

ASSOCIATION of

S.G.A.P. Fern Study Group

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SECRETARY: Moreen Woollett, 3 Currawang Place, Como West, 2226
TREASURER: Joan Moore, 2 Gannet Street, Gladesville, 2111
SPORE BANK:

Vale Dulcie Buddee

Early in the morning of 18 October 1995, Dulcie Buddee died of a massive brain haemorrhage. Dulcie had been rushed to Hospital on the previous evening suffering from elevated blood pressure. She suffered a cardiac arrest, underwent surgery but did not regain consciousness. Dulcie was only 47 years old.

Dulcie joined the Fern Study Group seven years ago. For the last three years Dulcie had been our Spore Bank Curator. Dulcie was the quintessential quiet achiever. She was ever ready to volunteer and undertake additional responsibilities and she did so cheerfully and without complaint. At the time of her death, in addition to the work performed for our Group, Dulcie was Secretary and Newsletter Editor of the SGAP-Parramatta & Hills Group, Secretary of the SGAP Exhibitions Committee and an office bearer for the Australian National Orchid Society. She worked as a bush regeneration officer.

Dulcie gave much to her fellow citizens and to the environment .. she is sadly missed.

Subscriptions are due

Its that time again - subscriptions to the Group are due to be paid in January (or in February - there's not much action during the holiday season) for 1996. Subscriptions are \$4 per year and provided that you are a member of SGAP that entitles you to attend Study Group outings or meetings, the quarterly Newsletter and gets you access to spore from the Fern Spore Bank simply by applying with a stamped addressed envelope.

If you are not a member of SGAP, then the \$4 subscription gives an entitlement to the Newsletter only. The Study Group Co-ordinator recently requested a list of all Study Group members so that their SGAP status could be checked. She reminded Leaders that non-SGAP members allowed to attend Study Group functions risks invalidating the ASGAP blanket insurance cover.

Subscriptions should be paid to the Treasurer, Miss Joan Moore, 2 Gannet Street, Gladesville, NSW, 2111. Payment early in 1996 will ease Joan's chore.

Pyrrosia confluens

Roy Duncan, indefatigable searcher, after ferns, brought in a rather longish frond of *Pyrrosia confluens* - see silhouette at the left of this page. It measures 34 cm long and has the distinctive confluent sori at the apex of the frond. Jones and Clemesha in "Australian Ferns and Fern Allies" (Reed) have this to say about *Pyrrosia confluens*.

Rhizome long creeping, much branched, clothed with dark-brown scales bordered with short teeth.; fronds up to 30 cm long, simple or occasionally bifurcate, hardly dimorphic; sterile fronds usually shorter than the fertile fronds; sori about 1.5 mm in diameter, usually restricted to the apex as a confluent horse-shaped brown patch, occasionally rounded or, rarely, rows of separated sori.

NOTES: A very common species growing principally in rainforest but also extending to rockfaces and trees in open forest, where it often grows on clumps of large epiphytes (such as orchids and elkhorns). In open sunny situations the fronds may become dwarfed, bleached and leathery, while in the shade they are long and dark green. In times of drought the fronds may curl and shrivel, but will swell again with rain. Plants from Lord Howe Island have thinner textured, paler fronds.

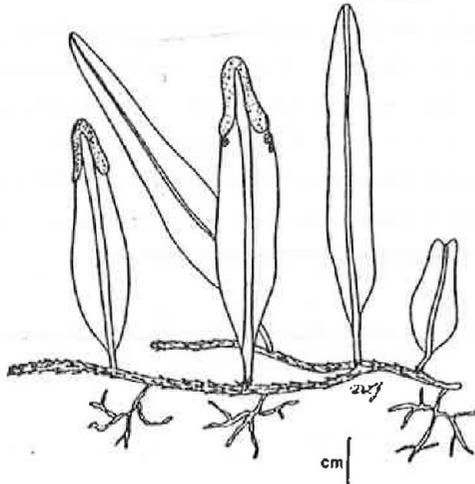
CONFUSING SPECIES *Pyrrosia lanceolata*.

DISTINGUISHING FEATURES The confluent mass of sori confined to the apex of fertile fronds.

DISTRIBUTION Northern Queensland to Northern N.S.W. (Hunter River), from sea level to over 1,000 m altitude; also in New Caledonia, Norfolk Island, Lord Howe Island.

CULTIVATION Extremely easy to grow and hardy in most situations; can be grown on a slab, pot or basket of coarse mixture.

At right *Pyrrosia confluens* sketch from "Australian Ferns and Fern Allies"

**"Ferns of Hawai'i"**

A book of the above title by Kathy Valier (University of Hawai'i Press) has just been released. Member Geoff Long said that he intends purchasing a copy and is willing to include other copies with his order, for those interested. The book includes descriptions of all the more common ferns and fern allies native to the Hawaiian Islands and is copiously illustrated with photos. This is a paper back edition advertised as costing US \$14.95 plus handling and postage - that is likely to mean about \$30 all up. Contact Geoff direct if you are interested, say by no later than 31 January 1996. Phone (02) 519 5536 or write to Dr G.Long, 23 Fowler Street, Camperdown, 2050.

HARVESTING FROM THE WILD

The attention of our Group has been drawn to three proposals to export ferns grown in their native habitat in Queensland. Apparently, this advice has arisen because existing approvals to export under the Wildlife Protection (Regulation of Exports and Imports) Act, 1982, are being extended beyond 31 December 1995. The existing approvals were expected to expire at that date with the implementation of the Queensland Department of Environment and Heritage comprehensive flora management plan for that State. Once approved the Queensland Legislation will supersede all current controlled specimens declarations. Subsequently, export permits will be issued only if the harvest has been carried out in accordance with the Queensland management plan. However introduction of the Queensland management plan has been delayed.

In our June 1995 Newsletter, reference was made to the harvesting of Dicksonia antarctica from the Otways in Victoria. That proposal was subsequently approved. The three proposals referred to above in Queensland are so similar that they apparently all emanate from the same person or organisation. All relate to the same area, the State Forests 589 and 611 and Toolara State Forest. Three fern species are to be collected, Sticherus flabellatus, Gleichenia dicarpa and Dicranopteris linearis. In respect of each of the three applications, it is said that,

" A common Fan Fern, found in large colonies in shaded damp places. Stems to 1 m with umbrella-like fronds.

It is proposed that only 30% of standing stems are to be harvested and it is intended to harvest from every plant where stems are mature and of a minimum length of 30 cm. Two million stems of each species is to be taken."

"We have researched the area for 6 months and found many substantial clumps of plants. We estimate the area would have in excess of 50,000 stems".

It is known that in general, the SGAP- NSW Region opposes the commercial harvesting of native plants from the wild unless there is a firm commitment to cultivate at least equivalent plants. Probably most members would be aware of the damage caused by harvesting wildflowers in parts of West Australia. The question of wood chipping forest timber in south eastern Australia is still very contentious. In the current proposals from Queensland the proposal is to harvest ferns from State Forests. If the timbers in those forests are to be harvested periodically, then presumably it is fair enough (and maybe sensible) to likewise harvest any ferns or other understorey plants. There remains the question of the long term sustainability of such operations. Do you have an opinion about commercial harvesting from wild source plants? This topic is being increasingly asked. Our Leader would be interested in hearing members' views and any contributions could be printed for the edification of all. Please write if you would like to express a point of view on the matter.

CONTRIBUTIONS WELCOMED

This Newsletter is only as good as the material published. Members are the source of the contents. Please keep (or start) sending in letters and articles relating to propagating, growing, admiring, yes, and even on the subject of harvesting ferns. Contributions for the March 1996 Newsletter should be received by the Secretary by no later than 15 February 1996

REPORT ON THE MID NORTH COAST GROUP'S VISIT
TO WASHPOOL NATIONAL PARK
ON 22ND & 23RD SEPTEMBER 1995

compiled by Steve Clemesha

This was our group's second visit to this beautiful National Park. The park has a mixture of forest types. Rainforest grows near the perfectly clear and clean creeks, while in other parts magnificent old-growth forest of Blue Gums (*Eucalyptus saligna*) and New England Black Butt (*Eucalyptus andrewsii*) dominate.

Todea barbara is common near the creeks and on just a few of them *Tmesipteris truncata* grows. On one we found *Polyphlebium venosum*. This was our first recording of this filmy fern in this area. *Blechnum wattsi* often climbed up the *Todeas*. Among the epiphytes were *Platycterium bifurcatum*, *Asplenium australasicum* and *A. flaccidum*. This mostly grew on trees near the creeks but we also saw some on a tree on a ridge. In both places light is quite good.

Among the ground ferns were *Doodia aspera*, *Lastreopsis microsora*, *L. decomposita*, *L. munita* and the related *Arachniodes aristata*. *Adiantum silvaticum*, *A. hispidulum* and *A. formosum* were also present. Fronds of some plants of *Calochlaena dubia* were about a metre long. I have observed other large fronds of this species in other highland areas.

In the creek edges and among boulders, *Blechnum nudum* is plentiful and this year we saw a young *Blechnum minus* on a rock. It will be interesting to see if it establishes itself in the area or is washed away next flood. This fern grows in more open country beside creeks at Gibraltar Range, which is literally across the road from Washpool.

We found three ferns in the area we did not find last trip. As well as the *Blechnum minus* and *Polyphlebium venosum* mentioned earlier, there was *Tmesipteris ovata* growing on *Cyathea australis*. It was among the old growth Eucalypt forest well away from the creek and higher up on a hill.

In addition to finding three new ferns, we found all of the 51 species we found last time. Some are not plentiful, eg only a small area where *Lycopodium deuterodensum* grows and only three plants each of *Doodia caudata* and *Lindsaea microphylla* were seen, both on the side of a road section of the walking track.

Among the animals and birds were a few Lyrebirds, the tame White Browed Scrub Wrens and some fairly tame Red Necked Pademelons. Fortunately leeches and ticks were not plentiful.

Mid North Coast Fern Study Outing
24 -25 September 1995
WASHPOOL N.P.

Adiantum formosum
 Adiantum hispidulum
 Adiantum silvaticum
 Arachniodes aristata
 Arthropteris beckleri
 Arthropteris tenella
 Asplenium australasicum
 Asplenium flabellifolium
 Asplenium flaccidum
 Asplenium polyodon
 Blechnum cartilagineum
 Blechnum minus
 Blechnum nudum
 Blechnum patersonii
 Blechnum wattsii
 Calochlaena dubia (Culcita)
 Cyathea australis
 Cyathea cooperi
 Cyathea leichhardtiana
 Davallia pyxidata
 Dennstaedtia davallioides
 Dictymia brownii
 Diplazium assimile ?
 Diplazium australe
 Doodia aspera
 Doodia caudata
 Gleichenia dicarpa

Grammitis billardieri
 Histiopteris incisa
 Hymenophyllum cupressiforme
 Hypolepis glandulifera
 Hypolepis muelleri
 Lastreopsis acuminata
 Lastreopsis decomposita
 Lastreopsis microsora
 Lastreopsis munita
 Lindsaea microphylla
 Lunathyrium petersenii
 Lycopodium deuterodensum
 Microsorium scandens
 Pellaea falcata
 Pellaea falcata var. Nana
 Pellaea paradoxa
 Platycerium bifurcatum
 Polyphlebium venosum
 Pteridium esculentum
 Pteris tremula
 Pteris umbrosa
 Pyrrosia confluens
 Pyrrosia rupestris
 Sticherus flabellatus
 Sticherus lobatus
 Tmesipteris ovata
 Tmesipteris truncata
 Todea barbara

NOTES FROM SOUTH EAST QUEENSLAND

Contributed by Irene Cullen

Once again the Fern Study Display at the Queensland Region Annual Show was of a very high standard.

As many of our members attended the ASGAP Conference, there was no October meeting. Only ten members were able to attend the Springbrook excursion in November. List of ferns seen, have still to be compared. However we feel a greater number will be recorded that were recorded on our previous visit in April 1991.

We visited Warrie National Park and the Best of All Lookout again. Then went to Tallabana Park for our lunch and made a hurried trip to the foot of the Falls. Members were very impressed with the area. As storms were forecast, we decided not to explore more, but all voted that it should be the venue of an excursion in the near future.

. NOTES FROM THE SYDNEY AREA

A Member's Fern - Asplenium aethiopicum

At the meeting at Dural on 15 October Moreen told us that there are about 650 Asplenium species world-wide with 26 found in Australia. The Group as a whole are known as spleenworts and are distinguished by sori elongated along the veins.

A. aethiopicum is a medium sized, slowly spreading fern with 0.3 to 1 m tall, semi-erect, dark green fronds. The black stipe is clothed with scales. The pinnules are acute with serrate margins and sori up to 1 cm long.

A terrestrial fern in nature it is often found growing among rocks in open forest. According to the "Flora of NSW", it is uncommon north from Mt Keira on the Central and the North Coast and also uncommon to rare in Queensland and Victoria. It is also found in Western Australia and Africa.

According to Elliot and Jones, A. aethiopicum generally resents disturbance and is not easy to grow. This has not been our experience and although we have not tried it from spore, it volunteers freely and small plants appear in various parts of the yard, but especially on rocks and wet brick walls. It grows readily in the ground or in a pot and prefers to be kept on the dry side of moist. The one draw-back to growing this fern, is that it is attractive to sap-sucking insect pests, but these can be controlled readily (by hand).

More About Lygodiums

The following paragraphs didn't make it into September's Newsletter. These paragraphs relate to the Report of the Meeting at Kenthurst on 18 June 1995 and follow on from the bottom of page 9.

L. microphyllum is the only member of the genus occurring in nature in N.S.W. It also grows in Queensland, Northern Territory and Western Australia as well as Africa, South East Asia and Melanesia. The leaflets are usually stalked and the stalks are of approximately the same length, they are jointed at the base and the margins are minutely crenate.

On L. flexuosum (a native of Queensland, India, Sri Lanka and Melanesia) and L. japonicum (from West Australia, Northern Territory and Asia) the lower leaflets are stalked and the upper leaflets are sessile (no stalks). The leaflets of L. flexuosum are pale to yellow green and sterile leaflet margins are toothed or crenately lobed. This contrasts with the leaflets of L. japonicum which are bluish green and the margins acutely biserrate.

Report on Outing to Girrakool, 8 July 1995

For winter it was a pretty good day and the 14 members greatly enjoyed this attractive area of National Park with its lush native flora. On our Group's previous visit in 1992 we took the right hand path, on this occasion we went left. First a tricky crossing of Piles Creek and then just a short walk the highlight being the plants found at the base of a long damp cliff face and sheltered rock ledge. At this spot Psilotum nudum was in abundance. Ferns sighted were Adiantum hispidulum, Asplenium flabellifolium, Blechnum ambiguum, B. nudum, B. wattsi, Calochlaena dubia, Gleichenia dicarpa, G. rupestris, Grammitis meridionalis, Histiopteris incisa, Hymenophyllum cupressiforme, Lindsaea linearis, Lycopodium laterale, Pellaea falcata var. nana, Psilotum nudum, Pteridium esculentum, Selaginella uliginosa, Schizaea rupestris, Sticherus flabellatus and Todea barbara.

Report on Outing to Mount Tomah, 16 September 1995

Rain interfered with the day, only eight members defying the inclement start to the outing. All voted the visit worthwhile, but comments suggest that the highlight of the day wasn't a fern but a stylish wedding in the beautiful Mt Tomah Gardens.

Report on Meeting at Dural, 15 October 1995

After concluding the business session, in lieu of study Peter provided something different for the 13 members present, a slide show tour of North Queensland. Peter and Margaret had only recently returned from their holiday and were able to provide contemporary commentary about the fern lovers paradise. Our thanks to Pat for hosting the meeting and providing all the "cuppas".

Report on Outing to Minnamurra, 18 November 1995

The day began disastrously with news from Margaret that our Leader had been up most of the night with a gastric attack and would not be able to participate in this outing. The Minnamurra Rainforest is located just south of Wollongong at the foot of the coastal escarpment. In recent years a high quality visitors centre, board walk and paved tracks have provided visitors of all ages and physical ability easy access to the rainforest and Falls. The day remained fine and the 9 members thoroughly enjoyed the 2.6 km walk (some even doing it twice). Apart from the ferns, of most interest were the giant Ficus obliqua (Strangler Fig) and very tall Dendrocnide excelsa (Giant Stinging Tree).

But it was ferns, ferns all the way all the way on the first section, a relatively flat walk suitable for assisted wheel chair access. Although not able to leave the track, the following species were identified: Adiantum aethiopicum, A. formosum, A. hispidulum, Arthropteris tenella, Asplenium australasicum, A. flabellifolium, A. polyodon, Blechnum cartilagineum, B. patersonii, Cyathea australis, C. leichhardtiana, Davallia pyxidata, Doodia aspera, Lastreopteris microsora, Pellaea falcata, Phymatosorus scandens, Platycterium bifurcatum, Pteris tremula, P. umbrosa and Pyrrosia rupestris.

The second section covers steep sections, some through more open forest, but all on excellent paved tracks with railing where needed. Lyre birds in this section added to the interest. Ferns noted as not having been seen on the first section included Asplenium bulbiferum, Blechnum nudum, Calochlaena dubia, and Pellaea falcata var. nana.

FORTHCOMING EVENTS : IN THE SYDNEY REGIONSunday 3 December 1995, End of Year Get-Together, Dee Why

Meet from 11.30 for our festive season gathering to be held this year at Stony Range Flora Reserve, Pittwater Road, Dee Why. Please inform Cynthia 451 6531, as early as possible before the date whether bringing meat, salad, or sweets for pooled lunch. Bring own cutlery and crockery. In keeping with our tradition, please bring a gift - maximum \$5 (or several according to the number in your party).

Saturday 17 February 1996, Meeting at Epping

Meet from 11.30 am at the home of Rose Bach, 33 Third Avenue (Corner of Audine Avenue), Epping. Formal part of the day will commence at 1 o'clock with brief business meeting and then study session led by Peter on "Tree Ferns". Dot Camp will tell us about "A Members Fern". Bring lunch and a plate for afternoon tea. Enquiries to Rose 869 1692.

Saturday 17 March 1996, Outing to Royal Botanic Gardens

Meet from 10 am at The Sydney Fernery in the Royal Botanic Gardens, Mrs Macquarie's Road, Sydney. Peter will take us for a guided walk through the Fernery and possibly to one of the nursery areas. Most of us plan to have a picnic lunch at the Gardens after our walk. Bring own drinks and food or these may be purchased at the Kiosk. Enquiries to Peter 625 8705.

FORTHCOMING EVENTS : IN THE MID NORTH COAST , N.S.W.

For details contact Charlie Charters, phone (065) 86 1088 .

FORTHCOMING EVENTS : IN SOUTH EASTERN QUEENSLANDSunday 3 December 1995 Break up Function at Pullenvale

Meet 9.30 am at Merle and Geoff Goadby's home 123 Haven Road, Pullenvale. Bring fern or appropriate gift for our Christmas exchange.

Sunday 4 February 1996. Excursion Pullenvale.

Meet 9.30 am at Graham Nosworthy's home 609 Grandview Road Pullenvale, to start our excursion into the nearby forest.

KNOW YOUR PESTS - Cottony Cushion Scale

(Taken from "Encyclopaedia of Ferns" by David L. Jones - Lothian)

This common scale is an occasional pest of ferns of subtropical regions. It favours dry conditions and is most often to be found on weakened ferns growing under eaves etc. where insufficient moisture penetrates. The adults are easily recognised by their plump bodies which are soft and can be squashed between the fingers.

FERNS IN GARDEN DESIGN

Following on from the September 1995 Newsletter, the following are further ferns considered valuable in garden design.

Blechnum cartilagineum

A common hardy fern found in all Eastern Australian States. The new growth fronds are an attractive pink often a feature of the sheltered gullies in the bushland. Fronds are a pale to mid green being darker in shaded positions.

Form: Erect or semi-erect, very broad fronds, the sterile and fertile fronds being fairly similar. Has a short creeping rhizome.

Size: Up to 1.5 m but usually less than 1 m.

Soil Type: Loamy well composted.

Aspect: Hardy but prefers some shade.

Watering: Tolerant of dry periods but periodic thorough watering will be to its advantage.

Blechnum nudum

A widely grown fern in cultivation and widespread and common in nature, often grows near streams. Found in all Eastern States and South Australia. Forms large colonies in a suitable habitat.

Form: Bright green erect fronds forming a rosette. Older ferns form a short trunk. Fertile and sterile fronds distinct. The fertile fronds are stiff and have very narrow pinnae and grow from the centre of the rosette.

Size: Up to 1.2 m but usually less than 1 m.

Soil Type: Hardy in any moist to even swampy acid soil.

Aspect: Best in at least partial shade.

Watering: Relatively hardy but likes ample water.

Blechnum patersonii

Widespread in nature and gaining popularity in cultivation. Its pink-tipped new fronds are a feature and may be simple or lobed. Found in all Eastern States and Lord Howe Island.

Form: Has semi-erect or pendant dark green strap-like fronds. The fertile fronds have very narrow segments.

Size: Up to 0.8 m.

Soil Type: Adaptable but prefers good loamy, composted soil.

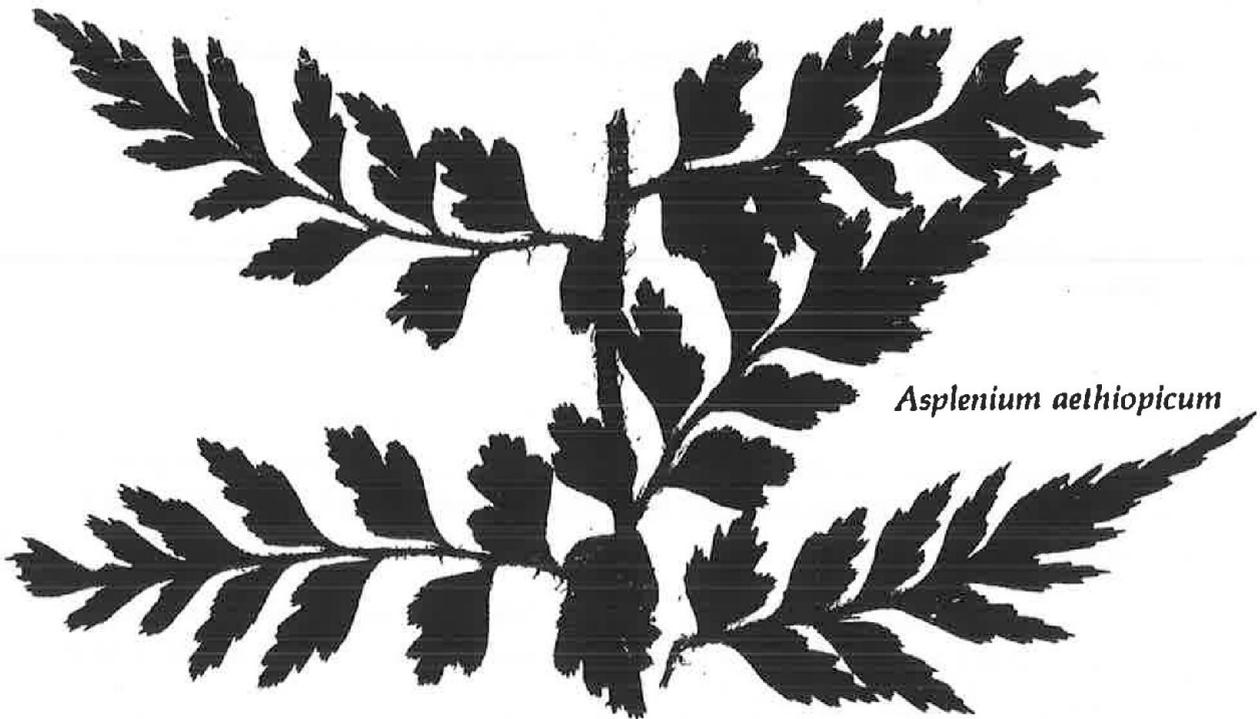
Aspect: Requires a shaded, sheltered position.

SPORE BANK CURATOR REQUIRED

With the untimely death of Dulcie Buddee, we require a member to volunteer for the position of Study Group Spore Bank Curator.

The position entails caring for the Group's stock of spore, sieving and enveloping spore donated by members and forwarding spore in response to requests. A microscope and all other equipment needed for the task, go with the position. The duties of Curator may be performed by a Sydney, country or interstate member.

Enquiries to Peter (02) 625 8705, or to Moreen (02) 528 4881.



Asplenium aethiopicum

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