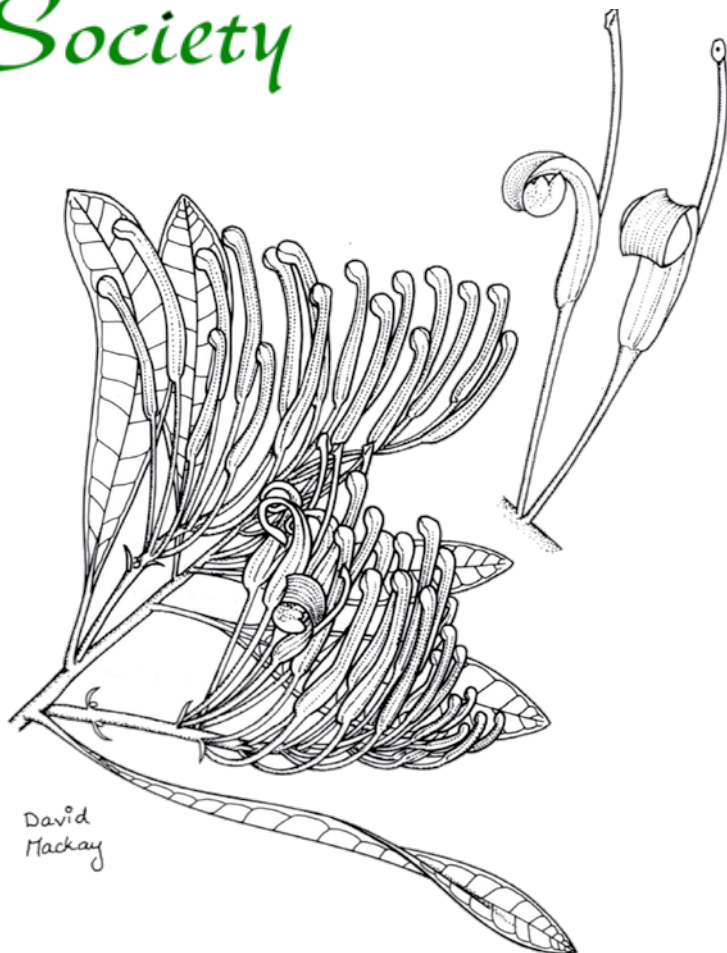


ASBS

*Australian  
Systematic  
Botany  
Society*



# Newsletter

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AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

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Papua New Guinea Botanical Society

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**Hansjörg Eichler Research Committee**

Bill Barker  
Betsy Jackes  
Greg Leach  
Kristina Lemson  
Chris Quinn  
Chair: Peter Weston, President  
**Grant applications close:** 14 March 2010.

Cover image: *Alloxylon flammeum* (Proteaceae), reproduced with the permission of David Mackay (the artist) and RBG Sydney.

**Looseleaf inclusions in this issue:**

Membership renewal form.

**Publication dates of previous issue**

**Austral.Syst.Bot.Soc.Newslett. 140 (September 2009 issue)**

Hardcopy: 27 Nov. 2009; ASBS Website: 10 Dec. 2009

## From the President

It is a great honour and also a little bit of a worry to have been elected as the new President of ASBS. The honour roll of past presidents is an impressive list of achievers and activists, both in scientific research on the Australian flora and in their work on behalf of our Society. I hope to live up to their example. Several other changes were made to the membership of ASBS Council at the recent Annual General Meeting in Armidale. Marco Duretto and Kirsten Cowley have both retired from Council, and the resulting vacancies were filled by Frank Zich and Gillian Brown. Marco has been our President since September 2008, having become a Councillor in 2003, and so had served the maximum term of six years on Council. Kirsten became our Public Officer in 2003, a Councillor in 2005, and our Secretary in 2006. On behalf of ASBS I thank Marco and Kirsten for the great job that they have both done as officers of our Society, and warmly welcome Frank and Gillian onto Council.

The Council for 2009/10 is:

- Frank Zich (Curator, CNS) joins the team as a Councillor. Frank's botanical interests are in herbarium curation and management, plant collecting in far north Queensland, tropical botany, taxonomy, nomenclature and floristics.
- Tanya Scharaschkin (Lecturer, Queensland University of Technology) joined the Council last year as a Councillor. Her main research interests include understanding the ecological and evolutionary biology of plants across varying temporal and spatial scales.
- Mike Bayly (Research Fellow, MELU) continues his excellent work as Treasurer (since 2008). Mike's research interests include the systematics and biogeography of Myrtaceae, Rutaceae, Plantaginaceae and Gleicheniaceae.
- Gillian Brown (ARC Australian Postdoctoral Industry Fellow, MELU) joins Council as our new Secretary. Gillian's research interests include the systematics and biogeography of *Acacia* and tribe Ingeae (Fabaceae) and

*Rhododendron* (Ericaceae).

- Dale Dixon (Manager Collections, NSW) who has been a Councillor since 2006 and hosted the ASBS conference in Darwin in 2007, is our new Vice President. His research interests, when he has time, include the systematics of *Ficus*, *Cycas* and *Portulaca*.
- Peter Weston (Senior Principal Research Scientist, NSW); last year I rejoined ASBS Council as Vice President (having previously served as a Councillor from 1997 to 2002). My research interests include the systematics, biogeography, and evolutionary ecology of Proteaceae, Orchidaceae, Fabaceae and Rutaceae.

As ASBS is an association incorporated in the Australian Capital Territory, we have to have a Public Officer who lives there. Kirsten Cowley previously took this role but as none of our new Council live in the ACT, Annette Wilson has kindly agreed to be our Public Officer again (she previously did this job from 2001 to 2003).

Prior to our Armidale conference, accreditation of providers of biological identification had not really been a subject on our Society's agenda but, thanks to the Workshop held on the Wednesday afternoon of the conference, it now seems to have become a central issue with which we must deal. The panellists who were invited to lead this discussion saw this subject as part of the broader problem of quality assurance of the work done by biological and environmental consultants. All of the panellists regarded this as a real problem because of their perceptions of variability in quality of consultants' reports. This concern was strongly echoed by several practicing consultants in the audience.

My personal view is that the quality of consultants' work would be most effectively assured by instituting a system of peer refereeing analogous to that used in the publication of the results of scientific research. That is, I see the work produced by consultants, rather than the workers that produce it, as the most appropriate target of a quality assurance system. However,

instituting such a refereeing system for evaluating environmental impact statements and similar reports would require legislative change at both Commonwealth and State levels to be made compulsory. ASBS would not be able to initiate nor control such a process, although it could try to lobby politicians to do so.

On the other hand, instituting a system of accreditation of providers of biological identification is something that ASBS could do, in principal. Whether ASBS or its officers would want to be involved in such a project is another matter. Some members of the audience argued that ASBS should set up its own system of accreditation of providers of botanical identification. Others saw this as unrealistically ambitious, beyond the Society's limited resources and suggested that the Society should restrict its involvement to an advisory role in a system administered by Government. Council will explore this subject further in 2010 and encourage discussion of it in the *Newsletter* but will not be committing the Society to involvement in any scheme before thoroughly investigating its implications for the Society, its officers and members.

A question that was discussed in the ASBS Council meeting was a proposal by the New Zealand Plant Radiation Network to become affiliated with ASBS. There are good botanical reasons for developing closer ties with our trans-Tasman colleagues—we share over 200 native species in common with New Zealand and the sister groups of New Zealand plant clades tend, overwhelmingly, to be Australian. New Zealand has a vibrant, productive community of plant systematists and ASBS would be proud to have more of them as members. Unlike ASBS, NZPRN is not a formal association and does not charge its members an annual subscription fee but it is a thriving vehicle for communication between plant systematists in New Zealand (see for example <http://www.allanwilsoncentre.ac.nz/NZPRN/index.htm>). Council was unanimously enthusiastic about the idea of forging closer links with our colleagues in New Zealand and discussion moved to the question of enlarging the geographic scope of our Society to Australasia. This would require a change of name (but not acronym) from Australian Systematic Botany Society to

Australasian Systematic Botany Society. Such a change would require the Society's constitution to be amended and that would have to be put to a vote of ASBS members, 75% of whom would have to approve the change. A show of hands at the end of the Armidale conference indicated a strong level of support for the idea from members who were present. I was sufficiently encouraged by this response to start thinking about the logistics of organising a referendum of members by mid-2010 and perhaps changing our Society's name before our next conference in Lincoln, New Zealand in December 2010.

The prospect of having to persuade over 75% of members to vote for anything is somewhat daunting and this raised another matter for discussion in the Council meeting: the idea of changing the constitution to make it easier to change the constitution. At present, the hardest thing about constitutional change is simply persuading over 75% of the membership to vote. A strong argument was put to Council in favour of requiring only 50% plus one of voting members to approve a constitutional change for it to be passed. When I suggested this to the audience at the end of the Armidale conference, I met more objections than I had anticipated. Everyone seemed to agree that requiring a 75% majority of all members to pass change is too onerous a requirement, but many thought that a 75% majority of voting members was appropriately conservative, and this suggested change seems more likely to gain the necessary 75% vote than more radical change.

It is an exciting time to be a member of ASBS, with our first conference at an exotic location (Lincoln, New Zealand) since 1992 scheduled for December 2010. Beyond that we can look forward to the International Botanical Congress in Melbourne in July 2011. As well as scheduling our 2011 Annual General Meeting to coincide with the IBC, we also aim to establish a visible presence at the conference by sponsoring a symposium and organising a Nancy Burbidge Lecture. Council will be working on these jobs early in the New Year.

Lastly, it has become the fashion for the ASBS President to nominate the art work for the cover of ASBS *Newsletter* and to choose an illustration of a taxon dear to his or her heart. The new

cover illustration is from the figure for *Alloxylon* (Proteaceae) that was prepared by David Mackay and published by Mike Crisp and me in our revision of that spectacular genus (*Telopea* 4(3): 501, 1991) and then republished in *Flora of*

*Australia* 16: 385 (1995). David and the National Herbarium of New South Wales kindly gave us permission to re-cycle this plate.

Peter Weston

## From the Editors

We would like to introduce a new regular column to the *Newsletter*, that of *Requests for material and observations*. With a society of some 300 members, scattered across Australia and overseas, there are many opportunities for productive collaborations, and particularly for sourcing collections from remote areas—if only we know what is required! As much as we all like to see our plants in the field personally, with ever limited funding for field work, the option of having someone local, or in the area for other reasons, collect our material can greatly increase our knowledge of particular groups. Often, we do not know that a revision is being carried out until it is published, so we feel that this column can be of significant benefit to members, as well as serving as a record of current research activities. Postgraduate students are likely to find this especially useful given the limited timeframe in which they must conduct their research.

A suggested format is as follows:

- Group of interest (including outgroups);
- Type and quantity of material required;

- Special storage or preparation requirements (e.g. spirit, silica gel, photographs, field observations, live material, seeds);
- Herbaria to receive duplicate material;
- Particular locations of importance;
- Whether supplementary funding may be available to assist in collection effort and consumables;
- Contact details for project coordinator.

Any such collections will obviously need to be compliant with local laws, thus collection permits etc. must be held. In some circumstances, additional collectors may be added to existing permits, so this may be worth checking if you do not have your own permit and wish to collect for someone else. If you wish to respond to a request, please contact the listed person so they know your intentions in advance (and so that six people do not go and collect the same rare plant!).

Additional suggestions for the future of the *Newsletter* are included in the formal report from the AGM.

## ASBS Inc. Business

### 2009 Annual General Meeting of the Australian Systematic Botany Society, Inc.

**4:50 pm, Wednesday 2nd December, at Biological Sciences Lecture Theatre,  
University of New England, Armidale, New South Wales**

Present: Marco Duretto (President), Peter Weston (Vice-President), Michael Bayly (Treasurer), Kirsten Cowley (Secretary), Tanya Scharaschkin and Dale Dixon (Councillors) and 51 members, including ASBS life member Robyn Barker.

#### 1. Apologies

David Mabberley

#### 2. Minutes of the 2008 Annual General Meeting

Proposed that the minutes of the 30<sup>th</sup> Annual General Meeting (as published in *The Australian Systematic Botany Society Newsletter* Number 136) be accepted.

Moved Marco Duretto and seconded David Cantrill. Motion carried.

### 3. Business arising from minutes

Nil

### 4. President's Report

Presented by Marco Duretto, his last. Copy will be printed in the ASBS *Newsletter*. Accepted with acclamation. See **Attachment 1**.

### 5. Treasurer's Report

Prepared by Michael Bayly who thanked Anna Monro, and to be printed in the ASBS *Newsletter*.

Income was higher due to the various donations including from the dissolution of the *Palynological and Palaeobotanical Association of Australasia* (PPAA). Membership fees will remain the same though do need to be monitored.

David Cantrill asked if ASBS had a financial advisor. Michael Bayly said not at this stage but it will be investigated.

Duncan McKay asked if the PPAA money would be 'quarantined'. Michael indicated that the use of the money will be discussed in the forthcoming year.

Proposed Michael Bayly, seconded by Peter Jobson. Carried. See **Attachment 2**.

### 6. Newsletter Report

Presented by Russell Barrett who thanked Robyn Barker, Gael Campbell-Young, Graeme Bell, Peter Jobson, Murray Fagg and Marco Duretto for their support. He indicated that the idea of the electronic journal receipt will be encouraged, introduced the concept that the *Newsletter* could be produced four times a year electronically and that it be published as a hard copy only once or twice per year in the future to save on time and costs. The editors will continue to aim for 4 issues per year no matter what. They also thanked the membership for contributing articles.

Marco Duretto moved that a vote of thanks be extended to the Editors, motion carried. See **Attachment 3**.

### 7. Web Site Report

Murray Fagg presented the Web page report saying it receives 560 hits per day.

John Clarkson asked for clarification on how the

search engine searched.

Marco Duretto moved a vote of thanks for Murray, motion carried. Murray moved a vote of thanks to ANBG for hosting the site and the IT section for supporting it, motion carried.

### 8. Eichler Research Fund

Peter Weston presented a power point presentation of the Eichler Award and moved that a vote of thanks be extended to the Committee.

The successful application for September 2009, Kerry Gibbons was presented with her cheque.

### 9. Other business

Australian Botanical Liaison Officer (ABLO)

Tony Orchard expressed concern that the position of ABLO that has continued for 75 years is going to be suspended. He thinks ASBS should have a say in the review.

David Cantrill responded that Churchill Scholarships (potentially 6) had been set up to attract young botanists to apply for positions anywhere in the world and not just at Kew.

Marco confirmed that ABRS are reviewing the current format of the ABLO position for this year. He suggested that Tony Orchard and David Cantrill, on behalf of CHAH, use the ASBS *Newsletter* to encourage discussion of the issues involved. Marco and David also encouraged the membership to apply for the Winston Churchill Fellowships currently open.

International Botanical Congress (IBC) 2011

Time was short so the IBC was not discussed though Karen Wilson will be providing more information in the future.

### 10. Election Results

President: Peter Weston  
Vice president: Dale Dixon  
Secretary: Gillian Brown  
Treasurer: Michael Bayly  
Councillor: Tanya Scharaschkin  
Councillor: Frank Zich

The new president, Peter Weston, moved a vote of thanks for the outgoing ASBS Council members. Carried.

Meeting closed 5:50 pm

## Attachment 1. PRESIDENT'S REPORT

### Newsletter

*Change of Editors:* This year the society saw a change in the Editors of the *Newsletter*. Robyn and Bill Barker have been the Editors for seven years and 29 issues. I think I can speak for the entire society when I thank them for an excellent job they have done over the years for the *Newsletter* as well as the society. The new editors (Russell Barrett and Peter Jobson, 'the noisy ones', in Perth, and Gael Campbell-Young, in Adelaide). The editors being in two different cities has not hindered this team who have now completed their first year of editing, and that efficiently and without too many difficulties. They have quite a few ideas regarding the *Newsletter* and how it is to be presented in the future. Russell will discuss this in the *Newsletter* Report.

*Electronic Newsletters:* The *Newsletter* has been freely available on the ASBS website for some time. When you received your September *Newsletter* [actually this issue: Ed.] you will see the annual subscription form contains a box to tick if you wish to forgo your hardcopy of the *Newsletter* and rely on the ASBS website and an email notification instead. (I for one will take the electronic option.) Several other societies already do this and it will mean Society money can be better spent on things such as conferences and student support etc., not to mention reducing our carbon footprint. At this stage if you choose to access the *Newsletter* via the website you will not get a reduction in your annual subscription. As Michael Bayly will indicate in the Treasurer's Report the money coming in from the annual membership subscriptions barely covers the cost of running the society as it is. Council is very interested in the views of the Society on this matter.

### Website

*Web Master:* Murray Fagg continues to work on the website making changes and additions promptly and efficiently. He has agreed to continue to do this which is greatly appreciated. He will discuss other issues in his Website Report.

*NEW website.* One of the major projects of the last year has been to revitalise the ASBS website. Siobhan Duffy, who designed the brochure, was

hired to do this and she has done a fantastic job. Council has made many edits etc. to the existing content and the feedback we have received from members has been greatly appreciated. The website is ready and only needs to be ticked off by the new Council and so will be publicly available soon. Please have a look and all feedback is welcome.

### Brochure

Another way the Society advertises itself is through the brochure. Copies are available from the website and the Secretary.

### *Palynological and Palaeobotanic Association of Australia (PPAA)*

In June this year the PPAA was dissolved by the last of its active members as reported in the September issue of the *ASBS Newsletter*. The dissolution has been happening over a number of years (c. 10) and has involved a number of ASBS Councils. In the past there was discussion of an amalgamation or incorporation with ASBS (as discussed in the President's Report in 2007). In the end the Society was dissolved and what this means for ASBS is that we received the remaining PPAA funds (a bit like in a will) that will be invested and used to support botanical systematics in Australia. The details of the transfer are in the Treasurer's Report. It is sad to see a Society like this dissolve. Many past members of the PPAA are members of ASBS and the use of palynological and palaeobotanic data in systematics research is becoming increasingly important. The opportunity exists, as it has always, for specialised meetings within ASBS conferences and for articles in the *Newsletter* to promote palynological and palaeobotanic research.

### ASBS Archives at MEL

National Herbarium of Victoria (MEL), The Royal Botanic Gardens Melbourne, has generously offered ASBS space and staff time to hold the archives of the Society. It is an offer we must take seriously in order to capture documents etc. that the Society generates such as meeting minutes, newsletters, correspondence and ephemera created by events such as conferences. This offer

is especially important as the Society is run by volunteers spread all over the continent. There has been a small response for the various calls for material and I encourage all to have a look for this material. I would like to thank David Cantrill and Helen Cohn of MEL for enthusiastically supporting the archives.

### **Conferences**

I am sure you all enjoyed this year's conference in Armidale and agree that Jeremy Bruhl and his team have done a fantastic job in organizing it. It is great to be having a conference in a regional city: this does not happen often in the Society. The 2008 conference in Adelaide with the Lucid workshop was also a great success. Our next conference will be held in Christchurch (New Zealand) (which Ilse Breitweiser will discuss at the close of the conference) that will celebrate stronger ties with New Zealand and hopefully a name change for the Society. This too has been discussed before and no doubt Council will discuss this further over the next year. The 2011 conference, or at least the AGM, is of course to be held in association with the IBC in Melbourne.

### **Conference Student Prizes**

In the 2008 conference the inaugural Pauline Ladiges Prize for the best student oral presentation was given. The prize was generously provided by CSIRO Publishing. I am very pleased to announce CSIRO Publishing is not only providing the prize for the Pauline Ladiges Prize and another for the best student poster, but that they have agreed to do this for five years.

### **Council**

The Council is made of a great group of dedicated

and hard-working volunteers who have been very enjoyable to work with over the last year and the five before this. This year we saw three new faces on Council all of whom hit the ground running with enthusiasm. Michael Bayly, as the new Treasurer, has done a fantastic job in what is probably the most demanding job on council. Likewise Peter Weston has done well, as Vice President, co-ordinating the Hansjörg Eichler Research Fund. Tanya Scharaschkin, who also started this year, has been an enthusiastic Councillor as has Dale Dixon (again).

Kirsten Cowley has worked tirelessly over the last few years as both the Secretary of the Society and as the Public Officer. She did not seek re-election this year and is leaving council. On behalf of the entire Society I would like to acknowledge the fantastic job she has done over the last few years.

### **Position of Public Officer**

The Public Officer must be resident in the ACT where the Society is Incorporated and basically serve as the society's point of contact with the Registrar General's Office, ACT. Annette Wilson (ABRS) has agreed to take on this role from this meeting.

### **Thankyou**

Lastly, as this is my last year on Council, I would like to thank everyone who has made it an enjoyable few years: especially the other members of Council.

*Marco Duretto  
Tasmanian Herbarium,  
Tasmanian Museum & Art Gallery*

## **Attachment 2. TREASURER'S REPORT 2008/09**

Presented at the Society's Annual General Meeting in Armidale, 2 December 2009

### **1. Introduction**

I am pleased to present the financial statements of the Australian Systematic Botany Society (ASBS) for the year ended 30 June 2009. The finances of the Society are run on a financial year basis. Anna Monro served as Treasurer from the start of the financial year until the AGM in September 2008,

at which time I officially took over the role. I am very grateful for the impeccable state in which Anna kept the Society's financial records, and for all her advice while I was settling into the role.

### **2. Membership**

At 31 August 2009 the financial members of ASBS numbered about 270, which is a decrease of about 40 members compared with the same time in 2008. The proportions of Full (63%) and



Concessional members (30%) remain roughly the same as last year, and the number of Gratis memberships remains unchanged. Fifteen unfinancial members who had not paid their dues since 2006 were written off at the end of 2008. Twenty-three new individual members joined ASBS between September 2008 (date of last Treasurer's Report) and 31 August 2009 [see list in *Newsletter* 140: 11].

Approximately 16% of paying members remain unfinancial, which is around the base level at this stage in the year. Two e-mail reminders have been sent to unfinancial members at this point in addition to the reminders on the *Newsletter* envelopes. Members who had not paid their subscription fees by 30 June were removed from the mailing list for newsletters, in accordance with Council's current policy.

### 3. General Fund

Melinda McAllister of BHT Partners in Eltham, audited the 2008/09 books in October 2009. It is the first time this company has audited the Society's financial statements.

#### 3.1 Income

Income to the General Fund in 2008/09, was greater than in the previous financial year. The most substantial contribution to this came from the acquisition of funds from the defunct Palynological and Palaeobotanic Association of Australia (PPAA, see note from Marco Duretto in *Newsletter* 140). The figures for gross income are inflated, compared with previous years, because of a number of transactions that passed through the fund, but were distributed to other sources, and thus did not contribute to nett income. A large number of transactions related to the Adelaide conference, for which Anna Monro, as a favour to the conference organisers, processed credit card registration payments, the funds from which were then returned to the separate conference bank account. Another substantial transaction was the

deposit of a large bequest into the general fund, prior to transfer to the Eichler Fund (because the cheque arrived on 23 December and there was going to be some delay before we could obtain the two signatures needed to deposit funds into the Eichler Cash Management Trust).

Subscription fees from members remain the steady source of income to the General Fund and they were at the usual level of around \$10,000 per year. Given the fairly healthy state of the General Fund, Council doesn't feel it is necessary to increase subscription rates at this point. However, overall income and expenditure of the General Fund are fairly tightly coupled (e.g., ignoring the investment income and inflow of money from the PPPA, the operating surplus was \$907) and subscription rates will need to be assessed annually to ensure the society is covering its regular expenses.

Book sales continue at their previous rather low rate, and because some stock at HO has gone missing, and is written off here, an overall loss of \$26 is recorded for our trading of books. The previous Council was considering ways to write off the remaining stock of our titles and pay out the remaining amounts owing to shareholders, as the administration required is disproportionate to the amount the Society earns in sales. There was no progress in this area in 2008/9, but the matter will be looked at further in the current financial year. See the Current Assets section below for details of the publication stock levels as at 30 June 2008.

#### 3.2 Expenditure

The reported expenditure for 2008/9 is substantially higher than in the previous year, but this large difference relates primarily to transactions (discussed under 3.1) associated with the Adelaide conference and the handling of a bequest to the Eichler Fund; it does not reflect a substantial increase in the outlay of core money from the General Fund.

**Table 1.** Membership of ASBS as of 31 August 2009 (unfinancial members in brackets)

Fee	Full	Concessional	Gratis	Total
Ordinary	163 (31)	n/a	0	163 (31)
Student	n/a	32 (13)	0	32 (13)
Retiree	n/a	46 (7)	0	46 (7)
Unemployed	n/a	4 (2)	0	4 (2)
Institutional	9	n/a	15	24
Life	n/a	n/a	3	3
<b>Total</b>	<b>172 (31)</b>	<b>82 (22)</b>	<b>18</b>	<b>272 (53)</b>

*Newsletter* printing and postage were, as usual, a major component of the routine expenses of the General Fund. Overall *Newsletter* costs were higher than in 2007/8. This is partly because 2007/8 saw some savings by production of a combined issue 131/132, and also because the average production cost per issue rose in the current year, being c. \$1,300 (\$1,137 in 2007/8, \$1,000 in 2006/07, \$1,185 in 2005).

Fees and charges associated with the acceptance of credit card payments increased over those of previous years, totalling \$951.62 (2.5 times the cost in 2007/8). These fees and charges are partly based on the amounts processed and the sharp increase in costs related mostly to the processing of many transactions for the Adelaide conference registration. The credit card facility has been used by an increasing number of members since it was first offered in January 2004, and 66% of all subscription payments in 2008/9 were by credit card.

### 3.3 Current Assets in the General Fund

At the end of June 2009 the Society held assets of \$105,507 (\$105,245 in cash, \$262 in books). This represents an increase of \$22,430 over the 2007/08 level, the great majority of which can be attributed to funds acquired from the defunct Palynological and Palaeobotanic Association of Australia.

The books that the Society fully or partially owns, held by Helen Thompson (ASBS sales) and by state chapter conveners, as at 30 June 2009 are as follows:

9 copies of *History of Systematic Botany in Australasia* (partial share; 10 copies at HO could not be found and have been written off);

14 copies of *Systematic Status of Large Flowering Plant Genera* and;

64 copies of *Evolution of the Flora and Fauna of Arid Australia* (partial share).

### 4. The Hansjörg Eichler Research Fund

The Research Fund continued to suffer the effects of current instability of the stock market. There was an overall loss on investments (\$517) but this was not as substantial as the investment losses sustained in 2007/8 (\$12,736). Investments of the

Research Fund are spread across three different accounts. The most substantial loss was incurred by the Colonial First State Diversified Fund (\$7,444), with smaller losses from the Commonwealth Bank Australian Bond and Growth Fund (\$218). The number of units in these two funds increased over the period and the losses reflect only the change in value of the units. This should mean that earnings will increase once the markets recover. While the market has remained volatile, all new investments have been held in a Commonwealth Bank Cash Management Trust, which has continued to earn interest (\$7,089) that has largely offset the other losses. Council will re-assess this investment strategy, in light of changes in the stock market, in the coming financial year.

Two grants were awarded to students in the September round of 2008: \$2,000 to each of Iain Moore and Laura Shirley. These were paid directly from the research cheque account.

As a result of poor investment performance, the March 2009 round of funding was not offered, but grants up to a total of \$2,000 will be offered for the September 2009 round. Council debated the merits of this course of action. It is mindful that it must manage the Fund for the long-term, while at the same time seeing benefits that each funding round brings to young researchers, in terms of both research funding and grant-writing experience. Although Research Fund investments suffered an overall loss for the last 12 months, Council has taken the view that the September 2009 round is funded by a proportion of the cash interest earned on the Cash Management Trust through this period, and that it is not undermining capital funds in a real way (other investments showing only "paper losses" at this stage, as discussed above).

Poor investment returns in 2008/9 were greatly offset by the continuing generous donations of members. More than 40 individual donations were received, and these contributions help the Society to support systematic research into the Australian flora. Donations ranged from \$5 upward (donations over \$2 being tax-deductible), and included a bequest of \$15,000 dollars from the estate of Helen Hewson. At the request of the organisers, profits of \$2,484.61 from the Adelaide conference were also deposited in the Research

Fund. Through these many donations, assets of the Research Fund increased during the period from \$330,076 to \$364,464.

## 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). The current conference is being run in this manner. Smaller conferences and workshops can be run through the Society as long as no GST is charged or recovered.

## 6. Summary

The General Fund retained a sizeable surplus in 2008/9 (\$22,429), with income boosted by acquisition of funds from the defunct Palynological and Palaeobotanic Association of Australia. The Hansjörg Eichler Research Fund suffered a slight loss on its investments, as a result of the downturn in world financial markets, but saw substantial capital growth (c. \$34,000) through the generous donations of members.

*Michael Bayly  
Honorary Treasurer  
December 2009*

# AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED: COUNCIL MEMBERS' REPORT

Your Council members submit the financial statement of the Australian Systematic Botany Society Incorporated for the year ended 30 June 2009.

## Council Members

The names of the Council members who held office throughout the reporting period and at the date of this report are:

President	John Clarkson	Term ended September 2008
President	Marco Duretto	Appointed September 2008
Vice President	Darren Crayn	Term ended September 2008
Vice President	Peter Weston	Appointed September 2008
Secretary	Kirsten Cowley	
Treasurer	Anna Monro	Term ended September 2008
Treasurer	Michael Bayly	Appointed September 2008
Councillor	Marco Duretto	Term ended September 2008
Councillor	Tanya Scharaschkin	Appointed September 2008
Councillor	Dale Dixon	

## Principal Activities

The principal activities of the association during the reporting period were to promote systematic botany in Australia.

## Significant Changes

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

## Operating Results

The operating results are as set out hereunder:

	Year ended June 2009 \$	Year ended June 2008 \$
Research Fund	<b>34,389</b>	(1,079)
General Fund	<b>22,429</b>	14,807
Total	56,818	13,728

Signed in accordance with a resolution of the members of the Council.

*Marco Duretto (President)  
Michael Bayly (Treasurer)  
22 October 2009*

**AUSTRALIAN SYSTEMATIC BOTANY SOCIETY  
INCORPORATED**

**INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2009**

	Note	2009 \$	2008 \$
<b>RESEARCH FUND</b>			
Income			
Donations to Research Fund		20,000	20,000
Investment Income	2	(571)	(12,736)
General Fund Transfer		18,960	1,485
Total Income		<u>38,389</u>	<u>8,749</u>
Expenditure			
Research Grants		4,000	9,828
Bank Charges		-	-
Total Expenditure		<u>4,000</u>	<u>9,828</u>
Surplus	3	<u>34,389</u>	<u>(1,079)</u>
<b>GENERAL FUND</b>			
Income			
Sales—Books		167	329
Less Cost of Goods Sold			
Opening stock—Books		455	706
Closing stock—Books		(262)	(455)
Cost of Goods Sold/written off		<u>193</u>	<u>251</u>
Gross Revenue from Trading		(26)	78
Advertising		50	-
Conferences		17,525	10,124
Investment Income	2	3,929	3,433
Subscriptions to ASBS Inc.		10,445	9,950
Donations to Eichler Fund		1,375	1,615
Bequest		15,000	
Funds from Palynological and Palaeobotanic Association of Australia		17,593	-
Sundry Income		112	74
Total Income		<u>66,003</u>	<u>25,274</u>
Expenditure			
Transfer to Eichler: member donations		1,475	1,485
Transfer to Eichler: bequest & conference profits		17,485	-
Auditors' remuneration		1,100.00	1,210
Bank fees		-	-
Credit card charge facility		952	378
Conference expenses		17,248	2,807
Newsletter expenses		5,267	3,411
History book sales—profit share		-	243
Registrar general returns		32	31
Miscellaneous expenses (e.g. postage)		15	902
Total Expenditure		<u>43,574</u>	<u>10,467</u>
Surplus	3	<u>22,429</u>	<u>14,807</u>

The accompanying notes form part of these financial statements.

**AUSTRALIAN SYSTEMATIC BOTANY SOCIETY  
INCORPORATED  
BALANCE SHEET AS AT 30 JUNE 2009**

	Note	2009 \$	2008 \$
<b>ASSETS</b>			
Current Assets			
<b>RESEARCH FUND</b>			
Cash at Bank		962	960
Investments			
Colonial Managed Investment		61,225	68,670
Cash Management Fund		159,186	117,137
Australian Bond Fund		81,328	74,204
Growth Fund		61,763	69,105
Total Current Assets Research Fund		364,464	330,076
<b>GENERAL FUND</b>			
Cheque Account		21,467	26,733
Savings Account		35,902	10,431
Term Deposit		-	-
Cash Management Account		47,876	45,458
Inventories—Books		262	455
Total Current Assets General Fund		105,507	83,077
Total Current Assets		469,971	413,153
<b>NET ASSETS</b>		469,971	413,153
<b>MEMBERS' FUNDS</b>			
Accumulated surplus—opening	3	413,153	399,425
Surplus for the period	3	56,818	13,728
Total Members' Funds		469,971	413,153

The accompanying notes form part of these financial statements.

**AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED**

**NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR  
ENDED 30 JUNE 2009**

**Note 1: Statement of Significant Accounting Policies**

The financial report is a special purpose financial report prepared in order to satisfy the financial reporting requirements of the members. The Council has determined that the Society is not a reporting entity.

The financial report has been prepared in accordance with the requirements of Australian Accounting Standard AASB 1031: Materiality. No other applicable Accounting Standards, Australian

Accounting Interpretations or other authoritative pronouncements of the Australian Accounting Standards Board have been applied.

The financial report has been prepared on a cash basis.

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 Society is exempt from income tax and accordingly no provision has been made in the accounts.

**(c) Comparative Figures**

Where required by Accounting Standards comparative figures have been adjusted to

conform with the changes in presentation for the current year.

**Members' Funds**

In accordance with the rules of the Society accumulated funds are not available for distribution to its members.

	2009 \$	2008 \$
<b>Note 2: Investment Income</b>		
RESEARCH FUND		
Interest Received		
Cheque Account	2	7
Distributions		
Colonial First State (Diversified Fund)	(7,444)	(12,735)
Cash Management Trust	7,089	7,111
Australian Bond and Growth Fund	(218)	(7,119)
Total Investment Income	(571)	(12,736)

GENERAL FUND		
Interest Received		
Cheque Account	40	103
Savings Account	1,471	431
Term Deposits	-	139
Distributions		
Cash Management Trust	2,418	2,760
Total Investment Income	3,929	3,433

**Note 3: Accumulated Funds**

RESEARCH FUND		
Accumulated Surplus—Opening	329,481	330,560
Surplus for the period	34,389	(1,079)
Accumulated Surplus—Closing	363,870	329,481

GENERAL FUND		
Accumulated Surplus—Opening	83,672	68,865
Surplus for the period	22,429	14,807
Accumulated Surplus—Closing	106,101	83,672

Total Surplus for the period	56,818	13,728
Total Accumulated Surplus	469,971	413,153

**Note 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
Kristina Lemson	Appointed Feb 2008
Tom May	July 2003–Feb. 2008
Chris Quinn	Appointed July 2003

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED  
STATEMENT BY THE MEMBERS OF THE COUNCIL

The Council has determined that the Society is not a reporting entity and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the Council:

The financial report as set out on pages 6 to 12 presents a true and fair view of the Society's financial position as at 30 June 2009 and its

performance for the year ended on that date.

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

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

*Marco Duretto* (President)

*Michael Bayly* (Treasurer)

## BHT PARTNERS (AUDIT) PTY LTD

### INDEPENDENT AUDIT REPORT

To the members of Australian Systematic Botany Society Inc.

#### Scope

We have audited the attached special purpose financial report, Profit and Loss, and Balance Sheet for Australian Systematic Botany Society Inc. year ended 30 June 2009. The Australian Systematic Botany Society Inc. Committee of Management is responsible for the financial report and has determined that the accounting policies used are consistent with the financial reporting requirements of the Australian Systematic Botany Society Inc. constitution and are appropriate to meet the needs of the members. We have conducted an independent audit of the financial report in order to express an opinion on it to the members of Australian Systematic Botany Society Inc. No opinion is expressed as to whether the accounting policies used are appropriate to the needs of the members.

The financial report has been prepared for distribution to members for the purpose of fulfilling the Committee of Management's financial reporting requirements under the Australian Systematic Botany Society Inc. constitution. We disclaim any assumption of responsibility for any reliance on this report or on the financial report to which it relates to any person other than the members, or for any purpose other than that for which it was prepared.

Our audit has been conducted in accordance with Australian Auditing Standards. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is fairly presented in accordance with the cash basis of accounting whereby revenue is recorded when it is received, expenses are recorded when they are paid, and no assets or liabilities, other than cash and bank balances, are recorded. Accounting Standards and other professional reporting requirements (UIG Consensus Views) are not applicable to the cash basis of accounting adopted by Australian Systematic Botany Society Inc.

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

#### Qualification

As is common for organisations of this type, it is not practicable for Australian Systematic Botany Society Inc. to maintain an effective system of internal control over subscriptions and other cash related activities until their initial entry in the accounting records. Accordingly, our audit in relation to fund raising was limited to amounts recorded.



BHT PARTNERS (AUDIT) PTY LTD ACN 113 241 919 ABN 28 113 241 91

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Directors: B.J. TAYLOR CPA · B.C. HOLLAND FCPA · M.L. McALLISTER CPA

## Attachment 3. NEWSLETTER REPORT

Since taking on the editorship from the Barkers following the last AGM in Adelaide, we have completed four issues of the *Newsletter*. We have been attempting to get each issue out within the month of the cover date, however there have been some delays, largely corresponding to low volumes of content for some issues. This has generally resulted in further material being sought at short notice, as well as additional contributions from the editors to ensure a reasonable number of pages to justify the expense of printing and postage.

As mentioned by Marco, we are considering some options for future delivery of the *Newsletter*. These suggestions are offered as a means of reducing the production costs so that membership fees may be kept to a minimum and used to best effect. One option would be to make the *Newsletter* only available online (with a small number of hard copies printed for any members without access to the internet). A second option would be to make the issues available online four times a year, but only send out (collated) print issues once or twice a year. This option would save somewhat on printing, and particularly on postage. Members are reminded that they can opt to only receive the electronic version.

[As discussed in the editorial for this issue] we suggest a new regular column for the *Newsletter*, *Requests for collections/observations* to encourage collaboration between members of the Society who may not otherwise be aware of research they can effectively make valuable contributions to.

We would like to express our thanks to Robyn Barker and Mike Bayly for patient assistance with each issue and Graham Bell (AD) for assistance with printing the *Newsletter* envelopes. Murray Fagg has continued to promptly arrange for each issue to appear on the website, this copy now being in colour. Marco Duretto is thanked for his support and encouragement during his term as President.

The editors seek and receive copies of new books from publishers and authors, and these are sent out to volunteering members for review, however we also welcome additional reviews, so if you have read a book that you think would be of interest to the Society, please consider writing a summary for the *Newsletter*.

As Russell is attempting to write up his PhD during the first half of 2010, contributions for the *Newsletter* issues to be produced during this time are particularly sought so as to minimise the time required to complete these issues.

We thank all the contributors to the last four issues, particularly those who have been making regular contributions (ABRS and ABLO) and look forward to your ongoing suggestions and articles. Articles from Eichler Research Grant recipients are always an interesting read and we welcome other research students who would like to provide a summary of their research to contribute an article.

*The Editors*

## ASBS Inc. Business

### Hansjörg Eichler Research Fund Report

Like other investors, the Hansjörg Eichler Research Fund has had to endure hard financial times over the past two years. Despite losses on investments of over \$12,000 in 2007–2008, ASBS Council decided that it must honour its call for applications to the fund in September 2008. Two successful applicants were awarded \$2,000 each for the following proposals:

- Iain Moore (Botany, University of New England). Species limits and phylogenetic relationships within Australian *Bulbine* Wolf. (Asphodelaceae)
- Laura Shirley (School of Botany, University of Melbourne). Genetic variation and systematic relationships of closely related stringybark eucalypts endemic to the Grampians National Park, Victoria.



Council then decided that funds' capital should not be depleted further by awarding grants while investments were still making losses and consequently cancelled the March 2009 round of applications. However, we were sufficiently encouraged by improvements in financial news in early 2009 to offer one award in September 2009. Six applications were submitted in this round, and of these, the following proposal emerged the winner ahead of some close competitors:

- Kerry Gibbons (School of Biological Sciences, University of Sydney). Phylogeny of Loganiaceae tribe Loganieae, using chloroplast and nuclear ribosomal sequence data.

Kerry was presented with a cheque for \$2,000 by ASBS Treasurer, Dr Mike Bayly at the Society's Armidale conference.

The standard of proposals remains high, although some recent applications have strayed into research areas that were judged by Research Committee members as being outside the bounds of "systematic botany". Proposals that specified a particular, well circumscribed sub-project that could be wholly funded by a \$2,000 grant, as required by the published selection criteria, have generally scored more highly than proposals that request partial funding for a larger project. Prospective applicants should read the selection

criteria carefully before planning their proposals.

We are well aware of the important role that Hansjörg Eichler Research Awards now play in funding research in plant systematics by Australian postgraduate research students and of the desirability of continuing to award as many Eichler grants as financial conditions allow. Consequently, Council resolved at its meeting in September 2009 to offer one or two awards in March 2010, even though the financial performance of some investments in the Research Fund has not fully recovered from the "Global Financial Crisis".

ASBS Council wants to ensure the gradual turnover of members of the Research Committee with one committee member being replaced each year. Rod Henderson retired after the September 2008 round, to be replaced by Dr Greg Leach, Director of the Northern Territory Herbarium. Dr Barbara Briggs retired after the September 2009 round, to be replaced by Dr Bill Barker, of the State Herbarium of South Australia. Both Rod and Barbara had served on the Research Committee since 2003, and on behalf of Council and the Society I would like to thank them for the work they have done to support this important research funding scheme. We warmly welcome Greg and Bill to the Research Committee.

*Peter Weston*

## Hansjörg Eichler Research Fund

Applications for an Award from the Hansjörg Eichler Research Fund are invited in the March 2010 round of awards. The project must contribute to Australian systematic botany (including cryptogams); must be carried out within Australia; and the applicant must be attached to an Australian research institute (in the broadest sense). The maximum grant awarded will be \$2,000. Large capital items will not be considered. All current financial members of the Australian Systematic Botany Society are eligible to apply but students, recent graduates and newly-established botanists

will be given preference. Applications will be assessed on the quality of the applicant and the proposed project. The project should be clearly defined in scope and preferably result in a publication. Submissions already received may be resubmitted if so desired.

Both the Selection Criteria and a Grant Application Form can be downloaded from the ASBS website ([www.anbg.gov.au/asbs](http://www.anbg.gov.au/asbs)).

The closing dates for applications is 14 March 2010.

## FUTURE OF THE ABLO

### The future of the position of the Australian Botanical Liaison Officer at Kew

**A.E.Orchard and A.S. George**

Recently one of us (AEO) returned from London after spending 2008–2009 as ABLO at Kew. For the first time in many years there was no new ABLO to whom the position could be handed over. The ABRs Advisory Committee had decided not to fill the position for 2009–2010, pending a review. Kew management and CHAH were invited to make submissions to this review, but it appears the general Australian taxonomic community was not consulted. The grant money that would otherwise have been used to fund the ABLO is in 2009 being provided to the Churchill Fellowship Foundation to fund two Churchill Fellowships (it has been suggested that the Churchill Board will match the two ABRs-funded positions two for one, but this was not announced in the *ASBS Newsletter* announcement in September 2009). This is a sound idea, but will not be a substitute for the ABLO position. The Churchill Fellowships can be taken up anywhere in the world, and in any case fund only 8 weeks' work. They are open to taxonomists in any field, not just botany. The ABLO appointment on the other hand was placed at the heart of the rich UK and European botanical taxonomic material, and had a 12 month duration.

The future of this position was raised at the recent ASBS AGM in Armidale, but discussion had to be cut short because of lack of time. The first author was asked to provide a discussion paper for the *Newsletter*. This is it.

#### **History of the ABLO position**

The ABLO position has had a history extending over 70 years (George 2007). Discussions were held between CSIR[O] and Kew in the 1930s, to establish an ongoing liaison position between Australia and Kew, to facilitate Australian botanists' access to the rich historical material held at Kew. The first holder of the position was Charles Gardner, who spent the period 1937–1939 at Kew. C.T. White followed in 1939. The second World

War made it impossible to send another botanist immediately, but Mary Tindale was appointed to the position in 1949, and worked at Kew until 1951. From then until this year (with only minor breaks in 1955 and 1960) there have been appointees every year. For many years CSIRO provided a grant-in-aid, managing the position through its Standing Committee on Agriculture. ABRs assumed administrative responsibility for the position in 1980, and took over funding in the 1990s. Indian and South African Botanical Liaison Officer positions at Kew were also established in the mid-20th century. The Indian Botanical Liaison Officer position is still filled, that of the South African appointee was suspended a few years ago.

Why has this been recognised as such an important position that it has survived for over 70 years?

Even a cursory glance at the history of Australian taxonomic botany (Orchard 1999; George 2009) provides the answer. For the first 70-odd years of European settlement there were no herbaria in Australia. It was not until Mueller was appointed Government Botanist in Victoria in 1853 that a formal collection of Australian plants began to be assembled locally. Although there may have been a small collection in NSW earlier, the establishment of the New South Wales herbarium essentially dates from about 1896. Other States were later (Tasmania from the mid-19th century). Thus all early collections of Australian plants were sent overseas, and the description of a large part of the Australian flora was based on material deposited in herbaria in the UK and Europe, where it still remains.

Sir Joseph Banks in London was instrumental in initiating Australian collecting. Many of the earliest collections were sent to him and eventually became part of the BM herbarium. Collectors involved included Banks and Solander, Robert Brown, William Paterson, George and Johann Forster, George Caley, Allan and Richard Cunningham, Archibald Menzies, and David Nelson among others. Later, other collections (e.g. Ludwig Leichhardt, Thomas Mitchell) were added. Lindley in Cambridge (CGE) also assembled a large collection of early Australian

material. In the early 19th century a number of French, German and other European expeditions were sent to Australia, mostly carrying a biologist/collector, and large numbers of specimens consequently ended up in European herbaria such as Paris (Verreaux, Baudin, Leschenault, Lesson, Gaudichaud), Berlin, Florence (Labillardière), Madrid (Née), Vienna (Huegel, Sieber) and St Petersburg.

After Banks' death in 1820, Robert Brown and John Bennett continued to build the BM collections, although with the appointment of William Hooker as Director of Kew in 1841 Kew herbarium gradually assumed a more prominent role in taxonomy. Even before his Kew appointment, William Hooker had been the recipient of major collections of Australian material (e.g. Allan Cunningham material) while Professor of Botany at Glasgow, and he brought much of this with him to Kew. He and his son/successor, Joseph Hooker, encouraged collectors in Australia to send material to Kew, attracting important collections by Drummond, Gunn, Lawrence, Adamson, Mueller, Molloy, Milligan and many others. Bentham worked at Kew while preparing *Flora Australiensis* between 1863 and 1878, borrowing the entire holdings of MEL, and accumulating material donated by many other botanists. Kew thus became known as the most important repository of Australian historical specimens, and substantial numbers of more recent specimens, including many types, continued to be deposited there, particularly in the late 19th and first half of the 20th century. This practice still continues, albeit at a slower rate, with the result that type and historical material of most Australian and New Zealand taxa can be found at K and/or BM.

The ABLO position has delivered three main benefits to Australasian botanists:

### 1. Service to taxonomic botany in Australia

This is arguably the most important. There is probably more type material of Australian taxa in K and BM than in all Australian herbaria put together. This is certainly the case if one adds the holdings of LINN, LIV, CGE, OXF and E, all easily accessed from London. In addition, the ABLO can quite easily and relatively cheaply access other important holdings of Australian

material at P, B, FI, G, L and W, amongst other European herbaria.

During 2008–09 the ABLO serviced 184 enquiries from botanists, of which 82 related to specimens held in UK and European herbaria. He made over 2000 digital images of specimens and sent these to enquirers. Why is this important? “Type” material in these herbaria is loosely defined for many good historical reasons. Material housed in red folders may or may not be really type material, and there is often other putative type material unidentified as such in the general collections. A request for a loan of type material will usually capture sheets housed in red folders, but may well overlook other critical material. In addition, specimens are often not where enquirers expect them – on a number of occasions Orchard found type specimens in herbaria other than those expected (e.g. Labillardière types in BM rather than/as well as in FI; Sieber and Drummond material in OXF). An informed Australian botanist with time available can find these sheets, where busy curatorial staff at K or BM may not.

During the year the ABLO also serviced 42 requests for bibliographic material. London houses some of the richest botanical libraries in the world, particularly those at Kew, the Natural History Museum, the Linnean Society and the British Library. He was able to provide copies of many rare and obscure references and descriptions. Kew and BM also house very rich archival material relating to Australasian botany, all of which is only accessible on site, and the most recent ABLO also had cause to access this on his own and others' behalf.

Finally, Kew employs many of the world's leading nomenclaturalists, and others visit regularly. The ABLO serviced 10 botanical nomenclatural requests, in consultation with these leading botanists.

The requests serviced came from all Australian and New Zealand government herbaria, several university herbaria, a number of government departments in both countries, and a number of unattached botanists. The impact of this service work is therefore widespread—we estimate that the 2008–09 service work had a measurable positive impact on well over 100 taxonomic projects. Most ABLOs, certainly over the last 40

years, have reported similar outcomes.

## **2. Research opportunities**

The ABLO works for 12 months (14 months in the most recent case) in the heart of some of the richest Australian botanical collections, with easy access to one of the world's greatest botanical libraries and archives, and with other great collections, libraries and archives nearby. At least half the ABLO's time is free for personal research, and there are no administrative interruptions. This is a situation that many working taxonomists can only dream of. In 2008–09 the ABLO completed and sent for publication two papers while at Kew, and gathered substantial amounts of material for several more papers and a number of books, to be written over coming years. One of the published papers could only have been written in London. An ABLO should expect to complete or substantially complete at least 3–4 papers while at Kew. The ABLO position thus provides a great opportunity for concentrated research over a substantial time frame.

## **3. Training**

Kew attracts as staff and visitors many of the world's leading taxonomists, and the ABLO position provides an opportunity to meet them, perhaps collaborate in various projects, and certainly to make lasting contacts. In addition, working in such a large institution provides valuable insights into the mechanisms and machinations of a large research institution. Being based in London offers opportunities to participate in seminars, conferences and colloquia which are otherwise impractical for most Australasian botanists to attend—meetings at museums, universities, the Linnean Society, the British Library and many more, providing a new perspective on global problems and developments.

### **The future of the position**

If the ABLO position delivers so many benefits, why has it been suspended? No rationale has been provided by the ABRS Advisory Committee, but anecdotal evidence suggests that there were a number of reasons:

#### ***1. Difficulty in attracting applicants***

This has certainly been a problem in the last

few years, although on every occasion a suitable applicant was found. There was at least one expression of interest in filling the position in 2009–2010, but ABRS preferred to suspend the position. One of the reasons for the apparent lack of interest is that many botanists, busy with day-to-day matters, overlook or are unaware of ABRS Grant closing times. The 2008–09 ABLO was approached informally by several botanists during the last year, expressing an interest in the position and asking about application procedures. The most recent of these was a young botanist enquiring as recently as December 2009. With suitable timely publicity about closing dates and a little encouragement it seems likely that, as happened regularly in the 1960s to 1990s, a pool of at least two or three applicants could be attracted each year. With only a single post to fill, we only need one suitable applicant a year.

#### ***2. A lack of young applicants***

In recent years the position has come to be seen by some as primarily a training/capacity building post, although this was not its original role. Applicants have in the past been required to have some year's experience, so that they can satisfactorily handle enquiries. As we have pointed out above, its main benefit to Australasian taxonomy is as a service position, providing valuable feedback into a host of taxonomic projects, and as a research opportunity for the appointee. However, even the lack of young applicants is not true—of the last four ABLOs, two (Wege and Tonkin) were early career taxonomists, one (Bruhl) was a mid-career taxonomist, one (Orchard) a late career taxonomist. We would also argue that even a late career appointment has training value. Older taxonomists also benefit from exposure to such a rich environment, and with a shrinking number of paid positions, much taxonomic work is nowadays carried out by older taxonomists, often for many years in their retirement. And isn't there legislation in Australia prohibiting discrimination on the grounds of age...?

#### ***3. Young taxonomists need research time to build their careers***

It has been claimed by some that the service obligations of the ABLO position would prevent young appointees from carrying out research

and publishing to build their early careers. This is not so. The ABLO has at least 50% of their time available for research, which is carried out in a rich botanical environment. Kew has excellent research facilities, including state of the art molecular laboratories at the Jodrell (these were used by Bruhl). A moderately enthusiastic researcher should be able to complete 2–4 papers during their posting, and gather materials for several more. In 2008–09 the ABLO chose to concentrate on gathering large quantities of material for future publications (as have many previous ABLOs), but still managed to complete and publish two papers.

#### **4. Australian herbaria cannot afford to send botanists away for a year**

Some herbaria have stated that they cannot afford to send an ABLO because with small staff numbers it would detract from their home responsibilities. On a number of occasions it has been suggested that one way to address this would be for Kew to send a botanist to the ABLO's home institution, as a kind of informal staff exchange. Our understanding is that Kew is prepared to consider such a scheme. To make it work it would be necessary to revert to the timetable adopted some years ago, where the ABLO was selected 18 months or a couple of years in advance, allowing time for an exchange to be settled. If CHAH and/or ASBS want to make the position work, perhaps incorporating an exchange scheme, then they need to cooperate with ABRs to provide coordination of publicity and logistics. This should not be an onerous task but needs to be carried out in a timely manner.

#### **5. Any gap in services can be filled by personal contacts**

Some have suggested that they see no need for the ABLO because they have always obtained what they wanted through personal contacts and visits to the UK. This may work for some, but is not universally so. Several of the requests received in 2008–09 were for follow-up enquiries with various institutions, when written requests had been ignored or delayed. It is unrealistic to expect that Kew (or BM) will pick up the tasks of the ABLO if the position is abolished. Kew has a broad research interest in Africa and BM in

Central and South America. Neither has more than a 'watching brief' on Australasian botany. While the staff of both institutions (and those of other herbaria visited in the UK and Europe) are friendly and helpful, they have to deal with enquiries from all over the world. The number of enquiries from Australasia is disproportionately high because of the historical concentration of material of our taxa in the UK and Europe. Australia is a rich country, and in their position, we would be asking ourselves why Australia cannot act in its own self interest, as it has for the last 70 years?

#### **What can be done?**

The grant-in-aid support that ABRs has recently given to the ABLO position (\$50,000, with a suggestion in 2008 that it might be increased to \$70,000) is the equivalent of about one normal research grant. This money not only supports the ABLO's own research project(s), and training/experience in a world class research institution, but provides through the service obligations support for over 100 other taxonomic projects in Australasia (based on recent experience). That seems to us to be excellent value for money.

If the Australian botanical taxonomy research community feels that the decision to suspend the ABLO is not in the best interests of Australian taxonomy, then they need to let the ABRs Advisory Committee know. Any communication should be copied to CHAH so that the two organisations can work together to find a solution. It might also be useful to let the Keeper at Kew (d.mabberley@kew.org) know of your concerns. The current members of the ABRs Advisory Committee are listed at <http://www.environment.gov.au/biodiversity/abrs/funding-and-research/advisory/index.html> while CHAH members are listed at <http://www.chah.gov.au>

It goes without saying that the views and wishes of younger taxonomists are particularly valuable, especially as they have the most to lose.

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# ASBS 2009 Conference Reports

## Meeting report ASBS National Conference, UNE, Armidale, 2009

**Mark Wallace**  
Kings Park and Botanic Garden  
The University of Western Australia

The 2009 ASBS conference, *Systematic botany: from science to society*, was held at UNE from December 1–3. The venue, the botany lecture theatre, was conveniently located close to Mary White College where many of the 100 delegates chose to stay. The conference kicked off on Monday afternoon with the welcome reception at the historic and beautiful Booloominbah homestead where we were given a bag replete with information about Armidale, the surrounding area, and the conference itself.

On Tuesday morning the conference proper began with a keynote address from Peter Stevens (University of Missouri) who gave us an update on plans for the Angiosperm Phylogeny Website, and also proposed that taxonomy is the least cumulative of all scientific disciplines! After this thought-provoking start, and a break for morning tea, we heard about some lower plants (Karen's words, not mine). Michelle Casanova (MEL) highlighted some useful morphological characters that can be used to distinguish between *Nitella* species. Endymion Cooper (Sydney) presented a molecular phylogeny of the Lepidoziaceae, (no other group has made more evolutionary mistakes!) and proposed that this group needs considerable revision, particularly at the subfamily and generic levels. Daniel Ohlsen (Melbourne) then told us about his work on the phylogeny and biogeography of *Gleichenia* and *Sticherus* ferns, and Ed Biffin (Adelaide) used a molecular phylogeny of Araucariaceae to explore whether New Zealand was completely inundated during the Oligocene. The session was concluded by Tony Orchard (ABRS) who gave an account of the trials and tribulations of Allan Cunningham and James Bowie on their first collecting trip to Brazil.

After lunch we delved into the world of

cytogenetics and polyploidy. Greg Keighery (DEC WA) began by outlining some examples of polyploidy in the Australian flora, then Mark Wallace (Kings Park) discussed the distribution of polyploids in the *Lepidosperma costale* species complex. To conclude the session the Kiwis, Rob Smissen (CHR) and Leon Perrie (Museum of New Zealand), presented work that suggests multiple allopolyploid origins of some Gnaphalieae daisies and *Asplenium* ferns.

After a break for afternoon tea, Bill Barker (AD) discussed New Zealand's long-tubed *Euphrasia* species that, incidentally, have an interesting fruit that angles down into the bog as it matures. This was followed by Laura Shirley (Melbourne) who spoke about some complicated phylogeographic patterns in three eucalypts from the Grampians. Claire Marks (Melbourne) then presented her work on *Nicotiana* sect. *Suaveolentes* and showed that morphological studies support the monophyly of this group. Finally, Duncan Jardine (JCU) spoke about *Solanum centrale*, a species that he suggests should be referred to as the 'desert raisin' rather than the 'bush tomato' to avoid confusion.

Day two began with consideration of some large and complicated groups. Caroline Punte-Lelievre (ATH) presented a molecular phylogeny of the Styphelieae followed by Betsy Jackes (JCU) who spoke about a 19-year-old study on the production of fruits by male plants of *Monotoca scoparia*. Chris Quinn (NSW) also dusted off some old work (only 13-years-old though), and proposed that a new genus name is needed in the *Monotoca* group. Then on to Cyperaceae (finally) and Adele Gibbs (UNE) spoke about *Schoenus* and Russell Barrett (Kings Park) updated us on his work on *Lepidosperma*.

After morning tea Mary Barkworth (Intermountain Herbarium) travelled all the way from Utah to tell us about the Australasian Triticeae! Udani Sirisena (Adelaide) presented a phylogeny of *Thysanotus* that suggested that *Murchisonia* was embedded within it. Matt Barrett (Kings Park) spoke about stink-lillies and, memorably, brought in an example to be passed around the audience. Finally, Phil Rose (UNE) discussed his work

on *Allocasuarina*, and also implored all of us to consider purchasing insurance if we provide biological identification services.

This was followed by a workshop on accreditation and quality control of providers of biological information, and the AGM. Then it was on to the bus for a few pre-dinner drinks at Dangars Falls before a delicious meal at McCrossin's Mill in Uralla. Madcap musical entertainment was in ample supply during dinner and passengers on one of the buses received a scenic, if unnecessary, tour of Armidale and surrounding areas on their (long) way back to Armidale.

The third and final day began with Trevor Wilson (Sydney) who spoke about his work using landmark-based morphometrics in *Prostanthera*, followed by Bort Edwards (UQ) who spoke about some common disjunctions in plant species' distributions in the Australian monsoonal tropics. Tanya Scharaschkin (QUT) presented some phylogenetic work from Craig Marston's (QUT) honours project on the Oleinae. Her message to other students: don't panic even if your sites are burned and none of the genera you are working on turn out to be monophyletic! Andre Messina (La Trobe) followed with a discussion of his ongoing work untangling the *Olearia phlogopappa* complex, and Gareth Holmes (MEL) spoke about his work on *Persoonia*, and concluded that Snottygobbles may need taxonomic revision.

After morning tea Ihsan Abdul Raheem (Adelaide) presented a summary of his work looking at morphological characters that are useful for species discrimination in *Hibbertia*. Then two talks on *Polyscias sambucifolia*: the first by Murray Henwood (Sydney) who spoke about the diversity of leaf forms in the species, the second by Kerry Gibbons (Sydney) who used phylogeographic techniques to better understand the relationship between populations. The session concluded with Mohammad Fatemi (UNE) who proposed that *Phyla canescens* has been introduced into Australia from several different locations on several different occasions.

After lunch Gill Brown (Melbourne) discussed genetic variation in the Cape Wattle, and John Clarkson (QPWS) spoke about the implications of hybridisation in *Hymenachne*. Brian Sindel

(UNE) spoke about the important role of farmers and inspectors in detecting weeds, and the session concluded with Robyn Barker (AD) who spoke about attempts to deal with some of the taxonomic issues complicating the eradication of blackberry from Australia.

The final session began with Helen Eddy-Costa (Centre for Plant Biodiversity Research) who spoke about assessing the needs of those who use taxonomic information. Nicholas Sadgrove (UNE) discussed the remarkable variability in leaf oils in *Eremophila longifolia* and Dan Murphy (MEL) spoke about the vital role that taxonomy must play if the prospects for DNA barcoding are to remain strong. Mark Harrington (ATH) then discussed his attempts to understand the origin of Australia's tropical flora, and Mike Bayly (Melbourne) concluded proceedings with his discussion of *Halfordia* in Queensland.

I think it is clear from this summary that many fascinating topics were covered during the three-day conference and that the depth and breadth of systematic botany research occurring in Australia and New Zealand is impressive. The conference was a great success and ran very smoothly. I am sure that everyone appreciates the work that Jeremy Bruhl, Ian Telford, and team put into organising ASBS 2009. The baton (bunch of daisies) has now been passed to Ilse Breitwieser (CHR) who, with her colleagues, will be organising the next conference near Christchurch next year. I hope to see you all there.



Jeremy Bruhl passes the baton to Ilse Breitwieser. (Photo: Murray Fagg).

## The Great Escarpment: ASBS post-conference field trip report

Gill Brown

After three days in the lecture theatre at UNE we were keen to get out and see the botanical treats on offer on the New England Tableland. We congregated at the bus stop outside Botany at 7.55 am on Friday 4 December, as instructed by our leader for the day, Jeremy Bruhl. After a head count, the bus promptly departed at 8.05 am and Jeremy handed out the detailed field notes and gave us the run down for the day. It was during this that we were given a demonstration of “the whistle”, which was used successfully throughout the day (except that one time with Peter Stevens...) to heard us back into the vehicle.

Our first stop was Wollomombi Falls in the Oxley Rivers National Park. Wollomombi Falls is one of Australia’s highest waterfalls at 240 m and the view was spectacular. At Edgars lookout, Jeremy stood on a wooden stump and took a group photo, while most of us took photos of him. After that, we were free to botanise in the grassy to layered



Jeremy Bruhl preparing us for group photo at Edgar's Lookout (Photo: Russell Barrett).



Trevor Wilson at Edgar's lookout collecting a variant of *Prostanthera lasianthos* (Photo: Gill Brown).

*Eucalyptus* woodland until 9.45 am. Several collections were made at this stop including a variant of *Prostanthera lasianthos*, which was collected by Trevor Wilson for an honours project, which is jointly supervised by Murray Henwood (University of Sydney) and Barry Conn (Botanic Gardens Trust). We were all back on the bus on time and as we headed off to our next destination, a New Zealand botanist was overheard to say: “All I see is weeds... eucalypts and acacias”. The botanist will remain unnamed, however, I will say that later in the day they appeared much more at home with the Australian vegetation, particularly in the closed *Nothofagus* forest.

Ebor Falls, where “the Guy Fawkes River drops in a double leap into a gorge cut into almost horizontal basalt flows”<sup>1</sup>, was the second stop for the day. As we walked along the escarpment track through Eucalypt grassy woodland there were numerous species in flower for us to ogle, including *Xerochrysum bracteatum*, *Dipodium* sp. and a *Stylidium* with five petals. Upon sighting the latter, Marco Duretto exclaimed, “a 5-petaled *Stylidium*... must be a new genus!” Obviously, it was time for a caffeine hit and some sustenance. For this we were all extremely thankful to Richard Willis who manned the boiling water and was unfazed by the aggressive rush for the plunger coffee. It was time to leave Ebor Falls (11.30 am) and we hadn't lost anyone yet, or had we? Where was Associate Professor Bruhl? He eventually boarded the bus at 11.42 am and we were off to site number three.





*Dipodium* sp. near Ebor Falls (Photo: Russell Barrett).



An unusual 5-petaled flower on *Styliidium graminifolium* near Ebor Falls (Photo: Russell Barrett).

Stop three was at a heath-sedgeland, with some minor occurrences of *Sphagnum* bog at Bullock Creek. While many were excited by the thought of scrambling through the scrub in search of new and exciting plants, others of us were a little more hesitant. Especially after the question “What about tiger snakes?” was posed, to which Jeremy coolly answered, “Tiger snakes smiger-snakes”. I for one was not all that comforted by this but as far as I know, Jeremy was correct as there were no snake encounters. The Bullock Creek site had a plethora of plants in flower, including *Utricularia*, *Epacris*, several species of Goodeniaceae, *Patersonia*, *Drosera*, *Whalenbergia*, *Xanthorrhoea*, *Gleichenia* and *Persoonia*. Sorry, I almost forgot, there was also some Cyperaceae there too! Of note, was the

species *Gymnoschoenus sphaerocephalus*. The whistle was blown at 12.42 pm and worked a treat, with everyone back on board by 12.44 pm!

On the way to Point Lookout (stop 4) we made an unscheduled stop (4a), at Tom’s Cabin, for Karen’s *Carex capillaris*. It was here we got our first sighting of *Nothofagus moorei* and it was the first time someone dared to rebel against “the whistle”. Jeremy blew the whistle to turn us back to the bus. However, Peter Steven’s kept going! Apparently he wanted to see what was around the corner. To this, Jeremy unsheathed his hunting



*Whalenbergia telfordii* at Point lookout (Photo: Russell Barrett).



Duncan Jardine beneath Point lookout (New England National Park) with a yellow flowered *Cassinia aculeata* subsp. *nova-anglica* in hand that was named by Tony Orchard in 2009 in ASB, based on a Telford specimen from Point Lookout as the type (Photo: Gill Brown).

knife with a sly grin as he said “I think I can get him from here!” Needless to say, Peter turned around and headed back to the bus with everyone else and we all left site 4a safely around 1.40 pm.

Lunch was at Point Lookout in the New England National Park. Richard Willis and David Lawrence arrived ahead of time to set up and get the kettle boiling. There were a delicious spread of salads, deli meats and bread rolls available, as well as fruit, tea and coffee and juice. After lunch, the organising team had come up with the brilliant idea of supplying zip lock bags, dried fruit and nuts for us to make our own personal scroggin mix... yum! As some of us often include lollies in our scroggin, the bags of snakes, which were next to the fruit and nuts, were opened and added to some of our mixes. But apparently lollies are not added to scroggin in all states and those bags of snakes had been earmarked as a snack for the drive back to Armidale... oops! Scroggin, cameras and secateurs in hand off we went for the afternoon; first to the Point Lookout circuit walk, followed by the Eagles Nest walk.

The view from Point Lookout, which is 1,562 m above sea level, was spectacular. It gave views

from the great escarpment to the coast and the green hills in between were dotted with splashes of red from the flame trees (*Brachychiton*) in flower. On the short circuit walk we saw several rare species in flower, including *Gaultheria viridicarpa* and the newly described *Whalenbergia telfordii* (named after Ian Telford). Under one of the lookout platforms, Duncan Jardine, had clambered down there to collect a yellow flowered *Cassinia* for Tony Orchard. We then started our descent into the closed *Nothofagus moorei* forest. Peter Stevens was extremely excited to find the endemic *Berberidopsis beckleri* (Berberidopsidaceae), commonly known as the montane tape vine. There is only one other species known in this genus, *B. corallina* from Chile. It is in the order Berberidopsidales, which is an early diverging lineage of the asterids<sup>2</sup>. People finished the walk between 4 and 4.45 pm and we all lounged about at the Weeping Rock carpark, with the exception of a small break away group who went off collecting *Persoonia*.

There was no need for the whistle at the end of the day and the bus departed on time. But about 5 minutes down the road the bus stopped while



Some of the tour group at Point Lookout (Photo: Russell Barrett).



Peter Stevens and David Cantrill collecting the endemic *Berberidopsis beckleri* (Berberidopsidaceae) from the Eagles Nest walk in the New England National Park. (Photo: Gill Brown).



The lustrous pink developing fruit of *Berberidopsis beckleri* (Berberidopsidaceae) from the Eagles Nest walk in the New England National Park. (Photo: Russell Barrett).



A superb *Xerochrysum* from the Eagles Nest walk in the New England National Park. (Photo: Russell Barrett).

going up a hill, at this point some of us thought we might repeat the return time of the Darwin field trip. The bus driver assured us it was ok, the computer just shuts down if it doesn't get enough revs! In a minute the bus was going again and we were safely returned to UNE on time (7 pm and well before dark, which is something I hear is uncommon for one of Jeremy's field trips) after a satisfying day in the field, full plant presses in hand.

On behalf of everyone who took part, I'd like to say a big thank you to the organisers of the field

trip, Jeremy Bruhl and Ian Telford, and all of the helpers on the day, including Richard Willis and David Lawrence. The field notes were fantastic and packed full of information about the geology of the route, notes on each of the stops as well as what we would see on the drive in between each stop, as well as a species list.

<sup>1</sup> Telford & Bruhl ASBS Conference 2009 Post-conference field trip notes (The Great Escarpment, New England Tableland)

<sup>2</sup> <http://www.mobot.org/MOBOT/research/APWeb/>

## Winners of Student Prizes

The best student talk award was presented to Mark Wallace for his presentation:

### Using flow cytometry to investigate ploidy distribution: an example from the *Lepidosperma costale* (Cyperaceae) species complex

M.J. Wallace<sup>AB</sup>, M.D. Barrett<sup>AB</sup>, M.A. Orvain<sup>A</sup>, K.A. Heel<sup>C</sup> and R.L. Barrett<sup>AB</sup>

<sup>A</sup>Kings Park & Botanic Garden; <sup>B</sup>School of Plant Biology, University of Western Australia; <sup>C</sup>Centre for Microscopy, Characterisation and Analysis, University of Western Australia.

Polyploidy refers to the genome-wide multiplication of chromosomes and is thought to have played a major role in the diversification of angiosperms. Understanding the distribution of ploidy levels in natural systems is an important area of evolutionary biology that has been greatly facilitated by the advent of flow cytometry. In the present study, flow cytometry was used to assess the ploidy level of 15 populations from the *Lepidosperma costale* species complex in southwest Western Australia. This species complex is taxonomically challenging due to the conservative morphology typical of the genus *Lepidosperma*. All but one population consisted exclusively of diploid or tetraploid individuals. The diploid populations were more geographically



Mark Wallace being presented with his student award by Mike Bayly, on behalf of both ASBS and the prize sponsor, CSIRO Publishing (Photo: Murray Fagg).

restricted and tended to occupy the more northern and drier regions of the WA wheatbelt. Only one site was found to contain multiple ploidy levels, and 1619 individuals were exhaustively sampled to examine ploidy distribution at microgeographic scales. Even at this scale, diploids and tetraploids tended to be spatially segregated and triploids only rarely occurred at the contact zone between the diploid and tetraploid cytotypes. This study is the first to document polyploidy in the genus *Lepidosperma* and highlights the potential importance of ploidy level in any future taxonomic treatment of the group.

The best student poster award was presented to Bort Edwards for his poster:

## Drawing a line in the sand: differentiation between *Melaleuca argentea* and *M.* *fluviatilis*, two ecologically similar members of the broadleaf paperbark complex

R.D. Edwards<sup>A</sup>, L.G. Cook<sup>A</sup> and M.D. Crisp<sup>B</sup>

<sup>A</sup>The University of Queensland; <sup>B</sup>The Australian National University.

The *Melaleuca leucadendra* complex of broadleaved paperbarks is currently described as a group of 14 poorly distinguished morphospecies. Typically associated with water or seasonally wet habitats, it appears that local scale ecological variation may play a role in the differentiation of morphotypes across the landscape. *Melaleuca argentea* (the silver-leaved paperbark) occurs in an almost continuous distribution across the monsoonal tropics of northern Australia and is commonly associated with riverbanks and seasonally dry watercourses. It occurs from the Gascoyne River district in Western Australia, to Cape York in the east where it is replaced by *M. fluviatilis*, a highly similar morphospecies, from the western side of the Great Dividing Range (GDR). The two species are differentiated by fine scale variation in leaf-hair form, appear to occupy



Bort Edwards being presented with his student award by Mike Bayly (Photo: Murray Fagg).

the same general ecological niche, and despite a narrow contact zone, are noted for maintaining their identity in sympatry. While neither nuclear nor chloroplast genetic markers show clear differentiation, climatic niche modelling predicts both of the species' current distributions, with the GDR representing a boundary between the seasonally drier western climate and the wetter Pacific margin to the east. With fine-scale differences in leaf hair morphology a plausible adaptation to variation in climate, it is suggested that small changes in phenotype are sufficient to drive incipient speciation within the group.



Delegates at the 2009 ASBS conference in Armidale (Photo: UNE).

# Article

## Aloe in Western Australia

Greg Keighery

### Introduction

*Aloe* is a genus of c. 365 species, largely confined to tropical and temperate Africa (Glen and Hardy, 2000 and Van Wyk and Smith, 2003). Species of *Aloe* are increasingly being used as water-wise plantings in arid regions and southern Australia, and I was recently queried if any were recorded as naturalised in Western Australia, because there is little information on the potential weedy members of the genus. Hence they could be readily recommended for use.

Randall (2002) lists 6 *Aloe* species as naturalised, The Australian Plant Census (CHAH, 2006) records 5 species:

*Aloe arborescens* Mill. (Qld, NSW, Vic. and SA—sparingly naturalised);

*Aloe ciliaris* Haw. var. *ciliaris* (Vic.—sparingly naturalised);

*Aloe cameronii* Hemsl. (Qld);

*Aloe maculata* All., includes *A. saponaria* (Aiton) Haw. (Qld, Tas, NSW, SA—sparingly naturalised & Vic.—sparingly naturalised);

*Aloe vera* (L.) Burm.f. var. *officinalis* (Forssk.) Baker (NT, Qld) and one hybrid;

*Aloe striata* x *maculata* (Qld) as naturalised in Australia.

The only difference between Randall and CHAH is *Aloe parvibracteata* Schonl., listed as a garden escape for Australia by Randall. No *Aloe* species are listed as naturalised in Western Australia.

Aloes are difficult plants to document as naturalised aliens. Often one notes populations when they are vegetative in relatively remote sites and these cannot readily be ascribed to species, unless they are grown on till flowering. They are difficult to prepare as herbarium specimens (here a thanks to Brendan Lepschi who taught me to file and gut *Agave* leaves) and usually better to

document with digital photographs. They require detailed population notes on their status in a site, since they are very long-lived and able to persist long after a site where they were planted has been abandoned. Many are able to spread via offsets and often do not spread via seed. However, when in flower, most are pollinated by local honeyeaters, and some populations do set seed, however, most populations are clones of one genotype. Seedlings are rarely observed in the wild in Western Australia.

### Notes on Species in Western Australia

*Aloe brevifolia* Mill.

Collected sterile at the old Kundip Townsite in May 2005 where it was abundant throughout the old townsite and tip. After potting each ramet produced over a dozen offsets the next year, rapidly filling the large containers. The adult ramets finally flowered in summer 2009, when a voucher collection was made. Material appears to conform to *A. brevifolia* var. *brevifolia*. Not recorded as naturalised elsewhere in Australia.

This population was collected for identification before being targeted for eradication as part of the State Biodiversity Conservation Initiative in 2006/7. One project of this initiative targeted emerging weeds, including succulents in the Ravensthorpe Range. Species targeted in this region were *Agave americana*, *Aloe* species (*A. brevifolia* and *A. arborescens*), *Opuntia* species, *Cotyledon orbiculata*, *Crassula tetragona* and *C. multicava*).

*Aloe ciliaris*

A garden escape spreading via scrambling stems, extending up to 7 metres in height and rambling throughout a stand of *Eucalyptus staeri* degraded woodland on the lower slopes of Mount Melville in Albany. Other populations are found on old tip sites and beach shacks at Mount Manypeaks. Material corresponds to *A. ciliaris* var. *ciliaris*. These localised populations are perhaps best considered as sparingly naturalised.

*Aloe arborescens*

Commonly found Persistent clumps of plants are found around tips, old settlements and abandoned farm houses and Stations in Mediterranean and southern arid Western Australia. Forms dense but very localised clumps, considered sparingly naturalised.

*Aloe ferox* Mill.

Persistent plants around old settlements, abandoned farm houses and Stations in southern Western Australia. All plants recorded are isolated individuals and the species is not considered naturalised.

*Aloe maculata*

Commonly found as dense colonies around old settlements, abandoned farm houses, drains and tip sites in southern Western Australia, from near Balladonia to Perth. Naturalised.

*Aloe variegata* L.

Populations of this commonly cultivated species have been found in coastal dunes around Geraldton and Dongara, spreading probably from dumped garden plants. Brendan Lepschi has recorded this species from Bencubbin and Trayning. These localised populations are perhaps best considered as sparingly naturalised.

*Aloe vera* var. *officinalis*

Commonly found as dense colonies around old settlements and abandoned farm houses and Stations in Mediterranean and arid Western Australia. Large populations recorded from the Pilbara, Murchison, Port Gregory, Geraldton and Perth. Naturalised.

**Conclusions**

In 2009, *Aloe brevifolia* was naturalised in Western Australia, but has been targeted for eradication and may longer be extant in the wild. *Aloe maculata* and *A. vera* var. *officinalis* are naturalised in Western Australia. *Aloe arborescens*, *A. ciliaris* var. *ciliaris* and *A. variegata* are sparingly naturalised. *Aloe ferox* is long persistent from plantings but does not appear to be naturalised.

Fortunately their slow growth and spread and ease of control probably limits Aloes to a minor weed status in Western Australia.

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## ABRS Report

**Staffing**

We welcome back Robyn Lawrence, who returns after 18 months leave, and Leah Schwartz, who was with us as a graduate and now joins us to work on the Australian Faunal Directory. Samantha Cocks joins us to work on the grants program until April 2010. Katherine Selwood has also joined ABRS and will be working with ABRS until April on biodiversity surveys.

**ABRS National Taxonomy Research Grant Program**

The ABRS Advisory Committee met on Tuesday 15th December to discuss the Capacity-Building Grants for 2010. Robyn Kruk, Secretary of the Department of the Environment, Water, Heritage

and the Arts, met with the Advisory Committee to discuss current and future priorities for the Department in biodiversity conservation and how ABRS and taxonomy could play a role in these.

**New Publication**

As foreshadowed in the last *Newsletter*, our newest publication is *Algae of Australia – Marine Benthic Algae of Lord Howe Island and the Southern Great Barrier Reef 2. Brown Algae*, by Gerald T. Kraft.

The book is available from CSIRO Publishing for \$140.

Cameron Slatyer  
Annette Wilson

## Vale Rica Erickson

### Frederica (Rica) Lucy Erickson August 1908 – September 2009

In the spring of 2009, Rica Erickson, a remarkable Western Australian icon, passed away at the age of 101. Just a year before she had celebrated her 100<sup>th</sup> birthday with her loving family and a large group of admirers and friends, many of whom were inspired by her and her botanical and historical studies.

Frederica Lucy Sandilands was born in Boulder on 10<sup>th</sup> August 1908 and was delivered by her grandmother. She developed her love of nature from her early years living in bush, mostly in the Goldfields with shorter stays in Albany, Cuballing and Kendenup.

While still at school Rica began her nature drawing and investigations, winning an Eastern Goldfields Exhibition medal for a crayon drawing in 1915 and a Nature Study and Author's Badge at Girl Guides. After obtaining her Leaving Certificate in 1925 she began training to be a teacher so she could continue to live in the bush and explore its plants and animals. The process of discovery was core to Rica's approach since these early years, and she described this in an interview in 1991:

"It's a very personal experience to go exploring—even if its written up and studied by someone before you, you have to do it again yourself to appreciate the wonder of it."

Rica's teacher training began with her postings as a monitor in the towns of Kendenup, Mount Barker, Dumbleyung and Gnowangerup before spending a year at the Teacher's Training College in Claremont (Perth). She then taught at Aurora (between Kojonup and Cranbrook), Young's Siding (west of Albany) and Bolgart. Once Rica gained her C and B Teacher's Certificates she began work on her A Certificate, which would qualify her to go on exchange overseas. For this she expanded her study of WA's orchids. As part of this work she developed a working relationship with Dr Rogers from Adelaide when she sent him specimens that established that there were

truly two Pink Fairies, *Caladenia latifolia* and *C. reptans*. Such collaborations were core to Rica's approach to her natural history studies. Other collaborators included the orchidologists Edith Coleman and J. Ros Garnet in Victoria, W. (Bill) Nicholls and Reverend Rupp in NSW and O.H. Sargent in WA, the bee specialist Tarlton Rayment and the professional naturalist Jim Willis from Victoria.

Rica's last school posting in 1934 was to Bolgart. While in Bolgart Rica met Syd Erickson and they were married in 1936. Now a farmer's wife and in the next four-and-a-half years, the mother of four children, she was very busy for the next ten years. However once the children were at school she was able to continue her work in tandem with her farm and family life with Syd as a "... most considerate helpmate". Her initial studies on orchids were now expanded to include the triggerplants, plants of prey and pollinating insects (principally the bees, wasps (Hymenoptera) and flies (Diptera)). She was drawn to these groups as they all contained plants that move.

Rica was extremely disciplined in her studies. Her hundreds of pencil drawings, ink drawings and watercolours were always made from fresh plants. The illustrations were life-size accompanied with the necessary dissections and notes. Her tools of trade were a specially made travelling lens and a black leather handbag that held her sketch book, paint box brushes and water bottles. At home in Bolgart, Rica aimed to do a drawing a month and when travelling for holidays or the special trips to pursue particular plants, drawings were done at the roadside with notes for the colours to be finished later. Pressed collections supported much of this work and are housed in Perth, Melbourne and Kew.

With a clear scientific approach Rica published her work.

"You've got to realise a time when you must, if you want to share your knowledge, publish, no matter what the imperfections are... Other people can work on what you have done."





Rica Erickson at the Botanical Artists Group display at the Kings Park Wildflower Festival in September 2000 (Photo: Russell Barrett).

Three iconic books were published between 1951 and 1968 describing and illustrating the three groups of WA plants that Rica worked on—*Orchids of the West* (Erickson 1951), *Triggerplants* (Erickson 1958) and *Plants of Prey of Australia* (Erickson 1968). Rica wrote these books from her observations and the information she collated from correspondence, books and journals with the intention of creating a work that the average person would be able to enjoy and learn from. The success of her books meeting these aims is illustrated by the number of botanists who cite Rica's books as one of their key early sources of information and inspiration. As an early teen Greg Keighery used *Orchids of the West* to both identify the orchids around Bunbury and used the book illustrations as a guide to his own developing drawing skills. Allan Lowrie's prodigious work on Carnivorous Plants and Triggerplants was inspired

by Rica's books, his aim being to produce up-to-date versions of these books.

Much of Rica's work was also published in other formats. She had papers in a variety of journals and magazines including the *Australian Orchid Review*, *Australian Plants*, the *Western Australian Naturalist* and the *Victorian Naturalist* (with her collaborator Jim Willis). Rica also contributed to materials for the Gould League and Naturalist's Club in WA.

Once Rica left the farm and retired to Perth with Syd she was ... "divorced from the bush... so went into history then". Rica was very busy, always having two or three projects on the go. A series of local history and biographies, including a biography of the Drummond Family, the family's patriarch, James Drummond being a key plant collector in the early days of WA. Her work for

the later publication again illustrated her detailed and meticulous work. On a visit to Kew Gardens in days before photocopiers she read and hand copied Drummond's letters. Rica collaborated on one more plant book over this period, working on the WA version of the Reed series on Flowers and Plants of Australia and New Zealand—*Flowers and Plants of Western Australia* (Erickson *et al.* 1979). Jim Willis had recommended her for this task.

In 1980 Rica was awarded an Honorary Degree of Doctor of Letters by the University of WA for all her works. Part of her citation reading... "Naturalist, illustrator, local historian and biographer, she has moved across the disciplines and her achievement has been outstanding." Other eminent awards in 1980 included being on the list of WA's 100 most influential people and being named as WA Citizen of the Year. In 1987 she became a member of the Order of Australia for her services to the Arts, particularly as an author and illustrator.

In 1991 Rica was drawn back to her plant work. Two spring exhibitions of botanical art were held in the Perth Cultural Centre, one in the Art Gallery of Western Australia and the other in the adjacent Alexander Library (State Library). The Art Gallery exhibition of botanical artists from 1699 to 1991 (Gooding 1991) included two watercolour and pencil pictures by Rica Erickson and the Alexander Library exhibition followed Rica's extraordinary works on the wildflowers of WA (Erickson 1991). It was Allan Lowrie's interest in Rica's work that was pivotal to the roots of the 1991 exhibition in the Alexander Library. On contacting Rica for his own studies Allan found that Rica had kept all of her pencil, ink and watercolour drawings (as well as the manuscripts of her books) which he photocopied and distributed. On hearing this the Wildflower Society of WA, long admirers and users of Rica's botanical works, worked with Rica to exhibit a selection of these works. Rica has since lodged these pictures and manuscripts with the Battye Library (part of the State Library of Western Australia). Together these exhibitions

renewed Rica's regular contact with the state's botanists and botanical community. Key to this was Rica's membership of the local Botanical Artist's Group (BAGS) being the 'Old Bag' of the Group. She joined them in many exhibitions over the next 15 years.

Rica maintained contact with both her botanical and historical interests throughout her long and productive life, authoring 10 books, co-authoring another 4 and editing 12 more, as well as many papers and articles. These and her reference materials will form a lasting legacy for Western Australia.

A private burial service was held on Monday 13 September followed by a gathering in Kings Park on 9 December to celebrate her life.

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Also see:

<http://www.botanicagallery.com.au/bag.php>

<http://www.slwa.wa.gov.au/erickson/pages/naturalist.html>

Bronwen Keighery

## Book review

### Another Paradise lost?

Greg Keighery

Department of Environment & Conservation, WA

**California's Fading Wildflowers (Lost Legacy and Biological Invasions). By Richard Minnich. University of California Press, Berkeley, 2008. 360 p. 6 x 9 inches. RRP US\$ 55.00. ISBN: 9780520253537.**

California is one of the two major areas of Mediterranean vegetation in the Northern Hemisphere, especially characterised by radiations of a diverse range of annual species (conservation issues of localised clades of these species in fact driving parts of the Phylocode).

In this fascinating but somewhat depressing book Richard Minnich uses historical ecology (Spanish explorer records, pack rat middens and early American accounts) to demonstrate that the valleys of California were not dominated by Bunch Grasslands or Prairie, as envisaged by many modern ecologists, but were dominated by herbaceous vegetation (forbs), like many deserts. These forbs were used as food and maintained by burning by Native Americans, grazing by native herbivores and a strong seasonal climate.

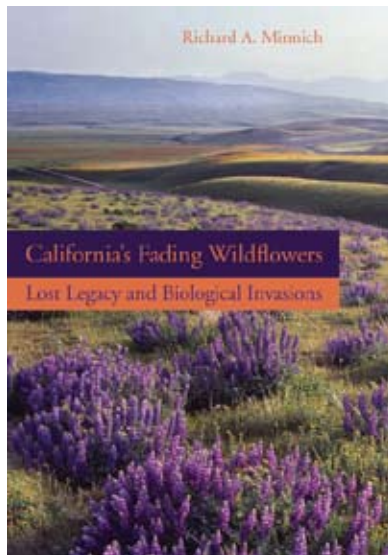
Spanish colonization brought in new species, new herbivores and new land management practices that introduced weeds into these herbaceous systems, not simply over-grazing of bunch grasses. Abode bricks from early missions were used to document what weeds were present when the buildings were constructed. These showed that *Brassica nigra*, *Erodium cicutarium*, *Malva parviflora*, *Avena fatua*, *Medicago* and *Trifolium* species were introduced by the Spanish. Minnich contends that introduced annual grasses and forbs rapidly invaded annual forblands, a transformation that is still continuing. These species spread

between 1780 and 1840 and were dominating coastal valleys by the Gold Rush (late 1850's), although the inland valleys and deserts were still dominated by native herbs, as noted in numerous explorers and herbarium records.

Minnich then discusses a second wave of invasives: *Avena barbata*, *Bromus diandrus*, *B. madritensis*, *Hordeum murinum* [= *H. leporinum*] and *Brassica geniculata* that occurred in the late nineteenth century. He documents their introduction and spread using historical herbarium specimens (both noted absence before 1860, first collections and specimen notes) and survey and botanical records. These species have caused the collapse of the famous wildflower meadows in the more arid interior and were dominating the central valley by 1930/40. Invasion by Mediterranean annuals appears aided by their pre-adaptation to earlier winter rain causing

earlier mass germination of propagules with a short seed life compared to the latter more random germination of native annuals.

Minnich finally discusses the "tunnel vision" problems of protecting rare species when the whole ecological system supporting them is collapsing and is itself present in only a fraction of its former abundance. His management suggestions are very broad brush, but his careful use of a multitude of historical data (including herbarium specimens) to document his thesis is of considerable interest to those of us in New South Wales and Western Australia who have grappled with similar bland statements about the past dominance of bunch grasses. I wish that this book had been written before I visited California in 2003, as I would have been less shocked by the extent of the weed invasion of their lowland reserves.



## Publication notice

### AoB *PLANTS*—a new open access journal for plant biologists

Authors are turning in increasing numbers to open access journals to publish their work. The attractions of doing so are several. They include having greater control over copyright, the appeal and flexibility of the latest publishing technologies and, above all, having papers made available without charge worldwide and thus freely available to anyone who wishes to read them as soon as they are published. The newly launched journal *AoB PLANTS* offers these and other attractive features. It covers all aspects of plant biology, is owned and managed by plant scientists on a not-for-profit basis

and is published by Oxford University Press. *AoB PLANTS* publishes 'Research Articles', 'Points of View', 'Reviews', 'Mini-reviews' and 'Technical Articles'. Submitted papers are evaluated against published minimum criteria for acceptability using a double-blind refereeing system. Papers will appear online within 3–5 days of acceptance and benefit from a full typesetting and proofing service. For an introductory period, there will be NO CHARGE to publish in *AoB PLANTS*. This creates the ideal opportunity for authors to try the new journal and enjoy the benefits of open access publishing at no cost. For further information contact Mike Jackson, Chief Editor *AoB PLANTS*, E-mail: [mike.jackson@bristol.ac.uk](mailto:mike.jackson@bristol.ac.uk) or visit the web site <http://aobpla.oxfordjournals.org/>.

## Food for thought

Robyn Barker pointed out an interesting article from a Thai newspaper which unfortunately sounds all too familiar. The author, Eric Danell, draws attention to the landscape-wide destruction of forests in northern Thailand. He then goes on to say that in place of the native forests, numerous weeds have sprung up (whether opportunistic invaders or deliberate introductions we are not told), however one in particular, the Mexican Sunflower *Tithonia diversifolia* (Hemsl.) A.Gray, has been given a Thai name (Bua tong), is referred to as 'Wild Sunflower' and is promoted as a major tourist attraction for the region!

Regular reports are heard in Western Australia of wildflower tour buses stopping on some particularly picturesque hills to the north of Geraldton for the paying passengers to photograph the dense fields of 'wildflowers' (near monocultures of Paterson's Curse - *Echium plantagineum* L. and Capeweed - *Arctotheca calendula* (L.) Levyns). Similar are the tourists who provide their compliments on the beautiful wildflowers on display in the bushland of Kings Park in early spring - when the Pink gladiolus and Freesias are in mass flower!

In each of these cases, the tourists are sadly mis-informed, and at their own loss. However, the greater tragedy is for the loss to the natural

ecosystems replaced or invaded by these weeds which the tourist are totally ignorant of, and as such are unable to value. Danell likens the tragedy to the possibility of exterminating all elephants, tigers and gibbons, only to promote the wonderful rat in their place, as if the promotion is more important than the object being promoted.

Tourists can be strong proponents for conservation and informed tourists will pay good money to see truly natural ecosystems, adding to local rural economies which may otherwise struggle to attract visitors.

The article is a stark reminder of how quickly public perceptions can change, or how they can be manipulated, when there is a lack of accurate information available.

Danell does provide some hope that common sense can prevail. The the region of Chiang Mai, a native tree legume, *Butea monosperma* (Lam.) Kuntze (Flame of the forest, ton kwao) is actively promoted and is given away from government nurseries.

Eric Danell, How does your garden grow? *Chiangmai Mail* Vol. VIII No. 51—Tuesday December 22–28, 2009. <http://www.chiangmai-mail.com/357/columns.shtml#hd15>

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# ASBS Publications

## History of Systematic Botany in Australia

Edited by P.S. Short. A4, case bound, 326 pp. ASBS, 1990. \$10; plus \$10 postage & packing.

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

*Only a few copies left!—available only from the Treasurer.*

## Systematic Status of Large Flowering Plant Genera

*Austral.Syst.Bot.Soc.Newslett.* 53, edited by Helen Hewson. 1987. \$5 + \$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 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 \$1.10 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 & ANZAAS, 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. ASBS members: \$60 plus \$12 p. & p. non-members \$79.95. 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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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, available on the Society website, and forwarding it, with the appropriate subscription, to the Treasurer. Subscriptions become due on 1 January each year.

The ASBS *annual membership subscription* is AU\$45; full-time students \$25. Payment may be by credit card or by cheques made out to *Australian Systematic Botany Society Inc.*, and remitted 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 Website. 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. Newslett.*

*Contributions*

Send copy to Russell Barrett and Peter Jobson and book reviews to Gael Campbell-Young at the addresses given below. They *preferably* should be submitted as: (1) an MS-DOS file in the form of a text file (.txt extension), (2) an MS-Word.doc file, (3) a Rich-text-format or .rtf file in an email message or 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.

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*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.

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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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# Contents

*Australian Systematic Botany Society Newsletter 141 (December 2009)*

<b>From the President</b> .....	1
<b>From the Editors</b> .....	3
<b>ASBS Inc. Business</b>	
2009 Annual General Meeting of the ASBS, Inc. ....	3
Attachment 1: President's Report .....	5
Attachment 2: Treasurer's Report 2008/09 .....	6
Attachment 3: Newsletter Report .....	14
Hansjörg Eichler Research Fund Report .....	14
Hansjörg Eichler Research Fund .....	15
<b>Future of the ABLO</b> .....	16
<b>ASBS 2009 Conference Reports</b>	
Meeting Report .....	20
The Great Escarpment: ASBS Post-conference Field Trip Report .....	22
Winners of Student Prizes .....	26
<b>Article</b>	
<i>Aloe</i> in Western Australia .....	28
<b>ABRS Report</b> .....	29
<b>Vale Rica Erickson</b> .....	30
<b>Book review</b>	
Another Paradise Lost? .....	33
<b>Publication notice</b>	
AoB—Plants .....	34
<b>Food for thought</b> .....	34