

A.N.P.S.A. Fern Study Group Newsletter Number 120

ISSN 1837-008X

DATE: August, 2010

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SPORE BANK: Barry White,

SubscriptionsDan Johnston

Subscriptions for the Fern Study Group for 2010-2011 are now due. See the last page of this newsletter for detail.

Program for South-east Queensland Region

Dan Johnston

Friday 3rd September to Sunday 5th September. Setup and manning of display at the SGAP Spring Flower Show at the Auditorium, Brisbane Botanic Gardens, Mt Coot-tha Road, Toowong.

Sunday 3rd October. Excursion to Buderim Forest Park. We will meet at 9:30am at the end of Harry's Lane, Buderim. This is the bottom end of Buderim Forest Park. (The park extends along Martin's Creek for a bit over a km.) We plan to then take some cars to the other (top) end of the park at the end of Quorn Close and walk back to the bottom. There is graded track all the way. The track is steeper at the top end with quite a few steps. The bottom section is effectively flat, with an elevated board walk for quite a few hundred metres from the bottom entrance, so for anyone thinking that the track might be a too steep, an option would be to walk up from the bottom and meet the main party coming from the top. We propose going to Wendy and Dan Johnston's house for lunch.

Harry's Lane is at G17 on map 68 in the Sunshine Coast section of the Brisbane UBD street directory. Although there are shorter routes to get to Harry's Lane via the back streets of Buderim, I suggest the simplest route is to continue up the Bruce Highway to the Nambour and Maroochydore exit which is less than 2km after the Forest Glen/Chevallum exit. After turning right into Maroochydore Road at the roundabout from this exit, it is about 5.5 km along Maroochydore Road to the Buderim (Jones Rd) exit off Maroochydore Road. Again we exit left, but turn right over the main road, this time at lights. Take the first turn right (after about 200 metres) into Lindsay Road. After about 800m, soon after crossing Martin's Creek, turn left into Harry's Lane.

It is about an hour's drive from the northern outskirts of Brisbane.

Sunday 7th November. Excursion to the Goomburra section of Main Range National Park. We will meet at the booking shelter for the National Park campground at 9:30am.

We hope to investigate some of the extensive fern areas near the end of the road. There are a number of graded track type walks, mostly through rainforest, with extensive groundcover of ferns. The walks to Sylvester's Lookout, and Mount Castle Lookout are each less than a km one way, and terminate at spectacular lookouts, as well as being through rainforest rich in ferns for all of each walk. Both of these tracks climb significantly on the way to the lookouts. On the other hand, an old forestry track running west from the end of the road is fairly flat, and initially also goes through rainforest rich in ferns. The Winder Track which goes NW along the Mistake Range from the end of the road, is probably less interesting as it is rather weedy in parts but it does have many ferns. The Araucaria Track starting a couple of km back from



Track at Goomburra

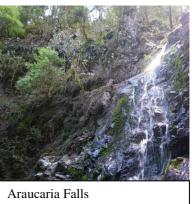
the end of the road has an even greater range of ferns as it goes to a creek and waterfall. After being relatively flat initially, the track goes down quite steeply to the top of the Araucaria Falls. There is a track to the bottom of the falls, but it is rougher although being rewarding in extra variety of ferns.

From Brisbane, take the Ipswich Motorway and Cunningham Highway through Cunninghams Gap to the driver reviver site at Gladfield (about 20mins beyond the Gap, I guess). Immediately after the driver reviver, there is a road to the right signposted to Goomburra, a small township in the next valley to the north. Take this road, and at Goomburra township again turn right. I think this road (Inverramsey Road) is signposted to Main Range National Park, Goomburra Section. Follow this road up the valley and you will eventually reach the National Park campsite.

Just before the State Forest Campsite, there are a number of campsites on a private property. Continue past these till you get to the National Park Camping Area. If it is wet, as it was last time we went there, the road to the lookouts etc. is closed near the camping area. There are alternative walks on Dalrymple Creek from the campsite.

It is about a 2 hour drive from Brisbane. Wendy and I will probably go there on Saturday (possibly Friday) and camp at the National Park campground, and will possibly also stay Sunday night. It is a favourite area and campground for us and there are plenty of walks if one wishes to spend more time there. We will probably do another walk on Saturday afternoon. If anyone else would like to join us, please contact us (treasurer's contact details at the top of the newsletter.) There is also cabin accommodation available nearby (Goomburra Forest Retreat—information on the net).





Sunday 5th December. Christmas meeting and plant swap, Rod Pattison's residence,

Forthcoming Events in the Sydney Region

Peter Hind

Bring

Saturday 21st August. Meet about 10.30 a.m. at the Taylor's residence, lunch etc. Study of *Platycerium*. This should be easy so please feel free to raise other ferny subjects for discussion too.

September. No meeting this month due to various flower shows that you may wish to attend.

Saturday 23rd October. Note: this is NOT the third Saturday. The meeting is later to enable those lucky members going to Lord Howe Island with a couple of BPS members to be back in time for it. Meet at 11am at Dot's place,

After morning tea we will take a 10 minute

drive to Strickland State Forest & explore the arboretum area.

Saturday 20th November. This will be our end of year meeting. No study - iust a garden visit to see the progress, particularly of the Fernery. Meet at Margaret and Peter Olde`s

December and January—No Meetings—MERRY CHRISTMAS.

Saturday 19th February. Meet from about 11 am at the home of Peter and Margret Hind, Topic to be decided. Any ideas or suggestions welcome. Phone (02) 96258705

All outings are subject to weather conditions being favourable.

Peter Hind 96258705

Sydney Meeting Reports

Visit to Kylie and Dwayne Stocks' Property and Nursery, 21-22 March, 2010.

Margaret Olde

In March, several fortunate Fern Study Group members visited Kylie and Dwayne Stocks property and nursery at the foot of Clyde Mountain about 25 kms inland from Bateman's Bay on the NSW South Coast.

We enjoyed wandering through acres of Cyathea australis, Polystichum australiense, Doodia aspera and australis, Adiantum aethiopicum and formosum, Pellaea falcata, Calochlaena dubia, Cheilanthes sieberi, Dennstaedtia davallioides and Lindsaea microphylla with some lovely specimens of Macrozamia communis, two of which had Asplenium australasicum growing on them. Along a creek bed we saw Blechnum nudum and patersonii. We walked through a spectacular area where Blechnum cartilagineum grew in profusion and where a large rock wall is host to Adiantum hispidulum, Asplenium flabellifolium and Doodia caudata. On the drier side of the property we saw Lindsaea linearis, as well as Cheilanthes austrotenuifolia, Sticherus flabellatus and lobatus, and Gleichenia dicarpa.

A beautiful display area under shadecloth has been created which features a pond surrounded by some outstanding specimens of ferns such as *Cyathea cooperi* (White Knight and double crested), *princeps*, *medullaris*, *tomentosissima* and *robusta*, *Todea barbara*, *Davallia* and *Humata* species, *Lygodium microphyllum*, *Arachniodes simplicior* and *standishii*, *Blechnum brasiliense* (red), *Blechnum penna-marina* (ordinary and crested), *Selaginella kraussiana*, *Cyrtomium falcatum* and *macrophylla*, and many *Adiantum* cultivars. Also featured were a number of *Asplenium* (Bird's Nest) cultivars including crested varieties, lasagne fern and osaka. The BBQ area adjacent to the house is also enhanced by a fern garden featuring *Cyathea australis*, *cooperi* (single crested) and *kermadecensis*, *Blechnum nudum*, *gibbum*, *brasiliense* and 'Silver Lady', *Angiopteris evecta*, *Dennstaedtia davallioides*, *Pteris tremula*, Asplenium *australasicum*, *Adiantum aethiopicum* and *hispidulum*, *Sticherus flabellatus* and *lobatus*, *Dryopteris* cultivars and *Polystichum australiense* and *proliferum*, and *Nephrolepis* species. We spent many hours enjoying the ambience created by Kylie and Dwayne and are very appreciative of their hospitality.

Kylie and Dwayne operate a specialist fern nursery, Verdigris. We were in Fern Heaven as we wandered through two large greenhouses filled with an extensive range of both native and exotic ferns. Their website is www.verdigris.com.au and is well worth a visit.

18th April, 2010, Meeting Report—Microsorum (Polypodiaceae) Dot Camp



On Saturday 18th April, 2010, 9 members met at West Ryde to study *Microsorums*.

- 1. Contains about 50 species with 7 found in Australia: *Microsorum australiense, M. grossum, M. maximum, M. membranifolium, M. punctatum, M. scandens*, and *M. scolopendria*.
- 2. **Grows** as an epiphyte, lithophyte or is terrestrial.
- 3. **Rhizome** short to long creeping, covered in raised, dark & thickened scales.
- 4. **Stipes** smooth & when shed, leave raised scars (phyllopods).
- 5. **Fronds** are upright to pendent. Laminae are extremely varied from simple, lobed or divided. Generally, leaf veins are much divided forming a network.
- 6. **Sorus** is variable –it may be round or oval, large or tiny, conspicuous or inconspicuous, raised or recessed without the protection of indusia. Mostly found in small depressions on the leaves in rows or scattered.

Growing Tips

Generally tough, robust ferns suited for cultivation in a wide range of conditions, though need protection from frost. Suitable for baskets, rockeries & growing on supports such as tree fern trunks. Most can be propagated from the rhizome, but are slow to establish. It is still probably quicker than from spore.

Questions

- 1. Why is a beautiful fern like *M. scandens* not grown commercially?
- 2. *M. scandens* is called the fragrant fern. Has anyone detected the perfume?
- 3. *M. punctatum* is said to need protection down south. Observe my robust specimen it thrives outside with just rain & no additional water.
- 4. Currently a different form of what appears to be *Microsorum pustulatum* (syn. *M. diversifolium*) is being sold in nurseries as *Microsorum diversifolium*. It has very shiny leaves & a reddish stipe. What is it & is it Oz.?

Comments by Study Group Leader: (2) I have occasionally detected the scent of this fern, but only after it has dried for a day or two in a plant press; the smell can be then quite strong; (4) this fern is still unidentified; it is in common cultivation in Brisbane, sold by nurseries and propagators (e.g. by Heatons Wholesale Ferns) and has a very distinctive rhizome with greenish-white colour and very fine almost hair-pointed dark scales; the scales are very different to those of any Australian or New Zealand *Microsorum* species.

Forest Island Track, Royal National Park, Saturday 15 May

Peter Hind

We have walked this track on several occasions, but this time we decided to take the side trail that crosses and follows Bola Creek. After walking upstream for about an hour we met a National Parks Ranger leading tourists from the opposite direction. She advised us that it was quite steep to regain the road further on. Armed with this knowledge we decided to walk on for about another 30 minutes along the creek flat in the rainforest and then turn around to go back the way we came in.

Ellen Mey wrote the following list of ferns seen on this walk:

Adiantum aethiopicum, A. formosum, Asplenium australasicum, A. flabellifolium, Blechnum cartilagineum, B. patersonii, Calochlaena dubia, Cheilanthes sieberi, Cyathea australis, Doodia aspera, Lastreopsis decomposita, Pellaea falcata, Polystichum australiense, Pteris tremula, Pyrrosia rupestris, Sticherus flabellatus, Todea barbara.

Visit to Ann & Geoffrey Long's place

- 17 July 2010.

Peter Hind

Five of us turned up from the Sydney district plus Dwayne, Kylie and son from the south coast. All met at the Long's from about 9.30 am. Richard Scarborough, a local resident, also attended, showing us his work on a local swamp. He showed us his camera & microscope setup for taking excellent pictures of pollen & spores found in his core samples. Richard accompanied us on the walk through the rainforest.

The most surprising discovery was the lack of tree ferns (*Cyathea australis* is common along nearby). A lone *Dicksonia antarctica* was the only one seen on this walk through an otherwise very rich subtropical rainforest.

Below is the list of ferns on the property compiled by Ann & Geoffrey with our assistance on previous visits plus their further observations.

Adiantum formosum, Arthropteris tenella, A. beckleri, Asplenium australasicum, A. flabellifolium, Blechnum cartilagineum, B. nudum, B. patersonii, Calochlaena dubia, Davallia solida var pyxidata, Dicksonia antarctica, Doodia aspera, Gleichenia dicarpa, Hypolepis muelleri, Lastreopsis acuminata, L. decomposita, L. microsora, Microsorum scandens, Pellaea falcata, Pteridium esculentum, Pteris comans, P. umbrosa, Pyrrosia rupestris.

Our thanks go to Ann & Geoffrey Long for allowing us to share in their Rainforest Experience again.

South-east Queensland Meeting Reports

Mt Glorious, 7th March, 2010

fern list from Noreen Baxter

The day dawned rather wet and our leader attempted to cancel the excursion. However, 6 members failed to get the message and met at Maiala Picnic Area at Mt Glorious. In fact, the rain largely held off while we walked along the track on the western side of the ridge at Mt Glorious, starting from the Joyner's Ridge Road access point.

Ferns recorded: Adiantum atroviride, A. diaphanum, A. formosum, A. hispidulum, Arachniodes aristata, Arthropteris tenella, Asplenium australasicum, Christella dentata, Cyathea australis, C. leichhardtiana, Diplazium sp., Doodia aspera, Lastreopsis decomposita, L. marginans, L. munita, Microsorum scandens, Pellaea nana, Platycerium superbum, Pteris umbrosa, Pyrrosia confluens, P. rupestris.

June 2010 meeting, Macgregor State High School

Claire Shackel

Due to house renovations, the June meeting was transferred to the Macgregor High School horticulture complex. This gave members a chance to see where many of my ferns are grown to a saleable size. There were a number of ferns for Peter to identify that had grown from spore and were not what they were supposed to be, but were not the usual contaminants - *Cyathea cooperi*, *Christella* species and the exotic *Polypodium* and *Cyrtomium*. The large vigorous ferns were identified as *Pteris tripartita* and *Hypolepis tenuifolia* or *H. glandulifera* while others were possibly *Microlepia*.

Due to some incorrect naming of ferns, there was an array of *Thelypteridaceae* to discuss. *Amphineuron* opulentum and *A. terminans* were separated. Others tabled were *Ampelopteris prolifera*, *Pronephrium asperum*, *Thelypteris confluens*, *Christella dentata* and *C. parasitica*.

My method of spore collection and planting technique was demonstrated and trays of prothalli and sporelings were viewed by members. These included sporelings from fertile natural cultivars of *Drynaria rigidula* collected by Rod Pattison. These are very slow growing and will take years to reach maturity. The members were given sporelings of *Angiopteris evecta*, *Coveniella poecilophlebia* and *Dicksonia youngiae* to take home.

Coffs Harbour, May Long weekend 2010

Claire Shacke

Thirteen Queensland based members of the Fern Study Group met at the Windmill Motel in Coffs Harbour on Friday night of the (Queensland) May long weekend. Some members went out for a good fish meal while the rest of the group dined at the Motel. The motel restaurant was in a full scale model of a Dutch Windmill and, after an enjoyable meal, members climbed the spiral stairs to the top floor that contained Dutch memorabilia and photographs of the windmill being built.

On Saturday, we were joined by local member, Bill Bright, and piled into four 4-wheel drives and headed for the Bindarri National Park. This is between the coast and the highland of the Dorrigo plateau. Our first walk was to Bangalore Falls where 29 ferns were seen. The walk was through rainforest. The falls were an attractive sight but were not host to the ferns usually associated with waterfalls as the atmosphere was dry, due to the falls being open to the North.

It was decided to try the 4-wheel drive road down Urumbilum Creek. The road was closed due to the serious undermining of a culvert so the party went for a walk to see the falls, which were supposed to be only 500m up the road. After a pleasant 2km walk up a gentle incline five more ferns were added to the list but no waterfall was found.

The third walk for the day was at the Bindarray picnic area where *Arachniodes aristata* and *Lastreopsis acuminata* were seen for the first time. This picnic area was reached by another 4-wheel drive road, called Pine Road, that was very steep with rough tight water diversion humps every few meters.

On Sunday we were also joined by Steve Clemesha for our trip to Dorrigo. The drive was up, up, up onto the Dorrigo Plateau and along to the Dorrigo Rainforest Centre. This is a very nicely set up area with a canopy walk and bitumen walking tracks. *Dicksonia antarctica* were used extensively in the surrounding gardens. It was all downhill to Crystal Shower Falls. The fern list was expanded considerably as it was a much wetter rainforest than that visited on Saturday. *Diplazium* species were a feature of the walk and were present all the way down the mountain side. It had been hoped to do a round trip but, as part of the track was closed, we had to retrace our steps back up the mountain.

After lunch the party visited the Never Never picnic area. The track chosen was through more open Eucalypt forest and the fern list was small but seeing a lyrebird scratching in the undergrowth made up for that.

On Monday everyone went their own way but a number paid a visit to the Coffs Harbour Botanic Gardens before departing for home. The gardens are very well planned and feature Australian native plants.

- A. Bindarri National Park—Bangalore Falls
- B. Bindarri National Park—Urumbilum Creek
- C. Bindarri National Park—Bindarray Picnic Area
- D. Dorrigo Rainforest Centre—Crystal Falls track
- E Dorrigo NP—Never Never Picnic Area—Casuarina Falls Track

FERN NAMES	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	FERN NAMES	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Adiantum diaphanum				X		Doodia caudata				X	
Adiantum formosum		X		X		Doodia hybrid				X	
Adiantum hispidulum	X	X	\mathbf{X}	X		Gleichenia dicarpa	X	X			
Adiantum silvaticum	X	X			X	Histiopteris incisa	X	X			
Arachniodes aristata			\mathbf{X}			Hypolepis glandulifera			\mathbf{X}	\mathbf{X}	
Arthropteris beckleri	X			X		Hypolepis muelleri		X	X	X	
Arthropteris tenella	X			X		Lastreopsis acuminata			X	X	
Asplenium australasicum	X		\mathbf{X}	X	X	Lastreopsis microsora	X	X		X	X
Asplenium flabellifolium	X			X		Lastreopsis munita				X	
Asplenium polyodon	X			X		Lastreopsis smithiana	X				
Blechnum cartilagineum	X	X	\mathbf{X}	X	X	Lindsaea microphylla		X			
Blechnum nudum	X	X	\mathbf{X}			Lycopodiella cernua	X				
Blechnum patersonii	X	X	\mathbf{X}	X	X	Microsorum scandens	X			X	\mathbf{X}
Blechnum wattsii	X	X			X	Pellaea nana	X			X	
Calochlaena dubia	X	X	\mathbf{X}		X	Pellaea paradoxa				X	
Cephalomanes caudatum		X			X	Platycerium bifurcatum	X	X	X	X	X
Christella dentata			\mathbf{X}	X		Platycerium superbum				X	
Cyathea australis	X	X	\mathbf{X}			Pteridium esculentum			X		
Cyathea leichhardtiana	X	X	\mathbf{X}	X	X	Pteris tremula				X	
Davallia pyxidata	X	X		X		Pteris umbrosa				X	
Dennstaedtia davallioides				X		Pyrrosia confluens				X	
Deparia petersenii subsp.						Pyrrosia rupestris				X	
congrua	X		X	X		Sticherus flabellatus	X	X	X		
Dicksonia antarctica				X		Sticherus lobatus	X	X			X
Dictymia brownii	X			X	X	Todea barbara		X			
Diplazium assimile				X		Vittaria elongata				X	
Diplazium australe				X							
Doodia aspera	X			X							

Delicia Ck – Mapleton Falls, Sunday 4th July, 2010

Merle Gynther

Ferns seen along a section of the Great Walk within and between Delicia Road Conservation Park and Mapleton Falls National Park, NW and W of Mapleton.

Adiantum formosum, A. hispidulum, A. silvaticum, Asplenium australasicum, Belvisia mucronata, Blechnum cartilagineum, B. indicum, B. camfieldii?, B. wattsii, Calochlaena dubia, Christella dentata, Cyathea australis, C. leichhardtiana, Cyclosorus interruptus, Davallia pyxidata, Doodia aspera, Hypolepis muelleri, Platycerium bifurcatum, Pteridium esculentum, Pteris tremula, Sticherus flabellatus, S. lobatus.

Meeting at Baxter's Residence,

Sunday 1st August 2010

Peter Bostock

This meeting was devoted to a study of Hymenophyllaceae, the filmy ferns. Due to a conspicuous lack of cultivated plants (even Wendy Johnston's long-lived *Crepidomanes saxifragoides* seemed to be lost), the discussion centred around a display of filmy fern images, catalogued and displayed from within a computer program called *IMatch*. Ray Baxter provided a projector to which was connected my laptop.

It is not surprising, perhaps, how few of the Australian filmy ferns have been photographed—the meeting saw a good representation of southern ferns, but very few of those from the Wet Tropics of Queensland. Indeed, there are a few that have only been seen once (*Hymenophyllum whitei* and *H. eboracense* are among these). The meeting also discussed the most recent taxonomic revision of the filmy ferns, which has resulted in a change to certain generic names. This revision is not yet universally accepted, but I am happy that the marriage of DNA and traditional morphology and taxonomy has been successful. Queensland Herbarium will be adopting the revised classification (see Newsletter #111, June 2006 for full reference).

Other Articles

Growing Ferns in Coconut Husk Chips

Steve Clemesha

I also grow orchids. For 30 or more years, pine bark was used as a principal potting medium. It has now become scarce and expensive, the quality has gone off and it appears to be on its way out.

Coconut husk chips are being promoted as a replacement for pine bark. They are cheaper and last longer. They hold more water but are well aerated, so I decided to try *Blechnum ambiguum* in them. I had never been able to grow this fern and it always declined and died.

The plant in coconut chips is growing well and is slowly increasing in size. I then decided to try *Blechnum* patersonii and *Lastreopsis acuminata* in them as these are two other ferns I have never been able to grow. The result was the same. They are growing well in this medium.

Coconut husk chips can be bought from large orchid nurseries and are worth trying for any fern you are having trouble growing.

I am trying other difficult-to-grow ferns in this medium but it is too early to be sure of the results yet.

Monga National Park

Dorothy Taylor

If you are looking for something to do on a weekend, I'd like to suggest that you take a trip down the South Coast of NSW to Bateman's Bay, turn right at the big roundabout and head towards Braidwood. Just over the top of the Clyde, about 35 km along there is a turn off to the left called River Forest Road. Take this in for approximately 2km. You are entering Monga National Park. Here you will see a feast of ferns:- *Dicksonia antarctica*, *Cyathea australis*, *Blechnum cartilagineum*, *Blechnum wattsii*, *Sticherus flabellatus* and *lobatus*, *Polystichum australiense*, *Histiopteris incisa*, *Rumohra adiantiformis* and *Hymenophyllum* species. There are many more to be observed.

If you've ventured far enough you will find a boarded walkway, given the name of Penance Grove, where you'll see a forest of *Dicksonia antarctica* and the devastation that people have wrought helping themselves to the many plants there. Skyward above these sights are forests of *Eucryphia moorei* – plumwood. Stand still and listen to the bees humming in these trees.

Make it a round trip back through Braidwood and Goulburn. In Goulburn near to McDonalds there is an excellent bakery.

If returning via the Princes Highway, ten minutes south of Batemans's Bay there is a nursery at the historic town of Mogo (turn left off the Princes Highway) that has some unusual ferns for sale.

Marsilea in France Michel Boudrie

Peter Bostock received the following communication of interest from Michel Boudrie in France.

"I contact you today because a friend of us, H. Michaud, has recently found a population of a *Marsilea* in South-Eastern France (see images attached) which is obviously an exotic (introduced) species as it does not correspond with any of our known European species (*M. quadrifolia, M. strigosa* and *M. batardae*). According to the Flora of Australia and what we have found on Internet, it would rather fit with the Australian *Marsilea drummondii*, which is a species used in aquaria. Would you please be kind enough to confirm our thoughts?"





Peter has confirmed that the photos are indeed of M. drummondii.

Spore List July 2010

Acrostichum speciosum 4/09 Amphineuron opulentum 4/10 Angiopteris evecta 11/09 Arachniodes aristata 5/10 Asplenium nidus 5/08 Asplenium nidus cultivar 5/08 Asplenium milnei 5/10

Blechnum ambiguum 1/08 Blechnum gregsonii 4/09 Blechnum wattsii 12/08 Chingia australis 6/10 Christella hispidula /09

Christella parasitica 4/09 Christella subpubescens12/08

Cyathea australis 6/10 Cyathea baileyana 12/08 Cyathea cooperi 1/09

Cyathea cooperi smooth stipe Mt Lewis 11/09

Cyathea cooperi (blue stipe) 1/07 Cyathea cooperi 'Brentwood' 3/08

Cyathea cunninghamii /07 Cyathea exilis 11/09 Cyathea felina 10/08 Cyathea robusta 2/10 Dicksonia antarctica 6/10 Diplazium australe 5/10 Diplazium assimile 6/09 Doodia australis 6/10 Hypolepis glandulifera 12/08 Lastreopsis acuminata 12/08 Lastreopsis decomposita 6/09 Lastreopsis marginans 1/07 Lastreopsis microsora 6/10 Macrothelypteris torresiana 6/10 Microsorum punctatum 1/09 Ophioglossum pendulum 7/08

Platycerium bifurcatum 'Hula Hands' 10/07

Platycerium bifurcatum 'Venosum' (Mt.Lewis) 10/07

Barry White

Platycerium superbum 4/08 Platycerium veitchii 10/07 Plesioneuron tuberculatus 12/08 Pneumatopteris sogerensis 12/08 Pneumatopteris costata 12/08 Polystichum australiense 5/10 Polystichum formosum 6/09 Polystichum proliferum 11/08

Pteris pacifica 6/10 Pteris umbrosa 6/10 Revwattsia fragile 4/10

Sphaerostephanos heterocarpus 7/08

Thank you to the following spore donors: Warren Simpson, Nada Sankowsky, Kylie Stocks, Wendy Johnston, Claire Shackel, Dot Camp and Crosby Chase.

Fern Study Group Financial Statement, July 1, 2009 to June 30, 2010

Dan Johnston, treasurer

ANPSA Fern Study Group Fees for 2010-2011

Dan Johnston, treasurer

The annual subscription to the Fern Study Group is \$5 for a single person or more than one person receiving a single copy of the Fern Group Newsletter.

If you get your newsletter by mail, the address label and an enclosed note will show your current paid-to date:

June 2009 Payment of \$10 is now due.

June 2010 Payment of \$5 for the coming year is now due.

June 2011 or later. You have already paid for the coming year.

We accept payments for up to 4 years in advance. i.e. \$20 if you are currently up to date to June 2010.

If you receive your newsletter by email, you will be advised in the body of the email of your paid-to date.

Methods of payment:

- In person at a Queensland group meeting.
- By cheque or money order posted to me: Dan Johnston.

• By electronic bank transfer. You can transfer into our account