



ASSOCIATION of

S. G. A. P. Fern Study Group

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A SPECIAL VISITOR TO SYDNEY

Members in Sydney for the monthly get-together on Saturday 18 March 1995 will have the opportunity of meeting with Gillean Dunk, one of Australia's foremost writers on gardening and author of the new edition of book "Ferns for the Home and Garden".

Gillean will be visiting Sydney from Bendigo and has kindly offered to bring her slides and speak to us generally on ferns. Her book was first published in 1982 and a warning on the blurb which accompanied that edition said, "if you're not a fern fancier already, you will be once you've explored its pages. And as most diehard fanciers will agree, there's no stopping at one species once you've lived successfully with a feathery fern. Once you are captivated there is a wealth of practical information on how to propagate and successfully grow ferns in the house, greenhouse or garden".

The new book is a hard cover quality production beautifully illustrated and a great buy for the advertised \$39.99.

DRYNARIA RIGIDULA- A FROND CHANGE

Contributed by Irene Cullen

I acquired my Drynaria rigidula, over 30 years ago. It was just a very small clump brought home by our school boy son, who found it while scrambling up White's Hill, one Saturday afternoon. (White's Hill was just an uninhabited area then - now it is one of Brisbane's prime housing estates). For the next twenty five years, it grew well. It had been divided into two baskets in that time. Then for no apparent reason, it started to form aberrant fertile pinnae. First at the very tips, then each year this became more distinct. The accompanying photo copy, was taken of a '93 - '94 frond. There has been no change in nest fronds.

This season the fern has set an exceptionally heavy amount of spore and the fronds are not so irregularly lobed. These ferns set spore every December. Has any member noticed this sort of change in their D. rigidula? Maybe - someone has a theory as to why this has occurred in both these plants. I only give them a light application of Osmacote each October, and have never had a cause to spray any of my ferns.



Drynaria rigidula

NOTES FROM THE SYDNEY AREA

Report - Christmas Function, Kenthurst, 4 December

Our thanks to Tamara and Ian Cox for hosting our annual get-together. A good time was had by the 20 members present, good food, good company and much conversation. The attractive, healthy ferns were much admired and the Cox's natural bush garden greatly envied.

Report - Meeting at Dural, 18 February 1995

Despite the threat of showers the afternoon stayed fine and a pleasant afternoon was enjoyed by the 21 members who attended at the home and garden of our Leader Peter and Margaret. Peter presented the day's study of Schizaeaceae, speaking from a key which he had prepared.

Although true ferns, Schizaeas are one of the most primitive of the family of ferns and look different. They have a specialised adaptation to their method of sporing with relatively large sporangia borne at the apex of the fronds - two rows of narrow, short leaf segments fold inwards in an arrangement resembling a cock's comb. In most Schizaea the fertile segments of the comb are close together but in one, Schizaea digitata, the segments spread like the fingers on a hand. Peter explained that because of this feature, some botanists put S. digitata into a separate genus calling it Actinostachys digitata. It grows in the North Queensland rainforest and Peter recalled having seen it at the side of tracks at Mt Bartle Frere. It is also found in Asia and Madagascar.

S. rupestris is quite easy to identify, firstly, because its sterile fronds are simple, flat and more than 1 mm wide, and secondly because it grows in mats in wet habitats on rocks in shaded places often near waterfalls, and as Peter told us, often under Gleichenia. It is endemic to N.S.W. All the remaining Schizaea, favour poor acid soil in sandy heathland. Peter said that although sometimes found close to swamps, they were invariably in raised, drier parts. S. fistula may be separated from the others because the sterile fronds are simple, smooth and more or less terete. It is found in all States except Queensland. This left two species, or three if S. asperula is recognised. The botanists who recognise this last named species claim that it covers those ferns which are rough and have forked sterile fronds, separating it from a group which they call as S. bifida and being only fairly rough and with sterile fronds that are not forked. A close examination of a potted specimen obtained by Fred Johnston from Dural, revealed difficulties with this distinction, and we agreed, good reason for not treating S. asperula as a separate species.

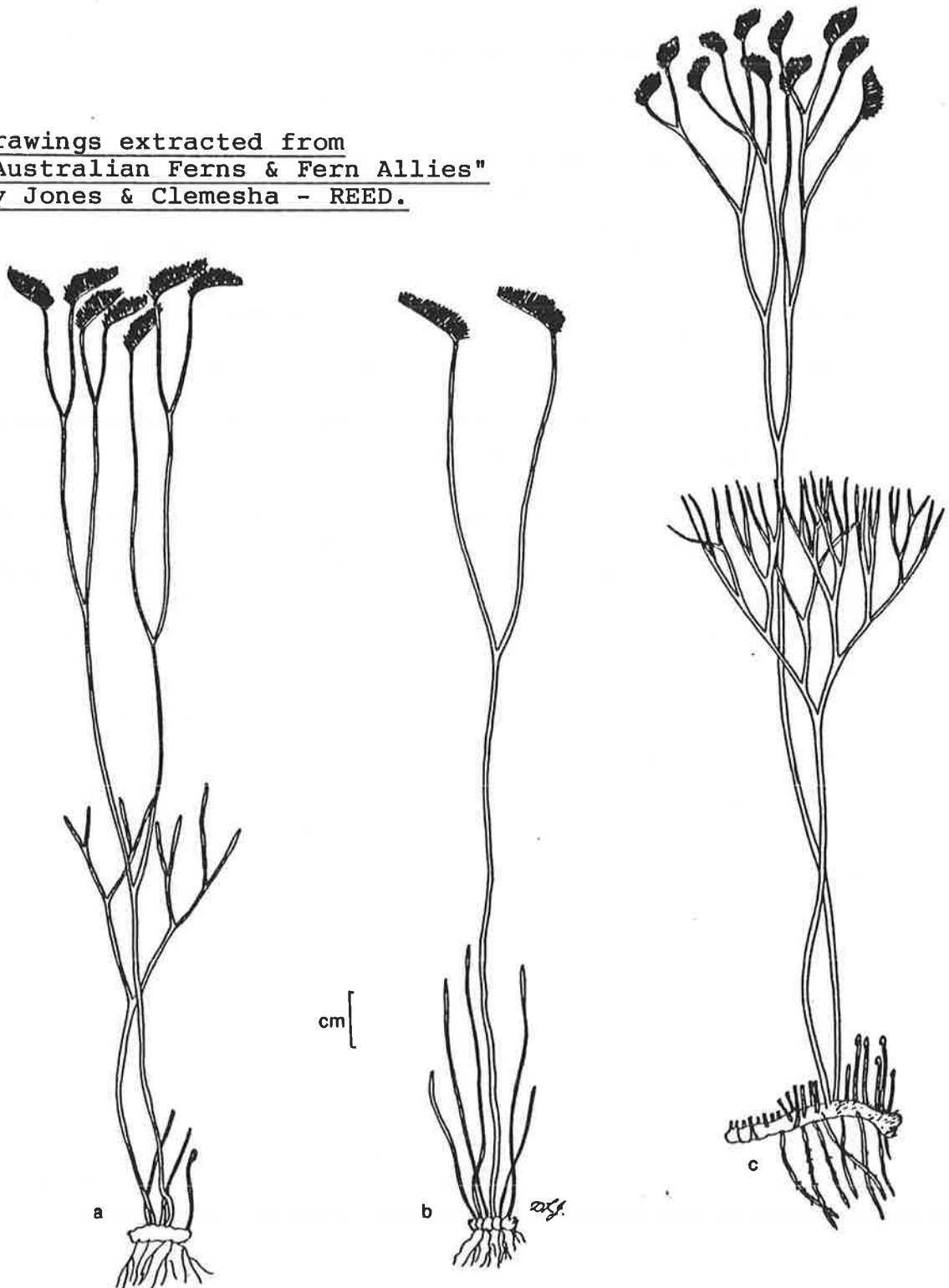
S. bifida is found in all States except Western Australia and is also a native of New Zealand and New Caledonia. 'The Flora of N.S.W.' doesn't recognise S. asperula and in its key attributes S. bifida as having fertile fronds which are simple or divided once or twice or rarely 3 times and sterile fronds usually with the first forking below the middle. These features are in contrast to the one remaining Schizaea, S. dichotoma, which has fertile fronds divided 3 to 6 times and sterile fronds with first forking above the middle. S. dichotoma is the tallest of the Schizaea and it grows in N.S.W., Queensland, Northern Territory and W. A., as well as Asia, Pacific and Madagascar.

Schizaea have a mycorrhiza association and there is no record of spores raising in cultivation. They are seldom seen in collections as transplanting is difficult because of disturbance to their deep root system.

The meeting concluded with a "Members Fern", Cystopteris tasmanica, presented by Allan Woollett who described searching and photographing it recently in a wet, shaded rock crevice near Blue Lake in the Kosciusko National Park.

Cystopteris tasmanica is a delicate, tufted fern with rhizomes ascending or short creeping, fronds narrow lanceolate in outline, once pinnate and twice pinnate towards the base. The pinnules are variously dissected and somewhat like those on a Maiden Hair Fern. The sori is orbicular and it has a pale, thin indusium which is fastened at the base, hooded and open at the apex. This hood or bladder is the reason for its common name "bladder fern". The fern is rare above the tree line in the Kosciusko National Park but is also found in the Victorian Alps, Tasmania, New Zealand, America and Europe. Earlier it had been thought to have been a form of Cystopteris fragilis. In cultivation it requires plenty of moisture and is most likely to succeed in a terrarium

Drawings extracted from
"Australian Ferns & Fern Allies"
 by Jones & Clemesha - REED.



SCHIZAEA SPECIES

a) *S. asperula* x1 b) *S. bifida* x1 c) *S. dichotoma* x $\frac{2}{3}$

Notes from the Mid North Coast

compiled by Steve Clemesha

For our outing on the 10th and 11th December our group walked around the tracks of the Never Never area of the Dorrigo National Park. This section has quite a different flora to the other part of the park. Most of it is temperate rainforest while the other section is subtropical rainforest as are some of the gullies at Never Never.

The most surprising of the 50 fern species we found was Ophioglossum pendulum hanging from a Platycterium bifurcatum as it usually does. This normally is a lowland fern and we were surprised to see it at this altitude.

A few plants of Diplazium assimile grow beside the track to one of the waterfalls. It is much more plentiful in the other section of the park. We have not seen this fern in any area except the Dorrigo National Park.

Tmesipteris ovata was seen on Cyathea australis scattered over a fairly big area. Often the Tmesipteris grew with the filmy fern, Macroglena caudata.

In the more temperate rainforests we found the usual ferns common to that country such as Lastreopsis microsora, L. decomposita and L. acuminata, Doodia aspera, Blechnum cartilagineum and B. patersonii and many others.

On the walks to the gullies we saw more subtropical species like Platycterium superbum, Fyrrosia confluens, Lastreopsis munita, Pteris umbrosa and Asplenium attenuatum.

Right near the base of the falls were a few patches of Grammitis stenophylla and an unusual form of Doodia caudata with longer fronds than usual which were almost as rough as those of D. aspera.

Hymenophyllum cupressiforme was present also and so were a few plants of Blechnum nudum and a solitary Blechnum minus. It is unusual to see this fern in a subtropical habitat as it normally grows in colder places.

Scattered through the Never Never area were trees of the Dorrigo Waratah, Alloxylon (formerly Oreocallus) pinnatum. This tree favours southern slopes and often grows with Blechnum watsii and Sticherus lobatus.

Another interesting plant we saw was a Grevillea relative with flowers resembling a Grevillea. The leaves are glossy and dark green. It is Triunia youngiana, the spice bush, with

beautiful scented flowers. Its very poisonous fruit was not present.

Rain before and during our visit freshened up the ferns and other plants and it also sharpened the appetites of the leeches and my bag of salt was very useful.

The following is a list of ferns sighted on this trip to Never Never, Dorrigo National Park - Rosewood Creek Track, Cedar Falls and Casuarina Falls.

1	<i>Adiantum diaphanum</i>
2	<i>Adiantum formosum</i>
3	<i>Adiantum hispidulum</i>
4	<i>Adiantum silvaticum</i>
5	<i>Arthropteris beckleri</i>
6	<i>Arthropteris tenella</i>
7	<i>Asplenium attenuatum</i>
8	<i>Asplenium australasicum</i>
9	<i>Asplenium flabellifolium</i>
10	<i>Asplenium polyodon</i>
11	<i>Blechnum cartilagineum</i>
12	<i>Blechnum minus</i>
13	<i>Blechnum nudum</i>
14	<i>Blechnum patersonii</i>
15	<i>Blechnum wattsi</i>
16	<i>Calochlaena dubia (Culcita)</i>
17	<i>Cyathea australis</i>
18	<i>Cyathea cooperi</i>
19	<i>Cyathea leichhardtiana</i>
20	<i>Davallia pyxidata</i>
21	<i>Dictymia brownii</i>
22	<i>Diplazium assimile</i>
23	<i>Diplazium australe</i>
24	<i>Doodia aspera</i>
25	<i>Doodia caudata</i>

26	<i>Grammitis billardieri</i>
27	<i>Grammitis stenophylla</i>
28	<i>Histiopteris incisa</i>
29	<i>Hymenophyllum cupressiforme</i>
30	<i>Hypolepis muelleri</i>
31	<i>Lastreopsis acuminata</i>
32	<i>Lastreopsis decomposita</i>
33	<i>Lastreopsis microsora</i>
34	<i>Lastreopsis munita</i>
35	<i>Lindsaea microphylla</i>
36	<i>Lunathyrium petersenii</i>
37	<i>Macroglena caudata</i>
38	<i>Microsorium scandens</i>
39	<i>Ophioglossum pendulum</i>
40	<i>Pellaea falcata</i>
41	<i>Platycterium bifurcatum</i>
42	<i>Platycterium superbum</i>
43	<i>Pteris umbrosa</i>
44	<i>Pyrrosia confluens</i>
45	<i>Pyrrosia rupestris</i>
46	<i>Sticherus flabellatus</i>
47	<i>Sticherus lobatus</i>
48	<i>Tmesipteris ovata</i>
49	<i>Todea barbara</i>
50	<i>Vittaria elongata</i>

FERNS IN GARDEN DESIGN

Further to the article in the December 1994 Newsletter, the following are two other ferns considered valuable in garden design.

Adiantum formosum:

A tall handsome fern with lovely verdant green fronds so evocative of rainforest and deep gullies. The name "formosum" means beautiful and this is particularly apt when viewed from above as a sward of dark green. It is a vigorous fern and forms large colonies spreading by means of deep, long creeping rhizomes. Up close an individual frond borne on a tall, stiff, black stipe, is just as attractive and examined in silhouette it is easy to see why it has been used so extensively in dried floral arrangements.

Form: Erect fronds, rhizome creeping and branched, forms large colonies

Size: 60 to 110 cm tall

Soil Type: Slightly acid, deep, alluvial loam

Aspect: Shaded position

Watering: Likes moisture but grows happily with infrequent watering if soil kept well composted

Adiantum hispidulum:

This is perhaps the easiest of the maidenhair ferns to grow and tolerates strong light and minimal watering when grown among rocks where it can get some protection for its root system. It is not invasive and requires only an occasional pruning of dead fronds to remain attractive. The young fronds are shades of pink or redder in more exposed positions.

Form: Upright, rhizome short creeping

Size: 25 to 45 cm tall

Soil Type: Light to heavy soils but needs to be well drained

Aspect: Semi protected, good among rocks.

Watering: Tolerates dry conditions if root system protected

NATIVE FERN NURSERY

Sydney members travelling on the southern side may be interested in visiting the Native Fern Nursery at 6 Bardess Road, Farmborough Heights. From the Pacific Highway travel south of Unanderra, turn right at lights before the railway viaduct, into Farmborough Road travel to top of hill then left into Fairloch Avenue, and then first left.

The Nursery specialises in ferns and palms and has an extensive stock of both in a very attractive, neat display area. A feature is the variety of mounted Platycerium and Bird Nest ferns. There is also an excellent range of Dendrobiums. Prices seemed reasonable and the Nursery is open 7 days a week. The proprietors are Graham and Karen Ingram (042) 71 6565.

AUDIO VISUAL

Largely thanks to Fred Johnston, planning is under way to produce a new audio visual to be titled "Native Ferns for the Home Garden". It is being designed for the relatively inexperienced gardener and aims to be interesting and educational using simple language. Ferns featured will be easy to grow and readily available for purchase. In conjunction with the audio visual, a handout is to be produced listing the ferns shown in the audio visual and indicating how to grow, soil conditions, fertilisers, where to situate ferns in the garden, etc. Joan Moore and Betty Rymer have already supplied suggested lists of suitable ferns and Moreen is preparing a consolidated list for final decision.

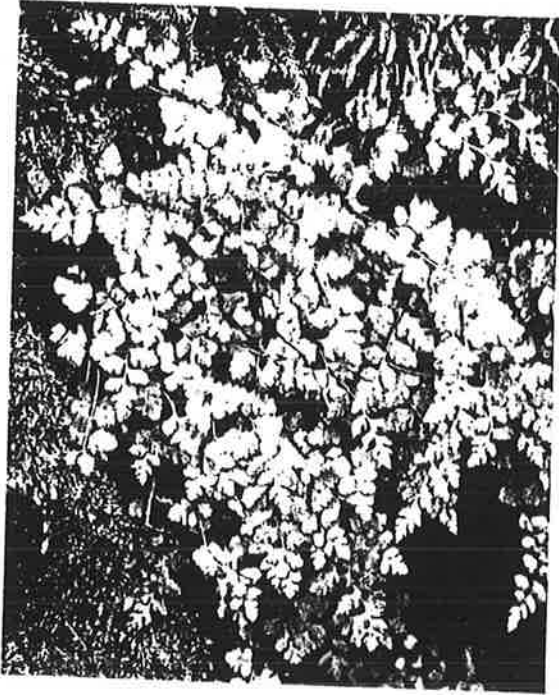
The push is now on for good slides of the common, easy to grow ferns. If any member has slides which might be suitable for the proposed audio visual, and these can be borrowed, please contact Fred Johnston, 18 Taylor Road, Dural, 2158, or phone (02) 651 1144.

CARETAKER WANTED

Caretaker or couple with interest in native plants wanted for Burrendong Arboretum. The Arboretum is situated 25 km south east of Wellington, 360 km from Sydney. It is a place where native plants are grown for preservation and study. The area of 162 ha contains one of the largest displays of cultivated native plants collected from all over Australia.

A comfortable 3 bedroom cottage is available in return for weekend attendance and some other light duties. Position suitable for pensioner or someone with independent means. Enquiries to Curator (068) 467 454 during working hours and after hours to Hazel Althofer (068) 452 483

Extract from "Ferns and Allied Plants of Victoria Tasmania & South Australia by Duncan & Isaac, Published by Melbourne University Press



Cystopteris tasmanica

(See article "A Members Fern")

Fern Society of Victoria Inc.

FERN SHOW

National Herbarium
Royal Botanic Gardens

Birdwood Avenue, South Yarra
(Melway Ref. 2L A1)

Sat 1st - Sun 2nd April '95
Open 10:00am - 5:00pm

Native & Exotic Ferns
Plant, Spore and Book Sales

Adults \$3.00 Concession \$2.00 Children Free

SPORE BANK

Dulcie's recent stocktake of spore showed minimal stock of recently acquired spore and very few recent users. This is something of a chicken and an egg situation, should the demand come for spore before we get it. We would like to try it the other way, if we build up a good stock of fresh spore and advertise its availability, perhaps we will have an increased demand for spore. So a plea to members, please help build up our stock of spore so that Dulcie can promote the availability of a reasonable stock of fresh spore and encourage the growing of more ferns.

Spore that Dulcie has had donated recently include Blechnum minus, Blechnum minus X watsii and Pneumatopteris sogerensis 'Minyon Falls'. You might like to ask for these when you send in your spore.

SUBSCRIPTIONS DUE

The annual subscription of \$4 is due and payable at the beginning of each calendar year. Payment should be made to the Treasurer Joan Moore, 2 Gannet Street, Gladesville, 2111.

DEADLINE FOR COPY

Thank you all who have contributed articles and information to this newsletter. The more news the better the letter! Items for the June Newsletter should be forwarded to reach the Secretary by no later than 15 May 1995.

FORTHCOMING EVENTS : IN THE SYDNEY REGIONSaturday 18 March 1995, Meeting at Gladesville - NOTE CHANGE!

Meet from 1.30 pm for 2 o'clock start at the home of Joan Moore, 2 Gannet Street, Gladesville. Our special guest, all the way from Victoria, is Gillean Dunk, well known writer and author of the recently revised "Ferns for the Home & Garden". Bring plate for afternoon tea. Enquiries to Joan, phone 817 5487.

Sunday 9 April 1995, Meeting at Dural

Meet from 11 am at the home of Norma and Fred Johnston, 18 Taylor Road, Dural. Study Session commences at 12 noon Peter leading discussion on Parkeriaceae and Platyzomataceae. In place of "A Member's Fern" Fred Johnston will show us some slides kindly loaned by Ray Best. Enquiries to the Johnstons, ph. 651 1144.

Saturday 20 May 1995, Outing to Lawson

Meet from 9.30 am ready to move off at 10 sharp on two short walks to Fairy Falls & Dantes Glen. If travelling from Sydney along Great Western Highway turn right and cross bridge over railway just before Lawson Railway Station (San Jose Ave), turn left, then first right and then first left leads directly to Picnic Area and our meeting spot just opposite Fairy Falls. Come prepared to carry lunch so that our options are open. Enquiries to Peter 625 8705

Sunday 18 June 1995, Meeting at Kenthurst

Meet from 11.30 am at the home of Betty and Eric Rymer, 48 Annangrove Road, Kenthurst. The study will commence at 1.00 pm on the genus Lygodium. Our special thanks to Tamara for nominating Ian Cox to present "A Members Fern". Bring lunch and afternoon tea. Enquiries to the Rymers 654 1831.

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

For details about forthcoming events contact Charlie Charters, phone (065) 86 1088 - note new phone number.

FORTHCOMING EVENTS : IN SOUTH EASTERN QUEENSLANDSunday 23 April 1995, Cooloola National Park.

Meet 8.30 am at entrance to the Rainbow Waters Holiday Park - Carlo Road Rainbow Beach. Members to make their own arrangements for accommodation and travel. Further particulars ring Merle Goadby (07) 374 1964.

Sunday 7 May 1995, Meeting at Beerwah.

Meet there at 9 am at the Beerwah Field Study Centre. The Fern Study members to lead groups at a workshop. "Identifying Local Ferns".

Sunday 4 June 1995, Outing to Greenbank

Meet at Kerry Rathies home 5 Saltoun Road Greenbank. Study Identification of Genera. Meet at 9.30 am.

Sunday 6 August 1995, Outing to Algester

Meet at Cullen's home, 220 Ridgewood Road, Algester. Another look at Lastreopsis and arrangements for September Display.

A.S.G.A.P. FERN STUDY GROUP

Statement of Receipts & Payments for the Year 1994 (\$)

<u>Receipts</u>		<u>1993</u>	
Membership Subscriptions	540	561	
Donations	133	133	
Interest Received	35	45	
Sydney Members Raffles - Net Proceeds	59	66	
Sale of Ferns -Net Proceeds	170	543	
Sale of Booklets	20	-	
Recoup Sale of Fernlings	-	200	
	<u>957</u>	<u>1548</u>	
Total Receipts			
			<u>SUMMARY</u>
			Cash at Bank 1.12. 93 \$2,462.50
			Add Surplus for year <u>233.12</u>
			Balance at 30.11.94 <u>\$2,695.62</u>
<u>Payments</u>			
Postage of Newsletters	252	296	The above financial statement
Paper & Printing for Newsletters	309	66	was prepared by the Treasurer
Donation to Burrendong Arboretum	-	500	Joan Moore. Our thanks to you,
Donation to North East Forest Alliance	-	50	Joan, for looking after our
Stationery	8	63	finances so capably.
Postage of Correspondence	26	33	
Bank Charges & Money Orders	13	14	
Expenses of Book - to be published	20	20	
Display Material	96	-	
Total Payments	<u>724</u>	<u>1042</u>	
Surplus for Year	<u>233</u>	<u>506</u>	

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