

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

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Please note: Subscriptions for 2015–2016 are due soon (see back page and attachments).

Program for South-east Queensland Region

Peter Bostock/Dan Johnston

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*.

Sunday 2nd August, 2015. Meet at 9:30am at Claire Shackel's place,
Subject: advances in classification of pteridophytes (true ferns) and lycophytes (tassel ferns and relatives).

Sunday, 6th September, 2015. Excursion to Karawatha Forest Park. Meet 9:30 am at the NE entrance off Acacia Street, via Compton Road. Karawatha. A useful map of the park showing the numerous tracks is available from the Karawatha Forest Protection Society Inc. at <http://www.karawatha.com/map.htm>.

Sunday, 4th October, 2015. Excursion to The Saddleback, also known as Mt Elimbah, which is one of the southernmost Glasshouse Mountains, but at c. 109 metres altitude at the summit, one of the lowest! The small section of Glasshouse Mountains National Park containing The Saddleback is c. 6.6 km N Old Gympie Road/D'Aguilar Highway intersection just N of Caboolture. We will meet at 9:30am near the locked National Park gates just south of Six Mile Creek on Old Gympie Road. In the Brisbane UBD street directory (main section, not Sunshine Coast), it is at F7 on map 37.

Best approach is probably via **M1** (Bruce Highway) heading onto the **D'Aguilar Highway** rather than the more southerly Caboolture and Bribie Island destinations at the combined exit near Caboolture. Take Pumicestone Road exit (the first, after about 2km) from D'Aguilar Highway, veering southbound (left). Then two sets of traffic lights are encountered. Turn right (north) at the first, then straight through the second set onto Old Gympie Rd. About 6km later, the road curves to the right and we need to turn left to stay on Old Gympie Rd. The meeting place is on the right about 1.2km from this corner.

Sunday, 1st November, 2015. Excursion to Mt Mee. Meet at 9:30 am near the old sawmill at the Gantry picnic area.

Sunday, 6th December, 2015. Meet at 9:30 am at Rod Pattison's residence,
. Plant swap and Christmas party and view Rod's garden!

Sunday, 7th February, 2016. Meet at 9:30 am at Sue Dowrie's residence,
Topic to be decided, although the usual planning for 2016 excursions is on the agenda!

Program for the Sydney Region

Peter Hind

Saturday 18 July. Appletree Bay via Bobbin Head. Meet about 10:30am for an 11am start. The start of the walk is at the Apple Tree Bay Picnic area (via Bobbin Head). Apple Tree Bay, in Ku-Ring-Gai Chase National Park, has a popular boat ramp for accessing Cowan Creek and plenty of parking. The area has a kiosk, electric BBQ's, picnic benches, toilets, drinking water, garbage facilities, and shade provided by trees. We plan to walk up Cowan Creek, perhaps to the Boatshed site or further, deciding at the time, and return via the same track. There is an entry (parking) fee at the entrance to Kuringai Chase National Park. Please phone Peter Hind on 96258705 to register your interest or apologies. The walk will be cancelled if there are no takers.

Saturday 15 August. Meet about 10:30am at the fernery in the Royal Botanic Gardens, Sydney. Bring picnic lunch if you wish and it's best to use public transport. Martin Place and St James are the nearest Railway stations. I will be leading us around the fern collection. Contact me, Peter Hind,

Saturday 19 September. Walk from Evans Lookout to Neate's Glen via the Grand Canyon. Meet at Evans Lookout about 10:30am for an 11am start of the walk. Evans Lookout Road starts on the right hand side of The Great Western Highway about 1.7 km before the traffic lights in Blackheath, when approaching from Katoomba. We plan to descend via a well made track about 200 m. to the canyon floor (it's actually only a small ferny creek). About halfway, near Beauchamp Falls there is a view into the Grose Valley, a good spot for a rest maybe before the ascent to Neate's Glen a moderate distance back from Evans Lookout by road. We can either walk back to our cars or perhaps arrange to park one of them at the Neate's Glen parking area. Perhaps carry lunch or eat back at the cars. As with all bushwalks wear sensible footwear and clothing. Check the weather forecast as it can be cold at this altitude. Please phone Peter Hind on 96258705 to register your interest or apologies. The walk will be cancelled if there are no takers.

Saturday 17 October. Meet at 11am at the home of Dot Camp, travel on the F3, take the Gosford exit and pass through Kariong, continue to the bottom of the hill to West Gosford. Turn **left** at the first set of traffic lights into **Manns Road**. Follow Manns Road and drive about 3k through the industrial area and then up a slight hill to traffic lights, turn **right here** into **Maliwa Road** and **right** again beside No. 7 Maliwa Road into an unnamed private road. If lost, phone . Please ring Dot on either of these numbers to give an idea of how many are coming. We will probably do a walk nearby? Check with Dot closer to the time.

Saturday 28 November. **Note this is the fourth Saturday!** Meet at Margaret and Peter Olde's Country Residence at 11 am. Ring Margaret on if lost on the way there.

Travel Instructions to the Olde's at Oakdale: Access via M5. Take Picton turn-off, drive approx. 10km to Picton. Turn left at Picton into Argyle St, then first right into Barkers Lodge Road. Drive on Barkers Lodge Road to Oakdale sign (17 km. Approx.).

No study, please bring a plate to share and as usual we will look around the fern collection and plantings.

December 2015 and January 2016 – No Meetings, - MERRY CHRISTMAS.

Saturday 20 February 2016. Meet from about 10:30am for 11am start at the home of Peter and Margret Hind, . Study to be decided, plus some more forward planning? Phone

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

Expressions of interest, several days before any of the bushwalks should be given to whoever is leading the walk, by phone, email etc. If no positive indications are received, at least two days, where possible, before the event by the walk leader, the event will be cancelled.

Of course if the weather is bad or there is any possibility of danger, such as bushfire please do not turn up. If personal events change your plans, please let the leader know or send apologies via someone who is planning to go, so that we don't wait for you.

All outings are subject to weather conditions being favourable.

Fern Study in North Queensland

Nada Sankowsky

Several years ago some of the ladies of the SGAP Tablelands Branch were bemoaning the fact that they could not identify ferns on our excursions. They approached me with the suggestion of holding some fern study sessions if I was agreeable. Their idea was to be able to recognize ferns on our outings - not to go into esoteric botanical depth. Thus our Fern Study days began.

In the early years the sessions were held rather erratically but eventually the ladies realised that they needed to have more regular sessions if they were to forge ahead more successfully. It was decided to make the third Monday of every month from February to November a set date. We start at 9.30 a.m. and work through until morning tea using Andrews' *Ferns of Queensland* as our reference. The ladies take notes of characteristics and hints from my observations as well as annotating their reference (Andrews) with local distribution notes. Morning tea is a bit like a party.

Afterwards we go for a walk around the fern areas of my garden. This is the highlight for the ladies as they can put their knowledge to use.

We direct our attention to North Queensland ferns and commonly seen local ones in particular. Although very modest about their achievements, the ladies are now much more confidently suggesting names for the ferns we encounter in the environment.

A hand lens ($\times 10$) is used for close study of venation - necessary to differentiate between *Lindsaea brachypoda* and *L. obtusa*, for example, or inspection of sori, hairs and scales.

Often, our last session for the year (in November) involves a drive to one of our fern rich National Parks where we stroll along identifying the ferns festooning the road cuttings.

The picture below shows the group some years ago - the dynamics have changed a little as some have moved away and a couple of new ladies have joined. The group leader was up the road somewhere looking at other ferns. The fern in the background is the Giant Scrambling Fern - *Diplazium longissimum*.



Sydney Area Meeting Report

Jack Evans Track and Erskine Creek, Glenbrook, 21 March 2015 *Peter Hind*

Horst, Alan and myself started the walk, after a cuppa at the Oaks Picnic area and waiting till about 11 am in case anyone else turned up on this rather overcast day. The three of us enjoyed the reasonably easy trek down the well maintained track to the creek. *Adiantum atroviride* was seen on shaly areas at the base of large sandstone rocks. It was somewhat of an endurance test walking up the creek, due to the frequent disappearances of "the track", mostly caused by flood debris from the creek. It was further complicated by fairly persistent but relatively light showers, making the vegetation and us rather wet. The views of the creek were good. Most of the ferns seen were quite plentiful, particularly *Adiantum aethiopicum* in the riparian sands but the number of species seen was surprisingly low. No epiphytic ones were seen and only one specimen 3-4 m. tall of *Cyathea australis* was seen. We gave up after about one and a half hours walk upstream. I know *Asplenium aethiopicum* is up there in a side gully. But we didn't go quite far enough. The decision was made at about 2.30 pm to go back before we ran out of daylight or become much wetter. The rain eased on the way back. We did meet other walkers in the area, most of them going down to the creek and back. It took us only one hour to get back to the cars, from where we left the creek, all uphill. It was a good bushwalk but unfortunately not very ferny.

Following is a list of ferns sighted on this trek.

Lindsaea microphylla, *Pteridium esculentum*, *Cheilanthes sieberi* subsp. *sieberi*, *Cheilanthes austrotenuifolia*, *Asplenium flabellifolium*, *Doodia aspera*, *Adiantum atroviride*, *Adiantum aethiopicum*, *Pellaea falcata*, *Calochlaena dubia*, *Sticherus flabellatus* var. *flabellatus*, *Todea Barbara*, *Blechnum cartilagineum*, *Cyathea australis*.

South-East Queensland Meeting Report

Queen Mary Falls, 1st March 2015

Peter Bostock & Ray Baxter

A small group of S.E. Qld members attended this excursion, just short of 9 years since we last visited the falls. This time the falls were flush with water (excuse the pun), which was good for the ferns, but limited the places we could investigate above and below the falls, due to the high water level above, and extensive mist and slippery rocks below the falls. As a result this current list does not include quite as many ferns as the earlier one.

Checklist

Adiantum atroviride
Adiantum hispidulum var. *hispidulum*
Arthropteris tenella
Asplenium australasicum
Asplenium flabellifolium
Blechnum cartilagineum
Blechnum patersonii
Calochlaena dubia
Cheilanthes distans
Deparia petersenii subsp. *congrua*
Dicksonia antarctica
Dictymia brownii
Diplazium assimile
Doodia aspera
Doodia australis
Doodia caudata
Hypolepis glandulifera
Hypolepis muelleri

Lastreopsis decomposita
Lastreopsis microsora
Lastreopsis smithiana
Microsorium scandens
Pellaea nana
Pellaea paradoxa (normal form)
Pellaea paradoxa (cultivar, see photo next page)
Polystichum fallax
Pteridium esculentum
Pteris tremula
Pteris umbrosa
Pyrrosia confluens
Pyrrosia rupestris

Not recorded this trip: *Blechnum minus*,
Blechnum nudum



Unusual form of *Pellaea paradoxa*, photographed on the circuit track at Queen Mary Falls. Photo: Peter Bostock



Antrophyum austroqueenslandicum photographed *in situ* in northern New South Wales. Note the tiny immature plants above the dead leaf. Photo: Peter Bostock



Another small patch of *Antrophyum austroqueenslandicum* from the Tweed site. The largest fronds are only a few cm long. Photo: Peter Bostock

Other Articles

“Australian” *Adiantum* Cultivars

Peter Hind

Some of these are not necessarily of Australian origin; however they involve species that are native to Australia including Islands.

Adiantum aethiopicum cv. “**Foxtail**” of unknown Horticultural origin (ref. Goudey 1985).

A. aethiopicum cv. “**A**” discovered by Mrs Mary Frost of Wangaratta at the site of old gold mining camps near Beechworth, N.E. Victoria (ref. Goudey 1985).

A. aethiopicum cv. “**B**” origin unknown, suspected hybrid between *A. aethiopicum* and *A. raddianum* cv. “Fritz Luth”. This form is reputed to be sterile (ref. Goudey 1985).

A. aethiopicum “**Crested Form**” like the previous two is unnamed. Found in Tasmania, introduced into cultivation by Mrs Lorna Monson of Stanley, Tasmania (ref. Goudey 1985).

Adiantum atroviride cv. “**Variegatum**” collected 20 April 1884 at Bundaberg, Qld by I. H. Burkill (ref. Fl. Austr. Vol. 48, 1998). A plant of this was presented at the meeting, grown by our hosts Tamara and Ian. With a lot of searching, “nodosities” were seen at some of the secondary stipe junctions. They were dark, hardly discernible from the black of the stipes. The more consistent character was of *A. atroviride* not producing the myriad of stolons that are distinctive of *A. aethiopicum* (*A. diaphanum* also produces root stolons prolifically). The plant presented consisted of a couple of sparingly branching tufts. The Variegation was not all that spectacular.

Adiantum capillus-veneris extends from Europe to Africa, India, China, Japan and east through the Pacific Islands and North and South America and south to Australia where it occurs sporadically as far south as the Mornington Peninsula in Victoria and near Renmark in South Australia. Seven Cultivars

are described in “Maidenhair Ferns in Cultivation” by Christopher J. Goudey published 1985. One of these is recognised as a botanical variety. These seven are listed below. Most of these originated from the Northern Hemisphere. Most, if not all, prefer alkaline conditions. A search of northern hemisphere literature would reveal many more cultivars.

A. capillus-veneris var. *incisum* collected in the wild several times in Ireland and England. Propagates true from spore.

A. capillus-veneris cv. “*Banksianum*” Propagates true from spore and is easily divided. The most commonly grown cultivar of this species in cool temperate parts of Australia.

A. capillus-veneris cv. “*Fimbriatum*” Propagates true from the very little spore it produces.

A. capillus-veneris cv. “*Imbricatum*” Propagates true from spores; cv. “Hardy Farley” and cv. “Cornie Bensii” are slight variations of this cultivar according to Goudey *loc. cit.*

A. capillus-veneris cv. “*Mairisii*” Propagates true from spore. Originated at the nursery of Mairis and Co., England in the 1880`s. Reported in early literature as a hybrid between *A. capillus-veneris* and *A. cuneatum*.

Growing old with the ferns

Ron Wilkins

On the carry bag I got from Green Apple Books, San Francisco, is the slogan ‘So many books – So little time’. This encapsulates the major problem of my life. So this year, in a perpetual state of exhaustion from pressing scientific and literary activities, I realized I could gain useful hours by not tending, including watering, the garden, which is established on a large suburban block covered with remnant original turpentine forest. I am away from home for slabs of time each year during which the garden is not tended anyway. For most of the year the shaly soil and leaf litter is very dry and not what you would call a perfect site for ferns. Recently, after heavy rain and a flush of autumnal growth, I decided to review the damage. Overall, the garden has survived the experiment. True, there are gaps like rotten teeth - three *Dicksonia antarctica*, an *Angiopteris evecta*, a *Platycerium hillii* and a *Cyathea cooperi* are all dead as dodos. What were nice patches of *Polystichum fallax* and *Histiopteris incisa* have gone to fern heaven, as well as some smaller ferns like *Lastreopsis hispida*, assorted *Adiantums* and *Blechnums*. But a few specimens I thought were long dead have plumped up and are throwing out new fronds.

Some species have survived but look unwell. My *Platycerium superbum* is anything but superb. But many of the other ferns including *P. bifurcatum* seem irrepressible. Several *Doodias*, *Pellaea falcata*, *Lastreopsis microsora* and *L. decomposita*, the fragrant and kangaroo *Microsorums*, *Polystichum australiense*, *Colysis ampla*, *Pteris umbrosa* and the florist variety of *Rumohra adiantiformis* are all aggressively seeking new space, of which, fortunately, there is plenty. *Calochlaena dubia* and *Nephrolepis cordifolia* happily patrol the dry and sunny outposts of the garden. And the *Dennstaedtia davallioides* established at the entry of the block, has suddenly and prolifically expanded its domain into the back garden some 50 metres away - without my knowing intervention. I’m pleased because it is one of my favourite ferns and it is smothering the *Hypolepis muelleri* that formerly blighted this area. At least another 20 species are hanging on and will probably survive in a much simplified garden. Pulling weeds is not good for old backs and the native violet I formerly kept under strict control, has spread like oil on water. But I am training myself to like it. There will be weeds growing on my grave so I’d better get used to them.

No watering has had one great advantage. Brush turkeys ravage the garden on a daily basis and seek out the moist patches. The surrounds of the small and delicate ferns, unwatered, are no longer their favourite places to scratch. I’ll continue with no watering and see what happens. If gaps appear, replanting once a year would be the quickest and easiest solution. The delicate species will have to make do with moist feet in the shadehouse where they constantly dare me to let them free-range in the garden. Next year an El Niño event is predicted. That will test my experiment as it proceeds.

One thing that always amazes me is the longevity of ferns. Always busy adding new bits and increasing their stature and dispersal area. Many in my garden will certainly long outlive me, given a sympathetic following occupant. Those ferns that survive my new dispensation, that is...

In the garden of the hostel I pass from time to time, where there are always people sitting around and not gardening, a plaque reads ‘A garden is a thing of beauty and a job forever’. We will see.

The following press release from the Nature Conservation Trust NSW is reproduced with their permission.

Presumed Extinct Plant Species Rediscovered in the Border Ranges Biodiversity Hotspot Region of NSW

29/03/2015

It's not every day you discover a plant that is presumed extinct. Lui Weber is a field botanist who received his Honours degree for his thesis on Plant Endemism, Climatic Refugia and Climate Change in Rainforests of Subtropical Australia from the University of Queensland in 2011.



Antrophyum austroqueenslandicum discovered within a monitoring plot during the 5 year vegetation survey of a private conservation property in the Tweed. Image: Lui Weber

“I am in new awe of the well known yet still underrated biodiversity of the Border Ranges even after looking at it for my whole life”, Weber explains.

Joining a recent routine NCT vegetation monitoring survey of the NCT covenanted property, Weber was not long into the survey when he saw what looked to be a fern that had been presumed extinct. “I had feared I would never see a living Border Ranges lined fern (*Antrophyum austroqueenslandicum*), but I had hoped that at least one population survived somewhere in the Border Ranges Biodiversity Hotspot with its multitude of varied altitudes, microclimates and geology that has served as a refugia for an immense variety of plants animals and fungi for at least the past 20 million years”, Weber enthused.

This fern had been discovered in southern Queensland in the 1980s, but was only known from a few individuals at one location. At least two plants were collected at the time to confirm its identity as a new species. Subsequent surveys a few years later failed to find any record of the fern and it was listed by the State of Queensland as ‘presumed extinct’.

The identity of this most recent discovery was confirmed by botanist Peter Bostock by comparing a sample of the plants with the original ‘type’ collection made in 1983, which is stored at Queensland Herbarium. Peter, formerly Curator of Ferns at Queensland Herbarium, retired recently and now volunteers at that organisation as an Honorary Research Associate.

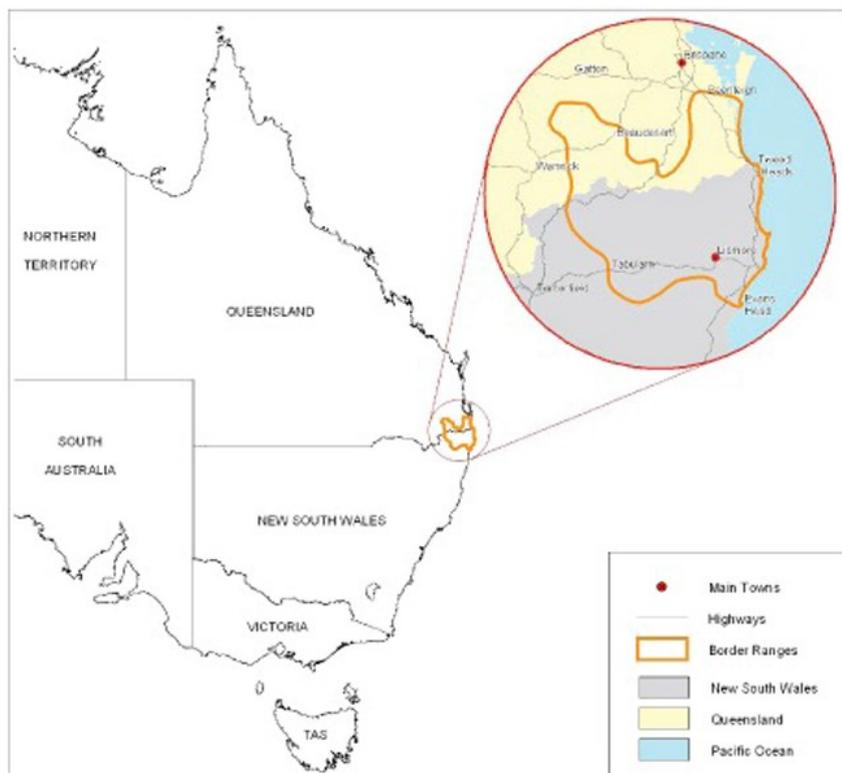
The discovery by Weber, along with NCT staff and the landholder whose property they were surveying, has led to great excitement and hope for the improving health of the biodiversity in the region.

“The Border Ranges fern and club-moss flora is remarkable. We have an endemic club-moss (*Selaginella andrewsii*) in the lowland rainforest understorey and the Border Ranges lined and rock tassel ferns (*Huperzia varia*) on boulders. New endemic species keep being discovered like the Rasp fern *Doodia hindii* and the ground orchid *Acianthus saxatilis*, along with herbs such as the Large Cliff Bluebell we recently found on Mt Merino and the hairy Rhyolite Cliff Violet. Not to forget the humble but delicately beautiful *Acalypha* species ‘Big Scrub’”, Weber outlines. “The highland and montane areas in national parks, while absolutely outstanding and world class are not enough to conserve the regions entire biodiversity on their own.” And he believes it is remarkable that the lowland biodiversity has survived all the past land uses. Private landholders, like the owner of the property where the fern has been re-discovered, are undertaking conservation and restoration works that are saving entire species like this fern.

The NCT landholder who, not unsurprisingly, would like to remain anonymous says "The discovery of the fern reinforces for me the value of private land conservation. To learn that a plant believed to be lost is alive and well in habitat somewhere on private land. It reminds me how worthwhile it was to have created the conservation area with the NCT”.

Don Arnold, North East Regional Manager from the Office of Environment and Heritage said “These kinds of events really highlight the importance of protecting biodiversity on private land. The covenant system provided by the Nature Conservation Trust supplements the formal conservation reserve network. Members of the community can play a hugely valuable role in protecting natural values by careful stewardship of their land.”

“The fern may well be eligible for listing under the NSW Threatened Species Conservation Act 1995, due to the restricted distribution and the very small number of individuals that have been found. Threatened species listing could facilitate further protection to the fern and support efforts to learn more about the species and how it might best be managed.”



Border Ranges location courtesy of the Border Ranges Alliance. For more information on the Border Ranges Alliance visit www.borderrangesalliance.org.au/quick-facts

To learn more about covenanting land or buying a covenanted property protecting our precious biodiversity, visit nct.org.au/supporting-land-owners/

For media enquiries please contact:

James Forbes, Marketing Manager, Nature Conservation Trust of NSW, james@nct.org.au or 0448 806 128.

**Draft Annual ANPSA Fern Study Group Financial Statement
July 1, 2014 to June 24, 2015**

*Dan Johnston,
Treasurer*

Initial balance	9819.70
Plus Membership fees	530.00
Term deposit interest	214.58
Donations	120.00
Subtotal	10684.28
Less Newsletter costs	170.45
Materials for Qld Flower Show display	252.84
Final balance	10260.99

\$9164.23 is held as a term deposit and the remaining \$1096.76 is in a Society Cheque Account, both with the Commonwealth Bank.

(This statement is a draft for the year as a few days remain, and it has not been audited.)

ANPSA Fern Study Group Fees for 2015-2016

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. Please note also that membership of an ANPSA affiliated body, such as SGAP (Qld Region) Inc., is a necessary prerequisite for study group membership.

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

- June 2013** Payment of \$15 is now due. Membership will be cancelled if payment is not received before the next newsletter goes out.
- June 2014** Payment of \$10 is now due.
- June 2015** Payment of \$5 for the 2015-2016 year is now due (on 1st July to be precise).
- June 2016** 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 2015. 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,

Please also include the completed form accompanying this newsletter.

Make cheques payable to 'ASGAP Fern Study Group'.

Some members have also been known to adopt the illegal practice of enclosing a \$5 note instead of a cheque. If you do this, please enclose it in an additional layer of paper to ensure that the note is not visible through the envelope.

- By electronic bank transfer or direct deposit. You can transfer or deposit into our account
Account name: ASGAP Fern Study Group
Account number (Commonwealth Bank): BSB: 064178, Account: 10230709.

Please give your name as the "To account description" (other banks may have different terminology). If you use the electronic bank transfer or direct deposit method, I suggest that you also send me an email at: dan.b.johnston@bigpond.com so that if I have any queries about the payment, I can contact you by return email. Please also include any relevant information – such as a change of address – that would normally appear on the subscription form.