
AUSTRALIAN GRASSES STUDY GROUP NEWSLETTER

Association of Societies for Growing Australian Plants

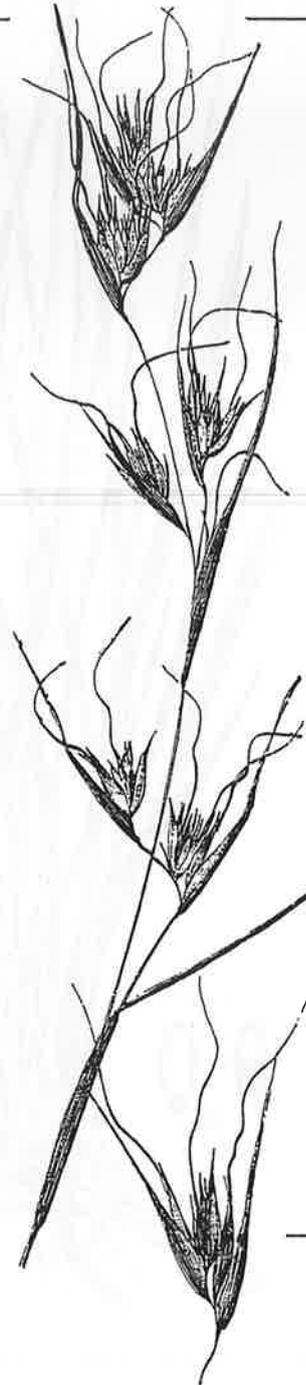
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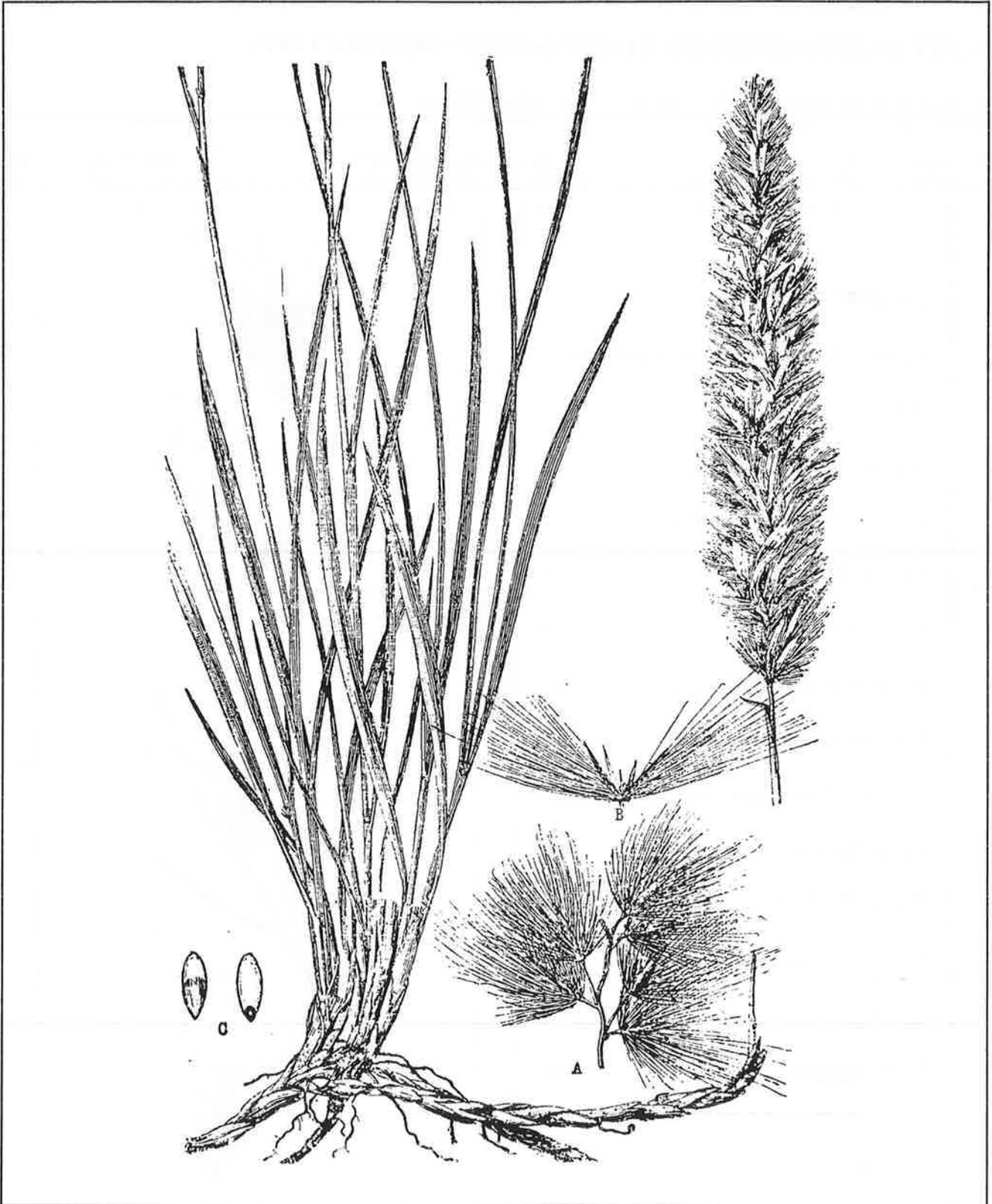
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Articles and reviews by Knud Hansen unless otherwise stated.

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



Imperata cylindrica

Key to smaller diagrams:

A: Arrangements of spikelets on rachis.

B: A spikelet opened out showing the four glumes and palea.

C: Grain, back and front view.

(all variously magnified)

[These diagrams and that on page 1 reprinted from Turner, F. (1895). Australian grasses. Vol 1.]

FEATURE GRASS

Imperata cylindrica (Blady Grass)

Background

The genus *Imperata* consists of about ten species occurring worldwide in temperate and tropical regions. It belongs to the subfamily Panicoideae, whose members are generally warm season C₄ grasses. *Imperata cylindrica* itself is widespread throughout the world, although its Australian representative (*var. major*) is found only here and in SE Asia.

Description

A tufted perennial with leaves and culms up to approximately 1 metre high, spreading by rhizomes and capable of forming extensive dense mats.

Leaves: mostly stiff, erect, narrow, flat and glabrous, sometimes vivid yellow-green or tinged reddish, leaf margins rough.

Culms: erect, unbranched, glabrous.

Inflorescence: a dense cylindrical spike-like panicle to approximately 20 cm long x 2 cm wide, fluffy in appearance due to long silky white hairs. Flowers in summer - autumn.

Spikelets: Almost hidden by hairs, in pairs on unequal pedicels.

Blady Grass is most easily recognized by its inflorescence and rhizomic growth.

Nomenclature

The genus *Imperata* was named after Ferrante Imperato, a Neapolitan botanist of the 16th and 17th centuries. The species name *cylindrica* refers to the shape of the panicle. The species is known by various common names in the different countries in which it occurs.

Distribution in Australia

Blady grass occurs in all Australian states and Northern Territory, usually in coastal and sub-coastal areas, and is particularly common near the east coast. An inland occurrence of interest is at Dalhousie Springs in northern South Australia.

Habitat

In south-eastern Australia, it is found in forests, woodlands, heaths and coastal dunes. It can become particularly abundant on cleared land and in overgrazed pastures.

Soil

Its presence often indicates low soil fertility and it is common on (but not restricted to) sandy soils. In New South Wales it has been noted as often occurring on moist acid soils.

Propagation

Easily propagated by division of the rhizomes. Ensure that each divided piece has one or two nodes from which shoots and roots can grow. Division can be done at any time of the year although roots will probably develop fastest in the warmer months. Aseptic practices will minimize losses caused by fungal attack.

Propagation from seed appears less common. Turner (1895) commented that a 'fair' amount of seed is produced, ripening annually in the autumn months. Mark Adams (pers. comm.) has suggested it is possible that viability is low, in common with various other plants which spread by rhizomes. However, Ian Shimmen (pers. comm.) has reported a high germination rate from a batch of seed and advises (in cooler areas at least) that sowing be carried out in spring. This enables seedlings to become more established before the onset of cold weather in autumn. Two other members of AGSG have sown seed without success.

I am unaware whether blady grass has been direct sown in land revegetation projects.

Garden Cultivation

Grows best in a sunny, well-drained position which is not dry. Responds to fertilizer, and to periodic pruning or burning. To avoid uncontrolled spread through the soil, some form of barrier is recommended. A possible specimen for large planters.

Benefits

This species has considerable ornamental appeal when in flower. It has excellent soil-binding properties and has long been recommended for erosion control on banks and similar areas. It provides significant habitat for reptiles and small marsupials. It was used for thatching in Australia last century, a function it probably still serves in Asia.

Disadvantages

Its invasive nature and poor fodder value make it unwelcome these days on land used for grazing or crops (eg. sugarcane). Before the introduction of improved pastures however it was a significant source of cattle feed, commonly being burnt off in spring to produce fresh foliage in summer. Only young growth is eaten by stock because older leaves are so tough and fibrous that they could only be digested by a camel (Maiden 1898)!

Control

A difficult grass to eradicate. Methods include chemical sprays, frequent repeated slashing or cultivation, and application of fertilizers in combination with seeding with vigorous pasture species, especially legumes. Burning only promotes further dominance because it stimulates new growth. Annual slashing in spring has the same effect.

In New South Wales and Queensland, Monsanto Ltd. recommends spraying with Roundup (360 g/L glyphosate) at a rate of 1.3L per 100 L, applied to actively growing plants at the head stage. A strategy for the introduction of a useful replacement needs to be planned however, since the elimination of blady grass may simply lead to a species shift in the weed population, eg. in surgarcane areas, massive germination of broad leaf weeds is common.

Acknowledgements

Many thanks to the following study group members who contributed information:

Maureen Bennett
Craig Campbell
Gerda Cohen
Bev Courtney
Pat Pike
Ian Shimmen
Pat Tratt

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The feature grass in the next issue will be Hairy Spinifex (*Spinifex sericeus*, formerly included under *Spinifex hirsutus*). All members are requested to contribute information so that a substantial account can be compiled.

INTERVIEW

Knud Hansen visited Bev Courtney who grows and sells a wide range of plants indigenous to her local area - a bayside suburb of Melbourne. Bev's appealing garden features many indigenous grasses, and she is also strongly involved in preserving the integrity of vegetation in a local bush reserve.

KH: Bev, you've been operating your small nursery for several years now. How do you go about growing your grasses?

BC: Well I grow grasses both at home and at the local Council nursery. At home I grow plants for my own use - for sale mainly - and my setup is simple. I sow seed in punnets in the open, using a mix of two parts perlite to one part of peat moss. I used to have trouble with flocks of sparrows eating the sown seed, which forced me to put wire cages over everything.

The plants I grow at the Council nursery are for Council use and for the regeneration project I am involved with. Community groups are able to use the nursery facilities to grow plants for local revegetation projects. The Council has a misted glasshouse which is excellent for getting the seedlings up and going. Once they have one or two leaves I pot them into tubes, and grow them on in the main growing area there, using wire benches to keep them off the ground - the tubes sit into the two-inch square wire.

KH: When do you do most of your sowing?

BC: Twice a year, normally. In spring at the Council nursery, I sow all local species needed for autumn planting in the local reserve and for Council use which is generally also in autumn. In autumn I sow seed at home to have stocks ready for sale in spring and summer - mostly *Poa* and *Danthonia*. *Themeda* and *Stipa* species (and also *Dicanthium*) seem to germinate best in spring so that's when I do all of them. In general though, seed is sown about six months before plants are needed.

KH: *Stipa* have a reputation for being difficult to germinate well - how do you go with them?

BC: This is the first year I've really had a lot of success germinating *Stipa*. Another chap who uses the council glasshouse had a wonderful punnet full of *Stipa* so I asked him how he got such a good result. He said that he took the awns off the seed and then just sowed and covered it. He just breaks the awns off.

So I tried the same technique myself - breaking the awns off and covering the seed - and they came up beautifully. He got his best results in spring but I haven't done any trials yet myself into time of year or freshness of seed.

KH: How many local grasses are you growing?

BC: About a dozen or so ... including this one here, which is *Danthonia linkii*. It occurs in the local reserve which I'm involved in looking after. It was previously unrecorded for Frankston.

KH: So your grasses identification skills must be fairly sharp then?

BC: Well if I use "*Grasses of New South Wales*", I'm usually able to get as far as genus level. I also compare notes with Rod Hill, another local SGAP member who is interested in grasses.

A few species are fairly easy to identify such as *Stipa elegantissima* and a few of the *Danthonia* but for other grasses which I'm not sure about, I'll always send in a specimen to the Herbarium. I don't sell anything which hasn't been properly identified.

KH: I imagine you're very familiar with some of your local grasses by now.

BC: Yes, after a while you can tell things apart, even by their seed - these two forms of *Danthonia setacea* for example.

KH: You've used grasses a lot in the planting scheme of your garden.

BC: Yes, well they self sow so easily. You might start off with only one or two plants of a species but it doesn't take long and there's lots of young seedlings about as well.

Dichanthium sericeum is a good example - it can self-sow prolifically, up to twenty feet or more away from the original plants. I keep a couple of plants just to show people but it can simply take over - I know that I need to just keep pulling seedlings up as they appear. Rows of seedlings of it will come up between pavers. When I was developing the garden I put down this mulch of stone chips because it looked attractive and because I hoped that daisies would self sow easily in it ... but it's really been the grasses which have been particularly successful.

KH: So you need to control the number of plants of grasses you've got in the garden.

BC: Definitely. What I'm aiming for now is to have the grasses growing in some form of balance so that I've got the odd little fine grass coming up here and there, like at the local reserve.

KH: Do you do any watering?

BC: No, this year I decided I wouldn't water at all. I only water new plants once a week through their first summer. I plant right through the year, although autumn is probably my busiest time.

I don't think I've ever lost a grass! People don't realize how easy they are to grow.

KH: And what about your front nature strip - that's pretty well vegetated with grasses and shrubs.

BC: Yes, I'd like to reduce the number of grasses there too. It was solid with *Danthonia* and I've taken quite a lot out. I've just planted a few grasses though, including a form of *Danthonia setacea* from east Frankston which I want to collect seed from to use in the local reserve. But I'd like to put more daisies in the nature strip and pull out more of the *Microlaena* which also takes over. Eventually I want the nature strip just to have only local plants in it - *Danthonia geniculata* is good too with its nice fine foliage.

KH: And you don't have any problems from the council with regulations about visibility or safety?

BC: No, they don't mind at all. There isn't really a problem.

KH: Do you find the local birds are using the grasses?

BC: Yes, for nesting material and also for food. We've had little red-browed firetail finches here. They're not permanently in the area - they must have come from somewhere else, maybe the Water Board land. They grab the seed head, pull it down, then put their foot on it and proceed to eat the seed. They collected as much seed as they could eat - it was terrific!

[Bev Courtney can be contacted on ph: (059) 712 585]

ALPINE REHABILITATION

The following article is reprinted with the permission of the author. It first appeared in the March 1993 issue of Backhousia (Newsletter of the Burnley Horticultural Alumni).

DEVELOPMENT OF INDIGENOUS SPECIES

FOR

REHABILITATING ALPINE ECOSYSTEMS

by

Elizabeth MacPhee

Australian alpine catchments and ecosystems have been subject to large scale and intensive soil disturbance in the past which has caused degradation of natural ecosystems and affected catchment conditions. Recreation and tourist pressures, especially developments in ski resorts are expected to increase in the future and have the potential to cause further degradation of soil and vegetation. Past revegetation techniques have been based on exotic species, commonly known as 'alpine mix', which does not restore natural ecosystems nor maintain optimal catchment conditions.

In the last three years research has been done into the production of indigenous species for use in alpine rehabilitation. The research projects primary objectives are:

- to develop economically efficient and ecologically sustainable systems to rehabilitate alpine areas following soil disturbance;
- to study the diversity of selected indigenous species in alpine ecosystems as a guide to their rehabilitation potential;
- to develop systems for propagating indigenous species that can be widely used through the Australian alps.

The first two objectives are currently being researched and developed by a team of highly qualified and dedicated scientists (some of whom are Burnley graduates!). The third objective has been my major field of interest, ie, the propagation of alpine species. The main species of interest are Ledge grass (*Poa hothamensis*) and Soft Snow grass (*Poa hiemata*). Ledge grass is the dominant grass growing in closed heathland communities commonly found on rocky slopes on the Bogong High Plains and on Falls Creek ski slopes. Soft Snow grass is the dominant grass on much of the gently sloping open grassy areas of the Bogong High Plains. These grasses are adapted to local climatic and soil conditions, particularly to low pH and low nutrient status. They are initially slow growing but their tussock growth form provides optimal catchment protection. Mature stands of *Poa* provide long term stable vegetation cover and are not readily invaded by weeds.

For the past four years, seed of these species has been harvested from Falls Creek. Laboratory trials and field trials have shown that both species germinate readily. The seed has been used

for direct seeding of some alpine areas in need of rehabilitation with promising results. Further seed production trials are being carried out at the Ovens Research Station (near Myrtleford). This is a potential method of producing larger quantities of seed because of year round growth and more efficient harvesting techniques. To date this has proved highly successful. In 1992 about 50kg of Ledge grass seed was produced on just over an acre. Further research into selection and breeding based on seed production attributes is being carried out. Special attention is going to be given to the suitability of resultant seed for germination, growth and reproductive capacity in the alps as well as seed production under cultivation.

Other species of interest are the alpine shrubs. Some of the alpine shrubs are colonising species in nature. That is, they readily establish in bare ground in the alpine areas. Once established, they then provide a microclimate for the establishment of native grasses and forbs. On particularly harsh, exposed sites, the grasses and forbs may readily germinate, but may not make it to maturity due to the extremes of temperature and erosion potential of alpine soils. The deep rooted shrubs have a greater potential for survival in these harsh areas and can ultimately provide protection for the establishment of herbaceous species. The major reason being that the alpine shrub seed displays dormancy characteristics that have not been overcome by nursery practices. To try and overcome these dormancy problems and develop a direct seeding system for alpine rehabilitation using alpine shrubs, I am currently undertaking a Master's Degree at Burnley. The species I am looking at are:

Grevillea australis

Oxylobium ellipticum

Hovea montana

Acacia alpina

Acacia obliquinervia

Bossiaea foliosa

Pimelea ligustrina

If anyone has any experience in germinating these species, any feedback would be greatly appreciated. Please contact VCAH Burnley on (03) 810 8800 and I will get back to you.

REVEGETATION OF WINDMILL GRASS

The following article is one of a series of native grass revegetation information sheets produced by Bushland Flora, P.O. Box 312, Mt. Evelyn, Victoria, 3796. It is reprinted with permission.

REVEGETATION OF WINDMILL GRASS

(*Chloris truncata*)

INTRODUCTION

These guidelines have been prepared to help in the establishment of Windmill Grass (*Chloris truncata*) from seed supplied by Bushland Flora.

SITE SELECTION

Windmill Grass is a low growing (tufts up to 10 cm tall, seed heads up to 30cm tall), drought-tolerant, Summer-growing species which responds well to Summer rains. We recommend its best uses are for low maintenance rough unirrigated parklands. It performs better under irrigation, but there are probably better species for irrigated lawns than this species (eg. Brown's Lovegrass *Eragrostis brownii*). Because it is Summer-active sites which are free of other Summer-growing species should be selected as management to favour Windmill Grass is also likely to favour these weeds. Problem weed species which sites should be free of are:

COUCH	<i>Cynodon dactylon</i>
PASPALUM	<i>Paspalum dilatatum</i>
WATER COUCH	<i>Paspalum distichum</i>
KIKUYU	<i>Pennisetum clandestinum</i>

SEEDBED PREPARATION

Sites which contain weeds can be sprayed (when the weeds are actively growing - recommended in October/November to kill Summer-active weeds) with "Roundup" (Glyphosate) (2L/Ha) and "Fusilade" or "Sertin" (100ml/Ha) several times at 4-6 week intervals to kill existing growth and subsequent weed regrowth. This may, however, take 4-6 months or longer to achieve a site clean enough for sowing. We therefore recommend that on weedy sites the soil be sterilised (using Methyl bromide or "Basamid") to kill all weeds present and any weed seeds in the soil.

The seedbed for lawns need to be properly prepared for best results, including rotary hoeing and raking. The seed is best sown onto a freshly prepared seedbed so the seed can gain good soil contact which will reduce moisture loss and improve germination.

SOWING

Windmill Grass is a Summer growing species requiring Warm temperatures and high moisture levels for germination. We recommend that it be sown with irrigation in early Spring (Oct-Nov), after the temperatures start to rise, or else through Summer (up to the end of February) if frequent initial irrigation is available. These times enable the seeds to germinate well, and give the seedlings enough time to establish before they become dormant in Winter.

The seed is normally supplied as florets which are very fine black wedge-shaped paper coverings containing very fine creamy yellow seeds, and for sowing small areas must be bulked up with sand to be sown at an even rate. We suggest that you use dry fine white sand and the seed must be mixed thoroughly through the dry sand to ensure even coverage. Hand sowing is difficult to get even, so we recommend you sow 45% in one direction, and sow 45% in the opposite direction, and keep 10% to re-seed any bare patches which may become evident after germination.

For large sites the seed can also be applied by hydro-seeding or hydro-mulching. For hydro-mulching we recommend using 1000 Kg/Ha of cellulose fibre mulch. Hydro-seeding is where the seed is applied in water without the mulch or binder, and is suitable only for flat sites where moisture-stress is not likely to be a problem (the cellulose fibre mulch helps reduce moisture stress).

We recommend and supply seed at a turf sowing rate of a minimum of 1000 germinable seeds per square metre, to result in a rate of 100 seedlings per square metre. This calculates out to be about 10g per square metre, 10kg per 1000 square metres, or 100kg per Ha. For non turf areas we suggest that this rate can be reduced.

ESTABLISHMENT

Sowings require irrigation, and we recommend the seeds must be kept constantly moist until germination which can take 2 weeks (but often takes less than 7 days when temperatures are high - Jan/Feb), then daily for the next two weeks, and weekly waterings until the Autumn.

Once established Windmill Grass responds well to Summer irrigation and is actively growing and grey green over Summer. It will become dormant in Winter and become less evident over this period.

Initially weeds should be spot sprayed with "Roundup" (using a very small hood to ensure minimal drift) or hand weeded until the seedlings pass a 5 leaf stage. After this broad-leaf weeds can be selectively eradicated by using a herbicide containing MCPA and Dicamba (e.g. "Banvel M" or "Valiant"). Exotic perennial grasses will still require hand weeding or spot-spraying with "Roundup" or "Fusilade" or "Sertin".

MANAGEMENT

For lawn situations Windmill Grass can be mown to conventional heights (12mm), but is best if mown no less than 2cm. Mowing should not be required as frequently for Windmill Grass as for conventional lawn species, as it is not as erect in habit, and is not actively growing over the cooler months. It does not often form a very dense turf, being open in habit, and is grey green in colour.

GROUP PROJECTS

All members are requested to contribute to the following projects -

Post your information to Knud Hansen.

PROJECT ONE - WHERE CAN AUSTRALIAN GRASSES BE OBTAINED?

The aim of this project is:

to compile a list of sources where plants and/or seed of Australian native grasses can be obtained.

The benefits of this project include:

an increased awareness of where grasses can be obtained. Members will have a better chance of procuring a wider range of species.

The results will be published in Newsletter No. 11 in September/October this year.

Please post me your contribution by the beginning of September. I need to know suppliers' names, addresses and phone numbers. Lists of available species are also desirable but not essential.

PROJECT TWO - RELIABILITY IN GARDENS OF NATIVE GRASSES

This project has been initiated by Diana Snape, the Leader of the Australian Garden Design Study Group and I hope that members will give it their full support.

For further details see Diana's letter on page 14.

CORRESPONDENCE

3 Bluff Street
East Hawthorn Vic 3123

6th April 1993

Mr Knud Hansen
Australian Grasses Study Group Leader
30 Cairo Road
Box Hill North 3129

Dear Knud,

We have just had the first official meeting of the ASGAP Garden Design Study Group, which is receiving very good support.

Our Group would like to establish a list of "proven" Australian native plants for garden design - plants regarded as being reliable under the conditions generally described for them in the literature (the Encyclopaedia of Australian Plants, etc.). Plants should also be reasonably readily available, from nurseries, through SGAP or (at least) from seedbanks.

Would it be possible for your Study Group, from your current knowledge, to write such a list for the Australian grasses? I know it's not an easy task! (Would it be easier at this stage to restrict the list to grasses in the eastern states?) You can assume people will check the literature to find out the conditions under which the plants should grow best.

Please let your members know about the Garden Design Study Group as we would welcome more members. I think grasses have a very special place in garden design. Contact through newsletters, etc., will be important to us, particularly in regard to garden design projects.

I'll look forward to hearing from you soon.

Best wishes,

Diana Snape,
Leader, Garden Design Study Group

(03) 822 6992

[Establishing reliability rating of native grasses is a most worthwhile project. Would members contributing to this project forward their information to me. I will then collate and record it and relay the results to Diana Snape - Ed].

CORRESPONDENCE

- Continued -

Dear Knud,

... I am interested to know whether other members have grown *Stipa elegantissima* in association with other plants for support. I am going to try *Olearia asterotricha* and *Leucophyta brownii* (formerly *Calocephalus brownii*) and possibly others, and hope to have something to report later on.

I enclose seeds ... (including some of) *Eragrostis trachycarpa* which is most attractive -its inflorescences are quite large but very light and airy like Blown Grass (*Agrostis aemula*).

Regards,

Pat Tratt

* * *

BOOK REVIEWS

Simon, B.K. (1990). A key to Australian grasses. Brisbane; Queensland Department of Primary Industries. 150 pages, approx. \$35.00.

Sharply focussed on enabling the identification of any native or naturalized grass in Australia via a key to the genera and separate keys to the species in each genus. The key couplets predominantly use characteristics of flowering material and are brief but clear. Apart from indicating Australian distributions, little extra information is provided.

Dashorst, G.R.M. and Jessop, J.P. (1990). Plants of the Adelaide Plains and Hills. Kenthurst, N.S.W.: Kangaroo Press. 224 pages, approx. \$40.00.

A most attractive reference to about half of the flowering plants and ferns (plus some lower plants) of the Southern Lofty Region of South Australia. Ninety-six grasses are covered, including forty-two native species. For each, an exquisite colour illustration of the spikelet is given, plus a simpler diagram showing the overall appearance of the plant, its flowering culms or other representative parts. Very brief notes provide typical dimensions and other distinguishing features; similar species are mentioned. Distribution in the other botanical regions of South Australia and in other states is listed, while distribution within the Southern Lofty is shown by means of a grid map.

JOURNAL ARTICLES

Recently published journal articles of interest include the following:

Sindel, B.M., Davidson, S.J., Kilby, M.J. and Groves, R.H. (1993). Germination and establishment of *Themeda triandra* (Kangaroo Grass) as affected by soil and seed characteristics. Australian Journal of Botany. 41(1), 105-117.

Maze, K.M., Koen, T.B. and Watt, L.A. (1993). Factors influencing the germination of six perennial grasses of central New South Wales. Australian Journal of Botany. 41(1), 79-90.

[Describes the effects of light, storage time, temperature regimes and water potential on the germination of the native grasses *Enteropogon ramosus*, *Botriochloa macra*, *Elymus scabrus*, *Chloris truncata* and *Danthonia caespitosa* and the introduced grass *Eragrostis curvula*.]

Gilliam, C.H., Keever, G.J., Eakes, D.J. and Fare, D.C. (1992). Postemergence applied herbicides for use on ornamental grasses. Journal of Environmental Horticulture. 10(3), 136-139.

* * *

CONTACT LIST - new members

Welcome to all the following people who have joined the study group in the last few months. Members are encouraged to contact others in order to share and develop their interests.

Janine Allen
4 Wimpole Crescent
Heidelberg West, VIC 3084

Margie Barnett
Mt. Barker Woodlots Nursery
2 Fletcher Road
Mt. Barker, SA 5251

[Margie is growing an increasing number of native grasses in her Australian plant nursery including various species of *Cymbopogon*, *Danthonia*, *Eragrostis* and *Stipa*, also *Diplachne fuscica*, *Enneapogon avenaceus* and *Eriachne basedowii*.]

Mrs. Maureen A. Bennett
Post Office Box 11
Kangarilla, SA 5157

I am trying to get my council strip back to its natural state. The area is long and is not used by the public. It is dominated by river red gum, sheoak and native cherry.

Whilst revegetating this area I have become aware of its various beautiful species of native grasses.

My knowledge of these grasses is almost nil. I continually have difficulty in trying to identify them.

I would like to hear from other members who are propagating grasses, and those who are revegetating council strips and bushland.

Geoff Carr
69 Spensley Street
Clifton Hill, VIC 3064

Dale Nurseries
(Steve Thomas, Phil Skillicorn, Jonathon Whiting)
54 Ramsay Road
Pennant Hills, NSW 2120
Ph: (02) 980 7526 (W)
(02) 484 3667 (H)

We are interested in ornamental and landscape use of native grass species, also use in rural and roadside plantings; bush regeneration work, etc.

Jenny Drewitt
P.O. Box 493
Armidale, NSW 2350

While driving along country roads I have been enchanted with the range of textures and colours of native grasses. I think many of these grasses could feature in domestic as well as park gardens, particularly the species without runners/stolons.

I would like to replace a quarter acre of largely *Paspalum* with native grasses. Species would need to survive prolonged and severe winter frosts, even if this meant a period of dormancy. Otherwise, rampancy would be desirable. In addition, a lawn which did not require mowing would be bliss. Is there a relatively painless, environmentally friendly method of exterminating *Paspalum*?

Joan Gibbs
University of South Australia
Salisbury East, SA 5109
Ph: (08) 302 5164
Fx: (08) 250 3769

I lecture in Revegetation and Land Care within our course, Conservation and Park Management.

A number of people here have begun an "Understorey Network" to share information about all types of understorey, especially native grasses. This is a movement to parallel and work with Trees for Life movement which grows primarily trees and shrubs. We hold workshops and set up trial plots on anyone's land.

I would be interested in people's experiences replacing weeds with native grasses and other small indigenous species, especially locally collected plants.

Mark Hackleton
99 Nierinna Road
Margate, TAS 7054
Ph: (002) 67 2558

Horticultural student finishing last year in Certificate Course in Hobart. I have 6 acres with various native grass species. Have tried to propagate some with limited success, e.g. *Themeda triandra*. Last year I was involved in a project on native grasses, so became very interested since then on the decline of native grasslands through constant mowing, slashing, grazing of native grasslands. As suburbs spread, native grasses are replaced. I am undertaking the preparation of herbarium sheets for all grasses - native and introduced - in my area. I am a member of SGAP in Hobart, and for many years have been interested in collecting seed and growing natives - but the grasses until now have mainly escaped my attention! I am by trade, a graphic designer with my own business - Bush Telegraph Design - in Hobart.

Graeme Kernutt
P. O. Box 178
Hurstbridge, VIC 3099

Dr Greg Kirby
2 Broadway
Colonel Light Gardens, SA 5041

Debra Little
17 Heath Street
Bexley North, NSW 2203
Ph: (02) 554 3176 (H)
(02) 914 5103 (W)

My interest in Australian grasses originally sprang from a horticultural/landscaping perspective. I planted what became a small "grassy woodland" in place of what passed for a front lawn, at a former house of mine. Initially using transplants from areas about to be "developed", I moved on to propagation of some species from seed and planted further species (to the bemusement of my co-house owner). I subsequently moved from horticultural/landscaping work into the field of urban bushland management, and my interest in Australian grass expanded in terms of their role in bushland restoration and revegetation work. I currently work for a local Council in Western Sydney and I am involved in the management of remnants of what is called Cumberland Plain Woodland. This type of woodland which has a very sparse shrub layer and a grassy/herb layer is now quite rare in the Sydney region. Bankstown City Council has some significant sized, quality examples of this type of grassy bushland left within its boundaries. So, I am interested in aspects of grassland management, harvesting techniques (particularly large-scale), propagation, general promotion of grasses and grasslands.

As a post-script, I am also busily creating another native garden at a new house I am living at and am keen to plant a range of grasses at part of that process.

Alexander Mackenzie
P O Box 313
Manly, NSW 2095
Ph: (02) 977 2973

My interest in Australian grasses is related to my interest in Australian plants in general especially their use in revegetation projects. Their development as horticultural prospects for efficient lawns and as hardy pasture species for grazing is also of interest. *Microlaena stipoides* is particularly interesting to me, also *Danthonia* spp. At present I am studying for a degree in Urban Horticulture at the University of Technology, Sydney.

Don McClintock
Lot 1 Nursery Street
Narara, NSW 2250
Ph: (043) 281 930 (H)
(02) 878 5777 (W)

Danie Olbrich
90 Benelong Road
Cremorne, NSW 2090

Ern Perkins
P O Box 212
Castlemaine, VIC 3450

(Mrs) Pat Pike
8 Yirra Road
Mt. Colah, NSW 2079
Ph: (02) 476 5765

David Powell
C/- D.P.I. Box 357
Port Augusta, SA 5700
Ph: (086) 423 722

My main interest in grasses is their distribution and occurrence in the local district.

I also have an interest in maintenance of bushland areas and re-vegetation.

My interest in grasses stems from my involvement in bush regeneration. Native grasses are one of the first natural colonisers of disturbed areas and are important in stabilising the soil. I too would like to improve my 'grass literacy' and learn how to propagate native grasses for restoration purposes.

I have a background in Science teaching and am at present teaching part-time at Ryde College of TAFE - the field work classes in the Bushland Weed Control Course.

My work as Soil Conservation Officer involves a lot of revegetation research into cost effective methods for the arid zone. I have mainly used chenopods but now hopefully will be able to use grasses as I collect seed and learn more about them. I have collected *Enneapogon* species in 1992 to try in 1993.

Doug Waterhouse
Conservation and Land Management
P. O. Box 445
Cowra, NSW 2794
Ph: (063) 421 811
Fx: (063) 424 551

As manager of the Department's Plant Materials Centre, I am engaged in collecting, assessing and developing plants for conservation uses. This involves a wide range of native species the majority of which are grasses. Currently 35+ species have been collected from 80 sites in NSW and northern Victoria which will form the basis of releases to mitigate against erosion, soil salinization and acidification.

In the short term, we are providing small quantities of seed of selected species to Landcare groups and private land holders who are committed to redressing land degradation problems. Storage of provenances is also being undertaken.

Janet Woodroffe
108 High Street
Rutherglen, VIC 3685
Ph: (060) 329 726

I am a recently retired teacher and my previous work has had nothing to do with gardens or grasses, so I am just starting up a new interest - developed through my passion for the Australian bush. I have a suburban block in a country town with an old historic house on it and I am trying to make an Australian garden from scratch (four large Peppercorn trees). I am interested in the whole caboodle, but wouldn't it be wonderful if we were able to transform the whole of Australian suburbia by doing away with lawns and planting native grasses. Everyone would be liberated from lawn slavery, noise levels would diminish, cancers would be reduced, etc. That is why I joined the Grasses Group!

SEED BANK REPORT

Currently available are:

<u>Species</u>	<u>Provenance</u>
<i>Danthonia geniculata</i>	Frankston, Victoria
<i>Danthonia geniculata</i>	Not known
<i>Danthonia setacea</i> (large form, dense purple heads)	Mt. Eliza, Victoria
<i>Danthonia setacea</i> (fine form)	Frankston, Victoria
<i>Echinopogon ovatus</i>	Frankston, Victoria
<i>Eragrostis trachycarpa</i>	Metung, Victoria
<i>Festuca asperula</i>	Wombargo, Victoria
<i>Poa morrisii</i>	Langwarrin, Victoria
<i>Stipa elegantissima</i>	Frankston, Victoria
<i>Stipa scabra ssp. falcata</i>	Not known
<i>Stipa nodosa</i>	Not known

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

To donate seed:

All donations are appreciated. Post seed to:

Knud Hansen (at above address)

WANTED - SEED FOR RESEARCH

**Field Crops Pathology Unit
C/- Waite Agricultural Research Institute
PMB 1 GLEN OSMOND SA 5064
Ph: (08) 372 2400
Fx: (08) 379 0871**

25 May 1993

Dear Knud,

I am currently undertaking a PhD at the Waite Agricultural Research Institute. I am researching a plant parasitic nematode of the genus *Anguina* which produces seed-galls on annual beard grass (*Polypogon monspeliensis*) and blown grass (*Agrostis avenacea*). I would like to organize a host range experiment to find out if these are its only hosts but have had difficulty locating some of the grass species I require. I have been informed that you are the leader of the Native grasses study group and was wondering if you knew where I could obtain some seed of the following:

x Agropogon littoralis

Alopecurus geniculatus *
myosuroides
pratensis

Ammophila arenaria

Deyeuxia densa *
minor
*quadriseta**

Dichelachne longiseta *
micrantha

Echinopogon ovatus

Gastridium pheloides

Pentapogon quadrifidus

Phleum pratense

All these grasses belong to the subtribe Agrostidinae according to Simon (1990) - A key to Australian grasses. Where several species are given for a genus, the preferred species is marked with an *.

Yours sincerely,

Terry Bertozzi

PASTURE GRASSES

Two varieties of *Danthonia* were submitted for Plant Variety Rights (PVR) by the NSW Department of Agriculture in September 1991. PVR was granted and notified in March 1993. Both *Danthonia richardsonii* 'Taranna' and *D.linkii* 'Bunderra' were selected mainly for their seed retention and production characteristics. They should be useful for establishing pasture in temperature areas in hilly country and on degraded cropping lands.

Further Reading: Lodge, G. (1992). Domestication of Australian native grasses. Australian Seed Industry Magazine, April, pp. 3-4.

Plant Varieties Journal. (1992). 5(1), pp. 18-21.

MORE ARTICLES PLEASE

ERRATA

Our Newsletter needs more communication or articles from members. Can you help?

Put pen to paper and share your thoughts and information with other members.

Post articles to:

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

Two misprints occurred in Newsletter No. 9:

- 1) page 7:
the final word of the third final line of the page should read:
'grasses' not 'gardens'
- 2) page 12:
the provenances of the two forms of *Danthonia setacea* should be interchanged.

** SUBSCRIPTIONS DUE **

Your subscription of \$5.00 for the 1993/1994 Financial Year becomes due on 1st July 1993. You must be a current S.G.A.P. member. Make cheques payable to: **AUSTRALIAN GRASSES STUDY GROUP** and post to: **30 Cairo Road, Box Hill North, Vic., 3129**. You are welcome to post your subscription from now on. Reminder notices will not be issued.

NEXT NEWSLETTER

The next newsletter will be posted in:
September/October 1993