

Australian Systematic Botany Society

# Newsletter

No. 143 June 2010

Price: \$5.00

ISSN 1034-1218

#### AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

#### Council

**President**Peter Weston

reter weston

National Herbarium of New South Wales

Royal Botanic Gardens Sydney

Mrs Macquaries Road Sydney, NSW 2000 Tel: (02) 9231 8111 Fax: (02) 9251 7231

Email: Peter.Weston@rbgsyd.nsw.gov.au

Secretary

Gillian Brown School of Botany

The University of Melbourne, Vic. 3010

Tel: (03) 8344 7150 Fax: (03) 9347 5460

Email: asbs\_secretary@anbg.gov.au

Councillor

Frank Zich

Australian Tropical Herbarium E2 building, J.C.U. Cairns Campus

PO Box 6811 Cairns, Qld 4870 Tel: (07) 4059 5014 Fax: (07) 4091 8888 Email: frank.zich@csiro.au

Vice President

Dale Dixon

Royal Botanic Gardens Sydney

Mrs Macquaries Road Sydney, NSW 2000 Tel: (02) 9231 8171 Fax: (02) 9241 2797

Email: Dale.Dixon@rbgsyd.nsw.gov.au

Treasurer

Michael Bayly School of Botany

The University of Melbourne, Vic. 3010

Tel: (03) 8344 7150 Fax: (03) 9347 5460

Email: asbs\_treasurer@anbg.gov.au *or* mbayly@unimelb.edu.au

Councillor

Tanya Scharaschkin

School of Natural Resource Sciences Queensland University of Technology

PO Box 2434 Brisbane, Qld 4001 Tel: (07) 3138 1395 Fax: (07) 3138 1535

Email: t.scharaschkin@qut.edu.au

#### **Other Constitutional Bodies**

Hansjörg Eichler Research Committee

Bill Barker Betsy Jackes Greg Leach Kristina Lemson Chris Quinn

Chair: Dale Dixon, Vice President *Grant applications close*: 14 March 2010.

Affiliate Society

Canberra, ACT 2601

**Public Officer** 

Annette Wilson

GPO Box 787

Papua New Guinea Botanical Society

Australian Bilogical Resources Study

Dept of Environment, Water, Heritage and the Arts

**ASBS** Website

www.anbg.gov.au/asbs Webmaster: Murray Fagg

Centre for Plant Biodiversity Research Australian National Herbarium

Email: Murray.Fagg@environment.gov.au

Cover image: Alloxylon flammeum (Proteaceae), reproduced with the permission of David Mackay (the

artist) and RBG Sydney.

Publication dates of previous issue Austral.Syst.Bot.Soc.Newslett. 141 (March 2010 issue)

Hardcopy: 04 June 2010; ASBS Website: 31 May 2010

# From the President

It is now only a little over 4 months until the next ASBS conference, in Lincoln, New Zealand, so some of us are in the process of preparing our travel plans and thinking of things to say there about the results of our research. I for one am looking forward eagerly to this conference. I found a number of the presentations by New Zealand botanists at Armidale quite fascinating and the prospect of hearing about a broader range of their botanical projects is very attractive. When you also have the opportunity of spending a day out botanising in the botanically rich and scenically spectacular Arthurs Pass area, the idea of spending a week or so in late November and early December in New Zealand is pretty hard to resist. I hope a good representation of Australian members is able to make it across the ditch for this meeting, despite many of us having to obtain ministerial approval to travel internationally on duty.

I had hoped that we would make a symbolic change to our Society's name from Australian Systematic Botany Society to Australasian Systematic Botany Society before the Lincoln conference but until recently I had not fully appreciated the formidable obstacles in the path of such change. As members will have gathered by the time they read this column, I have proposed a couple of special resolutions to change the rules of our society. Both were discussed at some length at our last Annual General Meeting, as well as informally at our Armidale conference. The proposed name change is the first of these. I advocated this enthusiastically in my column in the December 2009 ASBS Newsletter and I will re-iterate those arguments only briefly here. The New Zealand flora is, for the most part, a specialised subset of the flora of south eastern Australia and any move to encourage closer ties and more collaborative research between plant systematists of Australia and New Zealand will benefit our science, in my opinion. When one also considers the impressive contribution that New Zealanders have made to both plant systematics and systematic methodology, especially over the past thirty years, making this symbolic change to welcome more New Zealand members can only

strengthen our society.

The second proposal for a special resolution is to change our Society's voting rules to make it less difficult to change the Society's rules. At present, Rule 30(5)(b) of the ASBS constitution requires "the vote of at least 75% of those members of the Society who are entitled to vote" to approve any change to our constitution. Persuading 75% of all members to fill in a ballot paper and return it to the Secretary is extremely difficult, as ASBS Council found back in 2005, when it had to ask members to vote for an uncontroversial proposal twice because the first, almost unanimous vote fell short of the 75% threshold by about 50 votes. My proposal is to change this rule to require "the vote of at least 75% of those members of the Society who, being entitled to vote, vote in person or by proxy at the [general] meeting [at which the vote is held]". This change, if approved by the membership, would bring our constitution into line with the Associations Incorporation Act 1991 of the Australian Capital Territory, where ASBS is registered as an incorporated association.

Both of these proposals to change the ASBS rules will be discussed at our next Annual General Meeting in Lincoln on 30 November 2010 and members will be able to move and vote on modifications to the proposals then, if they wish. If approved there, ballot papers would be mailed to members in December 2010 and voting on the proposals themselves would happen in early 2011.

Another exciting upcoming event in the ASBS calendar is the International Botanical Congress to be held in Melbourne from 23-30 July, 2011. As well as holding an Annual General Meeting during the IBC, ASBS Council also plans to sponsor an IBC symposium and organise a Nancy Burbidge Memorial Lecture during the Congress. Maria Gandolfo (Cornell University) and ASBS Treasurer Mike Bayly have successfully proposed a symposium with the title "Patterns and processes in the evolution and biogeography of the Australasian flora" and we are negotiating with the Congress organisers to have this explicitly "badged" as an ASBS-sponsored event.

All symposia have three slots reserved for invited talks and three for contributed talks, and several ASBS members have been invited to participate in this symposium. I encourage ASBS members who have not been invited to give a talk at the IBC to consider offering a presentation in this symposium, when the call for contributed talks is made. We are also negotiating to have one of the plenary lectures of the conference badged as a Nancy Burbidge Memorial Lecture and we hope to be able to provide more details on this soon.

After publication of our December 2009 Newsletter, one of our three editors, Gael Campbell-Young, stepped down. Gael had looked after printing and distribution of the hardcopy version of the Newsletter. This is an important job for a geographically widespread society like ours, in which the *Newsletter* is the principal means of communication across the Society, and especially considering that the majority of our members still have the *Newsletter* mailed to them. We are grateful for the work that Gael has done on behalf of the Society and wish her well. We are still looking for a replacement for Gael on the editorial team and would be happy to hear from any members who are interested in taking up responsibility for printing the Newsletter and its distribution. Gael estimates that this job has demanded about 8 hours of her time per issue and notes that the responsibilities for printing and distribution could feasibly be split between two members based in the same city. The Newsletter has been printed for some year in Adelaide, so prospective new members of the editorial team would need either to be based in Adelaide or have access to the services of a suitable printing company. Interested members should contact Newsletter Editor Russell Barrett.

This is an appropriate point at which to re-iterate Marco Duretto's suggestion, made in last year's presidential report, that ASBS members seriously consider forgoing the hardcopy version of the *Newsletter* and instead receive just an email notification that the latest *Newsletter* has been posted on the ASBS website. As Marco noted, taking this option means that "Society money can be better spent on things such as conferences and student support etc., not to mention reducing our carbon footprint". It also enables our editorial

team to devote more of their time to editing the *Newsletter* and less to the more laborious tasks of having it printed and mailed out to members.

By the time your read this, all members should have received a nomination form for positions on ASBS Council for 2011. ASBS Treasurer Mike Bayly has indicated that he will be stepping down from Council at the AGM in Lincoln and we need to find someone who is willing and able to take on this crucial position in the running of our Society. Mike assures me that being the Treasurer does involve a significant workload, especially in processing membership renewals, but it is a most rewarding job. We plan to designate the "ordinary member positions" on Council as informal assistants to the Treasurer and Secretary, as a way of spreading the workload of running the Society a bit more evenly across Council. Tanya Scharaschkin has agreed to be the Treasurer's assistant and Frank Zich to be the Secretary's assistant. We hope that this will make the Treasurer's position more attractive to prospective nominees. Can interested members please contact Mike Bayly or another Council member to discuss the duties of this position and any intention they may have to nominate for it?

Members may recall seeing mention of Taxonomy Australia (TaxA) in previous issues of the ASBS Newsletter. TaxA is a peak body of Australian taxonomic societies and organisations, currently chaired by my immediate boss, Brett Summerell, in his role as Chair of the Council of Heads of Australasian Herbaria (CHAH) (see Brett's article in ASBS Newsletter 134: 5-6, 2008). TaxA's objective is to increase "Australia's taxonomic capability by increasing resourcing for taxonomic research and by enhancing opportunities for the training and employment of taxonomists". In other words it seeks to obtain more money for taxonomic work in Australia. ASBS was invited to participate in this group when it was formed in 2007 and our Society has played an active role since then, sending representatives to most of the TaxA meetings. The most recent TaxA meeting was held at the Queensland Museum in Brisbane on 5 May 2010, at which ASBS was represented by me. The agenda mostly consisted of updates from the various member organisations but several items dealt with general problems facing all of us.

The first of these items was the question of the extent to which Australian taxonomic publications ought to be co-ordinated to maximise the public profile of our research. This immediately prompted discussion of the implications of the Federal Government's "Excellence in Research for Australia" (ERA) initiative, which is supposed to assess "research quality within Australia's higher education institutions using a combination of indicators and expert review" (see http://www. arc.gov.au/era/). One of the indicators that this initiative has so far produced is a league table of scientific journals or "outlets" as a basis for "the evaluation of research excellence" in which journals are bracketed into four classes: A\*, A, B and C. Several participants in the TaxA meeting expressed exasperation at the results of this ranking procedure, noting that taxonomic journals were mostly ranked as either B or C rather than A or A\*. Whether there is a bias against taxonomic journals is hard to say without a detailed comparative study of the scores given to the 20,712 journal titles included in the system (see the spreadsheet downloadable from http://www. arc.gov.au/xls/ERA2010 journal title list.xls). In any case, TaxA is likely to take any remaining opportunity to argue for higher rankings for taxonomic journals in this system.

Another publication-related problem that was discussed was the generally low citation rates for taxonomic papers, despite the wide use of the results reported in them. It seems to me that part of the problem here is the archaic way in which many taxonomists cite each other's work. If plant taxonomists cited taxonomic publications using a standard Harvard-style format as used in the introductory sections of taxonomic papers as well as in almost all other scientific publications, rather than the impenetrable gobbledygook of BPH-style referencing, citation rates for plant taxonomy would rise immediately.

Andy Austin, who represented the Society of Australian Systematic Biologists, expressed an interest in organising more joint ASBS-SASB meetings, a suggestion that I for one think is a good idea. I would like to explore this possibility as an option for the ASBS conference that follows after next year's International Botanical Congress.

In late August my wife and I fly out of Sydney on our longest holiday ever, a long-service-leave-enabled trip to South Africa and Europe. We won't be back until late October 2010, so I won't be able to contribute a "From the President" column to the September 2010 ASBS Newsletter. In my absence, my presidential duties will be delegated to the capable hands of Vice President Dale Dixon. The next you will hear from me will be at the ASBS conference in Lincoln. I hope to see many of you there!

Peter Weston

# **Obituaries**

# SURREY WILFRID LAURENCE JACOBS 1946–2009

Dr Surrey Jacobs was never happier than when he was waist-deep in water collecting an interesting waterlily or standing in red dust collecting and photographing an inland spinifex grass.

He was an outstanding Australian botanist, well-known in botanical circles around the world for his research on grasses, chenopods and waterplants. Locally, he was also well-respected by those involved in understanding and managing plants in wetlands and grasslands. Fieldwork was a major part of his life and work: he would not have achieved his deep understanding of plants

without the extensive fieldwork that he did in all parts of Australia.

Growing up in Sydney, Surrey dreamt of becoming a farmer, and he studied Agricultural Science at the University of Sydney as the first step in that direction.

However, he developed more interest in plants themselves, and moved sideways into an ecological project for his PhD, on the spinifex grasses that dominate so much of the landscape in arid Australia. This interest in grasses led to



Surrey Jacobs. Photo by Jaime Plaza (© Royal Botanic Gardens and Domain Trust, Sydney)



Surrey Jacobs and Karen Wilson at Betts Creek, Snowy Mountains, 1985. Photo by: Barbara Briggs.



Surrey Jacobs and Yu Ito collecting *Ruppia* in South Australia in 2007. Photo by: Gillian Towler.

a career as a taxonomic botanist at the Royal Botanic Gardens, Sydney, which ended with his recent untimely death from cancer.

He could have had successful careers in agricultural science or ecology, but the world's biodiversity has benefitted from his decision to channel his energies into plant systematics research. As it was, he successfully melded all his interests and training during his career. Besides his extensive systematics studies, he supervised several postgraduate students on conservationand agricultural-oriented projects. And he was at ease conversing with and working with anyone with a common interest in plants: whether it was another phylogenetic botanist or a wetland manager or property owner.

Surrey maintained his initial interest in grasses, but also researched the classification, naming and relationships of chenopods (saltbushes and similar species in drier parts of Australia), waterplants and weeds. His greatest impact was probably in waterplants, which were relatively poorly understood before he started his research. He received the T.Wayne Miller Distinguished Service Award from the international Aquatic Plant Management Society in 2009, only the third recipient of that award.

Surrey was one of the Botanic Gardens' most productive botanists, resulting in his promotion to Senior Principal Research Scientist in 2008 – the most senior research scientist rank in the NSW Public Service. He authored over 120 scientific publications, often in collaboration with colleagues here and overseas, and these form a major contribution to our knowledge of the world's plant diversity. He named over 80 previously unnamed Australian plant genera and species. He was involved in several major international collaborative projects in the last decade or so, and some results remain to be published by his collaborators.

He was also very conscious of the need to make research results available to the wider community. So, for example, he often advised on wetland plant management, and provided forensic advice on plants connected with police investigations. He was author or co-author of over 60 extension-oriented publications, including a range of semi-

popular books and booklets such as 'Waterplants of NSW', 'Waterplants in Australia', 'Grasses of NSW', 'Australian Agricultural Botany' and 'Burnum Burnum's Wild Things'. Many of these were written with Geoff Sainty, another local waterplant expert and another excellent photographer of plants. Both thought nothing of standing in water or lying on a wet bank, ignoring leeches and other bitey things in pursuit of a good close-up of a flower. But both drew the line in the last few years at wading in tropical regions: the crocs are getting too big and too numerous.

The state of Surrey's office and his usually rather casual dress misled some people initially, but they soon learned that he was extremely organised in his work, and both practical and knowledgeable. He had an enquiring mind and a good memory, and he was thorough – all good traits for anyone, but particularly important for a systematics botanist. As a friend remarked recently, Surrey was a non-electronic predecessor of Google (a 'walking encyclopedia' in the old hard-copy terminology).

He demonstrated time and again his commonsense approach to innumerable matters, and showed generosity and patience in imparting his knowledge to others, in fields as varied as photography, laboratories, statistical analysis, and fieldwork. He was a very thorough, careful worker in the field – and he had a reputation amongst his colleagues



Surrey Jacobs and Leonie Stanberg on a cycad-collecting trip in central Queensland, 2006. Photo by: Jane Dalby.



From left: Peter Hind, Joy Everett, Barbara Briggs, Liz Norris and Surrey Jacobs on an excursion to Mt Kosciuzko after an ASBS conference at Thredbo in 1985. Photo by: Karen Wilson.



Surrey with Wal Whalley and Dorothy Wheeler at the launch of the third edition of 'Grasses of NSW' at UNE, Armidale, in May 2003. Photographer unknown.



Surrey Jacobs and Jason Sonneman monitoring waterplants in the Snowy River, 1997. Photo by: Geoff Sainty.

as an excellent camp-cook. He was a mentor and advisor to many younger staff and students, and was also an excellent listener for those with personal issues.

Surrey was the second child and only son of Wilfrid Jacobs, an industrial chemist at the Federal Match Company in Sydney (ultimately Works Manager there), and Viola née Sundstrom. His grandfather Ernest Godfried Jacobs taught botany at Sydney Technical College early last century and provided a botanical model for Surrey and also his older sister Janice (now retired), who had a long botanical career in the School of Biological Sciences at the University of Sydney. His younger sister Wendy Innes has kept a link with plants in running a family nursery and blueberry business.

Surrey met his future wife Betty Luscombe while tutoring at the university during his PhD period. Betty graduated as a science teacher, and they married in 1971. She became the first Education Officer at the Royal Botanic Gardens Sydney soon

after Surrey joined the staff as a botanist, but she left some years later to have their two children, Ellen and Geoffrey.

Even when young, their children learnt the scientific names of plants and had no fear of using them. When just two years old, Ellen entered a WEA plant identification class with her father, pointed to the grass-tree specimen at the front, and said "Look, Daddy, a *Xanthorrhoea*".

Surrey was very lucky in his choice of life partner: he couldn't have achieved nearly so much without the support of Betty. In particular, they have been very welcoming hosts to many botanical visitors from all parts of the world. Botany may have been Surrey's passion, but he was also a very loving family man, despite what his family may have thought sometimes given his many field trips and long days at work. He named previously unknown species of grasses and waterplants after Betty, Ellen, Geoff, and Ellen's sons Alex and Luke Fussell.

Surrey relaxed by collecting model trains and cars, and making jams of many kinds, mostly given away to friends and colleagues. He was the jammaker in the family but the jams were labelled as 'Mrs Jacobs' Jams and Jellies' – as Surrey noted, 'Dr Jacobs' Jams and Jellies' didn't have quite the right ring.

He sublimated his agricultural interests by breeding chooks at the back of their suburban quarter-acre block: bantams, silkies, Light Sussex (also known as Surreys) and others. Family and friends were regularly supplied with fresh eggs of various sizes.

Surrey was a larger than life character in many ways, but he was also a self-deprecating man,

who did not seem to realise what he had achieved. He once said that he had been in awe of his predecessor Dr Joyce Vickery for her extensive research on grasses. His successors will be equally in awe of Surrey. He has a permanent memorial in his botanical publications and in the plant species named by him and after him. Several more will be published in a few months' time in a special issue of our journal *Telopea* dedicated to him. In the more public sphere: he was awarded a Public Service Medal for his contribution to systematic botany in Australia.

Karen L. Wilson

National Herbarium of New South Wales, Sydney

Note: A slightly different version of this text was published in the 'Sydney Morning Herald' 12 Jan 2010.

# GEORGE McCARTNEY CHIPPENDALE 18 April 1921–16 February 2010



This photograph of my Father was taken by Canberra personality Reg Alder (dec) in October 2001 on the 30th anniversary of the National Parks Association's Black Mountain walk, lead by my Father. This photo shows my Father in favourite occupations, walking and teaching botany - hence the lens, for plant identification.

Botanist, George Chippendale, was a strong proponent of growing Australian Native plants. As well as a career in botany, George also taught his love of botany to all who would listen through talks to children, special interest groups, walks on Black Mountain and more recently through the U3A, both in class and online. George knew the value of planting local native plants in gardens as they would survive local conditions and save water.

George was born in Sydney, the eldest of six, and grew up in the suburb of Paddington, a life-long movie buff and South Sydney Rabbitohs supporter.

George left school at 14. After a short stint as a draper, his Mother helped him get a job at the Sydney Botanic Gardens in 1936 as the tea boy. George stayed working at the Gardens until serving in the Australian Army during World War II. In 1943 George married Joan.

Post war, George returned to the Gardens and due to his army service, was able to study for a Bachelor of Science at Sydney University. George made life-long friends at the Gardens who mentored him during his university study and future career. Part

of George's work at the Gardens was to identify plants brought in by members of the public which gave George a broad background in plant identification.

In 1954 George moved to Alice Springs with his wife and 3 children as the first resident taxonomist, a job which he loved. When George arrived in Alice Springs only a small collection of specimens existed, these having being gathered by members of CSIRO, various veterinary officers and stock inspectors of the Animal Industry Branch. No public herbarium existed in the Northern Territory at that time and George's responsibilities extended throughout the Northern Territory. George made many trips into the bush with colleagues and assistants to collect plant specimens. These specimens were the basis for the present Northern Territory Herbarium. As an avid plant specimen collector and describer, George had eight plants named after him: Acacia chippendalei, Bassia chippendalei, Corymbia (Eucalyptus) chippendalei, Levenhookia chippendalei, Minuria chippendalei, Ptilotus chippendalei, Sesbania chippendalei and Solanum chippendalei.

George's work was aimed at benefiting the pastoral industry, and he secured a special knowledge of the dry country in the Southern half of the Northern Territory. Despite a fourth child and many trips into the bush to collect specimens, George found time to write and publish some 25 papers, one of which was of considerable economic importance to the region, *Topfeed; the fodder trees and shrubs of Central Australia*.

In 1961 George and family, travelling to visit family in Sydney, were involved in a car accident near Maryborough, Queensland resulting in the lose of his wife and youngest daughter. George suffered many broken bones, but signed himself out of hospital to return to Alice Springs to care for his three elder children.

George married his present wife, Thelma, in 1963 and celebrated the birth of a fifth child prior to moving to Canberra in 1966 to take up the position of senior botanist in the then Forestry Research Institute, which became the Division of Forestry Research, CSIRO. George chose the position over a possible stint as the Director of the Botanic Gardens in Canberra due to his

preference to continue with pure botany rather than administrative tasks. George's main specialisation became the genus *Eucalyptus*.

For twelve months during 1972–73 George became the Botanical Liaison Officer at Kew Gardens in England where he examined type material of Eucalypts, also travelling to several European herbaria to examine similar material. This helped him prepare a technical note, *Herbarium Specimens of Eucalyptus Photographed in Europe* as well as a record of those who had collected the material.

George contributed to a steady stream of books either alone or as a collaborator, including: Eucalyptus Buds and Fruit; Illustrations of the Buds and Fruits of the Genus the List of Authentic Specimens from Which the Drawings Were Made (1968), Eucalypts (1969), The Forest Trees of Australia (1970), Australian Rain Forest Trees (1970), Wildflowers of the Australian Capital Territory (1972, with wife Thelma) and Eucalypts of the Western Australian goldfields (and the adjacent wheatbelt) (1973). The Natural Distribution of Eucalyptus in Australia (1981) was completed with George taking advantage of computer generated illustrations (by Ludek Wolf). Using the computer generated illustrations to show where Eucalypts occurred naturally was acknowledged by botanists and others world-wide as a first.

George's final work was completed in retirement, the sole author of book 19 of the *Flora of Australia* – *Myrtaceae* – *Eucalypts*, *Angophora* (1988) for which he was awarded a Bicentennial Australia Day Medallion.

George always thought he was lucky – lucky to have had a career accidentally chosen for him, for which he was entirely suited and passionate about.

George is survived by Thelma, 4 children, 10 grandchildren and 4 great-grandchildren.

#### References

Hall, N. 1978. Botanists of the Eucalypts. Commonwealth Scientific and Industrial Research Organisation, Canberra. Northern Territory Herbarium website: http://www.nt.gov.au/ nreta/wildlife/plants/aboutus/history.html

> Joy McMahon Kaleen, ACT

# **ASBS Inc. Business**

Postscript to the ASBS 2009 Conference and workshop on "National accreditation of providers of biological identification"

1–3 December, University of New England, Armidale NSW.

# A potential model for accreditation of Botanists from ASSSI

# **Austin Brown**

C/- Royal Botanic Gardens, Melbourne

At the 2009 Annual Meeting of ASBS in Armidale, the subject of quality standards for conservation assessment, plant survey and collection activities was debated. As part of this discussion, potential accreditation of botanists was raised. The Australian Soil Science Society Incorporated (ASSSI) has been engaged in a voluntary accreditation scheme for soil scientists for some years; the Certified Professional Soil Scientist (CPSS) and may serve as a model for ASBS to follow. The scheme arose from a joint development between ASSSI and the Australian Institute of Agricultural Science and Technology that provided standards for Professionals in Agriculture and Agri-business. In

2002, these standards were specifically adopted for Soil Scientists.

Accreditation involves an application including relevant qualifications and publications and evidence of at least 50 hours of professional development in the year. Referees are called upon and approval by the CPSS Accreditation Board needs to be made. A cost for this process is required by the applicant. There are three stages of accreditation granted, depending on experience and ability to undertake autonomous work. A CPSS associate for undergraduate and post graduate students is also available. A successful candidate is expected to comply to a Code of Ethics and with Rules of Conduct. To maintain accreditation, a CPSS needs to make an ongoing commitment to keep up-to-date with new knowledge, technology and industry developments with expertise exercised in at least two of five professional capabilities; professional practice values, communication, management, knowledge and or practice of soil science. Evidence of such is maintained in an OPD (Ongoing Professional Development) diary. An auditing process of submitted diaries and via interview with referees is made every 2-3 years. An online register of CPSS is maintained and a complaints process is also in place for any unprofessional behaviour.

Further information can be sought from the ASSSI website for CPSS http://www.cpss.com.au/

# Notice of AGM and Council Elections

# Australian Systematic Botany Society Inc.

# Nominations for 2010–2011 ASBS Council

Nominations for all positions on the 2010–2011 Council are now called.

Nomination forms have been included on page 15 of this Newsletter. Please photocopy or print this page from the web version.

#### Please note:

Our Treasurer, Mike Bayly, is stepping down. However, he is willing to move to another position on Council.

Nominations must be in the hands of the Secretary by 1<sup>st</sup> October 2010.

Councillor.

Treasurer

Secretary

Vice-President

for:



# Hustralian Systematic Botany Society Incorporated

(incorporated under the Associations Incorporation Act 1991)

# EI ECTION OF COLINCIL MEMBERS FOR 2010, 2014 NOMINATION FORM

- For limitations on and procedures for Nomination and Election to Council refer to Rules 12 and 13 of the Rules of the Society. Note:
  - Only financial members, or those accorded that status by the Rules, are eligible to stand for Council or to make nominations.
    - A separate nomination form or facsimile of the same is required
- No member of Council can simultaneously hold more than one of the six positions elected by members to Council (Rule 12(4)). for each candidate or, where a member is nominated for more than one position, each position.

	:
	:
	:
	:
,	:
	:
	:
	:
	:
	:
•	:
	_:
	ame)
	$\mathbb{Z}_{3}$
	Full N.
	$\Xi$
	minate (Fu
	na
	Ē
	n0
,	>
	iet
	0
	e S
	ersigned members of the Society, nominat
	S
	er
	m
	ne
	q
	ne
	. <u>[</u> ]
	ers
	þ
	Ξ
	Ve. the 1
	We.
	≥

(Please delete the offices that do not apply to this nomination)

First Nominator	Second Nominator
Member's	Member's
Name:	Name:
Signature	Signature:

<b>-</b>	
position o	
for the pos	
o my nomination	
consent to my	
I hereby	

Nominations must be in the hands of the Secretary by Friday, 1st October 2010 at the following address: Dr Gillian Brown Secretary ASBS Signature

For further information contact the Secretary: Ph. (03) 8344 5040, Fax (03) 9347 5460, Email: browngk@unimelb.edu.au VICTORIA 3010

The University of Melbourne

School of Botany

# Australian Systematic Botany Society Inc.

# **Annual General Meeting 2010**

The Annual General Meeting of the Australian Systematic Botany Society will be held in Lincoln, New Zealand, during the ASBS Conference.

Venue: Lincoln University, Lincoln, New Zealand

Time: Tuesday 30<sup>th</sup> November 2010, 4pm.

# Australian Systematic Botany Society Inc.

Hansjörg Eichler Research Fund March 2010 Round

This round we had a number of excellent applications showing a considerable level of skill and enthusiasm. Two successful applicants were awarded \$2,000 each for the following proposals:

 Mark Wallace (Kings Park and Botanic Garden, Western Australia)

The development of low-copy nuclear DNA markers for the study of hybridisation in *Lepidosperma costale* species complex.

 Sarah Fayed (Geography and Environmental Studies, University of Tasmania)

Understanding the dramatic differences in *Heliciinae* genera (Proteaceae) using basal Australian taxa.

# **ABRS** Report

# Staffing

Applications have closed for the position of Director of ABRS, and we hope to have a permanent Director by the end of August. In the meanwhile, Annette Wilson is acting in the role.

We welcome Jo Harding, who has joined us as Manager of the Bush Blitz project. She will be working with Kate Gillespie and Leah Schwartz on this Australia-wide survey program. Further information on Bush Blitz can be found at: http://www.bushblitz.org.au/

We also welcome Erika Alacs, who is working on the Australian Faunal Directory (AFD).

Robyn Lawrence has been seconded for 12 months to work on communications and IT for the Atlas of Living Australia project.

# ABRS National Taxonomy Research Grant Program

Applications for the main round of ABRS grants for 2011–2012 open on August 2 and close on October 29. There are a variety of grants on offer, supporting salaried and non-salaried researchers, and students at Honours, Masters and PhD level.

Details can be found on the ABRS website at: http://www.environment.gov.au/biodiversity/abrs/funding-and-research/grants/index.html

# **Churchill Fellowships**

This year ABRS partnered with the Winston Churchill Memorial Trust to sponsor 2 Fellowships, one for an early career researcher, the other for an established researcher. We congratulate Dr Amber Beavis from the A.C.T., who will travel to the U.S.A. to undertake training in integrative taxonomy as it applies to the Araneae, and Dr Paul Doughty from W.A., who will travel to the U.K. and U.S.A. to examine Australian specimens which will result in a large number of new species descriptions of frogs and reptiles, particularly geckos. Two further fellowships were also awarded to systematics researchers: to Professor Gerry Cassis from N.S.W. for travel to the U.K. and U.S.A. to study the systematics, natural history and biodiversity of true bugs (Heteroptera) of Australia: and to Dr Rebecca Jones from Tasmania for travel to Europe and the U.S.A. to visit centres of Eucalyptus research to learn techniques for the analysis of the Eucalyptus genome sequence.

#### **Recent Publication**

Algae of Australia: Phytoplankton of Temperate Coastal Waters, is the product of decades of research by Professor Gustaaf Hallegraeff and 11 collaborators, and provides descriptions and illustrations of 541 species known from the estuarine, coastal and offshore waters of southern Australia. It includes more than 1100 photographs and drawings, comprehensive bibliographies and a

glossary of technical terms, and represents the first guide for the identification of these fundamentally important microscopic algae in the temperate Australasian region. 432 pages, Hardback, ISBN: 9780643100398, \$140.00. Available from CSIRO Publishing (http://www.publish.csiro.au/pid/6446. htm)

Annette Wilson Acting Director, ABRS

# **Book reviews**

# Natural history collecting at Port Essington P.S.Short

Northern Territory Herbarium

The Top of the Top End: John Gilbert's manuscript notes for John Gould on Vertebrates from Port Essington and Cobourg Peninsula (Northern Territory, Australia): with Comments on Specimens Collected during the Settlement Period 1838 to 1849, and Subsequently. By Fisher, C. & Calaby, J. 2009. The Beagle, Records of the Museums and Art Galleries of the Northern

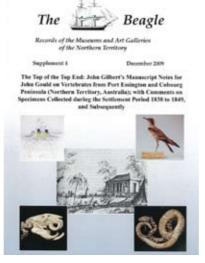
Territory. Supplement 4. ISSN 1833-7511. Available for antipodeans from the Librarian, **Museum and Art Gallery** of the Northern Territory, **G.P.O.** Box 4646, Darwin, N.T. 0801, Australia. library.dam@nt.gov.au; telephone (08) 89998200; price AUS\$66.00, including packing and economy postage. Also available from World Museum, Liverpool, U.K; details unavailable.

The latest supplement of *The Beagle* is a marvellous

publication for anyone interested in the history of the discovery of Australia's flora and fauna. It is a meticulously researched, highly readable and beautifully illustrated work. These are words which I am all too rarely moved to include when reviewing books. It is also a statement which should be tempered with an admission of bias: although a plant taxonomist I've had a long interest in much of the subject matter, particularly birds, John Gilbert and John Gould. The interest in birds started when I was little more than a toddler and we fed Spiny-cheeked honeyeaters bread crumbs and sultana cake outside the front door; and as a first year university student let loose in the

bookshops of Adelaide I came across reproductions of plates of birds from Gould's various and subsequently works delved into his publications Australian birds mammals, this in turn leading to various articles and books on both Gould and Gilbert; as a plant taxonomist I, like many readers of this article, am by necessity something of a botanical historian and, having specialised on the daisy family, I know that John Gilbert is commemorated in the name monotypic of the Gilberta, G. tenuifolia being an everlasting daisy named from a specimen collected by

Gilbert in south-west Western Australia. Gilbert is also remembered in the names of 13 species from various plant families. All of these species are also from Western Australia, a State in which Gilbert was considerably active during his two sojourns in Australia, from 1838 to 1841 and from 1842 to his death in June 1845 when, as a member of



Leichhardt's expedition travelling from Brisbane to Port Essington, he was speared by an aboriginal during an attack on their camp near the Nassau River, Queensland. Gilbert's specimens from the Cobourg Peninsula were obtained from July 1840 to March 1841.

The book commences with a Preface by David Attenborough, in which he reminisces about his time travelling in Kakadu National Park and meeting with the late John Calaby, an "unpretentious and modest" man and "one of the outstanding Australian taxonomists of his era and a particular expert on its mammals". Following the abstract the 28-page Introduction tells us that the aim of the work was to draw together information about existing vertebrate specimens from Port Essington and the Cobourg Peninsula, with particular emphasis on the collections and manuscripts pertaining to John Gilbert; the other specimens referred to include those gathered by collectors during the time Port Essington was occupied from 1838 to 1849, during CSIRO expeditions mounted between 1965 and 1968 the results of which were published in Frith & Calaby (1974) –to the present.

Much of the Introduction is dedicated to a short history of the Port Essington settlement, one of several early European settlements in the Top End and the longest-lived, with the climate, tropical diseases, indifferent management, attacks by aboriginals, poor trade and distance from major centres, all factors contributing to their disbandment. For the record, the first of these was the garrison of Fort Dundas on Melville Island, established in 1824 and officially closed in March 1829. Fort Wellington on the east side of Raffles Bay (Cobourg Peninsula) was established in 1827 but abandoned in August 1829. It was followed by the subject of this work, Victoria Settlement at Port Essington, which (as noted in the book's subtitle) was established in 1838 and survived until 1849. Incidentally, the name Palmerston was given to another short-lived settlement established at Escape Cliff in 1864. A mosquito-ridden site north of the mouth of the Adelaide River, it too was quickly abandoned, only lasting until January 1867.

Of all these settlements Port Essington figures most highly in the early history of natural

history collecting in the Top End with Gilbert being a stand-out contributor. To quote from the book "Gilbert's Port Essington specimens alone represent about fifty new species or subspecies of birds and animals ... Gilbert also collected many other new forms on the Cobourg Peninsula, particularly fish ..., reptiles, molluscs ..., and insects ...". (It isn't actually stated but I believe the wording is also meant to imply that Gilbert collected the type specimens of these taxa.) Much credit is also given to John MacGillivray (aboard H.M.S. Fly and H.M.S. Rattlesnake) while others of importance include John Lort Stokes (H.M.S. Beagle) and Benjamin Bynoe (H.M.S. Beagle & later H.M.S. Fly), Captain William Chambers and Assistant Surgeon Sibbald of the colony's ship, Pelorus, and Joseph Beete Jukes and John Ince (both H.M.S. Fly). I have a minor criticism here in that the major botanical collector from Port Essington, John Armstrong, is not mentioned among the natural history collectors. Allan Cunningham is mentioned – and he made the first botanical collections from Port Essington, with Bentham citing no fewer than 12 Cunningham collections from this locality in Flora australiensis – but Armstrong, the settlement's gardener, collected hundreds of specimens: according to my manuscript notes he despatched 597 specimens to Kew in February 1840 and a further 340 collections from the Port Essington region in December 1840. No fewer than 190 specimens gathered by him from Port Essington were cited by Bentham in his Flora australiensis and at least 30 or so of these are type specimens. He doesn't out rank Gilbert but I suspect - if one must rank them - that Armstrong's contribution to the early knowledge of biodiversity in the Port Essington region is second only to that of Gilbert. Incidentally, in contrast to his Western Australian collections Gilbert's plant specimens from the Cobourg Peninsula appear to have excited little attention; I have no idea as to the number gathered and am aware of just one published record, that of the Swamp Bloodwood (Corymbia ptychocarpa) which was cited by Bentham in Flora australiensis. (As evident from his preface to *Flora australiensis* Bentham may have had difficulty in accessing any Gilbert specimens housed at the Botanical Department of the British Museum.)

This section includes a reproduction of Gilbert's

letter to John Gould dated 19<sup>th</sup> September 1840. It reads in part:

... I have little doubt one tremendous drawback is the extreme heat of this country, so much as that I find it impossible to remain in the Bush between the hours of ten and three, the specimens not only spoil in two or three hours, but I find the heat brings on such a degree of lasitude [sic] and weakness, that I have now adopted the plan of going out by the dawn of day, and the cool of the evening ...

Thomas Huxley, aboard H.M.S. *Rattlesnake*, expressed similar views of the climate to those of Gilbert:

It is fit for neither man nor beast. Day and night there is the same fearful damp depressing heat, producing unconquerable languor and rendering the unhappy resident a prey to ennui and cold brandy and water ... Port Essington is *worse than a ship*, and it is no small comfort to know that this is possible.

[Huxley (1935), pp. 148-149.]

The introductory chapter concludes with a list of acronyms for the museums and libraries holding specimens and manuscripts relating to natural history collecting at Port Essington; there are 30 such acronyms, a figure reflecting just how big a task it was to bring this monograph to fruition. Indeed, it is noted on p. 211 that it "is the result of intensive ferreting done over the last 25 years in order to locate and analyse [Gilbert's] specimens". It was common for specimens from the antipodes - and elsewhere - to have been widely dispersed to interested parties in Europe, both before and subsequent to their formal naming. In part, Gilbert's specimens may be more scattered than most due to the entrepreneurial nature of Gould, but the sale of Gould's primary collection of Australian birds on which the descriptions of many of his new species were based very much added to the difficulty. Gould offered his primary collection to the British Museum for the sum of £1,000 but it was turned down and, with Gould apparently outraged and determined to humiliate the trustees (Tree 1991), it was subsequently acquired by what is now the Academy of Natural Sciences, Philadelphia (ANSP). The collection was sent to the U.S.A. via Paris where taxidermists mounted all the specimens but in so doing stripped many of them of their original labels. This, unsurprisingly, "caused endless problems with identifying Gould's bird types, or establishing the data for other important individuals." Mislabelling of other specimens has also caused problems in some other holdings but the ANSP collection of Gould's specimens is clearly the worst.

The bulk of this work is the listing of vertebrate species collected from Port Essington. It is arranged in four parts.

Part 1 (pp. 31–37) deals with a tad under 40 species of fish and includes illustrations of five species, including colour photographs of four holotype specimens collected by Gilbert.

Part 2 (pp. 38–54) opens with a transcript of a two-page manuscript account by Gilbert of the "Reptiles of Port Essington". It consists of an account of the Frilled Lizard, two live specimens of which Gilbert kept confined to take back to England; both died on the homeward passage. Thirteen frogs, one crocodile, six turtles, 26 lizards, 32 snakes are listed in this section.

Part 3 (pp. 55–74) covers 28 species of mammals and opens with a transcript of Gilbert's "Quadrupeds of Port Essington". I use an extract from this part – details of four of seven specimens cited for the Sugar Glider –to illustrate why I so like this monograph:

BMNH: 1842.5.26.1 (Fig. 85). F. Skin and skull (267a). [Collected by John Gilbert] at Port Essington [1840–1841]. Gould Collection. Designated lectotype of "*Petaurus*" [= *Belideus*] *ariel* Gould, 1849 (Thomas, 1922: 128).

BMNH: 1846.8.26.13 F. Skin and skull. Collected by John MacGillivray at Port Essington, December 1844. Collection of the 13<sup>th</sup> Earl of Derby. Included on MacGillivray's field label is the remark "Waugai" [the Aboriginal name].

BMNH: 1842.1.13.121. F. Skin (poor condition) and skull. Collected by Captain William Chambers at Port Essington [1839–1841]. Chambers Collection.

USNM: 284057. F. Skin and skull. Collected by David Johnson at Black Rock Point, 25 September 1948 (Specht, as above). ANWC: M1273. M.

Skin. Collected by D.A. Lindner's dingo between Black Point and reef Point, July 1966 (Frith & Calaby 1974: 184).

As well as noting an unusual method of capture these examples illustrate as well as any others the meticulous recording of specimen data and associated references. Importantly the layout is such that it is easy for anyone to scan the text for persons of interest. For example, I have an interest in the collecting activities of the men of H.M.S. Beagle along Australia's northern shores; one of them was John Edward Dring who I'm aware collected the type specimen of Leichhardt's Grasshopper. I've occasionally wondered just what else he may have collected and scanning this book I noted he obtained a specimen of Children's Python from Port Essington. Incidentally, I searched for an on-line catalogue of Dring's collections to no avail. Until such time all herbaria and museums electronically catalogue their specimens and make them readily available, publications such as this will remain important to taxonomists and historians of natural history.

Part 4 (pp. 75–210), deals with the birds, more than 200 of them. As with the other lists it is one in which to dabble to find information about the Port Essington naturalists, their collections, and Gilbert's observations on the birds, as for example his note on the voice of the Silver-crowned Friarbird:

... but its most ludicrous and amusing attempt, is when it try's [sic] to imitate the regular song of any other bird: while it attempts only single notes or cries, it succeeds so well, that the nicest ear is liable to be deceived; but the moment it attempts any regular succession of notes, its failure is complete, for instead of producing any thing like harmony it falls into a most discordant, and disagreeable, unconnected succession of unmeaning noises; and as if aware of this, it does not often try it again more than twice or thrice, when it suddenly changes it to a loud shrill scream or croak ...

The section ends with assorted tables, including one listing the bird species recorded for the Cobourg Peninsula against the collector, and another which lists avian scientific names based on type specimens that were collected at Port Essington.

The book ends with an extensive "References" and several appendices, including one containing "John MacGillivray's species list from H.M.S. *Fly*, largely from Port Essington, dated May 1845." Finally, there's an index to species names, both scientific and common.

This work abounds with illustrations, there being 145 figures in total. Almost all are in colour and of these 60 are of museum specimens, with many being types. Figures are frequently accompanied by informative notes:

Figs 93, 94. Two trays of Wandering Whistling-duck eggs, all collected at Port Essington for John Gilbert in March, 1841. The clutch of five was split into two groups by John Gould, and the dedicated entrepreneur sold three of the eggs to Adolphus Heermann, an American oologist. The five eggs were eventually re-united in the stores of the British Museum. Eggs too can be type specimens; all five are probably from the type series of *Dendrocygne australis* Reichenbach, 1850 and *Dendrocygna gouldi* Bonaparte, 1865.

The following shows yet again the problem with the ANSP specimens, it wasn't just the taxidermists in Paris who so poorly handled the specimens:

**Fig. 112.** Label written by John Gould and still attached to the holotype of *Athene rufa* Gould, 1846, from the Gould Collection in ANSP (ANSP 2552). It is one of the few original labels to survive the regrettable purges of specimen information from the ANSP Gould Collection – first by removal of written labels, then by the junking of wooden stands with the transferred data written on the underneath – by 19th and 20th century taxidermists and curators in Paris and ANSP.

I also liked this unexpected history lesson:

**Fig. 51.** Knowsley Hall, near Liverpool in northwest England, seat of the aristocratic Stanley family. Sir Thomas Stanley was created as 1st Earl of Derby by his stepson Henry Tudor, who was crowned Henry VII in 1845 after the Battle of Bosworth Field. During this battle Richard III was killed, and his army defeated, with the help of the Stanley's private army.

This pencil drawing, dated 1835, was the work of the "Nonsense Poet" Edward Lear, who lived at Knowsley in the 1830s with the 13th Earl of Derby

and his family. Lear, an extremely talented artist, was hired by Lord Derby to paint the animals and birds at Knowsley, but became more famous for the rhymes he wrote for the Stanley children. Lear's "The Owl and the Pussycat" was recently voted the most popular children's poem in Britain in a national competition (*The Times*, 4 October 2001).

While peripheral to the main story, the information in this caption is not out of place. As stated in the book, the wealthy 13<sup>th</sup> Earl of Derby amassed a large collection of natural history specimens, a collection which later founded the Liverpool Museum where the senior author, Clemency Fisher, is based. Furthermore, these collections also included some of Gilbert's specimens from Port Essington, received via Gould. The 13<sup>th</sup> Earl also bankrolled John MacGillivray, who was aboard H.M.S. *Fly* (Captain Blackwood) when she visited the Cobourg settlement. And, while it isn't mentioned, Edward Lear was one of several artists who painted for Gould.

If the photographs of dead creatures, types or otherwise, are not to your liking then there are other figures which are a splendid addition to this work. They are full-page illustrations – ten in all – of paintings taken from Jardine & Selby's *Illustrations of Ornithology* (1830), Gould's *The Mammals of Australia* (1845–1863) and Gould's *The Birds of Australia* (1840–1848), the latter including plates of both the black-headed and redheaded forms of the Gouldian Finch.

I urge anyone with an interest in northern Australian natural history and the history of collectors and collections to delve into this well-produced work. Clemency Fisher, the late John Calaby and a succession of editors of *The Beagle* (Helen Larson, Dirk Megirian, Chris Glasby and Richard Willan) have produced a most valuable, accessible reference which is deserving of a wide audience.

# References

Frith, H.J. & Calaby, J.H. (1974). Fauna Survey of the Port Essington District, Cobourg Peninsula, Northern Territory of Australia. *Division of Wildlife Research*, *Technical Paper No.* 28.

Huxley, J. (ed.) (1935). T.H. Huxley's Diary of the Voyage of HMS Rattlesnake. (Chato & Windus: London).

Tree, I. (1991). The Ruling Passion of John Gould. A Biography of the Bird Man. (Barrie & Jenkins Ltd: London).

# Museum of Economic Botany David Symon

State Herbarium of South Australia

The Museum of Economic Botany at the Adelaide Botanic Garden – a Souvenir. Edited by Peter Emmett and Tony Kanellos. Board of the Botanic gardens and State Herbarium, North Terrace, Adelaide, South Australia 5000. 2010. ISBN 978 0 9775608 9 9.

The Santos Museum of Economic Botany near the centre of the Adelaide Botanic garden is one of the few its kind anywhere. More extraordinary is the fact that the building and its collection have survived almost intact from its opening in May 1881. It has escaped being turned into a functions centre or lecture theatre.

The Museum was initiated by Richard Schomburgk, the second director of the Gardens (1865 – 1891) and the collections were assembled and labelled by him. This happened at a time of extensive plant introductions to Australia for both horticulture and agriculture and Schomburgk

was actively involved in this. The building was refurbished in 2009 restoring original features and preserving others (look to the decorative ceiling which remains untouched) and within it an area designed by Khai Liew was developed for temporary exhibitions. In 2006 at the back of the original building (northern side) a roofed and paved area the Schomburgk Pavilion including a café, bookshop and visitor information centre were built. With two new doors in to the main building this has greatly facilitated use of the Museum.

Now a generously illustrated and attractive book edited by Peter Emmett and Tony Kanellos has been published to celebrate its survival and refurbishment. In a forword Steve Hopper describes the Museum as 'a diverse and surprising reward to the botanically and culturally aware.' Indeed it is. Few of the public are aware of the consequences of the development of agriculture ± 10,000 years ago. The wealth of plant material

that supports us, the diversity of work they have generated, the development of cities and the now dangerous increase in population.

Peter Emmett and Tony Kanellos (and his small staff) have done a tremendous job in researching, retrieving and displaying the original contents, including more than 500 papier mache models of fruit and fungi made in Germany in 1866–1890 many still with original labels.

These inspire Gay Bilson to admire the craftsmanship which produced these and many other objects in the collection, e.g. the worked wood and the weaving.

Thekla Reichstein and Claire Bockner give stories of their experience of working in the Museum. They tell of the Museum's wayward history, of 'lost' material discovered when the entire contents were bundled into storage in preparation for the complete refurbishment and give credit to E.S. Booth who undertook, in

1940's and 50's, the relabelling and restaging of an extensive carpological collection.

The principal chapters of the book cover the importance of plants to mankind, a short history of the now *Santos Museum of Economic Botany*, sources of the collection and recollections of two

recent long serving workers in the Museum. Four essays follow on our own ethnobotany. Then there is a detailed account of the restoration of the building and an illustrated list of the contents of the museum. Finally under "objects Speak" there is a fascinating collection of 17 essays by artists, writers and craftsmen each inspired by single items in the collection. These essays are personal, unexpected and wide ranging and

include a quote by the late Claude Levi-Strauss on his visit to an Indian market. The splendid illustrations display the contents very well.

We hear a lot about protecting our Heritage these days and here's a good example, not only the building of Victoria origins, its unexpected contents no less important to us now than they were, but from which so many city people are alienated. So like Gary Warner in the book, visit Adelaide in its timewarp trapped-

in-amber evocation of Victorian sensibilities, and like Steve Hopper find this book of diverse and surprising rewards for the botanically and culturally curious.

This book is available from the Botanic Shop at the Adelaide Botanic Garden.



# A note of clarification on two volumes on Nicotiana

**David Symon**State Herbarium of South Australia

Illustrated book of the genus Nicotiana, Japan Tobacco Inc., Plant breeding and Genetics Research Laboratory; 1990.

In the ASBS Newsletter 114 (March 2003) I reviewed a copy of a book entitled The genus Nicotiana Illustrated dated 1994. A colleague has recently received as a gift the Illustrated book of the genus Nicotiana, dated 1990. Although the titles are different the contents are much the same and the 1990 edition would seem to be a

forerunner of the 1994 edition.

I am unable to read Japanese but the forewords are different and the English version in the 1994 edition (lacking in the 1990 version) does not say that it is a second edition. The 1990 edition contains 234 pages (cf. 294 in 1994) and many fewer illustrations. In both cases the bulk of the text in is Japanese with some commentaries in English. The 1994 edition contains one extra species, No. 67 *N. x affinis*. The literature cited is

similar but the 1994 edition has an added list of *Nicotiana* names and synonyms.

However the 1990 edition contains a 17 page account of the collecting in North and South America with 4 maps of routes taken and collecting sites for the species, as well as brief comments in Japanese of the species. This is followed by "The results of the Genus Nicotiana Scientific Expeditions in South America" in English. These are absent from the 1994 edition.

The 1994 edition has many extra field photographs; in only one case is there a reduction by two. The extra photos are spread throughout the volume, but the number for the Australian species has more than doubled (from 84 to 218). In addition many of the photos of the seeds (all species) have been replaced so that the 1994 volume is certainly

superior to the 1990 volume An enquiry some years ago into the deposition of any voucher specimens obtained no response.

Both of these volumes published by the commercial company Japan Tobacco Inc., have no ISBN number, nor a standard distribution organisation. This has complicated tracing them. I have been confused in the past by seeing the two slightly different titles cited in the literature and I hope that this item has contributed some clarification.

#### Footnote

Once a fully owned government company responsible since the late 1800s for salt and tobacco production in Japan, Japan Tobacco was privatised and incorporated in 1985, but still wholly owned by the Japanese government. Since then JT Inc. has diversified into the food, beverage, and pharmaceuticals industries and is now only partially owned by the Japanese Government.

# Practical phylogenetic techniques

# **Russell Barrett**

Kings Park and Botanic Garden

The phylogenetic handbook. A practical approach to phylogenetic analysis and hypothesis testing. Second Edition. By Lemey, P., M. Salemi, and A.-M. Vandamme (eds) 2009. Cambridge University Press, Cambridge. 723 pp. ISBN: 9780521730716 (paperback).

\$87.95. Available in hardback, paperback (http://www.cambridge.org/uk/catalogue/catalogue.asp?isbn=9780521730716) or as an ebook (http://www.cambridge.org/uk/catalogue/catalogue.asp?isbn=9780511513039 (\$47 USD)).

A brief review is provided here to draw attention to this useful reference book. Following on from the successful first edition of this book (Salemi & Vandamme 2003, 430 pp.), the present edition features six entirely new chapters, with

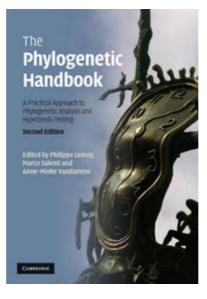
significant revision of the text of the remainder to account for the changes in this rapidly moving field of research. The large size of this volume reflects well on its coverage of the topics, with twenty one chapters providing both theoretical and practical reviews of phylogenetic analysis methods and issues.

A larger range of progams are now included, with practical tutorials and web references on how to

> analyse your own datasets. Progams covered include: BLAST. FastA. Clustal. T-coffee, Muscle, DAMBE, Tree-puzzle, Phylip, MEGA, PAUP, IQPNNI, CONSEL, ModelTest, Prottest, PAML, HYPHY, MrBayes, BEAST, LAMARC, Splits Tree and RDP, with chapters often contributed by the original authors of the software program.

> For those new to the field of phylogenetic analysis, this book is an essential starting point and contains and extensive glossary to ensure students can fully understand the content. For those already

active in the field, it provides a useful review and



some essential information on newer programs and techniques that may not be so familiar. The second edition provides an increased focus on hypothesis testing in order to increase the rigor of analyses and conclusions.

The book covers the literature up to 2006, with some references from 2007, so bear in mind the lag between completion of the chapters and final publication and be sure to check for more recent papers when using the latest methods, but for the most part, this book will provide all the information you need to successfully analyse your molecular data using one or more of the programs included here.

For those who do not undertake molecular phylogenetic research, but do want to understand the papers written by others, and objectively consider their conclusions, the theory sections of this book will prove invaluable. Reviewers and editors of journal articles will find this text to be an essental reference for checking the appropriateness of the analysis methods and conclusions drawn in phylogenetic papers.

This and subsequent editions are sure to be a standard text for many years to come.

#### Reference

Salemi, M., and A.-M. Vandamme (eds) 2003. The phylogenetic handbook. A practical approach to DNA and protein phylogeny. Cambridge University Press, Cambridge.

# **Books for review**

Review copies of the following books are on offer from CSIRO Publishing. Please contact Russell Barrett if you would like to review one.

Wetland Habitats (http://pid/6349.htm)

(http://www.publish.csiro.au/nid/21/

Rainforest Restoration Manual for South-Eastern Australia (http://www.publish.csiro.au/nid/20/pid/5268.htm)

Algae of Australia: Phytoplankton of Temperate Coastal Waters (http://www.publish.csiro.au/nid/20/pid/6446.htm)

# **Plant Families Website**

# Recognition of Australia's largest plant families

#### **Geoff Burrows**

School of Agricultural and Wine Sciences Charles Sturt University, Wagga Wagga, Australia gburrows@csu.edu.au

The ability to recognise plant families 'on sight' is a very useful skill. Its advantages include:

If an unknown specimen is encountered when identifying plants for a species list, biodiversity survey, quadrat assessment, etc. it is more efficient to start keying out at a known family rather than starting at the very start of a key.

In illustrated floras it significantly reduces the number of images that need to be examined and thus markedly improves the efficiency of identification.

Environmental science, agronomy or horticulture students can work more efficiently in most parts of Australia (e.g. east coast, south west corner, tropical savannas) and also overseas, as several of the largest plant families are cosmopolitan in their distribution.

Leisure activities such as bushwalking/gardening can be more rewarding as 'you' are actually observing more.

The website (go to: http://www.csu.edu.au/herbarium/ and click on 'Australian Plant Family Recognition') features an illustrated tutorial and 5 interactive tests consisting of 20 images each. The tests feature high quality images and optional hints to the main features of the flowers. As noted above, recognition of plant families is a very useful skill and listed below are some other websites that can be useful to explore:

http://www.colby.edu/info.tech/BI211/Families.html http://academic.reed.edu/biology/courses/BIO332/quiz/index.html

http://www.plantsciences.ucdavis.edu/courses/plb102/quiz/quiz\_by\_family.html

Feedback and comments are most welcome.

# **Chapter Conveners**

#### Adelaide

Robyn Barker

State Herbarium of South Australia Department for Environment and Heritage

PO Box 2732 Kent Town, SA 5071 Tel: (08) 8222 9348

Email: barker.robyn@saugov.sa.gov.au

#### Armidale

Jeremy Bruhl Department of Botany University of New England Armidale, NSW 2351

Tel: (02) 6773 2429

Email: jbruhl@metz.une.edu.au

#### **Brisbane**

Laurie Jessup

Queensland Herbarium Mt Coottha Road Toowong, Qld 4066 Tel: (07) 3896 9320

Email: laurie.jessup@epa.qld.gov.au

# Canberra

Vacant

#### Cairns

Mark Harrington James Cook University PO Box 6811 Cairns, Qld 4870 Tel: (07) 4042 1338

Email: mark.harrington1@jcu.edu.au

#### Darwin

Philip Short

Northern Territory Herbarium

Parks and Wildlife Commission of the NT

PO Box 496

Palmerston, NT 0831

Tel: (08) 8999 4512 / Email: phil.short@nt.gov.au

#### Hobart

Marco Duretto

Tasmanian Herbarium Private Bag 4 Hobart, Tas. 7001

Tel: (03) 6226 1806 / Email: marco.duretto@tmag.tas.gov.au

#### Melbourne

Frank Udovicic

Royal Botanic Gardens Melbourne Birdwood Avenue, South Yarra, Vic. 3141

Tel: (03) 9252 2313 / Email: frank.udovicic@rbg.vic.gov.au

#### Perth

Kristina Lemson

Plant Systematics and Conservation

Centre for Ecosystem Management and School of Natural Sciences, Edith Cowan University, Joondalup WA 6027

Tel: (08) 6304 5369 / Email. k.lemson@ecu.edu.au

# Sydney

Hannah McPherson

National Herbarium of NSW Mrs Macquaries Road Sydney, NSW 2000

Tel: (02) 9231 8111

Email: hannah.mcpherson@rbgsyd.nsw.gov.au

# Contacting Major Australian Herbaria and Systematics Institutions

From outside Australia: add the country code 61 and omit the leading zero of the area code

AD tel: (08) 8222 9307 fax: (08) 8222 9353 www.flora.sa.gov.au	HO tel: (03) 6226 2635 fax: (03) 6226 7865 www.tmag.tas.gov.au/ Herbarium/Herbarium2.htm	MEL tel: (03) 9252 2300 fax: (03) 9252 2350 www.rbg.vic.gov.au/	NSW tel: (02) 9231 8111 fax: (02) 9251 7231 www.rbgsyd.gov.au/conservation _research/herbarium_&_services
CANB tel: (02) 6246 5108 fax: (02) 6246 5249 www.anbg.gov.au/	BRI tel: (07) 3896 9321 fax: (07) 3896 9624 www.epa.qld.gov.au/hebarium	DNA tel: (08) 8999 4516 fax: (08) 8999 4527 www.nt.gov.au/pwcnt	PERTH tel: (08) 9334 0500 fax: (08) 9334 0515 http://science.dec.wa.gov.au/ herbarium/
QRS tel: (07) 4091 8800 fax: (07) 4091 8888	MBA tel: (07) 4048 4745/4743 fax: (07) 4092 3593	NT tel: (08) 8951 8791 fax: (08) 8951 8790	Australian University Herbaria Contact CHAH representative: Murray Henwood, University of Sydney
Council of Heads of Austral- asian Herbaria (CHAH) Chair: Dr Brett Summerell (NSW) brett.summerell@ rbgsyd.nsw.gov.au or www. chah.gov.au/	ABRS tel: (02) 6250 9417 fax: (02) 6250 9555 email: abrs@environment.gov.au www.environment.gov.au/ biodiversity/abrs/	Australian Botanical Liaison Officer (ABLO) Position Vacant Herbarium, Royal Botanic Gardens, Kew Richmond, Surrey TW9 3AB England tel: 44-20-8332 5270; fax: 44-20-8332 5278 email: ablo@kew.org	

# **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.

**Postage rates**: Those quoted apply only within Australia. Please email for prices to other locations. Send **orders and remittances** (payable to "ASBS Inc.") to:

Helen Thompson
ASBS Sales
ABRS
GPO Box 787
Canberra, ACT 2601, Australia
Or fax credit card details to:
Helen Thompson Fax: (02) 6250 9448

Contact details. Email: helen.thompson@environment.gov.au. Tel: (02) 6250 9445. Fax: (02) 6250 9448.

# 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 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.

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

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

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

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

#### Advertising

Advertising space is available for products or services of interest to ASBS members. The current fee is \$100 per full page, \$50 per half-page or less.

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

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.

#### **Editors**

Russell Barrett	Peter Jobson
Kings Park & Botanic Garden	(ENV Australia)
Fraser Ave	29 Montreal Road
West Perth, WA 6005	Woodbridge
Tel: (08) 9480 3640	WA 6056
Fax: (08) 9480 3641	
Email: russell.barrett@bgpa.wa.gov.au	Email: peter.jobson@env.net.au

# **Contents**

Australian Systematic Botany Society Newsletter 143 (June 2010)

From the President
Obituaries
Surrey Jacobs
George Chippendale
ASBS Inc. Business
Postscript to the ASBS 2009 Conference and workshop on "National accreditation of providers of biological identification"
A potential model for accreditation of Botanists from ASSSI
Nominations for 2010–2011 ASBS Council
Annual General Meeting for 2010
Hansjörg Eichler Research Fund March 2010 Round
<b>ABRS Report</b>
Book reviews
Natural history collecting at Port Essington
Museum of Economic Botany
A note of clarification on two volumes on <i>Nicotiana</i>
Practical phylogenetic techniques
Books for review
Plant families website