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Society



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#### AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

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#### **ASBS Web site**

www.anbg.gov.au/asbs Webmaster: Murray Fagg Centre for Plant Biodiversity Research Australian National Herbarium Email: Murray.Fagg@ea.gov.au

#### Loose-leaf inclusions with this issue

CSIRO Publishing advertising catalogue
Notice re September 2003 Plant Systematics in Australia conference in Melbourne

#### Publication dates of previous issue Austral.Syst.Bot.Soc.Nsltr 111 (June 2002 issue)

Hardcopy: 12th July 2002; ASBS Web site: 12th July 2002

# **ASBS Inc. business**

### Stop Press: Annual General Meeting

Here is some important news from the AGM. A full report will appear in the next *Newsletter*.

#### Your new Council

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Your new elected Council elected is as follows:

President Vice-President	Steve Hopper John Clarkson
Secretary	Brendan Lepschi
Treasurer	Anthony Whalen
Councillor	Bob Makinson
Councillor	Andrew Rozefelds

### The finalised proposals for changes to the Rules of the Society

No formal additional proposals for change were received by the Secretary for inclusion in the ballot. However, the meeting ratified several changes to the proposals put by Council and members. Most were errors in spelling, syntax or cross-referencing.

The major decision was to adopt just the second of two alternatives presented under current Rule 33 in the initial proposals for dealing with special resolutions put to the membership. This best caters for discussion amongst our widely dispersed membership before a proposal of a special resolution is finalised for putting to the vote. This parallels the current process which complies with both the our Rules and the Act with which they are required to accord.

Within the next four weeks you will receive voting papers and a system for ensuring that the

ballot is secret, including an addressed envelope for return to the Secretary Brendan Lepschi, who is the returning officer for the ballot. Only those members without email addresses will receive an unsolicited hard copy of the finalised proposals; remaining members will be referred to the ASBS Web site for the finalised proposals.

Only financial members or those accorded that status are eligible to vote.

The voting papers will allow for a member *either* to vote yes or no to all proposals at once *or* to vote on all proposals individually.

The revised proposals will be posted on the ASBS web pages shortly.

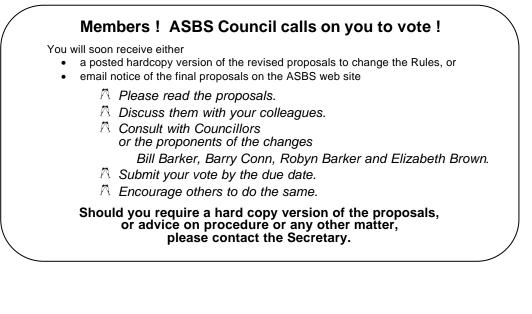
The ballot will be determined at a general meeting to be held at the Australian National Herbarium, Canberra on  $20^{th}$  December 2002. To pass, 75% of voting members must approve a proposal. A quorum of four members of Council and 13 members overall will be required.

# Council's recommendation on the Rules changes

Council believes it would be unmanageable to vote on each chane. Many of the proposed changes affect several rules and are inter-related.

Council supports all proposals and recommends that members vote on all rules en bloc.

"VOTE YES ABOVE THE LINE"



# Articles

### A note on the authorship of *Eucalyptus grandis*

#### Tony Bean Queensland Herbarium

*Eucalyptus grandis* is a tall tree from coastal forests of Queensland and northern NSW. It is a common species, but its great resemblance to *E. saligna* Sm. prevented its early recognition as a distinct species.

Walter Hill, first Director of the Brisbane Botanic Gardens, proposed the name, and J.H. Maiden later discussed the validity of the species. *E. grandis* was not treated by Bentham in his Flora Australiensis, and was perhaps overlooked by him.

The author citation for the name *E. grandis* is mostly given as "W.Hill ex Maiden", e.g. Forest Trees of Australia, Flora of N.S.W., Flora of southeast Qld, Flora of Australia.

Maiden (1915), in his Critical Revision of Eucalyptus, used "E. grandis Hill", with the comment that "the informal description of Mr Walter Hill, as there quoted, is quite clear, and, since it is backed up with herbarium specimens, might be claimed to be sufficient, if it were desired to give it specific rank." Just a few years later, he (Maiden 1918) used "(Hill) Maiden" and seems to attribute naming the species to himself. Blakely followed the latter citation in his Key to Eucalypts.

I have recently seen the original publication of *E. grandis* by Walter Hill. That reads as follows:

"74.- Eucalyptus grandis, Hill. Myrtaceae. Flooded Gum. 48 to 60; 90 to 140. A majestic tree, inhabiting the rich alluvial flats upon the banks of the rivers, and in such has a pillar-like trunk, clear of branches for three-fourths of its entire height. The timber is of high repute for strength, lightness (floats on water when dry), and durability, and can be had in great quantities."

This clearly constitutes valid publication of the name under the rules of the current ICBN, hence

"ex Maiden" is not warranted in the author citation. This was recognised by Chapman (1991) who used "grandis W.Hill" in his Australian Plant Name Index. Maiden did not alter the rank of the taxon, nor transfer it from another genus; hence his "(Hill) Maiden" is also incorrect.

There is a specimen in the herbarium in Kew with the label "No. 74 Queensland Woods, London Exhib. 1862, Mr Hill, Eucalyptus grandis Hill". This specimen, comprising two fruiting branchlets, should be regarded as the holotype. It matches the species currently known as *E. grandis*.

Its correct nomenclature is summarised below:

*Eucalyptus grandis* W.Hill, Catalogue of the Natural and Industrial Products of Queensland (London Exhibition) p. 25 (1862). Type: Queensland. [near Brisbane,] undated, W. Hill [No. 74 Queensland Woods] (holo: K).

#### Acknowledgements

Peter Bostock (ABLO at Kew) found and photocopied the original description and photographed the type specimen. Rod Henderson reviewed the manuscript.

#### References

- Chapman, A.D. (1991). Australian Plant Name Index Volume 2, p. 1237. Australian Government Publishing Service: Canberra.
- Maiden, J.H. (1915). A Critical Revision of Eucalyptus, part XXIII. William Applegate Gullick, Government Printer: Sydney.
- Maiden, J.H. (1918). Notes on Eucalyptus No. 6 (with descriptions of two new species, in co-operation with Mr R.H. Cambage, F.L.S.). J. Proc. Roy. Soc. New South Wales. 52: 486-519.

### John Richardson, an early collector from Melville Island, Northern Territory Philip Short Northern Territory Herbarium, Palmerston

On Wednesday 10<sup>th</sup> July the descendants of a convict gathered together to honour him by planting a tree in the Darwin botanic gardens. In his address to the gathered crowd – a very select group numbering about 25 in total – the Honourable Austin Asche (patron to the Friends of the Gardens and one-time NT Administrator) commented how things have changed, noting how not many years ago some Tasmanians tried to erase all mention of their convict ancestry from official public records. But on this day four generations of the descendants of John Matthew Richardson were proudly on hand to witness and partake in the planting of what we hope will be a splendid and long-lived specimen of the kauri pine, Agathis robusta. As well as his descendants others present included Greg Leach (Director of the Gardens), Syd Stirling (our acting Minister), and two local historians of note, Peter Spillett<sup>1</sup> and Graham Calley<sup>2</sup>.

I had met neither Peter or Graham before and chatting to Graham I found that by profession he was a vet and that his work on the early settlements on the Top End came from an interest in writing and was carried out mainly on weekends. He has now retired to Western Australia and farms sheep. I understand that it was Graham's interest in Richardson that led to his correspondence with the Richardson family and the subsequent tree planting.

#### John Richardson, a brief biography

So just who was John Richardson? The sign accompanying the commemorative tree reads:

> Planted in memory of John Matthew Richardson. Born England 1797–Died Australia 1882. A pioneer in tropical gardening. Overseer of the Fort Dundas settlement gardens Melville Island 1826-1829.

By necessity the plaque is rather brief but there are a number of publications pertaining to Richardson from which I have gleaned much of the biographical presented here. For his general background I have drawn on Graham Calley's book and a privately produced booklet containing information primarily compiled, I believe, by Mrs Barbara Richardson.<sup>3</sup> For general information on his travels and plant collecting I've again consulted these works plus a paper by Bill & Robyn Barker<sup>4</sup> which details a number of frequently overlooked, but notable, plant collectors of whom Richardson is just one.

Born at Slinfold, Sussex in April 1797, John Richardson, described as a nurseryman, was sentenced in March 1816 to seven years transportation for larceny. Following arrival in Sydney he was assigned to work in the government gardens in Sydney and was apparently well-behaved, receiving a Pardon in 1821. He returned to England, taking with him plants (including seed) and rock specimens destined for Lord Bathurst and others. However, in December the same year he was involved in a house-breaking with two accomplices. Records of his case still exist:

On the fourteenth day of December in the Second year of the reign of our Sovereign Lord Defender of the faith about the hour of Three in the night of the same day with force and arms at the parish aforesaid in the County aforesaid the dwelling house of Sans Chapman esquire there situate feloniously and burglariouslary did break and enter with intent the goods and chattels in the same dwelling house then and there being then and there feloniously and burglariously to steal and carry away against the peace of our said lord the King his crown and dignity.

You may find this gobbledygook slightly amusing but Richardson surely didn't. In March 1822 he and his associates were sentenced to be hanged.

At least Richardson's sentence was commuted to transportation for life and by November he had arrived in Hobart where he worked as a gardener. Before long a request from the Colonial Secretary was made to have Richardson returned to Sydney to again work at the government gardens. He duly arrived there in July 1823, having sailed from Hobart in the company of the Colonial Botanist, Charles Fraser. He subsequently accompanied Oxley, and apparently Allan Cunningham on several journeys, visiting for example both Port Macquarie and Moreton Bay. One result of this work was the coining of the names *Hibiscus* richardsonii and *Alyxia* richardsonii. Neither names are recognised today, the former being a synonym of *H. trionum* L., and the latter a *nomen nudum*, placed in synonymy under *A. ruscifolia* R.Br.<sup>6</sup>

During his brief time in Tasmania Richardson was twice charged with stealing, although on the last occasion he was acquitted of illegally obtaining nine pounds of turnip seed. There are no known records of any misdemeanors during his time at Sydney and it was perhaps because of this clean slate, his literacy, and presumably a respect for his abilities as a gardener and botanical collector that Richardson was sent to Fort Dundas.

Fort Dundas was the first British settlement in the Top End, being followed by Fort Wellington on Raffles Bay, Victoria Settlement at Port Essington and Palmerston at Escape Cliff. Although the name of Palmerston has lingered on this settlement and both of the others were shortlived. Climate, disease, indifferent management, attacks by Aboriginals, poor trade and distance from major centres, were all factors that contributed to their abandonment. Of these settlements Port Essington figures most highly in the early history of botanical collecting<sup>7</sup> in the Top End but thanks to Richardson some plants were also collected from the Melville Island settlement, more details of which I give below.

Fort Dundas was established in 1824 and officially closed in 1829. Richardson arrived in February 1826 with his wife and son (Matthew) – having married another convict, Jane Nelson, in July 1824 – and seems to have departed on  $4^{h}$  April 1829 when the settlement was abandoned in favour of Raffles Bay.

Richardson and his family (now including a daughter, Elizabeth Melville<sup>8</sup>) returned to Sydney. In the same year another son, William, was born. The following year Jane died and the two eldest children were placed in orphanages. What happened to William is apparently unknown.

Richardson, during his stay at Melville Island was not always a model member of the community, being involved in illicit trading of spirits. After the death of Jane he was in more trouble with the Law, facing drunk and disorderly and insubordination charges and ending up in a road gang smashing rocks. On two occasions he received 25 lashes and on another 50, the latter for absconding from a road gang.

Despite Richardson's illicit trading in spirits while at Melville Island his abilities as a collector

were noted. Charles Fraser, in a letter to the Colonial Secretary dated  $20^{\text{th}}$  June 1829 wrote

I have the honor to submit to the kind consideration of His Excellency the Governor the case of John Richardson Convict for Life, who has been employed for several years as Gardener at Melville Island, from which Settlement he returned by the Ship Lucy Ann.

From the character given him by the various Commandants under which he served and the testamany [sic] which I can justly bear to his previous conduct I consider him an abject ..... of His Excellency's clemency.

Should the Gov<sup>t</sup> be in search of a person as a Collector of subjects in Natural History, I can safely recommend him.<sup>9</sup>

It was perhaps this letter that eventually led to a change in fortune for Richardson. In any case, by 1836 he was no longer in a road gang but assigned to Major Thomas Mitchell's third expedition and travelled through SE Australia. Richardson collected plants during the expedition and a detailed list of new species collected during all three of Mitchell's expeditions is provided in Barker & Barker<sup>4</sup>.

Mitchell was impressed with the work of his plant collector and following his report to the Governor a Conditional Pardon was granted to Richardson. This meant that he had to remain in Australia, and he is known to have worked as a gardener at Redbourneberry Estate near Singleton. He also seems to have generally settled down, with no more altercations with the Law being recorded. This change was perhaps the result of his marrying Catherine Doyle in 1852, with whom he had seven children.

#### Choosing the "Richardson Tree"

The kauri pine is a superb tree and from experience with another planting in the Darwin gardens it is expected that the "Richardson Tree" should thrive, cyclonic winds and termites permitting. However, this was not the main reason for its selection. Dave Griffiths (Acting Curator of the Gardens) informed me that it was chosen as it reflects Richardson's early link with the Royal Botanic Gardens, Sydney. In 1818 Richardson, under the instruction of Mrs Macquarie, had to replant a sapling of the Norfolk Island pine, *Araucaria heterophylla*, which had been washed out during heavy rain. This tree became the celebrated "Wishing Tree" which stood in the gardens until decay caused it to be removed in 1945.<sup>3,10</sup> The link is at the

family level, both the kauri and Norfolk Island pine being members of the Araucariaceae.

#### The Melville Island collections

Bentham<sup>11</sup> in *Flora australiensis* listed no fewer than 15 taxa which he attributed to "Fraser" from Melville Island (Table 1). The Fraser referred to is undoubtedly Charles Fraser, the first officially appointed superintendent of the Sydney Botanic Gardens. However, although he travelled extensively, there is no record of Fraser having visited Melville Island (Maiden 1908)<sup>12</sup>. There seems to be no doubt that the actual collector of these specimens was John Richardson. As noted above he was not only stationed at Melville Island but was also professionally associated with Fraser who, in writing, acknowledged Richardson's work at Fort Dundas.

Lyn Craven<sup>13</sup> seems to have been the first taxonomist to have noted Richardson's role. In a review of northern Australian species of *Calytrix* he noted of *C. cupressifolia* A.Rich., a synonym of the widespread species *C. exstipulata*, that

*C. cupressifolia* A.Rich. is typical of *C. exstipulata* and one reason it was described as new may be that the origin of the type was confused. Richard gives the locality as Port Macquarie but the species does not occur there. Charles Fraser, who apparently sent the material to Richard from Port Macquarie, was probably given the material by another person. It is likely that John Matthew Richardson, who was acquainted with Fraser and who had collected plants with John Oxley, collected the species on Melville Island during 1826–28, and gave material to Fraser who sent it to Richard (this supposition is based on information given in Pike<sup>[14]</sup> and van Steenis-Kruseman<sup>[15]</sup>).<sup>13</sup>

As well as the confusion with Port Macquarie it is also evident from Bentham's work (Table 1) that some specimens were initially believed to have come from Moreton Bay.

This confusion, and the naming and description by the French botanist Achille Richard of some of Richardson's plants, is apparently the result of Fraser donating specimens to the naturalists (including Pierre Adolphe Lesson) of Dumont d'Urville's *Astrolabe* voyage when it was anchored at Port Jackson in December 1826. Bosse recorded that Fraser presented "a batch of new plants that were included in the four natural history cases sent from Sydney to the Museum of Natural History"<sup>16</sup> in Paris.

Laurie Jessup<sup>17, 18</sup> has recorded his observations on the type specimens of two species described by Richard, i.e. *Leococarpum obscurum* and Sersalisia laurifolia. In both cases the types in Paris (P) were labelled as "Morton [sic] Bay, C. Fraser" but duplicates in Kew – although retaining Fraser's name as "communicator" – were labelled as coming from Melville Island. There can be no doubt that the French confused the Melville Island collections with other specimens that Fraser had obtained from Moreton Bay and Port Macquarie, a fact recognised by Bentham who saw duplicate specimens independently sent to Europe by Fraser.

Inadequate labelling may also account for the dubious record of *Lawsonia inermis* from Melville Island (Table 1).

Of the collections now known to have been gathered by Richardson from Melville Island at least seven are type specimens and comments pertaining to these are presented in Appendix 1. As to the general distribution of the Melville Island specimens at least some are known to be in Kew (K), Paris (P) and, as noted by Jessup<sup>19</sup>, in Edinburgh. The latter are on permanent loan from the University of Glasgow, having originally been sent to William Hooker when he was Professor of Botany at that institution. Such specimens should be cited as being housed in "E–GL".

#### Acknowledgements

Mrs Barbara Richardson kindly provided comments on a draft of this note and supplied the transcription of Fraser's letter which is cited above. I also thank Laurie Jessup for permission to refer to a letter to Clyde Dunlop and for reminding me of his paper in *Austrobaileya*.

#### Notes and references

- 1. Spillett, P.G. (1972). Forsaken Settlement. An Illustrated History of the Settlement of Victoria, Port Essington North Australia 1838–1849. (Lansdowne Press: Melbourne).
- Calley, G. (1998). The Pumpkin Settlements. Agriculture and Animals in Australia's First Northern Colonies. (Historical Society of the Northern Territory: Darwin).
- 3. A Convict Gardener. 35 pp. My photocopy is from an original printing signed by Mrs B. J. Richardson and dated May 1996.
- Barker, R. M. & Barker, W. R. (1990). Botanical contributions overlooked: the role and recognition of collectors, horticulturists, explorers and others in the early documentation of the Australian flora. In Short, P. S. (ed) *History of Systematic Botany in Australasia*. (Australian Systematic Botany Society Inc.) pp. 37–85.

5. Cited in Calley, G. (note 2 above), p. 25.

- Hibiscus richardsonii Lindley, Edward's Botanical Register 11, t. 875 (1825); Alyxia richardsonii Sweet, Hortus Britannicus 273 (1826), nomen nudum [Middleton (2002), Blumea 47: 47.].
- 7. John Armstrong was the most prolific plant collector from the region (many details are in Spillet's work (note 1), but

others to collect plants in the area include John Gilbert and Ludwig Leichhardt.

- Elizabeth's second name, Melville, has become a family name. (Mrs B. Richardson, in litt. 18 July 2002).
- Original in New South Wales Archives, Colonial Secretary Letters, number 29/4835. Transcript provided by Mrs Barbara Richardson.
- Gilbert, L. (1986). *The Royal Botanic Gardens, Sydney. A History* 1816–1985. (Oxford University Press: Melbourne).
- 11. Bentham, G. (1863–1878). *Flora australiensis*. (Lovell Reeve & Co.: London).
- Maiden, J. H. (1908). Records of Australian botanists (a) General, (b) New South Wales. *Journal & Proceedings of* the Royal Society of New South Wales 42: 60–132.
- Craven, L. A. (1980). A review of the genus Calytrix Labill. (Myrtaceae) in northern Australia. *Brunonia* 3: 217– 246. Citation from pp. 232–233.
- 14. Pike, D. (Gen. Ed.) (1967). Australian Dictionary of Biography. Vol. 2. (Melbourne University Press).

- van Steenis-Kruseman, M. J. (1978). Cyclopaedia of Collectors. Additions. III. *Flora Malesiana Bulletin* 31: 3003.
- 16. Brosse, J. (1983). Great Voyages of Exploration. The Golden Age of discovery in the Pacific. (Doubleday Australia: Lane Cove, N.S.W.). p. 153. Brosse actually stated that Fraser "gave Gaudichaud a batch of new plants ...." but in the same work recorded that Quoy, Gaimard and Lesson were the naturalists on this voyage. Gaudichaud was naturalist on other major voyages undertaken by the French, i.e. on the voyage of the Uraine (1817–1820) and La Bonite (1836–1837).
- 17. Letter to Clyde Dunlop dated December 1994; copy of relevant page in DNA.
- Jessup, L. W. (2001). New combinations and a new name in Australian Sapotaceae. *Austrobaileya* 6:161–163.
- Jessup, L. W. (1994). Australian Botanical Liaison Officer. Australian Systematic Botany Society Newsletter 78:13.

Table 1. Specimens from Melville Island attributed to Fraser and listed in Flora australiensis

Volume: page number	Specimen citation	Plant name as given by Bentham	Notes & current name if different to Bentham
1:48	" Melville Island, Fraser"	<i>Pachynema complanatum</i> R. Br.	
1:106	" Melville Island, Fraser"	<i>Cochlospermum fraseri</i> Planchon	Туре
1:140	" Melville Island, Fraser"	Polygala orbicularis Benth.	Туре
1:401	" Melville Island (not Moreton Bay), <i>Fraser</i> "	<i>Denhamia obscura</i> (A.Rich.) Walp.	Type of <i>Leucocarpum obscurum</i> A.Rich.
1:463	" Melville Island (not Moreton Bay), <i>Fraser</i> "	<i>Atalaya salicifolia</i> (A.DC.) Blume	Type of Thounia australis
2:54	" Melville Island, Fraser"	Jacksonia dilatata Benth.	
2:409	" Melville Island, Herb. Fraser	Acacia oncinocarpa Benth.	Туре
3:49	" Melville Island (not Port Macquarie), <i>Fraser</i> "	Calythrix microphylla Cunn.	Type of <i>Calythrix cupressifolia</i> A.Rich. (a synonym of <i>Calytrix exstipulata</i> DC.)
3:255	" Melville Island, Fraser"	<i>Eucalyptus ptychocarpa</i> F.Muell.	
3:290	" Melville Island, Fraser"	Osbeckia australiana Naudin	
3:301	" Melville Island, <i>Fraser</i> "	<i>Lawsonia alba</i> Lam.	Synonym of <i>L. inermis</i> L.; apparently an erroneous record for Australia (Hewson & Beesley, 1990, <i>Flora of</i> <i>Australia</i> 18: 113).
4:282	"Queensland. Moreton Bay, Backhouse, Fraser"	<i>Achras laurifolia</i> (A.Rich.) F.Muell. ex Benth.	Type of <i>Sersalisia laurifolia</i> A.Rich. from Melville Is. [= <i>Pouteria richardii</i> (F.Muell.) Benth.]
5:281	" Melville Island, Fraser"	Myristica insipida R.Br.	
5:457	" Melville Island, Fraser"	Grevillea heliosperma R.Br.	
6:459	" Melville Island, Fraser"	<i>Tacca pinnatifida</i> J.R.Forst. & G.Forst.	= T. leontopetaloides (L.) Kuntze
6:461	" Melville Island, Fraser"	Dioscorea sativaL.	= D. bulbifera L.

# Appendix 1. Type specimens believed to have been collected by Richardson from Melville Island.

Acacia oncinocarpa Benth., Hooker's London Journal of Botany 1: 378 (1842). T: "N. Coast, Melville Island, Fraser, Sim's Island, Cunningham."

Bentham (1864, *Flora australiensis* 2:409) subsequently attributed the Melville Island specimen to *Herb. Fraser*, and not specifically to Fraser. Tindale *et al.* (2001, Flora of Australia 11B:254) recorded "T: Melville Is. ..., *C.Fraser*; syn.: K ...".

Calytrix cupressifolia A.Rich. in Lesson, Voyage de l'Astrolabe 2, Sertum Austrolabianum 41, t.16 (1834). T: "Crescit in Novâ-Hollandiâ, loco vulgo dicto Port Macquarie. Vidi siccum sp. communicatum à clar. Fraser." Craven (1980, Brunonia 3: 229) placed the name in synonymy under C. exstipulata and recorded "Type: [Northern Territory. Melville Island.] comm. Fraser s.n. (P)."

The name *Calytrix cupressoides* A.Rich. in Lesson, *Voyage de l'Astrolabe* 2, *Sertum Austrolabianum* 43, 158 (1834) is a misspelling of *C. cupressifolia*.

 Cochlospermum fraseri Planchon, Hooker's London Journal of Botany 6 307 (1847). T: "In insula Melville secud oram boreali-occidentalem Novae Hollandiae. Fraser in herb. Hook." George (1982, Flora Australia 8: 87) accepted Fraser as the collector and recorded the holotype as being in K.

Leucocarpum obscurum A.Rich. in Lesson, Voyage de l'Astrolabe 2, Sertum Austrolabianum 46, t.18 (1834). T: "Crescit in Novâ-Hollandiâ, loco vulgo dicto Baie Morton. Vidi unicum specimen fructiferum, communicatum à clar. Fraser." Jessup (2001, *Austrobaileya* 6: 162) recorded types in P & K. [= *Denhamia obscura*].

- Polygala orbicularis Benth., Flora australiensis 1: 140 (1863). T: "South Goulburn Island, A. Cunningham; Melville Island, Fraser; N. coast, Armstrong."
- Sersalisia laurifolia A.Rich. in Lesson, Voyage de l'Astrolabe 2, Sertum Austrolabianum 84, t. 31 (1834). T: "Crescit in Novâ-Hollandiâ, loco vulgo dicto Baie Morton. Vidi unicum specimen communicatum à clar. Fraser."

Bentham, under the name Achras laurifolia, cited several specimens, including "Moreton Bay, *Backhouse, Fraser*". This is presumably an error in citation by Bentham as van Royen (1957, *Blumea* 8: 341) recorded "Type specimen: *Voyage de l'Astrolabe* 6 in P." and in a list of specimens examined listed "Melville Island: *Fraser* 226 (K), fl.", the latter presumably the one seen by Bentham.

Thouinia australis A.Rich. in Lesson, Voyage de l'Astrolabe 2, Sertum Austrolabianum 31, t. 12 (1834). T: "Crescit in insulâ Melville, Novae-Hollandiae, communicata à clar. Fraser." Reynolds (1981, Austrobaileya 1: 400; 1985, Flora of Australia 25: 14) recorded that she had not seen the type. [= Atalaya salicifolia (DC.) Blume]

# Editorial

This is our fifth issue. Once again thanks to those members who have supplied articles, letters, news etc. for this newsletter. We have had no problems in filling any issue but would still like to hear from a few more of the "silent majority".

### Foregoing a hard copy Newsletter: your decision time approaches

Electronic copy of the newsletter has now been published at the same time as the hard copy for some time. As a member of the society you will shortly be asked whether you wish to continue to receive a hardcopy issue of each *Newsletter* or whether you are happy to forgo this.

# Changes to inserting advertisements in the *Newsletter*

Fees for advertising within the newsletter and by insertions in the mail-out have been revised to provide a consistent approach and to help recover some of production. Feedback from advertisers indicates that these rates are acceptable. See the inside back cover for the new fees.

The inside front cover now notes the fliers included within each mail-out of the hard copy. This enables those who decide to receive their Newsletter electronically to see what has been included in the mail-out.

Fliers will not be shown on the ASBS Web-site (a Government site) unless they concern Society or are non-commercial.

### News

### American Society of Plant Taxonomists award to Australian phycologist

The American Society of Plant Taxonomists has awarded Corresponding Membership to Hugh Bryan Spencer Womersley, Professor Emeritus of the University of Adelaide and Honorary Research Associate of the State Herbarium of South Australia.

Professor Womersley was cited for his sustained productivity and adherence to the highest standards of scholarship in his research on the marine algae of southern Australia. His monographs have served as indispensable sources of information for phycologists everywhere. His contribution to our knowledge of the morphology taxonomy and ecology of marine algae is exceeded in importance only by his enormous influence as a teacher: he has mentored several phycologists who in turn have been productive in research and effective in teaching. The honour bestowed on Professor Womersley by a society dominated by spermatophyte specialists is acknowledgment that phycologists also play an important role in taxonomy.

Professor Womersley will celebrate his 80<sup>th</sup> birthday (November 19) this year, coinciding with the publication of the final part of his monumental "The marine benthic flora of southern Australia. Part IIID, Delesseriaceae, Sarcomeniaceae, Rhodomelaceae", will be issued as a supplementary volume to the "Flora of Australia".

#### Editorial note

This information was communicated to Professor Womersley by Paul. Silva, Research Botanist at the University of California.

Corresponding Memberships of ASPT are conferred upon distinguished foreign scientists whose work has notably advanced plant taxonomy. Others to have received he award include David Mabberley, Vernon Heywood, William T. Stearn and Armen Takhtajan.

The publication of Part IIID of Professor Womersley's work in fact will be a joint publication by the State Herbarium of South Australia and the Australian Biological Resources Study.

### Royal Botanic Gardens Sydney Eureka Prize for Biodiversity Research

The annual Eureka Prize Award ceremony was held on 13 August, in Sydney. Nearly 700 scientists, science journalists, politicians and 'celebrities' were present when Director Frank Howarth awarded the second Eureka Prize sponsored by the Royal Botanic Gardens Sydney to Dr Bob Pressey from the NSW National Parks and Wildlife Service. With a Pitcher Plant in his lapel, Frank explained that the Gardens was all about plants, but plants in context - biodiversity conservation was the real outcome and this was why we sponsored a prize in Biodiversity Research. The Pitcher Plant of course illustrated the natural hierarchy, with plants eating animals...

Congratulations to all the finalists (a summary is included below), and a big thanks to the Friends of the Gardens who sponsored the prize and to our four judges - Peter Weston (Royal Botanic Gardens Sydney), Gerry Cassis (Australian Museum), Kingsley Dixon (Kings Park, Perth) and Chris Dickman (University of Sydney).

Royal Botanic Gardens Sydney Eureka Prize for Biodiversity Research: awarded to an individual, team or organisation for innovative scientific research that makes an outstanding contribution to the conservation of Australia's biodiversity.

#### Finalists

Australian Biological Resources Study & Bruce Maslin, Western Australian Herbarium For a national collaborative research project which has produced the most comprehensive account ever of Australia's largest flowering plant genus, *Acacia*. The authoritative descriptions and powerful interactive key provide essential information and tools for assessing the biodiversity value of *Acacia* that will greatly facilitate its effective conservation, management and utilisation.

#### Professor Roger Kitching Australian School of Environmental Studies Griffith University

For the development of widely used standard protocols which allow super-diverse insects and their relatives to be used as sensitive tools for environmental assessment. Spin-offs have included comparative survey techniques, 'predictor sets' which act as surrogates for overwhelmingly rich biotas, and progress in fundamental forest ecology.

#### Dr Bob Pressey Principal Research Scientist NSW National Parks and Wildlife Service

For innovative research which has revolutionised the planning of new reserves for biodiversity conservation. Using plant diversity and environmental data, innovative computer programming and analysis, his methods are designed to foster the active participation of all stakeholders, (including land managers, government, industry and environmental groups) in conservation planning.

#### Threatened Mammal Research Team CSIRO Sustainable Ecosystems Wembley WA

For research which challenges established ideas about the decline of mammals in Australia and demonstrates a major impact from introduced foxes and feral cats. In partnership with the Useless Loop community, the Heirisson Prong conservation site was established at Shark Bay, WA, where three species of threatened mammals were successfully reintroduced.

> Tim Entwisle National Herbarium of New South Wales

# **Global conservation initiative**

#### Gondwana Alive

A concept called "Gondwana Alive" has just been launched at the Earth Summit in Johannesburg. A copy of the document is reproduced below. This is an important initiative and has the backing of some major public figures (Nelson Mandela, Kofi Annan, the Dalai Lama, David Attenborough, Prince Charles, E.O. Wilson, David Bellamy, Jane Goodall and many more). The document outlines a very ambitious approach to preserving what is left of Gondwana. Since this initiative stems from Africa, that continent is well covered, but it is now time to think more about what can be included from Australia and I have been asked to coordinate an Australian response.

I will be pleased to hear any suggestions that you may have. This is now a public document; so feel

### Gondwana Alive corridors

Dr. John M Anderson Founder & Managing Editor, "Gondwana Alive" Specialist Scientist, National Botanical Institute, Pretoria Private Bag X101 Pretoria, 0001, South Africa Tel: +27 12 804 3200; Fax: +27 12 804 3211

#### Background

The "Gondwana Alive Corridors" concept was born within the context of stemming the Sixth Extinction. Fast-track Holistic Multidisciplinary Management (HMM) must be instituted if we are to arrest this catastrophically escalating event. We simply cannot conduct affairs globally along the well-tried traditional procedures, since it is precisely in this mode that we are destroying life on our planet. If we are to stem the Sixth Extinction within the decade — free to spread it widely. There is a 140 page colour booklet called "Towards Gondwana Alive" which appeared in 1999 and provides a broader outline. I have a copy if anyone would like to see it. Sometime soon a much larger book called "Gondwana Alive" will appear and this will be the blueprint for future action.

The document will soon be posted on <u>www.southernconnection.org.au</u>, the Southern Connection website.

Bob Hill Department of Environmental Biology University of Adelaide



and we must — it is imperative that we think a quantum bigger than we are normally accustomed to comfortably do.

### Gondwana-wide girdle/network of corridors

We visualize an unbroken girdle—or more precisely a network—of corridors spreading across the family of Gondwana continents and across the intervening oceans.

- On average the corridors might extend *ca* 1,000 km (but might vary from 500–5,000 km in length) and have a width of anything from 10–100 km.
- Each corridor would be an autonomous unit, yet be an integrated part of the whole girdle or web.
- There follows a selection of corridors on which work could begin without delay:

*Cradle-to-Cradle Corridor*—This entirely unique corridor from Nkomazi in the Barberton Mountains to Sterkfontein in Gauteng is the obvious prototype to set the project alive. It will track Earth history through 3,5 billion years from the "*Cradle of Life*" to the "*Cradle of Humanity*" in a way quite impossible on any other continent. South Africa is without question the geological hotspot on Earth and the "Transvaal" the core of that hotspot. The "*Cradle to Cradle*" corridor could be routed (meandering) to take in an unparalleled sequence of geological formations— in highly scenic biodiverse country.

The Cape Coast-Fynbos Corridor—In regards to superlatives and uniqueness globally, this corridor comes a close second to our "Cradle-to-Cradle" prototype. At a string of sites along the spectacular coastline is preserved the story of our human (Homo sapiens sapiens) emergence from around 140 to 70 thousand years ago. The earliest known human footprints, the earliest preserved artwork and the first glimpses of agriculture are all there to engage our wonder. And then there is the Cape Fold Belt and its clothing of Fynbos. This small mountainous chain crossing the southern foot of Africa is home to one of the six plant kingdoms recognized on Earth. In biodiversity terms, it is the equivalent of the entire Northern Hemisphere.

**The Great Karoo Corridor**—This corridor perfectly links the "*Cradle-to-Cradle*" and "*Cape Coast Fynbos*" Corridors. It also is a place of priceless, peerless global heritage. During that critical interval of time when the single supercontinent, Pangaea, existed (say 300–200 million years ago), when the mammals evolved from the reptiles and the proto-flowering plants from the gymnosperms, the Karoo basin lay deep within Gondwana. It preserves this critical transition in life history more fully than anywhere else and this could be admirably portrayed in a sequence of field museums.

**AFRICA:** *The Lungs of Africa Corridor*—In extending the corridors beyond South Africa into Africa and the other Gondwana continents, this would be an obvious early candidate. It is from these equatorial forests that our very first steps towards humanity were taken. The lungs of

Africa were the womb of our hominid family. Around seven million years ago, a fork appears in the primate family tree—the one branch leading to ourselves, who finally colonized the world, exploded to 6 billion individuals and set the Sixth Extinction alight; the other to the chimpanzees and gorillas who remained in their place of origin and are succumbing rapidly in that extinction.

**SOUTH AMERICA:** *Amazon Corridor*—In this corridor the Amazon to Andes facts of Extinction. biodiversitv and the Sixth humankind's impact on the prodigious diversity of life, are seen more starkly, perhaps, than anywhere else in our world. It is one of the laws of biodiversity that its richness increases towards the equator. And one of the facts every schoolchild and adult should know is that the hottest of all diversity hotspots occurs in the tropical Andean headwaters of the Amazon-a place that we are reducing to unsustainable human domestication at an increasingly, overwhelmingly tragic rate.

*The Paraná-Pantanal Corridor*— Incorporating one of the 25 biodiversity hotspots of the world, this corridor that takes in part of the Atlantic coast of Brazil boast many superlatives. Geologically and palaeontologically it spans the past 2 billion years, being richly fossiliferous and covering an enormous range of past environments and biological events. The rich spectrum of extant ecosystems are all heavily endangered. They include: mangroves, a rain forest even more diversified than that of the Amazon, the *Araucaria angustifolia* system, the semi-desert "cerrado", and the huge and unique lowlands "pantanal matogrossense" with nothing similar elsewhere in the world.

**INDIA:** *The Central Himalayan Corridor*—The High crumpled Himalayas, including Everest and Kanchenjunga and K2 and Annapurna and Nanda Devi, the majestic playground of the mountaineers, are the most visible expression of what Gondwana and drifting continents are all about. As India drifted North and impacted into Asia so this greatest of all ranges was folded into being to become sculpted by time and the scalpel of the monsoons.

AUSTRALIA: Aboriginal Corridor— Humankind arrived in Australia perhaps 30, 000 years ago, perhaps earlier. Along this corridor, the mind of the visitor is opened to the relationship between colonizing hunter-gatherers and the plants and animals they discovered and flourished within and upon. How did they impact on the landscape in which they found themselves? Not so benignly as we might wish to believe. **ANTARCTICA:** Scott Base to South Pole Corridor—Here we encounter human endeavour and human endurance at their limit and beyond their limit. And along the Trans-Antarctic Mountains with their stark Pangaean outcrops are seen sequences, paralleling those in each of the Gondwana continents, yielding fossils you could have collected in Sydney or Gauteng or inland of Rio de Janeiro.

Partners & potential partners (scientific, conservation)

Here we emphasize a selection of obvious partners who have been approached, or should be at the earliest opportunity—with a view to forging creative action in the fountainhead corridors ("*Cradle to Cradle*" in South Africa and the others across Africa and Gondwana noted above.)

**IUGS (International Union for Geological Science)**—It would be ideal that this project be officially ratified as an IUGS Gondwana Subcommission project. Maarten de Wit, one of the founding scientists of the Gondwana Alive Society and Chairperson of the Gondwana Subcommission, is currently presenting the case at the 11<sup>th</sup> International Gondwana Symposium in New Zealand (late August/early September, 2002).

**UNESCO Commission for South Africa**—As a UNESCO (South African Commission) Cooperating Organisation, it would be an obvious move to work the corridor concept in partnership with this global body—especially as the closelyrelated Biosphere Reserve program is of their creation.

**Peace Parks**—GA already has a 'letter of understanding' relationship with the Peace Parks and the corridor concept can easily be visualized as a natural extension of their theme of Transfrontier Parks.

**Expanded OUZIT project**—This project is being launched at the Johannesburg World Summit (2 September 2002) before an audience of Heads of State and others. A powerful group of strategic partners, including NEPAD (New Programme for African Development), SADC (Southern African Development Community) and PPF (Peace Parks Foundation) are closely involved. *Gondwana Alive* has been associated with this project on a consultancy basis.

**Conservation International (and others)**—It would be eminently advisable to form recognized alliances with the major international

environmental agencies such as Conservation International, IUCN (International Union for the Conservation of Nature) and the World Wildlife Fund.

**Enviropaedia**—David Parry-Davies, who founded this 'green pages' directory of South African environmental NGOs, Government bodies and others, thinks fondly of a synergy (in place of a battleground) of South African NGOs. The GA corridors would provide the perfect context for this. GA already has a close relationship with the Enviropaedia.

**International Pollinator Initiative** —The African wing of this Initiative is run by Dr Connal Eardley, one of our GA scientists. Pollination is a fundamental process in all terrestrial ecosystems, yet is still very superficially studied in the field. Research in this area would be promoted along all corridors.

**Schools and Universities**—All educational institutions along and closely adjacent to the corridors should be intimately involved— especially in eco-literacy capacity building (ELCB), environmental economics and holistic management. In effect all fields of human endeavour.

**CIDA City Campus** (to specify just one particular educational facility)—An immediate partnership could be forged with CIDA in developing ELCB nodes along the '*Cradle to Cradle*'' corridor.

**The Global Classroom**—Colin Garland and Sue Cutting of Massachusetts (USA) initiated their global outback school a few years back. They take groups of disadvantaged youth from around the World to places such as the tropical forests of Costa Rica or the desert landscapes of Baja California—to assimilate raw primary nature.

**ICLI**—International Council for Local Environmental Initiatives: the mayors of Africa, civil society, communities, eco-literacy, sustainability.

**Gondwana scientists**—We are exploring the route forward with the following colleagues in the first instance (pilot run). The interest and response is highly encouraging.

South America—Prof. Oscar Rösler Palaeontological Museum in Mafra (South Brazil)

"Museu da Terra e da Vida"

Africa—Prof. Maarten de Wit

University of Cape Town (Dept. of Geological Sciences)

Cigces-centre for interactive graphical computing of Earth Systems

*India*—Dr. P.C. Srivastava University of Allahabad (Dept. of Botany)

Australia—Prof. Bob Hill University of Adelaide (Dept. of Environmental Biology) "Southern Connection" (www.southernconnection.org.au)

Antarctica—Dr. David Cantrill British Antarctic Survey (Cambridge, UK.)

**Private ventures** (as critical focal nodes and 'drivers' along the corridors)

Examples in South Africa include:

*Nkomazi* (Barberton Mountains, Cradle-to-Cradle Corridor)—Fred Daniels and his colleagues have already prepared a detailed document on this venture.

*Khoinania* (Tsitsikama, Cape Coast-Fynbos Corridor)—Jenny Lawrence

Business partners—see following page.

**International body of patrons**—The ideal is to canvass a body of 10 to 20 deeply committed individuals from amongst Royalty, entertainment celebrities, billionaire business personalities and retired Heads of State as patrons for this project. They would be free of vested interest and ensure maximum networking and fundraising capacity. They would be primarily from the wealthy northern nations and would symbolize the partnership between northern and southern countries.

#### **Business and fundraising opportunities**

The following are at various stages of exploration.

#### Adopt a corridor

- Billionaires, top corporations and Foundations from Northern Hemisphere countries are approached to adopt particular corridors. Their name or names will be directly linked to all products, merchandise and advertising associated with that corridor.
- \$10–100 million paid into a trust or foundation by the adoptee(s). The interest is used for sustainable development projects in the corridor with a direct outcomes-based focus on stemming the *Sixth Extinction*.
- 25% of the annual interest is paid to "Gondwana Alive" to co-ordinate and fund fast-track scientific projects within the corridor.

- 25% is paid to a relevant global NGO (or UNESCO) to co-ordinate and fund cultural projects and activities.
- 25% is paid to the Nelson "Mandela Children's Fund" to co-ordinate and fund education, health, sport and cultural activities for children and youth.
- for children and youth.
  25% is paid to the "Natural Step" to coordinate and fund sustainable business projects.

#### Adopt a school

- Millionaires and smaller corporations particularly from Northern Hemisphere countries are approached to adopt specific schools within corridors. *Maretlwane* in the Magaliesberg would be an ideal pilot study.
- \$100,000-\$1 million paid into a trust or foundation by the adoptee(s).
- The interest is used for eco-literate capacity building.
- The education faculties of the nearest universities will administer the interest and co-ordinate projects.

#### Sustainable business opportunities

- Eco-cultural tourism
- Eco-crafts
- Small business enterprises
- Subscriptions/memberships
- GA booklets, videos, tapes, GIS maps on each corridor
- GA gigs, dance, theatre, art and architecture

Profits are fed straight back into the sustainable development projects within the corridor—again with the specific focus on holistic management and stemming the Sixth Extinction.

#### Wealth of Nations to Wealth of Nature

- The entire fund-raising mechanism is designed to redress the balance of wealth between the Northern and Southern countries. At present, perhaps 80%–90% of all monitory and industrial wealth esides in the North, while 80%–90% of all natural wealth—biodiversity and intact 'old' ecosystems (nondomesticated)—is preserved in the South.
- A massive flow of money, investment and capacity could flow from North to South, to the great and lasting benefit of all, within the decade. Fast-track is the operative word.
- The best principles, already formulated by The Natural Step, UNESCO Biosphere Reserves and the science of environmental/resource economics, will permeate throughout.

# Appropriate potential business partners with GA (in this venture)

- Hewlett-Packard ("A walk through time").
- The Swedish Academy of Sciences (linked to environmental economics, The Nobel Foundation and The Natural Step).
- DBSA (Development Bank of South Africa).
- GEDA (Gauteng Economic Development Association).
- PAST (Palaeo-anthropological Scientific Trust).
- De Beers and Anglo American (with ventures throughout Africa).
- Nedbank, Pick-'n-Pay, Old Mutual (South African companies presenting a green image). Similar companies from elsewhere around

Gondwana.

# Letters

### Herbarium of the Northern Territory

I submit the following as a preamble to the article about "The official opening of the Northern Territory Herbarium" (*ASBS Newsletter* 111 June 2002, p 6-8).

George Chippendale Canberra

I was working happily in a beaut room, in the Sydney Herbarium, shared with Knowles Mair, in 1953 when I saw an ad for a position of botanist in Alice Springs. I shared duties with Mary Tindale, Joyce Vickery, Neridah Ford, Joy Garden (later Thompson), Lawrie Johnson, and I had known Mr W.F.Blakely from when I was 15, and the Director was Mr R.H.Anderson. I also met Mr H.M.R.Rupp, Mr O.Evans, and many other visitors, including Miss Bea Miles. I had a view of the Bridge, the Harbour and much of the near gardens. Why would I want to leave that? I must say that when I applied for the position, I felt I would not get it.... perhaps I didn't want it! Anyway, I was called for an interview in some Public Service offices in Macquarie Street, the interviewer being Mr (sometime Colonel) A.L.Rose. He asked a lot of questions, and he had been well-briefed. I told him that he was asking for somebody to do what six or more were doing in Sydney. He asked could I do it. I said I could, but not all at once. Then he asked if I knew all the plants in the N.T. I had seen some specimens that were distributed to the Sydney Herbarium, but that was all, so I said, clearly, "No." He was silent a while, then said something like "I'm bloody glad to hear it. I have interviewed many others, and they all said they know all the Territory plants. They are bloody liars!"

I was offered the job somewhat later, after two others withdrew. So, in mid 1954, I had my first civilian plane flight to Adelaide where I met Noel Lothian and David Symon, and continued on the long trip to Alice in a DC3. I was met by the same Mr Alfred Lionel Rose who took me to his Animal Industry Branch, part of the NT Administration. There was not as yet any room for a botanist, but a friendly CSIRO bloke named Bob Winkworth had a part of a shed near Billygoat Hill, and he was willing to share with me. Bob had a small herbarium, surely the very beginning of the NT Herbarium. It had specimens collected by C.A.Gardner on a trip to the Centre, some collected by the CSIRO LRRS group, and a few others.

Within weeks, room was found for me in with the rest of the Branch, and I was able to take the CSIRO specimens with me. I had shelves built, ordered boxes such as were in use in Sydney, and in a very short time, the herbarium was established. I arranged for exchange of specimens with all State herbaria, and after I had made NT collections, I had a constant exchange. More shelves were built. Further reading on this at Australian Territories vol 2 No 4, July 1962, G.M.Chippendale, "Botany in the Northern Territory".

I needed some assistance, so asked about it. A Public Service Inspector created a job of clerical assistant, and several unsuitable people were trialled in helping out bush and in the herbarium. Before long, the Admin. Officer, Tom Hare, offered me Des Nelson. It was one of the best things that happened. Des was a good companion out bush, and a self-starter in the herbarium, competent in many things, and he is still a good friend. Some years later, several others came to work in the herbarium, including Rob Swinbourne. So, for a period I had Des Nelson and Rob Swinbourne, both interested in the country and in plants. I felt most fortunate.

Between us, we carried out all the functions of any State herbarium, and collected special items on request, investigated cattle poisonings with stock inspectors or veterinary officers, helped visiting botanists or ecologists, including those from other arid countries, and tourists. So, surely, the NT Herbarium was established, opened and functioned from 1954, without any official opening ceremony.

# Obituary

# David Whibley: 23<sup>rd</sup> June 1936 - 14<sup>th</sup> July 2002

David Whibley will be remembered by systematists around Australia as a gentle man of Acacia. He will be remembered further in the State Herbarium of South Australia and Botanic Gardens of Adelaide for his wide knowledge of the diversity and cultivation of South Australian plants, both native and naturalised. The State Herbarium benefited greatly from his knowledge. There he had the job of doing the bulk of general identifications of material provided by the public, led and participated in field expeditions throughout the State, headed up the curatorial team, and wrote authoritatively on South Australian weeds and wattles.

David began work in the Botanic Gardens under Noel Lothian in 1952 at the age of 16. His enthusiasm for native plants saw him transfer in on 21<sup>st</sup> June 1956 to the State Herbarium as a Botanical Assistant under Hansjörg Eichler. He continued to work there until his premature retirement as Technical Officer on 10<sup>th</sup> June 1988 after 36 years. He had left on extended sick leave two years before; a brain tumour had been diagnosed in 1982, but only his close family knew of it. Until shortly before his death, David led a rich uncomplaining life with his family within the Adelaide Hills community. Much of

David Whibley. Top right, with Betsy Shaw, who later moved to the Gray Herbarium . Lower right, with good friends Nik Donner and the late Joe Weber in the field. Photos : State Herbarium of SA

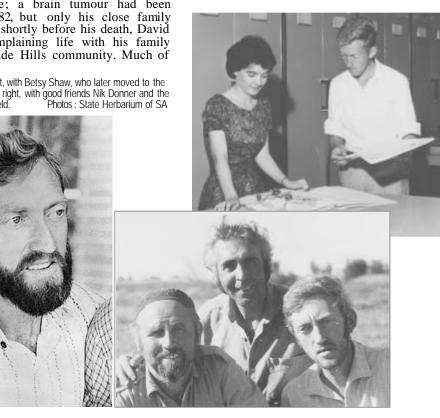
this life revolved around the family's exceptional talents in tennis.

David started publication only in his later years which revealed his passion for Acacias. He assisted and collaborated with other Acacia specialists. Acacia whibleyana Maslin is named after him and he himself named several new species in the genus and clarified the circumscription of others. This culminated in a handbook to South Australian Acacia. His retirement cut short completion of an accournt of coastal South Australian plants and their protection.

#### Publications

- (Arranged chronologically)
- Whibley D.J.E. 1976. Acacia araneosa (Fabaceae subfam. Mimosoideae), a new species from South Australia Contrib Herb.Australiense 14:1-7.

Whibley D.J.E. & N. Donner 1976. The plants of Chambers Gorge and Mt. Chambers. Austral. Pl. 8 (no.66): 256-266. Whibley D.J.E. 1977. A new wattle from South Australia.



Austral.Pl. 9 (no. 70): 69-71.

- Maslin B.R. & D.J.E. Whibley 1977. The identity of *Acacia leiophylla* Bent. (Mimosaceae). *Nuytsia* 2: 162–166.
- Whibley D.J.E. 1979a. A name change for a South Australian wattle. *Austral.Pl.* 10 (no. 77): 30 32.
- Whibley D.J.E. 1979b. Notes on *Acacia carnei* in South Australia. *S.Austral.Naturalist* 54: 12-14.
- Whibley D.J.E. 1980a. Acacia symonii, a new species from the north-western region of South Australia. J.Adelaide Bot. Gard. 2: 167–169.
- Whibley D.J.E. 1980b. Acacias of South Australia. (Govt Printer, Adelaide).
- Whibley D.J.E. 1981. Neptunia, Prosopis. In J.P.Jessop (Ed.)
- Flora of Central Australia. (Reed: Sydney), pp. 114–115. Whibley D.J.E. 1982. Book review: Acacias of Australia. J.
- Adelaide Bot.Gard. 6: 89. Whibley D.J.E. & T.J. Christensen. 1982. Garden Weeds. Identification and Control. (Adelaide Botanic Gardens Handbook 3).
- Whibley D.J.E. 1983. Mimosoideae. In B.D. Morley & H.R. Toelken (Eds.) Flowering Plants in Australia (Rigby: Adelaide), pp. 147 – 148.

- Whibley D.J.E. & J. Morley 1985. Plant Portraits. 14. Acacia glandulicarpa R.M.Reader (Leguminosae – Mimosoideae). J.Adelaide Bot.Gard. 7: 208 – 210.
- Whibley D.J.E. 1986a. Leguminosae Subfamily Mimosoideae. In Jessop J.P. & H.R. Toelken (Eds.). Flora of South Australia (edn 4). (Govt Printer, Adelaide), pp. 511 – 569.
- Whibley D.J.E. 1986b. The identity of *Acacia maxwellii* in South Australian nurseries. *S.Austral.Naturalist* 61: 27-29.
- Whibley D.J.E. & G.R.M. Dashorst 1986. Plant Portraits. 17. Acacia araneosa Whibley (Leguminosae). J.Adelaide Bot. Gard. 7: 307 – 308.
- Whibley D.J.E. 1986c. Acacia ligulata and Acacia maxwellii. Austral.Pl. 14 (no.109): 38 - 39.
- Maslin B.R. & D.J.E. Whibley 1987. The taxonomy of some South Australian Acacia section Phuyllodineae species (Leguminosae: Mimosoideae). Nuytsia 6: 19 – 32.
- Whibley D.J.E. & D.E. Symon 1992. Acacias of South Australia. (2<sup>nd</sup> Edn). (Govt Printer).

Bill Barker State Herbarium of South Australia

# Comment

### A comment on A.A. Munir's revision of Australian Verbena (Verbenaceae).

#### Barry J. Conn Royal Botanic Gardens Sydney Mrs Macquaries Road, Sydney NSW 2000

This is the first revision of the genus *Verbena* in Australia and as such represents a significant advance in our knowledge of the genus. It is a substantial work of approximately 70 pages and completes Munir's systematic studies of the Verbenaceae. The descriptions are comprehensive and readily comparable. These are supported by excellent botanical illustrations provided by G.R.M. Dashorst and A. Vlachoulis. Although many aspects of this study are excellent, it is expected that many of the taxonomic conclusions will prove difficult to support.

It is unfortunate that not all taxa recognised by the author are illustrated. This is regrettable because the new taxonomic concepts presented in this paper would benefit significantly by the inclusion of more illustrations. In particular, it is of concern that the new taxa and new combinations are not illustrated and no references are provided to previously published illustrations (for example, *V. litoralis* var. *brasiliensis*, *V. officinalis* var. *montana*, var. *eremicola* and var. *halei*, and *V. supina* var. *erecta*). Reference to *V. rigida* var *rigida* (p. 44), without reference to the presumed other variety (varieties) is puzzling. It is assumed that Munir is using the term "form" as a colloquial term for variant when he discusses V. supina var. erecta (p. 62).

Munir has misunderstood the typification of V. bonariensis. One would have thought that Yeo (1990) and Michael (1995) had made this clear. Based on his herbarium specimen citations, Munir's treatment shows that Verbena bonariensis var. bonariensis and var. conglomerata are both mostly equivalent to V. incompta P.W. Michael. Furthermore, Munir's Figure 1 appears to be a good likeness to V. incompta. However, I agree with Munir that Conn<sup>4106</sup> & Whalen is a specimen of V. bonariensis (sensu stricto).

A further complication that requires additional evaluation concerns the status of var. *conglomerata* Briq. (*sensu stricto*). Briquet's concept may equal V. *bonariensis sensu stricto* (also refer Yeo 1990) as it appears simply to be young inflorescences.

Care should be taken when we turn to Munir's treatment of *V. officinalis* and *V. litoralis.* Verbena litoralis var. litoralis appears to be comparable with the concept used by recent authors, for example, Stanley in Stanley & Ross(1986), Conn in Harden (1992), Green (1994) and Michael (1997a, 1997b). However, the concept of *V. litoralis* var. brasiliensis is unclear. It does not appear to be comparable with *V. brasiliensis sensu* Conn (1992). This raises another concern in the paper; the listing of additional references to the taxon being described by Munir may only be a link to the plant name being referred to, rather than a reference to the same taxon (as in the *V. brasiliensis sensu* Conn (1992) reference above)

The treatment of Verbena officinalis var. officinalis raises many concerns that will require further investigation. Munir appears to have misunderstood the typification of V. officinalis, just as he has with V. bonariensis. He regards V. officinalis as "native to Mediterranean region" (p. 78); however, Michael (1997a) explained that Linneaus (1753) was referring to central Europe. The illustration of var. officinalis (Fig. 7, p. 79) reminds me more of V. macrostachya sensu Michael (1997a). The leaves of Figure 7A are not as dissected as one would expect. They are more like the basal leaves, but still not very comparable to those of V. officinalis.

There are many instances in the paper where Munir has not given Michael's work the attention it warrants. Some of his comments are largely incorrect (refer p. 80 for his comments on Michael's work). On page 35, he writes "Michael (1995) included in the synonymy of *V. incompta* the photograph and account of *V. bonariensis* by Auld & Medd (1897) p. 236. This clearly shows that both taxa are identical and inseparable". However, Michael (1995, p. 182) actually wrote, "Auld and Medd (1987) p. 236 (as *V. bonariensis*)" as part of his reference to suitable illustrations of *V. incompta*. Furthermore, the comment, in several places, that Michael failed to provide an identification key is incongruent to Munir's reference to Michael (1997b). This latter publication is a key to the species of *Verbena*.

Clearly, there is more to the story of *Verbena* in Australia!

#### References

- Conn, B.J. (1992), in G.W. Harden (ed.). *Flora of New South Wales*, vol. 3, p. 613.
- Green, P.S. (1994). Flora of Australia, Oceanic Islands 1, vol. 49, p. 315.
- Linnaeus, C. (1753). *Species Plantarum*, Edn 1, vol. 1 (Laurentius Salvius: Stockholm).
- Michael, P.W. (1995). A new name for a widespread and misunderstood species of *Verbena* (Verbenaceae). *Telopea* 6(2-3): 181–183.
- Michael, P.W. (1997a). Notes on Verbena officinalis sensu stricto and V. macrostachya (Verbenaceae) with new combination in two closely related taxa. Telopea 7(3): 293– 297.
- Michael, P.W. (1997b). Weeds Wet & Wild Workshop Manual, pp. 9–17 (Australian Turf-grass Research Institute Ltd: Concord West, NSW).
- Munir, A.A. (2002). A taxonomic revision of the genus Verbena L. (Verbenaceae) in Australia. J. Adelaide Bot. Gard. 18: 21-103.
- Stanley, T. (1986), in T. Stanley & E.M. Ross (eds). Flora of South -East Queensland, vol. 2, p. 368.
- Yeo, P.F. (1990). A re-definition of Verbena brasiliensis. Kew Bulletin 45 (1): 101–120.

# ABLO Report

As I write, there is a hint of chill in the air, so it seems that we may have seen the best of summer that London has to offer this year. The past three months have been notable in many ways, not the least in having encompassed the Queen's Jubilee celebrations. We can say now that we have been two in a million, having stood in the Mall with the masses during the Jubilee weekend, as Concorde and its escort of Red Arrows flew low over the city. The most amazing thing to us was that the whole celebratory weekend was superbly managed without any negative incidents being reported. London has been crowded with visitors during August and Pat and I have stayed closer to home for a few weeks, enjoying the 'Colours of Summer' displays in Kew Gardens.

Now that my term as ABLO has been extended for a further three months, we will be leaving the UK on the  $27^{\text{th}}$  of November. We have surrendered our passports and a great deal of other personal documentation to UK Immigration to obtain the necessary visa extension, and feel quite 'stateless' at the moment. While confined to the UK, I plan to visit Edinburgh, Cambridge and, I hope, Liverpool, the last primarily because of the Smithian Herbarium presently in their care, as well as a 'top set' of Forster specimens.

Early in June, I visited Wakehurst Place and the Millennium Seed Bank, the latter being the venue of a meeting between Sarah Ashmore (Griffith Univ.), Tim Pearce and Robin Probert of the MSB and myself, exploring possible collaboration between Queensland and the Seed Bank. I have kept up my weekly visits to the Natural History Museum and in June I presented a talk as part of the NHM Botany Department seminar series, on 'Conservation and habitats of Queensland ferns and fern allies'. The BBC's Radio 4 also asked me to participate in a radio interview on Sir Joseph Banks and his influence on Australian Botany. The interview took place among the Banksias in the Australian section of the Rock Gardens at Kew, interrupted every couple of minutes by the noise of passenger jets on their approach to Heathrow.

During late June, I visited the National Herbarium of Paris for four days, and then in July, spent a week at the Netherlands National Herbarium in Leiden. Paris was a fantastic experience; I managed to get by with rudimentary 'franglish', and the staff at the Laboratoire de Phanérogamie were very understanding; Prof. Ph. Morat and Dr Frédéric Badré, in particular, made me feel very welcome, and provided me with every assistance. My time in Leiden was equally productive; their pteridophyte collections are extensive, and of course, many of the Blume and other Malesian fern types are held there. Leiden was a complete contrast to Paris, but with an immense charm of its own, truly a city of cyclists and pedestrians.

Kew's seminars and discussion forums continued, including a lively Nomenclature Forum on Types,

with presentations from Dick Brummitt and others bringing us up to date on the latest ICBN rules. In late July, the Library unveiled its webbased catalogue, initially available only on the Kew Gardens intranet; public release is planned for early next year.

There has been a strong contingent of Australian visitors to Kew during the summer, among them Judy West (CANB), who presented a well-attended seminar on the Australian Virtual Herbarium, Rogier de Kok (CANB), Stephen Forbes (Director, Adelaide Botanic Gardens), Ryonen Butcher (Univ. WA), Tom May (MEL), Julie Schofield (AD), Jenny Tonkin (Univ. of Melbourne & MEL) and Graeme Sandral (N.S.W. Agriculture). Late in July, Loretta Sullivan and Tippi Clark, from Cooktown, visited Kew and the Natural History Museumto see first-hand some of the paintings donated by Vera Scarth-Johnson to Kew, and to view some of Sydney Parkinson's drawings, paintings and lithographs. Prof. Gren. Lucas, former Keeper of the Herbarium, kindly showed them around Kew, and I trailed along, learning a great deal about Kew's history in the process.

Requests to ABLO have continued apace; one of the more unusual, from Moscow, was a request for information on the history of Prickly Pear infestations in Australia.

Peter Bostock Kew

# **Book reviews**

### The Genus *Clematis*

#### Magnus Johnson, Magnus Johnsons Plantskola AB, Söderatälje.

The "combination of a commitment based on aesthetic feeling and scientific ambition combined with the intelligence of stamina, is the key to this work". Sven-Ingvar Andersson wrote thus in the foreword to the original Swedish version of this book – *Släktet Klematis* (1997).

This remarkable treatment of *Clematis* represents a lifetime's love and work on both the horticulture and the science of the genus. It is intended to be a useful reference for the gardener, nurseryman, horticulturist, and botanical taxonomist. However it does go further than that because it provides a review of other aspects of the genus that will appeal to the historian, florist, herbalist, artist and more.

The book is divided into three parts:- Clematis: a

stimulant in the garden; Scientific description of *Clematis*; and, Descriptions of sections, species and cultivars. The first is of particular significance for the gardener and horticulturist; the second is important to all users providing the scientific underlay together with a key to Sections; and the third provides the descriptions of all of the species in flora-like style supported with a synonymy, geographic distribution and the habitat detail. The cultivars are also described synoptically in the context of the putative parents.

The third part is by far the largest because it provides descriptions of all of the species and cultivars. The amount of research that the author has undertaken is both broad and deep and the size of this part, in particular, reflects that. Several new combinations and new taxa were made in the Swedish edition, *Släktet Klematis*, 1997. The indication that they were made in this work represents an imperfection. However, it must stated that any imperfections that I did detect are minor and do not detract from the significance of the treatment.

The book is well indexed making it very easy to use. The imagery is encoded within the index in a unique way such that its type (e.g. photo or painting) is immediately obvious.

The illustration is unusual, being a combination of historical works dating from 1597, complemented by original drawings and gouache paintings by the author. It is rare to have the opportunity to see the work of artists relating to one genus, spanning 4 centuries, side-by-side in one publication. The imagery is expanded with a generous number of colour-photographs. While not every species is illustrated, images of a large proportion of both species and cultivars are available. All help to bring something of the magic of the genus to life, a facilitation which also comes through with the author's own enthusiasm.

This book is a must for the shelves of botanic gardens, nursery's, herbaria and enthusiasts. Order via <u>www.clematis.sunstone.se</u>

Helen Hewson

### The Encounter, 1802: Art of the Flinders and Baudin Voyages

#### Sarah Thomas, Co-ordinator

Art Gallery of South Australia, Adelaide, 2002. \$70. Pp. 228. No index.

A limited number were still available at the beginning of September.

In brief: a very handsome book that immediately takes its place among the standard works on the Flinders and Baudin voyages.

Produced as a catalogue for an exhibition of the same title in Adelaide, it has chapters by Sarah Thomas on the natural history art, Anthony Brown on the encounter of Flinders and Baudin, David Mabberley on Bauer, Ron Radford on Westall, Jacqueline Bonnemains on Baudin's artists, Howard Morphy on encountering Aborigines, Philip Jones on ethnography and Ann Moyal on the scientific legacy. Several others not cited as authors contributed sections within chapters. There are appendices on British and French place names on the South Australian coast, Aboriginal place names on the same coast, and on key events in Britain, France and Australia.

Each chapter is illustrated with well-selected art from the voyages, both pencil drawings made on the spot and paintings completed later. The colour reproduction is very good, better than that of recent works on Bauer such as Norst, though not of the same standard as the Basilisk Press Australian Flower Paintings of Ferdinand Bauer (1976) (cf. *Alyogyne hakeifolia*).

Generally the texts are good overviews and interpretations. There may be little that is actually new but it is good to have so much brought together in one work. Of particular interest to readers of this newsletter are the accounts by Robyn Barker of 14 plants shown in plates by

Bauer. These cover the meaning of the generic names, the discovery and naming of the species and information on occurrence, cultivation and other points of interest. There is a curious claim by Ron Radford that 'The strong and venerable European tradition of landscape art in Australia began precisely on Monday 7 December 1801 at 7.30 am' when Westall commenced his pencil drawings of the landfall. One would expect Radford, as Director of the Art Gallery of South Australia, to have been aware of previous artists on these shores such as those with Willem de Vlamingh in 1697 and William Dampier in 1699, not to mention those who drew or painted around Sydney during the 1790s. Brown states (p. 42) that the Flinders/Baudin meeting provided South Australia with its first bicentenary. Maybe the 200<sup>th</sup> anniversary of the visit to the Nuyts Archipelago by Thijssen in the Gulden Zeepard in 1627 didn't count, as the region was still not settled by Europeans in 1827 so there was no-one there to celebrate.

Editorially the book has some shortcomings. Most seriously, it has no index, very frustrating for anyone quickly seeking information about particular people, events, organisms etc. Sarah Thomas is cited as author on the title page but we learn from Radford's Foreword that she was in fact the co-ordinator of the written contributions. hence the citation as given at the head of this review. Although in the publication details (p. 228) there is a line 'National Library of Australia Cataloguing in Publication data', no such data are given. The form of citing references (pp224-226) is unusual, first repeating the textual citation and then the whole reference. The purpose of repeating the textual citation is unclear but seems redundant. The citation 'Brown 2001' is not a posthumous work by Robert Brown but Vallance, Moore & Groves' *Nature's Investigator*.

The oft-written error that Dampier was the first Englishman to visit Australia in 1688 is repeated (p. 211), overlooking the wreck of the Tryal in 1622. Cook's ship of his first voyage is given as HMS Bark Endeavour, the 'S' being wrong. Several typos were also noted (e.g. Mabberly, Sidney Parkinson, Linnaean Society). A number of people who made significant contributions to the text are cited by Thomas in her acknowledgments but in the text itself are indicated only by initials. This includes Robyn Barker, whose contribution is equivalent in length to others cited as authors under chapter headings.

> Alex George, 'Four Gables', 18 Barclay Rd, Kardinya, W.A. 6163

# ABRS Report

#### Staffing

The last few months have seen significant staff changes in ABRS. In March 2002 ABRS' graphic artist Ms Isabel Hallam decided to seek new challenges after 7 years with ABRS. Isabel had a varied range of tasks over the years, although her major work was associated with the *Fauna of Australia* series. She brought to us artistic skills of the highest order, combined with a great eye for design, and a familiarity with emerging graphics and desktop publishing software that helped ABRS move into new technology at a time of rapid change.

In May 2002 ABRS, along with many other areas in government, was presented with the necessity of making budget savings. As a result, a review of the staffing structure of ABRS was undertaken, resulting in a decision to dispense with the three Deputy Director positions, and the Administrative Assistant. At the same time new positions of Database Manager, Information Officer and a new Scientific Editor/Assistant Scientific Editor were created. As mentioned in the last ASBS Newsletter. two of the Deputy Directors, Dr Keith Houston and Dr Graham Ross opted to take accelerated retirement.

After 7 years with ABRS our administrative assistant, Ms Marlene Nuda has moved to Environment Australia in an acting capacity and is currently seeking a permanent position. At about the same time, another of our senior managers, Ms Liz Visher, who has managed the ABRS Participatory Program for 9 years, resigned to take up a new job as Assistant Director, Biological Sciences & Biotechnology with the Australian Research Council. Dr Tony Orchard agreed to take on the policy/coordinating role of Liz and Marlene, and Mr Philip Hodgson was temporarily recruited from Environment Australia as Acting Business Manager to manage the Participatory Program. The position of Graphic Designer, modified to include greater Web work, has been filled by Ms Virginnia Du Toit, who took up her new position on 15th August. Appointments to the positions of Database Manager and Information Officer are expected in coming weeks. Dr Tony Orchard has agreed to accept the newly created Scientific Editor position, and will be responsible for the Algae program and policy development. His former responsibility for vascular flora (particularly that associated with the *Flora of Australia*) now passes to Miss Annette Wilson.

The net result is a reduction of one staff position in ABRS, but with a 33% turnover in personnel and an infusion of considerable new skills. The challenge over coming months will be for the new team to quickly rise to the demands facing the 'New ABRS'.

#### Publications

A flurry of new publications have appeared in the last 3 months. Most were described in detail in the previous issue. *Flora of the South West: Bunbury, Augusta, Denmark* (in 2 volumes) was published on 1 July 2002, and will be launched in Perth on 27th September, along with our other joint publication with University of Western Australia Press: *Verticordia: Turner of Hearts.* 

Flora of Australia vol. 43, Poaceae 1, Introduction and Atlas was published on 6 September, and the companion work AusGrass, a LucID-based key and information resource for Australian grasses is expected to be available by late September.

Two additional titles in the Flora Supplementary Series have also been published: *Key to the Genera of Australian Mosses* by W.R.Buck, D.H.Vitt & W.M.Malcolm (Supplementary Series 14), and *Tasmanian Lichens: Identification, Distribution and Conservation Status I. Parmeliaceae* by G.Kantvilas, J.A.Elix & S.J.Jarman (Supplementary Series 15). Both are obtainable from ABRS (Publications), GPO Box 787, Canberra ACT 2611. A third book, *Mosses* of *Norfolk Island* by Heinar Streimann, is in press, and should be available by mid-September.

In the Species Plantarum Flora of the World series work is almost completed on the massive world monograph of Juncaceae, to be published in 3 parts (Species Plantarum Parts 6–8). These will be published by October, providing the first overview of this important wetland family for Australia since that of Bentham about 150 years ago. As part of the recent review of ABRS functions it has been decided that ABRS will withdraw from the *Species Plantarum* project. Tony Orchard and Annette Wilson will continue as editors of the series, in a private capacity, but other arrangements will be made for publication and distribution. More details will be available in the next Newsletter. For the present, orders can still be sent to ABRS (Publications), and they will be forwarded if necessary to the new publishers/distributors.

### **ABRS Participatory Program**

At its recent meeting in Canberra the ABRS Advisory Committee decided to align the ABRS grants program more overtly with general Commonwealth government biodiversity priority areas. in the next round applicants will be asked to apply in areas of taxonomy that contribute to concerns about soil conservation, salinity and

water quality, amongst others. At the same time, it is intended that research under this scheme will continue to contribute to the ABRS publications program, and areas of interest in publications will still be suggested in the call for applications. The following call for research applications will be published nationally on 28 September:

#### ABRS Participatory Program

ABRS is now calling for applications for research grants for the year 2003/2004. The research objectives of the ABRS participatory Program are to develop taxonomic understanding of the Australian biota in areas of national priority and to improve and increase the national taxonomic effort.

The ABRS Advisory Committee invites applications for grants in the year 2003/2004 for projects which meet several of the following criteria

- undertake the documentation of Australia's biological diversity
- undertake rigorous taxonomic treatment mainly at species level
- contribute to regional or continental generic or higher level taxonomic research
- contribute to taxonomic research in the following areas of national priority
  - o soils
    - o arid /semi-arid/rangeland zones
    - o coastal/marine systems
    - o freshwater systems
    - will lead to published outcomes either in peer reviewed journals, book chapters or as an ABRS publication. ABRS publications provide delivery of taxonomic information in a range of formats including web-based products, databases, CD products and books.

ABRS is particularly interested in advancing publications in the following areas:

BRYOPHYTES: Dicranaceae; Catalogue of Australian	Heliantheae; Rubiaceae (preparation of Flora of Australia texts)
Liverworts and Hornworts	
	ALGAE
LICHENS:	Regional Floras, especially of tropical
Teloschistaceae	areas
FUNGI:	FAUNA
Plant pathogenic fungi; Sequestrate	Checklisting: any groups not yet check-
fungi; Agaricales sensu lato	listed for the Australian Faunal Database
	(AFD). The table at
VASCULAR FLORA	www.ea.gov.au/biodiversity/abrs/abif/fauna/afd/fra
Stylidiaceae (excluding woody species	mes/search.html details taxa already
from SW WA); Campanulaceae -	databased, or in preparation for the AFD.
Campanuloideae; Asteraceae -	

# Marking the Robert Brown bicentenary

### Victoria's plants first revealed: Robert Brown in Port Phillip 1802

A half-day symposium co-hosted by the Royal Botanic Gardens Melbourne and The School of Botany, The University of Melbourne, was held in the KPMG Conference Room in central Melbourne on 18 April 2002 to commemorate the arrival of HMS *Investigator* in Port Phillip on 26 April 1802. The *Investigator* remained in Port Phillip until 3 May allowing Robert Brown, Peter Good and Ferdinand Bauer time to explore the heathlands of the southern Mornington Peninsula. Although not a particularly good time of the year for collecting, Brown made almost 90 collections during this brief visit, and on a subsequent visit in late January 1804.

#### **Program summary**

- Welcome Philip Moors
- Introduction Adrienne Clarke
- Robert Brown and the *Investigator*: a voyage to last a lifetime David Mabberley
- Brown in motion: from pollen to DNA – Frank Udovicic

- Vegetation mapping of the southern Mornington Peninsula – Winty Calder
- Melbourne's future landscape: challenges for biodiversity research and conservation – Mark Mc Donnell
- Brunonia Australis Helen Hewson
- Ferdinand Bauer: 'Nature revealed, art concealed' – David Mabberley, sponsored by the Embassy of the Republic of Austria

All who attended gained a much better appreciation of the contributions made by Brown and Bauer. Brown was clearly a man of remarkable perspicacity and the 'survival rate' of his taxa is far better than that of most of his contemporaries. It was interesting also to learn that *Brunonia* may not be monotypic after all. A very enjoyable symposium facilitated through the generous financial support of ASBS.

National Herbarium of Victoria

### Robert Brown Symposium in Canberra

Canberra seized the opportunity to join in the commemoration of Robert Brown and Ferdinand Bauer's visit to Australia 200 years ago. Whilst not geographically relevant it was more or less relevant time-wise. An afternoon symposium at the Discovery Centre, CSIRO, and an evening lecture at the National Library of Australia (NLA), both embracing the public, saw quite sizeable audiences participate.

#### Nature's Investigator – the diaries Ian Cresswell (ABRS)

ABRS have published the Robert Brown (and other) Diaries in a book entitled *Nature's Investigator*. Ian's presentation recommended it as a "ripping yarn and jolly good read". Must be good because it has not stayed on our library shelves long enough to have developed a space for itself. [It is available from ABRS for \$75.]

#### Mapping Terra Australis – Australia Maura O'Connor (NLA)

Matthew Flinders' charts and charting exposed, thereby setting the biological exploration in ts geographic context.

#### Robert Brown and the Naturalised Flora Richard Groves (CPBR)

Robert Brown noted 29 introduced plant species around Sydney and Parramatta between 1802 and 1804. This represents the first documentation of Australia's naturalised flora following European settlement of Australia's east coast and helps give a benchmark for the rate of introduction.

#### Dendrobium, Pterostylis and Caladenia Mark Clements (CPBR)

An exposé of issues involved in resolving the protologue material for lecto-typification of Brown names, with special reference to Australian Orchids. Given the distribution of duplicates of Brown's collections, following his death, due care needs to be taken when typifying Brown names.

#### Brunonia Australis Helen Hewson (CPBR)

An overview of the contribution Robert Brown made to the botany of Victoria. In a very short time Brown collected a hundred or so flowering plant specimens, 26 of which became type specimens, *Brunonia australis* being among them. However, over 600 Brown species occur in Victoria, representing almost 15% of the State's vascular plants.

#### To the Pantheon and Back Again: The career of Flinder's Naturalist, Robert Brown David Mabberley (NSW)

David presented a riveting exposé of Robert Brown, his life, his career and his particular legacy to the science of botany. The scientific career of Robert Brown (1773–1858) was launched by Sir Joseph Banks recruiting him as Flinders's naturalist. Brown's Australian experiences and connections with the Continental schools of scientific thought moulded his research, with the result that he was recognised as one of the great European intellectuals of his day. But by the time of his death, his star had faded. How and why all this came about was the subject of the lecture.

#### The Exquisite Eye of Ferdinand Bauer David Mabberley (NSW)

The following evening David gave a powerful lecture on Ferdinand Bauer for the Friends of the National Library at the Library. It was fascinating to have Bauer's life, career, and influence by numerous people, including the exacting Robert Brown, presented so eloquently by David. The audience included the Austrian Ambassador. The Austrian Embassy has been financing David to present the lecture on Ferdinand Bauer at each of the commemorations around Australia and it was obvious that the Ambassador was proud to have done so after hearing David's presentation.

> Helen Hewson Canberra

### Marking the bicentenary in South-east Queensland

The Queensland Herbarium, together with the Botanic Gardens, hosted an event to celebrate the Matthew Flinders Bicentenary from 13<sup>th</sup> July to 25<sup>th</sup> August. Tours of the Herbarium, which were conducted during the Botanic Gardens Open Weekend, were well attended. Most visitors expressed surprise on viewing actual specimens, which had been collected by botanist Robert Brown on the Queensland part of the Flinders voyage.

The Brisbane Botanic Gardens also ran tours in the gardens, highlighting the living collection of species collected on the voyage. The Herbarium foyer was open on weekends between 10 a.m. and 3 p.m. for the six weeks of the event. A set of 5

#### posters was presented on botanical aspects of the Queensland part of the voyage. These posters, along with some of Robert Brown's specimens are still available for viewing in the Queensland Herbarium foyer. In October, they will be travelling north to Townsville and Cairns for Flinders events in those cities.

On 5<sup>th</sup> August the highly regarded Professor David Mabberley visited the Queensland Herbarium and presented a talk on Ferdinand Bauer, the botanical artist on the voyage, in the Botanic Gardens auditorium.

> Ailsa Holland Queensland Herbarium

### Mabberley lectures in North Queensland: final details

David Mabberley will be talking at the following venues. Refer to the previous issue of the *Newsletter* for the full programme of celebrations.

#### Townsville

Saturday October 26 in the Pandora Gallery at the Museum of Tropical Queensland at 7.00 pm.

#### Cairns

Monday October 28 in the Lockhart Room of the Cairns Colonial Club at 7.00 pm.

#### Weipa

Saturday November 2 at the Hibberd Centre at 7.00 pm.

The title for all three talks is: *Flinders' naturalist* and natural history painter: the unequalled

partnership of Robert Brown and Ferdinand Bauer.

John Clarkson Mareeba

David Mabberley's talk in Gladstone was given in the Tondoon Botanic Gardens. Photo: Lyn Comben.



## **New Books**

*Verticordia*: The Turner of Hearts

Written by Elizabeth A. George, illustrations by Margaret Pieroni

Verticordia : The Turner of Hearts. By Elizabeth A. George, with watercolour paintings and illustrations by Margaret Pieroni. Published by University of Western Australia Press, Crawley, and Australian Biological Resources Study, Canberra.

See below for special offer for members.

#### The book launch

Steve Hopper launched the book at the Woman's Suffrage Pavilion, Kings Park and Botanic Garden on 27 September 2002. This is an amended version of his speech.

To an incorrigible natural history bibliophile like myself, this is indeed a wonderful volume – carefully researched, technically accurate, well written, beautifully illustrated and designed, and handsomely published.

I found the book easy to read and navigate through. The systematic arrangement of taxa greatly assists identification compared with an alphabetical treatment. The maps and superb illustrations together with the text make identification accessible to all interested in these special wildflowers.

The book encapsulates the story of the discovery and classification of the Western Australian flora as a whole.

It commences with the pioneering collections of Archibald Menzies and Robert Brown from the granite outcrops at Albany and Lucky Bay east of Esperance, then through the colonial collections of James Drummond and Ludwig Preiss, to the remarkable age of discovery we have seen over the past three decades, allminating last year in the description of *Verticordia mirabilis*.

It is interesting and important to note that 46 of the 101 species of *Verticordia* have been named in the last 10 years – close to half the genus! Such a significant increase eclipses that seen in recent revisions of many genera of tropical rainforest, and highlights that the south-west Australian region contains the Cinderella of temperate floras. The true riches, diversity and beauty of this priceless heritage are literally only now becoming widely known through books such as this.

On top of this tremendous surge of taxonomic description of new species, there is a parallel global revolution in understanding of the evolution and classification of all living forms through the application of molecular DNA analysis.

Just nine years ago, in 1993, the first major review of the phylogenetics of all seed plants using DNA sequence data was published. It involved many authors from laboratories around the world, an unprecedented level of collaboration compared to previous mostly soleauthored attempts to address what Charles Darwin called the "abominable mystery" of the evolution of flowering plants.

The findings of the molecular study were fascinating to some, shocking to others, many who remained incredulous or at least sceptical until subsequent research affirmed the repeatability and power of this approach.

I mention this only to signal that, within a few years, we are likely to have a much better understanding of where *Verticordia* sits in relation to allied genera in the Myrtaceae, as well as significant improvements of knowledge of relationships among species within *Verticordia*. Already, it is clear that many presently accepted genera in the Myrtaceae are poorly circumscribed. It may well be that the next edition of this fine book will deal with such issues, particularly concerning relationships between *Verticordia* and *Chamaelaucium*.

Such an unprecedented surge in knowledge of the genus *Verticordia* could not have happened without the extraordinary emergence and power of collaboration among people of diverse interests – botanists, artists, horticulturists, wildflower enthusiasts, farmers, government officers, conservation biologists, publishers.

How things have changed since the days of Charles Gardner, Western Australia's Government Botanist for four decades up to 1960. I am told that Gardner was of the view that the whole Western Australian flora was within the grasp of an individual botanist to know and document. However, he was to see his dream of producing a Flora of Western Australia slip away as the real complexity and magnitude of the task became evident.

Today, exemplified by the book on *Verticordia*, we see that one of the world's greatest temperate floras is in our care, a heritage far richer than the prodigious Charles Gardner ever imagined. Few of us today believe that we could know and document in a lifetime the real diversity of this wonderland of wildflowers.

Like many others, I have admired and enjoyed verticordias encountered in the field. I even had the privilege of being the first to collect a species new to science, but I struggled to understand the genus, and despaired when trying to key out species other than the very distinctive such as *Verticordia grandis*.

This book has changed all that.

Every successful venture requires leadership, coordination and teamwork. For this inspirational project, over more than 20 years, Elizabeth George has been the mainstay. Her aim, stated in the Preface, "was to learn about these fascinating wildflowers to help others gain a better understanding of them, and the need to preserve them in their natural habitats." Her authorship and clarity of purpose permeate the book.

There are rich pickings for those who love the botanical anecdote, horticulture stories, good science and well-written text.

Of particular enjoyment was that of James Drummond's enthusiasm for *Verticordia grandis*, "so beautiful that the waggoner who drove him used to stop to turn his bullocks out of the road to avoid trampling down this plant".

There was Ferdinand von Mueller's experience "so entranced by the sight of a plant of *V. oculata* on the northern sandplains that he was reluctant to 'tear himself away from such a beautiful floral display" - a species he subsequently described as 'the princess of the Australian flora'.

There was Basil and Mary Smith's search in a light airplane for suitable habitat for the long lost *Verticordia hughanii* in the Goomalling area, a venture rewarded by rediscovering the species in December 1983.

And there is the most recent and wonderful tale of the discovery of *V. mirabilis* near Warburton in the Gibson Desert by Ian Lyon and Jan Rowley in September 1999. This species, discovered so far removed from previous known locations of the genus, highlights how much we still have to learn about our desert floras.

It is also a remarkable parallel to the recent discovery and naming of *Clivia mirabilis* in South Africa, found 400 km north of Cape Town in a lonely semi-arid canyon 800 km further west than all other members of this famous horticultural genus.

Margaret Pieroni's artwork is of equal quality -a fine achievement that deserves rich commendation. These are challenging plants to paint and I believe all will be as impressed with Margaret's work.

Underpinning and supporting the text have been taxonomic studies primarily by Alex George. Alex's contributions in the field of monographic work, as well as his distinguished career as Executive Editor for the *Flora of Australia*, are well knownin the most rigorously refereed of all biological sciences. Everyone who uses a key or refers to a book such as this to identify a plant is testing the taxonomist's concepts of species. It's a demanding job to deal with such challenges, not to mention the need for years of careful historical library, herbarium, field and glasshouse work.

Such work of course relies on the institutional support and collections of herbaria. The *Verticordia* project would not have succeeded without such support from the Western Australian Herbarium and other herbaria around the world.

The contributions of those who know and grow *Verticordia* is also very evident in the book. There has been outstanding work in this field, with the contribution of Norm and Pat Moyle deserving special mention

The publishers, UWA Press and the Australian Biological Resources Study, have clearly played an important role in delivering such a handsome book.

I'm sure that this book will achieve Elizabeth's objectives. It will inspire and encourage people to get to know these and other plants well. New knowledge will develop as a consequence. I congratulate all involved in this admirable production..

Stephen Hopper Kings Park & Botanic Gardens

### Under A Regent Moon

#### Tim Willing & Kevin Kenneally Department of Conservation & Land Management

66 pages include colour photographs, black and white photographs and maps. Price: \$ 25.95, obtainable from Department of Conservation and Land Management, Locked Bag 29, Bentley Delivery Centre, Western Australia 6983, Phone: (08) 9334 0481 or (08) 9334 0437

This is an account of the attempt by Joseph Bradshaw, probably better known for his association with the "Bradshaw paintings", and his cousin Aeneas Gunn (of *We of the Never Never* fame), to farm around the Prince Regent River in the Kimberleys during 1891 and 1892.

Bradshaw also collected plants for Ferdinand Mueller. One remarkable example the Kimberley endemic *Lindernia macrosiphonia* (F.Muell) W.R.Barker which Mueller originally described as *Rhamphicarpa macrosiphonia* undoubtedly because of its unusual long-tubed flower. Mueller's noted that it would be better treated as a distinct genus, and should then be known as *Bradshawia* in honour of the collector. This is of course not validly published in a nomenclatural sense.

The account apparently includes the 24 newspaper articles that Gunn wrote on his return to Melbourne.

Details have been difficult to obtain, and the following information is obtained from various websites other than the publisher's. The book is presumably available through the Department of Conservation and Land Management even though no detail seems to be available through their bookshop on the web.

Robyn Barker

### The first of the ABRS grasses publications

The first volume concerned with the grasses of Australia in the *Flora of Australia* series, *Volume 43: Poaceae 1: Introduction and Atlas*, has been launched.

It is available as a set with AUSGRASS, an interactive identification tool for Australian grasses.

This is a very welcome event, not the least because of the long time these products have taken to become available.

See the included brochure for further details or contact CSIRO Publishing. Their website is <u>www.publish.csiro.au</u>

Price for the set is:

- Hardback + CD \$180
- Soft cover + CD \$165

Price individually is:

- AUSGRASS CD \$99
   Flora of Australia Volume 43: Poaceae 1: Introduction and Atlas – hard copy - \$100
- Flora of Australia Volume 43: Poaceae 1: Introduction and Atlas – soft copy - \$85

# **Special Offers**

### A special issue of *Australian Systematic Botany* "*Zieria* (Rutaceae): a Systematic and Evolutionary Study"

Authored by Jim Armstrong, *Australian Systematic Botany* Vol. 15 no.3 provides the most comprehensive revision of the important genus *Zieria* (Rutaceae).

The monograph contains 187 pages and 138 illustrations (line drawings and halftones) and 5 Appendices.

This volume will be a valuable reference to all plant taxonomists interested in this group.

The taxonomy of *Zieria* Sm. is reassessed and a revised classification is presented. The history of taxonomic discrimination in *Zieria* is summarised and its cytology, phytochemistry and biology reviewed; the generic relationships and phylogeny are assessed. The monophyly of the genus is discussed and its recognised taxa assigned to six taxon groups. Of the 73 previously published names, 20 names are re-instated and four new combinations established; 20 new species and eight new subspecies are described, bringing the total for the genus to 51 taxa (i.e. 42 species and nine infraspecific taxa). Lectotypes and neotypes are chosen where necessary, for a number of earlier names. Keys to all taxa, distribution maps, illustrations of most taxa and electron micrographs of a range of morphological features are provided.

An order form is included Please return the completed form to: CSIRO PUBLISHING

150 Oxford St, PO Box 1139 Collingwood, VIC 3066, Australia

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Email: publishing.sales@csiro.au

ORDER FORM Please send me copy(ies) of <i>ASB</i> (Vol. 15, no. 3) <i>Zieria</i> (Rutaceae): a systematic and evolutionary study
<ul> <li>@ special price of \$A65 to all ASBS members</li> <li>Offer expires 30 November 2002.</li> <li>All orders must quote \$B702. Price include postage.</li> </ul>
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Web: - www.publish.csiro.au/journals/asb

Australian Systematic Botany Society Newsletter 112 (September 2002)

### Special offers from UWA Press

University of Western Australia Press is offering a 20% discount to members of ASBS for two of their new books. Both have been long awaited by members and both have been launched in Perth on 27<sup>th</sup> September by our new president.

#### The offer expires on 31<sup>st</sup> October 2002.

#### Verticordia: The Turner of Hearts

Written by Elizabeth A. George, illustrations by Margaret Pieroni

Special price: AUD\$75.95 (rrp \$94.95)

#### Flora of the South West (2 volumes) (Bunbury-Augusta-Denmark)

Written by Judy Wheeler, Neville Marchant and Margaret Lewington

Special price: AUD \$132 (rrp. \$165)

#### Contact:

University of Western Australia Press 35 Stirling Highway Crawley WA 6009

Tel: +61 8 9380 3670 Fax: +61 8 9380 1027 Email: uwap@cyllene.uwa.edu.au

# **Coming meetings**

### MONOCOTS III

Claremont, California 30 March-5 April 2003

Third International Conference on the Comparative Biology of the Monocotyledons and Fourth International Symposium on Grass Systematics and Evolution - 30 March-5 April 2003, Rancho Santa Ana Botanic Garden, Claremont, California.

Web: - www.monocots3.org/

### 4th Young Systematist's Forum

London

5th December 2002

From 10.30 am, Thursday, 5th December 2002 The Flett Theatre, The Natural History Museum London SW7 5BD, UK

CALL FOR ABSTRACTS

The Young Systematist's Forum represents an exciting, annual setting for postgraduate students and young postdoctoral researchers to present their data, often for the first time, to a scientific audience interested in taxo nomy, systematics and phylogenetic inference. The meeting provides an important opportunity for budding systematists to discuss their research in front of their peers, and

hopefully supervisors too, within a supportive environment. There is space for up to 15 speakers with additional places available for those wishing to present a poster. A prize will be awarded for the most promising oral and poster presentations as judged by a small panel on the day.

Registration is FREE. For further information see <u>www.systass.org/</u>.

Please send applications to either r.seymour@nhm.ac.uk or r.stothard@nhm.ac.uk

### Introgression from Genetically Modified Plants into wild relatives and its consequences

#### Amsterdam, 21-24 January 2003

The second announcement has been made for this conference organised by the AIGM program [Assessement of the Impact of Genetically Modified Plants] of the European Science Foundation.

Safeguarding the genetic integrity of wild taxa is an important element of biodiversity maintenance policy, and this topic is not only relevant for agricultural colleagues, but explicitly also for taxonomists and systematists.

The Conference website is now updated and gives full information about the provisional program of invited and confirmed speakers, as well as about the time table and the registration details.

Web: -www.science.uva.nl/research/ibed/Introgression/

### Frontiers of Biogeography

#### Mesquite, Nevada, January 4-8, 2003

The International Biogeography Society was founded as a non-profit organization in 2000 with the following mission: a.. Foster communication and collaboration between biogeographers in disparate academic fields scientists who would otherwise have little opportunity for substantive interaction and collaboration. b.. Increase both the awareness and interests of the scientific community and the lay public in the contributions of biogeographers. c.. Promote the training and education of biogeographers so that they may develop sound strategies for studying and conserving the world's biota.

The inaugural meeting of IBS, Frontiers of Biogeography, will be held January 4-8, 2003 at the Oasis Resort in Mesquite, Nevada (just north of Las Vegas). With this meeting, we will launch the IBS as an international and interdisciplinary society contributing to the advancement of all studies of the geography of nature.

We want to create a meeting environment that maximizes opportunities for biogeographers from a wide range of disciplines to interact with one another. We therefore chose to design the meetings technical contributions around two formats. a.. Biogeographers from around the world have been invited to deliver oral presentations, organized into five symposia (see a list of symposia and presenters at the website). b.. We also invite meeting participants to submit titles and abstracts for contributed poster presentations (see the Call for Posters at the website).

The web site <u>www.biogeography.org</u> has complete details.

### Fifth Australian Network for Plant Conservation National Conference

#### Geelong, Victoria, 25th February - 1st March 2003

The Fifth Australian Network for Plant Conservation National Conference will be held in Geelong, Victoria, from Tuesday 25th February to Saturday 1st March 2003. The theme of the conference, "The Road to Recovery" will highlight the progress of plant conservation measures in the past decade with formal presentations, fieldtrips and conservation techniques workshops. Further information will be available in September and December issues of *Danthonia*.

For specific queries prior to circulation of the registration brochure, contact Jeannete Mill at Jeanette.Mill@ea.gov.au.

### Plant Systematics in Australia a conference celebrating the 150th anniversary of the National Herbarium of Victoria Melbourne, Victoria, 29<sup>th</sup> September – 3<sup>rd</sup> October 2003

A brochure is included in this newsletter or go to the Australia Systematic Botany Society website for further details. This meeting is sponsored by ASBS and will include the Annual General Meeting of the society.

# INCITES

From Australian Science and Technology Online www.asto.com.au

#### Fresh evidence on R&D project failures

The current Parliamentary inquiry into business R&D has been given fresh evidence on the causes of R&D failure in Australia. New research findings indicate that an overwhelming number of R&D projects fail because of poor investment at the 'marketability' stage, the phase leading directly to the launch of a new product on to the market.(News)

Web: -: - www.asto.com.au/News02/lead.htm

### The risks and rewards in Australia's access to critical research facilities

Federal and State Governments should radically alter the way they collect and present science and innovation budget figures to ensure better longterm planning for the creation of critical research facilities, and to facilitate international negotiations for access to CRFs. Current funding arrangements are putting Australia's CRFs at risk. (Summary)

Web: - www.asto.com.au/News02/crf risks.htm

#### Australia's pickup of broadband lagging

Australia has been quick to adopt earlier generations of communications technology such as faxes, mobile phones and the Internet but was lagging in its adoption of broadband, according to the Report on Broadband Advisory Group Consultative Forums held ealier this year. (Summary)

Web: - www.asto.com.au/News02/broadbandlag.htm

#### IT prospects on the up

The OECD Information Technology Outlook 2002 reports that in spite of the recent downturn

the ICT industry is now showing strong signs of growth. In most OECD countries the ICT sector accounts for a growing share of production, value added, employment and trade, owing to sustained price declines and continuing technological developments and venture capital investment in ICT firms. (Summary)

Web: - www.asto.com.au/News02/it ontheup.htm

# Technology forecast maps evolution in software development

The latest PriceWaterhouseCoopers technology forecast for 2002 - 2004 has mapped the likely changes in software development and suggests that the immediate future will see a consolidation in the shift from enterprise-based solutions to component software. (Summary)

Web: - www.asto.com.au/News02/techforcast.htm

#### Variability in venture capitalist practices

New research into the Australian venture capital industry shows that it may be dangerous to draw general conclusions about VC practices in one country and apply them in another. According to an article published in the Australian Venture Capital Journal, the research indicates that there are clear country preferences and decisionmaking criteria adopted by VCs which are unique to each country. (Summary)

Web: - www.asto.com.au/News02/vcs\_differ.htm

#### Of being seen to do the right thing

Consensus conferences provide an opportunity for public participation in issues of social concern, but recent experience in Australia in relation to gene food technology indicates that a number of hurdles need to be addressed if the consensus model is to succeed. (Abstract)

Web: - www.asto.com.au/News02/consensus.htm

#### Corporate courage

Although innovation is an essential component of corporate survival, many companies find innovation breakthrough difficult to sustain. The author suggests that part of the problem rests with chief executive officers and boards of directors who lack the courage for long-term change management.(Absract)

Web: - www.asto.com.au/News02/courage.htm

### New IP research and information resource

The Intellectual Property Research Institute of Australia (IPRIA) has begun operating at the University of Melbourne under the direction of Australian IP expert, Andrew Christie. IPRIA was set up with IP Australia seed-funding as part of Backing Australia's Ability. It is undertaking research aimed at improving policy advice to Australian governments, to improve the use of IP by Australian organisations and to improve debate about IP issues. (Newsbrief)

Web: - www.asto.com.au/News02/ip-resource.htm

#### Recharging Asian entrepreneurship

Asian economies are performing better, but still face slowing rates of economic growth, while the value of entrepreneurship is winning more consideration, according to the Clustering Alliance news. A recent workshop in Hong Kong noted that many Asian governments embraced a 'developmentalist' model relying on government intervention and heavy emphasis on manufacturing and export-oriented industries. (Newsbrief)

Web: - www.asto.com.au/News02/asian entrep.htm

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# Federation of Australian Scientific & Technological Societies (FASTS)

The latest letter to Society presidents from the organisation. See www.fasts.org

**The Prime Minister and the "Second Leg"** The \$2.9 billion dollar Innovation Statement was launched in January 2001. At the time FASTS welcomed the funding boost as a promising first step.

But it needs far more than \$2.9 billion over 5 years to allow Australia to catch up to the average OECD expenditure in science and research.

Recently I wrote to the Prime Minister asking him what his Government was planning to do about the next step, the "second leg" of the Innovation Statement. The letter read in part:

We are concerned that some elements in your Government may regard science and technology as a job that was completed with the announcement of "Backing Australia's Ability". Our concern was heightened when you outlined the priorities for your Government in a speech to the Liberal Party Federal Council on 13 April, and science and technology was not among them.

The Prime Minis ter has responded, saying that his Government is still monitoring the outcomes of the initiatives announced in 2001. He goes on to say:

It would, however, be premature for PMSEIC to consider a 'second stage' package of spending measures before the current initiatives have been implemented fully and evaluated.

FASTS will continue to press for a proper national investment in science and research. You can read the full text of both letters on our web site: www.fasts.org

#### Prime Minister's Science Council

The first full PMSEIC this year was held on May 31, beginning with a dinner hosted by the Prime Minister. Although proceedings of PMSEIC and its Standing Committee are confidential, the text of three key presentations will be shortly available on the web.

The first dealt with sustainable production, pointing to the increasing need for a triple bottom line reporting within the corporate sector, and requirements by major importers of foods to have guarantees from their suppliers that sustainable production methods have been used. The Government has been asked to explore how such matters can most appropriately be handled.

The second was on biodiversity and questioned whether current government policies were coordinated in this regard; and the third dealt with aquaculture and the export opportunities that this offered.

Whilst all three presentations looked at economic considerations as well as scientific ones, there was the overriding theme that good science would be necessary for these areas to be properly addressed.

The Council was also briefed on progress with *Backing Australia's Ability* and on the Higher Education Review and the National Research Priorities processes.

# National Research Priorities Consultative Council

The Government is determined to maximise the return to Australia of our research efforts, by concentrating research in areas where we have a competitive advantage and putting new efforts into areas of weakness where we should have a stronger presence.

FASTS supports this view.

The practicalities are interesting. I am a member of an eight-person consultative panel, along with FASTS' Board Member Melissa Little (both of us serving in a personal capacity). The Panel is chaired by Chief Scientist Robin Batterham.

We have been split into two groups, with each conducting consultative meetings throughout Australia (dates and times are on the FASTS' web site).

There are two stages of the process, and two important dates for submissions: a. determining the framework for setting national

a. determining the framework for setting hattonal research priorities (submissions close 28 June) b. views on what these priorities are (submissions close 9 August)

The Government intends to have priorities in place for the 2003 Federal Budget.

There appears to be common acceptance that it is appropriate for the Government to set national research priorities and that these should be both thematic and inspirational and should not direct funding to the exclusion of other promising areas of good science.

In another part of the process, Science Minister Peter McGauran consulted FASTS directly. He hosted a dinner at Parliament House for 8 members of the FASTS' Board and Executive, to discuss informally these two matters

#### **Higher Education Review**

I am a member of the Higher Education Review Reference Group. The first meeting in May was primarily to discuss the process to be adopted, and to offer initial comment on *Higher Education at the Crossroads*.

DEST officers are now preparing five issues papers which will form the basis for national debate on higher education issues.

In the light of these it will be important for FASTS and its Member Societies to make submissions in which the importance of science is highlighted, both in terms of the need to produce scientists and mathematicians and for universities to participate fully in the national research effort.

I would appreciate Member Societies forwarding a copy of any submissions they may make to the FASTS office, so that I can read them personally.

Submissions close on 28 June; and further information about making them is at: www.dest.gov.au/crossroads/how\_sub.htm

#### Workshops for member societies

I am pleased to announce that our proposal to run capacity-building workshops for our Member Societies has been successful.

The first stage will be to establish the content of the workshops. What do you as office-bearers of our Member organisations need to make your jobs easier in these challenging times? How would you like the workshops to be organised?

We have a good broad indication of what our Members think from earlier surveys, but now we need to refine these ideas.

Over the next few days FASTS will be contacting all Presidents of Member Societies, first by email and then by phone, to work out how each Society might take advantage of these workshops.

We expect to offer the first workshops by about September.

#### "Science Meets Parliament" Day

This event will be on Tuesday-Wednesday 12-13 November in Canberra.

It has several new features this year, including a science-industry-Parliamentarians dinner on Wednesday night, at prestigious Members' Dining Room at Old parliament House.

SmP provides an interesting opportunity to run regular business meetings of your Society, or to hold side meetings like last year's discussions on biotechnology and Nanotechnology. Please discuss these with the FASTS' office.

Full details of the program are on our web site.

Here are some comments from last year's participants:

Very well organised. The impact is becoming obvious.

The pollies are taking this seriously. I have no doubt that past SmPs have helped put science on the political agenda.

A fantastic experience. I'm glad I came and congratulations to FASTS for making it possible! Both MPs were cordial. The level of interest in science was high and unexpected to me

And one from an obvious masochist: *Great, let's* do it again. I would like more interaction with MPs - a boat trip?

#### New edition of FASTS Policy Document

The fourth edition of the FASTS' Policy Document will be launched later this year.

One of the most comprehensive statements on science policy, the document will cover all aspects of science from education, to research training, funding for science and research, and innovation.

Ken Baldwin is coordinating the production of the document as Chair of the Policy Committee. A draft will be considered by the FASTS' Board next month, and all Member Societies will have the opportunity to comment on the draft before it goes to print.

Launch of the revised policy is scheduled for mid-September.

### State Governments' growing interest in science

It's wonderful to see State Governments competing over the new synchrotron, instead of those disputes about who will host golf tournaments or the Australian Grand Prix. An illustration is the recently-reported size of the State delegations attending the world's biggest Biotechnology Conference in the US - 140 delegates from Victoria and 90 from Queensland, with both delegations headed by the premier.

SA Premier Mike Rann will also be there, along with delegations from all other States and the Federal Government.

NSW will not be sending the Premier, and not even the Science Minister - because it stands alone among all States in not having one.

This mirrors the low profile of science in the Premier State. The expansive budget NSW announced this month contained many spending initiatives, but little to stimulate the research an innovation community.

One hopes State efforts will also contribute to a national vision and priority setting.

#### **FASTS** web site

Our web site should be a central source of information on science policy. As well as carrying the latest information on events such as "Science meets Parliament" Day, the site also links readers to information on current issues like the research priority-setting exercise.

All our media releases are there, as well as speeches and feedback from our events at the National Press Club.

We are putting more resources into the site (at: www.fasts.org) and will soon be upgrading to a new design. Suggestions and comments welcome.

> Chris Fell President 14 June 2002

Email: fasts@anu.edu.au (Toss Gascoigne) Web: - <u>www.FASTS.org</u>

# Test your identification skills

This specimen came across the desk of an AQIS officer. He sent it to a few members in various State herbaria. No measurements were given. Can you work out what it is? Answer next issue.

Top: view from above. Bottom: view from below.





### History of Officers of ASBS Inc.

The following data are extracted from records compiled by John Clarkson and Robyn Barker.

#### Secretary

Even though the financial year of the Society is a calendar year, elections of Officers of the Society revolve around Annual General Meetings and so a following year is shown. Because prior to Incorporation AGMs could be held 18 months apart, there may be occasionally an extra year in a term. Since incorporation in 1992 AGMs must be held in each financial (calendar) year. Terms of office can be as short as a few months, as happened in 1999/2000 between AGMs in December 1999 and June 2000.

An officer's number of consecutive terms in office is shown in brackets. Before incorporation Presidents and Vice-Presidents could only hold office for two consecutive years; now it is three.

As a position filled by Council the Public Officer is shown by calendar year only.

#### President

1973/75 - 75/76	T. Whiffin (2)
1976/77 - 77/79	R. Carolin (2)
1979/80 - 80/81	J. Jessop (2)
1981/83	T. Clifford (1)
1983/85 - 85/86	B.Barlow (2)
1986/88 - 88/89 1989/90 - 90/92 1002/03 - 04/05	B. Briggs (2) J. West (2)
1992/93 - 94/95	M. Crisp (3)
1995/96	G.Guymer (1)
1996/97 - 98/99	T. Entwisle (3)
1999/00 2001/02	B. Conn (3)
2002/03	S. Hopper (1)

#### Vice/President

1973/75 1975– 76 1976/77	D. Carr (1) R. Henderson (1) T. Whiffin (1)
1977/79	R. Henderson (1)
1979/80 - 80/81	R. Carolin (2)
1981/83	B.Barlow (1)
1983/85 - 85/86	B. Briggs (2)
1986/88 - 88/89	J. West (2)
1989/90	M. Crisp (1)
1990/92 - 92/93	G. Guymer (2)
1993/94	J. Chappill (1)
1994/95	G.Guymer (1)
1995/96	T. Entwisle (1)
1996/97 - 97/98	C.Puttock (2)
1998/99	C.Puttock/B. Conn (1)
1999/00 2001/02	W. Barker (3)
2002/03	J. Clarkson (1)

#### 1973/75 1975–76 - 77/79 1979/80 - 83/85 1985/86 - 86/88 1988/89 - 92/93 1993/94 - 95/96 1996/97 2000/01 2001/02 2002/03

D. McGillivray (1) K. Wilson (3) J. West (4) L. Haegi (2) B. Conn (4) C.Puttock (3) R. Barker (5) B. Lepschi (2)

#### Treasurer

1973/75
1975-76 - 79/80
1980/81 - 81/83
1983/85 - 85/86
1986/88 - 90/92
1992/93
1993/94 - 95/96
1996/97 - 98/99
1999/00 2000/01
2001/02 2002/03

A. Kanis (1) M. Lazarides (4) B. Conn (2) P. Short (2) D. Foreman (4) D. Bedford (1) Peter Wilson (3) J. Clarkson (3) E. Brown (2) A. Whalen (2)

#### Councillors

$\begin{array}{c} 1973/75 \\ 1973/75 - 77/79 \\ 1975/76 - 76/77 \\ 1977/79 \\ 1979/80 \\ 1979/80 \\ 80/81 \\ 1980/81 \\ 1981/83 - 83/85 \\ 1981/83 - 86/88 \\ 1985/86 - 88/89 \\ 1988/89 - 89/90 \\ 1989/90 - 90/92 \\ 1990/92 \\ 1990/92 \\ 1992/93 \\ 1992/93 \\ 1992/93 \\ 1992/93 \\ 1992/93 \\ 1992/93 \\ 1992/93 \\ 1995/96 \\ 1996/97 - 98/99 \\ 1999/00 - 2002/03 \\ 1999/00 - 2002/03 \\ 1999/00 - 2000/01 \\ \end{array}$	D. Boyland (1) A. George (4) J. Armstrong (2) J. Jessop (1) K. Wilson (1) A. Mitchell (2) R. Hnatiuk (1) L. Haegi (2) R. Henderson (4) M. Crisp (3) G. Guymer (2) J. Powell (2) J. Chappill (1) J.Bruhl (1) T. Entwisle (3) J. Clarkson (3) R.Barker (1) P.Weston (3) T. Macfarlane (3) R.Makinson (4) K. Lemson (2)
1999/00 - 2000/01 2001/02 - 2002/03	K. Lemson (2) A. Rozefelds (2)

#### **Public Officer (since incorporation)**

(A Council	appointment)
1992 - 93	J.Bruhl/A.Lyne
1992 - 2001	A.Lyne
2001 - 03	Annette Wilson

# ASBS Publications

#### History of Systematic Botany in Australia

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

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

#### Systematic Status of Large Flowering Plant Genera

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

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

#### **Ecology of the Southern Conifers**

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.

#### Australian Systematic Botany Society Newsletter

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

#### Send orders and remittances (payable to "ASBS Inc.") to:

Katy Mallett ASBS Sales ABRS GPO Box 787 Canberra, ACT 2601, Australia

#### Evolution of the Flora and Fauna of Arid Australia

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

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

Special arrangement. To obtain this discounted price, post a photocopy of this page with remittance to: Peacock Publications, 38 Sydenham Road, Norwood, SA 5069, Australia.

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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 and forwarding it, with the appropriate subscription, to the Treasurer. Subscriptions become due on January 1 each year.

The ASBS annual membership subscription is \$40(Aust.); full-time students \$20. Please make cheques out to Australian Systematic Botany Society Inc., and remit to the Treasurer. All changes of address should be sent directly to the Treasurer as well.

#### The Newsletter

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

Contributions should be sent to the Editors at the address given below. They should *preferably* be submitted as: (1) an MS-DOS file in the form of a text file (*txt* extension), (2) an MS-Word 97 or earlier version *doc* file, (3) a Rich-text-format or *rtf* file. Send on an MS-DOS disk or as an email message or attachment. *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 work-load involved. Contact the Editors on *images*; their inclusion may depend on space being available.

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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