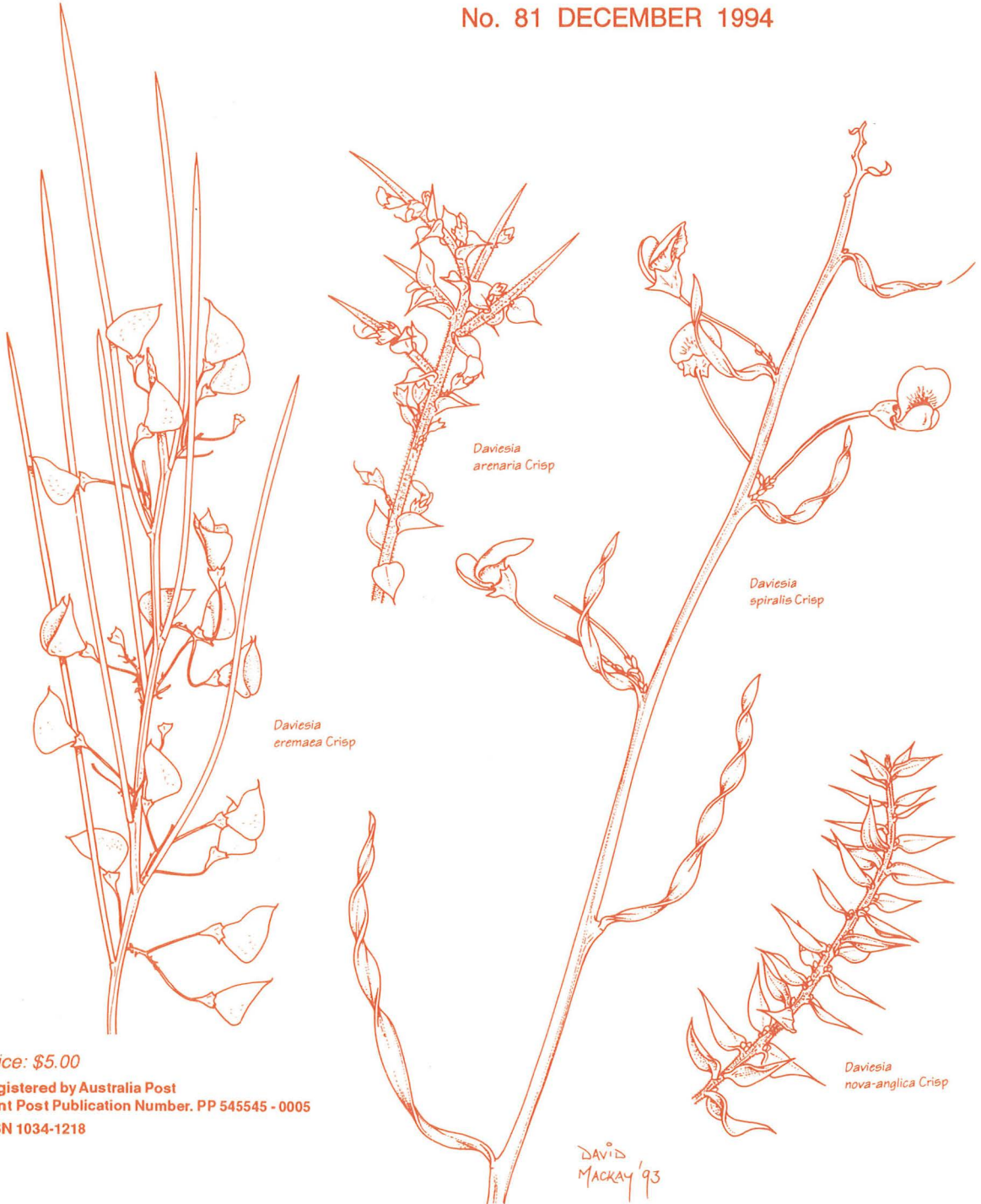




Australian Systematic Botany Society NEWSLETTER

No. 81 DECEMBER 1994



Daviesia eremaea Crisp

Daviesia arenaria Crisp

Daviesia spiralis Crisp

Daviesia nova-anglica Crisp

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MACKAY '93

Price: \$5.00

Registered by Australia Post
Print Post Publication Number. PP 545545 - 0005
ISSN 1034-1218

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EDITORIAL

Newsletter #80 gave David Morrison his last chance at slander and libel through the medium of the ASBS Newsletter. We offered him a position as permanent book reviewer but this was vetoed by the Treasurer who claimed it was time we saved on printing costs. Despite his retirement, I am sure he won't be able to help himself when the next cladistic textbook is released. As the new editors, we certainly would like to place on the record a vote of thanks to David and Barbara who join the select few of permanently scarred ASBS members foolish enough to take on the editorship. Although David produced the manuscript for the last Newsletter, the production was undertaken in Darwin and as might be expected we had our share of Gremlins. David is therefore only partially to blame and we do accept some long distance criticism.

A number of developments have followed on from the last newsletter. The Presidents comments on an Australian Institute of Biological Sciences have

prompted comment from David Greenwood. Perhaps other members may wish to add their thoughts. Our withdrawal from FASTS has elicited a predictable response and the formation of the National Biodiversity Council has progressed.

We have included another note from David Greenwood concerning the possibility of a semi-regular contribution in the Newsletter on Australian palaeobotany, perhaps in the form of reports such as the ABLO and ABRS. As editors, and as systematic botanists with interests in vegetation history, we fully support this suggestion. We encourage comment from members but we are unlikely to take any notice of it as we would like to give the palaeobotanists a go, even at the risk of encouraging David Christophel. David Greenwood, by virtue of making the suggestion, has nominated himself as coordinator and we look forward to his contributions in forthcoming Newsletters.

FROM THE PRESIDENT

NATIONAL BIODIVERSITY COUNCIL

You will recall that in the last Newsletter, I announced the formation of the Australian Biodiversity Council which has recently changed its name to "National Biodiversity Council". The ASBS had decided to be a part of that organisation and we have already given \$500, or c. \$1.50 per member to help them set up. Things are now moving quickly, and a meeting of the 'Founding Assembly' will be held in Canberra on 6 December to formally establish the NBC, and to choose its Founding Council. For the Founding Assembly, we were asked

to nominate a representative, who will be Judy West. ASBS Council also nominated 10 potential representatives for the Founding NBC Council. Criteria for nomination of individuals included commitment to and expertise in the conservation of biodiversity, peer respect, and representation of a variety of specialties, institutions and regions. By the time you read this, the Founding Council, chosen from the nominees of all member societies, will have been announced.

For further background information on the NBC, its aims and structure, read the letter and attachments sent to me by the NBC steering committee [*see*

page 10 and Newsletter inserts]. Note that some of the information in that letter will have been outdated by the meeting on 6 December.

HANSJORG EICHLER RESEARCH FUND

We have received some excellent news, in the form of a very generous donation (\$10,000) by Marlies Eichler to the research fund named after her late husband. I am sure you will join with me in extending to her the sincere gratitude of ASBS.

With the surplus from the Kuranda symposium profit, this will bring the balance in the fund to about \$23,000 - enough to allow us to begin using the fund. It seems sensible to invest the capital and use the interest earnings to offer small grants. Peter Wilson advises me that it is necessary to invest the funds for two years to obtain a reasonable return, so I expect that we may offer a biennial research grant (or grants) totalling about \$2,000, depending on interest rates. Council is still considering how we should proceed, but I expect that we should set up a committee to assess grant applications and run the scheme. (We may be able to re-establish a committee which we set up some years ago.) We

also are considering what sorts of projects we should offer grants for, and to whom. I should think honours and postgraduate students would be our main target group.

FASTS

I wrote to the president of FASTS (Graham Johnston) on behalf of ASBS, informing him of our withdrawal from FASTS. He replied, regretting our action, and attaching a report which is published in this Newsletter. It gives some details about changes in FASTS this year, and offers improved prospects for the future. I also asked him to send a representative to our next annual meeting, in September 1995, to try to convince us to rejoin, and he agreed. Meanwhile, I would appreciate letters from you, the membership, giving your views about FASTS, and under what circumstances you think we might rejoin. You should consider that science budgets are shrinking faster than ever, and somehow government should be persuaded to reverse this trend.

Mike Crisp
President

ARTICLES

WHAT TYPE OF TYPE ?

B.R. Maslin and R.S. Cowan

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INTRODUCTION

Some of the most difficult questions facing taxonomists relate to types: what are they, where are

they, and what is their status? In the course of our work on *Acacia* for the Flora of Australia we have had to assess the status of types for many of the names in this large genus. Although typification generally presented no major difficulties the names published by C.R.P. Andrews, R. Brown, G. Don, W.V. Fitzgerald and C.F. Meissner required special consideration. It was therefore necessary, or at least desirable, to examine more closely the working methods of these authors and the circumstances surrounding their publications. The result is a series of papers discussing the typification of their *Acacia* names (see Maslin & Cowan 1994, 1994a, 1994b & in press). In the case of names published

by G. Don we encountered a major problem in that we were unable to locate any original material, if indeed such material exists; given such uncertainty and the likelihood that many (perhaps all) of the names will require neotypification, we have not been able to typify them in the time available.

Although the present note was prepared as an introduction to the series of papers referred to above, we had doubts about whether it should be published. However, after extended conversations with colleagues here and elsewhere (see Acknowledgements) we have concluded that it may contribute to discussions of typification problems faced by all systematic botanists. The notes herein are not intended to be an exhaustive analysis, but rather a record of how we approached certain problems of typification in *Acacia*. Not everyone will agree with our interpretations and practices but, to a large extent, such disagreement simply serves to highlight certain inadequacies and ambiguities in the Code.

We present here our understanding and application of the provisions of the International Code of Botanical Nomenclature (Greuter et al. 1988), which deal with typification. It is recognized that the Tokyo Code may necessitate changes to some of our conclusions when it is available. The principles and practices which are discussed below have been applied to our contributions to the Flora of Australia treatment of *Acacia* and the associated precursor papers that have been published or are currently in preparation.

GENERAL CONSIDERATIONS IN SELECTING TYPES

No one is likely to question the observation that for nomenclatural stability it is important that taxonomists carefully assess available material associated with the protologue and have a knowledge of the taxa involved. Then it is possible to decide what element should serve as the nomenclatural type, as well as the status it should be given. The importance of care and accuracy in the selection of types, quite apart from their intrinsic value nomenclaturally, is underscored by the fact that other consequences flow from typification. For example, the place where a type

is housed is important from the standpoint of its long-term preservation and availability.

As we use the terms in *Acacia*, a *collection* is considered to be a gathering of one or more specimens (generally taken from one plant) which may or may not be identifiable by a collector's number for that gathering; a *specimen* is a single entire plant (rare in *Acacia*) or some single representative portion of it. An herbarium sheet may support one specimen or more than one.

Wherever possible we have considered the type to be the specimen, rather than the sheet. Some cases where this was not practical included (1) situations where specimens of a collection on a sheet were so fragmentary as to need to be considered together in order to portray adequately the critical features of the taxon, and (2) where fruiting material was detached from the plant and mounted separately on the sheet.

In typifying *Acacia* names we have generally considered that only those specimens used (and normally annotated) by the author of the name qualify for acceptance as holotype or be eligible for selection as lectotype. Sometimes it was necessary to infer from indirect evidence that a particular specimen had been used (for example, Robert Brown's use of his "wild" *Acacia* collections in the preparation of descriptions in Aiton's *Hortus Kewensis*, fide Maslin & Cowan, in press).

HOLOTYPES

Technically speaking, only the publishing author can designate a holotype; however, as indicated by Article 7.3, Note 1, of the Code, if only a single specimen was used to prepare the original description this must be accepted as the holotype. The situation becomes less clear when duplicate specimens of a single collection were used to prepare the protologue, as has been noted in a recent paper (Phillips, Brummitt & Molloy 1992). In this case, if no holotype were indicated at the time of valid publication (if the Code is interpreted in the strictest sense) one should regard each specimen as a syntype and select one as the lectotype, should this be considered necessary or desirable. However, as noted below, the use of the terms syntype and lectotype in

this sense is not altogether consistent with our perception of the general usage of these terms, and is somewhat misleading. It is our opinion that, if such a practice were applied rigorously, it would result in an unproductive use of the time and effort required to justify such a selection, assuming that choices of lectotypes are based on a thorough understanding of the taxa involved and that all relevant material has been seen. A more pragmatic approach is one that we commonly adopted in our treatment of *Acacia* for the Flora of Australia: in cases where clearly the type collection comprised more than one specimen of a single taxon, we considered as holotype the one specimen annotated by the author of the name and curated in the institution where the author worked. Alternatively we chose the one specimen that can be shown to have been part of the author's personal herbarium. If there was more than one specimen so annotated by the author, then the "best" was considered as holotype and the remaining specimens of the collection were treated as isotypes. Criteria for deciding what was "best" included specimen quality and how well it fitted the protologue, presence of annotations by the publishing author and indications that the specimen formed part of the publishing author's personal herbarium. An example of where we adopted this approach is seen in the case of Bentham names based on Drummond specimens lodged at Kew. Here the original material commonly comprised two sheets of a single collection, both annotated by Bentham, one stamped "Herbarium Benthamianum 1854" (which we normally considered the holotype) and the other stamped "Herbarium Hookerianum 1864" (isotype). Although we are not advocating that this approach be universally adopted, it did prove useful in our situation where many names needed to be typified relatively quickly. We could have simply listed the herb. Bentham and herb. Hooker specimens as syntypes, but in addition to being a misleading use of the term (see below) we considered it desirable to apply unequivocally our concept of the names by basing them on single specimens. However, having said this, it will be seen below that in other similar circumstances we chose to lectotypify the names! These contradictions could be avoided if the Code provided additional type terms so that authors are not obliged to use holotype or lectotype in situations where neither term is entirely appropriate.

In cases where the publishing author was not attached to a particular institution (e.g. W.V. Fitzgerald) other factors must be taken into consideration in typifying names, such as knowledge of the historical movement of the specimens involved, *vide* Maslin & Cowan (1994a).

SYNTYPES

In accordance with common usage, we have used the term syntype to apply to several different collections cited in the protologue. We have also sometimes applied this term to duplicate specimens of a single collection where no type was designated by the publishing author. However, there is an inherent ambiguity in the latter usage and we therefore support the intent of proposal 204 of Phillips et al. (1992a) which "shifts the emphasis to defining syntypes as involving different collections rather than merely different specimens of the same collection."

Specimens of a cited collection which were not actually seen or used by the author prior to publication of the name are treated as isotypes (when only a single collection is involved) or as syntypes (when more than one collection is involved); these specimens seem to us to be qualitatively different from those seen or used by the author and might well be denoted with a separate type term.

LECTOTYPES

We selected lectotypes from among the syntypes when the original material comprised more than one taxon and also usually when the name was based on more than one collection of the same taxon (e.g. a flowering and a fruiting specimen collected at different times). Sometimes, however, it was necessary, or it seemed prudent, to lectotypify when clearly only a single collection was involved. This situation can arise when it is not possible to regard one specimen from the collection cited in the protologue as holotype. A case in point are the Preiss specimens now housed at LD and NY, both of which were used by Meissner in preparing protologues for his *Acacia* species: if we were simply to regard the specimen in Meissner's own herbarium at NY as

holotype it would have resulted, in some cases at least, in the nomenclatural type being a depauperate or inadequately annotated specimen. Therefore we regarded the specimens at LD and NY as syntypes and designated the "best" one as lectotype; the excluded syntype was treated as an isolectotype, not a paralectotype. Duplicates of the same collection in other herbaria were also regarded as isolectotypes, even though there was no evidence that Meissner used the material.

PARALECTOTYPE

This useful term was used by Hansen & Seberg (1984) and refers to the excluded syntypes

following lectotypification. We have used paralectotype for excluded specimens following lectotypification of names based on more than one collection, but not for the excluded specimens following lectotypification of names based on a single collection (we use isolectotype in such cases).

NEOTYPE

Neotypification was only undertaken following exhaustive investigation to ensure that no material used by the publishing author is extant. In neotypifying taxa we always attempted to retain current usage of the name involved.

KEY TO TYPE TERMS

The following key represents our understanding and use of the type terms available in the Code. Note: In the key we define *original material* as the specimen(s) seen/used by the author(s) of the validating description and those specimens cited in the protologue (even if not seen by the author). This definition is based on a proposal by Gillian Perry which was accepted at the Tokyo Congress (Perry 1993).

- A. Original material exists
 - B. Some or all specimens of the original material were used by the author to prepare protologue (evidence for "use" may be indirect)
 - C. Original material comprises a single specimen
 - **Holotype**
 - CC. Original material comprises more than one specimen
 - D. Original material comprises one collection
 - E. Only one specimen used by the author
 - **Holotype** (the one specimen used)
 - **Iso-type** (duplicates of the holotype)
 - EE. More than one specimen used by the author
 - F. Author nominates a particular specimen as nomenclatural type
 - **Holotype** (nominated by author)
 - **Iso-type** (duplicates of holotype, whether seen or not seen by the author)
 - FF. Author does not nominate a particular specimen as nomenclatural type
 - **Holotype** (the "best" specimen available, or the specimen from the author's personal herbarium)
 - **Iso-type** (the other specimens, whether used or not by the author)

OR (if the Code is strictly interpreted)

- **Lectotype** (the "best" specimen, selected from among the syntype specimens)
 - **Isolectotype** (the other specimens, whether used or not by the author)
- DD. Original material comprises more than one collection
- G. One specimen is selected to serve as nomenclatural type
- **Lectotype** (the "best" specimen, selected from among the syntype specimens of one collection)
 - **Isolectotype** (duplicates of the lectotype, whether used or not by the author)
 - **Paralectotype** (all specimens of the excluded syntype collection)
- GG. No specimen selected as the nomenclatural type
- **Syntype** (all specimens of all collections, whether seen or not by the author)
- BB. No evidence that any of the specimens of the original material were used by the author in preparing protologue
- H. No need to typify the name
- **Isotypes** (when only one collection is involved)
 - **Syntypes** (when more than one collection is involved)
- HH. Demonstrable need to fix application of name
- **Lectotype** (selected from among isotypes or syntypes)
- AA. Original material destroyed or missing
- **Neotype** is selected

CONCLUDING REMARKS

We wish to re-emphasize that we have dealt with typification problems as taxonomists using the Code, not as nomenclaturists studying the Code to generate (hopefully) beneficial changes. Past attempts to bring more clarity to type terms have often generated more heat than light. Because types are of fundamental significance to nomenclature, we encourage those who are more knowledgeable than we are in the legalities of the Code, and who are also able to devote the time that is required, to consider providing additional type terms and unambiguous definitions. Because application of type terms is made difficult by the fact that botanists must attempt to apply them retrospectively to materials used by earlier authors long before the type concept came into being, such reconsideration of the terms sanctioned by the Code would seem appropriate.

It appears to us that much of the problem revolves around the definition of the term syntype. For example, a lectotype chosen from among duplicates of a single collection is surely different from a lectotype chosen from among specimens of more than one collection, and might well have a special term. Similarly, syntype (specimens) seen/examined by the author should perhaps be regarded as sufficiently different from those not seen as to warrant a distinguishing term; formal proposals to change the definition of syntype in the Code to recognize these distinctions have been made in the past, but rejected. Also, we regard the term paralectotype as especially useful and it might well be formally recognized in the Code. Type terms are important tools of taxonomy and we should not be particularly concerned about the size of the toolbox.

This brief report hopefully will stimulate discussion in the ASBS Newsletter and may lead

ultimately to changes, either in practice or more formally through changes to the Code which would better serve the needs of taxonomists in this fundamentally important aspect of our discipline. In practical terms, it would be of great value, particularly for young taxonomists, to have the consensus expressed by ASBS members embodied in a key to the application of type terms, and published in a subsequent Newsletter.

ACKNOWLEDGMENTS

The opinions expressed in this paper are wholly ours, although we benefited substantially from discussions with our colleagues Bill Barker, Barry Conn, Nicholas Lander, David Mabberley, Chris Puttock, Judy West, Paul Wilson and in particular, Gillian Perry, to whom we are most grateful.

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THE HERBARIUM OF MANCHESTER MUSEUM (MANCH) - ITS POSSIBLE RELEVANCE TO AUSTRALASIAN BOTANY

Barry J. Conn, A.B.L.O.
Royal Botanic Gardens, Kew

The herbarium of Manchester Museum (MANCH) is usually overlooked as a possible source of important herbarium material. Philip Short (pers. comm., Aug 1994) noted that the type material of *Calectasia cyanea*, at BM, was a George Maxwell

collection that had been donated by Melvill. Therefore, there is a strong possibility that the James Cosmo Melvill herbarium at Manchester may contain type material of a number of Australian plants. Melvill donated his personal herbarium to the Manchester Museum, University of Manchester, Manchester M13 9PL, England (MANCH)(Melvill 1904). It was formerly presented to the Museum on 31 October 1904 (Anon. 1904). Franks (1973) suggested that MANCH contained about 3,000,000 specimens, whereas Holmgren *et al.* (1990) cited a figure of 1,000,000. It is now thought that the Herbarium contains about 2,000,000 collections (S. Edwards pers. comm., 23 Nov 1994). Irrespective of the number of

collections, it is one of the larger herbaria of the United Kingdom. As well as the personal herbarium of James Cosmo Melville (worldwide collections, excluding Britain), MANCH also contains the formerly private herbaria of Leo Grindon (100,000 specimens - still stored separately; principally of cultivated plants, illustrations and printed material), and that of Charles Bailey (British and European plants), together with thousands of other smaller collections. These three herbaria were added to the already extensive collections of the Manchester Museum (which had their origins in the Manchester

Natural History Society) (Franks 1973). Bailey (1838-1924) was an 'ardent wealthy amateur botanist in close connection with W.C. Williamson at MANCH' (Stafleu & Mennega 1992) and Melville (1845-1929) was a wealthy 'British businessman and naturalist at Manchester' (Stafleu & Cowan 1981). Bailey (1917) estimated that his private herbarium contained a total of 2,679 specimens from Australia and New Zealand, with 1,078 general Australian collections, 621 from the Swan River [area] and Van Diemens Land, and 979 specimens from New Zealand.

THE COLLECTORS OF THE AUSTRALASIAN MATERIAL INCLUDE:

Australia:

R.S. Adamson (1910),
W. Archer (1840),
J.B. Armstrong,
C.J. Atkins (1885),
F.M. Bailey,
Bastow (1885),
J.A. Brewer (1850),
B. Clarke (1868),
Collie (1832),
?A. Cunningham,
Dane (1895),
H.C. Dent (1885),
J. Drummond,
F.S. Dutton (1863),
Elder Expedition,
Falkingham,
J. Gabriel (1874),
J. Gunn (1850),
W.H. Harvey (1850),
G. Hutton,
Jamieson (1820),
Lawrence (1850),
B.R. Lucas (1916),
R.G. McLeod,
J.H. Maiden (1884),
G. Maxwell (1878),
P. Merrifield (1884),
F. von Mueller (mostly Algae),
Mrs Nash,
Oldfield (1840),
G. Osborn (1915),

F.G. Pearcey,
J.M. Saunders (1839),
Sigsworth,
J.E. Smith ('being a duplicate set of the Australian collection in his Herbarium, now in possession of that Society [Linnean], at Burlington House' - Melville 1904),
Stephenson,
Stockwell (1903),
C. Stuart,
Symonds,
R. Tate (1893),
J. Walsh (1891),
J. Whitelegg (1880),
C. Wild (1880),
J.B. Wilson (1897).

New Zealand:

R.S. Armstrong,
J.L. Bassit,
S. Bergen,
?A. Cunningham,
R. Helms (1888),
J. Heywood (1899),
J.D. Hooker (1840),
D.A. Jones (1938),
King (1887),
T. Kirk,
Lyell,

A. Menzies (1780),
R. Munro (1937),
Sinclair (1860),
Stephenson,
C.L. Walton.

Sean Edwards (Keeper of Botany, MANCH) provided the following statistics on the holdings.

Paleobotanical slides (c. 10,000 collections),
Fungi (c. 20,000),
Algae (c. 20,000),
Diatoms (c. 10,000),
Lichens (c. 45,000),
Liverworts (British - c. 11,000; Foreign - c. 24,000; 2,746 types, particularly Richard Spruce's South American types),
Mosses (British - c. 32,000; Foreign - c. 68,000; types 1,015),
Ferns (British - c. 10,000; Foreign 60,000; Folio - c. 5,000),
Flowering Plants (General - c. 250,000; European - c. 1,000,000; British - c. 250,000; Leo Grindon - cultivated - c. 100,000; Duplicates - c. 60,000), and a further 50,000 unsorted collections. The Liverwort and Paleobotanical slide collection have been electronically catalogued.

Acknowledgements:

I gratefully acknowledge the information and advice that was generously given by Drs Sean Edwards (MANCH) and Philip S. Short (MEL).

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COMMENTARY

NATIONAL BIODIVERSITY COUNCIL

Dr Mike Crisp
President,
Australian Systematic Botany Society,
Division of Botany and Zoology,
Australian National University,
CANBERRA ACT 0200

Dear Dr Crisp,

This letter is a result of the recent workshop on the proposed Australian Biodiversity Council. The workshop was held at RMIT in Melbourne on 24-25 June. The thirty-five participants represented a variety of scientific and conservation organisations. A full list is enclosed (Attachment 2).

The workshop proposed the establishment of an independent Council with the following goals:

1. To advocate the scientifically-based conservation of biodiversity.
2. To familiarise Australians with the importance, benefits and values of biodiversity, its current status and how it is threatened.
3. To ensure that biodiversity is a major consideration in relevant political, social and economic decisions.
4. To promote policies and mechanisms for biodiversity conservation.
5. To promote multi-disciplinary forums for the scientific discussion of biodiversity conservation.

The participants of the workshop created a steering group with two main functions: First, to write a constitution, and second, to raise funds. The first function is in the hands of a group which is

formulating the structure, mode of operation and responsibilities of the Council based on comprehensive guidelines drawn up at the workshop. Some key points are enclosed (Attachment 1).

This letter is to request funds so that the Australian Biodiversity Council can be established by early November 1994. The workshop unanimously agreed that the Council should be thoroughly professional and well-organised. To this end, it should aim initially to establish a small office. The cost of this was estimated at \$40,000 per annum.

These first moves in the creation of the Australian Biodiversity Council have been characterised by very high levels of energy, cooperation and kindness. The next moves will rely on the generosity of the organisation and individuals we approach for funds. Those who endorse this letter under my signature ask your organisation to support these efforts to establish the Australian Biodiversity Council by giving, within the next four weeks, a one-off donation as large as possible. We also ask if you would place Attachments 1 and 2 in your next Newsletter or membership mailing.

At present, the funds will be handled by the Treasurer of the Ecological Society of Australia. Please send your donations to Dr Ross McMurtie, School of Biological Sciences, University of New South Wales, Kensington, NSW 2033. For more information please call any of the co-signatories.

Yours sincerely

Andrew Beattie,
Professor, Macquarie University
Director, CSIRO Multi Divisional Research Program
on Biodiversity

Co-signatories:

Bryan Barlow, Ross Crozier, Marilyn Fox, Pat Hutchings, Mick Keough, Jiro Kikkawa, Ebbe Nielsen, Ian Noble, Harry Recher, Denis Saunders

AN AUSTRALIAN INSTITUTE OF BIOLOGICAL SCIENCES, ASBS, AND LARGE CONFERENCES.

David Greenwood

Botany Department
University of Adelaide

In the September issue of the *Newsletter* (No. 80), the ASBS President, Mike Crisp, canvassed his views on setting up a new organisation as an umbrella for like minded biological societies, much in the manner of the American Institute of Biological Sciences (AIBS). Having recently spent 3 years in North America as a postdoc., I have experienced first hand the kind of concurrent conference structure, embracing diverse biological societies, that constitutes the annual US AIBS meeting and envisaged by Mike Crisp for Australia (Australasia?). I fully expect that other ASBS members have similar experience and will step into the fray and offer their viewpoint.

Mike notes that there are both advantages and disadvantages to the AIBS type of model. Amongst the disadvantages, he gives:

- ideological avoidance of cladistic presentations (!) by some (or other selectivity);
- attracting audiences to student presentations;
- loss of flexibility of timing and locale of conferences; and
- problems associated with participating societies having conflicting interests (his example being systematics vs ecology).

My experiences at AIBS and other "umbrella" meetings in the US and Canada included the type of problems suggested by Mike Crisp, and repeated above. However, I must say that on the whole I greatly enjoyed the possibility of picking from amongst an enormous diversity of topics and co-workers, although in general I attended a majority of presentations in the sessions run by the Botanical Society of America at AIBS, and particu-

larly the palaeobotanical and systematic sessions. Of course the biological community in North America, and the USA in particular, is much greater in size than that in Australia and New Zealand. Nevertheless, we certainly have the depth of talent and spread of interests to make an annual Aust. Inst. Biol. Sci. meeting both interesting and topical! I would like to point out that AIBS in the USA attracts considerable media attention, in much the same way that ANZAAS does here. This type of response is due in part to the critical mass of scientists and policy makers at these meetings. Something to consider.

Specifically, Mike is correct that some participants will take advantage of the offered alternatives to a session or presentation that they really would prefer to avoid; but let's be honest, the reality is that the really averse delegates will simply choose to have a longer tea break chatting with a colleague, or run out to do some shopping, or tourism, or even some field work! The issue of attendance at student papers is I think real, but perhaps not a great concern, particularly if, as has been the practice in the past, a prize is offered for the best student paper, either within a theme or within a session. As to the matter of conflict, at AIBS meetings that I have attended the individual societies and sections within Societies (BSA is all encompassing within "botany" and so it has separate Systematic, Palaeobotany etc. "sections", which function semi-autonomously within BSA) had their own themes, either coordinated with the overall AIBS meeting theme, or independently. Another common feature was the running of shared workshops by several (usually 2 - 3) closely related Societies. I feel that the advantages of such a model outweigh the disadvantages, and that with careful consideration that these can be minimised. I feel quite strongly that whereas it is useful and enjoyable to gather together with fellow systematic botanists, much as we all did so successfully at Kuranda (thanks, John, Rebel and crew!), that many of us also have interests outside of systematic botany that would be well served by a combined annual meeting. Another important factor is the exposure we would provide for our discipline to other biological scientists, and perhaps further afield. Lets face it, whatever we may think of the importance and relevance of systematic botany (and zoology), to such pressing issues as

environmental degradation, climate change and other societal concerns, from time to time this has been a hard sell - even to scientific colleagues from other biological and non-biological disciplines!

Based on my experience at AIBS in the USA, it seems to me that much useful within and cross-disciplinary dialogue occurs, both formally at convened meetings and workshops, as well as over a cup of tea or coffee and a biscuit (cookie) or a beer. This kind of exchange is a tangible benefit from grouping together the meetings of the proposed member Societies in the Australian Institute of Biological Sciences. For this reason, however, I think that the proposal should not be restricted to systematic societies, and perhaps should consider including (either as affiliates or fully integrated) suitable New Zealand Societies.

FASTS

Dear Mike,

I was very disappointed as you might imagine to receive your letter that the ASBS has resigned from FASTS. After all the effort the Executive has put into the Federation this year it is natural we feel let down when a member society resigns - but we hope that you will reconsider us next year. I am conscious that a major failing of FASTS this year has been not informing our member societies of all the things that were going on and this is something we will certainly rectify as soon as possible. Many of our member societies have actually been very pleased with what we are doing.

I have just finished my President's report which I will submit to the Board on Tuesday 29 November. Please use what you would like for your Newsletter - it certainly shows that FASTS has been very active.

Regards
Graham Johnston

President's Report to FASTS' Board & Council - November 1994

During 1993 there was frank discussion at FASTS' Board level about the long-standing failure of the Federation to articulate written policy positions on science and technology issues, and about the wide-spread negative perceptions of the operation of FASTS' Canberra office. These issues were addressed by the new Board and Executive with the development and release of the Policy Document for widespread comment in June, and the resignation of the Executive Director in the same month. As a result, 1994 has been a very active year for FASTS.

The Policy Document, spanning Industry, Education, University-sector Research and Government Laboratories, has received much favourable comment and constructive criticism from a variety of sources. The next draft of the Policy Document will reflect this input from our member societies and others interested in the development of science and technology policy. The Policy Document will enable the Federation to speak out with confidence and consistency on science and technology issues reflecting as far as possible the views of Australian scientists and technologists 'at the coal face'.

In June, Dr David Widdup, FASTS' Executive Director since its inception in 1986, resigned in order to give the Board a free hand in restructuring. This proved an amicable parting, with David being keen to resume his law career, and the Board anxious to make a fair financial settlement with someone who had served FASTS decisively for many years. The FASTS' Board revised the duty statement for the Executive Director's position and has advertised the new position. We have had an excellent response to the advertisements and hope to make an appointment in the near future. In the meantime, the Executive has been carrying an especially heavy role on behalf of the Federation. In essence, the new Executive Director's role will be to liaise vigorously with member societies, to implement and represent policies defined by the Board, and to deal with the day-to-day business of the Federation, as directed by the Executive. In addition, FASTS is considering moving its Canberra office from Dickson to a higher profile location in Canberra to

enable interaction between FASTS and organisations such as the Academy of Science, ANZAAS, the Australian Science Teachers' Association and the Australian Science Communicators; such a move would allow more coordinated lobbying by FASTS and these organisations.

FASTS has continued to speak out for science and technology workers in Australia. In May, FASTS made a presentation to ASTEC's Forum on 'Technology and Employment' and the FASTS' President has been appointed to the ASTEC Reference Group on its 'Matching Science and Technology to Future Needs' study. The President was invited to the Prime Minister's Science and Engineering Council meeting in June to discuss the future of Australian research networks; he was also invited to the Academy of Science's Science and Industry Forum in November. FASTS' submission to the Prime Minister's Science and Engineering Council discussion paper on 'Key strategic issues for science and technology policy' was well received by the Chief Scientist. After fruitful discussions with the Presiding Commissioner, FASTS submitted its Policy Document to the Research & Development Inquiry being held by the Industry Commission.

Since the AGM of the FASTS Board on 24 November 1993, the Board and Executive have met as follows: Board meeting, Canberra 14 December; Board meeting, Canberra 3 February; Executive meeting, Canberra 28 April; Special meeting of the Executive with Board members in attendance, Sydney, 21 June; Executive meeting, Canberra 24 June; Executive meeting by telephone, 16 August; Board meeting, Sydney 10 October; and Executive meeting, Canberra 26 October. Expenses have been kept to a minimum by the extensive use of electronic mail and by the timing of meetings to coincide with 'other events' that pay travel costs.

The President and/or members of the FASTS Executive had discussions regarding FASTS and Australian science and technology with the following people/organisations during the year (in chronological order), in addition to many fellow scientists and technologists, member societies and the media:

Tricia Caswell, Executive Director, Australian Conservation Foundation Professor; David Craig,

President, and Mr Peter Vallee, Executive Secretary, Australian Academy of Science; Senator Schacht, Minister for Science and Small Business; Dr John Zilman, Secretary, Australian Academy of Technological Sciences & Engineering; Dr Brian Lloyd, President and Dr John Webster, Chief Executive, Institution of Engineers, Australia; Professor Michael Pitman, Chief Scientist, Dept Prime Minister & Cabinet Scientists at the Australian Institute of Marine Science, Townsville; Dr David Kemp, Shadow Minister for Science, Technology & Export Development; Dr Laurent d'Ozouville, Counsellor for Science & Technology, French Embassy; Professor Gus Nossal, President, Australian Academy of Science; Professor Ron Johnston, Australian Centre for Innovation & Industrial Competitiveness; Dr John Bell, Department of Science and Technology; Dr John Stocker, CEO, CSIRO; Senator Cook, Minister for Industry, Science and Technology; Oliver Scofield, Present Australia; Garry Banks, Presiding Commissioner, Research & Development Inquiry, Industry Commission; Professor Bruce McKellar, President, ANZAAS; Ron Stevens, Focus Australia; Professor Ian Lowe, Faculty of Science & Technology, Griffith University; Michael MacKellar, CEO, Plastics and Chemicals Industry Association.

Significant radio coverage for FASTS was obtained on a variety of ABC and commercial stations. Print media coverage on FASTS during the year included the following:

- Search (New Broom for FASTS, Jan/Feb 94)
- Campus Review (Bridge builder sets proactive agenda for FASTS' future, 27 January 1994)
- Sun-Herald (Push to boost Aust research, 30 January 1994)
- The Canberra Times (Science lobby group offers Schacht truce, 31 January 1994)
- Laboratory News (FASTS shot in Schacht's arm, February 1994)
- The Bulletin (CSIRO faces its biggest test, 15 March 1994)
- New Scientist (Science on a new plane, 2 April 1994)
- The Australian (Hewson blames science student shortage on lack of vision, 28 April 1994)
- The Australian (Science lobby in policy battle, 21 June 1994)

Sunday Telegraph (A nation of science duffers - expert, 26 June 1994)
 The Australian (Literacy needed to stay in the race, 2 July 1994)
 New Scientist (A yen for strawberry flavoured cheese, 2 July 1994)
 Campus Review (Scientific 'wimps' move to exert more positive influence over debate, 28 July 1994)
 Search (FASTS releases draft of 'proactive' policy, August 1994)
 Laboratory News (Science policy - a public issue? September 1994)
 Laboratory News (Science policy - a public issue? Reply, October 1994)
 New Scientist (The chemical deficit, 5 November 1994)

It has been a pleasure to serve as FASTS President and to be associated with members of the Board and Executive during this year. Due to

the rather special circumstances and changing focus of the organisation, from being a purely lobbying body to actively developing policy and encouraging the greater involvement of member societies, the FASTS officers have borne an usually heavy load. On behalf of FASTS, I thank them for their efforts.

The changes have revitalised the Federation and there is great optimism for the future of Australian science and technology.

Graham Johnston
 President, FASTS
 23 November 1994

c/o Department of Pharmacology
 The University of Sydney, NSW, 2006

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 E-mail grahamj@extro.ucc.su.oz.au

E-MAIL - ADDENDA, ERRATA

Corrections (in bold):

West Judy.....judyw@pican.pi.csiro.au

Additions:

Woelkerling Bill.....botwjw@lure.latrobe.edu.au

On page 8 of Newsletter No. 80 in the second last paragraph of the *Oxalis* article.

replace the line beginning 'valuable

with the line:

'variable material in China and Japan known as'

REPORTS



**Australian
Botanical
Liaison
Officer**

MR EDWARD MCBARRON

We are sorry to hear that Eddie has been ill of recent times and we all wish him a speedy recovery. His extensive collections have proved invaluable in many plant groups.

RETIREMENT OF DIANA POLHILL FROM KEW

On the 16 September 1994, Diana Polhill retired from the staff of the Royal Botanic Gardens, Kew, after 37½ years. I was fortunate to be at Kew to attend a special function which was organised to acknowledge the contribution that she has made to this institution. Friends and colleagues, past and present, gathered in the Kew Guild Room to wish Diana well. She was assistant editor to Dr Roger Polhill, for the Flora of Tropical East Africa project. Her publication of geographical place names of this region provides a valuable resource reference for anyone working on this region. Her retirement has left a very large gap which will have to be filled by the staff of this project.

1994 INTERNATIONAL PRIZE FOR BIOLOGY

The 1994 International Prize for Biology will be awarded to Professor Ernst Mayr, Professor Emeritus of Harvard University. The prize will be presented at the Japan Academy, Tokyo on 28 November 1994.

PROFESSOR DAVID A. WEBB

David Webb, Professor of Botany at Trinity College, Dublin 1950-1966 and Honorary Professor of Systematic Botany, died suddenly on 26 September 1994. Professor Webb was a distinguished taxonomist who was a foremost authority on the European flora. He was one of the founding editors of the Flora Europaea project and will be remembered for his extensive contributions to that Flora.

DR RU D. HOOGLAND

We have received the sad news of the death in Paris of Dr Ru Hoogland. Ru was born in Leeuwarden, the Netherlands, and trained at the Universities of Groningen and Leiden. For many years he worked in New Guinea for the Australian CSIRO Division of Land Research. From 1968 until 1970, he was a Research Fellow at the Australian National University, Canberra. On retirement, he returned to Europe, first to Leiden and latterly to Paris. Here he continued his studies of various families, particularly the Dilleniaceae. He had visited Norfolk Island and Lord Howe Island several times and the recent Flora of Australia account, volume 49 (the Flora of these two islands) published last May, was dedicated to him. Latterly, he had been deeply involved with nomenclatural matters, especially the names of families. At times for some years, he has been seriously ill, but during periods of remission worked at the Musium National

d'Histoire Naturelle, Laboratoire de Phanirgamie, Paris. His last illness and death were rather sudden. His knowledge and helpfulness to colleagues visiting Paris will be sorely missed.

NEW APPOINTMENTS AT KEW

Dr Brian Schrire has been appointed to the recently advertised post in Legumes to deal with the Old World species.

Dr Henk Beentje has been appointed to the Compositae position. He will also be primarily responsible for Old World species, in particular, African floras.

VISITORS TO KEW

5 & 6 Sep 1994 Mr Michael Bayly (School of Botany, Univ. Melbourne).

Michael is a Ph.D. student working on a cladistic and biogeographic analysis of *Eriostemon*, *Crowea* and *Philotheca* (Rutaceae), with the phylogeny based on morphology and flavonoid data. He presented a paper at the 13th Meeting of the Willi Hennig Society, 'Phylogeny and biodiversity', at the Zoological Museum, University of Copenhagen, Denmark (22-26 August 1994), and then took the opportunity of examining herbarium specimens at the BM and K before returning to Australia. Michael was judged as making the best student presentation at the above conference.

6 Sep 1994 Dr Stan Webster (a volunteer at the Western Australian Herbarium) briefly visited the Herbarium and Gardens.

6 Sep 1994 Ms Vicki MacKenzie, Sydney: visited Herbarium and library.

7 Sep 1994 Mrs Margaret Moxon & Husband (Bentham-Moxon Trust) visited herbarium and library.

12 Sep 1994 Dr Anthony Mitchell, Manaaki Whenua Landcare Research, New Zealand visited Gardens.

19-21 Sep 1994 Dr Barbara Briggs (NSW) managed to spend two days examining Australian Restionaceae collections at Kew during a private visit to the United Kingdom.

19-30 Sep 1994 Mr Stuart Davies (Harvard) spent two weeks at K studying collections of *Macaranga* (Euphorbiaceae) as part of this studies towards a Ph.D. He has just completed three years in Borneo, two years of which were in Sarawak studying the ecology and phylogeny of *Macaranga*, as well as working for the Sarawak Forest Department. He spent one year in Brunei on a Research Fellowship at the University of Brunei. Here he investigated the comparative ecology of Dipterocarp forests and Kerangas (tropical heath). Before beginning his Ph.D. at Harvard, Stuart worked with Dr Mary Tindale (NSW) on *Acacia* (Mimosaceae) (1987-1989).

Karen Wilson and Laurie Johnson (both NSW), separately visited K as they made whirlwind visits to the UK on their way back to Australia.

31 Oct 1994 Dr A.A. Munir (AD) spent a few days at the BM and K examining type material of *Verbena* (Verbenaceae).

WETAR ISLAND, INDONESIA, FLORISTIC SURVEY, MAY 1993 - A CLARIFICATION

As the Australian Botanical Liaison Officer, I was recently asked to comment on the immigration difficulties faced by staff from the Herbarium of the Conservation Commission of the Northern Territory (DNA) during their floristic survey of an area on Wetar Island in May 1993. Since the reports in some of the Indonesian newspapers could be regarded as not accurately interpreting the situation, I offer the following clarification. The Officers were working as consultants for PT Prima Lirang Mining as

botanists to analyse data in connection with PIL (Environment document). This was a base line flora survey undertaken as a legislative requirement on a mining lease. The Officers travelled on business visas, as advised by PT PLM. They were not using tourist visas as reported in the newspapers. It is not true that they were held by the local police. It must be stressed that there was never any conflict between the Indonesian authorities and the DNA Officers. It would appear that the newspaper reporter inadvertently mis-interpreted the significance of a routine check of travel documents by the local police. I have made this public statement because the articles in the Indonesian newspapers could be interpreted as discrediting the reputations of the DNA Officers, PT PLM, the Provincial Government (Maluku) and other Indonesian authorities.

BOTANIC GARDENS CONSERVATION INTERNATIONAL

Review Group on the International Transfer
Format for Botanic Garden Plant Records
30 Nov & 1 Dec 1994

Since the International Transfer Format (ITF) was published by the BGCI in 1987, there have been many developments in information systems in botanic gardens. Implementing the ITF in botanic gardens has progressed well during the years since publication and it is now being used by a significant number of institutions to exchange data. There have been several workshops to consider additions and improvements to the ITF over recent years. It has been decided that it is now appropriate for the preparation of ITF Version 2 to proceed. For this reason, BGCI proposes to hold and host a small workshop meeting for a review group to discuss and consider ITF enhancements, towards the preparation of a draft Version 2 during 1995. I would like to thank those Australian Botanic Gardens and Herbaria who provided comments for consideration at the Workshop. It is unfortunate that more institutions did not respond to my request for comments. I will provide a report on the progress of the meeting in the next ASBS Newsletter.

A CURE FOR CANCER

The Manchester Guardian (1 November 1904) report on the official presentation of the Cosmo Melvill Herbarium to the University of Manchester recorded the following comments from Sir William T. Thiselton-Dyer (Director of the Royal Botanic Gardens, Kew).

“Light on the cancer problem”

We must be careful in every branch of science not to think that one thing was less useful than another. “[...] Who would have thought, to give another instance, that in my laboratory at Kew a very curious research made with regard to the growth of the tissues of ferns, which at first seemed to be anomalous and to have only a scientific interest, would ultimately give the key to the first step that has been taken in the real discovery of the nature of that appalling disease, that great scourge of mankind - cancer? I don't mean to raise your hopes by saying that very much has been done, but no problem can be attacked unless, as when you are besieging a fort, some outwork can be captured.”

It has proved wise not to “raise” their hopes, especially since “fort besieging” was obviously still big in the old country!

Barry J. Conn

COUNCIL OF HEADS OF AUSTRALIAN HERBARIA

The 22nd meeting of CHAH was held at Sydney's Royal Botanic Gardens on 19-20 October 1994. All major State, Territory and Commonwealth herbaria were represented, along with observers from the New Zealand National Herbarium Network, the Australian University Herbarium Network, Australian Biological Resources Study, the Council of Australian Museum Directors and the Council of Australian Faunal Collections.

We had hoped also to have observers from Papua New Guinea and (for the first time) Indonesia, but these were unable to attend since the Australian International Development Assistance Bureau (AIDAB) did not provide funds as it has done in recent years.

CHAH adopted a new Constitution by which the National Collections of Fungi (including BRIP, DAR and VPRI) achieved the status of a member organisation, rather than remaining an observer body.

A formal link has been developed between CHAH and the Australian and New Zealand Environment and Conservation Council (ANZECC), with CHAH recognised as a sub-committee of ANZECC's Standing Committee on Conservation.

CHAH resolved to make clear to relevant authorities the great need for increased government funding of the maintenance and development of major biological collections and for increased funding of ABRs. These measures were seen as essential parts of the implementation of the National Biodiversity Strategy.

The duties of the Australian Botanical Liaison Officer (ABLO) were discussed, a recommendation made for 1996/97, and the value of the position strongly endorsed. The experience of past liaison officers emphasises the need, when attempting to locate publications, to use inter-library loans within Australia so far as possible and only to approach the ABLO if such a search was unsuccessful.

Progress with the database of photographs of overseas-held types of Australian species was noted and an updated copy distributed. The Queensland Herbarium continues to maintain the database and BRI welcomes new records for inclusion.

CHAH plans to continue to provide training workshops; the next is expected to be on Cryptogams, in Canberra, in April-May 1996.

There was discussion of the involvement of the herbaria in the maintenance of the national list of Rare or Threatened Australian Plants (ROTAP). The list is being managed by the Endangered Species Unit of the Australian Nature Conservation Agency (ANCA) and that body will continue to hold the master copy of this list. The herbaria will provide

updated information for incorporation and, in turn, receive updates of the list.

Having a representative of the recently formed Council of Heads of Australian Faunal Collections (CHAFC) enabled discussion of the great extent of common concerns of the two Councils and the desirability of the Councils meeting together. [It was decided after the meeting that the 1995 CHAH meeting will not be Darwin as originally planned but in Brisbane, in association with CHAFC, the arrangements depending also on the meeting of Museums Australia.]

There was discussion of the desirability of the herbaria developing consistent policies of access to specimen data records. The steps being taken by CHAFC in this matter were seen as highly relevant to CHAH.

Technological developments, especially access to the e-mail, are now making easier the exchange of data between herbaria and it is planned, where possible, to send such data for exchanges and loans in a form that can be efficiently incorporated into the recipient's databases.

ABRS is continuing to partly fund the processing of loans for work towards the *Flora of Australia*. Since its funds are limited, and most grants extend over several years, ABRS has been making few new grants in recent years and herbaria have noted a reduction in loan requests.

Dr Hewson, Director Flora of ABRS, advised that more information from grantees would be required in future to show the progress of grant-funded work. This would include providing to ABRS copies of draft manuscripts or other work in progress. This is necessary so that any requirements to prove the accountability of the grant program can be effectively addressed.

Dr Murray Henwood, representing the University Herbaria, spoke of the current review of University Museums (including herbaria) and the value of the link with CHAH. He also drew attention to questions of the loan of specimens to University herbaria. The requirement of handling all loans through the Head of Herbarium was again emphasised.

In the report of the New Zealand National Herbarium Network, it was noted that the excellent booklet *New Zealand Herbarium Resources 1993* had been published and that Fiji was now represented by an observer at the Network's Council Meeting. A new building for the Museum of New Zealand Te Papa Tongarewa in Wellington is expected to open in 1998.

Clyde Dunlop was elected Chairperson of CHAH for 1995. As mentioned above, a meeting in Brisbane is planned for 1995.

Barbara G. Briggs
Chair of CHAH for 1994



**Australian
Biological
Resources
Study**

Atlas of the Vascular Rainforest Plants of the Northern Territory

This, the third volume in the Flora of Australia Supplementary Series, was published on 17 November 1994. The book, of xxii + 164 A4 pages has been compiled by David Liddle, J. Russell-Smith, J. Brock, G.J. Leach and G.T. Connors, and provides distribution maps of 585 native and 19 naturalised taxa of rainforest plants, based on the records of the Northern Territory Herbarium and a survey of 1245 sites undertaken over the last 10 years. For each taxon ancillary information on lifeform, frequency of occurrence, endemism, reservation status and conservation status (where appropriate) is given in a convenient coded form at the base of each map. While the maps comprise the major part of the book, they are accompanied by an overview of the biogeography of the region, including its tectonic history, and extensive tables are provided of distribution of 519 NT taxa in other re-

gions world wide. The book will provide a very useful overview of this important element in the NT flora for biogeographers, land managers and ecologists, and will be a useful tool for Flora writers in particular, who now have no excuse for not providing detailed distribution maps of these taxa, for the NT at least, for the Flora of Australia.

Copies are available by mail order from ABRS Flora for \$24 plus \$3 postage (if overseas airmail is required please add \$10 instead of \$3). A brochure and order form is enclosed in this journal.

Flora of Australia Vol. 55 Lichens - Lecanorales 2, Parmeliaceae

Publication of this volume is expected in mid to late December 1994. It will be available from CSIRO Bookshop, PO Box 89, East Melbourne Vic. 3002. The book contains 384 pages, with colour and halftone illustrations, and will cost \$64.95 for hard covers or \$49.95 for soft covers.

This is the second of six volumes on lichens in the Flora of Australia series. It describes the largest family of lichens in Australia and encompasses 31 genera and 395 species, many of which are illustrated in either colour or black-and-white.

Five contributors, twelve photographers and one illustrator from Australia, New Zealand, England and Germany have contributed to this volume. This volume brings together 20 years of research on the Parmeliaceae by the major author, John (Jack) Elix, Professor of Chemistry, Australian National University. For the past 20 years Jack has been investigating the Southern Hemisphere taxonomy of this family and is recognised as a world authority on the group. Other contributions are by Rex Filson (*Cetraria*), Gintaras Kantvilas (*Coelocaulon*, *Pseudephebe*) and David Galloway & Nathan Sammy (*Anzia*, *Pannoparmelia*).

This volume contains the usual Flora elements, including keys for identification of genera and species. Each species is fully described with bibliographic information, a full Australian synonymy, notes on habitat and distribution and a summary of its chemistry. Distribution maps are provided for each taxon.

Volume 55 is a complete guide to one of the more ubiquitous groups of Australian lichens. It should appeal to professional lichenologists and to those with a more general interest in Australia's plants.

Two new Series

At their meeting in September the ABRS Flora Editorial Committee recommended that the treatments of fungi and algae originally planned for the Flora of Australia should be separated as two new series to be called Fungi of Australia and Algae of Australia. Each of these series will be in a format essentially the same as that for the Flora, with minor adjustments as required to accommodate taxonomic peculiarities (e.g. anamorphs and teleomorphs in some fungi). The Lichens will continue to be treated in the Flora as originally planned, and appropriate cross references or updates will appear in the relevant Fungi volumes.

The ABRS Advisory Committee endorsed this plan of action at their meeting in November, and planning is now underway to establish a classificatory framework for the two new series. The first volume to be published will be Fungi of Australia Vol. 1, Introduction, which is expected to be in print in the first half of 1995.

Checklist of Non-marine Algae

Editing has started on Flora of Australia Supplementary Series No. 4. This work by Sandra Day, Rosemary Wickham, Tim Entwisle & Peter Tyler will consist of a list of all names used in Australia for algae of fresh and brackish waters, and the literature in which they were used. It will cover approximately 400 references, over 2800 species names and over 1300 infraspecific taxa. While some indications of synonymy will be made, the main value of the work will lie in bringing together for the first time a full census of non-marine algae names for Australia. Publication of this work is expected in the first half of 1995.

Participatory Program Grants for 1995

The following are the offers of grant for 1995 in Botany. An asterisk (*) indicates a new project beginning in 1995:

Australian Capital Territory

Australian National Botanic Gardens

Mr H Streimann. A Taxonomic Revision of the Moss Families Hookeriaceae and Daltoniaceae in Australia \$19,138 *

Australian National University

Dr MD Crisp. Systematics and Biogeography of Pittosporaceae \$23,619

Professor JA Elix. A Taxonomic Revision of the Lichen Genus *Lecanora* in Australia \$44,659 *

C Weiller. Flora and DELTA accounts of Chloridoideae \$72,647

Commonwealth Scientific & Industrial Research Organisation

Dr JG West. Generic Limits in Australian Rhamnaceae and Flora of Australia treatment of all genera except *Pomaderris* \$57,783

Unattached

Dr CF Puttock. Revision of *Ozothamnus* R. Br. \$54,350

New South Wales

National Herbarium of New South Wales

Mr MF Duretto. Systematic Studies in *Boronia* (Rutaceae) \$22,753 *

Dr SWL Jacobs (i) Revision of *Vallisneria* (Hydrocharitaceae). (ii) Flora treatments for Families Aponogetonaceae, Limnocharitaceae, Alismataceae, Hydrocharitaceae, Potamogetonaceae, Najadaceae, Zannichelliaceae and Ruppiaceae except for marine genera in each \$19,657 *

University of Sydney

Dr MJ Henwood. *Astrotricha*, Hydrocotyloideae and Apiaceae \$65,440

Queensland

James Cook University

Associate Professor IR Price. Taxonomy of the

Siphonous Green Algal Genus *Caulerpa* in Tropical Australia \$11,000

Associate Professor WA Shipton. Taxonomic Studies of the Family Saprolegniaceae and the order Leptomitales in Tropical Australia \$20,119 *

Queensland Herbarium

Mr PI Forster. Revision and Flora of Australia treatments of 24 genera of Euphorbiaceae \$47,360 *

Mr LW Jessup. Revision and Flora accounts of Sapotaceae, Ebenaceae and Symplocaceae in Australia \$8,000

University of Queensland

Dr JA Phillips. Taxonomic Investigations on Selected Genera of the Dictyotales (Phaeophyta) \$37,299

South Australia

South Australian Herbarium

Professor HBS Womersley. Completion of Part IIIB (Rhodophyta) and Substantial Progress on Part IIIC (Final Part) of The Marine Benthic Flora of Southern Australia \$40,823 *

Unattached

Mrs RM Barker. Revision of Zygothallaceae for Australia \$36,468 *

Tasmania

University of Tasmania

Dr WM Curtis. A Flora of Tasmania (Dicotyledons) \$6,000

Victoria

Institute of Plant Sciences

Mr IG Pascoe. Revision of Australian Erysiphales (Fungi: Ascomycotina) \$53,659

National Herbarium of Victoria

Mr NG Walsh. Revision of Pomaderris (Rhamnaceae) in Australia \$22,160

Unattached

Mr TW May. Catalogue and Census of Australian Macrofungi \$23,613

Western Australia

Commonwealth Scientific & Industrial Research Organisation

Dr NL Bougher. Taxonomic Revision of the Truffle Like Cortinariaceae (*Hymenogaster* s.l. and *Thaxterogaster*) in Australia \$10,000 *

Western Australian Herbarium

Mr PG Wilson. *Boronia* p.pt. (Rutaceae) of Western Australia \$38,800 *

University of Western Australia

Dr JA Chappill. Taxonomic Revision of Sterculiaceae, Tribe Lasiopetalae \$50,419

Unattached

Mr AS George. Treatment of Caesalpiniaceae p. pte. in Australia \$23,283

Northern Territory

Northern Territory University

Mr N Sammy. A Taxonomic Revision of the Lichen Genus *Heterodermia* in Australia \$4,500

Overseas

Hong Kong University

Dr KD Hyde. Flora Accounts of the Family Phyllachoraceae \$9,809 *

Australian Botanical Liaison Officer. ABRIS contribution to costs \$33,702

Herbarium Loans

Distributed to Australian Herbaria in partial compensation for loan costs associated with ABRs projects \$44,236

Participatory Program Research Priorities

It seems that it is not generally known that applicants are free to apply for support for taxonomic research in any group of plants (or animals) under this Grant scheme. However ABRs and the Advisory Committee set priorities each year to give the scheme coherence and direction, and obviously projects within these priorities receive somewhat greater weight when the allocation of scarce resources is being considered. Despite this there are usually a few projects outside the priorities which are successful each year. The message here is that if you have a project of high quality in mind which does not fall within the parameters below, or which must be carried out during 1996 or not at all, then it is worth submitting it for consideration.

One other point that does not seem to be generally appreciated is that once a group has been listed on the Research Priorities list (formerly known as the Preferred Objectives), then it remains permanently open for consideration, unless of course it is funded, researched and published in the *Flora* or other works. In effect, "Once a Research Priority, always a Research Priority". There are several groups from previous years which were not funded at the time because of budget restrictions or for other reasons. If one of your favourite groups is in this situation then we will be happy to consider applications on past Priorities on the same basis as present Priorities.

At their meeting in November the ABRs Advisory Committee determined to advertise (in February 1995) the following new Priorities for funding in calendar 1996.

Vascular Plants: Myrtaceae p.p. (*Myrtus* alliance; *Leptospermum*; *Agonis*; *Conothamnus*; *Beaufortia*; *Regelia*; *Calothamnus*).

Lichens: Lichinaceae; *Lobaria*.

Fungi: Oomycetes (excluding *Halophytophthora*, *Saprolegniaceae* & *Leptomitales*)

Algae: Rhodomeliales, Nemaliales, Batrachospermales.

Applications will close in early April 1995. Application forms will be available directly from ABRs, or through Museums and Herbaria early in the new year.

Tony Orchard
Executive Editor
ABRS Flora



PALAEOBOTANY

I was flattered that Pieter Baas should consider my analysis at the Kuranda meeting of central Australian Eocene macrofloras "rigorous" in his published "Summary Address" (*ASBS Newsletter* No. 80, p. 10). I

think that it is well known that a number of ASBS members are closet or publicly declared palaeobotanists. Which brings me to a suggestion that I would like to make, partly a response to Mike Crisps Presidential column. Palaeobotanists in Australia (both micro and macro) have their own organisation, the Palynological and Palaeobotanical Association of Australasia (PPAA), of which I am a member. PPAA has its own Newsletter, which while a useful vehicle, has I suspect a specialised readership. Some other ASBS members are also members of PPAA, and also the international body,

IOP. However, I think that some (perhaps many) members of ASBS would like to hear in the Newsletter more about what is happening in Australian palaeobotany, primarily I expect current research and conferences etc. in areas relevant to systematic neobotanists, i.e. phylogenetic analyses of key families or genera incorporating fossil material (e.g. Bob Hill's continuing analysis of *Nothofagus*), reconstructions of Australian Tertiary vegetation patterns, Tertiary phytogeography etc. Pieter Baas made mention of some of these topics in reference to the question of the origins and history of the Australian monsoon tropics flora.

Harking back to my discussion above of AIBS; in the USA the palaeobotanical section of the Botanical Society of America is an effective and largely independent organisation, but functions well under the BSA umbrella. While I think it is unnecessary and undesirable to suggest that some aspects of PPAA could be subsumed under a more broadly defined ASBS, there is an argument for including such an organisation in a future Australian Institute of Biological Sciences. Conversely, however, I feel in the short term that it may be appropriate to develop some formal dialogue in the ASBS Newsletter, with perhaps an informal semi-regular palaeobotanical column in the Newsletter, much in the same manner as the Chapter reports. In this vein, perhaps someone would like to write and submit reviews of the recent Australian palaeobotany books; Bob Hill's edited volume published by Cambridge Univ. Press, "History of the Australian vegetation", and Mary White's "After the greening. The browning of Australia.", published by Kangaroo Press. Any comments or takers?

David R. Greenwood,
Botany Dept., University of Adelaide.

Merry Christmas
and a Happy New Year to our readers

Have a wonderful 1995

QUEENSLAND HERBARIUM SEMINAR PROGRAM

February - August 1995

All seminars will be held in the Entomology Conference Room, Agricultural Research Laboratories, Meiers Road, Indooroopilly. (unless otherwise noted) on Wednesdays at 1.00 pm.

February 8 Vegetation of the Desert Uplands - John Thompson, Queensland Herbarium Queensland Department of Environment & Heritage.

February 22 Subantarctic Islands, unique terrestrial ecosystems - Dana Bergstrom, Botany Department University of Queensland.

March 8 Issues in Nature Conservation - Ross Rolfe, Queensland Department of Environment & Heritage.

March 29 Artificial Wetlands - Ralph Dowling, Queensland Herbarium Queensland Department of Environment & Heritage.

April 19 Improving Australian Tropical Pastures through Plant Introduction - Bryan Hacker, CSIRO Tropical Crops and Pastures.

May 17 PHYTOX, an aid to diagnosis of plant poisoning of animals - Ross McKenzie, Animal Research Institute Queensland Department of Primary Industries.

June 7 Pre-european Vegetation of the Darling Downs - Rod Fensham, Queensland Herbarium Queensland Department of Environment & Heritage.

August 2 Vegetation and Coastal Processes in the Mackay district - George Batianoff and Sel Saltman, Queensland Herbarium and Coastal Management Branch Queensland Department of Environment & Heritage.

Enquiries to Paul Forster (Seminar Convenor) (07) 877 9328 or Peter Bostock (07) 877 9327.

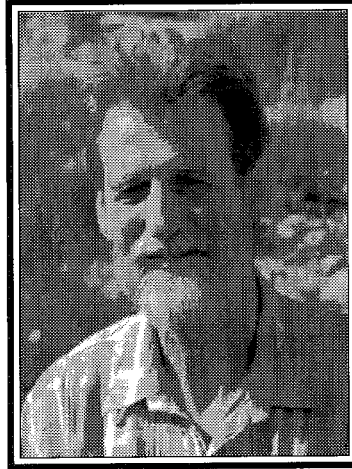
A.S.B.S. MEMBER PROFILE

PORTRAIT OF A BOTANIST

The following poem was spotted on Peter Latz's office door in Alice Springs by Bill Barker.
As a portrait, hardly anything more needs to be said.

Peter Latz

by
David Berman



*The little grey car with the
bent roof rack bar
Sits under the Emu Bush tree
Looking aloof with bird poo on its roof:
Latzie's at work today.*

*In his office he sits, in between
swearing fits,
Trying to lower the pile
Of paper and books, his scroungings like chook's
When searching for a lost file.*

*Looking through slides, preparing a talk
Arguing alternative views
On the meaning of life, while sharpening his
knife men, ecology, news.*

*At lunch hear the crunch, Latzie's after
the marrow.
He's cleaned all the meat off the bone.
Sliced lamb placed among, cottage cheese and
some tongue
On bread with a grunt and a groan.*

*Out bush in the mountains up cliffs or a tree
Looking for plants that others
can't see.*

*In the desert, the spinifex, sand
dune or flats
Look for the smoke and you'll
find Peter Latz.*

*Up north, early morning perched
on a rock
Giving the poor black fella's
a shock*

*With his didgeridoo like a Rock Kangaroo,
His pituri too and the things that he'll do*

*To entertain you, there are very few
Like our Peter Latz, he eats lizards and cats
Snakes and fruit bats, galahs, yellow chats
But not cheese and jatz.*

*We thought he'd never go far
in that little grey car
With his photos of urine on bark.
Yet he set off and drove to Darwin
and Gove
To make his artistic mark.*

*The little grey car with the bent roof rack bar
Is back under the Emu Bush tree
Looking aloof with bird poo on its roof:
Latzie's at work today.*

Note on the author:

David Berman writes and recites poetry in his spare time and works on Brumbies full time for the Conservation Commission in Central Australia. "Dead Pegs" (Bandicoot Books, PO Box 2014 Alice Springs) is the title of David's latest anthology; its subtitle is 'Performance Poetry for Pubs and Opera Houses'.

NOTICES

AUSTRALIAN BIOLOGY OLYMPIADS

Lynne Selwood
Dept Zoology
La Trobe University
Bundoora 3083

The Biology Olympiads Bursaries fund was established by the Victorian Cell Biology Society in 1994. Australian Biological Societies, Tertiary Institutions and Companies involved in scientific areas were able to provide 4 bursaries, each worth \$500 to the four team members competing in the International Science Olympiads in 1994. Donations will be sought annually to build up the fund for future years after the problem of government funding is resolved.

The Australian team earned three bronze medals in a very high standard competition. Australian team members, Amy Warren, from Brisbane, along with Katie Bergamaschi and Lachlan Rose, both from Sydney, each won bronze medals after completing theoretical and practical examinations lasting three and a half hours each. Stephen Rose, from Sydney, just missed out by a very small margin from receiving a medal. The 1994 team achieved comparable raw score marks to the unprecedented results of the 1993 team.

Dr John Dearn, the Australian deputy leader, said "Australia will need to at least maintain the current level of commitment to the selection and training programs to remain competitive as every nation in the competition continues to improve the preparation of their national representatives".

LOBBY FOR SCIENCE

Society members should lobby the Prime Minister and the Minister for Science so that the Federal Government continues to provide support for training students for the Science Olympiads. The

Government invested \$7 million dollars in the recent Commonwealth Games and \$350,000 for the 1994 Science Olympiads! Write a letter today to try and redress this ridiculous imbalance.

The Hon. Peter Cook
Minister for Industry Science & Technology
Minister Assisting the Prime Minister
Minster for Science
The Senate, Parliament House
Canberra, ACT 2600
FAX (06) 277 3387

The Hon. Simon Crean
Minister for Employment Education & Training
Parliament House
Canberra, ACT 2600
FAX (06) 273 4117

The Hon. Paul Keating
Prime Minister
Parliament House
Canberra, ACT 2600
FAX (06) 273 4100

The National Register of Biologists is now established, registering all biologists who wish to help by providing advice or coaching the team members.

NATIONAL REGISTER OF BIOLOGISTS

If you are able to help please fill in the form below and send to Dr Lynne Selwood, President, Victorian Cell Biology Society, Zoology Department, La Trobe University, Bundoora, Victoria, 3083 Australia. Tel. (03) 479 2239. Fax (03) 479 1551. email aools@zoom.latrobe.edu.au

We need to know your: Name - Address - Telephone - FAX - Email - Area of expertise

BOTANICAL ARTISTS GROUP (OF WESTERN AUSTRALIA)

Barry Conn A.B.L.O.

I recently received the first Newsletter of the Botanical Artists Group. This Group is keen to promote the essence of natural Australia, especially Western Australia. To stimulate awareness in their specialised work, they plan several activities. These include exhibiting at conference venues, corporate cocktail parties, wildflower exhibitions and art galleries. The botanical artists' paintings assist with recording Australian species for future generations. They reflect real concerns and issues such as our rare and endangered flora, the effects of fire on our native bushland and the use of bush foods for medicinal purposes. This Group recently held exhibitions at Kings Park Wildflower Festival, Kings Park (30 September - 4 October 1994) and at the Burswood Resort Hotel, Ground Floor Galleria (5 October - 12 October 1994). Future exhibitions are planned for Margaret River Art Galleries, Margaret River (16 December 1994 - 8 January 1995) and Albany Town Hall, York Street, Albany (14-17 April 1995). Further information can be obtained from Maggie Edmonds, P.O. Box 705, Claremont, WA 6010; Telephone: (09) 389 8601; Fax: (09) 389 8970.

LIVING IN A FIRE PRONE ENVIRONMENT: A SYMPOSIUM

Sponsored by The Linnean Society of NSW and ANZAAS NSW. Saturday 4th March, 1995
Biomedical Lecture Theatre D.
University of N.S.W.

The January 1994 bushfires around Sydney highlighted the public awareness of fire in the Australian environment, but much of the public comment has been ill informed.

There is scope for a look at several important aspects of fire:

- An historical perspective. To what extent has fire shaped the evolution of the present biota? When did fire become an integral part of the environment?
- The suggestion has been made that if we returned to aboriginal fire regimes all problems would be solved. What is known about aboriginal burning practices in forested eastern Australia? Is extensive and frequent burning compatible with what is known of population dynamics of some currently widespread species?
- How can we best manage the environment? How does fire affect the native plants and animals? What is being done in managing national parks and forests?
- Living in a fire prone environment. What are the consequences of bushfire on the people? How can people build and live in fire prone areas with reduced risks and increased safety?

PROGRAMME

8.30 Registration.

9.00 Opening address.

9.15 Dr. Helene Martin, School of Biological Science, University of NSW.

Fire and the evolution of the biota and environment. Bushfires have been a natural part of the environment for millions of years before man evolved.

9.40 Dr. Jim Kohen, School of Biological Science, Macquarie University.

Aboriginal use of fire in southeastern Australia. Aborigines burned for a variety of reasons few of which correspond to the reasons Europeans might want to burn.

- 10.05** Dr. Malcolm Gill and Mr. P.H.R. Moore, CSIRO, Division of Plant Industry.

Regional and historical fire weather pertinent to the January 1994 fires in Sydney. Weather data may be combined into a 'fire weather index'.

- 10.30** Dr. David Keith, N.S.W. National Parks and Wildlife Service.

Plant Ecology of fire. How should fire be managed to conserve fire prone plant species and communities?

- 10.55** Morning Tea.

- 11.30** Mr Bob Conroy, N.S.W. National Parks and Wildlife Service.

To burn or not to burn? That is the question. (Modern) history of fire within Parks and Reserves of north Sydney. Policy responses as a result of the January 1994 bushfires.

- 11.55** Prof. Rob Whelan, Department of Biological Science, University of Wollongong.

Animals, fire and fire regimes. Many animals appear to survive even high intensity wildfires but the shortage of food and cover causes post-fire mortality. Fire regime determines which species are sustained in the long term.

- 12.20** Lunch.

- 1.30** Dr Mark Garvey, Country Fire Authority, Victoria.

Wildfire threat assessment. A Geographic Information System profiles the wildfire threat and enables specific fire protection and prevention strategies to be developed.

- 1.55** Mr. Peter Moore, State Forests of N.S.W.

The basis of fire management in State Forests. The reasons for present policy and practice of State Forests in managing the public forest estate.

- 2.20** Afternoon Tea.

- 2.50** Dr Brett McDermott, Rivendell Child, Adolescent and Family Psychiatric Services, Thomas Walker Hospital.

4,000 Sutherland children and other erect bipeds. The case for the human consequences of bushfires.

- 3.15** Dr. Caird Ramsay, CSIRO Division of Building Construction and Engineering.

Building in a fire prone environment. Research shows how to improve the performance of buildings in bushfires.

- 3.40** Discussion.

- 4.15** Close.

Papers from the symposium will be published in the Proceedings of the Linnean Society of N.S.W. and all members of the Society will receive a copy.

The same papers will be published as a special symposium volume for non-members.

Enquiries and registration brochures are available from Dr. H.A. Martin, School of Biological Science, University of N.S.W., Sydney 2052,

Fax: (02) 662 2913

Phone: (02) 385 2071

**DUPLICATION OF JOURNAL NAME
'EUCRYPHIA'**

**FLORA OF VICTORIA
VOLUME 2**

There are two publications in Australia named 'Eucryphia'

(Ferns and allied plants, Conifers and Monocotyledons)

1. 'Eucryphia' - The newsletter of Society Growing Australian Plants - Tasmanian region, Reg. Australian Post Publication No. TBH 0297.

Edited by N.G. Walsh & T.J. Entwisle

Published by Inkata Press

The name derives from *Eucryphia lucida*, the Leatherwood.

This 950 page volume will be published on 21 November.

The March, 1994 Number is Vol. 11 No. 1.
Address: C/- M & T. Walker
24 View Street
Sandy Bay, 7005

The publishers are offering a special introductory price for orders received before 31 December:

From **Royal Botanic Gardens Shop** (Herbarium Building) - **\$140** (\$150 mailed within Australia)

2. 'Eucryphia' - The Journal of the Robertson Environmental Protection Society.
ISBN 1037 - 2032. It is named for *Eucryphia moorie* the Pinkwood.

From **Bookstores** - **\$165**

After 1 January 1995 prices will be:

The September, 1994 issue is No. 19.
Address: C/ - Alan Stiles
40 Beecroft Road
Beecroft, 2119

From **Royal Botanic Gardens Shop** - **\$155** (\$165 mailed within Australia)

From **Bookstores** (rec. retail) - **\$195**

REQUEST FOR MATERIAL

Luis Frank, Curator BAA, requests fresh seed material of the genera *Brachiaria*, *Paspalum*, *Digitaria* and *Paspalidium* for cultivation in the Lucien Hauman botanical garden of the Agronomy Faculty, Universtiy of Buenos Aires. If you are able to help, please contact him at the following address:

Universidad de Buenos Aires-Facultad de Agronomia

Dept. de Ecología-Cátedra de Botánica
Av. San Martín 4453
1417 Buenos Aires
ARGENTINA

ADVERTISEMENTS

JOURNAL OF THE HORN CENTRAL AUSTRALIAN EXPEDITION OF 1894

Corkwood Press was commissioned by the Conservation Commission of the NT to publish a facsimile of the Horn Scientific Expedition journal as part of the celebration of the centenary in September 1994. The four volume work has been reprinted and was launched at the centenary symposium in Alice Springs on 26-27 September.

This faithful reproduction of the four volume work, uses quality blue cloth binding and coated 130 gsm paper similar to the original. 500 copies have been printed.

The volumes consist of:

- Vol. 1: Narrative of the Expedition, summary of results. 4to, xvii, 220pp, large folding map, many photographs including the earliest quality views of Ayers Rock, Chambers Pillar etc.
- Vol. 2: Zoology. 4to, iv, 431pp, including many full colour plates (some folding) of plants and animals.
- Vol. 3: Geology & Botany. 4to, 204pp incl. many plates (some folding).
- Vol. 4: Anthropology. 4to, 200pp with some photographs of aboriginal people, their religious practices and rock art. (10 of the original plates have not been included at the request of Aboriginal cultural custodians).

If you would like to subscribe to a set of the Report on the work of the Horn Scientific Expedition, please complete the coupon below.

CONSERVATION COMMISSION OF THE NORTHERN TERRITORY
PO Box 1046 Alice Springs NT 0870 Ph (089) 518211 Fax (089) 518268

NAME:

STREET ADDRESS:

(for delivery)

I would like to subscribe to the facsimile edition of the Report of the Horn Expedition.

Please send me copies @ \$175.00 plus \$15 p&p TOTAL \$

My cheque for \$ is attached or

Please charge my credit card: **MASTERCARD/BANKCARD/VISA**

Card No.: Expiry Date:

Signature:

RECENT PUBLICATIONS

BIBLIOGRAPHY OF SYSTEMATIC WOOD ANATOMY OF DICOTYLEDONS. IAWA JOURNAL, SUPPLEMENT (INTERNATIONAL ASSOCIATION OF WOOD ANATOMISTS: LEIDEN).

By Gregory, M. (1994)

This excellent reference is a revised edition of her earlier bibliography, published in 1980, which was primarily arranged on a geographical basis. In this edition, the bibliography is arranged alphabetically, firstly by plant families and then by references. An indication of the genera or number of genera covered by each reference is also given. This publication represents a valuable resource reference for all botanical institutions.

Bary Conn A.B.L.O.

Yap/Truk/Pohnpel/Kosrae, Panama, Papua New Guinea, Peru, Philippines, Revillagigedo Islands, Sarawak/Sabah, Singapore, Society Islands, Solomon Islands, Sulawesi, Sumatra, Taiwan, Thailand, Tokelau, Tonga, Tuamotu Archipelago, USSR (Far East), Vanuatu, Vietnam, Wallis and Futuna, Western Samoa.

There are three lists included in the Directory; namely, (1) a list of the botanists according to the taxa studied, (2) a list of their fields of study, and (3) a list of their interests according to Pacific geographic areas. Naturally, there are many omissions and parts of the Directory would be better classified as 'wish' lists. However, the compilers have done an excellent job; producing a valuable resource booklet for this region. Since the information can only be as precise as that provided, it is essential that botanists correct errors and omissions. Requests for the Directory, together with US\$10-00, should be sent to: Dr S.H. Sohmer Director Botanical Research Institute of Texas, Inc. 509 Pecan Street Fort Worth, Texas 76102-4060 U.S.A.

Note: Corrections and additions should also be sent to the above address.

Barry Conn A.B.L.O.

DIRECTORY OF PACIFIC BOTANISTS

1993 The Pacific Science Association

A directory of botanists who are working on the botany of the Pacific region has been produced by the Pacific Science Association. The area covered by this Directory include (in alphabetical order): Alaska, American Samoa, Antarctica (only two entries), Austral Islands, Australia, Bonin/Ogasawara, Borneo, Canada, Caroline Islands, Celebes, Chile, China, Colombia, Continental United States of America, Cook Islands, Costa Rica, Easter Island, Ecuador, Enewetak, Fiji, French Polynesia, Galapagos Islands, Gambia Islands, Gilbert Islands, Guam, Guatemala, Hawaiian Islands, Honduras, Hong Kong, Indonesia, Irian Jaya, Japan, Java, Juan Fernandex Islands, Korea, Lesser Sunda Islands, Malesia, Marianas Islands, Marquesas Islands, Marshall Islands, Melanesia, Mexico, Micronesia, Moluccas, Nauru, New Caledonia, New Zealand, Niue, Okinawa, Palau/

AQUATIC CRYPTOGAMS OF AUSTRALIA. A GUIDE TO THE LARGER FUNGI, LICHENS, MACROALGAE, LIVERWORTS AND MOSSES OF AUSTRALIAN INLAND WATERS.

Edited by T.J. Entwisle. Australian Society for Limnology Special Publication No. 10. 1994. 151 pp., spiral bound. \$25.

This guide, which includes keys, illustrations, and notes to the genera, is available from: R. Marchant,

ASL Secretary, 71 Victoria Crescent, Abbotsford, Vic. 3067.

sperms, Glossary. 1972. 270 pp. ISBN 0-89327-256-6. \$US32.

COMMON AUSTRALIAN FUNGI. A NATURALISTS GUIDE.

By Tony Young. University of New South Wales Press, Kensington. 1994. ISBN 0-86840-150-1. \$19.95.

Volume Three, Part B. Fabales. 1989. 292 pp. ISBN 0-89327-347-3. \$US58.

Volume Four. The Asteridae, except the Asterales. 1984. 573 pp. ISBN 0-89327-248-5. \$US75.

INTERMOUNTAIN FLORA.

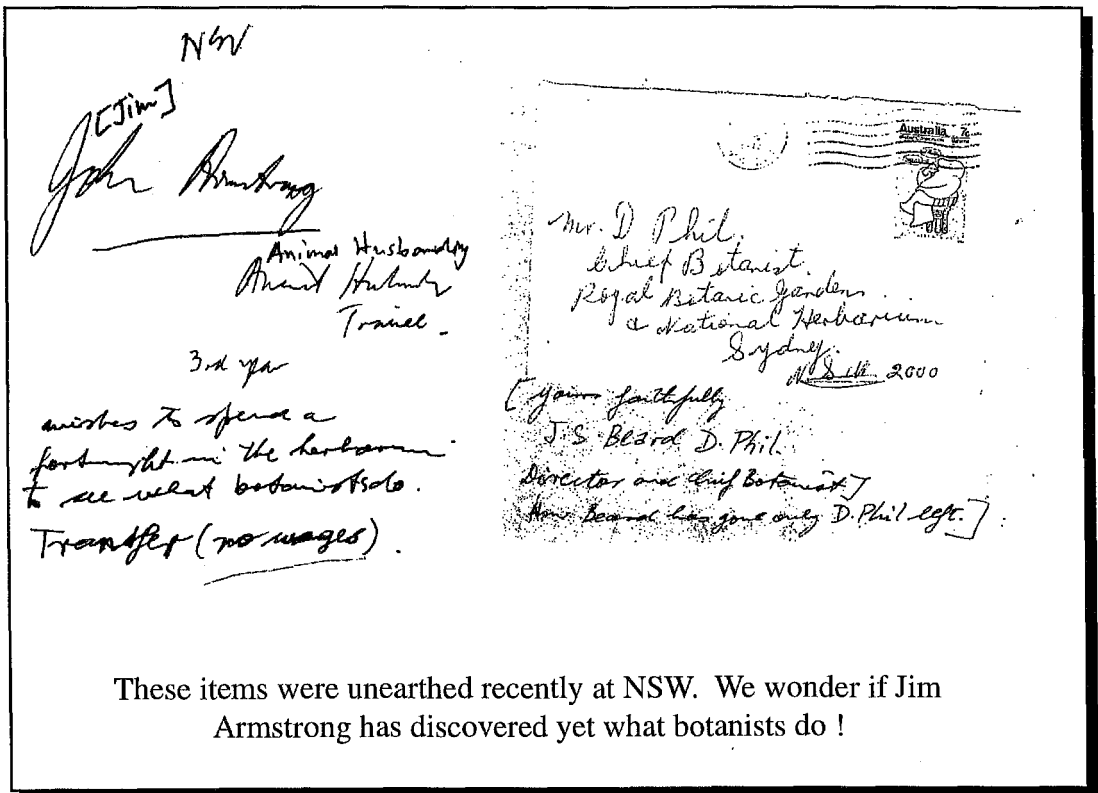
New releases from the series. New York Botanical Garden, Bronx. \$US210 for the five published volumes.

Volume Five. Asterales. 1994. 506 pp. ISBN 0-89327-375-9. \$US75.

Volume One. Geological and Botanical History, Plant Geography, Vascular Cryptogams, Gymno-

Volume Six. The Monocotyledons. 1977, reprinted 1994. 584 pp. ISBN 0-89327-386-4. \$US40.

MISCELLANEA



These items were unearthed recently at NSW. We wonder if Jim Armstrong has discovered yet what botanists do !

SUBSCRIPTIONS

SUBSCRIPTIONS TO A.S.B.S. FOR 1995

Subscriptions for 1995 were increased at the recent Annual General Meeting. Subscription rates for 1995 will be:

Ordinary/Institutional Members \$35
Full-time students \$15

Subscription become due on 1 January, 1995; a membership renewal form will be included in the December issue.

C.S.I.R.O. Scientific Journals
1995 Concessional Price List

The concessional rates for subscriptions to

C.S.I.R.O. journals for 1995 are listed below. Note that these are available only to *financial members* of A.S.B.S. Subscriptions must be paid for through the Society — the concessional rates are not available directly from CSIRO. Please note that *late orders will not be accepted*.

Those members wishing to subscribe, or renew their subscriptions, should send the appropriate subscription money by *January 6, 1995* to:

Dr. P.G. Wilson
Treasurer, A.S.B.S. Inc.
National Herbarium of New South Wales
Royal Botanic Gardens
Sydney N.S.W. 2000.

Please include this with the payment of your 1995 subscription to the Society.

Journal	Concession	Full Rate
Aust. Journal of Agricultural Research	\$125	\$250
Aust. Journal of Botany	\$110	\$220
Aust. Journal of Chemistry	\$240	\$480
Aust. Journal of Experimental Agriculture	\$110	\$220
Aust. Journal of Marine & Freshwater Res.	\$125	\$250
Aust. Journal of Physics	\$145	\$290
Aust. Journal of Plant Physiology	\$115	\$230
Aust. Journal of Soil Research	\$115	\$230
Aust. Journal of Zoology	\$110	\$220
Australian Systematic Botany	\$115	\$230
Invertebrate Taxonomy	\$140	\$280
Reproduction, Fertility & Development	\$115	\$210
Wildlife Research	\$110	\$220

A.S.B.S. PUBLICATIONS

History of Systematic Botany in Australia

Edited by P.S. Short. A4, case bound, 326pp. A.S.B.S., 1990.

Members \$30; non-members \$50. Postage \$10.

For all those people interested in the 1988 A.S.B.S. symposium in Melbourne, here are the proceedings. It is a very nicely presented volume, containing 36 papers on: the botanical exploration of our region; the role of horticulturalists, collectors and artists in the early documentation of the flora; the renowned (Mueller, Cunningham), and those whose contribution is sometimes overlooked (Buchanan, Wilhelmi).

Systematic Status of Large Flowering Plant Genera

A.S.B.S. Newsletter Number 53, edited by Helen Hewson. 1987. \$5 + \$1.10 postage.

This Newsletter issue includes the reports from the February 1986 Boden Conference on the "Systematic Status of Large Flowering Plant Genera". The reports cover: the genus concept; the role of cladistics in generic delimitation; geographic range and the genus concepts; the value of chemical characters, pollination syndromes, and breeding systems as generic determinants; and generic concepts in the Asteraceae, Chenopodiaceae, Epacridaceae, *Cassia*, *Acacia*, and *Eucalyptus*.

Flora and Fauna of Alpine Australasia: Ages and Origins

Edited by B.A. Barlow. A.S.B.S. & C.S.I.R.O., 1986. \$21 + \$5 postage.

The alpine environments of Australia, New Guinea, and New Zealand differ from each other in terms of topography, genesis, climate, and biota. They also contrast strongly with alpine habitats in the northern hemisphere. Palaeoclimatology, palaeobotany, biogeography, ecology, and plant and animal systematics have been used here to give an understanding of the biohistorical relationships of these isolated islands of alpine terrain in the southern hemisphere.

Evolution of the Flora and Fauna of Arid Australia

Edited by W.R. Barker & P.J.M. Greenslade. A.S.B.S. & A.N.Z.A.A.S., 1982. \$20 + \$5 postage.

This collection of more than 40 papers will interest all people concerned with Australia's dry inland, or the evolutionary history of its flora and fauna. It is of value to those studying both arid lands and evolution in general. Six sections cover: ecological and historical background; ecological and reproductive adaptations in plants; vertebrate animals; invertebrate animals; individual plant groups; and concluding remarks.

Australian Systematic Botany Society Newsletter

Back issues of the *Newsletter* are available from Number 27 (May 1981) onwards, excluding Numbers 29 and 31. Here is the chance to complete your set. Cover prices are \$3.50 (Numbers 27-59, excluding Number 53) and \$5.00 (Number 53, and 60 onwards). Postage \$1.10 per issue.

Also available are sweaters (\$25), t-shirts (\$15), mugs (\$8 each, or \$42 for a six-pack), and scarfs (\$20).

Send orders and remittances (payable to "A.S.B.S. Inc.") to:

Katy Mallett
A.S.B.S. Sales
Flora section, A.B.R.S.
G.P.O. Box 636
CANBERRA. A.C.T. 2601.
AUSTRALIA

A.S.B.S. INC. MEMBERSHIP APPLICATION

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED
(incorporated under the Associations Incorporation Act 1991)

APPLICATION FOR MEMBERSHIP

I,

of

.....
(address)

.....
(occupation)

herby apply to become a member of the abovenamed incorporated association. In the event of my admission as a member, I agree to be bound by the rules of the Society for the time being in force.

..... / /
(signature of applicant) (date)

I,
(full name)

a member of the Society, nominate the applicant for membership of the Society.

..... / /
(signature of proposer) (date)

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(signature of seconder) (date)

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AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED
(incorporated under the Associations Incorporation Act 1991)



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Subscriptions for A.S.B.S. membership for 1995 are due on 1 January, 1995. If you have already paid your subscriptions for 1995, please ignore this *pro forma* notice. The *Australian Systematic Botany Newsletter* will not be sent to unfinancial members. Correspondence concerning membership and subscriptions should be sent to the Treasurer at the address below.

Subscriptions for 1995, including the *A.S.B.S. Newsletter*, are:

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This list will be kept up to date, and will be published in each issue.
Please inform us of any changes or additions.

The Society

The Australian Systematic Botany Society is an incorporated association of over 300 people with professional or amateur interest in botany. The aim of the Society is to promote the study of plant systematics.

Membership

Membership is open to all those interested in plant systematics. Membership entitles the member to attend general meetings and chapter meetings, and to receive the *Newsletter*. Any person may apply for membership by filling in an "Membership Application" form and forwarding it, with the appropriate subscription, to the treasurer. Subscriptions become due on January 1 each year.

The Newsletter

The *Newsletter* appears quarterly, keeps members informed of Society events and news, and provides a vehicle for debate and discussion. In addition, original articles, notes and letters (not exceeding ten published pages in length) will be considered.

Contributions should be sent to one of the editors at the address given below. They should preferably be submitted as:- an unformatted word-processor or ASCII file on an MS-DOS or Macintosh diskette, accompanied by a printed copy; as an unformatted word-processor or ASCII email file, accompanied by a fax message reporting the sending of the file; or as two typed copies with double-spacing if less than one page.

The deadline for contributions is the last day of February, May, August, and November.

All items incorporated in the *Newsletter* will be duly acknowledged. Authors alone are responsible for the views expressed, and statements made by the authors do not necessarily represent the views of the Australian Systematic Botany Society Inc. *Newsletter* items should not be reproduced without the permission of the author of the material.

Notes

A.S.B.S. annual membership is \$35 (Aust); full-time students \$15. Please make cheques out to A.S.B.S. Inc., and remit to the treasurer. All changes of address should be sent directly to the treasurer, as well.

Advertising space is available for products or services of interest to A.S.B.S. members. Current rate is \$100 per full page, \$50 per half-page or less. Contact one of the *Newsletter* editors for further information.

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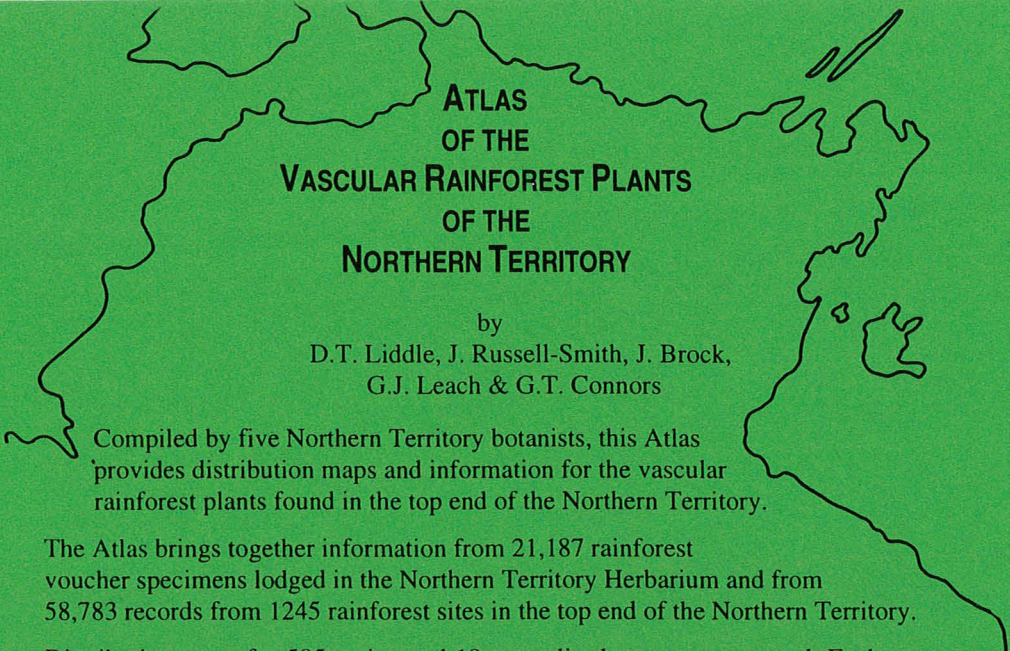
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David Mackay

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ATLAS
OF THE
VASCULAR RAINFOREST PLANTS
OF THE
NORTHERN TERRITORY

by
D.T. Liddle, J. Russell-Smith, J. Brock,
G.J. Leach & G.T. Connors

Compiled by five Northern Territory botanists, this Atlas provides distribution maps and information for the vascular rainforest plants found in the top end of the Northern Territory.

The Atlas brings together information from 21,187 rainforest voucher specimens lodged in the Northern Territory Herbarium and from 58,783 records from 1245 rainforest sites in the top end of the Northern Territory.

Distribution maps for 585 native and 19 naturalised taxa are presented. Each map indicates whether a locality was derived from herbarium data or rainforest survey data. The maps also include coded information on life form, the frequency of occurrence, endemism, reservation status and, where relevant, conservation status.

There is a comprehensive table indicating the distribution of taxa in the Northern Territory and whether they are endemic. This information is also given for four other Australian regions and 10 extra-Australian regions.

Appendices list each taxon with Northern Territory Herbarium accession number for selected reference specimens. References used in compiling the distribution data are given, and relevant nomenclatural information is given where necessary.

There are 8 tables, 4 figures, 604 distribution maps, an index and a bibliography.

The book contains xxii + 164 A4 pages, section sewn, with a full-colour soft cover.

FLORA OF AUSTRALIA SUPPLEMENTARY SERIES

The *Flora of Australia* series, coordinated and edited by the Australian Biological Resources Study, is a key reference to Australian plants.

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The *Supplementary Series* will comprise occasional papers on the systematics of the Australian flora. These will take many forms – monographs of key groups, nomenclatural indices, census lists and bibliographic compendia, among others.

The Executive Editor, *Flora of Australia*, should be contacted for conditions of publication.

Flora of Australia Supplementary Series, number 3

Published by

Australian Biological Resources Study, Canberra



ATLAS OF THE VASCULAR RAINFOREST PLANTS OF THE NORTHERN TERRITORY

by

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ATTACHMENT 1

PROPOSED AUSTRALIAN BIODIVERSITY COUNCIL

In March 1994, a short paper proposing the establishment of an Australian Biodiversity Council was circulated to Australian scientific societies and individuals interested in the conservation of biodiversity. The purpose of the paper was to find better ways for scientific views and insights to influence public debates and decision-making about biodiversity.

Following the positive response to the paper, a workshop was held in Melbourne on 25-26 June to develop the proposal. Participants included scientists representing 17 scientific societies, and a number of centres and departments, as well as interested individuals. The workshop addressed current problems and future opportunities, the need for a council, its goals and structure, and some aspects of operation and funding. There was a high level of agreement on all key issues. The following points were agreed.

THE COUNCIL

- * The Council should have about 10 members.
- * It should act independently; its members would not directly represent the societies.

THE ASSEMBLY

Composition

- * Half of its members would be the delegates from participating scientific societies and half individual nominees, leading to a total membership of around 100.
- * Individual members of the Assembly would be initially selected by the founding workshop participants and thereafter by the Assembly on a rolling basis.
- * Eligibility for nomination to the Assembly (and the Council) is based on demonstrable expertise and commitment to the goals of the Council.

Responsibilities and functions. The Assembly would be responsible for preparing a list of candidates for Council

- * selecting the Council
- * assessing new societies for admission
- * communicating with societies
- * nominating and selecting individual Assembly members
- * fostering discussion of biodiversity issue

The Assembly would meet annually or bi-annually and would have major roles in providing a direct link to individual scientists for information flow, fundraising and recruitment and a network to promote communication and provide access to expertise and resources.

SCIENTIFIC SOCIETIES

Societies would be eligible to participate provided that they meet the following criteria:

- * scientific
- * objectives consistent with the goals of the Council
- * national or with a national outlook.

SECRETARIAT

A permanent secretariat would serve the Council and the Assembly, providing administrative, research co-ordination and information/networking support.

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