



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

## *Newsletter Number 124*

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### **From the Editor**

Firstly, I must apologise for this newsletter being so late and being a bit shorter than usual. I have also included an article from Peter Bostock which is outside our domain. Still, I'm sure members will be interested in Peter's article on the orchids that distracted members of the SE Qld group on our mid-week trip to Girraween and Tenterfield. Peter has also supplied photos of some stamps featuring ferns from Christmas and Norfolk Islands and excursion report for the Tenterfield trip. Thanks to Dot for provided trip/meeting reports from the Sydney group, and to Claire for the Queensland trip to Python Rock in Lamington National Park. Dot and Ron have been inspired to contribute articles by Kyrill's retirement from his very active participation in fern related activities.

### **Program for South-east Queensland Region**

*Dan Johnston*

**Sunday, 4<sup>th</sup> December, 2011:** Christmas meeting and plant swap, Rod Pattison's residence.  
Meet at 9:30am.

**Sunday, 5<sup>th</sup> February, 2012:** Meet at 9:30am at Peter Bostock's home at  
Topic: *Polypodiaceae* other than *Microsorium* and *Drynaria*.

### **Program for the Sydney Region**

*Dot Camp, Peter Hind*

**December, 2011 and January, 2012:** No Meetings. *Merry Christmas & Happy New Year.*

**Saturday, 18<sup>th</sup> February, 2012:** Meet from about 11am at the home of Peter and Margaret Hind,  
to study filmy ferns & to suggest future program activities.

Phone: 02 9625 8705

**Saturday, 17<sup>th</sup> March, 2012:** Meet from about 10 am at Govett's Leap Lookout via Blackheath, Blue Mountains. The views are spectacular from the Lookout. We plan to walk down to the base of the waterfall, there are several sets of steel steps descending the cliff. *Blechnum gregsonii* is present on the wet cliff face. Carry drinking water. Track is well graded but it is a fairly steep descent. The ascent is via the same track and is not suitable for those with heart conditions. Carry packed lunch or carry a snack & eat lunch back at the cars – decide on the day. If heavy rain is forecast consider it cancelled.

**Saturday, 21<sup>st</sup> April, 2012:** Meet from 11am at the home of Steve Lamont,  
For our study we will look at *Davallia* species. Phone:

All outings are subject to weather conditions being favourable.

## Sydney Area Trip Reports

### Strickland State Forest 13<sup>th</sup> August, 2011

Dot Camp

After an early lunch at my place in Narara, 9 members plus 2 visitors made the short trip to the Picnic area at Strickland Falls. The group followed the Stony Creek walk, which begins at the picnic area & winds down to Stony Creek. A car shuffle allowed us to avoid the climb back up the hill.

Some highlights of the walk included the

- massive rock walls covered in ferns & orchids,
- valley full of bird's nest ferns,
- sound of the water splashing over the rocks in Stony creek,
- attractive cross of *Pellaea paradoxa* & *P. falcata*.

Ferns seen on the walk were *Adiantum aethiopicum*, *A. hispidulum* var. *hispidulum*, *A. hispidulum* var. *hypoglaucum*, *A. silvaticum*, *Asplenium australasicum*, *A. flabellifolium*, *A. polyodon*, *Blechnum cartilagineum*, *Blechnum nudum*, *Calochlaena dubia*, *Cheilanthes austrotenuifolia*, *Cheilanthes sieberi*, *Cyathea leichhardtiana*, *Davallia solida* var. *pyxidata*, *Doodia aspera*, *Hymenophyllum cupressiforme*, *Lastreopsis decomposita*, *Lindsaea microphylla*, *Microsorium scandens*, *Pellaea falcata*, *P. paradoxa*, *P. falcata* × *P. paradoxa*, *Platycerium bifurcatum*, *Polystichum australiense*, *Pteridium esculentum*, *Pyrrosia rupestris*, *Sticherus flabellatus*.

### Meeting at Kenthurst

Dot Camp

On Saturday, 15<sup>th</sup> October 2011, 13 members & 4 visitors gathered at Tamara & Ian Cox's very beautiful garden at Kenthurst. The natural bush setting is enhanced with many native plants, including stunning grevilleas & eremophilas. The eastern length of the house is planted out with a wonderful variety of ferns & orchids, sheltering under a canopy including many tree ferns. *Todea barbara* ferns surround a huge fish pond & two large baskets of *Oleandra* also attracted a lot of attention. *Asplenium bulbiferum* 'Island Beauty' with its mass of bulbils also created a lot of interest, as did a crested *Blechnum nudum*.

#### Growing *Blechnum* species

- Some *Blechnums* are difficult to grow & Peter suggested we stick to the easy to grow ones such as *B. camfieldii*, *B. nudum* & *B. cartilagineum* as garden plants.
- All require lots of water.
- Consider using a saucer under plants, keeping the size of the saucer relevant to the size of the pot i.e. not too deep or the soil may rot & become anaerobic. Water the plant from the top to help flush the plant.
- Some *Blechnum* spore is green when ripe for example *B. nudum* & possibly *B. articulatum*.
- *B. patersonii* likes lots of shade. *B. orientale* needs cover in Sydney.

## South-East Queensland Trip Reports

### Python Rock Track, August, 2011

Claire Shackel

It was a sunny but crisp morning when a small group met at the entry to the Python Rock track at Lamington National Park for morning tea. The track started in dense rainforest and the trees at the road edge were festooned with large *Platycerium bifurcatum* and *Asplenium australasicum*. On entering the dense canopy, *Lastreopsis microsora*, *Adiantum silvaticum* and to a lesser extent *L. decomposita* provided a good understory. A few plants of *L. silvestris* were seen in one area.

*Asplenium polyodon* grew in the bases of the epiphytes while *Arthropteris tenella* and *Microsorium scandens* climbed up the trees. In a moist area where the track crossed a dry gully, *Pellaea nana* and *Diplazium assimile* were seen. *Cyathea leichhardtiana* formed an under story layer between the canopy and ground cover. Other epiphytes seen were *Davallia pyxidata* and

*Dictymia brownii*. This area contained many old trees that had enormous extra weight of epiphytes (ferns & orchids) and climbers in their canopy.

As the track approached Python Rock, the canopy became less dense and *Adiantum formosum*, *Dennstaedtia davallioides* and a trunking form of *Blechnum cartilagineum* became evident. At Python Rock the vegetation was open eucalyptus forest and *Doodia aspera*, *D. caudata*, *Adiantum hispidulum* var. *hispidulum*. *Pteris tremula* and *Pteridium esculentum* were seen. *Pyrrosia confluens* and *P. rupestris* climbed over an old rotting stump.

After lunch the group went for a short walk along the Morans Falls track. The difference in the vegetation was unexpected and as there were no mature trees, it was considered to be regrowth. There was very little understory of any sort, just very scattered plants of *Lastreopsis microsora* among the leaf littered ground. There was no evidence of turkey or any other bird scratching to have caused the apparent devastation. In a wet gully, *Arthropteris beckleri*, a few plants of *Blechnum patersonii* and a second plant of *Diplazium assimile* were seen.

### **Thank you Kyrill**

*Dot Camp*

For many years now, Kyrill Taylor (a member of the Sydney F.S.G.) has been giving talks at A.P.S. meetings & various garden groups, promoting the growing of ferns. To achieve this Kyrill has loaded up his car with ferns, travelled long distances & parried many tricky questions. Kyrill has now retired from this role & we thank him very much for a job well done.

### **Kyrill and the Spore Question**

*Ron Wilkins*

For many years Kyrill Taylor has spread the good word by making himself available to plant societies for talks on Australian ferns. Kyrill is a practiced and entertaining speaker and we should place on record our appreciation of this great service to the Fern Study Group and the many people he has rewarded by their interest. Recently Kyrill announced his retirement from this activity because he can no longer carry the superb specimens from his collection he customarily brings to illustrate his talks.

In one of his recent talks an intelligent young man asked the question 'What is the difference between fern and fungal spores?'. It is the sort of question you hope will never be asked of you, but I have no doubt Kyrill answered it with his usual disarming grace. The question is a very interesting one and we all should know the proper answer, but what is it?

There are differences such as the cell walls are made of cellulose for ferns and a chitinous material for fungal spores. And the various ways they are held and dispersed in the different fungal and fern groups would take much paper and botanical knowledge to enumerate. But on thinking about this question I have concluded that the real difference between fern and fungal spores is that the one grows into a fern, and the other grows into a fungus. This may seem to be a facile answer to an intelligent question. But I don't think so.

### **Orchids seen during Granite Belt excursion**

*Peter Bostock*



**Caladenia carnea**

During the recent mid-weed excursion to the Granite Belt, among the extensive wildflowers at each of the sites we visited were a small number of spring-flowering orchids. Along the Junction Track in Girraween N.P. and later on, on the Dr Roberts and Underground Creek tracks, we saw a small caladenia, probably *Caladenia carnea*, and a few plants of a bright yellow donkey orchid, which I believe is *Diuris abbreviata*.

Near the Junction itself, in the humus on top of a boulder, was a specimen of old man's beard, *Calochilus robertsonii*. The Dr Roberts Waterhole track also produced a plant of *Lyperanthus suaveolens* (not illustrated), and some spotted thelymitras, *Thelymitra ixioides*.

On the Thursday, during a quick visit to Thunderbolt's Hideout on the Mt Lindesay Highway near Tenterfield, we were fortunate to find a small colony of *Chiloglottis formicifera*, a species which is quite uncommon in Queensland. As you can see from the photograph, the labellum and lateral sepals are an excellent imitation of an insect, presumably to lure pollinators to the flower.



**Chiloglottis formicifera**

Among the *Dendrobium kingianum* plants on top of Wellington Rock in Basket Swamp N.P. we saw (at some considerable distance, and silhouetted against a grey-white clouded sky), some pinkish flowers arising from pale green leaves, which none of us were able to identify. I am grateful to Dr. Bill McDonald (Qld Herbarium) for suggesting that the plants were *Thelymitra fragrans*, a somewhat peculiar thelymitra which prefers the company of *D. kingianum* on bare rock faces. The image shown here has been heavily manipulated from a telephoto shot of mine, and no doubt does not really do justice to the plants. To round off the trip we also saw considerable numbers of orange blossom orchid, *Sarcochilus falcatus*, at Timbarra Trig, and a few *Pterostylis nutans* (nodding greenhood, not illustrated) alongside the track in Bald Rock N.P.



**Calochilus robertsonii**



**Diuris abbreviata**



**Pterostylis pedunculata**



**Thelymitra ixioides**



**Sarcochilus falcatus**



**Thelymitra fragrans**

**Mid-week excursion, Granite Belt, October 2011**

*Peter Bostock*

A small group of FSG members, and one visitor, met this year in October for a mid-week trip to the Granite Belt of south-east Qld and north-eastern NSW. We last visited this area in April/May 2005. Most of the group stayed in Tenterfield, while one member camped at Girraween National Park. Our itinerary included one day in Girraween, one in Basket Swamp National Park (NSW) and on the final day we made relatively brief visits to Bald Rock N.P. and Undercliff Falls, both accessed via the Mt Lindesay Highway. Wildflowers somehow dominated our trip this time, but we still managed to find a reasonable number of the local ferns. One, *Asplenium flaccidum*, was unexpectedly found in the Timbarra Trig area – we had not seen it on the previous trip.

Our first day was divided between Junction Track in the morning and Dr Roberts Waterhole and Underground Creek tracks in the afternoon. We covered some 10.5 km of walking track in total, in quite warm conditions, but the wildflowers and occasional ferns made up for the effort.

We were joined on the second day by a visitor from Tenterfield, Janet White (see group photo below). All of us were very pleasantly surprised by the wide variety of ferns and wildflowers seen in Basket Swamp N.P.; everywhere we turned there were vast splashes of wildflowers – pinks and purples, yellows and orange, and here and there we even found ferns to admire. The granite tors of Timbarra Trig and Woolool Wooloolni (also known as Wellington) Rock were imposing on the skyline and relatively easy to access. As always, Dan Johnston managed to find a few new plants hidden away in places requiring a little bit of extra effort to explore.

On our final day, we fitted in a brief morning visit to the rock piles on the Bungoona Walk at Bald Rock N.P. and then explored the upper parts of Undercliff Falls.



**From left:** Julie Major, Dan Johnston, Ray Baxter, Noreen Baxter, Peter Bostock, Janet White and Sue Dowrie  
(Photo by Wendy Johnston).

Everyone was in agreement that this trip was very enjoyable, and we vowed to organise a visit again soon, perhaps enticing a few more members to participate. The close proximity of the annual conference undoubtedly contributed to some members not being able to attend.

Species seen in October 2011	Sites:	A	B	C	D	E	F	G	H	I
<i>Adiantum aethiopicum</i>		X	X					X	X	
<i>Adiantum hispidulum</i> var. <i>hispidulum</i>			X						X	
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>		X	X						X	
<i>Pellaea falcata</i>									X	
<i>Asplenium australasicum</i>					X		X	X	X	
<i>Asplenium flabellifolium</i>			X	X	X		X	X	X	
<i>Asplenium flaccidum</i>				X						
<i>Asplenium polyodon</i>								X		
<i>Blechnum cartilagineum</i>				X	X		X	X		
<i>Blechnum minus</i>								X		
<i>Blechnum nudum</i>							X	X		
<i>Doodia aspera</i>					X			X	X	
<i>Doodia caudata</i>									X	
<i>Cyathea australis</i>										X
<i>Davallia pyxidata</i>		X	X	X	X		X	X	X	
<i>Hypolepis muelleri</i>							X	X	X	
<i>Pteridium esculentum</i>		X	X	X	X			X	X	
<i>Calochlaena dubia</i>				X	X		X	X		
<i>Polystichum</i> sp. ( <i>fallax</i> or <i>formosum</i> )									X	
<i>Gleichenia dicarpa</i>		X	X			X				
<i>Sticherus flabellatus</i> var. <i>flabellatus</i>			X							
<i>Sticherus lobatus</i>				X						
<i>Hymenophyllum cupressiforme</i>				X	X			X		
<i>Lindsaea linearis</i>			X			X				
<i>Lindsaea microphylla</i>							X			
<i>Dictymia brownii</i>									X	
<i>Platyterium bifurcatum</i>					X					
<i>Pyrosia rupestris</i>		X	X	X	X		X	X	X	
<i>Psilotum nudum</i>		X								
<i>Schizaea bifida</i>			X							
<i>Selaginella uliginosa</i>						X				
<i>Christella dentata</i>										X

- A Junction Track, Girraween National Park (Qld)
- B Dr Roberts Waterhole and Underground Creek including access tracks, Girraween N.P. (Qld);
- C Timbarra Trig, Basket Swamp N.P. (NSW);
- D Woolool Wooloolni (Wellington) Rock (NSW);
- E Basket Swamp, Basket Swamp N.P.(NSW);
- F Thunderbolt's Hideout, Mt Lindesay Hwy, NSW;
- G rock piles, Bungoona Walk, Bald Rock N.P. (NSW);
- H Undercliff Falls (NSW);
- I Miscellaneous roadside sightings.

## **Brown's Falls and Moss Garden Ferns**

Dan Johnston

Wendy and I came home from the Tenterfield trip by a particularly scenic route. After leaving the group at Undercliff Falls, we continued north on the Mt Lindsay Rd to Legume. This was formerly the Mt Lindsay Highway but some of this road is still gravel (quite good), perhaps justifying the downgrading of its status. The Queensland – New South Wales border follows the Great Dividing Range for some way, so it is also the watershed between the Clarence River catchment to the east, and the Murray – Darling catchment (here the Condamine) to the west. From Legume we crossed the border (and the range – here pretty insignificant) towards Killarney and then turned right onto the Killarney-Boonah Road. This is a particularly spectacular road which crosses the Dividing Range again, but this time staying in Queensland, being the catchment of Teviot Brook, a major tributary of the Logan River which flows to the coast south of Brisbane. This road is all sealed but is quite slow travelling, being very steep in parts. It has several lookouts and a number of parks. The higher parts form a plateau and because of the basalt soils, much of it is attractive farmland. We visited 2 park areas on this trip: Brown's Falls and Moss Gardens.

Brown's Falls is on the western side of the range, immediately before the start of the steep climb. There is a rest area on the left of the road (heading east) and a concreted pathway running beside the creek under the road bridge. After this the track becomes an indistinct pad following up beside the creek. Perhaps there was a better track that was washed away by the floods earlier this year. Anyway, we followed upstream through moist forests for perhaps half a kilometre to a substantial waterfall. We believe we saw the following ferns: *Adiantum aethiopicum*, *A. atroviride*, *A. formosum*, *A. hispidulum*, *Arthropteris tenella*, *Asplenium australasicum*, *Calochlaena dubia*, *Davallia pyxidata*, *Dictymia brownii*, *Doodia aspera*, *D. caudata*, *Lastreopsis decomposita*, *L. munita*, *Pellaea nana*, *Platyserium bifurcatum*, *Polystichum* sp., *Pteris umbrosa* and *Pyrrosia rupestris*.

Continuing past the National Park area at Queen Mary Falls, but visiting the coffee shop opposite and also a couple of the lookouts along the road, we crossed the plateau and started descending steeply. At this point the road is briefly adjacent to the rabbit fence marking the NSW-Qld border and there is a sign "Moss Gardens" on the right hand side of the road. Although we are descending steeply to the north-east, with extensive views towards Brisbane, we are actually still in the catchment of the Condamine River at this point. It's the Clarence River catchment on the other side of the rabbit-proof. The Moss Gardens walk is beside the fence along a narrow ridge, more or less horizontally, but dropping very steeply on both sides. This very exposed situation has rainforest vegetation with numerous epiphytes, but at the end there are views out over cliffs, particularly on the NSW side. We believe we identified the following ferns on this short walk: *Asplenium australasicum*, *A. polyodon*, *Arthropteris tenella*, *Davallia pyxidata*, *Dictymia brownii*, *Doodia aspera*, *Lastreopsis decomposita*, *Pellaea nana*, *P. paradoxa*, *Pyrrosia confluens* and *P. rupestris*.

## **Some comments on fern names**

Peter Bostock

A name mentioned earlier in this newsletter, *Asplenium bulbiferum*, is probably misapplied when referring to the cultivated form commonly covered with plantlets (technically 'bulbils'). New Zealand botanists (Perrie, Shepherd and Brownsey) have determined that true *A. bulbiferum* bears few bulbils, and the cultivated plant is thought to be a hybrid between *A. bulbiferum* and *Asplenium dimorphum*. The current name for the hybrid is *Asplenium × lucrosum*.

To quote from the Museum Te Papa (Wellington) website: "The two parent species – *Asplenium bulbiferum* and *A. dimorphum* – don't occur together naturally, *A. bulbiferum* being naturally found only in New Zealand and *A. dimorphum* only on Norfolk Island. However, by 1831 both had been taken to grow in Britain. This is probably where they hybridised, producing *A. ×lucrosum*, which is now cultivated around the world."

Secondly, I believe that *Davallia pyxidata* is not a subspecies of *D. solida*. There are some superficial similarities between *D. solida* and *D. pyxidata*, but their differences, including a

substantial ecological separation and the quite unusual shrubby nature of the latter, suggest to me that they should be separated as species, not subspecies.

Perrie L.R., Shepherd L.D., Brownsey P.J. 2005. *Asplenium x lucrosum* nothosp. nov.: a sterile hybrid widely and erroneously cultivated as "*Asplenium bulbiferum*". *Plant Systematics and Evolution* 250: 243-257.

Note: "nothosp. nov." is an abbreviation for the Latin term "*nothospecies nova*", meaning "newly described nothospecies". In this context, a nothospecies is more or less equivalent to "species" but indicates that it arose by an inferred or proven hybridisation event.

## Christmas and Norfolk Island Fern Stamps

Peter Bostock

