

. G. A. P. Fern Study Group

ISSN 0811-5311 DATE - SEPTEMBER 1992

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

LEADER:

Peter Hind, 41 Miller Street, Mount Druitt, 2770

SECRETARY:

Moreen Woollett, 3 Currawang Place, Como West, 2226

TREASURER:

Joan Moore, 2 Gannet Street, Gladesville, 2111

SPORE BANK: Jenny Thompson, 2 Albion Place, Engadine, 2233

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# Gleichenia mendellii in N.S.W.

(Contributed by Steve Clemesha)

During the July school holidays last year I was visiting my sister at the Gold Coast and I decided to go to Stradbroke Island off Brisbane to try and find Gleichenia mendellii. Mr S. Bruce Andrews in his excellent book on 'Ferns of Queensland' gave what had been regarded as a forgotten synonym G.circinnata var. mendellii a new status as G.mendellii. This fern resembles G.rupestris in being glaucous (bluish in colour) or nearly so on the underside of the frond, but the underside of the primary secondary rhachis is matted with stellate hairs, whereas in G.rupestris it is glabrous (bare without hairs or scales) or nearly so. The pinnules of G.mendellii are smaller than G.rupestris and it grows in the ground in coastal swamps and not on rocks and cliff faces like <u>G. rupestris</u>. Its distribution was given as coastal Queensland from Fraser Island to the islands of Moreton Bay.

I drove to a friend's place at Brisbane. He had seen what he believed to be G. mendellii on the island so we caught the ferry over to there and walked about 3 km to the swamp where it grew. The fern was the dominant plant in the swamp and a check with my hand lens showed the matted stellate hairs. I dug up a few small pieces of the fern that were in the creek and brought them home and have them growing.

The following January I went to Minnie Water, south east of Grafton. This time the mission was to find the rare <u>Isopogon</u> mnoraifolius . I stopped near the Minnie Water general storepost office, stepped into the swamp there and it was covered with Gleichenia. It was glaucous beneath but I did not have my hand lens so could not be sure about the stellate hairs. I brought fronds and plants of it home and compared them with my Stradbroke Island plants. They were identical. I sent specimens to the N.S.W. Herbarium and to the Queensland Herbarium. They confirmed my identification and stated it was the first record of the species in N.S.W.

A few months later I went looking for this species about 15-20 km south of Minnie Water in the Yuragir National Park. I found it again. This time it was in a swampy gully and again very plentiful. I was pleased to find it in a secure habitat. On this day also I found <u>Isopogon mnoraifolius</u> for the third time although I did not find it on the day I first found <u>G. mendellii</u> at Minnie Water.

In cultivation <u>G.mendellii</u> is much like the other <u>Gleichenia</u> species. Small plants that can be dug out with some soil transplant fairly easily if kept humid till established. It is easier to establish in the cooler times of the year.

## A Member's Fern Oleandra neriiformis

At our July meeting in Sydney, Betty Rymer presented the first of what we hope will be a series on a member's experience growing ferns. The following notes summarize Betty's talk.

Oleandra neriiformis the Stilt Fern was planted in a garden bed in heavy soil mixed with potting mix under heavy foliaged trees. There was a mass of tree roots in this area and the soil was dry due to the tree roots taking all the moisture. It was watered often and the fern didn't grow much, hardly any fronds.

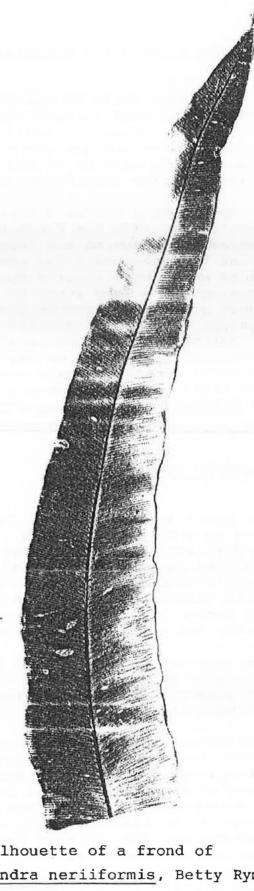
In another part of our property there is an easement which collects the run off from the road at the front of the house. Eric had constructed little beaver dams along this easement to hold the water and at the side of this, he made a narrow bed about 65 cm above the water. This was filled with good soil, gravel, compost and dynamic lifter. So I dug up the Stilt Fern and put it in the new bed — there was virtually no fronds on it, just three bits of rhizome. Then Eric decided to put in two ferns, a Maiden Hair and another, not knowing my Stilt Fern was there, so it was disturbed and patted down again, this was in February. Then our little dog, Abbie, buried a bone there, so my fern was disturbed again.

The Stilt Fern now gets constant humidity and plenty of water, Eric sloshes water there — every day last summer, every other day now. The soil is well drained and there is no wind and complete shade. So now, great long rhizomes, lots of leaves, growing furiously.

#### Our Book Is Still Coming!

Our manuscript was returned from Kangaroo Press with the advice that it would be best published in a soft cover, 240 by 180 mm, selling for r.r.p. \$12.75. Most of the material submitted was accepted but it was suggested to us that in order to provide the maximum number of colour plates allowed in the costing, we should supply about eight more slides, perhaps slides of ferns other than the Platycerium, Blechnum, Drynaria and Cheilanthes species featured in the book. We are pleased to have the opportunity of including more coloured photos, but rather than interfering with the theme of the book, have opted to include slides of fern habitat. Work is well advanced in assembling suitable material, thanks to some welcome assistance being provided by Ivy Hansen.





A silhouette of a frond of

Oleandra neriiformis, Betty Rymer's

"A Member's Fern". According to

"Australian Ferns and Fern Allies"

by Jones & Clemesha, it does best
in a coarse, porous mixture in a
basket.

#### Blechnum orientale & Eungella National Park

Contributed by Ian Wood

In Newsletter No.54 it was with great interest I read of Peter Bostock's journey through the Eungella National Park. The interest was two pronged - firstly, my parents had a dairy farm on Eungella Range and therefore my early years were spent there and secondly, his mention of only one specimen of <u>Blechnum orientale</u> on the roadside into Finch Hatton Gorge.

On the week end of May 2 this year, Mackay Branch of SGAP did a camping trip into the Finch Hatton Gorge area. I found the specimen in question and immediately went into raptures because it was the only one I had seen in the Mackay district. Better things were ahead — not a hundred metres away at the next creek crossing there were three or four more plants resplendent in new bronze growth with fronds 2 m long. They were growing in Eucalypt sclerophyll forest. There could be more because I did not follow the creek up very far. I have to go back to photograph the plants so may go a little further. The rest of the party agreed the walk was worth the effort just to see my face light up. There were also plenty of Lygodium recticulatum and Sticherus flabellatus and a few Blechnum whelanii.

### A List of Ferns

Contributed by Ray Best

Many years ago I commenced preparing an alphabetical list of ferns on a world wide basis. My idea being to keep a record for the efficient reference details of all the books in my library. This list as prepared covers first the fern title along with the author's name usually with the standard abbreviation. Followed by the location on a world wide basis including reference to the page number and the work concerned. This has now become a huge volume, for quick and efficient reference.

In my current edition of the Newsletter No. 57 June 1992, I noted an article by Peter Hind on the Keys to the Aspleniums of North East Queensland. I noted also a statement of adjournment until next Newsletter.

In reference to a current book "Ferns of Queensland" by Bruce Andrews late of Queensland botanic set up, I found in the Aspleniaceae group over 70 species, truly a large group covering a mass of study including a number of new types generally under the authorship of David Jones. Most of these Aspleniums are covered in my list including authors names and classification. Bruce Andrews has included David Jones name as the author of these new specimens, so these I have used in my list. I am given to understand that under the Law of Nomenclature that it is wrong to use a title for a fern unless its name has been accepted along with a numbered herbarium specimen lodged within a registered botanical organisation. If this has been done then I am free to include all the new species in my records. This is the procedure I have used with all my previous notations.

## Report on Outing to the Watagans, 20 June 1992

The weather was perfect and after morning refreshments at the Duncans, 20 of us set out in car convoy for the short drive up into the Mountains and the rainforest. Our walk began from near Heaton Lookout and Roy, equipped with two somewhat conflicting maps led the way into the tall eucalypt forest. Cheilanthes sieberi, Doodia aspera — this was widespread, and Pyrrosia rupestris were first ferns recorded and then the ubiquitous Pteridium esculentum. Perhaps the most noticeable plants in this area were the splendid tall Blue Gums and the numerous Cordyline stricta. As we descended towards the creek the canopy gradually closed and the ferns became more common including Adiantum formosum, Blechnum cartilagineum, Culcita dubia, Adiantum hispidulum, Platycerium bifurcatum, Polystichum australiense. Lastreopsis microsora and more commonly L.decomposita.

At the first creek crossing Peter pointed out Adiantum silvaticum, Microsorum scandens, Grammitis billardieri and a filmy fern Hymenophyllum cupressiforme. Progress was very slow with a number of diversions away from the main track. We added to the list Todea barbara, Blechnum wattsii, B.nudum, Asplenium australiense — we marvelled at how some of these huge Birds Nest ferns could stay on top of tall slim trees, A. flabellifolium the tiny Necklace fern clinging to the rock face, Cyathea australis, C.leichhardtiana and Sticherus flabellatus. There were many orchids in this area including large clumps of Liparis.

We paused at the junction of two creeks, a place Peter described as the core zone, the place of least disturbance. Here we found Pellaea falcata nana, Asplenium polyodon, A.attenuatum, Arthropteris tenella and Lastreopsis acuminata. As we walked further the forest became more open and the ground ferns were more numerous but the only additional species added to our list were Pellaea falcata and P.paradoxa. At about this point Roy told us that we had only traversed about two thirds of the total distance and as it was past lunch time, the pace quickened. Nevertheless the walk was full of interest all the way - and although we didn't begin lunch until 2.30 pm no one complained (much).

We returned to the Duncans for refreshments and a quick look at their extensive collection of ferns. There were enough ferns there to have happily occupied us all day, just three of the highlights being two <u>Angiopteris evecta</u>, one being of monster size, several magnificent <u>Platycerium superbum</u> and two species of <u>Ophioglossum</u>, <u>O.lasitanicum</u> and <u>O.pendulum</u>.

#### Report on Meeting at Camperdown 25 July 1992

There were 22 members for this meeting at the home of Ann & Geoff Long. The study finished our examination of the Aspleniums, this day was devoted to the North Queensland species not covered at our May session. These ferns are all two or more pinnate. Peter had prepared the following key.

- 2 Fronds dimorphic, fertile pinnules narrow & deeply lobed A.dimorphum
- 2\* Fertile & sterile fronds similar not narrowly lobed \_\_\_\_\_A.laserpitifolium
- 3 Ultimate segments 4 to 10 mm long 4
  3 \* Ultimate segments 7 to 17mm long 5
- 4 Rhizome scales to ca 2 mm long, lamina dark dark green usually with a proliferous bud towards the apex, stipe usually < half length of the lamina (fronds to 30 cm)

  A. baileyanum
- 4\* Rhizome scales to ca 8 mm long, lamina pale green without a proliferous bud, stipe usually > half length of lamina (fronds to 8 cm)

  A.macilwraithense
- 5 Pinnules spathulate to broadly ovate, those towards the base of a pinna often with a large wedge-shaped lobe on the apical side or sometimes both sides, lamina narrowly ovate to triangular

  A.cuneatum
- 5\* Pinnules narrowly wedge-shaped, not lobed as above lamina narrow triangular or narrowly ovate A.aethiopicum

A. aethiopicum is synonymous with the bipinnate form of A.polyodon. It is not clear from the "Ferns of Queensland" treatment as to whether or not this occurs in North Queensland. Peter believes it to be a distinct species having observed both this and A.polyopdon in the field around Sydney. The "Flora of N.S.W." treats it as distinct.

Our study was helped by the <u>A.aethiopicum</u> and <u>A. cuneatum</u> which Peter brought to the meeting. Peter considered that the <u>A.aethiopicum</u>, which is the form that several Sydney members are growing, is the one from West Australia. The fronds of the form which grows locally, are far shorter than those of the specimen brought to the meeting. Joan helped us with the derivation of "laserpitifolium". There is a plant, laserpitium in the Mediteranian region; it is in the carrot family and of course, we are familar with the carrot's lacy leaves.

Thank you Ann and Geoff for your hospitality on the day.

## Report on Outing to Wheeney Creek, 22 August 1992

Our Group's recent good luck with the weather held, and 18 members made the journey to the lower Blue Mountains on a perfect late winter's day. A feature of the drive down to the parking area, was the mass of <u>Gleichenia dicarpa</u> by the roadside. Our first walk downstream under tall blue gums and into patches of rainforest detected <u>Hypolepis muellerii</u> and <u>Pteridium esculentum</u>, these were near our parked cars, <u>Adiantum aethiopicum</u>, this proved to be possbly the day's most commonly seen fern, <u>Doodia aspera</u>, <u>Culcita dubia</u>, <u>Grammitis billardieri Hymenophyllum cupressiforme and Adiantum hispidulum</u>. Two more ferns, <u>Doodia caudata var laminosa</u> and <u>D.media created a lot of interest. A lush form of Asplenium flabellatum was seen and then <u>Pellaea paradoxa</u>. Joan identified <u>Cheilanthes austrotenuifolia</u>, and finally, the only other fern noted was <u>Blechnum cartilagineum</u>.</u>

After a short drive we explored further up stream, and across it, the additional ferns sighted being Blechnum nudum Gleichenia dicarpa Adiantum formosum Sticherus flabellatus Pellaea falcata and Pyrrosia rupestris.

A late lunch ended a peaceful day in an attractive setting.

# NOTES FROM N.S.W. MID NORTH COAST FERN STUDY MEMBERS (Contributed by Steve Clemesha)

#### Report on Outings Held on 13 and 14 June 1992

Our numbers were a bit down this weekend because two of our regular members were ill. We met at Steve & Pauline Clemesha's place near Woolgoolga and after lunch Norma Dodds, Roy and Bea Duncan, Jean Hope and Phyllis and John McCarthy drove to Bruxner Park Flora Reserve. Here we met Tony Winter. The Flora Reserve is in hilly country about 5 km north of Coffs Harbour. It has a number of walking tracks including some through subtropical rainforest.

We walked around the most popular walk and saw 22 different ferns while Gleichenia dicarpa. Hypolepis muelleri and Sticherus flabellatus were seen beside the road in sunnier places. Sticherus flabellatus in our area is variable. The population along England's Road, south of Coffs Harbour has lobed pinnules at the base of the first pinnae, as in S.lobatus but it in no other way does it resemble that species.

The real S. lobatus was seen on a southern slope where it grows with Blechnum wattsii in a coachwood forest. Hymenophyllum flabellatum is fairly common at Bruxner Park and always is on the trunks of Cyathea leichhardtiana. A few of our members attracted leeches which was surprising because of the time of the year.

Next day we set off for Dorrigo State Park with its circular walking track. Phil Avery, Julie McIntyre, Steve Clemesha, Roy and Bea and Roy Duncan, Jean Hope and Phyllis Lloyd-Hughes took part in this walk.

Beside the road on Dorrigo Mountain on exposed rock faces we saw Pteris vittata. We did not see this fern elsewhere. As we started our walk we saw a small Blechnum nudum in the garden near the visitors centre but we did not find this fern again though we know it grows elsewhere in the Dorrigo district. Counting these two we found a total of 43 different ferns.

Part of the area is rainforest and part tall Eucalypt forest and different ferns were found in the different habitats. <u>Doodia caudata grew along side some of the tracks and Doodia aspera was common</u>. Among some patches of <u>Doodia caudata larger plants were seen</u>. These appear to be hybrids between the two species. These have been determined as <u>Doodia media and D.squarrosa</u>. We have seen them on previous outings at Way Way and Woolgoolga Falls. They always grow among <u>D.caudata</u> with <u>D aspera near by and they show no evidence of reproducing from spores.</u>

<u>Diplazium</u> was well represented with <u>D.australe</u> and <u>D.assimile</u> common and widespread and we saw one large area of <u>D.dilatatum</u>.

<u>Arthropteris beckleri</u> was plentiful and their fronds were large for that species.

Dorrigo Park lacks lowland species such as <u>Platycerium superbum</u> but is not high or cold enough for <u>Microsorum diversifolium</u> which is found further west at Ebor. Curiously no filmy fern species were seen.

The following ferns were recorded.

Bruxner Park: Adiantum formosum, A.hispidulum, A.silvaticum, Arthropteris tenella, Asplenium australasicum, A.polyodon, Blechnum cartilaqineum, B.patersonii, B.wattsii, Christella dentata, Culcita dubia, Cyathea australis, C.leichhardtiana, Doodia aspera, Gleichenia dicarpa, Hymenophyllum flabellatum, Hypolepis muelleri, Lastreopsis decomposita, L.microsora, Microsorum scandens, Platycerium superbum, Pteridium esculentum, Sticherus flabellatus, S.lobatus.

Dorrigo: Adiantum diaphanum, A.formosum, A.hispidulum, A.silvaticum, Arthropteris beckleri, A.tenella, Asplenium attenuatum, A.australasicum, A.polyodon, Blechnum cartilaqineum, B.nudum, B.patersonii, Christella dentata, Cyathea australis, C.cooperi, C.leichhardtiana, Davallia pyxidata, Dennstaedtia davallioides, Dicksonia antarctica, Dictymia brownii, Diplazium assimile, D.australe, D.dilatatum, Doodia aspera, D.caudata, D.squarrosa, Histiopteris incisa, Hypolepis qlandulifera, Lastreopsis acuminata, L.decomposita, L.microsora, L.munita, Lunathryrium petersenii subsp. conqrua, Microsorum scandens, Pellaea falcata var. nana, P.paradoda, Platycerium bifurcatum, Pteridium esculentum, Pteris tremula, P. umbrosa, P.vittata, Pyrossia confluens, P.rupertris, Vittaria elongata.

NOTES FROM SOUTH EASTERN QUEENSLAND FERN STUDY MEMBERS
(Contributed by Merle Goadby)

#### Outing to Conondale - Bouloumba Creek, Peter's Creek Area

On 5 July 1992 members of the Samford Branch of SGAP joined us for this outing, so 32 people enjoyed a very pleasant day. The weather was ideal and the effects of record rains early in 1992 were still obvious on the creek walk. We visited several sites in shared cars, to cut down the size of the convoy.

Peter Bostock and Ross Scott of Kenilworth led us first of all to a grassy eucalypt woodland ridge to see emerging fronds of Parsley Fern, Botrychium australe. Peter explained that this species is difficult to propagate as in nature it appears to be partly saprophytic and germinates and lives underground in total darkness for several years. Additional ferns at this site were Drynaria rigidula Adiantum hispidulum var. hispidulum and Doodia aspera.

Further and higher into the State Forest, we stopped at a shaded roadside cutting. It was carpeted with <u>Dicranopteris linearis</u> <u>Gleichenia dicarpa</u> and <u>Sticherus flabellatus</u>.

Lunch was at a crossing of Bouloumba Creek, followed by a short walk along the Creek. From Peter's list, additional ferns seen on the creek walks included Adiantum aethiopicum A. diaphanum A. silvaticum Asplenium australasicum Diplazium assimile D. australe Deparia petersenii ssp. congrua (previously Lunathyrium japonicum) Blechnum cartilagineum B. nudum B. patersonii B. wattsii Doodia caudata Cyathea coopeir C. leichhardtiana Davallia pyxidata Hypolepis glandulifera H. muelleri Pteridium esculentum Culcita dubia Lastreopsis marginans L. smithii Lycopodiella cernua (previously Lycopodium cernum) Arthropteris beckleri Microsorum scandens Platycerium bifurcatum P. Superbum Pyrrosia rupestris Pellaea paradoxa and Christella dentata

Our last stop was at Peter's Creek, where we walked the Creek track. Despite the exceptionally good season, we didn't find any filmy ferns on this outing. Apparently, the fringing rainforest country is too dry in normal times. We probably would have to travel further up the Creek and deeper into the rainforest to find them.

## SPORE LIST

The following spore are currently available from our Spore Bank. Where known the date of collection is shown. Although some spore is old Jenny says that most are in good condition and may be worth trying, even if only to prove something about fern viability. Requests for sopre should be accompanied by a stamped, addressed envelope. The standard size envelope and postage of 45 cents, is usually sufficient for orders of up to 6 species.

Acrostichum speciosum, Adiantum sp. (Comboyne) 4/86, Amphineuron opulentum 9/85, 5/87, Arachniodes aristata 2/91, 4/90, A. aristata variegated form, Asplenium nidus 1/86, Blechnum camfieldii 5/90, B.cartilagineum 4/90, B. fluviatile 4/90, B. minus 6/90, B. nudum 11/82, B. wattsii 4/90, B.wattsii (Mt.Dromedary) 4/90, B.wurunuran 9/86, Cyathea australis 11/83, 4/90, C.australis (blue tinge) /87, C. cooperii (rusty) 1/87, C.cooperii (robust) 1/88, C.cunninghamii, C.leichhardtiana 5/90, C. rebeccae 11/82, C.woollsiana 6/90, Chielanthes distans 3/90, C. sieberi 3/90, Christella dentata 7/89, C. subpubescens 8/83, Cystopteris filix-fragilis 1/87, C.cyclosorus interruptus 1/83, Davallia solida 12/85, Diplazium assimile /90, D.australe, Dicksonia antarctica 12/82 /87, D.youngiae (Broken Head) /90, Lastreopsis decomposita 11/83, L. walleri (Cape York) 5/90, Microlepia speluncae 6/82, Ophioglossum pendulum 4/84, Pellaea falcata, Platycerium superbum 6/90, Polystichum formosum 4/90, Pronephrium asperum, Psilotum nudum, Pteridoblechnum neglectum 12/84, Pteris sp (Ferania Creek), Pteris comans 4/84, Pteris pacifica 9/85, Pteris umbrosa, P. tremula, Rhumora adiantiformis, Schizaea (Cape York) 7/92.

### Deadline for Copy

The Newsletter is only as good as the contributions received for inclusion. You can make it more interesting by sending articles of the type that appeal to you. Closing date for copy for our next Newsletter is 15 November 1992.

#### FORTHCOMING EVENTS

#### IN THE MID NORTH COAST OF N.S.W.

Week end 7-8 November 1992, Outing Kempsey Area Visits to Tamban State Forest and Nana Glen. For details and meeting place contact Charlie Charters phone (065) 85 6296.

Date to be Fixed in January 1993, Outing Gloucester Area Advance Notice! This is being planned as a three days excursion.

## IN THE SYDNEY REGION

Sunday 18 October 1992, Working Bee & Meeting at Dural
Note change of venue and plans! In lieu of the visit to Kareela,
we have arranged to pot on the fernlings bought in for sale as
next year's fund raising project. Venue is the home of Pat
Kenyon and Ted Newman, 1057 Old Northern Road, Dural. Enter the
property from private road on right hand side exactly 2 km from
Dural Post Office. The last street passed on the left is Wyoming
Road. The potting on commences at 10 o'clock, Ted will have all
material on hand, just bring gloves if needed. After lunch a
short meeting is planned. "A Member's Fern" is to be presented
by Pat Kenyon. Don't forget to bring lunch and a plate.
Enquiries to Pat or Ted 651 2765.

Saturday 14 November 1992 Outing at Girrakool

If travelling from Sydney leave the expressway at Gosford exit, turn left towards Old Sydney Town, travel approximately 1.5 km, then left and meet outside Girrakool Park entrance gates from 9.30 for 10 am start. Lunch at cars. Enquiries to Peter phone 425 8705.

Sunday 6 December 1992 Christmas Function at Pennant Hills Meet at the Environment Centre, Forestry Commission of N.S.W., 423 Pennant Hills Road, Pennant Hills, for the end of year get together. Please inform Betty 654 1831 or Pat 651 2765 at least a week before the date, whether bringing meat, salad, or sweets for pooled luncheon. In keeping with the tradition of these functions, please\_bring a gift (or several according to number in your party).

#### IN SOUTH EASTERN QUEENSLAND

Friday 18 September 1992, Set up Fern Display
Commencing 3 pm for Queensland Region Flower Show to be held on
Saturday 19th and Sunday 20th September at Redeemer College,
Rochedale Road, Rochedale.

Sunday 18 October 1992, Visit to Victoria Point Nursery Elaine Moores will speak on "Keeping the More Difficult Ferns Growing". Meet opposite the Nursery at 9.30 am.

Sunday 22 November 1992, Final Meeting of the Year Meet at Graham Noseworthy's home. Bring lunch and fern for exchange. A programme on the "History of Ferns" will be led by Geoff Edwards.