



ASSOCIATION of

S. G. A. P. Fern Study Group

Newsletter *Number* 84

ISSN 0811-5311

DATE - MARCH 1999

LEADER : Peter Hind, 41 Miller Street, Mount Druitt, 2770

SECRETARY : Vacant

TREASURER : Joan Moore, 2 Gannet Street, Gladesville, 2111

SPORE BANK: Barry White, 24 Ruby Street, West Essendon, 3040

PROGRESS TOWARDS COMPLETING "THE BOOK"

Calder Chaffey has advised that the long awaited book on Australian native ferns, "Australian Native Ferns - Growing Them Successfully" is to go to the printer on 1 July 1999. The book is scheduled for release in August and word from the NSW-SGAP Publishing Committee, suggests that the recommended retail price will be around \$65.

Incidentally, Calder is author of a little book just released by the SGAP-Far North Coast Group. This publication provides an easy identification and full, readily understood description of all known Lilly Pillies indigenous to far north-eastern NSW. Titled "The Blooming Lilly Pilly" it has text by Chaffey and illustrations by Lesley Cordery and Calder. Lesley's fine drawings often appear in "Native Plants of NSW" and she has done the drawings for "Australian Native Ferns - Growing Them Successfully". This Lilly Pilly book is the second of what hopefully may be a series produced by the Far North Coast Group. The earlier one "The Blooming Eucalypt" had text by Calder Chaffey and illustrations by Tim Roberts. Both books are essential aids to the enjoyment of any SGAP'er-type visiting the NSW North Coast. Perhaps now with "Australian Native Ferns - Growing Them Successfully" all but a reality, Calder and his local SGAP Group may be persuaded to work on a detailed guide to the Ferns of the Far North Coast. Possibly though to avoid any thought that ferns bloom, the title should be "The Bally Fern" !

POSITION VACANT - SECRETARY

After almost fourteen years as the Group's Secretary, Moreen Woollett has relinquished the position. The Woolletts are selling their Como property and moving to Kilaben Bay. The Secretary is responsible for answering correspondence and collating material for the Newsletter, arranging Newsletter printing and distribution. None of the work is very time consuming and Moreen agrees duties could be shared by more than one person.

Given today's methods of communication, it is not essential that the Secretary be located in Sydney. Indeed interest from interstate members would be most welcome. Anyone willing to consider volunteering their services as Secretary, or to obtain more information about the position, is asked to contact the Leader. In the meantime, all correspondence, other than matters relating to membership subscriptions that belong to our Treasurer, should be forwarded direct to the Leader.

SUGAR AND TREE FERNS

In our September 1998 Newsletter, Geoff Simmons wrote of hearing an ABC Garden Presenter say that an application of a teaspoon of sugar to a treefern was beneficial for growth. Following comments in the December Newsletter, Geoff has written again as follows.

"With reference to the item in the last newsletter on the use of sugar, I am somewhat puzzled by the linking of sugar and starches to nitrogen as theoretically neither contain nitrogen. I could understand that carbohydrates could stimulate bacteria, fungi, etc. that could produce nutrients in the vicinity of the fern.

It is interesting that brown sugar was used on cyathea - would the application have any effect on Dicksonia species which have a different type of growth that would enable a much more intimate contact with the growing root and frond structures."

Geoff's statements above, were discussed at February's meeting in Sydney. In the absence of a chemist among us, we were not properly qualified to answer in respect to the reaction of the various compounds and the chemical process. Obviously Geoff is right in wanting to know whether the use of sugar can be supported scientifically. What are the facts? It seems that sugar would attract ants and be unlikely to make any significant improvement in the ferns growth. The use of a liquid fertiliser would seem to be preferable. We would be very interested in hearing from any reader with knowledge of the results of any credible experiments using sugar to stimulate the growth of tree ferns.

LIME IN POTTING MIX

Kevin Hendreck of Netherwood Horticultural Consultants, 2 Birdwood St., Netherby, S.A., has written to Peter as follows:

"I notice in the SGAP Fern Study Group Newsletter No. 83 that you ask for comment on the use of lime in potting mixes.

As partial answer, I enclose a copy of a paper that I wrote some years ago. You will see that the work reported indicated that all ferns tested grew well in mixes with pH values in the range 5.5 - 6.5.

It does not matter how much lime (or preferably a lime / dolomite mixture of about 1 : 1) is added to a potting mix, so long as the pH comes to within the above range. The final pH is the critical thing, not the amount of addition. The only way to be sure is to measure the pH of the final mixture. All commercial potting mixes contain some added liming materials as the base ingredients of pine bark, sawdust and peat are always highly acidic (pH 4 - 4.5).

The simplest way for your members to get potting mix of the optimum pH is to buy only those mixes whose bags carry the Standards Mark".

The paper which Kevin sent to Peter appeared in 'Scientia Horticulturae', 50 (1992) on pp. 115-126. Also, information can be found in the following two books with which Kevin Hendreck has been associated.

1. 'Growing Media' by Kevin Hendreck and Neil Black - UNSW Press
2. 'Gardening Down-Under' by Kevin Hendreck - CSIRO.

(Ed.: "Gardening Down-Under" obtained from Florilegium, the SGAP-NSW Book Sales, for \$35 last Christmas, is highly recommended to anyone interested in knowing about soils - that should be every gardener!)

TODEA HABITAT

Contributed by Geoff Simmons

With respect to the Mid North Coast report on pages 10-11 (December 1998 Newsletter), I would be interested in information on the natural habitat of Todea in relation to the presence of soil moisture. I note in the report Todea was noticed near a stream - and I seem to recall reading that a plant of this species growing in England originated from a swamp in Australia.

In response to Geoff's query, Peter has responded as follows:

Todea and moisture go together: *Todea barbara* ferns are usually found along streams or hillside seepage of relatively permanent nature. Todeas may be found growing on sandstone but only next to water or where there is seepage.

SPORES - IMBIBATION, SOIL SPORE BANKS & WET STORAGE OF SPORES

Contributed by Geoff Simmons

Scientific research provides many interesting and perhaps, unusual insights into fern life and the above illustrates three of these. Without extensive access to the science reports, assessment of the practical use of these findings is difficult. However it is worthwhile mentioning them to alert members to possibilities in this fascinating subject of ferns.

1. Soil spore banks.

Attention was drawn to this phenomenon particularly by an article by Dyer & Lindsay in 1992 (*American Fern Journal*, 82;3;89). Basically it means that viable spores may exist below the soil surface, perhaps for years, and that these can be made to germinate and so produce ferns. Maybe spores of species not seen at the time of visiting an area or in the flora existing in that locality may still exist in the deeper layers of the soil. Methods to collect and examine soil samples have been devised and it seems that it may be possible for fern enthusiasts un-associated with laboratories, to explore this facet of fern survival. Whenever an excursion is made to a private property to observe the ferns present, perhaps it may be desirable to collect soil samples some centimetres below the surface and try to discover which species current or previous, have occupied the site.

Previously I have reported on the growth of bracken after a bushfire on my land even though no bracken had been seen before the fire. A suggestion was made to me that the ash stimulated growth which seems likely but the question could be posed - did the ash stimulate rhizomes or were dormant spores spurred into activity.

2. Imbibition

Reports suggest that suspending spores in water results in improved germination, a process that has been called imbibition. My practice is to sow spores quite quickly after collection - usually the same day or within 24 hours. Presumably there is sufficient moisture in the medium (mainly Yates Jiffy pots treated with boiling water) to produce the necessary water intake. However, maybe I would have faster and a greater percentage of germination if I imbibed the spores in water that has been boiled and allowed to cool, for 1 or 2 days prior to sowing. Holding the spore suspension in the refrigerator would minimise microbial growth.

3. Wet storage

Storage at low temperatures in the dry state in vials or bottles is the usual method used for keeping fern spores for long periods. However research reports suggest that spores can be stored at least as well if not better by using a wet method and keeping them at 20 degrees Centigrade. As spores require light to germinate the method requires that the containers are kept so that the spores are not exposed to light, that is total darkness.

Chemical treatment, e.g., by bleach, may be necessary as a preventative measure against growth of contaminants although it appears that the jury is still out on whether such treatments have any undesirable adverse effects on the resulting prothalli.

HISTORY

Contributed by Geoff. Simmons

In 1914 was published a book written by H.M. Vaughan titled "An Australasian Wander-Year". This book was based on his observations during a visit to our region. Following is an extract from the chapter headed "Wild Flora of Sydney Harbour".

*“Besides these cut flowers, the visitor to Sydney will probably note that all the gardens, and many of the areas and balconies of suburban houses, are distinguished by large parasitic plants with heavy curling leaves, shaped like a conch shell. These are the Elk-horn Ferns (*Platycterium alicorne*) which are not really ferns at all but non-flowering orchids, that are to be found on the tree-trunks of the coastal forests. In my opinion these vegetable monstrosities are more curious than ornamental, but the citizens of Sydney are very partial to these bizarre additions to their gardens or verandahs, and once I counted as many as twenty of these strange plants in a very narrow space, whilst the fact that half of them seemed to be dead or dying did not add charm of a collection.*”

*Another popular fern is the gigantic Deer's Tongue (*Acrostichum conforme*) whose long glossy green leaves assume the upright form of an Eastern diadem. These large ferns are brought in to town on country carts, which are piled high with elk-horns, deers-tongues, rock lilies and small palms for sale and the constant appearance of these vehicles with their masses of tropical greenery gives a characteristic note to the Sydney streets (as does the presence of the Chinese gardener, balancing his two deep baskets of fruit and vegetables on his long pole.)”*

The opinions expressed and the data on which they are based can be a cause of great speculation but nevertheless gives an interesting insight into ideas at the turn of the century.

PSILOTUM NUDUM

Contributed by Geoff Simmons

In a book published in 1992, I read that a Japanese book (*Illustrated Enumeration of the Varieties of Psilotum nudum*) published in 1836 listed more than 120 cultivars of this fern. This is astonishing. Have any members noted variations in this fern in Australia, sufficient to warrant recognition and naming as cultivars?

The few examples that appear in my shadehouse - presumably introduced some time in the past with another plant or media such as bark, all look to be similar in form.

LYGODIUMS AS WEEDS

Contributed by Geoff Simmons

In the Newsletter No. 70 dated September 1995, there is a contribution from me pointing out the weedy quality of *Lygodium japonicum* and at the same time requesting any information on the control of this fern. No replies were obtained. I was interested therefore in two articles in the American Fern Journal 88 (4) (1998) concerning *L. microphyllum*. In the first headed “Old World Climbing Fern (*Lygodium microphyllum*), a Dangerous Invasive Weed in Florida.” The authors R.W.Pemberton and A.P.Ferriter, describe the circumstances regarding the introduction of this fern to Florida, it's spread and potential spread. It is worth quoting a sentence which is as follows: “The fern's ability to grow over trees and shrubs and to run horizontally smothers whole communities of

plants.” The authors point out the bad effects this fern is having on the native flora. Herbicides and fire have been tried but cost and efficacy are drawbacks. Biological control is suggested. *L.japonicum* has also become naturalized following its introduction but is considered less dangerous

The second article by R.W.Pemberton examines the factors in using a biological method of control for *L.microphyllum*. Diseases such as rust and parasites such as moths are possibilities to be examined. The most interesting feature of this article for me, was the description of points to be considered when embarking on the biological control of an introduced plant.

L.microphyllum occurs in N.S.W., Queensland, Northern Territory and West Australia as well as other countries in Africa and Asia. As far as I am aware it has not been recorded as a problem plant in Australia - this would suggest that there is some naturally occurring factor whether climatic or parasitic. While *L.japonicum* doesn't appear to be so much of a threat, particularly in the north Queensland where it is endemic, the spread of the species by nurseries or natural means such as wind, makes for awareness of its potential as a weed as I believe it to be in my garden.

FLORA OF AUSTRALIA, VOLUME 48

Fern enthusiasts who have long awaited the release of this authoritative book on Australian Ferns, Gymnosperms and Allied Groups, could hardly be disappointed by its purchase. Its 766 pages are crammed with information. Not surprising then to find that the list of the Volume's Contributors, Illustrators and Photographers occupies two and one half pages.

Volume 48 covers all six Australian States, Northern Territory and Australian Capital Territory and the immediate off-shore islands. Other State administered territories such as Lord Howe Island and Christmas Island are excluded.

The simple language of the text and the abundant sketches will delight the non scientific reader. Those keys examined were easy to follow. Another welcome surprise is the inclusion of 25 colour plates all except one of which depicts 4 species on the page so enabling the colour reproduction of a large number of plants.

With such a landmark publication, especially one as comprehensive as this, changed treatment of a number of species can be expected. The full extent of these changes will only become apparent with study and usage. A few looked for changes were noted with satisfaction. For example, the recognition as species of *Adiantum atroviride*, *Pellaea nana* and *Sticherus urceolatus*. The changes to the worrying Doodia genus are also welcomed, although many of us would be disappointed that the “different” Doodia collected from the Wiangarie State Forest in the Kyogle district (Newsletter No.66, September 1994) has not been recognised.

The Flora's Volume 48 is sure to be the final reference and arbiter on the identification of Australian ferns for many years to come. It is 100 years since the previous issue. The hard back copy at \$95 is not overly expensive for such a quality, long enduring reference. The soft cover version is a bargain at \$60. These prices, post free, are advertised by SGAP-NSW Book Service, Florilegium, P.O. Box 644, Rozelle, 2039, Phone (02) 9555 8589.

Calder Chaffey has been keen to see that ferns listed in 'Australian Native Ferns - Growing Them Successfully' are consistent with those named in The Flora. "Our Book" would have been devalued if issued prior to The Flora being published. Accordingly, the timing of the release of the two books is ideal. 'Australian Native Ferns' with its concentration on ferns suitable for cultivation and the detailed requirements for growing them well, should form an excellent companion to the Flora. Volume 48 of The Flora provides comprehensive, technical descriptions of all our Australian native ferns but has no information about their cultivation.

SPORE BANK

Spore orders may be sent to Barry White, 24 Ruby St., West Essendon, Vic., 3040. Phone (03) 9337 9793, e-mail barry_white1@msn.com.au. When ordering, please include a stamped addressed envelope.

Spore donations are always welcome, including fresher samples of ones already on the list. There is no necessity to separate off the sporangia from the spore. The whole or part frond may also be sent in, all is acceptable. Please include the date of collection and, if collected in the bush, the area. Thank you to Joan Moore and Merle Wood for spore donations.

In the list below, after each species, the month and year of collection is shown. The letter "B" indicates collected in the bush. The area of collection is available on request. Requests for spore should be accompanied by a stamped addressed business-size envelope.

Arachniodes aristata 8/98, Asplenium aethiopicum 5/97, A. australasicum 5/98, A. milnei 9/97 B, Blechnum camfieldii 10/97, B. chambersii 5/97 B, B. howeanum 9/97 B, B. minus 4/98 B, B. patersonii 3/98 B, Cyathea australis 5/97 B, C. cooperi 'Brentwood' 1/98, C. cooperi 'Cinnamon' 1/98, C. cooperi 1/98, C. howeana 9/97 B, C. leichhardtiana 2/98, C. macarthuri 9/97 B, C. robusta 2/98, C. woolliana 3/97, Dennstaedtia davallioides 2/98, Dicksonia youngii 10/98, Histiopteris incisa 5/97 B, Lastreopsis acuminata 9/98, L. nephrodioides 9/97 B, Microlepia speluncae 5/98, Microsorium pustulatum ssp. howensis 9/97 B, Pellaea falcata 5/97, Platycterium bifurcatum v. willincki 2/98, P. bifurcatum ssp. willincki (wide) 1/98, P. superbum 6/98, Polystichum australiense 5/98, P. formosum 5/97, Psilotum nudum 9/97 B, Pteris umbrosa 6/98, Rumohra adiantiformis 5/97 B, Sticherus tener 5/97 B.

AUSTRALIAN FERNS FOR SALE AT THESE LOCATIONS

The nurseries listed below are known to be selling Australian native ferns and are willing to supply members on a retail basis. We would like to add other outlets known to carry a reasonable range of Australian native ferns. So that a more comprehensive list may be published in a future Newsletter, would you please inform the Leader of the details of any other outlets of which you are aware. The following information should be supplied: name, address and phone / fax number of nursery, brief details of the range of ferns for sale, and any other pertinent matters, including whether ferns are supplied by mail order. Those members with nurseries are particularly encouraged to take advantage of this opportunity of advertising ferns for sale. Please advise any supplementary data or corrections if relevant

QUEENSLAND

Nielsen's Native Nursery, 49-51 Beenleigh Redland Bay Road, Loganholme, 4129. Phone (07) 3806 1414. Fax (07) 3806 1706. Australian native ferns include *Angiopteris evecta*, *Todea barbara*, *Cyathea cooperi* and *Blechnum indicum* to name a few.

Member, Rod Pattison, P.O. Box 567, Rochedale South, 4123. Rod has a very large native fern collection and a small nursery selling native ferns. Many of the ferns are rare. Ferns sent by mail if required.

Rathie's Rare Plants, Lot 5 Salston Road, Greenbank, 4124. Phone (07) 3200 0268. Email: krathie@powerup.com.au. Member Kerry Rathie sells virtually all native ferns including mutant forms of some species. No mail orders but if unable to collect, contact Kerry regarding possible visit to your area.

Member, Ian Wood, P.O., Walkerston, 4751.

NEW SOUTH WALES

Kanerley Farm Exhibition & Nursery, 204 Hinton Road, Osterley, via Raymond Terrace, 2324. Phone (0249) 87 2781. A large range including rarer ferns.

Native Fern Nursery, 6 Bardess Road, Farmborough Heights, 2526. Phone (0242) 71 6565. Specialising in Stags, Elks & Tree Ferns.

Palm Land, 327 Mona Vale Road, Terrey Hills, 2084. Phone (02) 9450 1555. It is a large palm nursery but also contains a large area devoted to ferns, many Australian.

Sydney Wildflower Nursery, Veno Street, Heathcote, 2233. Phone (02) 9548 2818. A range of mainly local ferns.

VICTORIA

Bush-House Nursery, conducted by member, Lorraine Deppeler. It is situated at Cobden Road, Naringal, Victoria. (Postal Address: P.B. Allansford, 3277) Phone (03) 5566 2331. Lorraine has advised that mail orders have been quite successful with feedback indicating ferns arriving in good condition. Cartons will fit either 18 x 4" ferns or 12 x 6" ferns. Packaging and freight is \$7 per carton of 4", or \$12 per carton of 6". Tube sized plants can also be sent barerooted, but availability may be more limited. Prices: \$3 per 4" pot, \$5 per 6" pot and \$1 per tube.

Ferntastic Ferns, 272 Humffrey Street, Ballarat. Phone (03) 5332 1275. Member, Michael Healy, runs this small fern nursery as a hobby business. A variety of native ferns always available. People visiting the area are more than welcome to call but please phone in advance.

The Refernery, Amey's Terrace, Foster North, 3960. Phone (056) 89 1309. Range includes some cultivars. Most supplied in either tube, 4" and 6" sizes, or trays. The Nursery is conducted by Allan Standering and

SOUTH EASTERN QUEENSLAND REPORT

Report on End-of-Year Meeting, 6 December 1998

Contributed by Irene Cullen

Val and Ian Jimmieson's was the venue for a happy gathering of ten members and five visitors for the day. Besides being able to view two copies of the newly released Flora of Australia No. 48. Gymnospermae and Pteridophyta, we made good progress with our programme for next year. An excess of ferns provided for our Exchange, enabled everyone to leave with a couple of treasures each. There was much to see in Val's lawless backyard. Ferns and rainforest trees take up all available space and still she collects. Val also proved a delightful hostess and served us all plum pudding and ice cream to round off a great day.

Report on Meeting at Macgregor, 7 February 1999

Fourteen members and a visitor met at Pat Shaw's home for our first meeting of the year. All pleased to see new members Ron and Elaine Jell with us. Our foray into the new Flora left many a bit bewildered. Peter Bostock assured us that it would greatly simplify some areas. We are looking forward to a list he is kindly compiling for us. There were the usual "help me identify this fern" brought forward. The post meeting chat and sound of rain of the roof, was enjoyed by all as we ate lunch.

SYDNEY REGION REPORT

Report on End of Year Function, 6 December 1998

Once again we are indebted to Tamara and Ian Cox for hosting our traditional end of year get-together in their home at Kenthurst. There were 27 persons present. We were pleased that Alec Blombery and Bob Coveney were able to join us for the occasion and their informed comments and wise advice about various plants added to the day's learning.

Report on Meeting at Yagoona, 21 February 1999

The meeting was attended by 26 members. All were grateful to hosts Kyrill and Dorothy for extraordinary hospitality and initiatives included to make the day more helpful to our knowledge of ferns.

Fred Johnston provided the day's highlight, a first screening of his latest audio visual, 'Australian Ferns - For the Garden'. The audio visual has succeeded in capturing the evocative charm of ferns and a fern garden. The photography is superb and an ample testimony to the hundreds of kilometres travelled and countless hours Fred has spent getting the perfect shot. Commentary by Angie Michaelis is clear, informed and well balanced between description and erudition. All at the meeting were enthusiastic and full of praise at the presentation. The audio visual will be available for loan throughout District Groups and surely will encourage more people to grow more ferns. Well done Fred Johnston, congratulations!

In presenting a "Favourite Fern" Kyrill gave us a new slant - he provided descriptions before naming his fern. When Kyrill removed the wraps, to the surprise of many of us, he revealed an apparently well grown *Arthropteris tenella* climbing a stake wedged in a pot. The fronds were shiny but small although the fern was obviously healthy. Kyrill explained he had tendered this fern for about 12 years during which it had grown slowly. While common in NSW and Queensland rainforests, this species is not often seen in collections. *Arthropteris tenella* is probably best grown from spore as it is distinctly slow to establish after disturbance. It requires a cool sheltered position but tolerates dryness.

The day ended with the usual raffle of ferns donated by members. Just a word of appreciation to one of our unsung heroes, Tess Taylor, who regularly sells our raffle tickets and supervises the draw with incomparable efficiency and panache.

FORTHCOMING EVENTS : IN SOUTH EAST QUEENSLAND

Sunday 7 March 1999, Outing to Mt. Glorious

Meet at Miala National Park at 9 am. Several tracks outside the Park will be explored.

Sunday 11 April 1999, Meeting at Greenbank

Meet 9.30 am at Kerry Rathie's home for Doodia study and continued discussion of the new name and classification of some of our ferns.

Saturday & Sunday 1 & 2 May 1999, Outing to Border Range

Excursion to Border Range and Nimbin area, N.S.W.. Meet at 11 a.m. at the Loop Lookout on the Lion's Road. At 12 noon we will meet any N.S.W. members at the Picnic Grounds at Wiangarie State Forest. Members requiring a map of exact location, please contact Peter Bostock (07) 3202 6983 or Irene Cullen (07) 3273 1055. Overnight at Klassic Lodge via Nimbin.

Sunday 6 June 1999, Meeting at Jindalee

Meet at Lorna Murray's home, 18 Pantheon Street, Jindalee, for Pellaea study and discussion on involvement in the A.S.G.A.P. Conference.

For further information regarding South East Queensland Fern Study, please contact Peter Bostock phone (07) 3202 6983 or Irene Cullen on (07) 3273 1055.

FORTHCOMING EVENTS : IN THE MID NORTH COAST, NSW.

For details of the events and activities of the Group, contact Charlie Charters, phone (065) 86 1088.

FORTHCOMING EVENTS : IN THE SYDNEY REGION

Saturday 20 March 1999, Outing to Somersby Falls

If travelling from Sydney, leave the Freeway at Gosford exit. Meet in car park nearest the Falls at 9.30 am for 10 o'clock start. The walk covers only a short distance but is (at least it was on our last visit in 1990), full of ferns. A late lunch at cars should enable us to be ahead of most traffic returning to Sydney. If weather is doubtful or for other enquiries contact Kyrill, our Leader for the day, on (02) 9644 5531

Saturday / Sunday 17 - 18 April 1999, Plant Sales Mt. Annan

Activity for April in support of the Plant Sales week end at Mt. Annan Botanic Gardens. Volunteers required, if not already committed contact Peter Olde (02) 9543 2242.

Saturday 22 May 1999, Meeting at Epping

At the home of Rose Bach, 33 Third Avenue (Corner of Audine St.), Epping. Arrive from 11.30, business and study session starts at 1 pm. 'Thelypteridaceae' is to be studied with text taken from Andrew's 'Ferns of Queensland'. Bring your copy if you have one. Members with fold-up chairs are requested to take them to the meeting. Rose will present "A Favourite Fern". Bring lunch and plate for afternoon tea. Enquiries to Rose on (02) 9869 1692.

Sunday 20 June 1999, Outing to Royal National Park

To the Forest Island Track and its ten years since our previous visit. An easy 5 km walk on a well made loop track through some of Sydney's best rainforest and then largely open forest with ferns almost all the way. Meet from 9.30 in Bertrand Stevens Drive opposite entrance to Lady Carrington Drive for prompt 10 am start to avoid having to carry lunch. Enquiries to Peter on (02) 9625 8705.

ASGAP FERN STUDY GROUP

Statement of Receipts and Payments for the 1998 Calendar Year

RECEIPTS	<u>1998</u>	<u>Previous year</u>
Members Subscriptions	484	505
Donations (SGAP Regions \$45, Members \$30)	75	89
Raffles - Sydney Meetings	65	59
Sales of Books / Booklets	-	495
Interest Received	<u>5</u>	<u>16</u>
<u>Total Receipts</u>	<u>629</u>	<u>1,164</u>

