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EDITORIAL

We were conned; that's the only way to put it.

David was innocently standing around before the last general meeting, when some of the people in the council were informally discussing the need for a new *Newsletter* editor. Jocelyn Powell, who was also standing around (but far less innocently), was asked if she was interested in the job; and she said that she was. She then turned to David and asked if he was interested in helping; he naively said that he was. The next day, some of the older members of the council (Barry and Judy) decided that they needed some younger blood in control; and David was thus left carrying the baby (in a neat reversal of the time-honoured sexual roles).

Barbara wasn't standing around anywhere in particular (innocently or otherwise), and was, in fact, not even a member of A.S.B.S. at the time (in spite of years of being an Australian systematist). We have no idea why Barry Conn's devious mind thought of suggesting Barbara (probably an unguarded remark at the Hennig Society conference). However, she accepted the job more out of surprise than of careful pre-meditated thought.

Having accepted the job, Barbara immediately discovered that her co-editor was overseas, and wouldn't be back for several months; and she immediately began to feel very nervous. David, meanwhile, discovered by fax whilst in New York that he was one of the new editors. Upon his return to Sydney at the end of January, Barbara got sick; and this delayed the production of the *Newsletter* even further. All in all, this has been a very interesting experience for us both.

Actually, we have worked together before, although not necessarily under circumstances that will in any way help in producing a newsletter. As the accompanying biographical profiles indicate, we were both at Sydney University together. Second year botany at any university is often a less-than-scintillating subject, and so it proved in our case. So we spent extended portions of the lecture periods writing what can only be described as stream-of-consciousness notes to each other. At least it passed the time of day, and we presume that we learnt some botany anyway.

Taking over the editorship of the *Newsletter* from Barbara Barnsley and Mike Crisp is a challenging task. They have taken the *Newsletter* to unprecedented heights of professionalism in production (although we gather that the release of the

Microsoft Word computer program may have helped), as well as maintaining the quality and content. Their three years together as editors have seen the *Newsletter* become firmly established as a high-quality and informative publication, of which the Society can be proud.

Their decision to stand down as editors cannot have been an easy one, as they both seem to have enjoyed their various roles. This must have been a particularly difficult decision for Mike, as the last general meeting saw him go from being one of the most active officials of the Society (associate editor, vice-president, public officer) to a more minor role (public officer). We believe that the Society owes them both a great debt for their time and effort. However, if they'd tried less hard, our job in following them would be a lot easier.

We have no great plans to change the content or presentation of the *Newsletter* in any way, although we hope to continue producing it with the full potential of computer technology, including graphing, illustration and page-layout programs. However, we presume that it will evolve in some specific direction under our care.

So, now seemed like a good time to review the history of the *Newsletter*, to give us some idea of what directions could be usefully followed under our guidance. As the accompanying article shows, this was both a salutary and a sobering experience, at least for the person who did it. However, it did induce us to include a reproduction of the front cover of the early *Newsletters*, and to include Selwyn Everist's opening remarks from the first issue. These appear overleaf.

As you might expect, we would welcome any suggestions that anyone has for incorporation into the *Newsletter*, although it is up to the members of the Society to continue to provide the input of articles, comments, notices, and reviews. Already we feel like a couple of used-car salespeople, as we hussle to get people to provide their promised contributions to the *Newsletter*.

David Morrison
Barbara Wiecek

Selwyn Everist's opening remarks in the first issue of the A.S.B.S. Newsletter

So the systematic botanists of Australia have another Newsletter! Once again we have a medium for the exchange of ideas and for comment on what is going on in the field of systematic botany in Australia.

The establishment of an Australian Systematic Botany Society and the publication of a Newsletter are an indication that our Cinderella science has arrived at the ball and is dancing with the Prince. Let us hope that midnight does not strike too soon!

To the botanists of the older generation it is particularly heartening that the younger taxonomists are sufficiently aware of their importance and scientific standing to speak out. For many years we have been taken for granted by those in other disciplines who always beat a path to our doors when they want a plant identified but have been either apathetic or condescending when it comes to recognition of systematic botanists as scientists. The younger generation has taken the initiative in forming the ASBS and in producing this Newsletter and I wish them well.

We should, however, learn from previous experience. For many years we had the Australian Herbarium News produced under the auspices of the Systematic Botany Committee of A.N.Z.A.A.S. It flourished for a time then perished in the desert sands of apathy.

Whether or not this Newsletter meets the same melancholy fate is up to each of us. Unlike fairy godmothers, editors are unable to conjure up articles out of thin air, although sometimes they are forced to try. The value of this Newsletter will depend on whether those who have something to say (and most of us have) will take the trouble to put their thoughts on paper and send them to the Society or the Editor.

Right now, I would like to see a spate of letters, setting out the ideas of individuals or groups of individuals on what should and what should not be included in the Newsletter.

How's this for openers!

Basically, I believe the Newsletter should be for communication and comment by individuals, not by herbaria as such. It should be a medium for expressing ideas and opinions on such matters as disciplines involved in making taxonomic judgements and for notification of and comments on published work.

I should also like to see ideas on the training of botanists, bearing in mind that the systematic botanist may be functioning in three allied but different fields

- (a) identification of plant specimens
- (b) writing of floras
- (c) research on taxonomic problems

Anecdotes and personal notes have a place so that botanists can get to know each other as people.

Comments and suggestions about needs for and methods of preparing Floras would be welcome, even if they are at variance with existing practices or official policies. In this respect, the Newsletter can serve as a useful medium whereby the Flora of Australia Committee of the Australian Academy of Science, the Systematic Botany Committee of A.N.Z.A.A.S. and directors of individual herbaria can let all systematic botanists know directly what they are doing, or propose to do, rather than let this information filter down through other channels.

There are a few things that seem to me should be excluded. Botanical papers, for example, should be published elsewhere and the ASBS Newsletter used for notification, comment or criticism on these papers. Individuals should not commit their employing institutions to any particular policy or course of action, although they should feel free to comment on and, if necessary, criticize institutional policies or projects.

I wish the venture well. In the long term, its success or failure is entirely in your hands.

Selwyn L. Everist
Director,
Queensland Herbarium.

Reproduction of the front cover of the first five A.S.B.S. Newsletters



ARTICLES

A not-so-brief review of the history of the Australian Systematic Botany Society Newsletter

David Morrison
University of Technology, Sydney

Introduction

The Australian Systematic Botany Society was formed at a meeting of concerned systematists in Melbourne in early 1973, and the first General Meeting was held in Perth in August of that year. The members decided that one of the main functions of the Society should be to produce an official *Newsletter*, and the first issue duly appeared in March 1974. It is now early 1991, and so I thought that a run-down on how the *Newsletter* has fared in the intervening 17 years might be an interesting exercise. In some ways this is a rather cheeky exercise, because I decided to be fairly critical in places and somewhat provocative in others, and this may be construed by some people as a very negative or even rude attitude by a newly-appointed editor. So, I should emphasise here that this is simply the opinion of one amongst several hundred members, many of whom will probably disagree with at least some of my comments.

For the first three years, the *Newsletter* appeared three times a year (March, July, November), and it has appeared four times a year since then (March, June, September, December). There has never been, as far as I can gather, any official description of what the *Newsletter* should look like or what it should contain; so in many ways both the presentation and its content have been up to each editor to determine.

There have been seven changes of editor in the past 17 years, although the editorial office has only been in four different cities. Issues 1-3 were edited by Des Boland in Brisbane (one year), issues 4-14 were by Rod Henderson also in Brisbane (just over three years), issues 15-25 by Alex George in Perth (nearly three years), issues 26-30 by Barry Conn in Adelaide (just over one year), issues 31-45 by Gordon Guymer back in Brisbane (nearly four years), issues 46-53 by Helen Hewson in Canberra (two years), issue 54 by Barbara Barnsley and Alex George also in Canberra, and finally issues 55-65 by Barbara Barnsley and Mike Crisp still in Canberra (three years).

I guess there must be something about the air in Brisbane (the editorial office for eight years) and Canberra (five years) that makes people want to edit newsletters. What's worse, Alex George immediately took up full-time editing (of the *Flora of Australia*) after his stint with the *Newsletter*. This is in contrast to Rod Henderson and Gordon Guymer, who both quit their editorial duties to become Australian Botanical Liaison Officer at Kew. I guess that's one way out.

Presentation

The first 27 issues of the *Newsletter* were printed on quarto paper, with a thin cardboard cover at one end, the whole thing being designed to be folded over for posting. The first five issues had a blue cover, with a dark blue logo (as shown elsewhere in this issue). I have not enquired as to what this logo is meant to represent, but I can only assume that it is intended to show that Adelaide holds the light that illuminates the rest of the country.

However, in 1975 the Society's council decided that the Secretary should have an official logo and letterhead, and that the logo should be used on all Society publications. Four designs were considered by council (one based on a map of Australia, two on eucalypts, and one on xanthorrhoea), with our current logo being the winner. So, issues 6-27 had a pale yellow cover with a large Society logo printed in green. It is interesting to note here that it was also proposed that the logo could appear on t-shirts; this idea did not come to fruition until 15 years later.

Issues 28-30 were printed on A4 paper (although issue 30 was manually trimmed to quarto size), with both a front and back cover, and the name of the Society (in full for the first time) and the logo printed in black. These issues are a bit hard to fold over, in the style of the previous issues.

Up until this time, each issue was typed, and duplicated directly from the typed copy. In particu-

lar, issues 4-18 were actually produced in Sydney. The editor sent a typed rough draft to the Secretary (usually Karen Wilson), who passed it on to Science House (issues 4-14) or the Environment Centre (issues 15-18) for final typing, duplication, and mailing.

Issues 19-27 were separately typed and off-set printed in Perth, as this proved to be cheaper and more efficient than sending the final draft to Sydney. Unfortunately, this became increasingly expensive, with rapid increases in typing costs for larger issues. So, Barry Conn moved production of issues 28-30 to the University of Adelaide, where most of the work was done manually by the editor and his fast-diminishing group of friends.

The biggest change in the *Newsletter* came when Gordon Guymer took over the editing for issue 31, because he investigated the possibility of using new photo-reduction techniques to produce a more professional-looking *Newsletter*. Since then, the editor has been responsible for preparing camera-ready copy on A4 paper, including the cover. This is then submitted to a commercial printer for photographing and printing on B5 paper, with the folios then being collated, stapled, folded and trimmed. A number of printers have been used over the years, depending on where the

editor resides. The editor is then responsible for getting their few remaining friends to help put the finished newsletters into their envelopes and stick on the address labels.

The next real change in *Newsletter* production has been the recent introduction of computer word processors, which make the laying out of the text in each issue a lot easier and better. This also reduces the typing costs. As a final change, recent issues have become more visual, with photos, logos, and book covers being included.

The current production technique does (perhaps unfortunately) allow a great deal of flexibility in the presentation of the cover of the *Newsletter*. All sorts of colour combinations have been tried since issue 31, in contrast to the relative uniformity of the earlier issues, including dark brown printing on an orange background, dark brown on light brown, brown on light brown, red on grey, green on grey, and purple on grey. There appears to be no pattern to these changes.

Nevertheless, the one evident pattern is the choice of illustration on the cover, which tries to reflect the research interests of the current president. So, we have had *Triodia marginata* for Trevor Clifford, *Amylothea dictyophleba* and *Amyema linophyllum* for Bryan Barlow,

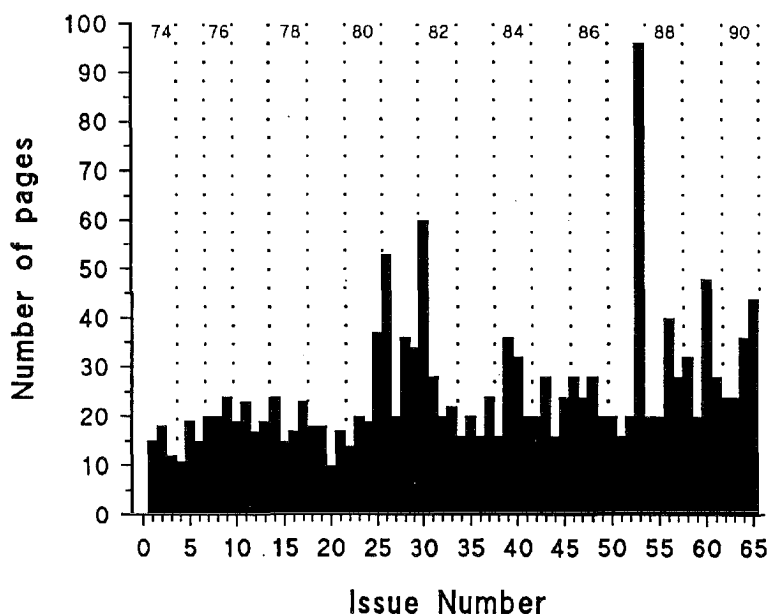


Figure 1. Number of pages for each issue of the A.S.B.S. Newsletter

Ranunculus anemoneus for Barabara Briggs, and *Calandrinia* sp. for Judy West.

The number of pages in each issue of the *Newsletter* has varied dramatically over the years, as shown in Figure 1. This is to some extent determined by the Society's finances, as production of the *Newsletter* accounts for over two-thirds of our expenses, and several editors have suggested that about 20 pages is ideal financially.

The average number of pages per issue has actually been 25 over the full 17 years. If one excludes the five upper outlying issues (i.e. those that are more than one standard deviation above the mean number of pages), then there has been a gradual increase in the size of the *Newsletter* since its inception. The average issue during Des Boland's time was 15 pages long, increasing to 19 pages for Rod Henderson and Alex George, 22 pages for Gordon Guymer and Helen Hewson, and 27 pages for Barbara Barnsley (I'm ignoring Barry Conn's ridiculous average of 30 pages plus two of the outliers). I hope this trend does not continue.

Within each year there are also consistent differences between issues. Once again ignoring outlying issues, and also excluding the first nine issues (which were produced only three times per year), then there is a gradual increase in the number of pages per issue through the year. The March issue has averaged 21 pages, the June issue 22 pages, the September issue 24 pages, and the December issue 25 pages. I presume that this reflects when events worth reporting occur during each year (e.g. our conferences usually occur later in the year), as well as the activity of the correspondents.

The five largest issues all commemorate unique events. Issue 26 (53 pages long) has a large number of appreciations on Hansjorg Eichler's retirement; issue 30 (60 pages) has some papers on inflorescence morphology from the 1981 International Botanical Congress; issue 53 (96 pages) has papers from the 1986 Boden Conference; issue 60 (48 pages) has some papers from the 1989 Symposium; and issue 65 (44 pages) has a couple of papers from the 1990 Symposium.

Nevertheless, there have (unfortunately) also been repeated calls from the editors for extra contributions. Indeed, issue 3 almost didn't appear, while in 1979 there was a distinct possibility that the *Newsletter* would revert to three issues a year, and in 1980 two of the issues were once again almost not produced. However, as it turned out, only two issues are outliers on the lower side: issue 4 (1975) with 11 pages, and issue 20 (1979)

with 10 pages.

Content

Perhaps the simplest way of giving you an idea of what the people who created this society had in mind for the substance of their *Newsletter*, is to consider the introductory remarks of Selwyn Everist (then the director of the Queensland Herbarium), which appeared on the first page of the very first issue. These are included elsewhere in this issue.

Selwyn's comments have been echoed at a number of General Meetings, where the content of the *Newsletter* has been discussed. Basically, people seem to want:-

- 1) reports of what's happening in official decision-making bodies;
- 2) news of activities or events in other parts of the country (and the world, for that matter);
- 3) commentary on current issues;
- 4) reviews of published works; and
- 5) a forum for publishing information that isn't suitable for refereed journals.

So, I guess that the success of the *Newsletter* can best be judged by considering how it has contributed to each of these areas.

When our Society was first formed, it was very involved with the Systematic Botany Committee of A.N.Z.A.A.S., as noted in the quotation from Selwyn Everist. In many ways, our Society has now replaced that committee. Consequently, the *Newsletter* appears to have been relatively effective at point number 1) as a means of communicating official news.

One of the biggest set of issues over the years has been the events surrounding the Australian Biological Resources Study, both in its formation and in its activities since then. In many ways, this has been the unifying theme in the *Newsletter*, both in attempts to provide a long-awaited Flora of Australia and in getting sufficient research funds. Just about every issue of the *Newsletter* (including the first one) has had reports by or comments about A.B.R.S., or its Interim council, or the Advisory Committee, or the Bureau of Flora and Fauna (in its several incarnations), or even the Australian Academy of Sciences Standing Committee on the Australian Flora (not to be confused with the well-known university Standing Committee on Chairs).

This consistency is to be applauded; and, if nothing else, this would seem to justify the existence of the *Newsletter*. However, I feel that it should be noted that information stemming from these sources has not always been accurate in retro-

spect. Perhaps the most glaring example concerns the *Australian Plant Name Index*. This work started out under the sponsorship of the A.A.S. Standing Committee, as the "first step" towards an Australian Flora (issue 1 of the *Newsletter*, 1974), being based on the early work of Nancy Burbidge. Issue 4 (1975) reports some progress on the Index; and issue 11 (1977) reports even more progress, claiming that it "will be ready for publication in from 2.5 to 3 years". Issues 23 (1980), 35 (1983), and 36 (1983) report further progress; and issue 37 (1983) suggests that the whole Index should "be available on microfiche in two years' time". Finally, issues 62-65 (1990) insist that the "long-awaited" *Index* will be published "in the first half of 1991". These reports are not easily reconciled.

The other official decision-making body dealing with systematics is the council of Heads of Australian Herbaria. At its second meeting, in 1974, this council (or Committee as it then was) decided to send "a report of major decisions" to A.S.B.S. for incorporation in the *Newsletter*. Unfortunately, the proposed reports from the second and third meetings never did appear in print. However, in 1977 a report from the fourth meeting was published in the *Newsletter*; and this council has published reports of all of its annual meetings since then, with the exception of meetings number nine (chaired by Arthur Court) and number fifteen (chaired by Clyde Dunlop). These reports constitute a major source of information concerning systematic botany in Australia, and I hope that detailed reports appear from all future meetings.

One final source of official information is the various herbaria themselves. Most of the Australian herbaria seem to have used the *Newsletter* as a means of disseminating information, but only on a very sporadic basis. This may to some extent reflect the sporadic nature of events that they considered worth reporting, but it also seems to reflect the willingness of someone in the herbaria to sit down and devote some time (among their many other activities) to writing something down.

One interesting idea that appeared very early in the life of the *Newsletter* was a series of articles entitled "Know the Herbaria", which attempted to inform the members about the status, specimen holdings, staff composition, and current activities of the various Australian herbaria. In temporal order, the herbaria contributing were:- ADW, PERTH (with an updating supplement), SYD, NSW (also with an update), HO, King's Park, AD, NT (with a supplement discussing its merger

with DNA), and AIMS. This series died quietly in 1979, but it seems to have been very useful while it continued.

Finally, I suppose that I should discuss official reporting from A.S.B.S. itself. Not unexpectedly, there have been published reports from all of the General Meetings, sometimes more than once (eg. the third meeting was reported twice, and the fourth meeting three times!). On the other hand, reports from the council meetings seem to have atrophied completely in recent years. From 1975 to 1982 (inclusive), there was a (sometimes lengthy) published report of business discussed by council, especially if it wasn't mentioned in the report from the General Meeting. However, there has only been one report since then, in 1985.

This may, to some extent, reflect the relationship between the editor and council, since a referendum of the Society in 1983 formally decided that the editor should not be a member of council unless independently elected to it (so as not to discourage editors by overworking them). A number of our editors have, in fact, also been on the council, at least for part of their time, notably Des Bolland, Rod Henderson, Alex George, and Barry Conn (as well as Mike Crisp as Associate editor). In 1979, council decided that "the editor, when he [sic, our first female editor did not take office until several years later] is not a council member, should be invited to attend council meetings"; and, indeed, Rod Henderson had already attended meetings in 1976-77 as an observer. However, since 1982 none of the senior editors has been on council, and I suspect that this has affected the communication between council and the *Newsletter*.

There are also a number of ideas that council has decided upon that have been allowed to languish in the *Newsletter*. The two most obvious of these are the two membership and university theses lists. In 1977, council decided that an updated membership list should be published in the *Newsletter* every two years; and yet lists have only appeared for 1976, 1978, 1980, and 1988. Also in 1977, council decided to publish a Guide to Graduate Botany, which would be a regularly-updated list of completed research theses from all Australian universities. The list was published in 1978, and was due to be updated each year in the *Newsletter*, with a revised list appearing every five years; but only the 1979 update was published.

The second role of the *Newsletter* is reporting activities or events around the country; and Helen Hewson, in particular, has tried to emphasise that maintaining a sense of history as it happens is one of the more important roles of the *Newsletter*. I

Table 1. Number of Chapter reports submitted to the Newsletter each year.

CHAPTER	YEAR																		TOTAL
	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90		
Adelaide	1	1	1	2	3	2	1	2	1		3	1	1		1			20	
Alice Springs					1	1												2	
Armidale							1											1	
Brisbane	1	3	3	4	3	2	1	1	1	1								20	
Canberra	2	2	1	3	2	2	2	2	1	2	3	1	2		1	2		28	
Darwin																		0	
Hobart																		0	
Melbourne	1	1	1	1	2		1		2		4	3	1	1	1	1		20	
Perth	2	2	1	1	2	2	3	1	1		2	2						19	
Rockhampton				1														1	
Sydney	3	3	3	2	3	1	2	1	1			1		1			1	22	
Townsville					1		1											2	
Papua New Guinea	2	1	1				1	1					1		1			8	
TOTAL	10	14	11	15	16	9	13	9	8	3	12	8	5	2	4	3	1	143	

think that the *Newsletter* has only been sporadically effective here. This relates directly to the willingness of individual members to provide information for the *Newsletter*. Perhaps the most obvious way for such information to be communicated is via the various regional Chapters that have been established around the country, but this has apparently been very inadequate.

In the larger cities, the various Chapters were officially formed very early on: Perth, Canberra, and Adelaide in the second half of 1973; and Melbourne, Sydney, and Brisbane in early 1974. The formation of Chapters in Rockhampton (1977), Townsville (1978), and Armidale (1982) was also formally announced in the *Newsletter*; but the Alice Springs, Darwin, and Hobart Chapters seem to have simply materialised in a list of Chapters published in 1979. The perceived role of each of these Chapters seems to vary dramatically, from very official bodies to more or less informal gatherings.

Table 1 shows the number of reports received each year from the convenors of each of the Chapters and published in the *Newsletter*. The reports vary from extremely brief to several pages (the Perth Chapter seems to hold the record, with a seven page report in 1980). Each of the larger Chapters has submitted reports to about one third of the newsletters, although Canberra (our most active Chapter in other ways as well) is getting closer to a half. This can be seen as either good or bad, depending on whether you emphasise those

newsletters with reports or those without them, since there is no formal requirement to submit reports of any kind.

The smaller Chapters are more erratic. The Rockhampton and Alice Springs Chapters no longer exist, as far as I know. However, the ones in Armidale and Townsville apparently do, so I presume that they are merely being shy in not submitting reports more often. The Darwin and Hobart Chapters are both tied almost exclusively to the main herbarium (unlike any of the other Chapters), and so reports of their activities have tended to come out of the herbaria rather than via the Chapters. The reports from our only affiliated society, the Papua New Guinea Botanical Society, seem to have been largely related to the presence in New Guinea of people trying to get to Australia; those that were, tended to write reports to attract attention to themselves (notably Bill Barker, Barry Conn, Jim Croft, and Greg Leach).

However, the most disappointing thing about Table 1 is the dramatic drop off in reports after 1984-85. The first sharp drop in number occurred in issue 18 (1979), with the first formal request for more Chapter reports in issue 23 (1980). By the time of the General Meeting in 1981, the president was moved to comment: "I have a suspicion that some of the once active regional sections have been holding fewer and/or less well-attended meetings. I have been impressed by the length of time over which the early activity has been maintained. There is a limit to the number of speakers and topics

likely to attract good attendances, but I hope regular, if not necessarily so frequent, meetings will continue to be held".

If the frequency of reports reflects activity, then most of the Chapters are limping rather badly, if not actually already lying on the stretcher. However, I should point out that the early reports from several of the Chapters emphasise that their activities were not restricted to formal presentations of talks. They included discussion groups and poster displays, as well as outdoor activities such as visits to areas of botanical interest. If satiation is responsible for lack of Chapter activity, then it seems that a bit of lateral thinking may help relieve the problem.

The early Chapter reports were also full of all sorts of personal news (honours, promotions, changes of job, etc), as well as the lists of talks held, and (more rarely) a report on the events at each meeting itself. It seems to me that the Chapters are the best mechanism available to us for reporting activities as they occur around the country, and I believe that it should be part of the responsibilities accepted by every Chapter convenor to provide a report for each issue of the *Newsletter*. I should, however, (in defence of convenors) note that in my own time as convenor of the Sydney Chapter I only submitted one report (still, it was 2.5 printed pages long).

The other potential regular source of news around the world has been from the Australian Botanical Liaison Officer at Kew. This position has been filled sporadically since 1937 (but regularly since 1969), but until the advent of the *Newsletter* there was little in the way of general communication concerning their activities. Nevertheless, until recently, even the *Newsletter* has been only intermittently (starting with issue 2) used as an information tool, with the notable early exceptions of George Chippendale, Andries Kanis, and Rod Henderson. However, since 1987 the ABLO has been a regular and valuable contributor to the *Newsletter*, and I hope that this will continue.

The third valuable role of the *Newsletter* is as a forum for informed commentary on current issues. In this regard, the *Newsletter* has been quite successful, although perhaps not as much as it could have been.

There have been a number of controversial issues discussed in the pages of the *Newsletter*, with several people being willing to present and cogently argue their respective points of view. This started with discussions about how best to achieve a new Flora of Australia, with suggestions ranging from regional floras through an undirected flora to

a monographic work such as we ended up with. Other issues canvassed include the formation of a Botany Society of Australia or an Australian Systematic Biology Society; as well as the merits or otherwise of splitting *Acacia* and *Eucalyptus* (although there was little comment on *Cassia*; and no-one seems to have commented on *Casuarina*, the splitting of which never seems to have been formally justified in print), or even the usefulness of the recognition of various newly-described eucalypt species.

There have also been numerous less-controversial subjects discussed, from cladistics to which biro inks are suitable for archival purposes. However, I am convinced that there are innumerable opinions out there that never make it onto paper, much less get submitted to the *Newsletter*; and it is in this respect that the *Newsletter* is less than it could be. Still, getting people to express their opinions in an organised fashion, such as is required by a written commentary, is no mean feat; so I guess we should be grateful for what we've got so far.

The fourth role of the *Newsletter* is as a means of reviewing published works. This idea was, for some reason, a bit slow to get going. Rod Henderson started the ball rolling in issue 7, by briefly reviewing some recently published journal papers; and in the same issue, David Symon reviewed a retrospective exhibition of Margaret Stones' botanical paintings. The first actual book review was an anonymous one in issue 9, followed by another from David Symon in issue 14. Since then, reviews have slowly picked up, and have been very successful, particularly in recent years.

The publication of information that would otherwise not be generally available seems to me to be a valuable role for the *Newsletter*, although the various editors have been at pains to prevent the *Newsletter* from becoming a scientific journal. In particular, council has formally decided that no articles making new nomenclatural combinations can appear in the *Newsletter*, nor can articles of more than ten printed pages (nor can defamatory ones, for that matter).

The first such published article appears to have been a short note in issue 3 on Jules Verreaux by Peter Michael, followed by a larger one on the cytology of euphorbias in issue 7. The first nomenclatural note was by Les Pedley in issue 8, on eucalypts appropriately enough. Not unexpectedly, the number of articles picked up rapidly with the change in *Newsletter* format for issue 31; and they have often seemed to dominate some of the more recent issues, particularly those reporting on con-

Table 2. Number and size (no. pages) of contributions made to the A.S.B.S. *Newsletter* in issues 31-65.

	Unsolicited articles	Invited articles	Comments	Short notices	Book reviews	Chapter reports	Other reports
Akeroyd, J.R.				1 1			
Albrecht, D.						1 0.5	
Anderson, R.	1 1						
Armstrong, J.A.		1 5					
Aston, H.I.				2 1			
Baas, P.				1 0.5			
Barker, R.M.						1 0.5	
Barker, W.R.	1 1.5						
Barlow, B.		2 5					4 10
Bean, A.R.	1 0.5		1 4				
Bedford, D.				1 0.5			
Boden, R.W.				3 2			1 1.5
Bridgewater, P.					1 0.5		
Briggs, B.G.			2 3.5	3 1.5			2 3
Brouer, Y.	1 3.5						
Brownsey, P.J.	1 2						
Buchanan, A.M.	1 3						
Busby, J.R.	1 1						
Byrnes, N.	1 1						
Canning, E.				1 0.5			
Carolin, R.		3 19.5		1 1		1 0.5	
Carr, D.J.			2 5.5	2 7			
Carr, S.G.M.			2 5.5	1 0.5			
Chapman, A.R.		1 8					
Chapman, A.D.	2 9				1 2		
Chinnock, R.					1 1.5		
Chippendale, G.M.	3 3.5		1 1		1 0.5		
Clarkson, J.	1 2						
Clifford, T.			1 0.5				1 0.5
Colless, D.H.		1 6					
Conn, B.J.			3 5	1 0.5		8 5	
Connor, H.E.		1 14.5					
Conran, J.	1 2						
Cooke, D.A.	3 8				1 1		
Craven, L.				1 1		2 2	
Crisp, M.	2 6		1 1.5	2 2.5	2 5		
Croft, J.R.	1 4			1 1		1 1.5	
Crowley, G.M.	1 4						
Curtis, D.				1 1			
Diment, J.A.			1 1				
Doust, A.N.L.		1 8					
Dunlop, C.				1 0.5			1 0.5
Edmonson, J.	1 2.5						
Eichler, H.				1 3			
Everett, J.			1 1.5			1 2.5	
Fagg, M.				1 0.5			
Forbes, S.J.	1 0.5					3 2	
Foreman, D.B.	1 1.5					1 1	
Forster, P.I.	5 5.5						1 1
Frodin, D.G.					2 4		
Garnock-Jones, P.					1 1.5		
George, A.S.	1 0.5		1 1.5	1 0.5	2 2.5	3 1.5	2 1
Green, J.W.	1 4						2 3
Green, P.S.				2 1			
Grieve, B.J.		1 7					

Groves, E.W.	1	1.5										
Guymer, G.P.	2	3									2	1
Haegi, L.	1	1			1	0.5		1	1		3	3.5
Hansen, V.	1	0.5										
Harden, G.					1	0.5						
Hawksworth, D.L.	1	2										
Henderson, R.J.F.	6	15			1	0.5						
Henwood, M.								1	1			
Hewson, H.			1	0.5	1	0.5		3	2.5		8	5.5
Heyligers, P.C.	1	2.5										
Hill, R.S.	1	5										
Hnatiuk, R.J.					1	0.5						
Hoogland, R.D.	1	1.5										
Hopper, S.D.	1	5.5		1	2.5			1	2			
Horne, R.W.	1	3										
Humphries, C.J.			1	1								
Hwang, Y.H.	3	4.5										
Jackes, B.R.								1	0.5			
Jefferis, B.	1	1.5										
Jeffrey, C.			2	7								
Jessop, J.P.											1	1.5
Jessup, L.W.										2	1	
Jessup, L.G.	1	1										
Johnson, L.A.S.	1	2.5	1	2.5	1	3		1	0.5			
Johnson, R.W.	1	1.5										
Jones, D.L.	1	1										
Kanis, A.	2	9		2	3.5	2	2				1	3
Kenneally, K.F.	4	14.5										
Keighery, G.	2	3.5						2	2		1	0.5
Kerenga, K.											1	0.5
King, R.J.								2	2			
Kleinig, D.				1	3.5							
Ladiges, P.Y.				1	1						1	1
Lamont, B.				1	0.5							
Lander, N.S.	1	3									1	5.5
Lazarides, M.									1	1		
Leach, G.											1	0.5
Lee, H.								1	1		1	1.5
Looker, M.	1	2										
Macfarlane, T.									1	1	4	2
Marchant, N.							1	1			1	0.5
Maslin, B.	1	12.5					2	2.5				
McCarthy, G.J.	1	3									2	1.5
McCusker, A.				1	1							
Michael, P.W.	1	2										
Mitchell, A.				1	0.5							
Monteith, G.B.				1	5							
Moore, D.T.	1	1.5										
Morley, B.							1	1.5				
Morrison, D.	3	10	1	5.5	1	1.5	2	7.5	1	5.5	1	2.5
Murray, D.R.	1	1										
Ng, F.S.P.	1	6										
Newbey, K.R.					1	1						
Orchard, A.E.	1	1			1	2					1	1
Palmer, J.D.							1	2				
Pedley, L.	3	5	1	3.5					1	2		
Polhill, R.									1	1		
Powell, J.			1	8	1	1						
Pryor, L.							1	1				
Puttock, C.F.									1	1		

Quinn, C.			1 0.5	1 1			1 0.5
Ramsey, H.P.	1 5						
Randell, B.R.	1 2	1 2.5		1 0.5		1 0.5	
Reynolds, S.T.	1 0.5						
Richardson, M.M.	1 4						
Robertson, R.					1 1.5		
Robinson, H.		1 3					
Ross, E.						1 0.5	
Ross, J.H.				1 2			1 2
Rowland, B.C.	1 2						
Schodde, D.		1 9.5					
Schofield, W.B.	1 5						
Scott, G.A.M.	1 1						
Selkirk, D.R.					1 1		
Seppelt, R.D.			1 1.5				
Short, P.	2 8.5			1 0.5	2 2.5		
Simon, B.K.	8 15			2 3.5	1 1		
Sinkora, D.	1 2.5				1 1		
Skog, L.E.				1 0.5			
Slatyer, R.O.			1 0.5				
Stead, T.Y.			1 1				
Stearn, W.T.				1 0.5			
Steenis, C.G.G.J. van	1 0.5		1 2.5		1 0.5		
Stevens, P.F.		1 7.5					
Stones, M.	1 1						
Symon, D.E.	2 1	1 6.5	1 0.5	3 2	7 5	2 1	2 3
Telford, I.	2 1						
Thompson, J.	2 2.5						
Toelken, H.R.	1 1						
Tucker, M.C.	1 0.5						
Wannan, B.	1 2						1 0.5
Watt, A.	1 2						
Webb, C.J.		1 5					
Webb, J.	2 5.5						
West, J.G.		1 8.5	1 2	2 1		1 1	5 7
Whiffin, T.		1 5				1 0.5	
Wightman, G.	2 1.5				1 1		
Williams, J.						1 0.5	
Willis, J.H.		1 3.5	1 1		2 3		
Wilson, K.	4 5						2 2.5
Wilson, P.G.	2 3	1 7					
Wilson, P.G.	1 2					1 1.5	
Womersley, H.B.S.	1 2.5						1 1.5
Wright, A.				1 1			

ferences. This therefore seems to have been the most successful role of the *Newsletter*; and this is probably no bad thing, provided that it is not at the expense of the other desirable roles.

There is also the matter of humour. Interestingly enough, it only took until issue 3 for a basically humorous note to appear in the *Newsletter*, with a further example of *divertimentia* in issue 4. At least systematists have a sense of humour. However, this has been a rather sporadically-appearing element since then (with a notable piece in issue 22), although some lunatic named Morri-

son has tried to increase the content more recently.

Finally, I feel that I should make some remarks about who is actually providing all of this content for the *Newsletter*. In order to provide some accurate data for this, I compiled Table 2, which lists all of the voluntary contributors to issues 31-65 inclusive (the past nine years).

I have excluded all contributions concerning official Society business (as this is determined solely by who bears office at the time), as well as the regular contributions from C.H.A.H. (who decided formally that they should contribute) and

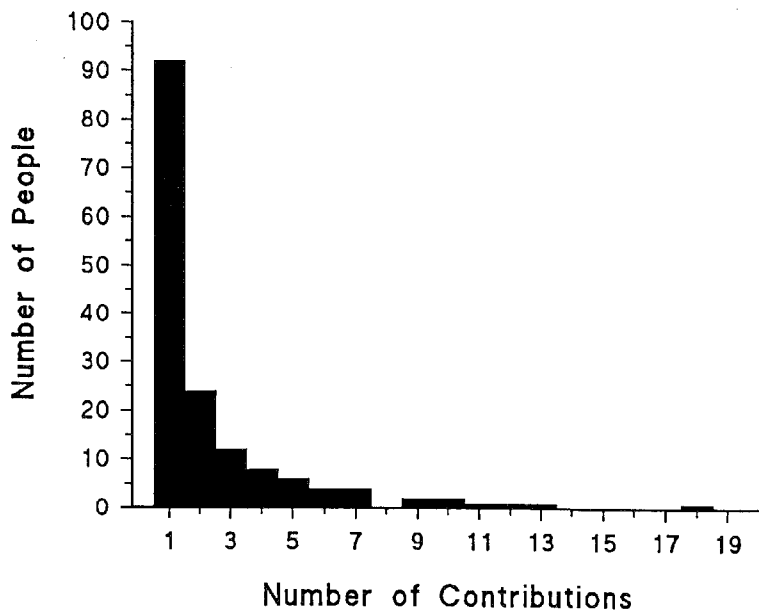


Figure 2. Number of contributions per person in issues 31-65 of the A.S.B.S. *Newsletter*

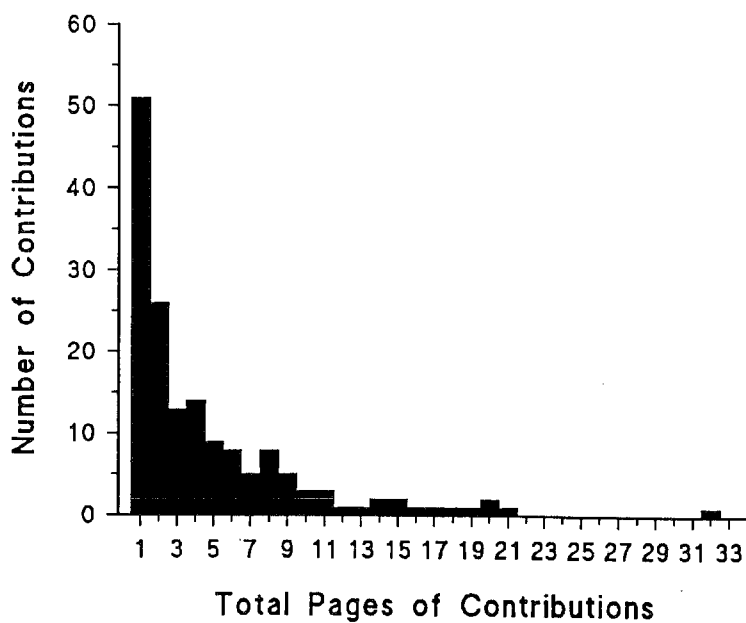


Figure 3. Size of total contributions to issues per person 31-65 of the A.S.B.S. *Newsletter*

A.B.R.S. (notably Alex George, Alison McCusker, Roger Hnatiuk, and Helen Hewson). I also excluded all conference abstracts (since these were not originally intended for publication in the *Newsletter*), but included all such papers. I attributed the total number of pages per contribution to each author where there was more than one, and I used 0.5 page as the basic unit of measurement. The division of the contributions into categories is somewhat arbitrary, but it basically tries to reflect the breakdown used in the above discussions.

This list is both heartening and saddening. It's heartening because there are 159 names on it, which implies that about half of the Society's members (remembering that not all of the people on the list are members) have contributed something to the *Newsletter* in the last nine years. This is much greater than I expected. It's saddening because about half of the members are not on the list, and of those that are 58% have contributed only once.

Figure 2 shows the frequency distribution of the number of contributions per person, which is, as expected, a poisson distribution. This figure reveals that 24% of the contributions came from just eight (5%) people:- David Symon (with 18 contributions), Helen Hewson (13 contributions), Barry Conn (12), Bryan Simon (11), Alex George and Judy West (10), and Terry Macfarlane and myself (9).

If we consider the total number of pages contributed per person, we see a similar trend. Figure 3 shows the frequency distribution, which is also poisson. This figure shows that, once again, 22% of the length of the contributions was from just 5% of the people:- myself (32 pages contributed), Roger Carolin (21 pages), Bryan Simon and Judy West (20), David Simon (19), Andries Kanis (18), Bruce Maslin (17), and Rod Henderson (16).

There is substantial overlap between these two groups, although these numbers do seem to suggest that my contributions are more long-winded than anyone else's.

It is also worth noting that, apart from being on both of these lists, David Symon is the only person in Table 2 to have contributed to all seven categories. David seems to be far and away the most active supporter of the Society who has never held an official post. For example, he was also the major *Newsletter* contributor in the first 30 issues, he contributed the first "Know the Herbaria" and the first reviews, the Adelaide Chapter was formed at his house, etc. We all owe him a considerable debt, and I personally hope that he keeps up the level of his contributions.

Conclusion

So, it seems to me that in several ways the *Newsletter* has been eminently successful, while in other ways it has not lived up to its full potential. It has been very successful as a forum for published data that would otherwise not be available, and as a means of reviewing published works; it has been quite reasonable as a means of disseminating official news, and as a forum for commentary; but it has been much less successful as a source of news.

All in all, I think that our Society can be proud of our *Newsletter*; and I think that the fact that it has not "perished in the desert sands of apathy" is a testament to the value that the members of the Society attach to the various roles that it plays. We all owe the various *Newsletter* editors a great thanks, both for a job well done, and for the dedication that they have shown in spending the time and effort necessary to produce it.

Botany, n. The science of vegetables - those that are not good to eat, as well as those that are. It deals largely with their flowers, which are commonly badly designed, inartistic in colour, and ill-smelling.

Zoology, n. The science and history of the animal kingdom, including its king, the House Fly (*Musca maledicta*). The father of Zoology was Aristotle, as is universally conceded, but the name

of its mother has not come down to us. Two of the sciences most illustrious expounders were Buffon and Oliver Goldsmith, from both of whom we learn (*L'Histoire Generale des Animaux* and *A History of Animated Nature*) that the domestic cow sheds its horns every two years.

Ambrose Bierce
The Devil's Dictionary

The Casuarinaceae : A few problematic fossil records

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Discussion

In general, casuarina microfossils of Laurasian origin are considered doubtful. For example, Muller (1981) rejected reports from North America and France due to a lack of diagnostic evidence. However, he did not comment on a report from Scotland and another short note from the U.S.S.R.

Simpson (1961) reported four microfossil species from the prebasaltic at Ardslnish, Ardnarmurchan of western Scotland with light-microscope photographs. Zaklinskaya (1964) of the Academy of Sciences of the U.S.S.R. briefly noted the discoveries of pollen of *Casuarina* (along with *Eucalyptus*, *Araucaria* and the Proteaceae!) in the late Cretaceous deposits of southern Eurasia, Kazakhstan and western Siberia (unillustrated). I would be very interested to see comments on the above records from qualified palynologists. A re-examination of the specimens seems in order.

Mathur (1966) reported Palaeocene casuarina pollen grains from the Kush region of India (unillustrated). Although India is of a Gondwanan origin, so far no definite confirmation of an Indian casuarina fossil has been made. I tried to investigate this claim, but communication proved difficult. Frengueli (1943) reported the discovery of Miocene cones from Argentina and regarded them as belonging to the Cryptostomae. However, these specimens were later re-interpreted by Christophel (1980) as fossils of the Gymnostomae.

Campbell and Holden (1984) reported early Miocene Cryptostomae cones from Bannockburn, New Zealand. Very surprisingly, Johnson (1989, p.102) identified these cones as belonging to his *Allocasuarina*. Although Kemp and Harris (1975, 1977) did mention a possible occurrence of Palaeocene to Oligocene Cryptostomae microfossils from the Ninetyeast Ridge in the Indian Ocean, the earliest definite Cryptostomae are from the Miocene (Patton, 1936; Campbell and Holden, 1984), with Christophel (1980) noting Miocene forms intermediate between Gymnostomae and Cryptostomae from Victoria.

It is generally recognised that New Zealand began to separate from Australia in the late Cretaceous, reaching its present position before the Eocene (Austin, 1977; Craddock, 1982; Galloway

and Kemp, 1981; Griffiths, 1977). *C. equisetifolia* is the only species known to show long-distance dispersal, but it is not a member of *Allocasuarina*. It is worth noting that post-Tertiary microfossils from New Zealand are thought to have been blown across the Tasman Sea from Australia (Close et al., 1978; Kershaw and Strickland, 1988; Mildenhall, 1976). Therefore, if Johnson insists that the Miocene cones from New Zealand belong in *Allocasuarina*, it seems that there are only 4 logical possibilities:

1. *Allocasuarina* is polyphyletic.
2. *Allocasuarina* existed before the Tertiary.
3. New Zealand began to separate from Australia shortly prior to the Miocene.
4. Birds carried *Allocasuarina* seeds across the Tasman Sea in the early Miocene.

It is doubtful that any biologist will consider any of these to be plausible except the last one, which might have a slim chance. And even this requires the premise that *Allocasuarina* was well differentiated in the early Miocene.

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Druid's Caps - George Caley's collections of the genus *Pterostylis* R.Br. in the colony of New South Wales 1800-1810

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Introduction

It is most unfortunate that so little recognition has been given for the botanical work done by George Caley (1770-1829), collector to Sir Joseph Banks, particularly in regard to his work on the Orchidaceae of the Sydney district from 1800 - 1810.

It is hoped that this paper and the two to follow will be the beginning of an increased awareness of both Caley and his work, and will gain him credit and recognition for his botanical efforts during his 10 years in New Holland.

This paper will outline the dates and locations of species of *Pterostylis* R.Br. collected by Caley. The second paper will detail his work, analysing his descriptions and diagnoses of various species; and the final paper will examine his work with other orchidaceous genera.

Caley's Collections

In October of 1803, Caley collected two plant species at the 'Cowpastures', which he called

"Druid's Cap Brownii" and "Druid's Cap Baueri" [1]. Earlier, in April and September of that same year, he had collected two similar plants near Parramatta. The former he did not then name; and the latter he called, at the time, simply "uniflora", but which he later changed to "Dicksoni".

Caley labelled this specimen as "uniflora", but he wrote a description of the plants as "Druid's Cap uniflora" (Sept. 1803) [2]. The April 1803 specimen he later named "Druid's Cap Patersoni" (May 1803) [1]. Caley's name "Druid's Cap" alluded to the hooded shape of the flowers, which, to him, resembled the hood worn by Druids. Today we know his "Druid's Caps" as the orchidaceous genus *Pterostylis*, first described by Robert Brown in his *Prodromus Florae Novae Hollandiae et Insulae Van Diemen* of 1810.

The manuscript names Caley used to distinguish between species, eg. "Brownii", were either in honour of his various botanical colleagues or patrons at the time, or were taken from some other conspicuous feature of the plant, eg. "uniflora" meaning "single-flowered".

Between 1803 and 1807 Caley collected,

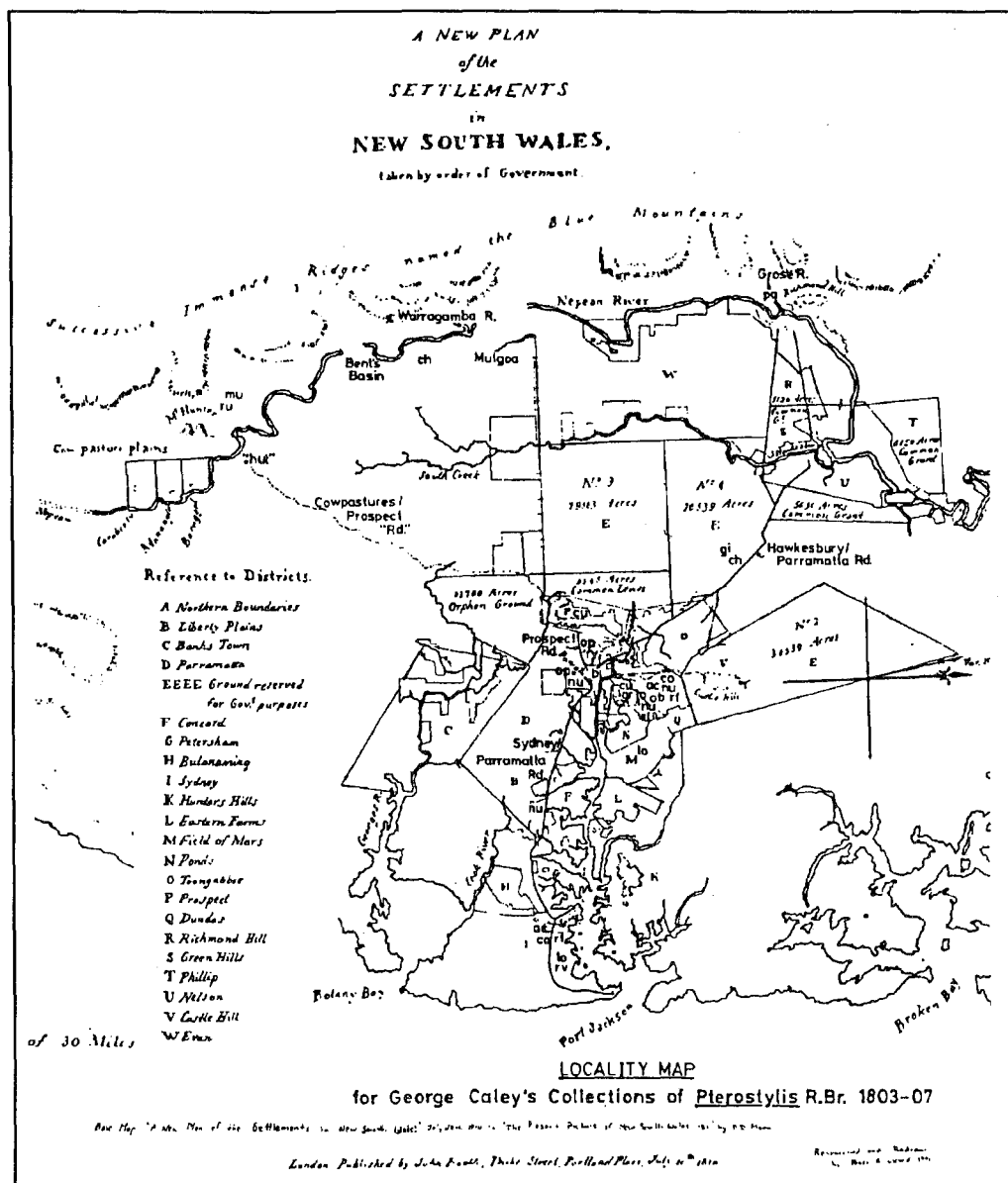


Figure 1. Map showing where George Caley collected *Pterostylis* R.Br. in the Sydney district.

ac <i>P. acuminata</i>	bi <i>P. bicolor</i>	ch <i>P. chaetophora</i>	co <i>P. concinna</i>
cu <i>P. curta</i>	gi <i>P. gibbosa</i>	gr <i>P. grandiflora</i>	lo <i>P. longifolia</i>
mu <i>P. mutica</i>	nu <i>P. nutans</i>	ob <i>P. obtusa</i>	op <i>P. ophiglossa</i>
pa <i>P. parviflora</i>	re <i>P. reflexa</i>	rv <i>P. revoluta</i>	ru <i>P. rufa</i>

"hut" - the hut referred to by Caley on his field tag for *P. rufa*. [5]

named, and wrote descriptions and diagnoses of his "Druid's Caps", totalling some 208 specimens, representing 16 species from as far afield as Hobart.

Caley spent considerable time collecting *Pterostylis* around Sydney, Parramatta, North Rocks, Epping, Toongabbie, Prospect, Mulgoa, Bent's Basin, and the Cowpastures. Table 1 lists Caley's major collection dates and locations of *Pterostylis* species in the Sydney district, extracted from Caley's collection tags and herbarium specimens held in The Natural History Museum (London). Figure 1 shows these locations in the Sydney district.

Conclusion

George Caley was more than just a minor collector. Within a single genus such as *Pterostylis*, his specimens number more than 200. He rarely collected single or aberrant specimens, trying to make collections representative of a taxon, and demonstrating the range of natural variation within each of them.

When Robert Brown published his *Prodromus* in 1810, 19 species of *Pterostylis* were known, of which more than 70% had been collected by Caley during his stay of 10 years.

Caley was clearly exhaustive in his approach to collecting and describing plants. He journeyed to areas not visited by any other European, up to 45 km from his residence in Parramatta, when collecting *Pterostylis* in the Sydney district. The majority (as many as 11 taxa) were collected within a 10 km radius of his residence.

This systematic and complete approach towards collecting, alone, deserves more recognition than has previously been given.

Notes

[1] Information from Caley's field tags on herbarium specimens held in The Natural History Museum [formerly The British Museum (Natural History)], London.

[2] Mitchell Library, Sydney. Caley manuscript MS FM4/2568, plants 1803-04, p. 91 (copied 24.viii.87).

[3] Letter from Caley to Joseph Banks, Parramatta, 12th Oct. 1800 (Banks Papers), Historical Records of N.S.W., Vol. IV, p. 239.

[4] "A New Plan of the Settlements in New South Wales", July 20th 1810, in *The Present Picture of New South Wales 1811*, by D.D. Mann, John Booth: London; and also the map by Bryan Thomas (1978) "Sydney 1796. The First Land Grants, Sydney to Parramatta", based on the Charles Grimes map "The Plan of the Settlements of New South Wales".

[5] "After crossing the nepean between the hut & the flat at the head of the Long Meadow - I only saw it in two places - in both growing in patches - the ground rather bare and barren - the trees seemingly Magargra. Red Druid Oct 27, 1807". According to Maiden, "Magargro" is the aboriginal name for *Eucalyptus crebra* F.Muell., in "George Caley, Botanical Collector in New South Wales 1800-1810", *Agricultural Gazette of N.S.W.*, Vol. 14, 1903.

Table 1. *Pterostylis* R.Br. collected by George Caley, 1803-1807

Taxon	Location	Date	Taxon	Location	Date
<i>P. acuminata</i> R.Br.			<i>P. concinna</i> R.Br.		
DC Dryanndri	Sydney	May 1804	DC Smithii	S + B	June 1804
	P North rocks	May 1804		P. N. rocks + B	July 1804
<i>P. bicolor</i> M.A.Clements ms.				N rocks	May 1805
DC Baueri	Portland Place [?] B	Aug. 1804		North Rocks B	July 1805
	Portland Place	Sep. 1804	<i>P. curta</i> R.Br.		
	P	Sep. 24 1804	DC nemoralis	near Prospect	
<i>P. chaetophora</i> M.A.Clements ms.				Brush + B	Aug. 1804
DC Brownii	between the Great			North P. brush (of	
	Creek [South Ck] &			Parramatta) [sic] B	1804
	Toongabbe {sic}	Sep. 1804	<i>P. gibbosa</i> R.Br.		
Red Druid	between Dove Dale		DC Brownii	between Prospect &	
	[Bent's Basin] &			the South Creek	Oct. 1803
	Mulgoey [Mulgoa]	Oct. 31 1807			

Taxon	Location	Date	Taxon	Location	Date
<i>P. grandiflora</i> R.Br.				Portland Place [?]	March 1805
DC Banksii	North Brush P	June 1804		South Brush [?]	April 1805
	N Brush	May 1805	<i>P. ophioglossa</i> R.Br.		
<i>P. longifolia</i> R.Br.			DC arenaria	P	May 1804
DC Solandri	N. Brush +B	June 1804		on the Prospect road	March 1805
	Port Jackson B	1804		P	April 1805
	near Patello's farm		<i>P. parviflora</i> R.Br.		
	[William Patullo			Groses Head	Winter 1806
	near Epping]	May 1805	<i>P. reflexa</i> R.Br.		
<i>P. mutica</i> R.Br.			DC Patersoni	P	April 1803
DC Baueri	Bulbinmatta			N rocks P	May 1804
	[Cowpastures]	Oct. 1803		N Brush	June 1804
	Hobart +B	Dec. 1805		Northern Boundary P	June 1804
	Hawkesbury/Toongabbe			S	March 1805
	{sic} Rd Ba	Sep. 1803		Parramatta	April or May 1805
<i>P. nutans</i> R.Br.				Sydney	May 1805
DC Dicksoni	P	Sep. 1803		S	April 1806
	N. Brush [North		<i>P. revoluta</i> R.Br.		
	Parramatta]	June 1804	DC Aitoni	P	May 1804
	N. rocks	July 1804		Port Jackson B	1805
	halfway on the Sydney		<i>P. rufa</i> R.Br.		
	road from Parramatta	July 1804	Red Druid	Bulbinmatta	
	N. Brush	May 1805		[Cowpastures] +B	Oct. 1803
<i>P. obtusata</i> R.Br.					
DC prominens	P North rocks	May 1804			

[] = present-day place name DC = "Druid's Cap" P = Parramatta S = Sydney

B = a Brown label attributing Caley with the collection

+B = a label/tag by Brown and Caley, but collected by Caley only

Ba = specimen collected by Bauer (but with a Caley tag)

Northern Boundary = the northern boundary of Parramatta (viz. North Parramatta, Telopea, Carlingford)

N. Brush = "Northern Boundary" + North Rocks

The triumph of reason

Behold the mighty dinosaur

Famous in prehistoric lore,

Not only for his weight and length

But for his intellectual strength.

You will observe by these remains

The creature had two sets of brains -

One in his head (the usual place),

The other at his spinal base.

Thus he could reason *a priori*.

As well as *a posteriori*.

No problem bothered him a bit

He made both head and tail of it.

So wise was he, so wise and solemn,

Each thought filled just a spinal column.

If one brain found the pressure strong

It passed a few ideas along.

If something slipped his forward mind

'Twas rescued by the one behind.

And if in error he was caught

He had a saving afterthought.

As he thought twice before he spoke

He had no judgement to revoke.

Thus he could think without congestion

Upon both sides of every question.

Oh, gaze upon this model beast

Defunct ten million years at least.

Bert Liston Taylor

A.S.B.S. Inc. BUSINESS



WARNING Subscriptions for 1991

Subscriptions for 1991 were due on 1st January 1991. Those members who have not yet paid for 1991 are now unfinancial. Unfinancial members are reminded that they will cease to receive the *Newsletter* after this issue. Instead, they will receive a *Newsletter* envelope containing an explanatory letter, followed by no further communications until they become financial again. The current subscription rate is \$22.00, and \$12.00 for full-time students. Payment must be made in Australian dollars. Cheques should be made out to 'ASBS Inc'. Please remit to the Treasurer, Don Foreman, whose address appears inside the front cover.

Systematic and Ecological Relationships of the South Pacific Floras

November 25-27, 1991

The Australian Systematic Botany Society Inc. and the New Zealand Botanical Society will hold a joint conference in Auckland, New Zealand, in late November 1991. The conference will be preceded by a small workshop on cladistics, and followed by a botanical tour of the South Island. An organising committee comprising both Australian and New Zealand representatives is in the process of being formed.

Timetable

Friday	22 November	Cladistics workshop
Saturday	23 November	Cladistics workshop
Sunday	24 November	Local field trip - Rangitoto Island and/or Waitakere Ranges
Monday	25 November	A.S.B.S. - N.Z.B.S. conference

Tuesday 26 November A.S.B.S. - N.Z.B.S.
conference
Wednesday 27 November A.S.B.S. - N.Z.B.S.
conference
Thursday 28 November - Monday 1 December
Nature Oquest Tour of botanical
highlights in the South Island

Cladistics Workshop

This will be an introductory workshop for practicing plant systematists, organised by Pauline Ladiges of the Botany Dept., University of Melbourne, and Phil Garnock-Jones, of D.S.I.R. Land Resources, Lincoln. It will cover the philosophy and methods of cladistics, including the main computer packages. We hope to give you the opportunity to analyse real data for your group of plants. Numbers will be limited, so please signal your intention to attend as soon as possible.

Conference

There will be three days of papers on South Pacific botany, and the usual social events. The theme of the meeting will be Systematic and Ecological Relationships of the South Pacific Floras. There will also be an evening event open to a wider and less-specialist audience, which we hope will draw attention to plant systematics. Poster papers will be welcome. Both Societies will hold a General Meeting during the conference period.

Venue and Accommodation

The conference will be held at the University of Auckland's Conference Centre. Accommodation will be available in nearby University Halls of Residence. The current cost is \$41 + GST (12.5%) per night for bed and breakfast.

Tour

Nature Oquest New Zealand Ltd will organise the post-conference tour, probably of five days duration. At the time of writing, exact itinerary and costs are not available. The tour will concentrate on botanical highlights of the South Island, including podocarp forest, Nothofagus forest, and alpine vegetation.

First Circular

The first circular will be sent out in early April. If you are interested in receiving this, please write to:

Anthony Wright
Auckland Institute and Museum
Private Bag
Auckland 1
New Zealand.

Barry Conn
Secretary

A.S.B.S. Member Profiles

Don Foreman A.S.B.S. Treasurer

Dr Don Foreman was born in the small western N.S.W. town of Trangie on 27th May 1945, and spent most of his boyhood in Dubbo, once a notable farming and grazing centre, but now more famous for the numerous glitzy motels that line the main roads into town. Don is at present a botanist at the National Herbarium of Victoria, a position he has held since the beginning of 1984. He was encouraged (ie. told in no uncertain manner) to apply for the position by his wife, Joy, whose family have been resident in the dairy country of Victoria between Colac and Camperdown for many years, but have lately all gravitated towards Geelong.

Prior to coming to Victoria, Don was a tutor in the Botany Department of the University of New England, where he initially organised first year practical classes, as well as doing some of the lecturing, but later on became involved with the teaching of some second year courses. Over a period of nearly 20 years from the day of first enrolment to the day of leaving in January 1984, the degrees of B.Sc., M.Sc. and Ph.D. were obtained from U.N.E. Before taking up the position at U.N.E., Don worked for six years in the Division of Botany at Lae, P.N.G., and spent a lot of time with forest survey groups.

Don's time is divided between preparing accounts of some Proteaceae genera for the *Flora of Australia*, editing *Muelleria* and the forthcoming *Flora of Victoria*, as well as accumulating increasing piles of paper about herbarium databases (but so far not much data). Other botanical interests include pollen morphology of the Monimiaceae. In time away from the herbarium (who called it spare time?) Don is an assistant Scout Leader (what better excuse to go camping?), and has been on the school Council of Lara Lake Primary School for

four years (the last two years as President). He also tries (some times more successfully than others) to keep the garden under control, and enjoys the odd day fishing. It was in Lae that Don met his wife, Joy; they have two children, Maryanne and John, now both at high school, so any ambitions to travel are at the moment on the slow burner.

Jocelyn Powell A.S.B.S. Councillor

Dr Jocelyn Powell is a Senior Research Scientist at the National Herbarium of N.S.W., where she has worked since 1975. After graduating from the University of Auckland in 1961, she was employed by the D.S.I.R. Crop Research Division to carry out plant breeding trials and cytology - which explains why the Kiwis became so successful at exporting fruit and vegetables to Australia. She gained her M.Sc. (Class I Hons) in 1963 for cytotaxonomic work on the liliaceous genera *Astelia* and *Collospermum* while working at the D.S.I.R., also on the cytology and breeding systems of the tropical crops sweet potato (*Ipomoea batatas*) and taro (*Colocasia esculenta*).

Interest in the tropics lead Jocelyn to the A.N.U. to do a Ph.D. in palynology. Field work in the highlands of Papua New Guinea required the rapid mastery of new skills: Melanesian Pidgin, negotiating a Landrover over virtually non-existent roads, training local field assistants to operate coring equipment from unstable rafts on remote lakes, living in grass huts, and dodging the occasional arrow.

This research into the vegetation and agricultural history of various parts of the highlands continued in collaboration with archaeologists and geomorphologists until 1975, with attachments to A.N.U.'s New Guinea Research Unit and the University of Papua New Guinea. Ethnobotanical work and extensive field trials into varieties of subsistence crops were also conducted, to assist local nutritionists and agriculturalists.

In 1975, Jocelyn returned to civilisation, and to taxonomic work at the Sydney Herbarium. Her research there has focussed on the Epacridaceae, and includes revisionary work on *Leucopogon*, and pollen morphological and phylogenetic studies of the family as a whole. In her spare time, she helps run a conservation society, writes and edits books on the Hawkesbury River, and pulls in the odd fish or two.

Greg Leach
Australian Botanical Liaison Officer,
Kew

Dr Greg Leach, botanist with the Northern Territory Herbarium in Darwin, was born on 5th January 1952, at Geelong in Victoria. After completing a B.Sc. at La Trobe University, the vagaries of Melbourne's weather forced a move to the Lae Botanic Gardens in Papua New Guinea. Returning to Melbourne in 1974, to undertake an Honours degree (on *Acacia*) and then a Ph.D. (on *Angophora*) under Trevor Whiffin, he remained unconvinced about the delights of Victoria. With wife Amanda, it was back to the tropics in 1979, to take up a lecturing position at the University of Papua New Guinea in Port Moresby.

Projects undertaken in P.N.G. covered mangroves, freshwater macrophytes, and traditional medicinal plants; but after nearly six years in this botanical wonderland, a more senior position at the Alice Springs Herbarium was too tempting. Following four years at Alice Springs, Greg went with the transfer of most of the collection to Darwin in 1988; and he had barely unpacked before packing again to take up the A.B.L.O. position at Kew in September 1990. The weather is very much like that in Melbourne, and he has moved once since getting to England. He is currently revising Australian *Eriocaulon*, but on his return to Darwin he will resume work on the Top End *Acacia*, and rejoin Clyde Dunlop and Ian Cowie in writing a *Flora of the Darwin Region*.

David Morrison
Editor, A.S.B.S. Newsletter

Dr David Morrison was born on New Year's day of 1958, although neither the doctors nor his mother planned it that way. He spent the first five years of his life in the country of New South Wales, before his family moved to Sydney. He has not managed to escape since then. He attended Berala Primary School, where he spent far too much time worrying about his school work. This was followed by a stint at Birrong Boys High School, and (after his family moved house) Baulkham Hills High School. The latter school was much more satisfactory, not the least because it was co-educational. He then went to the University of Sydney, with the intention of becoming a research physicist. He quickly realised that his grasp of mathematics was not good enough to allow him to contribute anything new to this field,

so he decided to become a zoologist instead. He then discovered that he didn't actually like zoologists very much, so he became a botanist as a last resort.

Having completed an undergraduate degree with honours in 1979 (working on *Leptospermum*), he immediately embarked on an ecological Ph.D. project at the same university (on the reproductive biology of *Acacia*). This project dragged on for much longer than it should have done; so, after his scholarship ran out, he worked on an A.B.R.S. grant for a year, and then spent a year and a half at the National Herbarium of New South Wales. Having finally completed his thesis in 1986, he took a job as a lecturer at the New South Wales Institute of Technology, which has since mutated into the University of Technology, Sydney. David has never been able to make up his mind whether to be a taxonomist or an ecologist, so he continues to moonlight in both areas. His systematic work has mainly been in the Goodeniaceae and *Acacia*, but he has recently become entangled in the Epacridaceae and Proteaceae. He met his wife, Louisa, while they were both working at the National Herbarium of N.S.W. (which is a lot more romantic than it sounds); and their baby daughter, Holly, is a lot more normal than her genealogy would lead you to think.

Barbara Wlecek
Editor, A.S.B.S. Newsletter

Born in Darwen (with an "e" but still somewhat prophetic), Lancashire 10 days after D. Morrison. Her mother (from Liverpool) and father (Polish airforce) met during WWII. The English climate played havoc with Barbara's lungs, and the sun had set on the British Empire, so they decided to migrate to Australia when Barbara was 18 months old. After a stint in tin army huts at East Hills, they moved to the western suburbs of Sydney. Primary school was Our Lady of the Rosary in St Marys, an establishment left completely unscathed by the Catholic reformation. At O.L.M.C. at Parramatta the inquisition was actually over, and there were lay teachers (unfortunately mostly female), so high school was relatively bearable.

When university choice came around, Barbara decided that two chemists in the family was definitely enough, and plumped for biology. Zoology was her first choice, but while the subject matter was fascinating the disseminators were user-hostile and slightly reminiscent of primary school. Botany

looked more promising; at least the botanists seemed to like having you around. Met D. Morrison c. 1977; he was then a skinny kid with lots of dark hair. During the plentiful lulls in excitement during plant kingdom lectures David was wont to circulate notes and improper suggestions to young ladies in his vicinity. He was always first to congratulate you on your mark in Botany/Zoology and then in the same breath tell you by exactly how many marks he had beaten you.

When university ended, Barbara was wondering why she hadn't done accounting or optometry

or anything that might make you employable, when, to her surprise, she was offered a position at the University of N.S.W. She has been employed in a botanical capacity ever since. Most botanists have the sense to work on one or a few obscure or complex groups which no-one else knows much about. This reduces conflict within the profession and enables everyone to string out grants indefinitely. Barbara didn't quite twig to this, and generalised, thus ending up in her present position as an Identifications Botanist at the National Herbarium of N.S.W.

REPORTS



**Australian
Biological
Resources
Study**

A further change has taken place in the administrative structure of the Australian National Parks and Wildlife Service, affecting A.B.R.S. The Australian Biological and Environmental Survey has been divided, A.B.R.S. now being part of the Education, Research and Corporate Development Division. The Environmental Resources Information Network (E.R.I.N.) is a separate division, and remains under the direction of Barry Richardson. Correspondence for A.B.R.S. on Flora matters should be addressed to the Associate Director, Flora, and on Fauna matters to the Associate Director, Fauna.

Paul Hattersley is in London. From 21-23 February he represented A.B.R.S. at the meeting at the Royal Botanic Gardens Kew on improving the stability of plant names. He then presented a paper at a meeting of the Linnean Society of London, on C4 photosynthetic pathway variation in grasses of arid and semi-arid regions. This presents results of research carried out by Paul before he joined A.B.R.S. last year.

Prospective applicants are reminded that applications for A.B.R.S. grants in 1992 must be submitted by 10th April. The delayed availability of application forms is regretted, but the Preferred Objectives for 1992 were circulated much earlier than usual, and hence have been available for consideration.

Alex George
Acting Associate Director, Flora

Australian Botanical Liaison Officer, Kew

The Christmas/New Year period proved to be very busy with liaison inquiries. This surprised me, as I had expected the Australian botanical community to be either at the beach or watching the cricket. The weather has certainly dominated our thoughts and lives over the past few weeks, and even temporarily displaced the Gulf War from the front pages of the British newspapers. No doubt the cold weather over Europe even made it on the Australian news, as London ground to a halt under heavy snow.

With my usual astute forward planning, I had decided this was an ideal time to make a trip over to Ireland. As I left my house in the early hours of the morning in pitch darkness, with a thick layer of snow and the stuff still falling, I tried to recall the duty statement of the A.B.L.O. I was certain that this was above the call of duty, but continued on in search of a train that might still be running to

Heathrow. British Rail had been badly caught out by the snow, with their excuse being that it was the wrong sort of snow - too soft and fluffy! Fortunately, at this early stage in the morning it was the right type of snow, and I made it to Heathrow before it became the wrong type of snow (with the consequent end of British Rail services). The cold of Dublin was more than overcome by the fine hospitality shown by the staff of Botany at Trinity College, and Charles Nelson at Glasnevin. This was also assisted by a wonderful black anti-freeze readily available in large quantities in Dublin.

Of interest at Glasnevin were two sheets of *Angophora* from the Museum of Applied Arts and Sciences in Sydney, collected by R.T. Baker. These sheets were part of a collection of 200 specimens purchased by Glasnevin from Max Koch. It is not known how many of these sheets were from the Museum, but anybody searching for R.T. Baker type specimens should keep the Glasnevin material in mind.

Several visitors have come through Kew over the Christmas/New Year period. Kevin Kenneally spent some time chasing up early historical records from the Kimberley. Paddy Osborne from U.P.N.G. paid a brief visit during a holiday break in the U.K., prior to him taking up an appointment at the University of Western Sydney. David Morrison, collecting data for various nefarious cladistic studies, came through in the New Year, at a good time for enjoying the cricket results here in England. It was a change to have someone who enjoyed talking about the cricket, as I had not found it a welcome subject around London. Trevor Clifford bravely came into Kew for further research on his etymological dictionary of the grasses, and miraculously also got out again.

A highly successful visitor was Dr Gillian Scott from Toowoomba, who brought an exhibition of 22 of her mistletoe paintings for The Royal Horticultural Society show. Her work was awarded a prestigious gold medal and she is the first Australian artist to achieve such success at the R.H.S. shows. The paintings form part of the set of plates that will be used in a forthcoming book that Gillian is writing on Australian mistletoes. Gillian also displayed her work in the Kew library after the exhibition.

This award has come at an opportune time, as I had independently received several suggestions that Australian botanical artists should be encouraged to exhibit at the R.H.S. shows. The Society is very enthusiastic to see Australian material. There are regular entries of work from South Africa, and a Canadian artist was also successful at

the January show. David Bedford at NSW is now on the mailing list for the R.H.S. shows, and he can be contacted by any artists interested in exhibiting. Gillian Scott has also kindly agreed to provide details for any artists, and she can be contacted at The Queensland Wheat Research Institute, P.O. Box 2282, Toowoomba 4350.

There was a typographical error in my last report, which is probably worth correcting. With reference to the Queen Mother's tree-planting activities, the text should have read:- "During her visit she planted a macadamia tree, as a gift from the Victoria League of Australia. A walnut tree was also planted, as a gift from the Victoria League of New Zealand".

Greg Leach,
ABLO



A.S.B.S.

Sydney

Chapter

A.S.B.S. Sydney Chapter seminars are held at 6 pm on the 2nd Tuesday of the month in the George Caley seminar room at the Royal Botanic Gardens Sydney, Mrs Macquaries Road, Sydney. Members and non-members are most welcome.

Seminar Program, March-June 1991

Tuesday, March 12th

Ass.Prof. Rob Whelan

Department of Biology, University of Wollongong

"Pollination and fruit-set in waratahs"

Tuesday, April 9th

Dr David Morrison

University of Technology, Sydney

"Vegetation regeneration after human disturbance"

Tuesday, May 14th

Dr Barry Conn

National Herbarium of New South Wales

"Relationships within the Australian labiates"

Tuesday, June 11th

Prof. John Thompson

Honorary Research Associate, National Herbarium
of New South Wales

"Major evolutionary lineages in the bracken ferns
(*Pteridium*): a global analysis.

Further information can be obtained from me
on (02) 231 8138 or (042) 27 0440.

Siegy Krauss
Convenor

While spending some eight months enjoying the hospitality of Kew, and seeing the U.K. in all its beauty, I was invited to visit Trinity College, Dublin. The herbarium of Trinity's Botany Department came as a surprise; and anyone who's interests involve species from south-western W.A. or Tasmania would be advised to arrange to add Dublin to their itinerary. They have a good chance of finding Type material, and they'll never regret a visit to Dublin and its charming inhabitants.

Joy Thompson
National Herbarium of N.S.W.

PERSONAL NEWS

Alma Lee (1912-1990)

The death on 20th October 1990 of Alma Theodora Lee (nee Melvaine), at age 78, was the loss of a systematist noted for both her important work in Fabaceae, Lomandraceae, and Xanthorrhoeaceae, and for her lively spirit.

Alma's career was almost all at the National Herbarium of New South Wales (NSW), as a botanist (from 1938 till about 1947, and part-time from the early 1960s till 1982) and Honorary Research Associate (till 1986). Her revision of *Swainsonia* in 1948 was a landmark paper, and she published on other legume genera, including *Bossiaea*, *Psoralea*, *Crotalaria*, *Platylobium*, *Templetonia*, *Hovea*, and *Aenictophyton* A.Lee. She did important work on *Lupinus* with the Western Australian plant breeder J.S. Gladstones, and on *Hovea* with Joy Thompson. She was senior author of the second part of the general treatment of Fabaceae in the *Flora of New South Wales* series. Alma also made major advances in the monocot genera *Lomandra* and *Xanthorrhoea*, both notorious problem groups. Other botanists have subsequently gone beyond her early investigations in some of these genera, but have found her work a most reliable basis on which to build.

Alma is much missed by all of her colleagues. We remember her fine work, generous nature, friendliness, independence of mind, impish humour, and her life-long enthusiasm for botany and for better understanding of species and nature.

Barbara G. Briggs
National Herbarium of N.S.W.

[A fuller biography of Alma Lee appears in *Telopea* 4(2):141-143 (1991); an issue in which Mike Crisp and Peter Weston establish the genus *Almaleea*, in her honour and "to highlight her contributions to systematics of the Fabaceae, especially her critical insights into relationships in the tribe Bossiaceae". Eds.]

Job Movements

After 15 years at the Australian National Botanic Gardens (CBG), Mike Crisp has finally decided to enter the real world, by returning to university. Mike is now Lecturer in Plant Systematics at the Australian National University, where he is discovering just how hard it is to leave an ivory tower. We all wish him the best in this mid-life crisis.

Bob Makinson and Ben Wallace, formerly of the Royal Botanic Gardens Sydney, have both moved to A.N.B.G. in Canberra. Ben has taken up the position as Assistant Director, Living Collections, and Bob is Curator of the Herbarium.

Still at the Australian National Botanic Gardens, Jim Croft is now officially the Assistant Director, Flora.

John Benson, formerly of the National Parks and Wildlife Service of N.S.W. has accepted a position as Botanist (Ecology) at the National Herbarium of N.S.W., replacing Dr Marilyn Fox, who has moved to the University of N.S.W.

REVIEWS

The Herbarium Handbook. Edited by Leonard Forman and Diane Bridson. Royal Botanic Gardens Kew, London. 1989. iv+214pp. ISBN 0-947643-20-6. \$34.50.

Herbarium curatorial work, as carried out by technicians, has traditionally been something that is learned on the job. There is usually no formal training at tertiary level, even as a small component of an undergraduate degree course, as universities prefer to concentrate on the more intellectual aspects of taxonomy itself. Within Australia, the Council of Heads of Australian Herbaria have recognised this as a potential problem, and they have recently organised a number of very successful workshops specifically aimed at people in the technical range (at Brisbane in 1986, and Adelaide in 1990; the next is to be held in Sydney in 1992).

The Royal Botanic Gardens Kew have also recognised this problem, and in 1987 the staff implemented an International Diploma Course in Herbarium Techniques, which has run annually since then. This course attracts people from all over the world, but the number of applicants far exceeds the number of places available. So, the organisers decided to gather the course material together and make it more widely available by publishing it. This handbook, then, is the distilled experience of several hundred years of running what is undoubtedly the most famous herbarium in the world.

I can still remember when I first started working in a herbarium in 1981, when during my induction the Kew Herbarium was held up as the paragon of world herbaria. It was therefore quite exciting when earlier this year I got to see the Herbarium for the first time (and thanks to Greg Leach for showing me around). I was also intrigued to get a copy of this book, and to compare it to my own experiences. Actually, my husband told me that we had a choice between buying a copy of this book and having dinner in a restaurant, since we were running out of money at the time. He insisted that we choose the book; so we had a packet of chocolate biscuits for dinner.

The book is organised as 39 short chapters, arranged in six sections (plus references and index):- introduction; the herbarium building, collections and materials; herbarium techniques and management; additional techniques; collecting; and the herbarium in a wider context. Each chapter is a

brief overview of a particular topic (most chapters are only about five pages long, although the longest is fourteen), with numerous diagrams and examples, and a short reference list for further reading.

The book was put together by a large number of people (at least 24 contributed to the text, according to the acknowledgements), so the information in each chapter was compiled by an expert in that field. The topics covered include:- storage arrangements, pest control, storage media, label design, accessioning procedures, processing procedures, handling specimens, distribution of duplicates, loans, the treatment of visitors, nomenclature, photographic collections, the library, plant dissection, maps and gazetteers, computing, and all aspects of plant collecting (including pteridophytes, bryophytes, fungi, and lichens).

This is a truly wonderful book, and I would have really appreciated having a book like this when I started out in herbarium life. It deals effectively and accurately with the technical aspects of herbarium work, and covers practically everything a technical person needs to know when working with a herbarium collection or with a taxonomist. About the only area I thought could be usefully expanded was the preparation of diagrams and distribution maps for publication, since this is often an important part of a technical job.

The book is very thorough in describing techniques, taking the reader step by step with very clear and helpful illustrations. This is especially true of chapter 8 on processing specimens, chapter 9 on mounting specimens, and chapter 23 on the dissection of floral organs. Many different techniques are discussed, not just the ones used at Kew, along with their various pros and cons. For example, chapter 9 shows various ways of adhering the plant specimen to the mounting paper.

The book provides useful definitions of the terminology used in nomenclature and typification, which must be understood by herbarium technicians. There is an excellent glossary of terms and abbreviations relevant to curation in chapter 22, along with the definition of types.

The problem of infestations by insects is well covered in chapter 4, discussing the many pests, problems, and methods of prevention and decontamination. Not all of the recommended methods are practised by all of our Australian herbaria. In particular, the widespread use of naphthalene is not recommended because of the dangers to health

(and, indeed, it is banned from use in the United Kingdom for this reason). In the same vein, the use of formalin in preservative mixtures (such as FAA) is no longer practised at Kew; the new recommended safe mixture is 70% alcohol, 29% water, 1% glycerol. The health hazards associated with lack of ventilation, especially in conditions where the atmosphere within the herbarium rooms has a high concentration of insecticidal or fungicidal vapour, is covered in chapter 3.

Other interesting points covered by the book include the use of microfiche for historic herbaria (chapter 2), to allow accessibility while keeping the specimens in their original state; and the notes on collecting techniques and notes on special groups (chapter 33) could certainly be usefully read by some of the botanists that I know.

Finally, the last two chapters are a gentle reminder that ecologists use herbaria, and that they are an essential aid to ecological and conservation work. Therefore, more field notes relevant to ecology should be included as a matter of course on labels or in databases; and herbaria can provide a range of conservation information not available elsewhere. These points are very relevant in these days of restricted government funding, and the need to continually justify the continued existence of herbaria around the world.

I think that this is an essential reference book for all technical people working in herbaria; although, quite naturally, its usefulness would be extended greatly by an accompanying practical course.

Louisa Murray
Greenfield Road, Empire Bay

Plants of the Adelaide Plains and Hills.
By G.R.M. Dashorst and J.P. Jessop. Kangaroo Press, Kenthurst. 1990. 224pp., 96 plates. \$39.95.

This is a hard-backed book that presents illustrations of about 1,000 of the 2,000 flowering plants and ferns that are found within the Adelaide district - which here equates with the Southern Lofty Region as used in the *Flora of South Australia*. Smaller sections of fungi, lichens, marine algae, liverworts, and mosses are also presented. Each plate contains illustrations of about 12 plants, and the facing page provides the name (binomial and usually a common name), a very brief description, a note on the overall distribution

of the species, and for the non-marine species a 5' grid map showing the distribution within the region.

The "lively, well-drawn and beautifully-designed" plates (Margaret Stones' words in the book's Foreword) by Gilbert Dashorst have illustrations that are a combination of pencil and water colour. The first three plates display green, brown and red algae respectively, plates 4-10 are of fungi, plates 11 & 12 of lichens, plates 13 & 14 of liverworts and mosses, plate 15 has ferns, and plate 16 a mixture of ferns, fern-allies, *Callitris* and *Allocasuarina*. Plates 17-71 are of dicots, and 72-96 are monocots. The flowering plants are treated family by family. Family concepts, and more-or-less the sequence of presentation, are those employed in the *Flora of South Australia*. None of the plates display a scale - and this would not be possible given the array of plants and features illustrated on each plate - the accompanying descriptive text indicating the size of leaves, flowers, etc.

To my mind, the composite plates do, as the dust-jacket suggests, have an appealing artistic flavour. Although there are times when I think that more exacting illustrations would have served better, I believe that, in the main, most species are adequately depicted. Only occasionally have I felt that either differences between species are not always readily apparent, or that different or additional features should have been illustrated. For example, plate 82, which contains illustrations of 12 species of *Stipa*, is congested. The awns of the different species overlap too much. I also feel sure that it will be difficult to identify some of the stipas from this work alone, e.g. the illustrations of *S. mollis* and *S. nodosa* look remarkably similar.

Although not incorrect, the illustration of *Calocephalus brownii* (for which I suggest the name *Leucophyta brownii* is preferable) does not show what is perhaps the most distinctive feature of this coastal plant, ie. the cushion-like habit. I also think that the illustrations of the species of *Vittadinia* in plate 65 are misleading. As noted in the accompanying descriptions, all species have long bristles, which are often about the length of the fruit. Presumably to "balance" the plate, only the base of each pappus is illustrated in each species. This has resulted in drawings that suggest that the pappus is a short ciliate cup. The illustration of *Olearia grandiflora* is incorrect. As far as I am aware, all plants have alternate petiolate leaves. In plate 67, the lower leaves are depicted as being opposite and sessile.

Errors in the text seem to be few. The only spelling mistake to catch my eye was "Fold mush-

room" instead of "Field mushroom" on p.30. The only blemish that I noted in the descriptions occurs on p.142, where the pappus of *Angianthus tomentosus* is described as "a crown of scales and a few bristles". The scales and bristles are not separate entities. The pappus consists of several plumose bristles, each of which has a wide scale-like base. This also isn't particularly clear from the accompanying illustration. The nomenclature is generally as up-to-date as it can be in any such work. However, unless it was not accepted, a fairly recent change in regard to *Soliva* seems to have been overlooked. The name *S. sessilis* is preferable to *S. pterosperma* [see Webb (1986) *N.Z. J. Bot.* 24: 665-669], which is used on p.144.

The above comments primarily concern the flowering plants. I therefore consulted sometime MEL mycologist, Tom May, about the fungi. His comments were generally very favourable, but there are apparently one or two nomenclatural errors. The combination *Xeroconus fuscescens* (p.24) has seemingly not been validly published. If, as on p.34, the name *Dermocybe austrovenetus* is accepted, then both *Cortinarius cinnamomeus* and *C. sanguineus* (both p.34) should also be referred to *Dermocybe*. Tom also noted that *Armillaria luteobubalina* is erroneously marked as an introduced species. It is native to Australia. Also, *Collybia elegans* has reddish-orange caps, not yellow-brown as illustrated.

I have never been certain as to what type of botanical guide books should be produced for public consumption. I like photographic guides such as Fuhrer and Marchant's *Wildflowers of the Stirling Range*, and McCann's *The Mallee in Flower*. Approximately 140 species are illustrated in the former, and about 400 in the latter. In each case, the plants are arranged alphabetically by family. Assuming it's included in the first place, then the relatively small number of plants illustrated means that users with no botanical knowledge can soon flick through the pages and find the flower they are looking for. But, does such a system work well in larger works? Does it work for *Plants of the Adelaide Plains and Hills*?

There is no other means by which someone with little knowledge of plant classification can attempt to identify a plant in this book. There are no keys, not even simple ones to major groups that could be based on obvious features such as dominant flower colour or petal number. All of which means that, unless you have some familiarity with plant groups and names (there is an index to consult), there are a lot of illustrations to examine. On the other hand, I doubt that most members of

the public wish to grapple with even quite basic botanical terminology, and (even if they are simple) keys can look all too daunting.

To quote from the Introduction, "*Plants of the Adelaide Plains and Hills* was planned to help people to appreciate and learn more about the plants of the Adelaide area". Despite a possible difficulty with "finding there way", I have little doubt that the aims expounded in the book's Introduction will be achieved.

Philip Short
National Herbarium of Victoria

Plants of the Adelaide Plains and Hills.
By G.R.M. Dashorst and J.P. Jessop. Kangaroo Press, Kenthurst. 1990. \$39.95.

My anglophile aunts have always kept a copy of W. Keble Martin's *Concise British Flora in Colour*. Although of little use in South Australia, it did have "proper" plants in it, like dogroses, campanulas, crocus, and cowslips. The ghost of Keble Martin will be smiling benignly, to see that Dashorst and Jessop have done in three years what took him 60 years to complete as a labour of love. If your heart is now in Australia, this has proper plants too: banksia, bottlebrush, and blue gum.

The book is exceptional in starting with a colour plate each of the common green, red and brown algae, seven plates of fungi, four of lichens, liverworts and mosses, and one of ferns, before 81 plates of the flowering plants. A total of about 1200 of the 2000 plants from the hills and plains in the vicinity of Adelaide have been drawn. Dashorst uses a pleasing combination of pencil and colour to show typical small vignettes of each species. These are lively, and the colour reproduction on pale cream pages is excellent.

The botanical art work is a vast improvement on some of Dashorst's earliest line drawings in the *Flora of South Australia*, and results in many attractive pages. All may have their favourites; to name a few, I liked Plate 32 Acacias, Plate 70 Compositae, Plate 82 *Stipa* a wonderful plate of such unpromising material, however, useful it may be to identify this dreadful genus. A minor criticism is that Dashorst is not always successful in separating the dozens of species on each of these full pages, eg. the legumes on Plate 34 and in this Keble Martin may be marginally more successful.

Facing each plate is a page of notes describing the species, about six lines on each in double

column format, plus a little map showing distribution; these rarely occupy more than three-quarters of a page, leaving plenty of space. A further sentence on each species, some comment such as whether abundant, weedy, aromatic, toxic, or garden worthy, might have been possible. Nor is there any indication of what is not illustrated.

There is no key to the flora; but there is a map of the area covered, and of the Adelaide Herbarium divisions of the State, which is also indicated for each species. In addition, there is a brief glossary and bibliography.

Dashorst's pen is mightier than the camera when it comes to packing a page, but it is not able to provide the more generous scenic or ecological views that one finds in the welter of colour photographic books.

There will be inevitable comparisons with Ann Prescott's *It's Blue With Five Petals*. This does have a key, and the paragraphs on each species are more "user-friendly", to use a vile phrase. Prescott's book may well be more successful in the field, but it does lack the plates on the lower plants, a plus for Dashorst. You really need to know the botanical families to use the book readily.

D.E. Symon
South Australian Herbarium

Orchids of South Australia. By R.J. Bates and J.Z. Weber. Flora & Fauna of S.A. Handbooks Committee, Adelaide. 1990. \$29.95.

This is the latest in the series of South Australian handbooks, which started in 1922 with the first volume of Black's *Flora of South Australia*.

Introductory chapters, by several authors, deal briefly with ecology and phytogeography, cultivation, morphology, pollination, mycorrhizas, and other relevant topics, including a biography of R.S. Rogers, the well-known South Australian orchidologist.

The main part of the text provides the genera and species with short flora-type descriptions; but it is stronger than is usual in floras in the areas of biology, ecology, variation, hybridisation, and cultivation. The keys are illustrated, something like Blackall and Grieve's, by Erika Stonor, whose knowledge as an orchid enthusiast helped her in interpreting the wishes of the authors. All of the 130 taxa recognised by the authors are also illus-

trated in the colour photographs, and their general distribution in the State is shown on a map.

The authors had some difficulty with the large number of taxonomic and nomenclatural changes published or expected while the book was in production. Some alternative names and recent synonyms were incorporated in the text, and some others are recorded in an appendix.

This book should provide a very convenient and practical introduction to the genera in South Australia for some time, even when further changes will doubtless render the taxonomy and nomenclature partly out of date.

John P. Jessop
South Australian Herbarium

Recent Publications

Mawson's Papers. A Guide to the Scientific, Personal and Business Papers of Sir Douglas Mawson, OBE, BE, DSc, FRS, FAA. Compiled by Margaret Innes, with additional material compiled by Heather Duff. The Mawson Institute for Antarctic Research, Adelaide. 1990. xvi+302pp. Distributed by The Librarian, The University of Adelaide. \$45.00.

Plant Taxonomy. The Systematic Evaluation of Comparative Data. By Tod F. Stuessy. Columbia University Press, New York. 1990. 514pp. ISBN 0-231-06784-4.

Taken for Granted. The Bushland of Sydney and its Suburbs. By Doug Benson and Jocelyn Howell. Kangaroo Press, Kenthurst. 1990. 204pp. ISBN 0-86417-331-8. \$35.00.

Plant Taxonomy and Biosystematics. Second edition. By Clive A. Stace. Edward Arnold, Caulfield. 1990. ISBN 0-7131-2955-7. \$55.95.

Plant Life of Western Australia. By John S. Beard. Kangaroo Press, Kenthurst. 1990. 319pp. ISBN 0-86417-279-6. \$49.95.

The Families and Genera of Vascular Plants. Volume 1. Pteridophytes and Gymnosperms. Ed. by K.U. Kramer and P.S. Green. Springer-Verlag. 1990. 635pp. ISBN 3-540-51794-4.

NOTICES

Request for Copies of Newsletters

From time to time, we receive requests for current and past copies of the *Newsletter*. At times, these come from overseas countries where access to Australian dollars (or any dollars) for library services is at best difficult or impossible. I recently received such a request from:-

Dr J.K. Maheshwari
Acting Director
National Botanical Research Institute
LUCKNOW - 226001
INDIA

Anyone who would be willing to part with their old newsletters and pass on their current ones, should contact Dr Maheshwari directly. Some exchange of articles on Indo-Australian taxa may be arranged, if so desired.

Don Foreman
Treasurer, A.S.B.S. Inc.

Taxon Back Issues Special Sale

New members of I.A.P.T. joining in 1991 will benefit from a substantial discount on back volumes of *Taxon*. For a limited period of time, until the end of 1991, the International Association for Plant Taxonomy is offering new members the opportunity to acquire any or all issues of volumes 28-39, except vol. 30(1) and vol. 33(3), at a special rate of \$US 5.00 per issue, or \$US 20.00 per yearly volume including four issues and an annual index. The prices include surface postage and handling. Orders, together with an informal membership application, should be sent no later than 30th November 1991 to the

I.A.P.T. Secretariat
Botanischer Garten und Botanisches Museum
Berlin-Dahlem
Konigin-Luise-Str. 6-8
W-1000 BERLIN 33
GERMANY

Please add a bank cheque in US Dollars, payable to

I.A.P.T., to cover both your order and the 1991 membership fee (\$US 40.00 for individuals, \$US 120.00 for institutions, including subscription to *Taxon* volume 40, 1991).

Prof. Werner Greuter
Secretary-Treasurer, I.A.P.T.

Cape York Peninsula Scientific Expedition

Wet Season, Jan.-Feb. 1992

In January and February of the wet season of 1992, the Royal Geographical Society of Queensland Inc. is organising a scientific expedition to northern Cape York Peninsula, based at "Heathlands".

Broadly, the aim of the expedition is to increase our scientific knowledge of the Peninsula, so that future management decisions can be made on the basis of a greater understanding of the area's ecology. More specifically, the expedition aims to provide the support facilities necessary for researchers to investigate the biological and environmental changes that occur during, and are characteristic of, the wet season.

The expedition will be held during the wet season, as very little research has been carried out at that time of the year. Individual scientists have great difficulty in accessing and working in the region during that season.

The conduct of the expedition is under the control of an Advisory Committee. Members of this committee include:-

Alan Bartholomai
Director, Queensland Museum
Athol Chase
Senior Lecturer in Anthropology, Griffith University
John Holmes
Professor of Geography, The University of Queensland
Ross Hynes
Chief Scientific Officer, Queensland Department of Environment and Heritage
Robert Johnson

Retired Director of Botany, Queensland
 Department of Primary Industries
 Jiro Kikkawa
 Professor of Zoology, The University of
 Queensland

The Society is interested in hearing from researchers who would like to be considered for the expedition. Because of the difficulties in raising funds, at present the duration of the expedition has been limited to six weeks with a capacity of 12 scientists at any one time. Participation in the expedition will therefore be selective. Efforts to raise additional funds are continuing, and, if successful, the length and/or capacity of the expedition may be extended.

The Royal Geographical Society of Queensland Inc. is a non-profit organisation, whose aim is to promote the study of geography. Since its establishment in 1865, the Society has encouraged and supported geographical exploration, research, and education.

For further information, contact:

Kath Berg
 The Royal Geographical Society of
 Queensland
 112 Brookes Street
 Fortitude Valley QLD 4006
 Tel (07) 252 3856

Kathryn Berg
 Administrator, RGSQ

Symposium and Workshop on Biological Collections

Australia's Biota and the National Interest - the Role of Biological Collections

The Australian Academy of Science and the Australian Institute of Biology are organising a two-day symposium and workshop on the above topic. It is to be held on Monday 11th and Tuesday 12th November 1991 at the Academy of Science in Canberra.

A tentative structure and program has been developed, and key speakers from across Australia and overseas are being approached to present lead papers on the following topics:-

1. What have we got?

- Biodiversity and collections
- Systematics
- Australian biological collections
- 2. How are the collections used?
 - Current methods in systematics
 - Ecology and biogeography
 - Conservation
 - Biochemical/molecular systematics (including tissue banks)
- 3. Future needs
 - Management and accessibility (including computer handling)
 - Professional training and recruitment in systematics
 - Funding and protection

On the Tuesday morning, the meeting will break into small concurrent workshops, to discuss certain topics in more detail and to develop recommendations and proposals to bring back to the final plenary session in the afternoon. The aim is to develop formal recommendations that can be transmitted to State and Federal Governments on the future of Australia's biological collections.

The Council of the Academy has approved the meeting as an Academy activity, and will assist financially. We expect that the Australian Biological Resources Study and some scientific societies will also provide some financial support towards the fares of invited speakers.

The program committee comprises:-

Hugh Tyndale-Biscoe
 Australian Academy of Science &
 Australian Institute of Biology
 Ebbe Nielsen
 Australian National Insect Collection
 Judy West
 Australian National Herbarium
 Jim Croft
 Australian National Botanic Gardens
 Barry Richardson
 Australian Biological Resources Study
 Andrew Cockburn
 Division of Botany and Zoology, Australian
 National University

We expect to have a firm program very soon, and we will then distribute a circular with details of registration.

Judy West
 Australian National Herbarium

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY PUBLICATIONS

History of Systematic Botany in Australasia

Edited by P.S. Short. A4, case bound, 326pp. A.S.B.S., 1990. Members \$40; non-members \$50.

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.

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 concept; 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.

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.

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).

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 become a member by forwarding the annual subscription to the Treasurer. Subscriptions become due on the 1st January each year.

The Newsletter

The *Newsletter* appears quarterly, and 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, or as two typed copies with double-spacing. All items incorporated in the *Newsletter* will be duly acknowledged. Authors alone are responsible for the views expressed.

Notes

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

ASBS annual membership is \$22 (Aust); full-time students \$12. Please make cheques out to ASBS 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 ASBS 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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Cover

David Mackay

Austral. Syst. Bot. Soc. Newsletter 66 (March 1991)

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