



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

Newsletter Number 143

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NEWSLETTER EDITOR: Peter Bostock, contact as above.

Program for South-east Queensland Region

Peter Bostock

Sunday 7th July 2019. Excursion to Bryces Road/Joyners Ridge Road, Mt Glorious. Meet along roadside between Mt Glorious Cafe and lower entrance to Maiala (D'Aguilar NP) at 9:30 am. Entrance to the walk is via set of steps on the southern side of Mt Glorious Road (or walk around the locked gate!). We last attempted a visit to Bryces Rd in August 2017 but had to make alternate plans due to hazard reduction burns in the area. Leader's comment: this newsletter is a month late, as recipients will realise; this walk was quite successful, rain held off and a full report will be in the next newsletter.

Sunday 4th August 2019. Excursion to Witches Falls, Mt Tamborine. Meet at 9:30 am at the roadside parking area, on Main Western Road between Hartley Rd and West Rd. Witches Falls circuit is a steep walk, with Grade 3 difficulty (suitable for most ages and fitness levels; some bushwalking experience recommended; tracks may have short, steep hill sections, a rough surface and many steps). See the Qld Department of Environment and Science website at : <https://parks.des.qld.gov.au/parks/tamborine/about.html#witches> for further information.

No meeting or excursion in September, due to members commitments to the Spring Flower Show.

Sunday 6th October 2019. Meeting at Mt Coot-tha Botanic Gardens. Meet near the Cafe entrance to the Gardens, at the usual 9:30 am. No plans at this stage – we can decide where to explore, on the day!

Sunday 3th November 2019. Excursion to Tallanbana, Springbrook. Meet at the roadside parking area at 9:30 am. We will walk in anti-clockwise direction along the circuit track, which will take us past the rock face with *Hymenophyllum marginatum*, and we can detour to Rainbow Falls or try for Twin Falls, as time and energy permit.

Sunday 8th December 2019. Note change of date – second Sunday, not first. Christmas meeting at Bev & Bill Weir's residence, 151 Warriewood St, Chandler. We will have a 'round-robin' plant swap (so bring a plant to contribute if you can), plan excursions/meetings for early 2020, view the Weirs' garden and celebrate the year that was!

As usual, there will be no meeting in S.E. Qld in January 2020.

Program for the Sydney Region

Peter Hind

Saturday 20th July 2019. Meet from about 10.30 am at the home of Gayle and George Hardy, our newest members, at 19 Aranda Drive, Davidson (an apparently invisible house?). As usual bring a plate for morning or afternoon tea. Study of *Blechnum* re current (apparently accepted) classification including *Doodia*. If lost, phone 02 9453 9940.

Saturday 17th August 2019. Meet from about 10.30 am at the home of Natalie & John at 4 Laurel Street, Willoughby. We plan to study *Asplenium*, particularly species from Lord Howe Island and Norfolk Island plus NSW species. Enquires to Natalie & John 02 9958 8766.

Saturday 21st September 2019. Meet at 11am at the home of Dot Camp, 118 Manns Road, Narara. From Sydney, travel on the F3, take the Gosford exit & 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 & drive about 3k through the industrial area & then up a slight hill to traffic lights, turn **right here** into **Maliwa Road** & **right** again beside No. 7 Maliwa Road into an unnamed private road. If lost phone 02 4324 6077 or 0415 512 511 Please ring Dot on either number to give an idea of how many are coming. We will probably do a walk nearby? Check with Dot closer to time.

Saturday 19th October 2019. Meet from about 10.30 am for 11 am. start of the Circular Walk (Waterfall Walk) at Waterfall Creek Picnic area, Mt Wilson. Drive through Mt Wilson settlement to the T junction; turn right into the dead end road to the picnic area on your left. The relatively easy track does have steps into and out of the rainforest and is usually well maintained. Bring picnic lunch and thermos of hot drink and perhaps water as the tanks attached to the picnic sheds are not always reliable. Pit Toilets available. Phone Peter on 02 9625 8705 to register your intentions.

Saturday 16th November 2019. Meet from about 10.30 at Margaret and Peter Olde`s Suburban Residence at 138 Fowler Road, Illawong from 10.30 am. (1.3 km along Fowler Rd from the Illawong Village shops: 138 is on the right. Follow the right-of-way to the end and veer to the right). This is our end of year meeting. **No study**, please bring a plate to share. Ring Margaret on (mobile) 0432187025 if lost on the way there.

December 2019 and January 2020 – No Meetings - MERRY CHRISTMAS and HAPPY NEW YEAR

Saturday 15th February 2020. Meet from about 10.30 am for 11 am. Start at the home of Peter and Margret Hind, 41 Miller Street, Mt Druitt. Study to be decided plus some more forward planning? Phone 02 9625 8705. Please bring a plate to share for morning or afternoon tea.

Saturday 21st March 2020. Meet from about 10.30 am at the Wollongong Botanic Gardens. The gardens open at 7 am on weekends and entry is free. The Rainforest section is the area we plan to look at. If travelling from North or South take the F6 Freeway and take the Keiraville exit, then simply follow the signs to the Botanic Gardens. Car park available off Murphys Avenue not far from junction with Paulsgrove Street. Phone 02 9625 8705 to register. The Garden Grounds coffee van is open from 9am to 2pm every day at the Garden near the playground. In addition to coffees, they offer a range of fresh and toasted sandwiches and wraps, cakes, muffins, ice creams, milkshakes and a selection of cold drinks. See map at <http://www.wollongong.nsw.gov.au/botanicgarden/Documents/Murphys%20Ave%20Entrance%20Map.jpg>

Note: 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 by the walk leader at least two days, where possible, before the event, 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.

Excursion and General Reports

Mt Mee outing, March 2019

Claire Shackel

On a wet and foggy Sunday morning, two car loads of Fern Study Group members met at the Gantry, Mt. Mee, for morning tea. The road up was lined with *Calochlaena dubia* with occasional patches of *Sticherus* and *Gleichenia*. None of these ferns were seen later on in the areas of the park we subsequently visited. After morning tea, the party drove to the Bull Falls track entrance.

The weather was kind to us as we descended to the falls. Initially the track was through open forest/rainforest and ferns were very scarce. Only isolated plants of *Adiantum hispidulum*, *Lastreopsis microsora*, *Pellaea nana*, *Pyrrosia confluens* and *P. rupestris* were seen beside the track. As we descended and the moisture increased, *Platyserium bifurcatum*, *P. superbum*, and small *Asplenium*



Dictymia brownii, a lush clump on rocks near the falls.

australasicum appeared on the tree trunks. At the first Lookout, on a dry outcrop, *Drynaria rigidula* and *Pellaea paradoxa* were seen. Descending further to the Falls Lookout, a fern garden appeared. Rocks were covered with *Dictymia brownii* and *Pyrrosia*. Around the rocky banks were *Arachniodes aristata*, *Blechnum cartilagineum*, *Christella dentata*, *Davallia pyxidata*, *Lastreopsis margins* and more *Drynaria*.

After a dampish lunch, the Piccabeen Palm track was walked. As the name suggests, this was a moister area of rainforest (in fact, it rained quite a bit during the walk) and the following ferns were seen – *Adiantum formosum*, *Arachniodes aristata*, *Asplenium australasicum*, *Blechnum cartilagineum*, *Davallia pyxidata*, *Doodia aspera*, *Hypolepis muelleri*, *Lastreopsis marginans*, *L. microsora*, *Platynerium bifurcatum* and *P. superbum*.

The Palm track was also notable for its sneaky and persistent leeches, some of which managed to make it back to Brisbane!

Excursion to Natural Bridge, Numinbah Valley, Qld, May 2019

Claire Shackel

There was a good attendance for our excursion to Natural Bridge in the Numinbah Valley. Jeff and Karen Lynne from Port Macquarie came along, and some members and visitors from the Gold Coast also joined us.

The track takes a circuit around the cave and rock feature, going down one side of Cave Creek to below the rock formation and falls and returning by the other side. The area was moist rainforest and ferns were plentiful and showed a degree of variation. *Adiantum hispidulum* showed variation between *A. hispidulum* var. *hispidulum* and *A. hispidulum* var. *hypoglaucum* at different times during the walk. Another variable fern was *Doodia caudata* with examples of the very small type with a ground hugging rosette of sterile fronds, to the much larger more common form with more upright fronds.

Upon entering the track, *Asplenium australasicum*, *Lastreopsis marginans*, *Pellaea nana* and *Adiantum hispidulum* were quickly identified. As the track descended to the creek, *Asplenium attenuatum*, *Arthropteris tenella*, *Platynerium superbum*, *Doodia caudata*, *Lastreopsis munita* and *L. microsora* were added to the list. All the way, *Adiantum diaphanum* protruded from the track edge. As the moisture increased near the creek, *Arthropteris beckleri* and *Microsorium scandens* climbed the trees and scrambled over the rocks and *Asplenium polyodon* and *Davallia pyxidata* grew out of the base of *Asplenium australasicum*.



Crepidomanes saxifragoides, on a tree trunk.

In the creek bed, *Christella dentata* and *Nephrolepis cordifolia* were seen, and a dark patch of liverwort-like plants growing among mosses on a tree trunk was found to be the filmy fern *Crepidomanes saxifragoides* (dark green fronds in the photo at left). This fern was shrivelled, but showed, under magnification, that the sporangia were present and intact. As we climbed up towards the carpark, isolated plants of *Blechnum patersonii*, *Diplazium assimile* and *Pteris umbrosa* were seen. *Cyathea cooperi* and *C. leichhardtiana* grew in a small patch and *Pyrrosia rupestris* was seen on a fallen branch. Near the top of the falls, we encountered *Hypolepis glandulifera* and *Lastreopsis smithiana*, while *Ophioglossum pendulum* hung from a staghorn.



Ribbon fern, *Ophioglossum pendulum*, hanging from the base of a staghorn fern (*Platynerium superbum*).

The track returned to the other side of the valley and on a branch track to the top of the falls, *Dictymia brownii* festooned a tree and *Hypolepis rugosula* was seen on returning to the track entry. A very enjoyable day was had by all with lots of ferns to see and admire.

Note from Leader: Records from the Queensland Herbarium show that we might have missed a few species during our visit, although these may have been recorded during surveys from areas now off-limits to the public or from the larger area that comprises the Natural Bridge section of Springbrook National Park.



Doodia caudata, with broad fertile frond in the middle foreground

These additional records are: *Deparia petersenii* subsp. *congrua*, *Dicksonia youngiae*, *Lastreopsis decomposita*, *Psilotum nudum* and *Tmesipteris ovata* (probably on *Cyathea* or *Dicksonia* trunk). Of some interest, which we commented on during the walk, was the extreme length of fronds on some *Lastreopsis munita* plants. This is supported by a Qld Herbarium specimen, collected by David Jones in 1998, recording fronds up to 3.5 ft (about 106 cm) long, so this patch of *L. munita* seem to be on steroids!

Ferns recorded by FSG members along Natural Bridge track:

<i>Adiantum diaphanum</i>	<i>Diplazium assimile</i>
<i>Adiantum hispidulum</i> var. <i>hispidulum</i>	<i>Doodia caudata</i>
<i>Adiantum hispidulum</i> var. <i>hypoglaucum</i>	<i>Hypolepis glandulifera</i>
<i>Arthropteris beckleri</i>	<i>Hypolepis rugosula</i>
<i>Arthropteris tenella</i>	<i>Lastreopsis marginans</i>
<i>Asplenium polyodon</i>	<i>Lastreopsis microsora</i>
<i>Asplenium attenuatum</i>	<i>Lastreopsis munita</i>
<i>Asplenium australasicum</i>	<i>Lastreopsis smithiana</i>
<i>Blechnum patersonii</i>	<i>Microsorium scandens</i>
<i>Christella dentata</i>	<i>Nephrolepis cordifolia</i>
<i>Crepidomanes saxifragoides</i>	<i>Ophioglossum pendulum</i>
<i>Cyathea cooperi</i>	<i>Pellaea nana</i>
<i>Cyathea leichhardtiana</i>	<i>Platycterium superbum</i>
<i>Davallia pyxidata</i>	<i>Pteris umbrosa</i>
<i>Dictymia brownii</i>	<i>Pyrrosia rupestris</i>

Recent Fern Literature

Peter Bostock

Ohlsen, D.J., Perrie, L.R., Brownsey, P.J. & Bayly, M.J. (2019). A new combination for an Australian fern: *Hymenasplenium wildii* (Aspleniaceae). *Muelleria* 37: 19–22.

Until recently, the Australian species of *Hymenasplenium* (*H. excisum* and *H. unilaterale*) were treated as part of a broader *Asplenium*, despite the genus being proposed in 1927 by B. Hayata (*Botanical Magazine (Tokyo)* 41: 712). However, molecular phylogenetic analyses confirm that these species, together with the newly confirmed *Hymenasplenium wildii* (F.J.Bailey) D.J.Ohlsen, should be separated from *Asplenium*. The authors note that ‘this genus was initially distinguished by its differing rhizome anatomy (Hayata 1927) and later was found to have distinctive chromosome numbers within the family [Aspleniaceae]’.

Currently the Australian Plant Census places these species within *Asplenium*, but I expect that eventually this segregated genus will be accepted. *Hymenasplenium* species, according to the authors, can be distinguished in life by their thin, creeping rhizomes, pinnate fronds, thin membranous pinnae, and a preference for constantly wet and humid sites.



"Christella Pond", just above Bull Falls, Mt Mee in 2006 (left) compared to the same pond in 2019 (below). While the *Christella* clump has survived, the small patch of *Dictymia brownii* to the right of the pool has been replaced by *Peperomia*.



**ANPSA Fern Study Group
Financial Statement
1st July, 2018 to 30th June, 2019**

Initial balance	11,404.21
Plus Membership fees	340.00
Term deposit interest	215.01
Donations	65.00
Subtotal	12,024.22
Less Newsletter costs	93.72
Final Balance	11,930.50

\$11,000 is held as a term deposit; and \$930.50 is in the Society Cheque Account. Both bank accounts are with the Commonwealth Bank.

Fees paid in advance represent a financial liability.

Subscription Year	Number Received	Liability
2019-2020	34	\$170
2020-2021	17	\$85
2021-2022	6	\$30
2022-2023	1	\$5
Total		\$290

The accounts have yet to be audited.

ANPSA Fern Study Group Fees for 2019–2020

Dan Johnston, Treasurer

The annual subscription to the Fern Study Group is \$5 for per household receiving a single copy of the Fern Group Newsletter and is due on 1st July. Please note also that membership of an ANPSA affiliated body, such as Native Plants Queensland, is a necessary prerequisite for study group membership.

Newsletters are sent by email (colour images, Adobe Acrobat pdf file) or by post (B&W images).

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

June 2017 Payment of \$10 is overdue and a total of \$15 was due on 1st July. Membership will be cancelled if payment is not received before the next newsletter goes out.

June 2018 Payment of \$5 is overdue and a total of \$10 was due on 1st July.

June 2019 Payment of \$5 for the 2019–2020 year was due on 1st July.

June 2020 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 2019.

Methods of payment:

- In person at a Queensland group meeting.
- By cheque or money order posted to me:
Dan Johnston,
9 Ryhope St,
Buderim, Qld. 4556.

For new members, please provide contact details e.g. name, address, and optionally an email address and phone number(s) (see form below). Please indicate if you prefer to receive newsletters by email or post. Make cheques payable to 'Fern Study Group'.

- By electronic bank transfer or direct deposit. You can transfer or deposit into our account.

Account name: **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: **ANPSAferns@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.

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