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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

Australian Grasses Study Group Newsletter No.1

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Dear Member,

This is just a short letter to outline some objectives for the group and to solicit comment, questions, ideas and discussion.

The first, for each of us, is to become familiar with the grasses in our particular area. In my case, and others, it's the grasses of the Adelaide Plains and foothills (25 genera, 59 species at last count).

Identifying grasses needn't be as difficult as you think but will require patience. Send/take specimens to the herbarium in your capital city. Ring first to learn the correct procedure. In Adelaide, the Herbarium's library of pressed specimens is open to the public Monday-Friday, 9 a.m. to 5 p.m.

I have a list of the grasses found by various individuals in the Adelaide Hills and Plain, including those believed to be around Adelaide at one time, and this has been a great help. There is also a list for Melbourne in "Trees and Natural Resources" (Victoria), volume 29 (no. 2). June, 1987.

Many of the references I've given out (and those given below) may no longer be available except from a library (again, make enquiries). However, CAE and/or University bookshops may carry some of them.

Collect pressed specimens for your own reference, noting the usual things (date, location, description of plant) and other observations too (soil?, aspect, the other plants with which it occurs ..). The enclosed notes on the preparation of pressed specimens and the extract from "Grasses of Southern Queensland" may be of some help in this regard.

Once familiar with your local species, locate stands/swards from which you can collect seed and this would have to be a top priority. Send some to your SGAP seed bank, and a list of the species you have, to me, for the newsletter.

Information about dormancy factors, seed viability and improving germination (pre-treatment of seed etc.) is non-existent for many Australian grass species. As a general rule (and after a period of storage), plant warm season species from mid-summer to early autumn and, cool season and year-long-green species from late autumn to late winter. Site history will also determine how your grasses perform in the garden situation.

Different grasses possess different pathways for photosynthesis (the so-called C3 and C4 pathways). The C3 grasses (e.g. Danthonia) found in southern Australia grow mainly in the spring and autumn months, and the C4 grasses (e.g. Themeda) grow mainly in summer when temperatures are higher. In southern Australian grasslands usually both groups of grasses are present as dominants. Generally, wet summers favour the growth of the C4 grasses, and wet spring and autumn periods favour the C3 element.

"The Biology of Australian Plants" edited by J.S. Pate and A.J. McComb (Uni. of W.A. Press, Nedlands. 1981) includes a chapter on germination strategies and may be of some value in this respect.

The next step, as I see it (and this may or may not be practical), is then to establish seed plots, along the lines of the Knox Operation Revegetation Community Nursery in Victoria, namely, monospecific plots of 10 square metres. Information on the establishment and management of such plots is essential if the horticultural potential of many grasses is to be realised.

Alternatively, try to persuade and/or interest your local Council in the idea. Funding constraints and the lower maintenance costs of native grassland compared with turf, should provide strong incentive. The East Torrens and Salisbury Councils here in Adelaide, and Greening Adelaide (Dept. of Environment and Planning) are currently establishing and/or managing native grassland in some parks and along median strips (Port Road), creeks and roadside verges.

Other useful references at this point may be:

"Australian Vegetation" edited by R.H. Groves (1981), pages 293-316 (chapter titled "Natural Grasslands"). Cambridge Uni. Press, Melbourne.

"Management Plan for Cobra Killuc State Wildlife Reserve: with notes on native grassland ecology" by Ian Hastings (1983). Reserve & Planning Branch, Fisheries & Wildlife Service. Department of Forests, Conservation and Lands. Victoria.

"Fire and the Australian Biota" edited by A.M. Gill, R.H. Groves and I.R. Noble (Aust. Academy of Science, Canberra. 1981).

I can post photocopies of the relevant sections of the above (8 and a 1/2c per page, plus postage) should anyone so desire.

These are just a few ideas and I would be grateful to hear your ideas and opinions, and what you expect from the group.

Yours sincerely,