

A.S.G.A.P. Forn Study Group Newslotter Number 111

ISSN 0811-5311

DATE: November 2006

LEADER: Peter Bostock, PO Box 402, KENMORE, Qld 4069. Tel. a/h 07 32026983, mobile

0421 113 955; email: pbostock@ozemail.com.au

TREASURER: Dan Johnston, 14 Bank Rd, GRACEVILLE, Old 4075. NEWSLETTER EDITORS: Peter & Pat Bostock, contact as above. SPORE BANK: Barry White, 34 Noble Way, SUNBURY, Vic. 3429

From the Leader...

We were greatly saddened to learn of the death of Calder Chaffey, who passed away on 2nd of November. He was a good friend to many of us and he will be greatly missed. Calder's enthusiasm for the projects he undertook, including his books "Australian Ferns – growing them successfully" and the two-volume set "A field guide to Australian Ferns", was inspiring. These books, in particular, are testament to his industry and enquiring mind. He also generously gave royalties from "Australian Ferns" to the Fern Study Group, and I think it is everyone's wish that this money be used for the betterment of Australian ferns. Merle and Geoff Goadby represented the Fern Study Group at his funeral, which was held near Lismore on the 9th of November. Peter Bostock

PROGRAM FOR THE SYDNEY REGION

Peter Hind

1

Sunday 26th November is the CHRISTMAS PARTY and GARDEN VISIT again combined with the GREVILLEA STUDY GROUP. Meet at Margaret and Peter Olde's at 140 Russell Lane, Oakdale at 11 am. Ring Margaret on 02 4659 6598 to discuss what to bring, or if lost on the way there.

If coming from the north, drive along M5 Motorway past Campbelltown exits – take Narellan Road (Mt Annan) turnoff, then stay in right hand lane to Narellan not Bulli. Continue along Narellan Road, past Mt Annan, (in left lane eventually) then veer left onto the Camden bypass just before Narellan. Not far past Elderslie turnoff is a set of lights to Camden – take the NEXT turn right to Burragorang Dam. Continue along Burragorang Road past Mt Hunter, Glenmore and The Oaks. When you see a sign on the right to Belimbia Park, IMMEDIATELY take that left into Binalong Road. Continue to the end of Binalong Road and turn right into Russell Lane. We are on the left just past Foxes Hollow – 140 – "Silky Oaks".

THERE WILL BE NO MEETINGS IN DECEMBER 2006 and JANUARY 2007

Saturday 17th February 2007. Meet 11 am at the home of Ron and Paula Wilkins, 188b Beecroft Road, Cheltenham. Beecroft Road is extremely busy—Ron suggests parking in Cheltenham Road and walking in. Ron will be giving us more on fern spores. Phone 02 98761948

Saturday 17th March 2007. Meet after 10 am at the Wollongong Botanic Gardens. The gardens open at 10 am on weekends. If travelling from North or South, take the F6 Freeway and take the Keiraville exit, then simply follow the signs to the Botanic Garden. Perhaps try for the Administration Centre Car Park off Murphys avenue.

Saturday 21st April 2007. To be advised.

Saturday 19th May 2007. Meet about 10 am at the home of Horst and Ellen Mey, 24 Elebana Street, Colyton. Phone 02 96237228. We then plan to car pool (after a cuppa and looking at the garden and perhaps lunch) as needed to drive to the Glenbrook Reserve, on the Great Western Highway on the eastern side of Glenbrook.

Sunday 1st December. Meet 9:30 am at Graham Nosworthy's home, Unit 72, The Terraces, 34 Tewantin Way, Forest Lake. This is the Christmas meeting so bring a fern or two for the fern swap, and make sure you bring chairs. Also bring along a batch of ideas for meeting topics and outings in 2007! Car-parking at Graham's place is minimal (3 cars in his driveway, 1 or 2 in a parking area just beyond his house, the remainder in the public car park just along from his shared access road). Travel south along Forest Lake Boulevard for approx. 2km from the main Entrance, then turn right into Tewantin Way (it is not signposted - should be next right after Oakview Way). Contact Peter Bostock if you need more information.

No meeting in January 2007.

Sunday 4th February 2007. Meet at Peter and Pat Bostock's residence, 59 Limosa St, Bellbowrie 4070. Topic for discussion: Lycopodiaceae, particularly the tassel ferns of the genus *Huperzia*.

Sunday 4th March 2007. Excursion to Mt Mee State Forest and Forest Reserve—this time we plan to cover the full 13km of the Somerset Trail circuit. Meet near the old sawmill at the Gantry Picnic area at 9:30 am.

Sunday 1st **April 2007.** Meet at Claire Shackel's home, 19 Arafura St, Upper Mt Gravatt, at 9:30 am. We will discuss the progress (or lack thereof) of the sporelings potted on at the workshop in March 2006.

May 2007 long-weekend excursion. To be decided. Suggestions range from somewhere in northern NSW to Cania Gorge or Kroombit Tops.

SOUTH-EAST QUEENSLAND CHAPTER REPORTS

Fern recorded from Ravensbourne National Park, 3rd September 2006

Claire Shackel

Adiantum atroviride Adiantum formosum

Adiantum hispidulum var. hispidulum Adiantum hispidulum var. whitei

Arachniodes aristata Asplenium australasicum Asplenium polyodon

Blechnum cartilagineum Cheilanthes distans

Cheilanthes sieberi Christella dentata Cyathea australis

Cyathea cooperi

Davallia pyxidata Dennstaedtia davallioides

Doodia aspera (including a patch of bipinnatifid

plants - see photo below)

Doodia australis Doodia caudata Drynaria rigidula

Hypolepis glandulifera? Lastreopsis decomposita Lastreopsis microsora Microsorum scandens Platycerium bifurcatum Platycerium superbum Pteridium esculentum

Pteris tremula
Pteris umbrosa
Pyrrosia confluens
Pyrrosia rupestris

The Falls Lookout track

Adiantum formosum Adiantum hispidulum Asplenium attenuatum Asplenium australasicum Blechnum cartilagineum Calochlaena dubia Christella dentata Cyathea cooperi Davallia pyxidata Dictymia brownii Doodia aspera Drynaria rigidula Hypolepis glandulifera Lastreopsis decomposita Lastreopsis margins Lastreopsis munita Pellaea nana Pellaea paradoxa Platycerium bifurcatum

Platycerium superbum

Psilotum nudum Pteris tremula Pyrrosia confluens Pyrrosia rupestris

Somerset Trail

Arachniodes aristata
Asplenium australasicum
Blechnum cartilagineum
Calochlaena dubia
Cyathea australis
Doodia aspera
Hypolepis muelleri
Lastreopsis decomposita
Lastreopsis margins
Nephrolepis cordifolia
Platycerium bifurcatum
Platycerium superbum
Pteridium esculentum
Pyrrosia confluens
Pyrrosia rupestris

Kosciusko Polystichum Ron Wilkins

In mid-March [2005] I was walking the track between Charlotte Pass and Mount Kosciusko when I noticed small fern fronds peeping out from under a few large boulders. The last time I was there it was a November and I did not notice any ferns, though the reason for that may have been that there was plenty of snow on the ground.

Costin et al. (1979) record five ferns from the alpine environment (Grammitis armstrongii, Asplenium flabellifolium, Blechnum penna-marina, Polystichum proliferum and Cystopteris fragilis) as well as two fern allies (Lycopodium fastigiatum, Huperzia selago). My 'peeping' ferns were clearly Polystichum sp. Fertile fronds were rare but I managed to find a couple. The sori were about 1 mm diameter, indusiate, 'plump' and reminiscent of the sori of Rumohra. The sori were restricted to the terminal seven pinna pairs. After dihescence the sporangia cases still attached form a furry mat that covers much of the undersides of the fertile pinna. After much searching I found a frond with a couple of sub-terminal proliferous buds, both on the same frond. The scales were very pale, even paler than those of P. australiense, and quite unlike the dark shiny scales on the P. proliferum which is common at much lower altitudes along the Alpine Way.

It would be interesting to piece together the life cycle of the Kosciusko *Polystichum*. Presumably it is dormant in winter beneath a thick snow cover for several months. When I saw it in early autumn the new fronds were probably at their luxuriant best. Do the proliferous buds survive winter or does reproduction occur through spore? What physiological feature enables this fern to survive sub-zero temperatures, especially because *Polystichum*, alone amongst the alpine ferns has fleshy fronds that one would imagine would be easily frost damaged. Perhaps someone knows the answers to these questions. I found myself wondering if a *P. proliferum* from the Alpine Way would survive a season above the tree line. Interesting thought.

Reference

Costin, A.B., Gray, M., Totterdell, C.J. and Wimbush, D.J. 1979. *Kosciusko Alpine Flora*. CSIRO/Collins Australia (joint publishers).



Polystichum at Kosciusko photo: Ron Wilkins



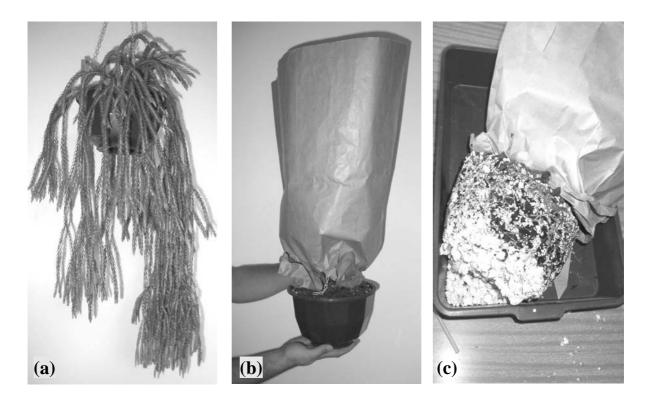
Doodia aspera - bipinnatifid form

Ravensbourne Ferns



photos: Peter Bostock

Adiantum hispidulum var. whitei



Epiphytic ferns with long pendant fronds or branches (a = *Huperzia carinata*) often break or become soiled at replanting time. I prevent damage to their fronds or branches by using paper plant sleeves to gently gather the branches above the pot (b). I slide the sleeve just past the basket and slip the basket off to examine the roots (c). I place the root mass into a new container that is not much bigger than the previous container and fill the small gap with a good epiphytic fern mix (d). The sleeve can be gently torn away or slipped up off the branches (e) which are then rearranged (f). Paper plant sleeves are available from the Challenge Foundation, Lismore, NSW.



Recent fern literature Peter Bostock

Ebihara, A., Dubuisson, J.-Y., Iwatsuki, K., Hennequin, S. & Ito, M. 2006. A taxonomic revision of Hymenophyllaceae. *Blumea* 51: 221-280.

This paper revises the generic system of the filmy ferns. It is based on genetic analysis and reexamination of morphology. The following changes have been proposed for Australian filmy ferns: the
genus *Abrodictyum* is resurrected for ferns at one time placed in *Macroglena* and later *Cephalomanes*.
Hence, *Abrodictyum brassii*, for *Cephalomanes brassii* and *Abrodictyum obscurum* for *Cephalomanes*obscurum; *Polyphlebium* is also resurrected, and it is expanded to encompass, in Australia, both
Polyphlebium venosum, a widespread fern in southern Australia, and Polyphlebium endlicherianum (a
new name for *Crepidomanes endlicherianum*). *Crepidomanes johnstonense* is transferred to the
resurrected genus *Vandenboschia* (as *V. johnstonense*), but the superficially similar *Crepidomanes*aphlebioides remains in *Crepidomanes*. Finally, the genus *Didymoglossum* is resurrected. The small
mostly entire-fronded species which were included variously in *Microgonium*, *Didymoglossum* or *Trichomanes* are now transferred to *Didymoglossum*, hence *D. bimarginatum*, *D. exiguum*, *D.*mindorense, *D. motleyi* and *D. tahitense*.

There are some background publications cited in this paper which are still in press, so I plan to take a little longer before deciding whether to replace the current classification (as in Flora of Australia volume 48, 1998) with this one.

The photograph below are of *Crepidomanes aphlebioides*, which can attain a frond length of 60-100 cm and is perhaps the largest of the filmy ferns, and *Trichomanes tahitense*, which has circular almost stalkless fronds up to 2 cm in diameter, which press themselves flat to the bark of trees. Both of these ferns were observed by me recently in the Cooper Ck system of the Daintree rainforests.

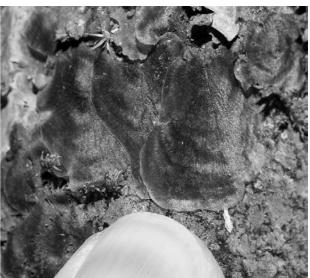


Crepidomanes aphlebioides [lacy fronds across the middle and right of the image], on the walls of a small gorge in the Daintree rainforest. Associated species include Angiopteris evecta, various Selaginella species and Adiantum diaphanum. C. aphlebioides is considered endangered in Australia, as it occurs only in the creek system shown above, and in a small population near the tip of Cape York.



Crepidomanes aphlebioides takes its species name from the aphlebiae, small sterile fronds spaced along the rhizome. Perhaps these are an adaption to the frequent flooding that this fern would experience? The small fronds at bottom right of this photograph are a *Trichomanes* filmy fern, probably *T. bimarginatum*.

Trichomanes tahitense on a rainforest tree in the Daintree. Thumb-nail indicates the scale!



ASGAP - FERN STUDY GROUP

STATEMENT OF RECEIPTS AND PAYMENTS

YEAR ENDED 30TH JUNE, 2006

	\$
Transfer from previous treasurer	5666.07
Transfer from Queensland branch	268.55
Starting balance	5934.62
Receipts	
Membership Fees	\$210.00
ASGAP Study Group support	\$30.00
Queensland flower show contribution	\$50.00
Bank Interest	\$4.00
Total Receipts	\$294.00
	========
TOTAL	\$6,228.62
	=========
Payments	02/2022/2014
Newsletters - Printing, postage, etc.	\$382.25
Bank charges	\$2.75
Total payments	\$385.00
Bank Balance 30 June, 2006	\$5,843.62
TOTAL	\$6,228.62
TOTAL	========

DB gabrister

In my opinion, the above represents a true and fair view of the state of the affairs of the study group, according to its pecords and the explanations provided to me.

hell fyrther

Deadline for copy for the next newsletter (send to Peter Bostock by email or post): January 22nd, 2007

The address label on your envelope containing this newsletter will show one of the following codes:

June 2006

June 2007

June 2008

Subscription due for period July 2006 to June 2007

You are financial member, paid up until 30 June 2007

You are 1 year in credit, paid up until 30 June 2008.

Form for renewal of subscription and change of address or other details:

		<	<cut here=""></cut>		
Current Ad	ldress:				
Address co	rrection:				
				State:	Postcode:
Optional	Email:				
	Telephone:	Work:		Home:	
		Mob.:			