ASSOCIATION of

S.G.A.P. Fern Study Group

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A FERN SURVEY OF LORD HOWE ISLAND

Contributed by Calder Chaffey

In November 1993 eight of us SGAPpers, seven also belonging to the Fern Study Group, spent a week (Two of us two weeks) on Lord Howe Island. We were Geoff and Ann Long, Allan and Moreen Woollett, Roy and Beatrice Duncan and Calder and Keith Chaffey. Our leader was Ian Hutton who gave us his generous and unstinting help, and the benefit of his enormous knowledge of the flora and fauna of Lord Howe Island.

Anyone interested in Lord Howe Island must have a copy of Ian's book, "Lord Howe Island" in which he discusses the natural history flora and fauna of the Island. He also describes most trees, shrubs and climbers with a key. There is also a fern list. The new edition to appear shortly will describe all discovered ferns as well as other expanded chapters. His "Birds of Lord Howe Island Past and Present" is also a must. Both books are obtainable from him c/o P.O. Box 6367, Coffs Harbour Plaza, NSW, 2450.

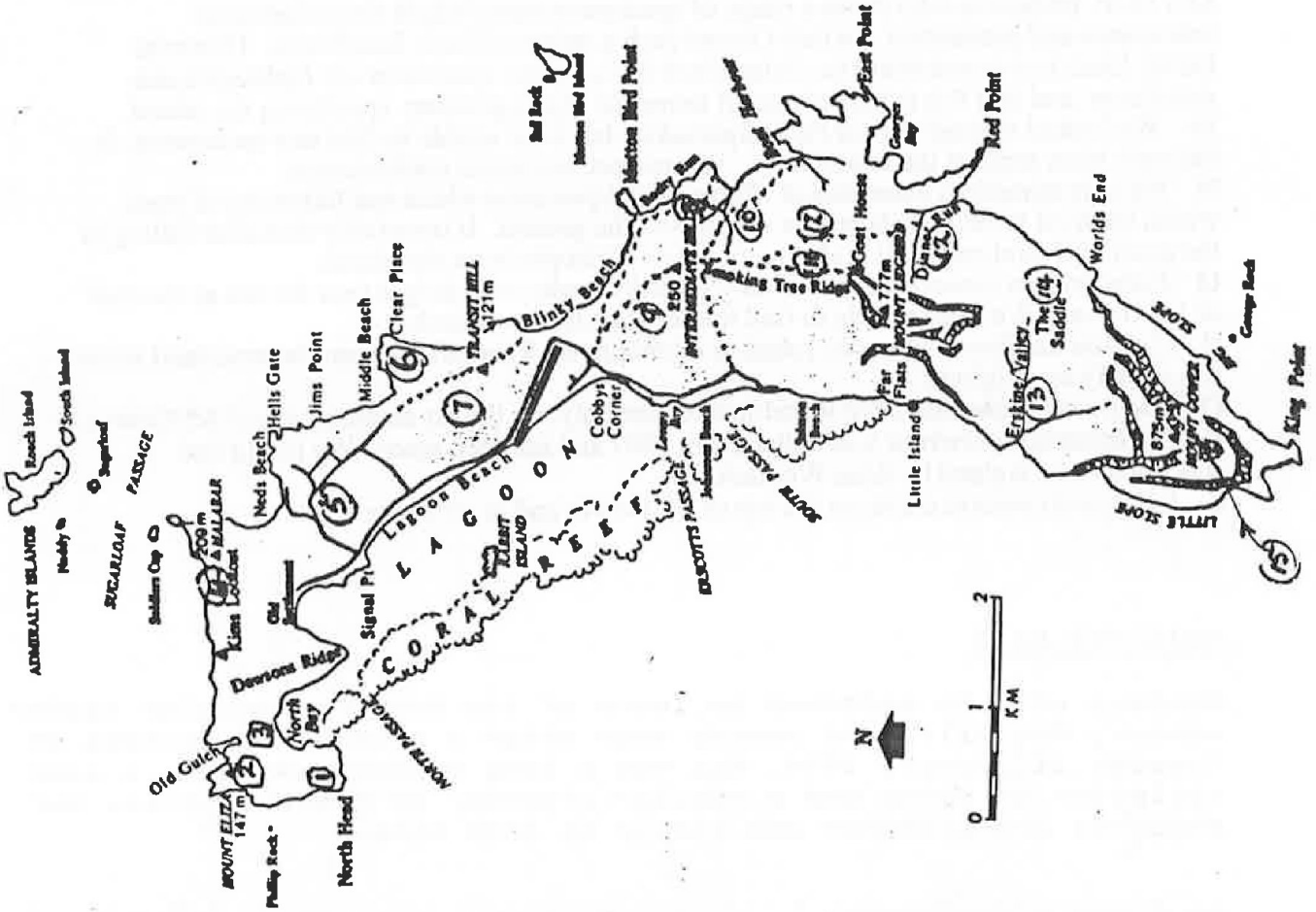
We sighted and identified specimens of all except two of the 180 native trees, shrubs and climbers, including 57 endemic species. Some of us were especially interested in the ferns. Of the 56 species we found 51 of which 26 were endemic. There was an extremely limited area of distribution of some fern species. We only found one or a few plants of some ferns suggesting that they are extremely rare. Of great interest is that some genera are shared with Australia, some with New Zealand and a few with New Caledonia.

In the following table I have recorded all the ferns we found with locations. Of the 5 we did not sight, one being deciduous was not above ground at that time of the year. One was on the southern top of Mt. Gower where we did not have time to reach. Also we did not have the opportunity to climb and investigate the top of Mt. Lidgbird. Although we searched for the other 3 we were not able to find them. These comments are expanded in the notes to the table.

FAMILY	GENUS	SPECIES	1 NORTH HILL	2 Mt ELIZA	3 NORTH BEACH	4 MALABAR	5 STEVEN'S RESERVE	6 CLEAR PLACE	7 TRANSIT HILL TRACK	8 SMOKING RIDGE-ROCKY RUN	9 INTERMEDIATE HILL TRACK	10 BOAT HARBOUR TRACK	11 GOAT HOUSE TRACK	12 DINNER RUN TRACK	13 ERSKINE VALLEY	14 THE SADDLE	15 Mt GOWER	16 OTHER - SEE NOTES	NOTES	OCCURS AUSTRALIA	OCCURS NEW ZEALAND	ENDEMIC
Psilotaceae	Psilotum	nudum		•	•		•		•	•	•	•	•	•	•		•			•	•	
Psilotaceae	Tmesipteris	truncata															•			•		
Lycopodiaceae	Huperzia	myrtifolium															•			•		
Ophioglossaceae	Botrichium	australe														*			G	•	•	
Ophioglossaceae	Ophioglossum	pendulum										•	•	•			•		K	•		
Ophioglossaceae	Ophioglossum	petiolatum			•											•			L	•	•	
Osmundaceae	Leptopteris	moorei															•		S			•
Adiantaceae	Adiantum	aethiopicum	•																	•	•	
Adiantaceae	Adiantum	hispidulum				•														•	•	
Adiantaceae	Adiantum	pubescens								•	•	•		•	•		•		A		•	
Sinopteridaceae	Pellaea	paradoxa																	M	•		
Sinopteridaceae	Pellaea	falcata				•														•	•	
Sinopteridaceae	Cheilanthes	distans	•			•									•					•	•	
Sinopteridaceae	Cheilanthes	humilis	•			•														•	•	
Pteridaceae	Pteris	tremula												•						•	•	
Pteridaceae	Pteris	microptera		•	•	•		•	•	•	•	•	•	•	•		•					•
Hymenophyllace	Hymenophyllum	howense															•					•
Hymenophyllace	Hymenophyllum	moorei															•					•
Hymenophyllace	Trichomanes	atrovirens												•					R	•		
Hymenophyllace	Trichomanes	bauerianum												•	•		•					•
Gleicheniaceae	Sticherus	lobatus															*		Q	•		
Polypodiaceae	Platycerium	bifurcatum				•			•	•	•	•	•	•	•		•		N	•		
Polypodiaceae	Pyrrosia	confluens				•													P	•		
Polypodiaceae	Microsorum	scandens															•			•		
Polypodiaceae	Microsorum	howensis	•			•	•		•	•	•	•	•	•	•		•					•
Grammitaceae	Grammitis	diminuta											•				•					•
Grammitaceae	Grammitis	wattsii															•					•
Grammitaceae	Grammitis	nudicarpa															*					•
Cyatheaceae	Cyathea	macarthurii										•	•	•	•		•					•
Cyatheaceae	Cyathea	brevipinna											•				•					•
Cyatheaceae	Cyathea	howeana															•					•
Cyatheaceae	Cyathea	robusta								•		•	•	•			•					•
Dennstaedtiaceae	Hypolepis	elegans								•		•	•	•			•		I			
Dennstaedtiaceae	Histiopteris	incisa					•										•			•	•	
Thelypteridaceae	Christella	dentata								•		•	•	•						•	•	
Aspleniaceae	Asplenium	polyodon										•	•							•	•	
Aspleniaceae	Asplenium	sp.	•			•	•			•	•	•	•	•	•		•		C			•
Aspleniaceae	Asplenium	milnei	•	•	•	•	•	•	•	•	•	•		•	•		•					•
Aspleniaceae	Asplenium	pteridoides											•	•			•					•
Aspleniaceae	Asplenium	surragatum												•	•		•					•
Athyriaceae	Diplazium	melanochlamys											•	•	•		•					•

Distribution of ferns of Lord Howe Island.

			1 NORTH HILL	2 Mt ELIZA	3 NORTH BEACH	4 MALABAR	5 STEVEN'S RESERVE	6 CLEAR PLACE	7 TRANSIT HILL TRACK	8 SMOKING RIDGE-ROCKY RUN	9 INTERMEDIATE HILL TRACK	10 BOAT HARBOUR TRACK	11 GOAT HOUSE TRACK	12 DINNER RUN TRACK	13 ERSKINE VALLEY	14 THE SADDLE	15 Mt GOWER	16 OTHER - SEE NOTES	NOTES	OCCURS AUSTRALIA	OCCURS NEW ZEALAND	ENDEMIC
Dryopteridaceae	Lastreopteris	nephroides															•					•
Dryopteridaceae	Arachnoides	aristata									*									•	•	
Dryopteridaceae	Polystichium	moorei																*	O			•
Dryopteridaceae	Polystichium	whiteleggei											•				•					•
Davalliaceae	Arthropteris	tennella		•		•			•		•	•	•	•	•		•		B	•	•	
Davalliaceae	Nephrolepis	cordifolia				•	•	•		•		•	•	•	•		•			•	•	
Blechnaceae	Blechnum	patersonii															•		F	•		
Blechnaceae	Blechnum	contiguum															•					•
Blechnaceae	Blechnum	fullageri															•					•
Blechnaceae	Blechnum	geniculatum															•		D			•
Blechnaceae	Blechnum	howeanum											•				•		E			•
Blechnaceae	Doodia	aspera															•		H	•	•	
Blechnaceae	Doodia	media											•				•			•	•	
Blechnaceae	Doodia	caudata												•	•					•		
Marattiaceae	Marratia	howeana																•	J			•



Distribution of ferns of Lord Howe Island.

Notes

* These ferns were not sighted by me but had been recorded as coming from the areas designated.

A *Adiantum pubescens* resembles *A hispidulum* but whereas the ultimate segments bear soft white hairs less than 0.5 mm in *A hispidulum* they are over 2 mm in length in *A pubescens*.

B In many parts of the island *Arthropteris tennella* occurs as a terrestrial fern.

C *Asplenium sp* was thought to be *Asplenium australasicum* but has now been recognised as a separate species and is being renamed.

D *Blechnum geniculatum* was only known to occur in clumps of one to six plants in four places on Mt Gower. We found one other isolated plant.

E *Blechnum howeanum* has only recently been described as a species. Although widespread in the southern mountains it is not plentiful.

F Unlike mainland plants those of *Blechnum patersonii* on the island have only been seen with entire fronds. Those we saw were also small with fronds less than 20 cm in length.

G *Botrichium australe* has a very limited distribution and is rare on the island. Being deciduous it was not above ground while we were there.

H *Doodia aspera* was not sighted by us. It has been recorded a couple of times but perhaps this needs confirming.

I *Hypolepis elegans* is also found in Fiji and Vanuatu.

J *Marratia howeana* is endangered. A small number of plants exist on Mt Lidgebird above 200 m and we found two plants on the side of Mt Gower.

K *Ophioglossum pendulum* is rare and we only found it growing in association with *Platycerium bifurcatum*. Although the clumps were large we only found three clumps.

L We found specimens of *Ophioglossum petiolatum* at North Beach area and there was a range of these both in size and shape. Some some appeared to resemble *Ophioglossum reticulatum* but see note in Andrews *Ferns of Queensland* where he quotes a reference from a Mrs M. P. Robinson who states a range of specimens exists which varies between *reticulatum* and *petiolatum*. In fact I found such a range at North Beach area. However David Jones in a recent study has determined that all these specimens are *Ophioglossum petiolatum* and that this is the only small terrestrial Ophioglossum species on the island.

M We looked extensively for *Pellaea paradoxa* but were unable to find any specimens. It has only been seen on the Island once. Its presence not needs confirmation.

N We saw numerous examples of *Platycerium bifurcatum* which had fallen out of trees which went on growing robustly as a clump on the ground. It invariably dies after falling in the mainland rainforests. It is also common as a lithophyte on the island.

O *Polystichium moorei* was previously recorded under rock ledges near the sea at the base of Mt Gower. We were unable to find it after an extensive search.

P *Pyrrosia confluens* was only found as a lithophyte. This differs from the mainland where it is usually an epiphyte.

Q *Sticherus lobatus* has been found in one area only, on the far southern top of Mt Gower.

R *Trichomanes atrovirens* was collected in 1887 and not seen since. We found one specimen only, sighted by Alan Woollett.

S *Leptopteris moorei* exists on the top of Mt Gower and is very rare.

Vale Max Hill

Members will be saddened to learn of the death of popular Sydney member, Max Hill, who passed away after a protracted illness on Tuesday 11 January 1994. Max was a long standing member, a keen collector of ferns and a regular attender at Sydney events. Our thoughts are with Pam and family at this time.

SOME EARLY BOTANISTS ... sorry, Ray!

Ray Best contributed an article under the above title to our December 1993 Newsletter. Unfortunately, the typist missed part

of the item regarding Sir Joseph Banks - Ray, please accept our apology for the mistake. The following is a corrected version of the article.

BANKS, SIR JOSEPH BANKS (1740- 1820) Contributed by Ray Best

British botanist who accompanied Captain Cook on his first voyage around the world, was educated at Harrow, Eton and Christ Church Oxford, and elected Fellow of the Royal Society in 1766. During that year he went to Newfoundland to collect plants. Banks obtained permission to accompany Cook's expedition on the Endeavour, the voyage lasted until 1771, and visited South America as far as Cape Horn, Australia, New Zealand, and through the Great Barrier Reef to New Guinea and thence to Cape of Good Hope. His account of the voyage in the Endeavour shows clearly his enthusiasm, and on his return he was looked upon as an authority on Australia. Almost every learned society enrolled his name in their list of honorary members. In 1776 he visited Iceland, Labrador and Newfoundland and on his return succeeded Sir John Pringle as President of the Royal Society and held that position until his death. Banks ranks as a munificent patron of science rather than an actual worker himself. His extensive collections made during many exploratory voyages and his magnificent library were left to Great Britain.

USE OF SCALES IN CLASSIFICATION OF CYATHEACEAE

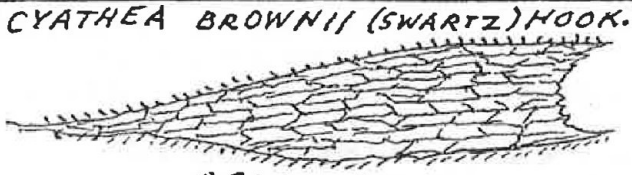
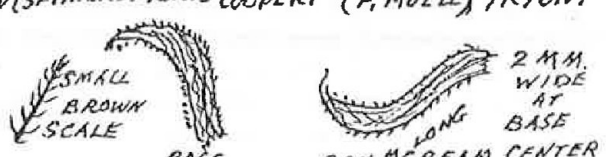
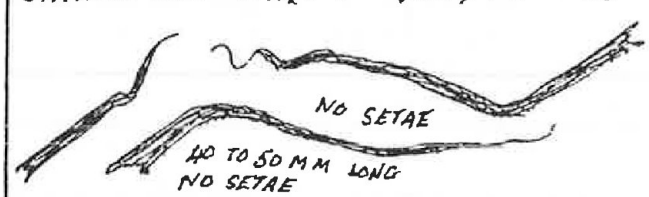
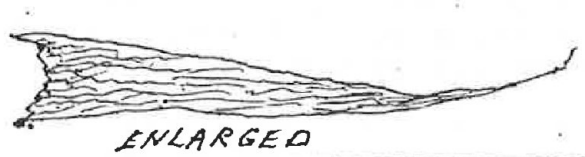
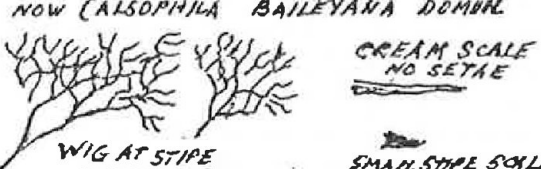
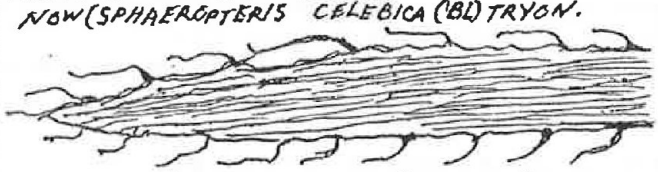
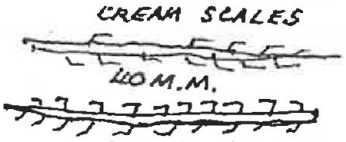
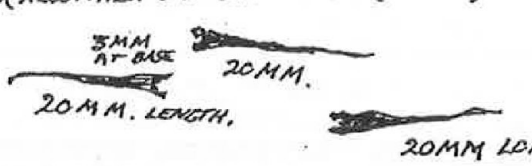
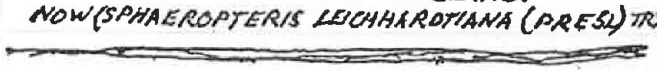
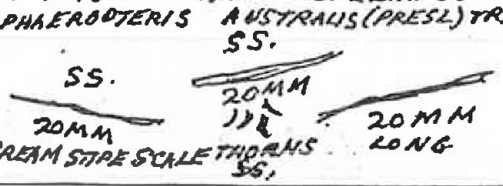
Contributed by Raymond Best

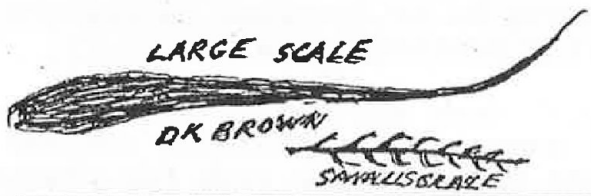
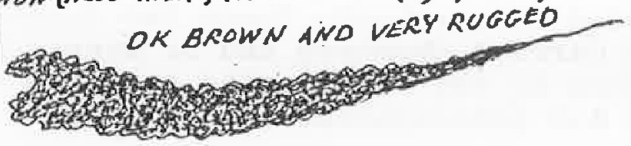
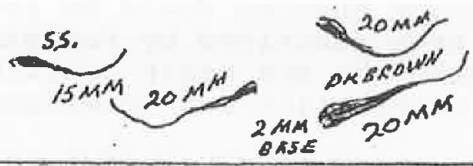
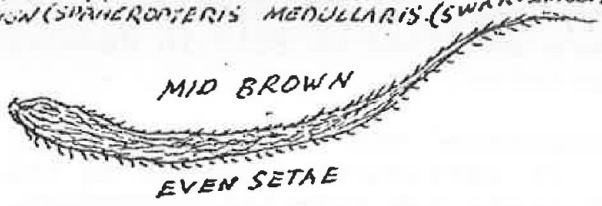
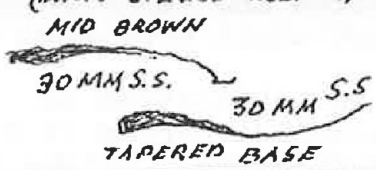
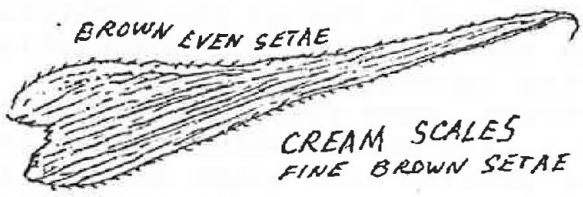
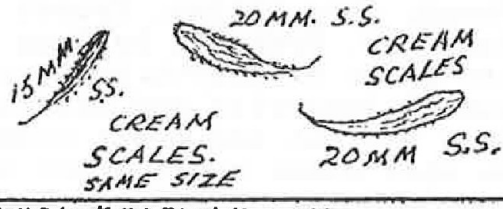
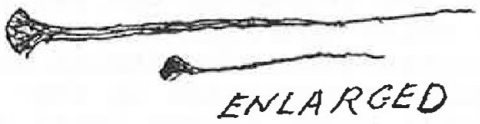
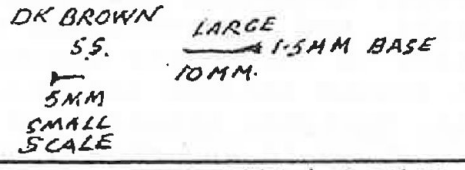
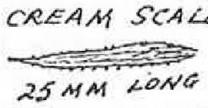
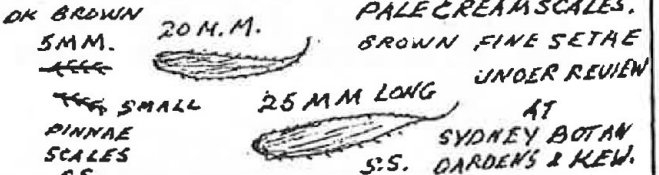
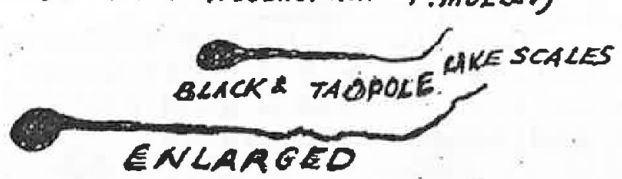
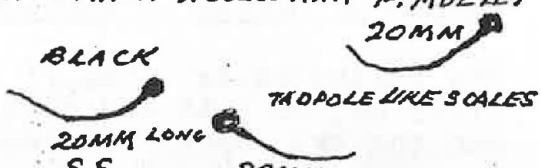
Thanks to the co-operation of John & Judy Marley I was invited to meet Barbara Joe Hoshizaki and her husband at their home and Nursery at 5 Seaview Street, Mt Kuring-gai, N.S.W.

Although our time was limited I managed to ask a few questions regarding classification. She explained that there were two types of botanists in existence, one group known as Lumpers, the other as Splitters. Whichever group you choose to use was your own affair. I understand that the classification of Jermy Crabbe & Mickel as used in The Fern Dictionary and with most other authorities around the world, is classed as lumpers in their desire to use larger groups; while others like Edwin Bingham Copeland, U.S.A, and Pichi-Semolli from Italy, would be classed as splitters. The latter group are the name changers, searching all the time for subtle name changes which would make classification very confused for the lay person, providing indefinate work for botanists.

According to Peter Hind, our Leader, in a recent article, our local authorities have decided to use both the Splitters and Lumpers where the situation applies. Particularly as many Australian works on ferns seem to prefer the Splitters to the Lumpers.

Reading also in a recent article in the" Newsletter" that scales were being used to identify some ferns. I decided to include the drawings of scales involved in a number of Australian Cyatheaceae species. All these scales taken from live ferns in my collection are filed in a folder for my own personal use. Any additional scales along with information concerning types, etc., would be welcomed.

ENLARGED	SCALES SAME SIZE ①.
CYATHEA AUSTRALIS (RBR) DOMIN. NO SETAE GLOSSY BROWN SCALE  DETAILS OF SECTION OF SCALE FROM BOTH STIPE AND RACHIS	CYATHEA AUSTRALIS (RBR) DOMIN. NOW (ALSOPHILA AUSTRALIS RBR. NO SETAE  S.S. DK BROWN & GLOSSY ACTUAL LENGTH OF SCALE
CYATHEA BROWNII (SWARTZ) HOOK.  CREAM SCALE FINE REGULAR & BROWN SETAE	CYATHEA BROWNII (SWARTZ) HOOKER. NOW SPHAEROPTERIS COOPERI (F.MUELL) TRYON.  20 MM LONG 25 MM LONG 4 MM WIDTH AT BASE CREAM SCALE FINE BROWN SETAE OR TEETH
CYATHEA COOPERI HOOK; F.MUELL; DOMIN. CREAM SCALES  REGULAR FINE BROWN SETAE NOW (SPHAEROPTERIS COOPERI (F.MUELL) TRYON.	CYATHEA COOPERI HOOKF; MUELL; DOMIN. NOW (SPHAEROPTERIS COOPERI (F.MUELL) TRYON.  SMALL BROWN SCALE BASE 2MM. 2 MM WIDE AT BASE LONG 20 MM CREAM CENTER
CYATHEA DEALBATA (SWARTZ ROX) MORTON.  DK BROWN TO BLACK NO SETAE	CYATHEA DEALBATA (SWARTZ) ROX) MORTON.  NO SETAE 40 TO 50 MM LONG NO SETAE
CYATHEA FELINA (ROXB) MORTON. NOW (SPHAEROPTERIS CONCINNA (BAKER) TRYON.  ENLARGED	CYATHEA FELINA (ROXB) MORTON. NOW (SPHAEROPTERIS CONCINNA (BAKER) TRYON. CELL VEINS RED BROWN  20 MM 20 MM ACTUAL SIZE S.S.
CYATHEA BAILEYANA (DOMIN) DOMIN. NOW (ALSOPHILA BAILEYANA DOMIN.)  ELONGATED STIPE SCALE CREAM SMALL SCALE ENLARGED NO SETAE	CYATHEA BAILEYANA (DOMIN) DOMIN. NOW (ALSOPHILA BAILEYANA DOMIN.  CREAM SCALE NO SETAE WIG AT STIPE BASE S.S. SMALL STIPE SCALE S.S.
CYATHEA CELEBICA BLUME. NOW (SPHAEROPTERIS CELEBICA (BL) TRYON.  UNEVEN WIDELY SPACED SETAE	CYATHEA CELEBICA BLUME. NOW (SPHAEROPTERIS CELEBICA (BL) TRYON. CREAM SCALES  40 M.M. 40 M M .S.S.
CYATHEA CUNNINGHAMII HOOKER. NOW (ALSOPHILA CUNNINGHAMII (HOOKF) TRYON.) DK BROWN ENLARGED  RUGGED MARGIN ENLARGED	CYATHEA CUNNINGHAMII HOOKER. NOW (ALSOPHILA CUNNINGHAMII (HOOKF) TRYON.  3 MM AT BASE 20 MM. 20 MM. LENGTH. 20 MM LONG
CYATHEA LEICHHAROTIANA COPELAND. NOW (SPHAEROPTERIS LEICHHAROTIANA (PRESL) TRYON  ENLARGED THORNS ON STIPE & RACHIS	CYATHEA LEICHHAROTIANA COPELAND. NOW (SPHAEROPTERIS AUSTRALIS (PRESL) TRYON. SS.  SS. 20 MM 20 MM CREAM STIPE SCALE THORNS SS. 20 MM LONG

ENLARGED	SCALES ETC SAME SIZE (2)
CYATHEA MACARTHURII (F.MUELL) BAKER.  	CYATHEA MACARTHURII (F.MUELL) BAKER 
CYATHEA MARCESCENS WAKEFIELD. NOW (ALSOPHILA MARCESCENS (N.A. WAKE) TRYON.  	CYATHEA MARCESCENS WAKEFIELD. NOW (ALSOPHILA MARCESCENS (N.A.W.) TRYON. 
CYATHEA MEDULLARIS SWARTZ. NOW (SPHAEROPTERIS MEDULLARIS (SWARTZ) HOLTT.)  	CYATHEA MEDULLARIS SWARTZ. NOW (SPHAEROPTERIS MEDULLARIS (SWARTZ) HOLTT. (BASIC SPECIES HOLTTUM) 
CYATHEA ROBUSTA (C.MOORE) HOLTTUM.  	CYATHEA ROBUSTA (C.MOORE) HOLTTUM. 
CYATHEA REBECCAE DOM. NOW (ALSOPHILA REBECCAE (DOM) F.MUELL.)  	CYATHEA REBECCAE DOM. NOW (ALSOPHILA REBECCAE (DOM) MUELL.) 
CYATHEA ROBERTSIANA DOMIN. NOW (ALSOPHILA) ROBERTSIANA (DOMIN) F.MUELL.  	CYATHEA ROBERTSIANA DOMIN. NOW (ALSOPHILA ROBERTSIANA (DOM) F.MUELL. 
CYATHEA TOMENTOSISSIMA ? N.G. ? UNDER REV.  	CYATHEA TOMENTOSISSIMA ? UNDER REVIEW. 
CYATHEA WOOLLISIANA (F.MULL) DOMIN. NOW (ALSOPHILA WOOLLSIANA F.MUELL.)  	CYATHEA WOOLLSIANA (F.MUELL) DOMIN NOW (ALSOPHILA WOOLLSIANA F.MUELL. 

ABOUT BOOKS

A word about three books that should be of interest to members, and two of these books are actually available now!

Firstly, not yet available is "our" fern book which has long been in the making. Bill Payne who is managing the project, advised in May 1993, that Kangaroo Press, had approved the book for printing but he requested that we should include the two Lord Howe Island newly described Blechnums - this would mean that all Australian Blechnum species would be included in our book. These two ferns had been described by Professor Carrick Chambers and Dr Penny Farrant who are major contributors to the book having supplied the description and drawings of all Cheilanthes species.

None of the Lord Howe Island species had been included originally so this meant the addition of four more ferns indigenous to Lord Howe. Photos and descriptions were supplied to Bill in January and we now await word from the printer.

The second publication is "Cunninghamia" the bi-annual journal of the National Herbarium of N.S.W. Of particular interest is Volume 3 (2) of 1993. This Volume which costs $15 from the Herbarium, deals with Ecology of Sydney Plant Species Part 1 and covers Ferns, Fern Allies, Cycads, Conifers and a few of the dicotyledon families. Prepared by Doug Benson and Lyn McDougall descriptions are given of growth form, flowering (sporeing) and fruiting times, longevity and maturity periods, seed dispersal, distribution habitat and plant community - information which is not found in most other books which usually provide only plant descriptions and or cultivation notes. Of topical interest is the information regarding the times when ferns spore. Although advising on several occasions that sporeing times have been based on limited detail, and only covering approximately two thirds of the ferns native to the Sydney Region (ferns for which sporeing times are not stated include the well known in cultivation, Christella dentata, Dictymia brownii and Pteris tremula) information is complementary to and should be of inestimable value to our "when do ferns spore project".

Finally, "A World of Ferns" by Camus, Jermy and Thomas, was produced to celebrate the centenary of the British Pteridological Society. The book is filled with great pictures of a most diverse range of ferns in habitats from snow to desert and provides a fine overview of the fern world. Our Leader has a copy of this book and has promised a book review next Newsletter, but if you can't wait for Peter's critique, the book may be obtained from Intercept Ltd, P.O. Box 716, Andover, Hants, SP10 1YG, England for 17.45 pounds - that price covers postage.

NOTES FROM MID NORTH COAST

Report on Outing to Woolgoola / Middle Creek Areas

Contributed by Steve Clemesha

The following is a report on the outing of the Mid North Coast Group on the 20th and 21st November 1993. It was a good weekend and the two creeks are beautiful and interesting places.

For our outing of 20th and 21st November, the mid north coast group visited Woolgoolga Flora Reserve at Upper Woolgoolga Creek and Middle Creek east of Glenreagh.

The Woolgoolga Flora Reserve is mostly beautiful subtropical rainforest. This follows the creek but is not present on the drier hills.

As we entered the forest we found a patch of Adiantum diaphanum growing beside the track in a lighter, drier area than is usual for it. Doodia caudata and a few D. aspera grow there also and there is one clump of the hybrid between the two which has been called D. squarosa and D. media. This hybrid is present in most areas where the parent species grow together.

Under wetter conditions beside the creek were more A. diaphanum, Blechnum patersonii, Arthropteris bechleri and Doodia caudata.

We walked along the track to the base of Woolgoolga Falls and crossed the winding creek bed about six times.

Beside the track Lastreopsis marginans grows and is locally fairly plentiful. It is the only area where our group has found it and I have not seen it in other areas around Coffs Harbour.

Epiphytic ferns are plentiful. Large plants of Platycerium bifurcatum and P. superbum grow high in the trees and so does Asplenium australasicum. We saw one plant of Asplenium polydon. Dictymia brownii, Davallia pyxidata and Arthropteris tenella are present also.

Among the ground ferns Arachniodes aristata and Lastreopsis microsora are plentiful and we saw one patch of Denstaedtia davallioides.

In a rocky drier area we found Pellaea paradoxa. Nearby Adiantum hispidulum and A. silvaticum grow together.

At the base of Woolgoolga Falls were a few small Psilotum nudum.

Two of us decided to continue a few hundred metres upstream to where a stand of the Dorrigo Waratah (Alloxylon pinnatum) - formerly Oreocallus - grows. This habitat is unusual as it is at a lower altitude. On the way we saw Ophioglossum pendulum in an area that is drier than usual for it. We also saw Grammitis stenophylla which also grows at Mt Coramba and Middle Creek. We also saw Sticherus flabellatus and Blechnum nudum.

About 100 metres upstream from the falls is a concrete dam - Woolgoolga's first water supply. Not far further upstream the Dorrigo Waratahs grow and Sticherus lobatus and Blechnum wattsii are common in the area. In all, 41 species of ferns were seen in this area and all are within 30 minutes walk of the carpark.

Next day we set out for Middle Creek. This is about 5 km east of Glenreagh. The ranges near Glenreagh are sandstone and some plants that grow in the Sydney sandstone and Blue Mountains

grow there although they are not found in areas between. Examples are the Gymea lily - Doryanthes excelsa - and Mountain Devil - Lambertia formosa.

Middle Creek is the best creek in the area and normally is beautiful with clean running water and a range of interesting plants - ferns and otherwise. For our visit, it was a very dry time and the creek was not running much.

Todea barbara is plentiful in and near the creek. Pteris vittata grows along the track in one area.

Two interesting sandstone ferns grow in the area. Blechnum ambiguum hangs down from wet rock faces and Schizaea rupestris grows in wet shady places. Both species are absent for hundreds of kilometres between this area and the Sydney sandstone and Blue Mountains.

A feature of this area is a large stand of Psilotum nudum that grows in rock crevices. This time there was much less than usual because of the drought.

A few plants of Gleichedice rupestris on a rockface had died at a time that was drier than our visit as water was dripping through it. G. rupestris hangs down from wet rocks and is quite different to the form that grows on cliffs near the sea and the two forms retain their differences in cultivation. I have found plants in this area that look like a hybrid between G. rupestris and G. dicarpa but we did not see any on the day of our visit.

In wet places in swamps and on rocks, the forked sundew grows (Drosera binata) just as it does in similar places near Sydney and in the Blue Mountains but the form is different. The leaves of the form on the north coast are more branched and redder.

Beside the creek near the carpark, Adiantum aethiopicum grows and a form of Blechnum camfieldii without auricles at the base. The only other area where we have seen this form is at Wilson River. The normal form grows only a few kilometres away on a swampy flat.

We saw a total of 21 fern species in this area.

NOTES FROM SYDNEY

Report on End of Year Get-together, 5 December 1993

This happy occasion was held at Stony Range, Dee Why. A happy day made the more so because of the presence of Alec Blombery.

Report on Outing to Royal Botanic Gardens, 20 February 1994

Forty members and visitors took up this opportunity to see the Sydney Fernery and behind the scene nursery and glass houses. Prof Chalmers wasn't on hand for the promised talk but Peter was able to provide all needed data about the ferns. The vigour of the ferns made it difficult to believe the Fernery has only been established for less than a year.

TIME OF SHEDDING SPORES

Contributed by Geoff Simmons

I note in Number 63 (December 1993) Newsletter that February to August is listed for Platycerium superbum. In a note that I wrote to Bill Payne I included the sentence that "Spores may be collected in the May-August period but July is the most successful time to collect."

In regard to gathering data I would agree that on the spot recording is much more successful than appealing to members to send information. At one time I collected data on the flowering time for native plants by taking forms along to the monthly meeting of a local SGAP Branch in Brisbane and asking them to write down the names of each plant in flower on that day. At the end of the meeting I collected the forms - each person got a form and, as they waited for the meeting very few members didn't record their own information. Over a period of two years or so quite a lot of data was obtained. Although the introduction of new species and cultivars makes the list look dated, nevertheless it is a record of what the members of that area of Brisbane were growing at that time. This out-of-date aspect is not so critical for ferns, but they do present the problem of determining the maturity or viability when seen or collected.

Perhaps a University, TAFE or even a high school could be encouraged to adopt a species for this type of research. Perhaps if it was known that a small sum of money was available some one would be interested. It may even be possible to formulate a liquid into which spore collections could be placed to determine it's maturity or viability.

In regard to the " A final thought .... " paragraph on page 3, I would have some doubt on the viability of this assumption. Although individual plants may vary, the variation would not be critical enough to encompass a week or two.

NOTES FROM SOUTH EASTERN QUEENSLAND

Microsorum Study

Contributed by Irene Cullen

Twenty-five members met on 6 February at Pat Shaw's home to hear Peter Bostock speak on Microsorum spp. It was decided to treat all the species of Microsorum as published in our Fern Books. Species with the large sori are now being called Phymatosorus. We were fortunate to have a specimen of every specie to table and discuss. One member had a plant which she believed to be M. punctatum var. lobatum. On closer inspection it was decided it could well be a M. grossa x puctatum hybrid. While discussing M. superficiale, Peter told us of a move to group it with M.punctatum. He is reluctant to do so and explained why. (Leader to comment next Newsletter).

FORTHCOMING EVENTS

IN SOUTH EASTERN QUEENSLAND

NB: Members taking part in excursions must notify the Leader. If unable to attend let the contact person know.

Sunday 13 March 1994, Meeting at Cunninghams Gap.
Meet 9.30 a.m. at 1st Car Park on Gap. (If necessary drive to Garage and return for easier access). Leader and contact person Geoff Goadby, phone (07) 371 946.

Sunday 17 April 1994, Palm Grove Mt Tamborine.
Meet 9.30 a.m. at Palm Grove. Directions will be available at the Gap excursion. Leader and contact person Jan Glazebrook, phone (075) 468 590

Sunday 5 June 1994.
Study. Meet 9.30 at home of Val and Ian Jimmieson, 55 Foxglove Street, Mt. Gravatt. Subject - Keying Ferns into Families.

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

11-12 13 March 1994 Outing to Washpool National Park
For details of this outing contact Steve Clemesha (066) 56 1937. Other information about Group from Charlie Charters, 203 Oxley Highway, Wauchope, phone (065) 85 6296.

IN THE SYDNEY REGION

Sunday 20 March 1994, Meeting at Mt Druitt
Meet at the home of Peter & Margaret Hind, 41 Miller Street, Mt Druitt from 10.30 am for 11 o'clock sharp start on study of the genus Colysis. "A Member's Fern" is to be presented by Roy Duncan. Enquiries to Peter 625 8705.

Saturday 16 April 1994, Outing to Fox Grounds
Visit to Ann & Geoff Long's property "Bolwarra", Lot 10 Foxground Road, Foxground. Drive south through Gerringong and after the second rise turn hard right, follow the signs to Wild Country Park, "Bolwarra" is 600 m past the Park. Drive 50 m further on where there is more room for parking. The entrance to the property is on the right side of the road with a chain across the access (approx. 6 km from Gerringong). Meet at 10.30 am for walk. Allow about 2 hours for journey from central Sydney. Map will be available at March meeting. Hot water supplied but there is no electricity. Enquiries to the Longs 519 5536

Saturday 21 May 1994, Meeting at Epping
Meet at the home of Rose Bach, 33 Third Avenue (corner of Audine Avenue), Epping. Arrive from 12 noon, meeting will start at 1 pm sharp. Bring a plate and a chair, hot water available. Enquiries to Rose 869 1692.

Sunday 19 June 1994, Outing to Wattagans
Plan to meet at the home of Bea and Roy Duncan at 167 Freemans Road, Morisset at 9.45 am for 10 o'clock sharp departure for walk to Waterfall Creek. More details next Newsletter.

SUBSCRIPTIONS FOR 1994
If you have not already renewed your subscription for the 1994 calendar year, please remit $4 to our Treasurer, Joan Moore, 2 Gannet Street, Gladesville, 2111.

FERN OUTING 28-30/1/94
GIBRALTAR RANGE N.P.

SPECIES	C	T	N	M	D	A
Adiantum silvaticum			X	X		
Arachniodes aristata				X		
Arthropteris beckleri		X				
Arthropteris tenella			X	X		
Asplenium australasicum		X	X	X		
Asplenium flabellifolium		X	X	X		X
Asplenium flaccidum		X		X		
Asplenium polyodon		X	X	X		
Blechnum cartilagineum		X	X	X		X
Blechnum minus	X	X			X	X
Blechnum nudum		X	X	X	X	X
Blechnum patersonii		X	X	X		
.chnum wattsii		X	X	X		
Calochlaena dubia (Culcita)	X	X	X	X	X	X
Cyathea australis		X	X	X		
Cyathea cooperi		X				
Cyathea leichhardtiana		X	X	X		
Davallia pyxidata		X	X	X	X	X
Dennstaedtia davallioides		X				
Dicksonia antarctica		X	X	X	X	
Dictymia brownii		X	X	X		
Diplazium australe		X	X	X		
Doodia aspera		X	X	X		
Doodia caudata			X			
Gleichenia dicarpa		X	X	X	X	X
Gleichenia microphylla		X				
Grammitis billardieri				X		
Histiopteris incisa		X	X	X		
nenophyllum cupressiforme				X		
Hypolepis muelleri			X			
Lastreopsis acuminata				X		
Lastreopsis decomposita		X	X	X		
Lastreopsis microsora		X	X	X		
Lindsaea linearis	X	X	X	X	X	X
Lindsaea microphylla						X
Lunathyrium petersenii		X				
Lycopodium deuterodensum				X		X
Microsorum scandens		X	X	X		
Pellaea falcata		X	X	X		
Platycerium bifurcatum		X	X	X		X
Polyphlebium venosum		X				
Pteridium esculentum	X	X	X	X	X	X
Pyrrosia confluens			X			
Pyrrosia rupestris		X	X	X	X	
Schizaea bifida	X					X
Sticherus flabellatus		X		X	X	
Sticherus lobatus		X	X	X		X
Todea barbara		X		X	X	X

C: Near Mulligan's Hut campsite. **T**: Treefern Forest Walk **N**: Needles Walk
M: Murrumbooee Cascades Walk **D**: Dandahra Trail **A**: Anvil Rock Walk

MORE NEWS FROM THE MID NORTH COAST

Outing to Gibraltar Range, 28-30 January 1994

Contributed by Charlie Charters

Friday saw us at Gibraltar National Park, all bright and eager, but at the minute it started to rain, so on with the rain coats for Tree Fern Forest Walk, a very easy and beautiful walk with plenty of ferns and tree ferns. After lunch it was off to Murrumbooee Cascades Walk (a long 5 km) once again plenty of ferns. After about 14 km for the day it was early to bed.

Early next morning everybody, although stiff and sore, was eager to be off again, but first a juggle of cars to save the walk home. We set off on the Dandahra Trail but although it was a comfortable walk there was not a lot of ferns. It should be an extra good walk in spring. After arriving at the Ranger Station it was into the cars for a 10 km drive back to camp. Trying to fit as much in as possible in the weekend it was off to the Needles. Although slightly harder it was another good walk with plenty of ferns and good views.

On Sunday we decided to do Anvil Rock Walk. Although not a lot of ferns, the rock formations were very interesting.
(Ferns sighted during these outings are listed on page 13)

DEADLINE FOR COPY

Our thanks to all those who contributed to our Newsletter. Contributions are always welcome in fact we depend on them. On this occasion we have had to carry over our Treasurer's financial report but rest assured the Groups position is sound and the report will included in the June issue. Contributions for the June Newsletter should be received by the Secretary no later than 15 May 1994.

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