ASBS

Australian Systematic Botany Society

Newsletter

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AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

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Loose-leaf inclusions with this issue

- None

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From the President

Although quite chuffed, I must admit to some initial reluctance to accept the nomination as president of ASBS. As a botanist based in a small regional centre who finds his day to day work taking him further and further from hands on plant systematics, I was concerned that I might not be able to fully represent the Society's interests. Some of the shoes of previous presidents are quite large to fill. However, no matter how far work takes me from the discipline, systematics remains one of my passions. I have derived an immense amount of satisfaction from my involvement in several roles with the Society. I enjoy being a member of ASBS and it was with great pleasure that I accepted the honour of serving as its president. I appreciate the support I got from those members I talked to before accepting the nomination. I will do my best to live up to your expectations.

The Society is in a very strong position. I have the support of a hard working and enthusiastic Council which has a pleasing mix of old hands and fresh faces. I see the next few years as a time for consolidation of what we have achieved to date.

Membership is one thing we must address. Many of our inaugural members are retiring and thus eligible for membership at the concessional rate. This has a flow on effect to our income. While it is pleasing to see many members choosing to continue their association with ASBS at a time when many review which memberships and subscriptions they will retain and which they will let go, we need to be looking for ways to recruit new members. Darren Crayn has begun working on reinvigorating local chapters and has had some initial success. Council sees active local chapters as one way of generating interest in the Society and securing new members.

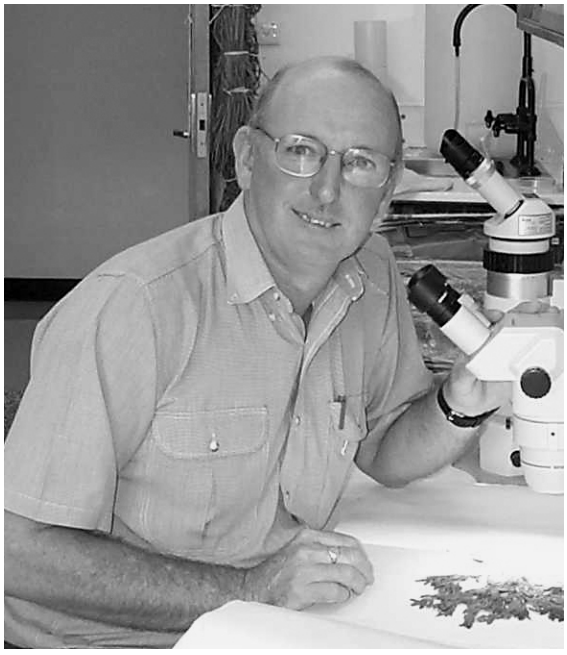
For some time now the Society has had three ways of recognizing excellence in plant systematics. Hansjörg Eichler Research Grants provide financial support to students and young botanists as they strive to establish their careers. Life Membership of the Society recognises outstanding contributions to the Society. The Nancy Burbidge Medal recognises long-standing and significant contribution to Australian Systematic Botany. In many ways the latter is still in its relative infancy. I would like to see this award grow in prestige so that it comes to be seen as a significant scientific accolade.

Anyone who has been involved in organising a conference would know that it can involve a lot of time and effort. Council appreciates the efforts of those who take on this responsibility on behalf of the Society. The next conference will be held in Brisbane later this year. Cairns will be the location for the conference in 2006. Council hopes to develop a forward plan for at least 3 to 4 years. We have ideas for 2007 and beyond but if anyone would like to offer to convene a conference don't be shy in offering.

Changes to the financial year

Despite almost unanimous support in favour, the special resolution to alter the constitution to change our financial year from January - December to July - June, was not carried. Thanks to those of you who returned the ballot paper but any change to the rules of the Society must be approved by the vote of at least 75% of members who are entitled to vote. While Council was impressed by the number of members who responded, we fell about 50 votes short of the necessary 75%. Council would like to hold another ballot to effect this change. We would not do so had the first vote suggested that the membership was opposed to the suggestion.

History has shown that the Society holds most of its conferences in the second half of the year. The AGM is timed to coincide with these meetings because it means more members can attend and it costs less to bring Council together. The rules, as they presently stand, compel us to hold our AGM before the end of May. This



rarely coincides with a conference. We can apply to the ACT Registrar General for an extension of time to hold the AGM but we have now done this so often that they have said they would not approve any further requests. There are two solutions to this problem: hold the AGM within the first 5 months of the year regardless of when the conference is scheduled, or change the rules. To leave the rules unchanged would mean that the AGM would always have to be held in Sydney, Melbourne or Canberra because nowhere else do we have enough local members to secure a quorum. I would appreciate your support when we send out the next ballot.

ABRS funding

In his President's report, Steve Hopper, mentioned a teleconference with Hon Greg Hunt MP, the Parliamentary Secretary to the Minister for Environment and Heritage. This teleconference was in response to a letter co-signed by the presidents of ASBS, the Society of Australian Systematic Biologists and the Australian Entomological Society and the Director of the Centre for Evolutionary Biology and Biodiversity. The letter was addressed to Senator Ian Campbell the Minister for the Environment and Heritage. The letter, which was reproduced in the last Newsletter (March 2005), drew the Minister's attention to the abysmal level of government funding for the Australian Biological Resources Study, particularly the research grants program. Despite repeated requests from numerous organisations, funding for this has not increased in real terms for the past decade. As a result of the teleconference, the societies were invited to provide the Minister with details of their concerns and to outline possible solutions. The modest initiatives suggested in the subsequent letter would require an additional $2.32 million per annum. They are:

- a new postdoctoral fellowship scheme which would fund two fellows per year for a period of three years. The fellows would pursue taxonomic research within a university or government research laboratory,
- the expansion of the current ABRS PhD scholarship program from one to three students per year, and
- an immediate doubling of the ABRS research grants scheme.

The Minister has referred the letter to the Science, Engineering and Technology Skills Audit currently being undertaken by the Office of the Minister for Education, Science and Training. The outcomes of this audit should be known by the end of this year. Further details of the audit are available from the website: *www.dest.gov.au/sectors/science_innovation/policy_issues_reviews/key_issues/setsa/default.htm*

John Clarkson

ASBS Inc. business

2005 Annual General Meeting of the Australian Systematic Botany Society, Inc.

3:00 pm, Tuesday 24th May, in the Caley Room, National Herbarium of New South Wales,Sydney, NSW

Starting time: 3:10 pm. The President welcomed the 19 members present.

Present: Steve Hopper (President – outgoing), John Clarkson (President-elect), Darren Crayn (Vice President-elect), Anna Monro (Treasurer), Brendan Lepschi (Secretary – Minutes), Kirsten Cowley (Councillor-elect, Public Officer), Marco Duretto (Councillor).
Ex officio: 13 members.

Apologies: Peter Weston.

1. Minutes of the 2004 Annual General Meeting

See Attachment 1.
Proposed that the minutes of the 26th Annual General Meeting (as published in the *Australian Systematic Botany Society Newsletter* Number 120) be accepted.
Proposed: Steve Hopper; *seconded*: Brendan Lepschi. *Carried*.

2.Business arising from minutes

Nil.

3.Presidents report

Presented by Steve Hopper. See Attachment 2.

Queries from floor regarding Department of Education, Science and Technology's Science, Engineering and Technology Skills Audit, and the degree to which systematics and collections will be covered in any relevant submissions. Judy West advised that these areas were covered in submissions from both CHAH and CHABG. Results of the audit to be communicated to ASBS membership once known, via an article in the *ASBS Newsletter*.

Discussion re Council's decision to resign from FASTS. Agreed that Council would prepare an article for the *ASBS Newsletter* outlining the reasons for our withdrawal. Noted that ASBS is still a member of FASTS, as FASTS requires a years notice before resignation becomes effective.
Proposed: Barry Conn; seconded: Darren Crayn. *Carried*.

4.Treasurers report

Presented by Anna Monro. See Attachment 3.

Queries from floor regarding ASBS funds and tax payments, given ASBS's tax-free status. The Colonial First State diversified fund has had withholding tax charged on distributions, as we did not clarify our tax-exempt status when opening the fund. Anna Monro to rectify this with CFS and to reclaim amounts withheld from the Tax Office.
Proposed: Anna Monro; *seconded*: David Murray. *Carried*.

5.Financial Year Ballot

Brendan Lepschi detailed the results of the ballot to change the Society's financial year from January-December to June-July. ASBS Rules requires at least 75% of members to vote on any proposed changes to the Rules, but in the case of this ballot, numbers were well short of the required percentage – 111 of 208 financial members, or 53%. Despite this, there was overwhelming support from members for this proposal, viz:

- "Agree" on both proposals: 108
- "Disagree" on both proposals: 1
- "Agree" on either first or second proposal only (no indication on remainder): 2
- Disqualified (cross): 3

Discussion followed as to the reasons for the relatively poor response to the ballot. Suggested that timing of ballot distribution may have been an issue, but Council (via Chapter Conveners) could also play a more active role in encouraging members to participate. Council will consider the possibility of repeating the ballot, with a greater response time, and more involvement / encouragement via Chapter Conveners. Results of the ballot means that 2006 AGM will need to be held within the first five months of 2006, unless Rules are changed beforehand.

Additional discussion regarding active vs moribund local ASBS Chapters; Darren Crayn to contact Chapter Conveners to gauge whether or not Conveners were happy to continue in this role, and to attempt to reinvigorate less active chapters where possible. Darren also to investigate the possibility of setting up a chapter in Cairns.

6.Newsletter & web page report

See Attachment 4.
Summarised versions of Newsletter report presented by Brendan Lepschi on behalf of Robyn and Bill Barker. No report available for web page. Vote of special thanks from the floor for Bill and Robyn Barker and Murray Fagg for their efforts in producing a high quality newsletter and maintaining the Society website.
Proposed: Steve Hopper; *seconded*: Bob Makinson. *Carried*.

7.Eichler Research Fund

John Clarkson presented a summary of Eichler Research Fund activities, and announced successful applicants for the first round of funding in 2005:

- Hannah McPherson (MSc, University of New England / Botanic Gardens Trust, Sydney). Phylogenetics and Evolutionary Dynamics of the Tremandroid Elaeocarpaceae.
- Matthew Renner (PhD, University of Sydney). Character State Evolution and Homology within the Lejeuneaceae (Hepaticae): What Can Australian Species Tell Us?
- Tony Roberts (MSc, James Cook University, Cairns). An Investigation into the Molecular Phylogenetics of Jedda multicaulis (Thymelaeaceae)

Congratulations were extended to successful applicants. Vote of special thanks to John Clarkson and the Eichler Research Fund Committee (Barbara Briggs, Rod Henderson, Betsy Jackes, Tom May and Chris Quinn) for their efforts.
Proposed: Steve Hopper; *seconded*: Peter Wilson. *Carried*.

8.Any other business

i. ***Electronic version of ASBS Newsletter***
Query from floor as to the possibilty of producing an electronic version of the *ASBS Newsletter*. Brendan Lepschi repeated the outcomes of the 2004 Ballot on this issue (see *ASBS Newsletter* 120: 1, 122: 1 [2004] for details). Anna Monro queried the need to send hardcopies of the newsletter to overseas members; suggestion that overseas members pay increased subs to cover costs. Possibility of an email distribution list also suggested. Council to consider this option.

ii. Brisbane Conference 2005 and ASBS/CHAH training proposal
John Clarkson outlined the upcoming ASBS conference to be held in Brisbane during November 2005. This will include a workshop

on nomenclature. John raised the possibility of running similar workshops on particular subjects in conjunction with future ASBS conferences, as a joint ASBS/CHAH training exercise. Discussion followed, with agreement to hold workshop in Brisbane, and revisit the proposal subsequent to this.

10. Election Results

Three positions vacant due to the stepping down of the President, and subsequent nominations (Vice President and Councillor).
Returning Officer (Brendan Lepschi) indicated that the number of nominations received were the same as the number of vacancies. The following members elected (without voting) to the positions indicated and took office from the close of the AGM.

- President: John Clarkson
- Vice President: Darren Crayn
- Secretary: Brendan Lepschi
- Treasurer: Anna Monro
- Councillor: Kirsten Cowley
- Councillor: Marco Duretto

Kirsten Cowley will also continue as Public Officer

The President (Steve Hopper) thanked the Council for their efforts over the previous year.

Vote of special thanks from the floor to Steve Hopper for his efforts as President over the past three years.
Proposed: John Clarkson; *seconded*: Brendan Lepschi. *Carried*.

Meeting closed: 4:05 pm

Attached:

- Minutes of the 2004 Annual General Meeting (Attachment 1)
- Presidents Report (Attachment 2)
- Treasurers Report and audited accounts for year ended 31st December 2004 (Attachment 3)
- Newsletter Report (Attachment 4)

Attachment 1 – Minutes of the 2004 Annual General Meeting

See *Austral.Syst.Bot.Soc.Nsltr* 120: 2-3.

Attachment 2 – President's Report

The past year has seen significant progress for the Society on a number of fronts. While no conference was held, planning is well advanced for the coming meeting in Brisbane in November 2005, and Vice President John Clarkson has been active in forward negotiations for Cairns in 2006. Council recently affirmed its support for a central Australian conference in 2007, subject to agreement from relevant members willing to help on an organizing committee. Moreover, John Clarkson has Council's support in proposing joint systematic training workshops with the Council of Heads of Australian Herbaria at future ASBS conferences.

As announced in the Newsletter, Council awarded the 2004 Burbidge Medal to Alex George, and that for 2005 to Dr Barbara Briggs. The medals will be formally presented to Barbara and Alex by the incoming President at the forthcoming Conference in Brisbane in November 2005.

The Society has remained at a membership of 300, with 14 new members balanced by a similar number not renewing. Treasurer Anna Monro has worked hard on contacting unfinancial members and secured an improvement over that recorded at the last AGM. I would encourage any members still in arrears to rectify the matter. Because we have had few major outlays this past year, and investments are working well, the Society has a healthy operating surplus more than double last year's. My congratulations to the Hon. Treasurer for this result.

Growth in membership remains a focus of forward planning by Council. Dr Darren Crayn has contacted all State and Territory Conveners to see if they can assist and rejuvenate local Society activities where they have lapsed. Once these discussions are concluded a new brochure and website addition that Darren is preparing will help advertise the Society to new audiences.

Council has been mindful of the need to continue to encourage young plant systematists and I am delighted at the work this year of the Eichler Research Grants Committee led by John Clarkson. Other members include Barbara Briggs, Rod Henderson, Betsy Jackes, Chris Quinn and Tom May. At its meeting on May 23 2005 Council resolved to increase the grants offered from a maximum of $1000 to a maximum of $2000, subject to available interest from capital invested. We hope this will make the Eichler Research Grants even more attractive to early career botanists.

Despite increasing community and industrial interest in biodiversity and a "sustainable Australia" being one of four national research priorities, federal funding for systematics has declined dramatically over the past decade. The Australian Research Council rarely awards grants for projects focused on systematics, and the Australian Biological Resources Study has had funding cuts over this period.

On 1 March 2005, a letter was written to the Minister for Environment and Heritage requesting an increase in funding to ABRS. With Council's agreement, I co-signed this letter on behalf of the Society, joining together with the Presidents of the Society of Australian Systematic Biologists and the Australian Entomological Society, as well as the Director, Centre for Evolutionary Biology and Biodiversity (Adelaide). This resulted in a teleconference in May with the Honourable Greg Hunt MP, Parliamentary Secretary to the Minister for Environment and Heritage. An invitation to write another letter was made, which will be mailed in late May, highlighting the looming skills shortage in Australian systematics, its implications, and recommending a specific funding model to rectify the situation. It is our hope that the abysmal funding level awarded to ABRS will be rectified.

On 14 March 2005 I forwarded a letter to Sir Ghillean Prance, the International Association of Botanical and Mycological Societies' Chair of the Selection Committee for the venue for the International Botanical Congress in 2011. The letter indicated the Society's support for a bid from Melbourne as host city for the 2011 IBC, with CSIRO Plant Industry as host institution. Dr Judy West played a key role in developing this bid, working with the Melbourne Convention Bureau and the proposed Organising Committee, on which several other ASBS members propose to serve.

If the Melbourne bid is successful, this Congress would provide a superb boost to international focus and attention on Australia's flora and the nation's role in collaborative plant science, including systematics. Several core disciplinary areas of interest to ASBS members would be covered by the scientific program, including systematics and evolutionary biology, botanical diversity and taxonomy, botanical history, ethnobotany, bioinformatics, biological databases and knowledge management, molecular genetics, conservation and restoration biology, and ecology and environment. More specialized symposia might include systematics and botanical diversity in the genomics age, evolution of gondwanic floras, biogeography of Oceania, tropical forests, genes and genome evolution, and urban plant ecology and conservation, among many others. We will hear at the forthcoming IBC in Vienna in July how the Melbourne bid has fared.

Council and members greatly appreciate the efforts of the Newsletter Editors, Dr Robyn Barker and Dr Bill Barker. The availability of such a well-produced and informative document in hard copy and on-line is a valued part of being a member of ASBS. Similarly, we are grateful to Murray Fagg for maintaining the Society's website.

A few administrative matters are worthy of brief mention. Unfortunately, the required support of 75% of the membership did not eventuate in the recent vote to change the constitution so that AGMs can be held in the second half of the year to coincide with the timing of most ASBS conferences. While there was overwhelming support for this initiative (108 valid votes for, 1 against), insufficient votes were received. Council will investigate ways to have the matter addressed again in the future. Otherwise, the enforced requirement to have the AGM by May 31 of each year will continue to be an unnecessary drain on the resources of the Society.

Council has agreed to establish an archival set of Newsletters, and to establish a central repository of records with the Hon. Secretary. Marco Duretto and Brendan Lepschi are dealing with this. Such matters are recorded in a Procedures Manual, initiated by Robyn Barker when she was Hon. Secretary, and now tabled as a standing item at Council meetings to ensure any procedural changes agreed upon are duly recorded in a place where future Council members will have access.

The issues of public liability insurance and Director's liability are under investigation by Anna Monro. These are important matters of corporate governance that need to be addressed to minimize risk to the Society's assets and to those of Council members.

It remains for me to thank all Council members for their support and enthusiasm during my term as President. It has been a pleasure working with them.

The business of the Society relies on the volunteer endeavours of its membership and of Council. I am delighted that there has been such strong willingness to step forward when needed. I wish President Elect John Clarkson and his Council every success in leading the Society over these next few years.

Attachment 3 – Treasurers Report

1. Introduction

It is my pleasure to present the annual financial statement for the year ended 31 December 2004. The finances of the Society are run on the calendar year so the figures being presented are for the year 1 January to 31 December 2004. The period from 1 January to 27 July 2004 was presided over by Anthony Whalen, with Anna Monro serving as Treasurer for the remainder of the year.

2. Membership

Membership of ASBS remains at around the 300 mark, with no significant increase over the last year. There has been an increase in the proportion of concessional fee-payers with the retirement of several Ordinary members. It is important that we attract and retain students and other new members to the Society to off-set the reduction in income. We have written off 14 unfinancial members who have not paid their dues since 2002 and two other members have resigned. Twelve new individual members and two institutional libraries joined ASBS in 2004 (see list below).

Approximately 23% of members remain unfinancial, an improvement on the 28% in arrears at the last AGM in July 2004. This may be due in part to the introduction of credit card payments for 2004. I have also made two fairly extensive attempts to contact members who are in arrears and have been able to reinstate a significant number of these members to fully-paid status. However, these "arrears drives" take a lot of time and effort to follow up and seem to have only improved matters slightly. Since printing and postage are among the general fund's major costs, Council has determined that **newsletters will no longer be sent to unfinancial members** after 1 June in the year for which they owe arrears.

The following new members for 2004 are welcomed to the Society:

- Ms Heather Brownlie, Moffat Beach, Qld.
- Ms Trisha Downing, University of Melbourne, Vic.
- Ms Tara Hopley, Cranbourne, Vic.
- Ms Lina Juswara, Museum of Biological Diversity, Columbus, Ohio, U.S.A.
- Dr Simone Louwhoff, Eden Park, Vic.
- Mr Peter Martensz, Australian National Herbarium, Canberra, A.C.T.
- Mr David Maynard, University of N.S.W., Kingsford, N.S.W.
- Ms Lindy Orthia, Australian National University, Canberra, A.C.T.
- Mr Matthew Pye, James Cook University, Qld.
- Mr Bruce Reardon, Busby, N.S.W.
- Mr Bill Richdale, Heidelberg, Vic.
- Ms Jillian Walsh, University of Sydney, N.S.W.
- The Library, Botanical Garden and Museum, Berlin-Dahlem, Germany.
- The Library, Natural History Museum, London, England.

3. General Fund

Neil Weaver, a Canberra accountant, audited the 2004 books in May 2005. This is the third year that Neil has audited the Society's financial statements.

3.1 Income

Income to the general fund remains fairly steady, increasing slightly from the level in 2003. Since 2004 was a low-spending year with no major conference and because investment interest rates have improved, the General Fund finished the year in surplus. The return of a $4000 profit from the 2003 Melbourne conference to the general fund in 2004 also boosted reserves.

Subscription fees from members were up in 2004 to the highest level in the last three years. However, this figure may be artificially inflated by the successful chasing down of arrears and the decision by many of the members contacted to pay in advance for 2005. I would not expect this level to be maintained in 2005, given that the overall membership levels are constant. It would thus be prudent for ASBS to look at ways to attract new members and Council has been discussing effective ways to promote the Society.

Book sales also increased in 2004, mainly due to a fairly large back-issue order and to people taking advantage of the reduced price on the History of Systematic Botany. However, some titles are now sold out or down to the last few copies (see Current Assets section below), so it is vital that ASBS look at new publications if we wish to maintain this source of revenue. The proposed new Handbook of Australian Vascular Plants may help to revitalise our book stocks

Table 1. ASBS Membership as of 21 May 2005 (unfinancial members bracketed)

Fee	Full	Concessional	Gratis	Total
Ordinary	165 (35)	NA	0	165 (35)
Student	NA	49 (23)	0	49 (23)
Retiree	NA	55 (5)	0	55 (5)
Institutional	11 (4)	NA	15	26 (4)
Life	NA	NA	2	2
Total	**176 (39)**	**104 (28)**	**17**	**297 (67)**

with all our current titles being at least ten years old, but would obviously carry production expenses.

3.2 Expenditure

As mentioned above, there was no major conference held in 2004 and this helped keep the Society's costs down. Newsletter printing and postage were again the major expense for the General Fund, but these were still less than in previous years. Four newsletters were printed in 2004 with an average cost per issue of around $1143 ($1341 in 2003).

The fees and charges associated with the acceptance of credit card payments are a new expense for 2004, totalling $254.14. With almost half the payments received in 2004 being made by credit card, this expenditure definitely seems justified. It is also much more convenient for the Treasurer, as credit card payments are processed in-house. Fewer trips to the bank are thus required and receipts can be issued immediately rather than having to wait for cheques to clear.

Unfortunately our 2004 subscription to the Federation of Australian Scientific and Technological Societies (FASTS) was not paid until April 2005, as a result of Council discussion on whether we wish to remain a member. This will mean that there will be two annual FASTS subscription payments in 2005. However, the 2004 subscription payment was reduced substantially by providing a more accurate membership level to FASTS—this number did not include unfinancial, institutional, concessional or gratis members, as the subscription rate is calculated on full-fee paying members only. The higher subscriptions paid in past years may have been due to the inclusion of some of these categories in the membership level.

3.3 Current Assets in the General Fund

At the end of 2004 the Society held assets of $51,873 ($51,089 in cash, $784 in books). This is an increase over 2003, due mainly to the increase in income to the general fund and to the improved performance of our investments.

The books that the Society fully or partially owns, held by Helen Thompson (ASBS sales) and state convenors, as at 31 December 2004 are as follows:

- 55 copies of *History of Systematic Botany in Australasia* (partial share)
- zero copies of *Ecology of Southern Conifers* (SOLD OUT in 2004)
- 3 copies of the *Proceedings of the Dampier 2000 conference*
- 14 copies of *Systematic Status of Large Flowering Plant Genera*
- 75 copies of *Evolution of the Flora and Fauna or Arid Australia* (partial share)

4. The Hansjörg Eichler Research Fund

The investment growth for the Research Fund has been good, with interest increasing overall assets significantly after the relatively slow growth over the past few years. A total of $20,002 was earned in interest and distributions during 2004.

The new Colonial First State Diversified Fund account is performing very well so far and the move to this medium-risk account was obviously a good decision by the previous Treasurer. One item of concern is the taxation applied to this account—we are currently losing a large proportion of each distribution in tax due to not supplying a tax file number. The Treasurer will be discussing this with Council to see if there is any way to minimise the effects of this tax.

Two grants totalling $2,000 were awarded to students in 2004.

Net assets increased from $205,353 to $242,195 in the twelve months ended 31 December 2004, with most of the Research Fund's surplus coming through members' generous donations. This continued growth will enable us to cover the expenses of a second round of grants in 2005. The diversification of the Research Fund now across its five accounts continues to spread the investment risks while increasing the funding available for the research grants.

5. Taxation

The ASBS continues with its tax-exempt status. Organisers of conferences are reminded that ASBS is not registered as a GST gathering organisation. Planners of large conferences need to obtain an ABN and the relevant status or work through a registered institution (such as a herbarium). Smaller conferences and workshops can be run through the Society as long as no GST is charged or recovered.

6. Summary

General Fund spending was kept relatively low in 2004 with increased income over previous years, but some of this increase was of a one-off nature (e.g. arrears payments, Melbourne conference returns). Increasing subscription fees for 2005 should help keep the general fund in surplus, but it is also necessary for us to consider new sources of income. We need to be able to cover the costs of the upcoming Brisbane conference and the publication of the new *Handbook*. I plan to consult Council and a financial advisor about whether our general fund investments could be reorganised to increase returns—for example, the $10,000 term deposit earns relatively low interest and it may be time to "shop around" to see if we can do better. The Eichler Fund continues its strong growth and this will allow us to increase our grants to students

and maintain our support of research in systematic botany.

Special thanks are due to Anthony Whalen, our previous Treasurer, for his work over the last three years and for a smooth hand-over to me in mid-2004. I'm definitely still learning the ropes, but I hope to be able to manage the finances of the Society in consultation with Council to ensure the continued success and growth of ASBS.

Anna Monro
Honorary Treasurer

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

COMMITTEE MEMBERS' REPORT

Your committee members submit the financial statement of the Australian Systematic Botany Society Incorporated for the financial year ended 31 December 2004.

Committee Members

The names of the committee members who held office throughout the year and at the date of this report are:

President	Steve Hopper	
Vice President	John Clarkson	
Secretary	Brendan Lepschi	
Treasurer	Anthony Whalen	Did not seek re-election July 2004
	Anna Monro	Appointed July 2004
Councillors	Darren Crayn	
	Marco Duretto	

Public Officer

Kirsten Cowley

Principal Activities

The principal activities of the association during the financial year were to promote systematic botany in Australia.

Significant Changes

No significant change in the nature of these activities occurred during the year.

Operating Result

The surplus for the year ended 2004 amounted to $**49,652** (2003: $**20,811**) (2002: $**14,459**[1])

	May 2005	**2004**	**2003**	**2002**
	$	**$**	**$**	**$**
Research Fund	[2]n.av.	36,842	20,456	18,142
General Fund		12,810	355	(3,603)
		49,652	**20,811**	**14,539**

Signed in accordance with a resolution of the members of the Committee.
S.Hopper (President)
A.Monro (Treasurer)
Dated this 27th day of April 2005

[1] $14,539 according to attached figures and audit report for 2002
[2] n.av. = Not available. Since accounts for 2005 are not complete many figures are unavailable

STATEMENT OF INCOME AND EXPENDITURE
2002–2004 (audited figures) and to May 2005
RESEARCH FUND

	May 2005	2004	2003	2002
Income				
Donations to Research Fund	0.00	$20,000.00	$20,000.00	$20,000.00
Investment Income	n.av.	$20,002.38	$6,751.68	$5,725.82
General Fund Transfer	$982.00		$1,038.30	$252.98
		$40,002.38	**$27,789.98**	**$25,978.80**
Expenditure				
Research Grants	$3000.00			
Loss on Bonds and Growth Funds	n.av.		$3,846.32	
Investment Entry Fees	0.00	$580.00	$2,200.00	
Bank Charges	n.av.		$25.20	$30.00
General Fund Transfer	0.00	$2,580.00	$5,110.00	$3,960.00
		$3,160.00	**$7,335.20**	**$7,836.32**
Surplus for the year		**$36,842.38**	**$20,454.78**	**$18,142.48**

STATEMENT OF INCOME AND EXPENDITURE
2002–2004 (audited figures) and to May 2005

GENERAL FUND

	May 2005	2004	2003	2002
Income				
Sales				
Books	$416.50	$353.47	$117.20	$534.00
	$416.50	**$353.47**	**$117.20**	**$534.00**
Less Cost of Goods Sold				
Opening stock - books	n.av.	$914.25	$1,374.25	$840.00
Closing stock - books	n.av.	-$784.25	-$914.25	-$1,374.25
Cost of Goods Sold		**$130.00**	**$460.00**	**-$534.25**
Gross Surplus from Trading		**$223.47**	**-$342.80**	**$1,068.25**
Advertising	0.00	$500.00		$150.76
Conferences	0.00	$4,115.00[3]	$5,050.00	
Investment income	n.av.	$2,794.01	$1,348.76	$1,523.52
Subscriptions to ASBS Inc	$6,940.00	$10,450.00	$7,005.86	$9,231.00
Donations Eichler Fund	$807.00	$1,190.00	$530.00	$1,715.00
Transfer Ex Research Fund	0.00	$2,580.00		$3,960.00
Transfer Ex Cash Management Account	0.00		$5,110.00	$5,500.00
Sundry income	0.00	$33.00	$10.00	
Total Income		**$21,885.48**	**$18,711.82**	**$23,148.53**

[3] Donation of 2003 Melbourne conference profit from Royal Botanic Gardens Melbourne, plus 2004 Canberra workshop participant contributions

GENERAL FUND (c ontinued)

Expenditure				
Transfer of Member donations to Eichler	$982.00		$1,038.30	$252.98
Auditors remuneration	$900.00	$700.00	$700.00	$935.00
Bank fees	n.av.	$32.60	$67.60	$65.30
Credit Charge Facility	$138.39	$254.14		
Conference expenses	$545.89[4]	$927.92[5]	$1,629.75	$9,087.71
Meet the scientists workshop	0.00	$450.00[6]	$198.00	
Eichler Award Students	0.00	$2,000.00	$4,980.00	$3,910.00
Student conference participation	0.00		$900.00	$100.00
Newsletter expenses	$2,272.40[7]	$4,571.84[8]	$5,364.49[9]	$5,370.59[10]
Royalties - history book sales	0.00		$1,088.77	
Subscriptions (FASTS)	$605.00[11]		$2,211.00	$1,105.50
Constitutional change mail out	$200.52			$359.21
Registrar general returns	0.00	$54.00	$105.00	$52.00
Miscellaneous Expenses (e.g. postage)	$73.50[12]	$84.70	$73.05	$13.50
Cheque Account Transfer				$5,500.00
Total Expenditure		**$9,075.20**	**$18,355.96**	**$26,751.79**
Surplus (-Deficit) For Year		**$12,810.28**	**$355.86**	**-$3,603.26**

BALANCE SHEET
2002–2004 (audited figures) and to May 2005

	May 2005[13]	**2004**	**2003**	**2002**
Current Assets				
Cash and Investments				
Research Fund				
Cash at Bank	$3938.09[14]	$938.09	$20,897.47	$920.55
Investments				
Colonial Managed Investment	$60,231.67	$60,213.81	$52,922.01	
Cash Management Fund	$58,884.41	$60,224.84	$20,455.71	$76,852.96
Australian Bond Fund	$65,828.36	$65,720.49	$61,958.74	$60,389.07
Growth Fund	$56,456.99	$55,693.08	$48,564.48	$46,181.15
	$245,339.52	**$242,790.31**	**$204,798.41**	**$184,343.73**
General Fund				
Cash at bank	$4,552.36	$14,308.37	$3,710.42	$3,877.14
Investments				
Term Deposit	$10,000.00	$10,000.00	$10,000.00	$10,000.00
Cash Management Account	$41,081.71	$26,780.41	$25,587.60	$24,605.02
	$55,634.07	**$51,088.78**	**$39,298.02**	**$38,482.16**

[4] Airfare costs for Clarkson & Duretto to attend Sydney AGM
[5] Councillor travel expenses to Canberra workshop and AGM
[6] Actually catering costs for July 2004 "Families of Australian Plants" workshop in Canberra
[7] Two issues of Newsletter plus envelopes and 2005 covers, 121–122
[8] Four issues of Newsletter plus envelopes and 2004 covers, 117–120
[9] Four issues of Newsletter, 113–116
[10] Four issues of Newsletter, 109–112
[11] Annual FASTS subscription for 1/07/04–30/6/05, paid in Apr. 2005—2005 subscription due in July–Aug.
[12] Includes Burbidge medal engraving $17.00 and back issue postage to Geneva $56.50
[13] Colonial Managed Investment balance as at 31 March 2005, Cash Management balances as at 30 April 2005, Bond and Growth Fund balances as at 3 April 2005.
[14] $3000 of this for first round of Eichler grants 2005, cheques drawn but not yet cleared

Inventories				
General Fund				
Books	n.av.	$784.25	$914.25	$1,374.25
Total Current Assets		**$294,663.34**	**$245,010.68**	**$224,200.14**
Net Assets		**$294,663.34**	**$245,010.68**	**$224,200.14**
Members' Funds				
Research Fund				
Accumulated surplus at year end		$242,195.25	$205,352.87	$184,898.19
		$242,195.25	**$205,352.87**	**$184,898.19**
General Fund				
Accumulated surplus at year end		$52,468.09	$39,657.81	$39,301.95
Total Members' Funds		**$294,663.34**	**$245,010.68**	**$224,200.14**

1. Statement of Significant Accounting Policies

This report is a special purpose financial report in order to satisfy the financial reporting requirements of the Associations Incorporation Act (ACT). The committee has determined that the association is not a reporting entity.

The financial report has been prepared in accordance with the requirements of the Associations Incorporation Act (ACT).

No Australian Standards, Urgent Issues Group Consensus Views or other authoritative pronouncements of the Australian Accounting Standards Board have been intentionally applied.

The financial report has been prepared on an accruals basis and is based on historic costs and does not take into account changing money values, or except where specifically stated, current valuations of non-current assets.

The following specific accounting policies, which are consistent with the previous period unless otherwise stated, have been adopted in the preparation of this financial report.

(a) Membership
Membership is recorded on a cash basis.

(b) Income Tax
Under present legislation the association is exempt from income tax accordingly no provision has been made in the accounts.

(c) Asset Revaluation Reserve
In prior years the movement in the Bond and Growth Funds have been recorded as asset revaluations. In 2001, management have decided to recognise these movements as income. The balance of the asset revaluation reserve was transferred to income in the 2001 year.

(d) Comparative Figures
Where required by Accounting Standards comparative figures have been adjusted to conform with the changes in presentation for the current year.

(e) Members Funds
In accordance with the rules of the association accumulated funds are not available for the distribution to members.

	2004	2003	2002
2. Investment Income			
Research Fund			
Interest Received			
Cheque Account	$47.42	$2.22	$0.28
Distributions			
Colonial First State	$7,871.80	$122.01	
Cash Management Trust	$1,192.81	$2,674.45	$2,222.60
Australian Bond and Growth Fund	$10,890.35	$3,953.00	$3,502.94
Total Research Fund	**$20,002.38**	**$6,751.68**	**$5,725.82**
General Fund			
Interest Received			
Cheque Account	$15.23	$11.12	
Term Deposits	$429.65	$355.06	$512.61
	$444.88	**$366.18**	**$512.61**
Distributions			
Cash Management Trust	$2,349.13	$982.58	$1,010.91
Total General Fund	**$2,794.01**	**$1,348.76**	**$1,523.52**
Overall Investment Income	**$22,796.39**	**$8,100.44**	**$7,249.34**
3. Accumulated Funds			
Research Fund			
Accumulated Surplus start	$205,352.87	$184,898.19	$166,755.71
Surplus/ (Deficit) this year	$36,842.38	$20,454.68	$18,142.48
Accumulated Surplus end	**$242,195.25**	**$205,352.87**	**$184,898.19**
General Fund			
Accumulated Surplus start	$39,657.81	$39,301.95	$42,905.21
Surplus/ (Deficit) this year	$12,810.28	$355.86	-$3,603.26
Accumulated Surplus end	$52,468.09	$39,657.81	$39,301.95
Total Accumulated surplus end	**$294,663.34**	**$245,010.68**	**$224,200.14**

4. Research Committee

The Australian Systematic Botany Society is an approved research institute. The approved membership of the Research Committee comprises:

Barbara Briggs	Appointed July 2003
Rod Henderson	Appointed July 2003
Betsy Jackes	Appointed July 2003
Chris Quinn	Appointed July 2003
Tom May	Appointed July 2003

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

Statement by Members of the Committee

In the opinion of the committee the financial report as set out on pages 1 to 7:

1. Presents fairly the financial position of the Australian Systematic Botany Society Inc. as at 31 December 2004 and its performance for the year ended on that date.

2. At the date of this statement, there are reasonable grounds to believe that Australian Systematic Botany Society Inc. will be able to pay its debts as and when they fall due.

This statement is made in accordance with a resolution of the Committee and is signed for and on behalf of the Committee by:

President: S.Hopper
Treasurer: A.Monro
Dated this 27th day of April 2005

INDEPENDENT AUDIT REPORT TO THE MEMBERS OF THE AUSTRALIAN SYSTEMATIC BOTANY SOCIETY

Scope

I have audited the special purpose financial statements of The Australian Systematic Botany Society Inc. (the Society) for the financial year ended 31 December 2004. The Committee members are responsible for the preparation and presentation of the special purpose financial statements and the information they contain. I have conducted an independent audit of these special purpose financial statements in order to express an opinion on them to the members of the Society.

The audit has been conducted in accordance with the Australian Auditing Standards to provide reasonable assurance as to whether the special purpose financial statements are free of material misstatement. My procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the special purpose financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Australian Accounting Standards, other mandatory professional reporting requirements and relevant statutory requirements and other requirements, in Australia so as to present a view which is consistent with my understanding of the Society's financial position and the results of its operations.

The audit opinion expressed in this report has been formed on the above basis.

Qualification

As is common for organizations of this type, it is not practicable for the Society to maintain an effective system of internal control over the receipt of revenues until their initial entry in the accounting records. Accordingly, my audit was limited to the amounts recorded.

Qualified Audit Opinion

Subject to the above qualification, in my opinion:

a) The special purpose financial statements of the Australian Systematic Botany Society Inc are properly drawn up:
   i) so as to give a true and fair view of the assets and liabilities of the Society as at 31 December 2004 and the income and expenditure of the Society for the financial year ended on that date and the other matters required by Subsection 72(2) of the Associations Incorporation Act to be dealt with in the financial statements;
   ii) in accordance with the provisions of the Associations Incorporation Act; and
   iii) in accordance with proper accounting standards.
b) I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purpose of the audit; and
c) Proper accounting records and other records have been kept by the Society as required by the Act.

Neil Weaver
Registered Company Auditor
PO Box 965
DICKSON ACT 2602
19th April 2005

Attachment 4 – Newsletter Report

Bill and Robyn Barker continued editing of the ASBS Newsletter for 2004/2005. Since the last AGM in July 2004 they have edited four issues, 119-122. All editions published have appeared later than the indicated month on the front cover for a combination of reasons, but primarily due to lack of time by the editors. The actual date of publication appears on the inside cover of the next newsletter along with the date the edition was placed on the web. We are indebted to Murray Fagg for his promptness in adding each issue to the ASBS web site.

As in previous years there has been no lack of material for the Newsletter. We thank Annette Wilson and Alex George as Australian Botanical Liaison Officer's (ABLO's) in Kew and Mary Colreavy of Australian Biological Resources Study (ABRS) for the regularity of their contributions. News items received from the Federation of Australian Science and Technology Societies (FASTS) had been selected and edited by the editors for inclusion in the newsletter up until Newsletter 119, but with Council's decision to withdraw from the Federation, this practice has ceased, even though items are still received by the editors from the Federation.

Thanks to John Clarkson and his terrier-like abilities, reports from all of the Eichler award recipients are now all up to date and it is pleasing indeed to see how much value the Society is receiving from these awards.

There remains a weakness in the exchange of views and the *News* section of the newsletter. However, with the encouragement of state activities by Council, perhaps a few more communications concerning happenings within states will be reported.

We thank all of those who have provided book reviews this financial year. It is pleasing to be able to report that there are presently no book reviews outstanding. Our policy to depict the front cover of a reviewed product with the review has been working well and has been possible for most reviewed products.

We continue to encourage unsolicited reviews of products since in these increasingly busy times members seldom have the luxury of time to browse and are often unaware of products which may be of interest or use to them.

We have had the odd newsletter go astray for reasons we have not been able to fathom. If you do not receive your newsletter when those around you are receiving them, then please let us know.

The inclusion of advertising flyers in the newsletter offsets the cost of production of the newsletter to some extent and *CSIRO Publishing* has placed brochures in two of the issues this financial year.

We are always open to suggestions and if you have any comments on the newsletter and how it might be improved, then please contact us.

Robyn & Bill Barker
19th May 2005

Results of ASBS financial year ballot

Members will be aware of the recent ballot dealing with potential changes to the ASBS financial year (see *ASBS Newsletter* (120: 1 [2004] and 122: 1 [2005]). Results of the ballot were announced at the Society's AGM in Sydney in May 2005 (minutes from the AGM are presented elsewhere in this issue), but an expanded account is presented here.

Under the Incorporations Act, at least 75% of members are required to vote before any proposed changes to the Society's rules can take effect. In the case of this ballot, the required percentage was not met, with only 53% of financial members responding. Despite this, the overall result was overwhelmingly in favour of the proposed changes, as evidenced below:

"Agree" on both proposals:	108
"Disagree" on both proposals:	1
"Agree" on either first or second proposal only (no indication on remainder):	2
Disqualified (cross instead of tick):	3

These results mean that the Society's financial year remains unchanged, running from January to December. The tentatively scheduled second AGM for 2005, outlined in *ASBS Newsletter* No. 122: 1 [2005] is now not required, and should be disregarded.

The reasons for the lower than desired response to the ballot were discussed by Council and at the recent AGM. The short (two week) timeframe between ballot papers being issued and the deadline for responses is likely to have been a major contributing factor, but this was unavoidable due to time delays involved with printing of the *ASBS Newsletter*. Given the positive response to the ballot, regardless of the eventual result, Council has resolved to present the proposed changes to members again at a later date, with greater lead time to encourage a greater proportion of members to cast their votes.

Details of this subsequent ballot will be outlined in a future issue of the *ASBS Newsletter*. In the meantime, on behalf of ASBS Council I would like to thank members once again for their patience in matters regarding changes to the Society's Rules.

Brendan Lepschi
ASBS Secretary

Reminder:
ASBS Conference
in conjunction with
the Queensland Herbarium
and CHAH

2nd – 3rd November 2005

Expression of interest form is available on the ASBS Website *www.anbg.gov.au/asbs*

Program

- Plant Systematics in Australia. Where is it going?
- Master class in Botanical Nomenclature

STOP PRESS

The organisers of the Nomenclatural Session believe they have convinced Dick Brummitt to lead the workshop.

Hansjörg Eichler Research Fund

First round grants for 2005

Council is pleased to announce the following three students were successful in their application for support from the Hansjörg Eichler Research Fund in the March round of grants for 2005.

- Hannah McPherson (M.Sc., University of New England / Royal Botanic Gardens, Sydney). Phylogenetics and Evolutionary Dynamics of the Tremandroid Elaeocarpaceae.
- Matthew Renner (Ph.D., University of Sydney). Character State Evolution and Homology within the Lejeuneaceae (Hepaticae): What Can Australian Species Tell Us?
- Tony Roberts (M.Sc., James Cook University, Cairns). An Investigation into the Molecular Phylogenetics of *Jedda multicaulis* (Thymelaeaceae)

Each applicant received the maximum grant of $1,000 each. Members of the Research Committee and Council wish these students every success with their studies and look forward to seeing their reports in the Newsletter in due course.

Closing date for second round of applications for 2005

Students and supervisors are reminded that the second round of applications for 2005 closes on **September 14**. Information on the grants and the application form are available from the Society's web page at *www.anbg.gov.au/asbs/asbs.html* or from the Secretary, Brendan Lepschi (see inside cover for contact details).

At the recent Annual General Meeting of ASBS, I was elected Vice-President which carries with it chairmanship of the Eichler Research Fund (following on from John Clarkson, elected President). I would like to take this opportunity to record thanks to John for so competently chairing the Fund over the last three years, and for handing over to me such a well-organised and healthy state of affairs. I look forward to interacting with applicants, grantees and the Research Committee over the coming years, and hope I can build on John's work and make the Eichler grants even more competitive and prestigious.

Darren Crayn
Chairman
Hansjörg Eichler Research Committee

Eichler research reports

Phylogenetic status of four species belonging to the brown algal order Sporochnales (Phaeophyceae)

Nicholas Yee
Marine Lab, School of Botany, The University of Melbourne, 3010
Botanic Gardens Trust, Mrs Macquaries Road, Sydney 2000.

Project Outline

The Sporochnales comprises a single family (Sporochnaceae) of 10 genera and 27 currently recognised species of marine brown algae. The group is distributed worldwide, although disjunct, in cool temperate to tropical oceans. They are predominantly encountered in shallow to deep sub-tidal habitats along the southern Australian and New Zealand coasts which account for almost 70% of total diversity and also the greatest number of endemic taxa.

Womersley (1987) published the most recent and comprehensive taxonomic treatment on the Sporochnales recognising 10 genera: *Austronereia, Bellotia, Carpomitra, Encyothalia, Nereia, Perisporochnus, Perithalia, Sporochnema, Sporochnus* and *Tomaculopsis*. He provided a detailed phenological account of 12 species representative of eight genera occurring along the southern Australian coast. Despite being well reported in many floristic accounts, the phylogenetic relationships among sporochnalean genera are currently unknown, and no published phylogenies exist that have tested the monophyly and relationships among taxa within the Sporochnales. Furthermore, the phylogenetic position of the Sporochnales in relation to other brown algal orders is also currently highly speculative. Most authors have suggested a close affinity to the Desmarestiales based on gametophyte morphology and a heteromorphic life history (Parke & Dixon, 1976; Wynne & Loiseaux, 1976; Van den Hoek,

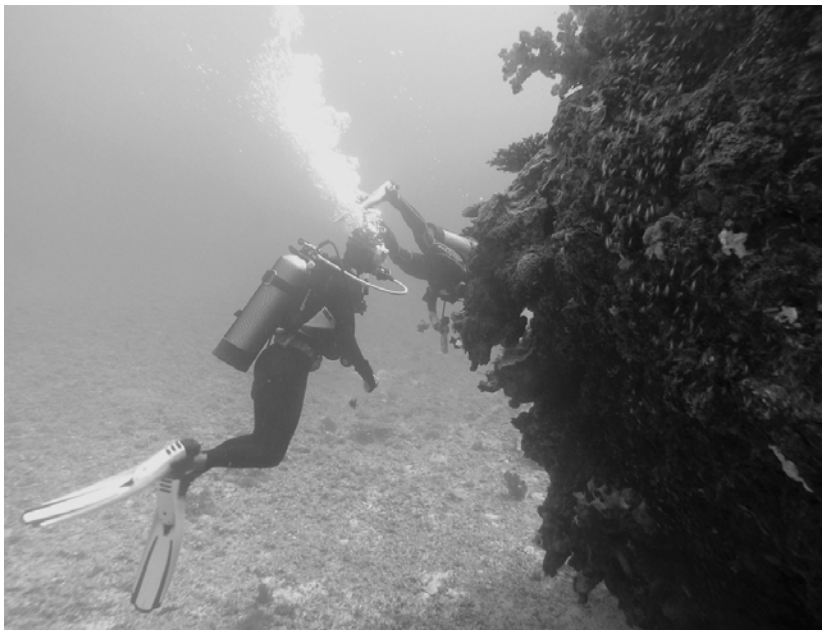


Fig. 1. Botanising at Steve's Bommie, north side of One Tree Island. Ph. N. Yee

1978; Clayton, 1981). Recent molecular investigations using nuclear-encoded rDNA (Rousseau *et al.* 2001) and plastid-encoded DNA gene sequences (Draisma *et al.* 2001; Cho *et al.* 2004) have examined one or two European representatives of the order and suggest the order has closer affinities, though not strongly supported, to the Scytothamnales than to the Desmarestiales or Laminariales.

This research project has been utilising DNA sequence data from the plastid-encoded RuBisCo gene (*rbc*L) and adjacent non-coding spacer (RuBisCo spacer) to estimate a phylogeny among genera in the Sporochnales with a secondary objective of providing increased resolution for a phylogeny among brown algal orders.

Hansjörg Eichler Scientific Research Fund grant

In November 2004, accompanied by two volunteers, I travelled to One Tree Island located at the southern end of the Great Barrier Reef Marine Park. Our aim was to re-collect fresh specimens of four species of brown algae belonging to the Sporochnales for molecular sequence analysis to help resolve their phylogenetic status. The Hansjörg Eichler research funds along with one other grant contributed to the overall costs of undertaking the fieldtrip.

A total of 14 dives were conducted over five days around various reefs and bommies at One Tree Island and Heron Island, including the northwestern part of the Wistari Channel, amounting to an accumulated search time of approximately two hours at depths down to 30 meters. However, our attempts to confirm the existence of any of the four target species, *Nereia* sp.nov., *Sporochnus* ?*comosus*, *Sporochnus* sp. nov. and *Bellotia simplex*, and to obtain specimens of them for the study, were unsuccessful. All of these species were regularly recorded between 1980-83 from the northwestern part of the Wistari Channel, an expanse of water separating Heron Island from Wistari Reef with depths approaching 35 meters. The habitat is devoid of coral reef, comprised of just sand and coral rubble supplied with a strong tidal flow. It is only possible to conduct dives at this location at slack water when the tidal flow is neglible. Previous records indicate that these species have only ever been encountered at minimum depths of 25 meters and most collections were made during the month of November (although that is a sampling artefact and does not reflect the true seasonality of the species). Returning without the specimens is a disappointing outcome, but it highlights how little time is available searching for sub-tidal macroalgae at depths greater than 25 meters, as well as the uncertainty that always attaches to biological collecting.

In the absence of fresh material collected from Heron Island a DNA based phylogeny representing most genera can still be estimated. Only the monotypic genera *Perisporochnus regalis* from New Zealand and *Sporochnema tomentosum* from South Australia remain to be sampled. The phylogenetic status of the four species from Heron Island will be estimated in a cladistic analysis of morphology and anatomy.

Sincere thanks to the Australian Systematic Botany Society and the Hansjörg Eichler Scientific Research Fund for providing financial assistance to conduct the fieldwork, and to Pam and Konrad Beinessen, managers of the One Tree Island Research Station, who generously provided kind advice and support throughout our stay.

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Fig. 2. Myself (left) and Julian Reichl getting ready to enter One Tree Island Lagoon Ph. N. Yee

Articles

The discovery and documentation of the eucalypts of Queensland and New South Wales, 1770 – 1895

A.R. Bean
Queensland Herbarium

Joseph Banks and Daniel Solander were the first botanists to critically examine the eucalypts. They collected hundreds of plant specimens from eastern Australia in 1770, but only a few of those were eucalypts (in the broad sense), namely *Angophora costata* and *E. gummifera* (Botany Bay), *E. crebra* (Thirsty Sound), *E. platyphylla* and *E. tereticornis* (Bay of Islets).

This bias against the eucalypts is perhaps understandable. When presented with such a diverse new flora, one would naturally collect those plants that are showy and ready at hand, and it would have been easy to ignore the out-of-reach branches of the eucalypt trees.

At the Endeavour River, Captain Cook and his crew had a six-week enforced stay, and time was not a limiting factor for the botanists. Banks and Solander were able to make a comprehensive collection of the local flora, including even the tiny plants such as *Stylidium capillare*, which grows to a maximum height of 10 cm. In fact, towards the end of their stay, Banks complained in his journal that 'The plants were now intirely compleated (*sic*) and nothing new to be found' (Beaglehole 1963). Why then did they not collect a single eucalypt specimen? There are about nine eucalypt species in the vicinity of Cooktown, most of which they could not have seen earlier in the voyage. This apparent lack of interest in the eucalypts probably delayed the naming of several species - none more so than *E. brassiana.* This distinctive species grows in several places around Cooktown, but was not formally described until 1977.

In Tahiti, Solander had coined the generic name *Metrosideros* for some trees and shrubs of the Myrtaceae family that he saw there. As Cook's expedition sailed west to New Zealand and Australia, Solander applied this generic name to nearly every capsular-fruited Myrtaceae they saw, including the eucalypts. Hence, Solander's manuscript descriptions of the eucalypts, reprinted in Britten (1900-1905), are titled *Metrosideros costata, M. gummifera* etc. But a closer examination reveals that he did recognise the distinctiveness of the eucalypts. Part of his Latin manuscript, when translated, reads

> genus distinguished from *Metrosideros* by the absence of petals and the upper part of the calyx entire, conical, calyptriform, deciduous, evidently from the expansion of the stamens …

Joseph Gaertner used the Banks and Solander collections to formally name two eucalypts as *Metrosideros costata* and *M. gummifera* in his *De Fructibus et Seminibus Plantarum*, published in December 1788.

In early January 1789, just a few weeks after Gaertner's work appeared, the French botanist Charles Louis L'Héritier de Brutelle published the first description of the genus *Eucalyptus* and described a single species, *E. obliqua*, based on a collection made in Tasmania during Cook's Second Voyage.

From the time of arrival of the First Fleet in January 1788, visitors and residents began collecting and sending eucalypt seeds and specimens back to their home countries. J.E. Smith, a famous English botanist of that time, received specimens of "vegetable produce" from Surgeon John White, David Burton and others. He described numerous eucalypt species in 3 papers, including many of today's well-known forest trees e.g. *E. pilularis, E. resinifera, E. saligna, E. robusta,* and *E. tereticornis*. Smith's first *Eucalyptus* description appeared in 1790, suggesting that *Eucalyptus* was immediately and generally embraced as a distinct genus. However, for species now included in *Angophora*, Smith continued to use *Metrosideros*. Incidentally Smith was responsible for the first duplication of names. *Metrosideros gummifera* (now *Eucalyptus gummifera* or *Corymbia gummifera*) was named by Gaertner in 1788, and the same taxon was named *E. corymbosa* by Smith in 1795. So it didn't take long for synonyms to appear! Around the same time, the Spanish botanist Antonio Cavanilles named several species based on the collections of Luis Née who visited Port Jackson in 1793. Smith had already described some of these (more synonyms!), but some were new, including *E. racemosa* Cav. This name was misapplied for many years, and it was not until 1955 that it was recognised to apply to a Scribbly Gum (Cameron 1955).

In 1823, Franz Sieber spent several months botanising around Port Jackson and the Blue Mountains, when he collected many excellent multi-duplicate specimens. Back in Europe, Sprengel and De Candolle quickly pounced upon these specimens, and from them named numerous new eucalypt species in 1827 and 1828 respectively.

From the early 1800s, eucalypt seeds were distributed to various European botanic gardens, and the seedlings then raised in glasshouses. The provenance of the seeds was usually either unrecorded or erroneous, and in no instance was there was any information about the parent tree. In many cases, *Eucalyptus* species were newly described and named in journals or catalogues before the plant had produced any buds or flowers, and the descriptions provided were often brief or non-diagnostic. These names are validly published despite the fact that for many species, no herbarium specimen exists. In any event, as present-day botanists are well aware, sterile eucalypt specimens are virtually impossible to identify to species level.

A variety of authors described eucalypts from juvenile material, notably Link, Colla, Dehnhardt, Naudin, Desfontaines, Hoffmannsegg, Regel, and Dumont de Courset, who between them validly published about 50 new *Eucalyptus* species. Not surprisingly, these "glasshouse species" are the ones responsible for most of the nomenclatural disputes and confusion in *Eucalyptus*. About 90% of them are *nomina dubia*, and it is unlikely that their correct identity will ever be established.

Robert Brown and Ferdinand Bauer collected numerous eucalypt specimens in the period 1801-05, and Allan Cunningham collected several species from the Blue Mountains, Bathurst and Moreton Bay between 1815 and 1829. It wasn't until 1843 that Johannes Conrad Schauer used the specimens of Bauer and Cunningham to formally describe 18 new species, including the first eucalypts named from a Queensland locality (*E. setosa* and *E. pruinosa*). All but two of Schauer's eastern Australian eucalypt species are still accepted today.

Robert Brown named over 2000 species of plants, but no eucalypts, because the planned second volume of his *Prodromus florae Novae Hollandiae et Insulae Van Diemen* was never published. Interestingly, it must have still been expected as late as 1825. Lindley, in the Botanical Register of that year wrote "the public are waiting with impatience for the appearance of the 2d volume of Mr Brown's Prodromus". While Brown did not validly publish any Queensland or New South Wales eucalypt species, his name does appear as an authority for some, e.g. *E. grandifolia* R.Br. ex Benth., where he had proposed the name.

William Hooker named several eucalypts from Queensland and New South Wales, but only two (*E. maculata* and *E. citriodora*) are accepted today. The story of the naming of the latter is very interesting: On 16th July 1846, Thomas Mitchell collected two sterile specimens from "fragrant shrubs of eucalyptus". Mitchell apparently did not connect the "fragrant shrubs" with the tall smooth- barked eucalypts undoubtedly towering above him. Both

specimens, as it turned out, were of *E. citriodora*, but they looked quite different, as the hairy peltate juvenile foliage was present on one but not the other. Hooker described *E. citriodora* from one of these specimens, while John Lindley described *E. melissiodora* from the other! Both are described on the same page of Mitchell's journal. So the Lemon-scented Gum could have just as easily become known as *E. melissiodora*. Hooker gave names to two other well-known eucalypts; *E. viminalis* (now *E. tessellaris*) and *E. populifolia* (now *E. populnea*). Both of his names are illegitimate, having been used earlier by other botanists for other species.

The third volume of Bentham's *Flora Australiensis* appeared in 1867, providing an excellent comprehensive account of species then known. Bentham newly described only seven eucalypt species that are indigenous to New South Wales or Queensland, including the first species now known to be endemic to the latter state (*E. drepanophylla* and *E. peltata*).

Ferdinand Mueller appeared on the scene in the early 1850s, when he named several eucalypts from South Australia and Victoria. In 1855-56, he accompanied the Gregory Expedition as official botanist. Soon afterwards (Mueller 1859), he published "Monograph of the *Eucalypti* of northern Australia", where many of Queensland's best known eucalypt species were described. Mueller arranged the species primarily according to leaf arrangement and degree of exsertion of the fruiting valves. He also devised a classification of the eucalypts according to bark type, entrenching many of the terms in common usage today, e.g. ironbark and stringybark. This latter system was supposedly "for the use of colonists", but one wonders how the colonists coped with a paper that was written entirely in Latin.

After his important 1859 paper, Mueller described only one Queensland or New South Wales species based on his own collection (*E. microcorys*). During the 1860s and 1870s, by enlisting the help of several collectors (notably Dallachy, Bowman, Thozet, O'Shanesy and Fitzalan) who travelled in various parts of Queensland, he described a dozen or so highly distinctive eucalypt species from that state, mainly in *Fragmenta Phytographiae Australiae.* During the same period, he described only one New South Wales endemic (*E. luehmanniana*), though he did name a further three species from that state during the last few years of his life.

Mueller's great long-term project in relation to *Eucalyptus* was his *Eucalyptographia* (Mueller 1879-1884), which aimed (initially) to illustrate every known species of eucalypt. Mueller's descriptions in *Fragmenta* were invariably concise, all in Latin and without discussion. However, in *Eucalyptographia*, Mueller wrote in English, provided notes about each species and how they varied, and discussed strange trees encountered by his collectors. These notes and comments offer a small insight into Mueller's taxonomic concepts on *Eucalyptus*. Throughout his career, he seemed to place a heavy emphasis on the size and shape of the fruit to distinguish species of eucalypt. He failed to make use of diagnostic characters that were used by J.H. Maiden just a few years later e.g. the operculum scar and juvenile leaves.

It is puzzling that Mueller appeared to either ignore or place little importance on the texture, colour or extent of the rough bark, despite having spent long periods examining eucalypts in the field in Victoria, Northern Territory and Queensland, and despite his apparent recognition (in the 1859 paper) of the utility of bark type as a diagnostic tool. For example, in *Eucalyptographia* (Decade V, Crebra 43), he tentatively included in *E. leptophleba* a specimen collected by O'Shanesy from the Comet River, which one can now readily identify as *E. cambageana* from the description of the bark. These two species are very different in bark characteristics, but the fruits are similar. Similarly, Mueller included in *E. leucoxylon* (a smooth-barked species) what we now know as *E. sideroxylon* (an ironbark). In his treatment of *E. leucoxylon*, he wrote:

> This is the Ironbark-tree of Victoria and many districts of New South Wales, but also the White Gum-tree of South Australia … Two forms of this species bear marked outward differences, arising from geologic circumstances.

Mueller's influence on Australian botany was profound, but it must be said that eucalypt taxonomy was not his forte.

Walter Hill, Queensland's first Colonial Botanist, named just one species (*E. grandis*).

His successor, F.M. Bailey, was evidently not very enamoured with eucalypts, as he named just a few, and some have fallen into synonymy. Bailey's only pre-1896 species were *Angophora woodsiana* and *E. staigeriana*.

I have chosen 1895 as the end date for this account. The following year, 1896, was the year when Mueller died, and when the great eucalyptologist J.H. Maiden published (with H. Deane) his first new species. Maiden, along with R.T. Baker, who published his first taxonomic eucalypt paper in 1898, dominated eucalypt taxonomy for the next quarter of a century. They were colleagues and became rivals to some extent, but that is another story.

The following tables (Tables 1, 2) summarise the sequence of formal naming of the currently accepted eucalypt species in both Queensland and New South Wales over the period from 1788 to 1895. Mueller named 51% of Queensland species listed, and 28% of New South Wales species listed.

Table 1. Queensland Eucalypts[15]

Year	Species added in that year	Progressive total
1788	*Metrosideros costata, Metrosideros gummifera*	2
1789	*obliqua*	3
1790	*resinifera*	4
1795	*robusta, tereticornis*	6
1797	*pilularis, racemosa, saligna, Metrosideros floribunda*	10
1827	*eugenioides, pauciflora*	12
1828	*radiata*	13
1832	*camaldulensis, moluccana*	15
1843	*acmenoides, dealbata, ferruginea, melliodora, miniata, pruinosa, setosa*	22
1848	*citriodora*	23
1855	*largiflorens*	24
1856	*socialis*	25
1859	*aspera, confertiflora, crebra, exserta, fibrosa, leptophleba, melanophloia, microtheca, odontocarpa, phoenicea, platyphylla, polycarpa, populnea, ptychocarpa, tectifica, terminalis, tessellaris, tetrodonta, trachyphloia, Angophora subvelutina*	45
1860	*microcorys*	46
1862	*grandis*	47
1864	*pellita*	48
1867	*albens, drepanophylla, grandifolia, peltata, siderophloia*	53
1875	*papuana*	54
1876	*watsoniana*	55
1877	*raveretiana, torelliana*	57
1878	*abergiana, baileyana, cloeziana, gamophylla, ochrophloia, planchoniana.*	63
1882	*howittiana, Angophora woodsiana*	65
1883	*staigeriana*	66
1887	*sideroxylon*	67
1891	*amplifolia*	68

[15] List includes *Eucalyptus*, *Corymbia* and *Angophora*, but only those taxa described at species level and currently accepted at species level, and known to be indigenous to Queensland. The full basionym is listed if not *Eucalyptus*

Table 2. New South Wales Eucalypts[16]

Year	Species added in that year	Progressive total
1788	*Metrosideros costata, Metrosideros gummifera*	2
1789	*obliqua*	3
1790	*piperita, resinifera*	5
1795	*capitellata, robusta, tereticornis*	8
1797	*botryoides, haemastoma, paniculata, pilularis, racemosa, saligna, Metrosideros floribunda, Metrosideros hispida*	16
1806	*ovata, viminalis*	18
1819	*pulverulenta*	19
1820	*dumosa*	20
1822	*longifolia*	21
1827	*eugenioides, pauciflora, stricta*	24
1828	*ligustrina, punctata, radiata, sparsifolia, stellulata*	29
1829	*elata*	30
1830	*cunninghamii*	31
1832	*camaldulensis, moluccana*	33
1834	*mannifera*	34
1843	*acmenoides, baueriana, dealbata, dives, eximia, melliodora, polyanthemos*	41
1844	*maculata*	42
1852	*calycogona*	43
1855	*behriana, costata, gracilis, largiflorens, leucoxylon*	48
1856	*goniocalyx, leptophylla, oleosa, porosa, socialis*	53
1859	*crebra, exserta, fibrosa, melanophloia, populnea, terminalis, tessellaris, trachyphloia, Angophora subvelutina.*	62
1860	*microcorys*	63
1862	*grandis*	64
1867	*albens, cinerea, macrorhyncha, siderophloia*	68
1878	*baileyana, luehmanniana, ochrophloia, planchoniana.*	72
1882	*Angophora woodsiana*	73
1887	*sideroxylon*	74
1890	*baeuerlenii, maidenii, muelleriana*	77
1891	*amplifolia*	78
1893	*perriniana*	79
1895	*bosistoana*	80

[16] List includes *Eucalyptus*, *Corymbia* and *Angophora*, but only those taxa described at species level and currently accepted at species level, and known to be indigenous to New South Wales. The full basionym is listed if not *Eucalyptus*.

Acknowledgements

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The National Weed Detection Network

Jane Morton
Queensland Herbarium

The Cooperative Research Centre for Australian Weed Management (Weed CRC) and the National Heritage Trust are funding The National Weed Detection Project (NWDP) for a period of four years with the aim of testing a model for a community-based weed detection network. Early detection of new weed incursions at a stage when eradication or containment is possible can minimise both the control costs and the impacts on environmental, social and economic values (Harris *et el.* 2001). The NWDP is being piloted in Queensland with the Weed CRC entering into a special collaboration with the Queensland Herbarium, which provides the home base and technical support for the project officer, Jane Morton who began in July 2004.

Previous and existing weed detection initiatives were considered before the development of the Queensland community-based weed detection model and there are clear links to the Victorian Department of Primary Industries, Weed Alert and Rapid Response Project, which was launched in March this year.

The model set up in Queensland uses fortuitous surveillance, where volunteers find weeds in the course of doing something else rather than where people are employed to actively look for weeds. Volunteers inadvertently will cover a range of local habitats, including areas prone to weed invasion (vulnerable sites) or sites that have high conservation value such as national parks (valuable sites) (Harris *et el*. 2001).

Volunteers are called "weed spotters" and are people who have been specifically sourced from existing weed management networks or botanical networks such as Society for Growing Native Plants, local Landcare or Coastcare groups and State and Local Government Pest Management Officers. They are trained in collection techniques, hygiene protocols and work place, health and safety and will provide duplicate specimens to the Weed CRC Regional Coordinators in each region. These Regional Coordinators will filter

George Batianoff, Principal Botanist, Queensland Herbarium and Jane Morton, National Weed Detection Project Coordinator, Weed CRC. Ph. J. Morton

Collection technique training with Gladstone SGAP May 2005. Ph. J Morton.

the specimens using Queensland Herbarium criteria before they are forwarded onto the Queensland Herbarium. One specimen is retained in a regional reference herbaria and the other forwarded onto the Queensland Herbarium. The Queensland Herbarium will provide formal identification and verification of the specimen and new records and distributions will be incorporated into the collection and associated databases HERBRECS (specimens) and Wildnet (observations). Once formally identified the Queensland Herbarium notifies the Queensland Department of Natural Resources and Mines (NR&M) of any new naturalisations, any new occurrences of declared weeds (declared Class 1,2 and 3 under the Queensland Land Protection (Pest and Stock Route Management) Act 2002) and any new and emerging weeds through its notification protocol.

The pilot is testing a model for a community-based weed detection network and does not cover the response component. The formal identification from the Queensland Herbarium is provided to the weed spotter and the weed spotter network, as well as the State and Local Government Pest Management Officers who may choose to assess the level of risk posed by the species to determine if action is required.

At present the pilot regions are focussed in central and northern Queensland with eight local shires involved in the Rockhampton area and six local shires involved in the Townsville area. Two Weed CRC Regional Coordinators have been engaged one day a week from July 2005 in each region and are based within a Queensland Herbarium workspace that has an existing regional reference herbarium with access to the Queensland Herbarium database HERBRECS and EPA database Wildnet. A total of 54 potential weed spotters have registered and training began in May 2005 with collaboration from local community groups and local governments to provide the venues.

Whether or not the NWDP succeeds in delivering a national weed detection network using the community-based weed detection model described, the project will provide a process for improving our weed detection capabilities on a regional basis. The following direct benefits are:

- Weed spotters trained in collection techniques, hygiene protocols and health and safety.
- Increased awareness of priority, declared and alert weeds.
- Weed detection process and protocols developed and functioning in two regions in Queensland.
- Improved specimen-backed data available nationally through Australia's Virtual Herbarium. The Australia's Virtual Herbarium provides on-line access to specimen label databases in all major Australian herbaria.

Should the Australian Government choose to give priority to regionally based weed detection networks, Queensland will be prepared, experienced and well placed to make use of any support offered.

Acknowledgements

Some of the material in this article has been adapted from a paper delivered to the 8th Queensland Weed Symposium in Townsville, June 2005 'Establishing a weed detection network'. The enthusiasm and support of Queensland's Environmental Protection Agency, Department of Natural Resource and Mines, regional staff and volunteers is gratefully acknowledged. Thankyou to Ailsa Holland for providing further comments on this manuscript.

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News

New director for the Nationaal Herbarium Nederland

Starting on 1st September 2005, Prof. Erik F. Smets will succeed Prof. Peter Baas as director of the Nationaal Herbarium Nederland. He will assume his duties as Professor in Systematic Botany at Leiden University on May 1. He will continue as Professor by Special Appointment at the K.U.Leuven (Belgium), where he has spent much of his working life until now.

His major research interests are focussed on the phylogeny, morphology and anatomy of flowering plants, more specifically the evolution of floral nectaries, floral development and wood anatomy (Web ref. 1).

This information was taken from the NHN website (Web ref. 2)

Web references

1. www.kuleuven.ac.be/bio/sys/
2. ww.nationaalherbarium.nl/smets.htm

Miscellanea

Introduction to US of Blackberry rust used for biological control in Australia

Phragmidium violaceum, the blackberry rust introduced into Australia as a blackberry biological control agent, appears to have found its way to Oregon in the USA. Since Oregon is the leading state for the commercial production of blackberries and boysenberries there has been some concern expressed (Oregon Department of Agriculture, 25 May 2005 – see http://oregon.gov/ODA/docs/pdf/news/050525rust.pdf). However provided the experience in Australia is repeated the rust should not be a threat to commercial blackberry crops.

So far the only *Rubus* species affected is the introduced Himalayan blackberry which infests creek-lines and watershed areas – in the States the term Himalayan blackberry is a misnomer as it applies to the European *R. discolor* and *R. armeniacus*, both of these names representing a part of the *R. fruticosus* group; these names were both earlier applied to the commonest species of introduced *Rubus* in Australia, *R. anglocandicans* (Evans & Weber 2003) and so the scene is very similar to that in Australia. That there is an awareness within the community of *Phragmidium violaceum* is shown in the May 2004 Newsletter of the Long Tom Watershed Council in Oregon where the following appeared as part of an article entitled *Biological Control of Non-native Blackberry* by Cindy Thieman, Projects & Monitoring Coordinator

> To date, the most effective biological control discovered for non-native, invasive blackberry is a rust fungus called *Phragmidium violaceum.* This fungus has been introduced in Australia and Chile, which also have significant invasions of Eurasian blackberry species. In the 1970's, a Chilean scientist brought back this rust from Europe and released it into the wild. Although he did this without government sanction, there were reportedly no negative effects on native plants or commercial cane-berry production. And it was very successful in reducing the spread and stunting the growth of non-native blackberry….
>
> So why aren't we introducing this rust into the United States? The reason is that legally introducing a biological control agent into this country requires extensive research and a lengthy political process. The first steps are raising awareness levels and quantifying the problem. Although many farmers, ranchers, foresters, and scientists are acutely aware of the problems non-native blackberries are causing, the general public is not. Also, there is surprisingly little quantification of their economic impact. The next step is identifying the biotypes of non-native blackberry in this country and testing the effectiveness of various strains of *P. violaceum* on these plants. Extensive research will also need to be conducted on native plants and commercial varieties of blackberries to ensure no negative impact to these species. Mr. Issacson estimated that in the best-case scenario *P. violaceum* could legally be released in this country in 10 years. It would probably take an additional 10 years for a substantial effect to be seen. Some of the ranchers present at the workshop commented that they would probably be dead before they saw the tides turn in the war on non-native blackberry!
>
> www.longtom.org/documents/newsletters/2004_05_ltwcnews.pdf

The introduction of *Phragmidium violaceum* to Australia was in a similarly obscure fashion (Evans 2005). Investigative work was being carried out on the effects of *P. violaceum* on blackberry populations in Chile in the 1970s and Bruzzese and Hasan of the Keith Turnbull Institute in Victoria were in Europe selecting

strains of the rust for testing as a biological control agent when the rust was first noticed in Victoria in 1984 (Marks et al 1984) – it is assumed that it was illegally imported. Strains of the rust were not officially released in Australia until 1991 following comprehensive studies to ensure that commercial *Rubus* crops and native *Rubus* species were not affected. There were mixed results from this 1991 release and a further 8 strains were released in Manjinup in WA and the Tumut region in NSW in February 2004 (Web ref. 1). Monitoring of the effects of these strains of *P. violaceum* on introduced blackberry species is ongoing.

In New Zealand *Phragmidium violaceum* was first recorded in 1990. Since there is a record of rusts of other plants becoming established in New Zealand after their establishment in Australia it has been assumed that the introduction was as a result of air-borne dispersal of the 1984 Australian illegally-introduced strain (Pennycook 1998) rather than by deliberate introduction. Once again, it appears that only introduced members of the *R. fruticosus* agg. in New Zealand showed any susceptibility to the rust and by 1997 there appeared to be little evidence of deleterious effects even on these.

Blackberry is classified as a weed of national significance in Australia. The characterisation of the Australian species of the *Rubus fruticosus* agg. has painstakingly been carried out by David Symon of the State Herbarium of South Australia in collaboration with *Rubus* experts in Europe. Those "species" which are known here now have a DNA profile thanks to Kathy Evans work with microsatellites (Evans et al., in prep.). Kathy's Ph.D. student Don Gomez is just completing a Ph.D. on the DNA characterisation of *Phragmidium violaceum* strains and provided funding is continued it should be possible to work out just which *P. violaceum* strains are effective against each particular "species" of the *Rubus fruticosus* agg.

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Robyn Barker

Relic of Mueller's short-lived attempt to be a farmer

An old cottage in the Bugle Ranges in the Mt Lofty Ranges included on the local heritage list has been recommended recently for addition to the South Australian State Heritage Register (*The Hills Courier*, June 8 2005) (Figs. 1, 2). The cottage is on the 60 acres of land officially bought by Ferdinand Mueller on 9th November 1850 from Samuel Davenport, but apparently rented by him from 1848. Mueller and his friend Friedrich Krichauff built a cottage on this land (Section 2852 Hundred of Macclesfield); it was occupied for a few months by Mueller until he decided to return to work as a pharmacist in Adelaide (Willis 1949, Gemmell 1975). Mueller retained this land (along with other blocks he had bought in Macclesfield and at Willyaroo, south of Strathalbyn) for some time after his departure to Victoria.

The cottage in question is described as a timber slab hut with the original chimney in the *Courier* article, where it is pictured with its present corrugated iron roof. Nancy Gemmell, who brought the cottage to the attention of South Australian naturalists in 1975, described the floor

Fig. 1. The current state of the cottage. Telephoto, Nov.2002, from main Wistow – Strathalbyn road. Ph. Bill Barker

and ceiling as consisting of "hand-hewn red gum slabs". The cottage may be the equivalent of the old shovel in which the handle and the blade have been replaced several times and there is probably no way of ever knowing whether any of the present cottage formed part of Mueller's and Krichauff's labours. But it is on land which indisputably belonged to Mueller and it does represent a building of the time and it should be treasured even if only for that. In its state of repair considerable funding will be needed to restore this modest but important building.

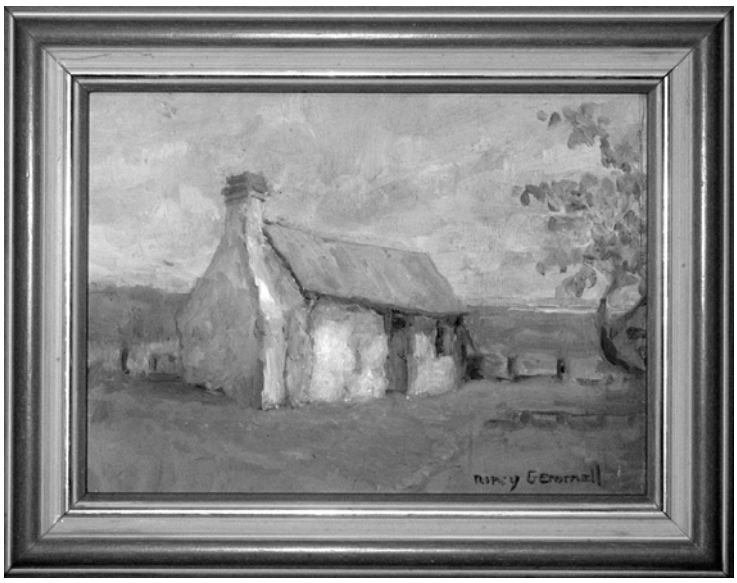

Fig. 2. Nancy Gemmell's reconstruction of the old cottage. (Board of Botanic Gardens & State Herbarium colln). Ph. Bill Barker

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Robyn Barker

Another use for herbarium specimens

A paper in the American Journal of Botany in 2004 documented the use of herbarium specimens for indicating climate change. In Boston Massachussetts, where there has been a recorded 1.5°C increase in mean annual temperature since 1885, the flowering times of plants growing in the Arnold Arboretum was found to be 8 days earlier between 1980 and 2002 than it was for species between 1900 and1920. This change was attributed to temperature.

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Consensus Census Report

June 2005 report

In the last issue Judy West announced the commencement of this project, and promised further information. The project is now well underway, and we plan to provide an update on progress in each issue of *ASBS Newsletter*. Future reports will likely be more concise than this one!

Organisational structure:

The Consensus Census, as reported by Judy, is a cooperative CHAH initiative, funded in part by the Natural Heritage Trust, through the Commonwealth Department of Environment & Heritage (DEH), with 2 years of funding (beyond the first 2 years, a mechanism will be developed to maintain the Consensus Census as a core CHAH project). It will have a Project Coordinator, who will liaise with a Working Group (one member from each State/Territory herbarium) and experts in various groups of plants, to generate a synonymic census of Australian plants. All herbaria will adopt this list as an "agreed national working list" for the Australian flora. All entries on the list will have the agreement of CHAH, but the list will be advisory only, individual jurisdictions are not bound by it in any way, and some may choose to adopt a different State view of the flora for their own purposes.

I have been appointed Project Coordinator of the project. My task will be to ensure that the project stays on track for completion in 2 years, to coordinate the preparation of lists, and circulate them to the Working Group and CHAH for their agreement. I will also be responsible for arranging, through consultation, resolution of any disagreements on what should become the consensus view, for publicity, and for getting the agreed names on to the web via APNI as quickly as possible.

The CHAH Working Group presently consists of the following representatives: Robyn Barker (AD), Alex Buchanan (HO), Dale Dixon (DNA), Ailsa Holland (BRI), Brendan Lepschi (CANB), Terry Macfarlane (PERTH), Neville Walsh (MEL) and Peter Wilson (NSW). Their task is to check the synonymic lists that are generated by the Project Coordinator, refer them where appropriate to their colleagues, and report any matters of concern back to the Project Coordinator. They also have the task of building support for the process in their own jurisdictions and being the local points of contact for what we hope will be many offers of assistance.

Substantial in-kind support is also being received from ABRS through Annette Wilson (editor, *Flora of Australia* vascular flora volumes), and within CANB the APNI team (Brendan Lepschi, Kirsten Cowley and Anthony Whalen) are also working hard on various aspects of data entry. Jim Croft and Greg Whitbread are managing and developing the esoteric IT details to deliver the Consensus Census as part of APNI.

CHAH is the sponsor and final arbiter of the Consensus Census, and have undertaken to adopt it as their agreed (but flexible) position on accepted names and synonyms for the Australian flora. Once the Working Group is satisfied with sections of the Census, that will be reported to CHAH, who will provide final consideration and endorsement.

Progress to date

One of the conditions of the contract to produce the Consensus Census was that the taxa listed on the Commonwealth EPBC Act as Extinct, Endangered or Vulnerable would be dealt with first. DEH have also embarked on a consultative process with the States and Territories to bring Commonwealth, State and Territory Rare & Threatened Lists into harmony, and have asked that the Consensus Census be involved in the more nomenclaturally challenging parts of this process.

The Project Coordinator and Working Group have now prepared synonymic lists for all of the (over 1200) EPBC taxa, and about half of these have already been loaded to APNI. The others are still going through the approval stages outlined above, but should be loaded by the end of June.

A lively and cooperative meeting of the Project Coordinator, Working Group, some CHAH representatives, ABRS and the APNI team took place in Canberra on 1–2 June, to review initial progress and lay down operating procedures for the project from now on.

The next stage of the project will involve working through the national flora family by family. Initial target groups are the families of *Flora of Australia* volume 3 (Hamamelidales to Casuarinales), Proteaceae, and Haloragaceae. Others will be nominated on a rolling basis.

We are also very keen to have researchers and experts in particular groups contribute to the project. This can happen via two main processes. First, it would be helpful if as many experts as possible were to work locally with the Working Group to check draft lists and provide commentary that will improve them. Second, we would be delighted if those with working lists of names and synonyms for any group were prepared to make them available to the Consensus Census as starting points for our compilations. Anyone with a list that they are prepared to offer should contact their local Working Group member to discuss it. All contributions to the project will be acknowledged.

It should be noted that the Consensus Census will only include names (formal or informal) which have been published in some form. It will not be a forum for delivery of novelties. However, it is envisaged that some kind of parallel "Precursor paper" series may be developed to facilitate publication of very short notes, new combinations etc.

Outputs

The Consensus Census will be delivered, incrementally, as a separate view of APNI, and will be an integral part of that database. In effect, it will gradually subsume the existing *What's Its Name?* (WIN), although that will be maintained as an alternative (tabular) view of the data.

Details of the Consensus Census view are still evolving, but at the Working Group meeting it was agreed that it would have the following minimum characteristics:

- The "core" view will be a standard Accepted Name/Indented Synonyms format, that most are familiar with from monographs and Floras.
- The "full view" will contain additional fields, initially Comments, Common Names and State/Territory level geographic distribution. Other fields may be added later.
- A "printable view" will also be available, where all names and synonyms will be arranged alphabetically, with synonyms cross referenced (x = y) to their accepted name. This will be useful for those who wish to print large sections and still be able to find all names easily.
- A Chooser screen will be available so that users can customise their reports to a large degree (e.g.. synonyms shown/not shown, comments shown/not shown, cross references shown/not shown, etc)

- Reports will have all names and synonyms hyperlinked back to the current bibliographic view of APNI, so that Comments etc.can be checked against references. This will also provide a Source document facility – all names in the Consensus Census will be linked to at least one reference in Bibliographic APNI.
- There will be some sort of guide on the Home Page detailing which groups have already been treated for the Consensus Census. The default for groups still in waiting will be the existing WIN.

Further information about the Consensus Census is provided on the CHAH (Web ref. 1). There a continually updated commentary will be provided on progress, and major players/contributors acknowledged.

Synonymy

One of the major agenda items at the Working Group meeting in Canberra was the question of how to handle synonyms. It was agreed that the success of the Consensus Census project will largely be judged on the extent to which we deliver complete synonymies. It was also agreed that we will attempt, so far as possible, to deliver a list containing all kinds of synonyms: formal (latinised) names published under the ICBN; formal (latinised) names existing in the literature but not formally published (manuscript names in current use); misapplied names in at least major works on the Australian flora; basionyms even if foreign; and informal phrase names. "Foreign" synonyms will not normally be included, except on a case-by-case basis for some key groups (e.g.. weeds).

For informal (phrase) names it was agreed that these would all be included if coined and published before the end of 2005, in the format in which they had originally appeared. Only major orthographic variants of phrase names will be listed. If a phrase name is required for interim listing (e.g. in case of conservation) and no latinised published name is available, then a phrase name will be coined in the CHAH/HISCOM style described by Bill Barker in *ASBS Newsletter* 122: 11–12 (2005). All users/coiners of new informal names are urged to adopt this style in future, and to encourage this, it was resolved that after 31 December 2005, the only new phrase names to be accepted into the Consensus Census will be those constructed in the CHAH/HISCOM style. All others will be ignored.

Conclusion

This is an ambitious and exciting new initiative which, if successfully carried through, will deliver a very powerful working tool for all taxonomists. It will also allow taxonomy to reclaim its rightful place as the discipline underpinning all biological science. I hope all Australian taxonomists will maintain the enthusiasm that has been displayed so far, to the conclusion of "the first pass" through the flora over the next 2 years, and provide a sound foundation for a living document into the future.

Web reference

1. http://155.187.10.27/chah/consensus-census/contributors.html

Tony Orchard
Project Coordinator

Attendees at Consensus Census meeting, Canberra, on June 1-2. From left. Greg Leach, Bill Barker, Greg Whitbread, Annette Wilson, Robyn Barker, Alex Buchanan, Peter Wilson, Tony Orchard, Dale Dixon, Ailsa Holland Brendan Lepschi, Neville Walsh, Judy West, Terry Macfarlane. Absent. Minutes-takers Kisten Cowley, Anthony Whalen. Ph. A. Monro (Bill Barker colln)

ABRS report

ABRS staffing news

Lyn Jessup has joined the team at ABRS as an Assistant Editor. She replaces Katy Mallett who took up another position in the Department of the Environment and Heritage. Lyn has moved from Brisbane and brings with her a wealth of experience in publishing and editing. Her other talents include illustrating plants, with some of her illustrations appearing in published volumes of the *Flora of Australia*.

Helen Thompson
A/Director, ABRS

ABLO report

Requests on a wide range of matters and an increasing number of visitors as the days lengthen have made the past three months a busy period.

Jenny Chappill, University of Western Australia, visited the Herbarium from 29 March to 1 April to study legumes. John Jessop, State Herbarium of South Australia, spent 10 days here in April, locating early literature for a glossary of the terminology of grasses. Rosemary Purdie, Dept of Environment and Heritage, Canberra, visited the Herbarium and Gardens on 9 May.

Trevor Whiffin, La Trobe University, visited the Herbarium on 27 May and gave a presentation on the development of computer-based keys for rainforest flora. Ellen Hickman, a botanical artist from Albany, visited Kew on 27 May to examine paintings by the brothers Ferdinand and Francis Bauer. She visited the Natural History Museum the following week.

Kew has joined the Consortium for the Barcoding of Life, a project that aims to use short, standardised DNA sequences as an identification tool for all species of living organisms. Perhaps optimistically, the goal is to achieve this by the year 2010.

In a marathon one-day effort, staff of Kew and a number of other UK institutions recently discussed all the proposals for amendment to the *International Code of Botanical Nomenclature*. Those proposals that receive sufficient support in the postal ballot will be thrashed out at the Nomenclature Session of the XVII International Botanical Congress in Vienna. It is fairly clear that the matter of conserving *Acacia* with an Australian type (*A. penninervis* Sieber ex DC.) will be raised from the floor at the Session. I hope that the Australian contingent at Vienna will strongly support the decision of the Committee for Spermatophyta to accept this proposal.

While researching data on the cultivation of eucalypts at Kew I found that there had been no herbarium collections from the Gardens since 1975. About 15 species are now growing outdoors here. I have therefore been making collections, with a set of duplicates for CANB.

On 16 March I attended a seminar organised by the Royal Horticultural Society, 'Plants from Down Under', on the cultivation of Australian plants in the UK. The range of species is much larger than I had been aware of. A useful book on the topic is Ross & Irons (1997), *Australian Plants for European Gardens*, privately published. Following the seminar Roberta and I were invited to Tresco, in the Isles of Scilly, to see the Abbey Garden where a wide range of Australian (and other temperate) flora is grown. While generally frost-free (though they have experienced some damaging frosts), the islands are subject to strong winds off the Atlantic and hence the gardens must be protected by hedges of trees and tall shrubs. The plantings are a delightful mix of species from regions with a temperate or Mediterranean climate. It was interesting to see plants such as *Dryandra formosa* and *Calothamnus validus* being visited by bumblebees.

In May we visited France and met a descendant of J.-B.L.C.T. Leschenault de la Tour, who visited Australia on the Baudin expedition of 1801–03, and after whom *Lechenaultia* is named. At the Jardin des plantes, Paris, the phanerogamic herbarium (P) is to be refurbished, starting some time in 2006. The fixed cupboards will be replaced by compactus units and the collections will be rearranged. Access will be restricted, so anyone requiring information on collections should contact either the ABLO or P well in advance. An interesting find there was a field label of John Dallachy, rolled up and tied to a specimen, that appeared to have been untouched since he attached it, probably in the 1860s.

People

Lucy Smith (alias Sydney Parkinson on a voyage of the *Endeavour* replica), an Australian artist now based at Kew, has received the Margaret Flockton Award for Excellence in Botanical Illustration, sponsored by the Friends of the Royal Botanic Gardens, Sydney.

Both Bernard Verdcourt and Roger Polhill have recovered from recent illness and returned to 'work'. John Dransfield, renowned expert on palms, retired on 15 April; his wife Soejatmi, an Associate at Kew, also 'retired' but both will return from time to time (from their new home near Monmouth, Wales) to continue their research.

Dr Robert Ross, known to many Australian botanists as a former Keeper of Botany at the Natural History Museum, South Kensington, died recently.

Wollemi Pine

RBG Kew has joined the Royal Botanic Gardens, Sydney, in a consortium formed to propagate and market *Wollemia nobilis*. Proceeds from sales are directed towards conservation of the wild populations. In recent weeks the plant has received wide publicity in the UK as preparations are made towards placing it on sale later in the year. On 10 May, young trees were planted simultaneously at Kew (by Sir David Attenborough) and at Wakehurst Place (by actor Kenneth Branagh). The plant at Kew is in a conspicuous position near the Orangery, with a Monkey Puzzle not far away, and attracts many visitors. A plant was also displayed by Kew at the Chelsea Flower Show. There have been items in newspapers and on television.

Chihuly glass

Various parts of the Gardens, both in glasshouses and outdoors, are now adorned with glass sculptures by the American Dale Chihuly. They are very diverse in shape, size and colour. Reaction has been varied – but that's the way with much contemporary art. There's no need to rush to see them, as they'll be on display until 15 January 2006.

Library requests to the ABLO

Requests for bibliographic assistance are one of the most common inquiries to the ABLO. I would like to remind people of the procedure for requesting photocopies. Photocopying is governed by copyright legislation, which means that a request form must be signed by the person requiring the copy for research – neither a librarian nor the ABLO can sign on their behalf. All requests must be made through an institutional librarian. A photocopy request form is available from the ABLO; it must be filled in with details of the author, publication, pages requested and date, then signed and faxed to Kew (44 20 8332 5278). RBG Kew covers the cost of a limited number of pages to the ABLO. This allowance includes both outside requests and the ABLO's personal research. It is important, therefore, bear in mind that the Kew Library is not to be regarded as a primary source, and to check whether the work you need is available in Australia so that unnecessary requests are avoided. You can also save the ABLO's time by checking the Kew library catalogue and including the call number in the request form. Many older journals are not yet in the electronic catalogue, however, and can be searched only in the old catalogue in the Kew library.

Images of herbarium sheets

Some herbaria besides K now supply scanned images of herbarium sheets. By all means ask the ABLO if she/he plans a visit to the relevant herbarium but otherwise, if you want such images, please contact the institution directly to ask if they can be provided.

Web reference

1. www.rbgkew.org.uk/library/using.html

Alex George

Death

Dorothy Catling

Dorothy Catling, the well-known authority on fibre identification, died in Durham (UK) on 15 April, aged 77. After retirement from a career in forensic science, Dorothy embarked on anatomical studies in Australian Proteaceae for a Ph.D. While earlier work was done at Kew, where she came in contact with a number of Australian botanists, she later transferred to Durham University where she was awarded her doctorate in 1996. She continued to teach annual short courses on fibre identification, attended by many archaeologists.

Publications: major and relevant to Australia

Catling, DM & Gates, PJ (1998). Nodal and leaf anatomy in *Grevillea* R. Br. (Proteaceae). *Bot. Jahrb*. 120(2): 187-227.

Catling, DM (1996). The systematic anatomy of Grevilleeae and Persooniinae (Proteaceae). 223 pp. Thesis: University of Durham: Doctor of Philosophy.

Catling, DM & Gates, PJ (1995). Nodal anatomy in *Hakea* Schrader (Proteaceae). *Bot. Jahrb.* 117(1-2): 173-186.

Catling, DM & Gates, PJ (1995. Leaf anatomy in *Hakea* Schrader (Proteaceae). *Bot. Jahrb*. 117(1-2): 153-172.

Baas, P, Bolton, AJ, Catling, DM (eds). (1976). Wood structure in biological and technological research. 280 pp. Leiden Botanical Series no. 3. (Leiden University Press).

Catling, DM & Grayson J (1998). Identification of Vegetable Fibers. 89pp. (Archetype Publications).

Exhibitions

Dr Winifred Mary Curtis: centenarian with a lasting legacy

Dr Winifred Mary Curtis turned 100 on the 15th of June 2005. Over the last 100 years Dr Curtis has worked hard, lived life and left Australians, especially Tasmanians, a lasting legacy. A biographical sketch of her life is given by Kantvilas (1991). The 'sketch' was compiled by conducting and recording extensive interviews with Dr Curtis and, though short, gives a good insight into Dr Curtis' life and achievements. Dr Curtis would be an ideal subject for a biography.

To celebrate this significant birthday staff of the Tasmanian Herbarium and the University of Tasmania have put together an exhibition on Dr Curtis' life. The exhibition is entitled 'Dr Winifred Mary Curtis: 100 years of botanical research, teaching and travelling' (see flier [17]). Gillian Ward (Information Co-ordinator, Morris Miller Library, University of Tasmania) and Zoe McKay (Reference Librarian, Morris Miller Library, University of Tasmania) have done a magnificent job of sorting through the many objects and documents housed at the Tasmanian Herbarium, the University of Tasmania and from a variety of other sources to bring together this exhibition. Some of the more interesting items include travel documents, brochures and photographs from Dr Curtis' travels [and she seemed to keep everything from her many trips to places like Bermuda, Iceland, Japan, Mexico and Russia], photographs of her throughout her life [such as featured in the flier[17] for the exhibition], and quotes from the interviews with Dr Curtis that formed the basis to the biographical sketch given by Kantvilas (1991).

I am sure everyone will wish Dr Winifred Curtis all the best for her birthday and I hope many of you are able to see the exhibition.

In recognition of her achievements Dr Curtis has received many honours. While putting this exhibition together, several honours that were not listed by Kantvilas (1991) have been brought to my attention, and so, a more complete list is given below. Kantvilas (1991) listed 15 books and c. 30 scientific publications authored by Dr Curtis: two additional publications are also given below.

Honours bestowed on Dr Winifred Mary Curtis in recognition of her achievements include:

1941 Keeper, Tasmanian Herbarium. Dr Curtis worked in an honorary capacity at the herbarium from this period to the present day. She is now an Honorary Associate of the Tasmanian Herbarium.

1964 Honorary Associate Life Member, British Ecological Society

1966 Honorary Life Member, Australian and New Zealand Association for the Advancement of Science (ANZAAS)

Clive Lord Memorial Medal, the Royal Society of Tasmania

Honorary Research Fellow, Plant Science, University of Tasmania (to at least 1998)

1974 Patron, Launceston Field Naturalist Club (to present)

1976 Australian Natural History Medallion, The Field Naturalists Club of Victoria

1977 Member in the Order of Australia

Honorary Life Member, Society for Growing Australian Plants (SGAP, now Australian Plants)

1987 Honorary Doctorate of Science, the University of Tasmania

1988 Australian Plants Award, SGAP

1990 Winifred Curtis Prize (Plant Science, University of Tasmania). This prize is awarded annually to students who have shown greatest proficiency in first year sciences.

1991 *Aspects of Tasmanian Botany: A Tribute to Winifred Curtis*. M.R. Banks, S.J. Smith, A.E. Orchard & G. Kantvilas (Eds), Royal Society of Tasmania. "This volume is a tribute to the botanical work of Dr Winifred M. Curtis AM, work largely concerned with Tasmanian plants. Scientific and public knowledge of the Tasmanian flora has been greatly enhanced by her contributions."

1993 Winifred Curtis Gateway, Waverley Flora Park, Hobart

1995 Mueller Award (ANZAAS)

1997 Australia Day Citizen of the year, Hobart City Council

1998 Curtis Laboratory (Plant Science, University of Tasmania)

Winifred Curtis Scamander Reserve

2001 'The Peoplescape' exhibition, Centenary of Federation Celebrations, Canberra. A life size image of Dr Curtis was placed in this exhibition of significant Australians in recognition of her contribution to the understanding and documenting of Tasmania's Flora.

2003 Honorary Life Member, Royal Society of Tasmania

2005 Tasmanian Honour Roll of Women (established 2005). Awarded for her contribution to botany.

Books co-authored by Dr Winifred Mary Curtis in addition to those listed in Kantvilas (1991) are:

Curtis, W.M. and Pearse, D.C. [illustrator] (1965?). *Forests and flowers of Mount Wellington,*

[17] A colour version of the flier (opposite) can be emailed to interested parties on request.

Tasmania. Tasmanian Museum and Art Gallery: Hobart.

Curtis, W.M. and Morris, D.I. (1994). *Students Flora of Tasmania, Part 4b*. *Angiospermae: Alismataceae to Burmanniaceae.* Tasmanian Museum and Art Gallery: Hobart.

Acknowledgment

A special thanks goes to Gillian Ward (Information Co-ordinator, Morris Miller Library, University of Tasmania) for the hard work and enthusiasm she has put into producing the exhibition 'Dr Winifred Mary Curtis: 100 years of botanical research, teaching and travelling' and for producing the flier* for said exhibition that is reproduced here.

Reference

Kantvilas, G. (1991). Winifred Mary Curtis: A biogeographical Sketch. *Aspects of Tasmanian Botany: A Tribute to Winifred Curtis*. M.R. Banks, S.J. Smith, A.E. Orchard & G. Kantvilas (Eds), Royal Society of Tasmania: Hobart.

Marco Duretto
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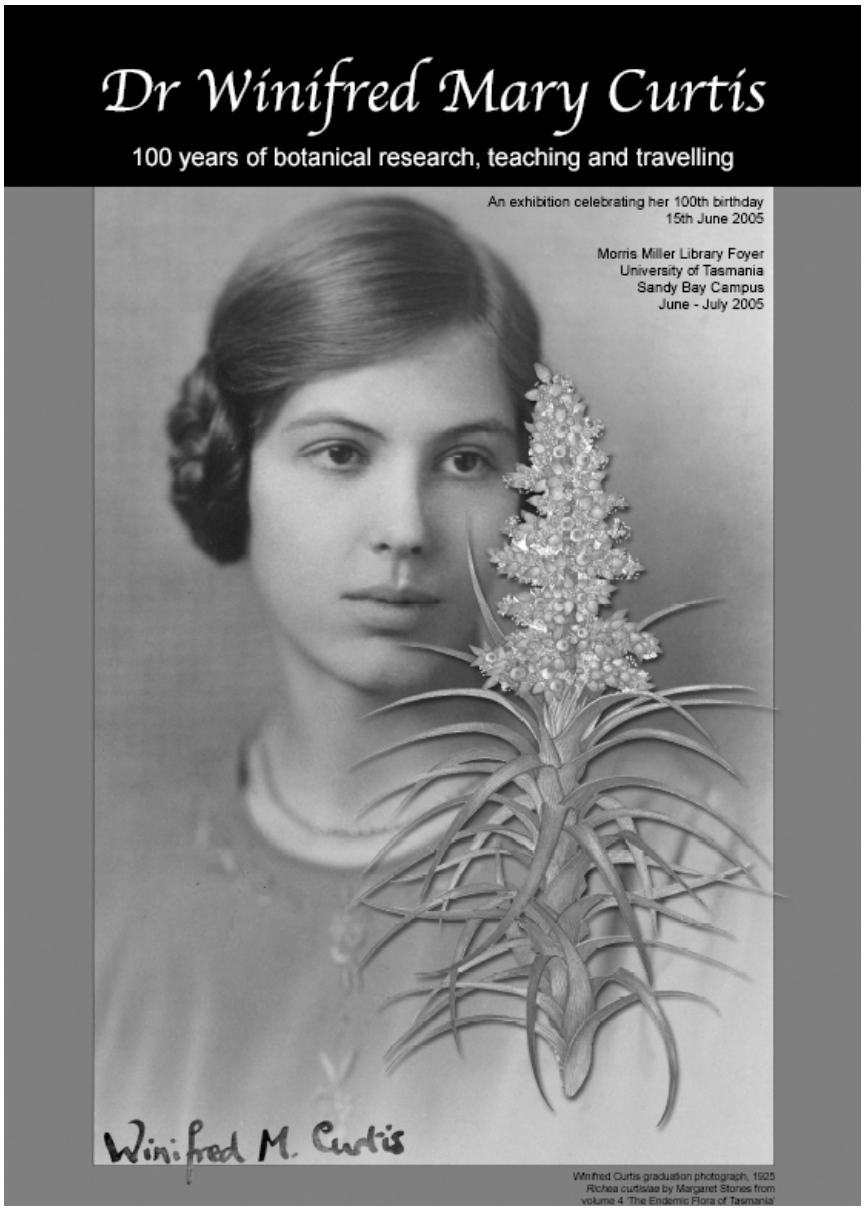


Colonial connections: the Cape and New South Wales

The Historic Houses Trust is pleased to present *Cape Town: halfway to Sydney 1788-1870* – a new exhibition at the Museum of Sydney from 13th May to 7th August.

This exhibition continues the Museum of Sydney's exploration of our colonial past and presents for the first time in Australia a remarkable collection of rare artworks from the Brenthurst Library belonging to the Oppenheimer family in Johannesburg.

Featuring exquisite watercolours and dramatic oils from South African artists along with delicate sketches, rare books and journals from visitors and travellers, the exhibition reveals the significant connections between the two British colonies of the Cape and New South Wales: their shared British Governance and bureaucracy, wealth based on forced or cheap labour (whether convicts, slaves, or indigenous people), British influence on taste, fashion and morality, as well as scientific study of unique flora and fauna.

Book reviews

Flora of Australia grasses continued

Review by Marco Duretto
Tasmanian Herbarium, Tasmanian Museum and Art Gallery

Mallett, K. (Editor) (March 2005). *Flora of Australia* Volume 44B, Poaceae 3. 504 pp. ABRS/CSIRO, Melbourne.
www.publish.csiro.au
Hardback (ISBN: 0643069607) AU $120.00
Paperback (ISBN: 0643069615) AU $99.00

It has been three years since a volume dealing with the vascular flora has been published in the *Flora of Australia* series; and four years since a volume containing taxonomic accounts of vascular plants. Not that the Australian Biological Resources Study has not been busy in the interim, it is just that another volume dealing with vascular plants will be well received.

Volume 44B is the second published of the four planned volumes (43, 44A, 44B, and 44C) that will cover the Australian members of the family Poaceae. The first published, Vol. 43 (Mallett & Orchard 2002), is a comprehensive and informative introduction to the family Poaceae. It includes dichotomous keys to the tribes and genera, as well as distributional maps for all species and subspecific taxa (see review by Morrison 2003). Volume 44A is expected to cover the subfamilies Pharoideae, Pooideae, Bambusoideae and Ehrhartoideae and Volume 44C the subfamilies Centothecoideae and Panicoideae.

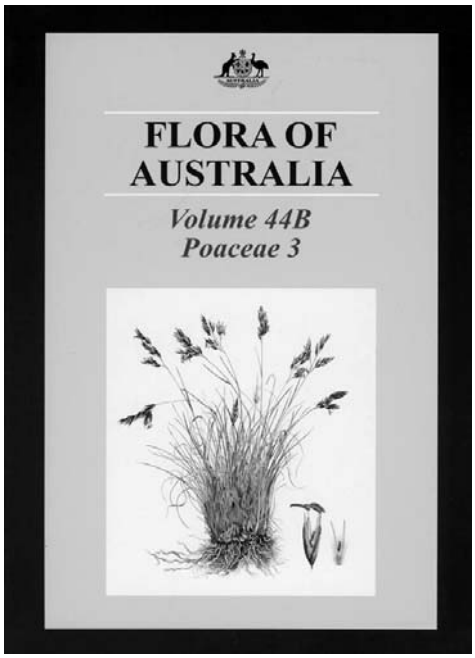
Volume 44B contains the accounts of the five remaining subfamilies found in Australia, viz. Aristidoideae, Arundinoideae, Chloridoideae, Danthonioideae and Micraroideae. Arundinoideae is a small subfamily of two tribes and three genera: the aquatic genera *Arundo* and *Phragmites*, and the endemic *Amphipogon*. Danthonioideae, a cosmopolitan subfamily, is represented in Australia by 14, largely temperate, genera including some significant ones, e.g. *Austrodanthonia*. Aristidoideae contains the species rich and widespread *Aristida*. Micraroideae, which is largely endemic, includes two tribes and three genera including *Eriachne* (Wanderrie Grasses) and *Micraira* (unique in the grasses in that they have spirally arranged leaves; and, if that is not enough, they also behave as resurrection plants). Chloridoideae, which is the largest subfamily in the volume, is a mainly tropical group and includes the two important endemic genera *Triodia* (Spinifex – 'symbolic of central Australia') and *Astrebla* (Mitchell Grasses), as well as *Eragrostis* (Lovegrasses), *Sporobolus* (Ratstail Grasses), and *Chloris* and relatives (Windmill Grasses).

In total there are accounts of 55 genera and 468 species. This is the work of 48 contributors (authors, illustrators, photographers). The volume was edited by Katy Mallett with the assistance of 12 other people. Co-ordinating 60 people to produce one volume, and a volume that looks good, is easy to use and uniform in appearance, is no small feat and all involved should be congratulated.

The book starts with an account of the currently accepted classification of grass genera found in Australia (based on Kellogg [2002] as presented in Vol. 43). This is most useful as it places Vol. 44B in context and indicates the taxonomic placement of all Australian genera and in which volume they are expected to appear. Much of the classification presented represents the current thinking on the family, such as from the Grass Phylogeny Working Group, with some of the literature cited 'in prep.', e.g. in subfamily Micraroideae. This is most useful and

informative though you have to assume that the authors (and editors) are confident these papers will be published.

The various taxonomic accounts give a delightful insight into the biodiversity of grasses in Australia. Many may be surprised at the large number of endemic species and genera, as well as some of the relationships. Tribes such as Triodieae and Eriachneae, both with large genera aligned with small genera, must make most want to perform cladogenesis just out of sheer curiosity.



The tribes and genera are not numbered though the subfamilies, species, subspecies and varieties are. The reasoning for this is given in Volume 43; that is, as the knowledge of the grasses improve, circumscription of some tribes and genera is expected to change. A little annoying when you are used to just flicking through the text following numbered genera, but, in reality and as people keep telling me, what are indexes for. Under each sub-family there are keys to tribes and genera. Of course, if you do not know what subfamily your beastie belongs to there are excellent keys to tribes (McCusker 2002) and genera (Simon 2002) in Volume 43. I can't help but feel a key to subfamilies would have been useful in Volume 43 so that the keys to all tribes and/or all genera need not be used but I suspect this may not be an easy thing to produce.

The overall layout is very similar to that seen in recent volumes of the *Flora of Australia*. The length of the descriptions appears to be longer in some cases, which is not a bad thing as some in the past have been far too brief. There appears to have been greater latitude in the length of the text outlining distribution and ecology as well as how the taxon in question differs from relatives and the variation found within the taxon. While using various keys I found these notes (and the maps!) invaluable.

The placement of the maps with the description is a major change for the *Flora of Australia*. It is just fantastic to have all the data of a taxon in one place. A welcome change from previous volumes in which pages of maps were placed in the text, or later, *en masse* at the end of the accounts. Having the map next to the verbal description of the distribution is so much more useful. Hopefully, this vast improvement is planned for future volumes. I must admit I was worried that the maps published in Volume 43 would not be reproduced in Volume 44 with the taxonomic accounts. These volumes are large: why drag out two when all the data can be in one place. Also, in Volume 43, as the maps are placed in taxonomic (and not alphabetical!) order the index has to be used again.

Another change, though minor but almost as useful as that mentioned above, is the inclusion of what the page number 'that bloody figure' is featured on after the figure is cited. This would have added to editorial time in proof reading etc.but the end result is worth it: a much friendlier account to use.

The colour photographs are mostly of good quality and illustrate the diversity found in the family. Some are very useful for identification, e.g. Plate 3 (p. xiii), which illustrates the differences in habit between *Cortaderia jubata* and *C. selloana*. Many others are beautiful photographs of groups that are difficult to photograph and may make people look a little closer at grasses in the future.

Line drawings have been used extensively throughout the volume. For some genera, such as *Eriachne*, these were commissioned for the volume, while many others have been reproduced from various journals. All are useful in illustrating the various features and do help when the user is trying to determine exactly what the author means in a description. Of course, for the non-specialist, there are never enough drawings.

I did not have the time or the inclination to 'try out' or check each account by the various authors with the holdings of the Tasmanian Herbarium [my apologies] but I did look at a few. To my surprise and horror there were unidentified herbarium specimens of grasses in the collection [and a priority 1 taxon for Australia's Virtual Herbarium too!]. After meditation and digging up the memories and those slight skills I learnt in grass practicals many years ago [a whole

semester of them under the tutelage of Prof. H.T. Clifford] I tried out various keys (e.g. for *Aristida, Austrodanthonia, Chloris, Eragrostis, Eriachne, Triodia,* etc.). Not being familiar with many of the groups and the often specific terminology (well I am used to lobes a little bigger than 0.3 mm across and stamens you can get your fingers around) does have its drawbacks. But, with a little diligence, not too much sweat, and cross referencing with descriptions and notes, I found most of the keys worked well and I was comfortable with most of the identifications I made. Which, to be honest, was a relief. Some of the problems I had, e.g. with *Austrodanthonia*, were because of my lack of understanding of some of the terms and how they applied to that group, and because of my choice of specimen.

I do have a gripe though, which is probably minor, and that is the glossary. It is called a 'Supplementary Glossary'. I was left wondering if this is supplementary to Volume 43 and the remainder of published volumes or something else. With many families a small supplementary glossary at the end of the volume is sufficient. With groups such as grasses where many of the important taxonomic features are not found in other groups I think a special glossary should be produced that covers all the important features of the group. In effect this may have been done in Volume 44B but the glossary could be labelled 'Supplementary Glossary for Poaceae' thus informing the user that most of the specialist terms used in the text can be found here. I would ask that the entire glossary be reproduced in volumes 44A and 44C. To be honest I did survive without using the glossary too frequently and I did find the illustrations embedded within it useful.

Though Volume 44B will be an invaluable and interesting resource to anyone interested in grasses and/or the Australian biota it can, as any such book, hardly be said to be a bloody good read from cover to cover. The new combination in the last paragraph of the taxonomic accounts, though, did take me completely by surprise when I breathlessly got to the end of my first reading. In retrospect, it shouldn't have, as all the clues were there. As I was saying: it is a delight to see Volume 44B published. The changes in the format from previous volumes of the *Flora of Australia*, such as the placement of the maps with the descriptions, page numbers near figure citations, are a vast improvement for the reader and researcher. The plates and figures are extensive and do illustrate a wide range of features and are very useful. The expanded notes on many of the taxa are excellent. I believe anyone working on grasses anywhere will find this publication a 'must have'. In addition, I am sure, and hope, this volume, and the next two installments of Volume 44, will stimulate further research and interest on our diverse grass flora.

Acknowledgements

I would like to thank Matt Baker and Lyn Cave for commenting on an earlier draft of this review.

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New South Wales vegetation: a comprehensive view

Reviewed by John W. Turnbull
gumtree@iimetro.com.au

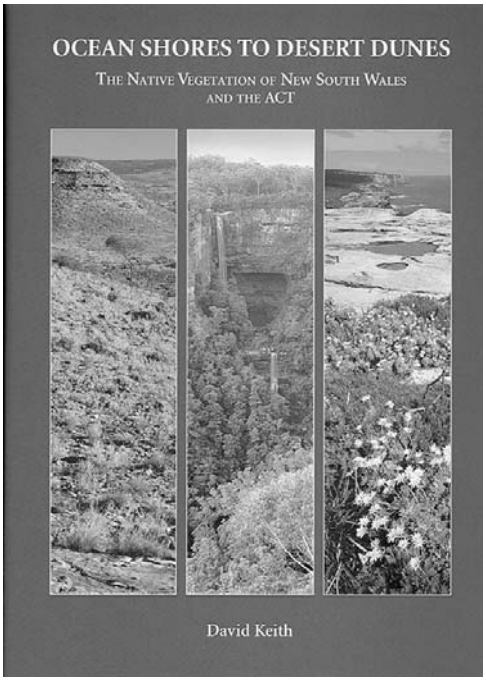
***[18]Ocean Shores to Desert Dunes: The Native Vegetation of New South Wales and the ACT,* by David Keith**
Department of Environment & Conservation (NSW), Hurstville, Sydney. July 2004. 365pp. with maps, colour photographs and indexes.
Retail Price: Aus$ 79.95 ISBN: 0731367804

In recent years there have been many studies of the native vegetation in southeastern Australia. They have mapped the distribution of species and communities, explored their diversity and described their dynamics. New species names have come into the literature as taxonomists have completed and published systematic studies. The time was certainly right for a comprehensive review to consolidate the new knowledge and to present it in a form suitable for a wide audience. Such basic information is critical if native vegetation is to be managed wisely, and effective conservation plans developed and supported. To achieve this objective this book describes broad formations of native vegetation such as rainforests, heathlands and arid shrublands. Within each formation several vegetation classes

[18] The reviewer, now retired, formerly held positions as Senior Principal Research Scientist, CSIRO Forestry and Forest Products (Canberra) and Chief Scientist, Centre for International Forestry Research (Bogor, Indonesia).

are identified and each is comprehensively described, including conservation and management challenges and its place in the evolution, history and development of New South Wales and the Australian Capital Territory.

The first part of the book is a brief introduction to native vegetation. It points out that much of Australia's heritage is closely associated with its natural vegetation. 'The bush' is central to Aboriginal culture and this landscape also features prominently in the art and culture of post-European settlement. Native plants have direct and indirect and indirect economic significance in Australia and other countries. Australian eucalypts are the most widely planted hardwood species in the world and support pulp and paper industries in countries as widely separated as Brazil, China and South Africa. There is a general description of the ecology of plant species and their communities, and mention of the processes responsible for the decline in the overall biological diversity of the vegetation.



A very valuable component of the Introduction is a review of vegetation classification and mapping in New South Wales. Classification and mapping began over 100 years ago with the work of German botanist Frederich Diels. Fifty years later a vegetation map was produced as part of the 'Atlas of Australian Resources' and this has been improved on in recent years culminating with the vegetation map produced by the National Land and Water Audit in 2001. Newer technologies such as satellite imagery and computer-assisted spatial modelling to fill unmapped areas now assist the task of plotting distribution and boundaries of vegetation types. National inventories of plant communities by Specht and then Beadle were made well over 20 years ago. Central to David Keith's new synthesis of information on the native vegetation of New South Wales and the Australian Capital Territory is a new classification system. This classification has succeeded in being neither too complex nor too general. Groups of plant communities comprising similar plant species are grouped into 99 vegetation 'classes'. Plant communities identified in existing regional vegetation studies have been interpreted and assigned to the new classes and their distribution mapped. The 99 classes have been grouped into vegetation formations based on structural and physiognomic features. These forms include rainforests, eucalypt forests, heathlands, arid shrublands and so on and can be readily recognised by the non-specialist. A simple key in the book assists their identification.

Reliable vegetation maps are crucial in land management and environmental planning. Although this book represents a major step forward in classifying and mapping the vegetation of New South Wales and the ACT, the author makes it clear that there remain deficiencies in survey data and mapping in parts of the State. Coverage is incomplete of the western slopes, western plains, and parts of the tablelands and north coast. The scale at which the maps are produced determines the level of detail for particular end uses. The mapping scale used by Keith was 1:1 million and a resolution of 10 km grid cells to provide an overall pattern of vegetation. The maps in this book are at 1:2 million scale, and in separate sections for north and south of the state, due to page size constraints. At this broad scale the maps are of limited value for location-specific or even regional assessments and resource management planning. However, they provide a framework within which for such activities can be related to native vegetation in other areas of the state. In addition to the maps of existing vegetation, reconstructed maps have been compiled of the historical distribution of the vegetation classes to show pre-European settlement vegetation patterns.

Part 2 of the book comprises 266 pages describing and illustrating the 12 vegetation formations and 99 classes. The main features of the ecology, structure and human use are covered for each formation. This is followed by 2-pages of description, photographs and a map for each vegetation class. The description includes reference to relevant published research and is complemented by a list of indicative species of trees, shrubs, herbs, ferns, grasses etc. The author has clearly made an effort to use the most up to date nomenclature for species and very few

errors have crept through. Great care has been taken with selection of colour photographs, some of which were taken especially for this book, and the result is an exceptionally well-illustrated publication. Part 3 comprises foldout, coloured maps of existing and reconstructed native vegetation of New South Wales and the ACT.

Following the maps are three appendices. Appendix 1 is a table of the estimated present-day area of each vegetation class in NSW and ACT and the per cent cleared since settlement. There is considerable uncertainty in these estimates but they provide an interesting snapshot of the extent of each vegetation class that has been cleared and that which remains. For example an estimated 60-90% of Littoral Rainforests have been cleared and only 12-20 km^2 remain. At the other extreme, less than 10% of Sand Plain Mulga Shrublands have been cleared and 40 000-65 000 km^2 remain. Appendix 2 relates the vegetation classes presented in the book to identified endangered ecological communities at December 2003. Appendix 3 shows the changes to vegetation class and formation names between an earlier version of this classification (2002) and the version in this book. The book concludes with a glossary of terms used in vegetation science, management and landscape ecology, an extensive bibliography, and botanical and general indexes.

The 400 or more excellent colour photographs that illustrate this book make it worthy of a place on any coffee table. But it has much more to offer to land managers, research scientists and anyone with a serious interest in the ecology, evolution, history, conservation values and responses to management of the diverse vegetation in the landscapes of New South Wales and the Australian Capital Territory. It also complements the many regional plant identification guides. David Keith, a research scientist in the NSW Department of Environment and Conservation, has produced an outstanding, authoritative review that will certainly be a standard reference text for many years. It represents very good value for money and is highly recommended.

Three more French works

Alex George
Australian Botanical Liaison Officer 2004–05, Kew

Philippe Jaussaud & Édouard-Raoul Brygoo (2004), *Du jardin au Muséum: en 516 biographies*, Muséum national d'Histoire naturelle Publications Scientifiques Collection Archives, Paris. Pp 630 (17 × 24 cm). Price €39 (paperback)

In the same series as the two books mentioned in the previous *Newsletter*, this, as the title says, provides biographies of 516 people associated with the Muséum national d'Histoire naturelle, Paris. Most range between a quarter page a full page, descibing the person's career in the Muséum (for example, that on Antoine Guichenot makes no mention of his visit to Australia). Some are accompanied by portraits or other illustrations of their work, e.g. specimens, drawings, and title pages. Eighteen annexes give chronologies of the several periods in the history of the Muséum, various documents such as royal and government decrees, and the heads of the major departments of the Muséum.

Joëlle Magnin-Gonze (2004), Histoire de la botanique, Delachaux et Niestlé, Paris. Pp 240 (15.5 × 22.5 cm) Price €26 (paperback)

This is a well-illustrated, concise account of all aspects of botany from ancient times to 1912, illustrated with portraits, title pages and drawings. The last 20 (unnumbered) pages are a chronology of the main events in botany, with the years of publication of significant works.

Philippe Morat, Gérard Aymonin & Jean-Claude Jolinon, direction scientifique (2004), *L'Herbier du monde: cinq siècles d'aventures et de passions botaniques au Muséum national d'histoire naturelle* [*Herbarium of the world: five centuries of adventures and botanical passions at the national Museum of natural history*], Les arènes / L'iconoclaste, Paris. Pp 240 (22 × 32 cm). Price €63 (casebound)

This is a sumptuously illustrated book, by 22 authors, aimed at bringing the importance of herbaria to the general reader. It is divided into four main sections: L'Herbier du roi 1640–1789, Les grandes expéditions 1789–1815, Du monde entier 1880–1914, and Des herbiers et des hommes 1914–2000. Before these is an introductory chapter, L'Herbier vivant (the living herbarium) by Philippe Morat (well known to many Australian botanists), which neatly describes the functions and importance of herbarium collections. The emphasis is, understandably, on the Paris herbarium but, as the title indicates, it is placed in a world context with accounts of French botanists and botanical exploration in many countries. Of particular relevance to Australia is a chapter by Michel Jangoux on the Baudin voyage to Australia in 1801–03. The photographs of herbarium specimens are excellent, with an Australian plant, *Pomaderris lanigera*, on the front dust jacket.

Coming meetings

Acacia 2006: knowing and growing Australian wattles

Ringwood Convention Centre and Royal Botanic Gardens, Melbourne.
26-28th August 2006.

Organisers: Australasian Plant Society Vic. and National Herbarium of Victoria.

Program

Saturday 26th August
Horticultural Sessions. Conference Dinner. Ringwood Convention Centre

Sunday 27th August
Visits to local gardens

Monday 28th August
Scientific Sessions – co-hosted by National Herbarium of Victoria.
Papers are currently being called.
Venue – Royal Botanic Gardens, Melbourne.

Tuesday 29th August – Saturday 2nd September
Post conference tour of country Victoria. Self-guided tour maps will also be available.

Expressions of interest for papers and posters are being sought. Researchers wishing to present a paper need to submit an abstract by 31st October 2005.

Themes include, but are not limited to, taxonomy of *Acacia*, genetics, pollinations and hybridisation, acacias in conservation, weediness and utilisation.

Summaries should be sent by email to *Acacia2006.Melbourne@netlink.com.au* and *daniel.murphy@rbg.vic.gov.au* and must include the title of the proposed paper, author, organisation and email address.

For further information telephone:
Marilyn Gray 03 9728 4256 w, 9728 5891 h.

Plant conservation - the challenges of change

National Wine Centre, Adelaide
: 26 Sept to 1 October 2005

The Australian Network for Plant Conservation and the South Australian Department for Environment and Heritage invite you to Adelaide to exchange ideas and to participate in discussions on the challenges that currently face us all in plant conservation.

Whether these be challenges of changing climates, changing environmental conditions, changes in government and policy focus, or confronting scientific information, this conference will stimulate consideration and participation.

The Conference theme is Plant Conservation – The Challenges of Change.

The sub-themes include:
- Extreme policy changes
- Urban ecology
- Using revegetation to achieve ecological outcomes
- Indigenous interests in conservation

The conference will appeal to all those involved in plant conservation from the on-ground practitioners to researchers and policy makers. All are invited to share experiences in managing for conservation in times of change and uncertainty.

The Conference will be held at the National Wine Centre in the environs of the Adelaide Botanic Gardens and adjacent to Adelaide's East End restaurant district. A three-day scientific program and two days of post-Conference workshops are planned with plenty of opportunity to enjoy Adelaide's fine food and wine.

Early bird registration: 30th July

Call for Papers:
Papers addressing the conference themes and other issues are invited.

If you are interested in presenting a paper, poster, workshop or conservation techniques workshop, please send an extended abstract of no more than one A4 page with a 250 word summary by Friday 15th July 2005 to: *anpc2005@plevin.com.au*

For further information, visit:
www.plevin.com.au/anpc2005/index.htm , or

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Canberra ACT 2601
Tel: 02 6250 9509
Fax: 02 6250 9528
email: *anpc@deh.gov.au*
website: *www.anbg.gov.au/anpc*

FASTS

There has been a flurry of activity from the FASTS Desk in the last couple of months and this is reproduced below in abbreviated form. Anyone wishing to have a copy of the Fasts submissions, please contact the editors.

- Copy of the Fasts submission on Research Quality Framework: received 4th May
- Copy of the Submission on Building University Diversity: Future Approval and Accreditation Processes for Australian Higher Education – received 28th April

Chief Scientist not seeking third term

Robin Batterham will not be seeking a third term as Chief Scientist and will finish his role on 31 May.

FASTS has a strong view on the role and the need for a full time Chief Scientist (refer, for instance, our submission on the Chief Scientist for the Senate inquiry last year which is in the media release archive of news-reports on the FASTS website) and hope that the CS will have a strong appreciation of the diversity of science and R&D outcomes, impacts and pathways to successful economic, environmental and social utilisation of R&D.

(17th May 2005).

Alarming trend in R&D investment must be reversed

Analysis of the budget shows Commonwealth investment in R&D will drop to below 0.6% of GDP in 2005/6 – the lowest level in two decades.

(Media Release: 19th May 2005)

Media wants environment and medical R&D information

A survey of journalists across Australia shows that when it comes to R&D they are particularly interested in environmental and medical R&D information.

The survey was sent to about 1200 media outlets across Australia with 114 journalists responding to the web survey, most of them being science journalists (91 or almost 80%).

A list of 32 R&D topics was provided on the web survey for journalists to choose from, and the top 12 topics chosen (in order) were:

- Water Use (65%)
- Native Flora & Fauna (56%)
- Medical treatments (55%)
- Social Issues (54%)
- River Health (54%)
- Global warming/climate change (53%)
- Disease threats (52%)
- Genetic engineering (52%)
- Waste Management (51%)
- Biotechnology (50%)
- Agricultural production (50%)
- Salinity (50%)

Academy of Science: Call for nominations for Awards for scientific excellence for junior and senior researchers

Nominations are invited from senior and junior researchers for awards for outstanding research in the natural sciences. Nominations close 30 August 2005. Information about the awards is available at *www.science.org.au/awards.*

Centres of Excellence and Federation Fellows Funding

The Centres of Excellence will receive $122m in Commonwealth funding over the next five years and partner organisations have pledged to contribute $71 million to support the work of the Centres.

The 24 Federation Fellows for 2005 will receive an indexed salary of around $235,000 a year for five years. Four of this year's Fellowships will be awarded to expatriate Australians, fifteen Fellowships to researchers residing in Australia and five to foreign nationals who will come to Australia.

A list of their projects can be found at *www.arc.gov.au/pdf/Attachment_FF_June2005.pdf*

Developing a national strategic framework of e-Research

Along with the RQF, National protocols, University Governance and National Infrastructure Strategy, DEST are also undertaking a consultation process to develop a national strategic framework of e-Research "to carry Australia forward in its journey of embracing the capabilities offered by e-research".

This is a joint effort of DEST and the Department of Communications, Information Technology and the Arts (DCITA).

E-Research is defined as issues around research methodologies emerging from increased access to

- Distributed high performance computing resources; and
- Data resources, research instruments using the grid, internet, LANs and advanced ICT.

In brief, the purpose of the strategy is to maximise ICT to enable real research (as distinct, say, from conducting virtual research). The core idea is that provision of ICT infrastructure and digital data bases is only part of the requirements; even more important is the engagement of researchers and research groups in the adoption of e-research.

Key issues to be considered include

- Access to infrastructure
- Accessibility to data and research outputs
- Cultural change by researchers and research communities to maximise take up of e-Research
- Skills issues
- Engagement by industry
- Security – data integrity issues
- Role of funding agencies

DEST are currently running some consultation forums and have invited about 60 organisations to be part of a reference group (including FASTS). Anyone can join if they wishThe intent is for the Committee to e-mail out questions and propositions to the reference group to get a wide range of opinions. To be involved refer to the e-Research website[19] or contact Kristina Vaughan, secretariat of the co-ordinating committee *Kristina.Vaughan@dest.gov.au* .

[19] *www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_issues/e_research_consult/e_research_coord_committee.htm*

ASBS Publications

History of Systematic Botany in Australia
Edited by P.S. Short. A4, case bound, 326pp. ASBS, 1990. $10; plus $10 p. & p.

For all those people interested in the 1988 ASBS 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 horticulturists, 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
Austral.Syst.Bot.Soc.Nsltr 53, edited by Helen Hewson. 1987. $5 plus $1.75 postage.

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

Australian Systematic Botany Society Newsletter

Back issues of the Newsletter are available from from *Number 27* (May 1981) onwards, excluding *Numbers 29*, *31*, *60-62*, *66*, *84*, *89*, *90*, *99*, *100* and *103*. Here is the chance to complete your set. ***Cover prices*** are $3.50 (*Numbers 27-59*, excluding *Number 53*) and $5.00 (*Number 53*, and *60* onwards). ***Postage*** $1.30 per issue, apart from $1.75 for the *Large Genera* issue (*Number 53*).

Evolution of the Flora and Fauna of Arid Australia
Edited by W.R. Barker & P.J.M. Greenslade. Peacock Publications, ASBS & A.N.Z.A.A.S., 1982.
$20 + $8.50 postage.

This collection of more than 40 papers will interest all people concerned with Australia's dry inland, or the evolutionary history of its flora and fauna. It is of value to those studying both arid lands and evolution in general. Six sections cover: ecological and historical background; ecological and reproductive adaptations in plants; vertebrate animals; invertebrate animals; individual plant groups; and concluding remarks.
Also available from. Peacock Publications, 38 Sydenham Road, Norwood, SA 5069, Australia.
(To obtain this discounted price, post a photocopy of this page with remittance).

Ecology of the Southern Conifers (NOW OUT OF PRINT)
Edited by Neal Enright and Robert Hill.

Proceedings of a symposium at the ASBS conference in Hobart in 1993. Twenty-eight scholars from across the hemisphere examine the history and ecology of the southern conifers, and emphasise their importance in understanding the evolution and ecological dynamics of southern vegetation.

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AD tel: (08) 8222 9307 fax: (08) 8222 9353 www.flora.sa.gov.au	**HO** tel: (03) 6226 2635 fax: (03) 6226 7865 www.tmag.tas.gov.au/Herbarium/Herbarium2.htm	**MEL** tel: (03) 9252 2300 fax: (03) 9252 2350 www.rbg.vic.gov.au/biodiversity/	**NSW** tel: (02) 9231 8111 fax: (02) 9251 7231 www.rbgsyd.gov.au/conservation_research/herbarium_&_services
CANB tel: (02) 6246 5108 fax: (02) 6246 5249 www.anbg.gov.au/	**BRI** tel: (07) 3896 9321 fax: (07) 3896 9624 www.epa.qld.gov.au/nature_conservation/plants/queensland_herbarium	**DNA** tel: (08) 8999 4516 fax: (08) 8999 4527 www.nt.gov.au/pwcnt	**PERTH** tel: (08) 9334 0500 fax: (08) 9334 0515 http://science.calm.wa.gov.au/herbarium/
QRS tel: (07) 4091 8800 fax: (07) 4091 8888	**MBA** tel: (07) 4092 8445 fax: (07) 4092 3593	**NT** tel. (08) 8951 8791 fax: (08) 8951 8790	

Council of Heads of Australian Herbaria (CHAH) Chair: Dr Greg Leach (DNA) ***www.chah.gov.au/***	**ABRS** tel: (02) 6250 9554 fax: (02) 6250 9555 email: abrs@deh.gov.au *www.deh.gov.au/biodiversity/abrs*	**Australian Botanical Liaison Officer (ABLO)** Alex George Herbarium Royal Botanic Gardens, Kew Richmond, Surrey TW9 3AB England tel: 44-20-8332 5270 fax: 44-20-8332 5278 *email: ablo@rbgkew.org.uk*

These listings are published in each issue. Please inform the Editors of any change.

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

The Society

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

Membership

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

The ASBS *annual membership subscription* is $45(Aust.); full-time students $25. Payment may be by credit card or by cheques made out to *Australian Systematic Botany Society Inc.*, and remitred to the Treasurer. All changes of address should be sent directly to the Treasurer as well.

The Newsletter

The Newsletter is sent quarterly to members and appears simultaneously on the ASBS Web site. It 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.
Citation: abbreviate as *Austral. Syst. Bot. Soc. Nsltr*

Contributions

Send to the Editors at the address given below. They *preferably* should be submitted as: an MS-Word *doc* file *or* a Rich-text-format *.rtf* file; enclose in an email message or as an attachment or on an MS-DOS disk or CD-ROM. *Non-preferred* media such as handwritten or typescripts by letter or fax are acceptable, but may cause delay in publication in view of the extra workload involved.

Formatting of submitted copy. Please use Word in formatting indents, bullets, etc. in paragraphs and for tables. Do not format primitively with tabs, which change with the Normal style sheet. If embedding tables or references or other Objects from other software (Excel, bibliographic software, etc.) ensure that these are converted to Word tables or paragraphs. Letters in abbreviations of Australian States (SA, WA etc., but Vic.) and organisations (e.g ASBS, ABRS) should not be separated by full-stops, but initials should be (e.g. W.R. Smith, not WR Smith) and abbreviations such as e.g., i.e, and etc. should not be further contracted.

Images: their inclusion may depend on space being available. Improve scanned resolution if printing your image is pixellated at a width of at least 7 cm (up to a 15 cm full page). Contact the Editors for further clarification.

The *deadline* for contributions is the last day of February, May, August and November. All items incorporated in the Newsletter will be duly acknowledged. Any unsigned articles are attributable to the Editors.

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

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Flyers may be approved for inclusion in the envelope for products or services of interest to ASBS members. The current fee is $100 per flyer, plus the cost of inserting them (usually roughly $25-30). Flyers are not part of the Newsletter and do not appear with the Newsletter on the ASBS Web site.

A 20% discount applies for second and subsequent entries of the same advertisement. Advertisements from ASBS members are usually exempt from fees but not the insertion costs in the case of a flyer. Contact the Newsletter Editors for further information.

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