looking to the future, I envisage our membership rising steadily. Strictly speaking, I believe it is more accurate to describe the group as an Interest Group rather than a Study Group; however, I see us as capable of undertaking modest projects to do with Australian grasses. Also, as detailed in this issue, I would like to see members contribute their knowledge to future Feature Grass Articles. I welcome your comments and ideas.

Knud Hansen

Address all correspondence to: **Knud Hansen, 30 Cairo Road, Box Hill North, Victoria, 3129.**

CONTACT LIST - membership profiles

Thanks to all members who provided information on their interest/involvement in Australian grasses. We currently have twenty-eight individual members engaged in various areas of activity including field studies, pasture research, lawn grasses, ornamental horticulture and revegetation. For members from whom a profile was not received, I have (where possible) presented a brief description of interests, based on their letters or articles in past newsletters. Paul Carey's project is an interesting one - would members involved in revegetation, or familiar with his part of South Australia like to offer their comments?

Eric R. Anderson
P.O. Box 6014
Mail Centre
Rockhampton, QLD 4702

My interest in Australian grasses comes from my work in monitoring the impact of grazing in eucalypt woodlands. I am particularly interested in the role grasses can play in indicating the "condition" of our grazing lands. From an evangelistic point of view, I continue to remind SGAP members (in Queensland) that they cannot see the grasses for the trees (or anything with a pretty flower on it).

Helen Bizzai
P.O. Box 386
Gawler, SA 5118

[Helen has propagated and grown various Australian grasses - Ed.]

Sue Brunskill
RMB 1182 Beechworth Road
Wooragee, VIC 3747

I don't know lots about grasses but think they are very undervalued in revegetation work, erosion control and their importance in our ecosystems. Before I moved here (recently - which is why the delay in returning this, sorry), I was a bush regenerator in Sydney and also worked growing site specific natives. I grew some grasses *Themeda*, *Danthonia*, *Dichelachne*, *Echinopogon*, *Poa affinis*, etc. I would like to grow grasses from this area as well as improve my identification skills. We have just bought a property with 180 acres of bush and 50 acres cleared. I would like to return some of the 50 acres to native grass.

Bob Buck
37 Bushland Drive
Taree NSW 2430
ph (065) 525 647

My interest is mainly from the horticultural viewpoint. I am at present trying to incorporate my grasses into my 'developing' garden. I only have four grasses namely *Cymbopogon ambiguus*, *Danthonia caespitosa*, *Pennisetum alopecuroides*, and *Poa sieberana*, all of which are pretty common and in no danger. I will probably move house next year so I will not see how they go after planting. I am wary of planting species which I find can become rampant/weedy, e.g. *Danthonia* and *Pennisetum*, hence my desire to become 'grass literate'. One of the problems is ascertaining that the plant you have acquired is in fact the 'real McCoy'. Given that some common grasses are very variable and the differences between species is sometimes not obvious to the uninitiated, like myself, there are some small problems. I have only obtained my plants from nurseries, but I will have to start looking elsewhere if I am to get some results in the long run. I hope to improve my 'literacy' through membership of the group. I hope eventually to be able to propagate my own plants, but there are so many species to investigate. The problems are: (1) Plant selection; (2) Sourcing material either commercially or otherwise and (3) As I would prefer to use seed, obtain information on seed viability and germination. I look forward to fruitful membership of the group.

Bushland Flora
P.O. Box 312
Mt. Evelyn, VIC 3796

[Professionals involved in propagation, supply and revegetation with Australian grasses and other indigenous species especially of Melbourne - Ed.]

Craig Campbell
13 Tobruk Avenue
Engadine, NSW 2233
ph (02) 520 2713

Paul Carey
"Wallgrove"
P.O. Box 111
Streaky Bay, SA 5680
ph (086) 261 338

Dr J.A. Carpenter
15 Albion Street
Cottesloe, WA 6011

Gerda Cohen
34 Banks Avenue
North Turrumurra, NSW 2074
ph (02) 550 6319 (w)

I am a qualified greenkeeper as well as a horticulturist, so I am very interested in mass planting of native grasses as lawn alternatives. Can this be achieved successfully? My knowledge of native grasses is very limited. Besides using native grasses in small landscapes, I am also interested in collecting them myself, especially some of the taller, tussocky *Poa* spp., etc. I would like to know of their growing habits for ornamental usage. Also any photos, etc. Most books only have line drawings. I would be happy to send any money required for photos, etc.

I have a farm of 1,400 acres and plan to withdraw from cropping and as finances allow for fencing to revegetate. Present plans are to plant out fifteen acres with *Euc. rugosa*, quandongs, sandalwood, *Templetonia*, *Mel. uncinata*. Need understory but have no information or idea of grasses that will survive in area - 12 inches rainfall. Lack expertise in plant identification and seed collection.

[Jim is a pasture agronomist interested in grasslands and in growing native grasses for turf and ornamental purposes - Ed.]

My background is in Veterinary Medicine. My current occupation is cytogenetics and tissue culture. As a vet, I have always been interested in pastures. Having emigrated from Poland I have realised that the botany I learned in my Vet course needed revision and relearning in my new country. I have done some botany and wildflower identification courses. About ten years ago I got interested in bush regeneration and have completed a course (the Bradley method) with the National Trust. Since then I have been regenerating our adjacent bush. I have become a passionate hater of Kikuyu and buffalo grass and have, with my husband, eradicated those exotics from our garden and the adjacent bush.

Our lawn (which we do not cut, nor water) consists mostly of *Microlaena stipoides*, plus some *Entolasia marginata*, a patch of *Eragrostis leptostachya* (which loves the Sydney sandstone), *E. parviflora*, *E. brownii*, *Oplismenus aemulus*, *Cyperus mirus*, *C. gracilis*, *C. sesquiflorus*, *C. brevifolius*, *Dichelachne micrantha*, *D. rotundus*, and in between the grasses, the native bluebell *Wahlenbergia gracilis*, *Commelina cyanea* and *Dichondra repens*.

All those grasses and herbs came up spontaneously after the kikuyu and buffalo were removed. So the seeds must have been there all the time.

Once, while browsing in a second hand book shop, I came upon an interesting publication from the year 1898.

The author was J.H. Maiden (Government Botanist and Director of the Botanic Gardens, Sydney). The title was: "*Manual of the Grasses of New South Wales*". About *Microlaena stipoides* he says:

"This is an excellent pasture ... affording a tender green growth, 6 inches to 1 foot high, for many months of the year. Cattle crop it readily and the dairy farmer should give it every encouragement. It is a good fattening grass and does not suffer so much from overstocking as the Kangaroo-grass."

Pity the farmer did not take much notice and the invasion of Kikuyu began. Last year the seed producing Kikuyu got its entry visa to Australia.

I have written too much, but as you see I am quite angry about the manicured or not so, lawns of Kikuyu and buffalo which have to be attended at weekends in the most noisy way.

Bev Courtney
3 Burswood Close
Frankston, VIC 3199
ph (059) 71 2585

- Interested in promoting the creation of natural bush gardens (in which grasses are an integral part).
- Interested in promoting the growing of local grasses along roadsides to replace the introduced grasses usually found there. Also in roundabouts, nature strips, median strips, etc.
- Run a small nursery specialising in local species (inc. grasses).
- Interested in dried grasses for floral art.

Mark Couston
C/- Ku-ring-gai Municipal Council
818 Pacific Highway
Gordon, NSW 2072

B. Durnota
39 Baird Street
Doncaster, VIC 3108

Gill Earl and Ian Lunt
P.O. Box 910
Bairnsdale, VIC 3875

[Botanists with expertise in grassland conservation and management - Ed.]

Louise Gilfedder
89 Jubilee Road
South Hobart, TAS 7000

[Has written on the subject of Tasmania's native grasslands - Ed.]

Laurie Gilmore
48 McClelland Avenue
Lara, VIC 3212

[Laurie has been growing Australian grasses for a number of years, both for sale and for using them in his garden plantings - Ed.]

Clive Gordes
14 Kiah Court
Patterson Lakes, VIC 3197

Knud Hansen
30 Cairo Road
Box Hill North, VIC, 3129
ph (03) 898 7736 (h)

My main interest in Australian grasses is as ornamental garden and landscape plants. I feel that their potential as such has not been fully realized.

I have about a dozen species growing at the moment, mainly *Poa*, *Danthonia* and *Stipa*. I am keen to evaluate lot more as soon as house repairs and renovations allow me more time in the garden! My attraction to native grasses has developed gradually, but was particularly awakened by a couple of trips to the Northern Territory in the last few years, where their visual impact is particularly strong.

I am also a member of a local group (Greenlink Box Hill) here in suburban Melbourne which is involved in replanting open space areas with indigenous vegetation, including various grasses.

Although my original qualification was in languages, my interest in plants (especially Australian) and the outdoors has seen me employed in both wholesale and retail nurseries for the past sixteen years. It has also led me to study in various aspects of horticulture.

Frances Hutchison
137 Copacabana Drive
Copacabana, NSW 2251

[Interested in encouraging the growth of native grasses in a coastal hillside garden - Ed.]

D.J. Loch
Department of Primary Industries
P.O. Box 395
Gympie, QLD 4570
ph (074) 821 522 (w)
(074) 823 492 (h)

1. Harvesting of Chaffy-seeded Native (and Exotic) Grasses. Evaluation and development of bush harvesting for Australian conditions and grasses (based on original American concept).
2. Optimising Handling of Chaffy-seeded Native (and Exotic) Grasses. Evaluation of a range of techniques and machinery (hammer milling, precision thrashing and sizing, debearding, cone threshing, Woodward Chaffy Seed Conditioning System, etc.) for Australian conditions and gardens. Includes effects on establishment characteristics.

Wayne Long
RMB 1305
Moriac, VIC 3240
ph (052) 672 291

Dr. Graeme Lorimer
42 Gratten Road
Montrose, VIC 3765
ph (03) 728 5841

Robert Myers
P.O. Box 250
Birdwood, SA 5234

Grasses can provide ideal wildlife havens - seeds for birds, corridors for reptiles, small animals. I am interested in what particular grasses and grass-like plants attract particular wildlife, and am only commencing this study; e.g. *Lomandra longifolia* attracts the skipper butterfly (dependant upon area). I would also be interested to hear about other people's thoughts on "companion" growing, i.e. grasses which grow well together - either naturally or aesthetically.

I have compiled a list of various places where grasses are available and enclosed stock lists where possible.

[Wayne enclosed stock lists from Bushland Flora, and Dragonfly Aquatics - Ed.]

1. Natural History, particularly ecology and field surveys.
2. Education - I run courses on grasses identification and land management.
3. Lawns - I have a couple of demonstration plots in Ringwood North and Montrose.
4. Pasture - an interest only (particularly as I suffer badly from hay fever caused by rye grass, cocksfoot, Yorkshire fog grass, etc.).

I have just finished producing a double-sided A4 sheet to add to a 1993 Catchment Manual for the Landcare Group. It highlights the role played by sedges, rushes reeds and grasses along watercourses. It is an introduction to a subject not understood well (or at all) by most landholders. I have been dabbling in this area for the last four years.

Right now I have a number of rows of hand sown *Microlaena stipoides* germinating vigorously next to four strip trial sites of pasture grasses (the usual; cocksfoot, Demeter Fescue, *Phalaris* and lucerne) ... more about this later.

John Neff
27 Woodberry Road
Winston Hills, NSW 2153
ph (02) 639 8833

I am very interested and am currently involved in collecting native grass seed in the Sydney area, and using native grasses in tree planting and bushland restoration projects.

I am co-managing Urban Bushland Management Inc., that has substantial bush regeneration projects all over the Sydney district.

W.F. Owen
14 Duncan Street
Ballarat, VIC 3350
ph (053) 323 374

My interest in Australian grasses is mainly to use them in my garden with my daisies, as Bev Courtney's garden is of that type, and I am gradually working towards that pattern.

I only have four species (grown from seed that Dermott Kelly sent to me) and they are *Danthonia caespitosa*, *D. geniculata*, *Poa labillardieri* and *Microlaena stipoides*; but as I have seen some very attractive other varieties in Bev Courtney's garden, I hope to get seeds from you. I will also try to get some seed for you from Laurie Lees, one of our SGAP members, who is the ranger at Mooramong, a National Trust property near Skipton since they are trying to preserve the endangered plants of the western plains, and grasses come into this project.

I have had skin trouble for the last six years, and have been told that I am allergic to plants of the Composite group, which is mainly daisies, so I am hoping that grasses don't affect me.

Michael B. Sando
28 McLaren Street
Adelaide, SA 5000

Russell Starr
22 Oraston Avenue
Brighton SA 5048
ph (08) 207 2273 (w)

Pat Tratt
Lot 17 Nungurner Road
Metung, VIC 3904
ph (051) 56 2683

Associate Professor R.D.B. Whalley
Botany Department
University of New England
Armidale, NSW, 2351
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- Using grasses as ornamental groundcovers around my own home, particularly: *Cymbopogon ambiguus*, *Enneapogon nigricans*, *Themeda* and *Danthonia*, etc.
- Project Officer for State Government involved in landscape and urban design policy and project work - so promote native grass use wherever possible.

Collecting, identifying and listing local species. Growing quite a few from seed with varying success. *Danthonia* spp. seem to germinate readily - species tried to date are *D. longifolia*, *D. setacea*, *D. caespitosa* and *D. geniculata*. *Eragrostis brownii* and *E. trachycarpa* have grown well but *Stipa* spp. have proved more difficult.

I am establishing areas of native grasses with rocks and logs, interplanted with some herbs and forbs. I have also used quite a few Asteraceae as I am also a member of the Australian Dairy S.G. Just 'scratching the surface' so far. Some inflorescences are lovely when young, especially with the sun through them.

1. The ecology and management of Australian native grasses in a variegated landscape.
2. The manipulation of the species composition of pastures by grazing management.
3. Domestication of the native grass *Microlaena stipoides* for lawn, amenity and forage uses.
4. Population biology of selected native grasses.
5. The use of native grasses, herbs and shrubs for low maintenance vegetation on roadsides and amenity areas.
6. The population biology of exotic or native weeds of grasslands with a view to devising appropriate strategies for their management.
7. Anything else to do with the ecology, population biology and management of grasslands and grassy woodlands with particular reference to native grasses.

BOOK REVIEWS

Society for Growing Australian Plants Maroondah, Inc. (1991), Flora of Melbourne. Ringwood, Victoria : Society for Growing Australian Plants Maroondah Inc. 335 pages, approx. \$38.00.

Describes over 1,100 taxa indigenous to the Greater Melbourne area, including over ninety grasses. Also has substantial chapters on Melbourne's indigenous plant communities, seed collection, bushland restoration and other topics. The main strength of this book is its user-friendliness - a high percentage of grasses are depicted by line drawings of foliage and flowering stems and for each species, a comprehensive verbal description is provided under the headings of size, habitat, form, foliage, flowers, distribution and comments (including distinguishing features from similar species). Because many of the grasses described occur in other parts of south-eastern Australia, the book has far greater application than its title suggests.

Scarlett, N.H., Wallbrink, S.J. and McDougall, K. (1992). Field Guide to Victoria's Native Grasslands. South Melbourne : Victoria Press. 190 pages, approx. \$18.00.

Compact spiral bound handbook mostly devoted to plant descriptions but also containing up-to-date sections on grassland conservation, management and restoration. Also briefly describes the main kinds of grasslands and grassy woodlands in Victoria. About 120 grassland species (including 17 grasses) are depicted in colour photographs and described in concise easily-read text. Flowering time, points of difference with similar species, and a Victorian distribution map are provided for all species covered.

Dowling, P.M. and Garden, D.L. (eds.). (1991). Native Grass Workshop Proceedings, 16 and 17 October 1990, Dubbo, NSW. Melbourne: Australian Wool Corporation, 194 pages.

Clearly indicates just how much research on native grasses is now being undertaken, particularly in the pastoral sphere. Sixty papers deal with such topics as the status of native grasses in different parts of Australia, pasture management, nutritional value, domestication of various species, and the use of native grasses for example in combating soil erosion and salinity. The summary of recommendations given in the book identifies priorities for future work on native grasses in Australia. (My thanks to Dr. Graeme Lorimer for drawing my attention to this publication).

SEED BANK REPORT

Due to our group starting up again only recently, the range and especially quantity of seed currently available is limited; no seed was inherited from the group's seed bank of 1990. Thus all donations of seed will be much appreciated! Post to:

Knud Hansen, 30 Cairo Road, Box Hill North, Vic., 3129

If your unsure about how to collect seed, the article following will be of value to you.

Currently available are:

<u>Species</u>	<u>Provenance</u>
<i>Danthonia geniculata</i>	Frankston, Victoria
<i>Danthonia setacea</i> (large form, dense purple heads)	Frankston, Victoria
<i>Danthonia setacea</i> (fine form)	Mt. Eliza, Victoria
<i>Echinopogon ovatus</i>	Frankston, Victoria
<i>Eragrostis trachycarpa</i>	Metung, Victoria
<i>Poa labillardieri</i>	Langwarrin, Victoria
<i>Poa morrisii</i>	Langwarrin, Victoria
<i>Poa poiiformis</i>	Mt. Martha, Victoria
<i>Stipa elegantissima</i>	Frankston, Victoria

Thanks to seed donors:

Bev Courtney, Pat Tratt

To obtain seed:

Please list species requested in order of preference and send with stamped, self-addressed envelope to:

Knud Hansen (at above address)

Requests will be met as far as stocks allow.

COLLECTING SEED BY HAND

Collecting native grass seed can be a surprisingly pleasant and relaxing experience, and it takes only a short time to gather enough seed to contribute to the seed bank.

The main aspects of seed collection are:

- harvesting
- labelling
- drying
- avoiding insect damage
- storage

Harvesting seed by hand is simple : move your enclosed hand gently upwards over the seed heads of one stem, effectively dragging over them lightly, so that only ripe seed is dislodged and falls into your hand. Check that you are collecting seed and not simply floral or chaffy parts. It can take a considerable time after flowering for seed to develop and become ripe enough for harvest.

Transfer the seed into a paper bag or large envelope (never use plastic bags) and repeat the process for other stems. Seed often ripens progressively over time, enabling you to collect every few days from the same plant, if you wish. Any envelope should contain only one identifiable 'kind' of seed - do not mix different species, subspecies or provenances.

Proper labelling is important. Include the following on any label:

- name of species (and subspecies)
- name of provenance
- date of collection
- name of collector
- location of collection

If you are not certain of the identity of the plant, have a sample identified by the herbarium in your state.

Other information on the label is also often useful, e.g. soil type, aspect, situation and other vegetation present.

Record your collection information in a sound book for future reference.

Dry your seed by putting it on a plate or tray in a cool area (out of draughts or wind!) and leaving it there for 1 to 3 weeks. Where possible, remove bracts and debris prior to storage.

Avoid insect predation of stored seed by using mothballs or naphthalene flakes.

Store seed in a cool dry place out of the sun, and where humidity is low. For short term storage, paper bags or envelopes are adequate; otherwise, screw top jars containing a dessicant (e.g. silica gel) are preferable. Silica gel can be obtained from some photographic stores.

CORRESPONDENCE

Request for Seed and Information

September 7, 1992

I am currently studying for an Honours Degree in botany at the University of Adelaide. My project deals with mycorrhizal associations in grasses and chenopods from sand dunes. I need seeds of any of the following grasses/plants or any other grasses that come from sand dune areas.

Ammophila arenaria
Cynodon dactylon
Distichlis distichophylla
Lagurus ovatus

Lolium loliaceum
Sporobolus virginicus
Spinifex hirsutus

I have contacted the Society for Growing Australian Plants and I was told that you may be able to supply me with some seed. I would appreciate if you could let me know promptly if you can supply me with a small quantity of any of these species and the cost of buying them. I would also like any information that you have on germination of these species that you could give me.

Regards,
Matthew Denton

[Members can contact Matthew: c/- Department of Botany, University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001 - Ed.]

MEETINGS

Are you interested in meeting occasionally with other group members in your area?

Bev. Courtney has written to me suggesting that Melbourne members may like to do so. I support this idea because it has several obvious benefits.

Please phone either Knud on (03) 898 7736 or Bev on (059) 71 2585 if you are interested.

Members living in Sydney and Adelaide may be interested in initiating the same arrangements in their areas.

FEATURE GRASS - next issue

Past issues of the newsletter have included a feature article on a particular species. I see this as an item of considerable interest and intend to continue it in the future. I also feel that it can be enhanced in content and substance by including information about the species contributed by members. Therefore I am asking you to post me any information you have on the grass to be featured in the next newsletter - *Imperata cylindrica*. Whether your data is on its natural occurrence, propagation, establishment, lifespan, ease of cultivation, horticultural merit, use in revegetation projects, or any other aspect, I would like to publish it.

NEXT NEWSLETTER

The next newsletter will be posted in:
April/May 1993