

A.N.P.S.A. Fern Study Group

Newsletter Number 132

ISSN 1837-008X

DATE: January, 2015

LEADER: Peter Bostock,

email: pbostock@ozemail.com.au

TREASURER: Dan Johnston,

NEWSLETTER EDITOR: Dan Johnston, contact as above.

SPORE BANK: Barry White,

From the Editor

I was most impressed with the recent issue of Australian Plants dedicated to ferns. (Spring 2014, Vol 27 No. 220). Congratulations and thanks to Kylie Stocks for organising this and to the other contributors. I believe we have had some new members join our group as a result.

Members will be disappointed to hear that the Fern Society of Victoria was wound up at the end of last year. However, I think this has also resulted in new members for our group. Perhaps our Victorian members would be interested in forming a local chapter similar to our Sydney and South-East Queensland chapters.

Program for South-east Queensland Region

Dan Johnston / Peter Bostock

Sunday, 1st February, 2015. Meet at 9:30 am at Peter Bostock's home

Topic: *Lastreopsis*. Note: Peter will present recent major revisions to *Lastreopsis*. Many *Lastreopsis* species have been transferred to a new genus *Parapolystichum*.

Sunday, 1st March, 2015. Excursion to Queen Mary Falls and adjacent area. Meet at 9:30am at the Queen Mary Falls car park.

Saturday 18th April to Monday, 20th April, 2015. Excursion to Conondale Ranges area. Accommodation in Kenilworth. Note: This replaces the normal April and May meetings.

Sunday, 7th June, 2015. Meet at 9:30am at Claire Shackel's place,
Subject: to be advised.

Sunday, 5th July, 2015. Excursion to the Jolly's Lookout, Boombana area of Brisbane Forest Park (Thylogale Track). Meet at 9:30am at carpark where Jolly's Lookout access road branches off Mt Nebo Road. The track is notable for small colonies of *Adiantum silvaticum* and *Crepidomanes vitiense*.

Program for the Sydney Region

Peter Hind

Saturday 21 February 2015. Meet from about 10.30am at the home of Peter and Margaret Hind,
Study to be decided, but some more forward planning?

Please bring a plate to share for morning or afternoon tea.

Saturday 21 March, 2015. Jack Evans Track to Erskine Creek. Meet about 10 am at "The Oaks" picnic area in the Blue Mountains National Park at Glenbrook. After morning tea we travel by car towards the Nepean Lookout. A short distance back from the lookout is the start of the Jack Evans track to Erskine Creek. A fairly easy but relatively steep descent to the creek and back via the same track. We hope to see *Asplenium aethiopicum* – a bit of a hike upstream. Bring drinking water and packed lunch and wear sensible footwear and hat. Please let me know if intending going on the walk

It's a few years since I did this walk; it's a fairly strenuous walk back up. Here is a clip from Dave Noble's blog of his walk here in 2013 - "After a late start we set out along the Jack Evans Track. This is an easy, well made and maintained track. Near the start are some rock platforms that

give excellent views of Erskine Creek.” There is an entry fee at the National Park gateway at Glenbrook.

There is a map of the Jack Evans track at <http://www.wildwalks.com/bushwalking-and-hiking-in-nsw/glenbrook-eastern-blue-mountains/jack-evans-track-to-erskine-creek.html> You need to click on the “Show contours” label above the map to see contours.

Saturday 18 April, 2015. Meet at the home of Gayle and George Hardy, our newest members,
Study – Growing Ferns from spore and hybridisation. As usual bring a plate for morning or afternoon tea. If lost, phone

Saturday 16 May, 2015. Meet about 10.30 am at the home of Tamara & Ian Cox,
Enjoy the opportunity to explore Tamara & Ian’s lovely garden. Their excellent fern garden is well worth exploring along with their extensive plantings of other attractive natives, that do so well on this sandstone bush block. Enquiries to Ian or Tamara. Study to be advised.

All outings are subject to weather conditions being favourable.

Sydney Area Meeting Reports

Sydney Fern Study Meeting, Saturday 20th Sept. 2014

Dot Camp

Kyrill & Dorothy made us feel very welcome at their home

For our study we looked at some of the smaller Australian fern genera that can be cultivated in Sydney.

There are 2 species of *Bolbitis*, both found growing in northern Queensland.

- *Bolbitis quoyana* likes a very moist spot.
- *Bolbitis taylorii* is harder to grow but is more tolerant of the cold. It is hard to grow and establish but you might try growing it on a rock, it still likes constant moisture.

Belvisia mucronata is usually found growing on rocks and trees. It is easy to grow but difficult to establish, and should be grown as an epiphytic plant in orchid type mix.

Dictymia brownii found locally in the Sydney region and usually grows on trees and rocks. Easy to grow and can grow into a large clump.

Vittaria elongata can be found growing as far south as the Watagans and is easier to grow in Sydney than *Vittaria ensiformis*. Use a good porous mix with good drainage. Often found growing in the root mass of other plants for example Platyceriums.

Todea barbara is a common ground fern found growing in the Sydney region, usually in sandstone areas. It likes to be kept damp and is prone to red spider mite.

Tectaria confluens (muelleri) is easily grown in a pot. None of the Australian species have bulbils.

Arachniodes aristata grows easily in Sydney, its native to this area as well as being widespread further north and extending beyond Australia.

Many of our group donated ferns to be planted in the garden at the Sydney Survivorship Centre, a cottage located in the grounds of Concord Hospital. This centre has been created to give a homely, atmosphere where cancer survivors and their families can meet, attend support groups and participate in courses. Margaret from Sydney Rotary called in the afternoon to collect the ferns and speak to the group about the cottage.

South-East Queensland Meeting Reports

Ferns of Palm Grove and Jenyns Circuits

Claire Shackel

It was a typical winter’s day when the Queensland members of the fern study group met at the Palm Grove Circuit on Mt Tamborine. As morning tea was taken, a member reported that where they had spent the night, nearer the western side of Mt Tamborine, the ferns were shrivelled and unrecognisable. Indeed, the first few steps inside Palm Grove did not look very promising as a fern outing. There was a forest of Bangalow palm (*Archontophoenix cunninghamiana*) and a few Walking Stick palms (*Linospadix monostachyos*) and very little understory. As we proceeded further into the rainforest, a good array of ferns was seen. Judging by those ferns seen, we could infer the area is usually much

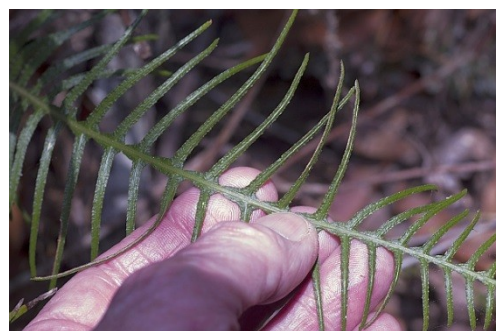
wetter. For example, *Diplazium assimile*, usually seen at stream edges, was growing beside the dry track. On our return, one reason for the lack of understory was seen—an Albert's Lyrebird was scratching away in the undergrowth. There was no surface moisture but most plants seemed to be surviving relatively well.

The Jenyns Circuit was also included in our outing. It continued on from Palm Circuit and dropped down further below the palms to open forest country and the edge of a cliff line which borders part of this park. In this area ferns like *Drynaria rigidula*, *Pellaea paradoxa* and *Calochlaena dubia* were seen. The track climbed back out of the open forest to the palm grove and back to the cars. After a poor first impression, it was a very enjoyable day with 36 ferns seen.

Ferns seen: *Abrodictyum caudatum*, *Adiantum atroviride*, *A. diaphanum*, *A. formosum*, *A. hispidulum* var. *hispidulum*, *A. hispidulum* var. *hypoglaucum*, *A. silvaticum*, *Arachniodes aristata*, *Arthropteris tenella*, *Asplenium attenuatum* var. *indivisum*, *A. australasicum*, *A. polyodon*, *Blechnum cartilagineum*, *Calochlaena dubia*, *Christella dentata*, *Cyathea cooperi*, *C. leichhardtiana*, *Davallia pyxidata*, *Dictymia brownii*, *Diplazium assimile*, *Doodia aspera*, *D. caudata*, *D. maxima*, *Drynaria rigidula*, *Lastreopsis decomposita*, *L. marginans*, *L. microsora*, *L. munita*, *Microsorium scandens*, *Pellaea nana*, *P. paradoxa*, *Platynerium bifurcatum*, *P. superbum*, *Pteris tremula*, *Pyrrhosia confluens*, *P. rupestris*.

Baroon Pocket end of Sunshine Coast Hinterland Great Walk Peter Bostock

On this excursion we examined the ferns along an approximately 2 km section of the Sunshine Coast Hinterland Great Walk, starting at the lower carpark at Baroon Pocket Dam, heading in the direction of Kondalilla Falls, but turning back at Baroon Lookout. The track follows more or less the course of Obi Obi Gorge, crossing a couple of small tributaries of Obi Obi Creek along the way. The day was quite warm, and while the area was a little down on rainfall at the time, ferns were looking reasonably happy. We did find some water in a small gorge along the way, well down on normal



Doodia heterophylla or a hybrid?



Young frond of *Schizaea dichotoma*

levels, allowing us to walk along that gorge to examine ferns on the rock walls. In this area we found *Asplenium attenuatum* var. *attenuatum* and *Asplenium flabellifolium*, as well as *Doodia heterophylla*, *Adiantum diaphanum* and *Arthropteris beckleri*. One of the *Doodia* plants seen had very long pinnae (see picture) – perhaps indicative of hybrid origin.

We were also privileged to see a lone specimen of a damselfly, the Flame Flatwing, a fairly uncommon rainforest denizen in S.E. Queensland, as well as a mating pair of Southern Whitelip damselflies, both in the small gorge. Later in the day, from the afore-mentioned Baroon Lookout, we observed a pair of Peregrine Falcons feeding at least 3 advanced young.

The Fern Study Group had last walked this track in July 2007, and while I did not record the full list seen on that previous trip, we did note one new record – *Schizaea dichotoma*.

Species recorded in November 2014 (ed. I lost the list I made and this is a merging of lists from Peter Bostock and Peter Woodall (thanks!) but I suspect it is incomplete.)

Adiantum diaphanum, *A. hispidulum* var. *hispidulum*, *A. hispidulum* var. *hypoglaucum*, *A. silvaticum*, *Arachniodes aristata*, *Arthropteris beckleri*, *Asplenium attenuatum* var. *attenuatum*, *A. australasicum*, *A. flabellifolium*, *Blechnum cartilagineum*, *Calochlaena dubia*, *Christella dentata*, *Cyathea australis*, *C. cooperi*, *C. leichhardtiana*, *Doodia aspera*, *D. heterophylla*, *Hypolepis muelleri*, *Lastreopsis marginans*, *Microsorium scandens*, *Nephrolepis cordifolia*, *Pellaea nana*, *Platynerium superbum*, *Psilotum nudum*, *Schizaea dichotoma*, *Sticherus flabellatus* var. *flabellatus*.

Other species recorded July 2007: *Abrodictyum caudatum*, *Adiantum formosum*, *Asplenium polyodon*, *Cheilanthes distans*, *C. sieberi*, *Davallia pyxidata*, *Dennstaedtia davallioides*, *Hypolepis*

glandulifera, *Lindsaea microphylla*, *Platynerium bifurcatum*, *Pteridium esculentum*, *Pyrrhosia rupestris*, *Vittaria ensiformis*.

Other Articles

New Fern Publication

Peter Bostock

L.R. Perrie, R.K. Wilson, L.D. Shepherd, D.J. Ohlsen, E.L. Batty, P.J. Brownsey & M.J. Bayly (2014). Molecular phylogenetics and generic taxonomy of Blechnaceae ferns. *Taxon* 63(4): 745–758.

This recently published study of the phylogeny of the Blechnaceae has found that the current circumscription of genera in the family is in need of revision. As the core clades uncovered by this study are not easily distinguished by morphological characters, the authors propose a broad definition of the genus *Blechnum*. In particular, species currently placed in *Doodia* and *Pteridoblechnum* are now treated as species of *Blechnum*. Notably, two species of *Blechnum*, *B. indicum* (Thailand, Malaysia, Indonesia, Papua New Guinea, Australia, Vanuatu, and New Caledonia) and *B. serrulatum* (North, Central and South America), are separated out into a new genus *Telmatoblechnum*.

Here are the proposed name changes for Australian ferns in the above paper:

Blechnum neglectum (F.M.Bailey) R.K.Wilson & Bayly, formerly *Pteridoblechnum neglectum* (F.M.Bailey) Hennipman (based on *Acrostichum neglectum* F.M.Bailey).

Blechnum reticulatum R.K.Wilson & Bayly, formerly *Pteridoblechnum acuminatum* (C.T.White & Goy) Hennipman, with older names *Steenisiolechnum acuminatum* (C.T.White & Goy) Hennipman and *Leptochilus acuminatus* C.T.White & Goy. A new species epithet was required since the name *Blechnum acuminatum* has previously been used for a different species.

Telmatoblechnum indicum (Burm.f.) Perrie, D.J.Ohlsen & Brownsey, formerly *Blechnum indicum* Burm.f.

Other name changes which will apply if the taxonomic system proposed by Perrie *et al.* (2014) is accepted are shown in this table:

Currently accepted name in <i>Doodia</i>	Proposed name in <i>Blechnum</i>
<i>Doodia aspera</i> R.Br.	<i>Blechnum neohollandicum</i> Christenh.
<i>Doodia heterophylla</i> (F.M.Bailey) Domin, based on <i>Doodia aspera</i> var. <i>heterophylla</i> F.M.Bailey	<i>Blechnum doodianum</i> Christenh.
<i>Doodia australis</i> (Parris) Parris, based on <i>Doodia media</i> subsp. <i>australis</i> Parris	<i>Blechnum parrisii</i> Christenh.
<i>Doodia caudata</i> (Cav.) R.Br., based on <i>Woodwardia caudata</i> Cav.	<i>Blechnum spinulosum</i> Poir.
<i>Doodia dissecta</i> Parris	<i>Blechnum dissectum</i> (Parris) Christenh.
<i>Doodia hindii</i> Tindale ex T.C.Chambers	<i>Blechnum hindii</i> (Tindale ex T.C.Chambers) Christenh.
<i>Doodia linearis</i> J.Sm.	<i>Blechnum lineare</i> (J.Sm.) Christenh.
<i>Doodia maxima</i> J.Sm. ex C.Chr.	<i>Blechnum maximum</i> (J.Sm. ex C.Chr.) Christenh.
<i>Doodia media</i> R.Br.	<i>Blechnum medium</i> (R.Br.) Christenh.

Cyclone Survivor

David Long

The attached images are of a *Platynerium* growing on a coconut palm located just above the high mark on the beachfront at Mission Beach North Queensland.

The *Platynerium* and smaller one further up the trunk of the palm didn't get blown off by the winds of cyclone Yasi. A few coconut palms further along the beach also had small *Platyneriums* growing on the landward side of the palm trunk. The branch across the back of the palm and at the top corner of one of the images is part of a large tree blown over by the cyclonic wind. Part of the bark on the branch behind the palm has been taken off by the impact with the palm trunk. I guess the attachment of the fern to the host must be very secure to withstand cyclonic winds.

(ed. I was at Mission Beach with the SES soon after cyclone Yasi, and one of my most vivid memories was seeing the forest trees stripped of all leaves where the road went through rainforest on a ridge on the way into Mission Beach from the highway. The tops of the remaining trees were just bare stems. It's most impressive that an elk exposed on a palm on the beachfront could hang on through this.)



Spore List – December, 2014

Barry White

<i>Adiantum formosum</i> 1/12	<i>Diplazium dameriae</i> 8/13
<i>Adiantum hispidulum</i> 6/12	<i>Doodia australis</i> 6/13
<i>Amphineuron opulentum</i> 8/13	<i>Doodia media</i> 6/13
<i>Amphineuron queenslandicum</i> 4/12	<i>Dryopteris wattsi</i> 9/14
<i>Amphineuron terminans</i> 8/13	<i>Hypolepis glandulifera</i> 12/14
<i>Arachniodes aristata</i> 8/13	<i>Hypolepis muelleri</i> 3/12
<i>Asplenium aethiopicum</i> 10/12	<i>Lastreopsis acuminata</i> 10/12
<i>Blechnum chambersii</i> 4/12	<i>Lastreopsis decomposita</i> 1/12
<i>Blechnum minus</i> 3/12	<i>Lastreopsis marginans</i> 3/12
<i>Blechnum wattsi</i> 3/13	<i>Lastreopsis microsora</i> 8/13
<i>Blechnum wurunuran</i> 6/14	<i>Lastreopsis nephrodioides</i> 7/14
<i>Bolbitis quoyana</i> 5/13	<i>Lastreopsis tenera</i> 6/13
<i>Chingia australis</i> 11/12	<i>Lastreopsis</i> × <i>Coveniella</i> 5/13
<i>Christella dentata</i> 3/12	<i>Lygodium reticulatum</i> 11/12
<i>Christella subpubescens</i> 4/12	<i>Macrothelypteris torresiana</i> 7/14
<i>Cyathea australis</i> 1/12	<i>Plesioneuron tuberculatum</i> 9/14
<i>Cyathea baileyana</i> 11/12	<i>Platynerium superbum</i> 8/13
<i>Cyathea brownii</i> 10/12	<i>Pneumatopteris sogerensis</i> 8/13
<i>Cyathea cooperi</i> 7/13	<i>Pneumatopteris costata</i> 6/11
<i>Cyathea cooperi</i> 'Cinnamon' 2/13	<i>Polystichum australiense</i> 6/13
<i>Cyathea exilis</i> 4/14	<i>Polystichum formosanum</i> 12/14
<i>Cyathea leichhardtiana</i> 8/12	<i>Pronephrium asperum</i> 8/13
<i>Cyathea rebecca</i> crested 8/13	<i>Psilotum nudum</i> 6/13
<i>Dicksonia antarctica</i> 12/13	<i>Pteris umbrosa</i> 12/14
<i>Diplazium australe</i> 12/14	<i>Rumohra adiantiformis</i> 4/12
<i>Diplazium assimile</i> 7/12	

Thank you to regular spore donor Nada Sankowsky.