ASSOCIATION of



. G.A. P. Fern Study Group

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#### Growing (& Cutting Back) Maidenhair Ferns

Heard recently on a Radio Garden Talk-back Show a caller seeking advice concerning Maidenhair Fern that looked tatty after the winter. The caller was advised to "get the mower to it" - cut the fern off at ground level and water well with a nitrogen based fertilizer in order to bring on the fresh new fronds.

We checked the advice against what Chris Goudey has written in his book "Maidenhair Ferns in Cultivation" published by Lothian. An extract from that book follows.

"Many growers believe that it is beneficial to cut back Maidenhair ferns every year, others believe that it is better to burn them back, as ferns always come up fresh, green and healthy after a bush fire in their natural habitat. It is not necessary to cut ferns back at all, unless they are being grown for a specimen to be exhibited in a competition. Cutting ferns back can be quite harmful, particularly if it is done at the wrong time of the year. By removing all the fronds from a fern, it suffers a set back and it must then grow by using up all its reserves. The first fronds which appear after cutting a fern back are usually much smaller than those originally on the plant. If a temperamental fern is cut back at the wrong time of the year (i.e. autumn or early winter), or given excessive water during this period, it could well fail to re-establish itself.

The best method is to groom Maidenhair ferns about once per month throughout the year, by removing old and damaged fronds from the plant. It is also a good time to check for possible infestations of parasites, such as aphids, scale or mealy bugs, etc."

From Chris Goudey's authoratitive book, a couple of other lines which are well worth remembering.

"The three basic requirements for the good healthy growth of Maidenhair ferns are soil, moisture and light.... The ideal (soil) mix should consist of at least two-thirds of organic matter and one-third of coarse open sand."

#### Great Find in Tasmania

Contributed by Jennie Lawrence

On October 10th Peter McGlowe of Hobart, the Coordinator of Threatened Species Network had organized a trip to the Smithton area in North West Tasmania where it was known that the Lime Fern - Pneumatopteris pennique - existed on two sites.

A short walk from the cars through private property brought us to Copper Creek where we saw the fern in a patch of several square metres in area. Quite a large fern, fronds are up to 110 cm, erect, light green. Pinnae oblong with lower 3 to 4 pairs reduced in length and well separated. The unprotected sori are in two rows away from the margin. This genus has 75 species, most of which are in Malaysia, while <u>P.pennigera</u> is found in New Zealand, Queensland, Victoria, King Island and North West Tasmania on limestone soils near streams.

Following Copper Creek we found a few more patches of this fern. As the Copper Creek population is threatened by blackberry invasion and cattle stamping, a "Friends of the Lime Fern Group" was formed on the spot, of mainly locals, who will try to keep the invaders at bay.

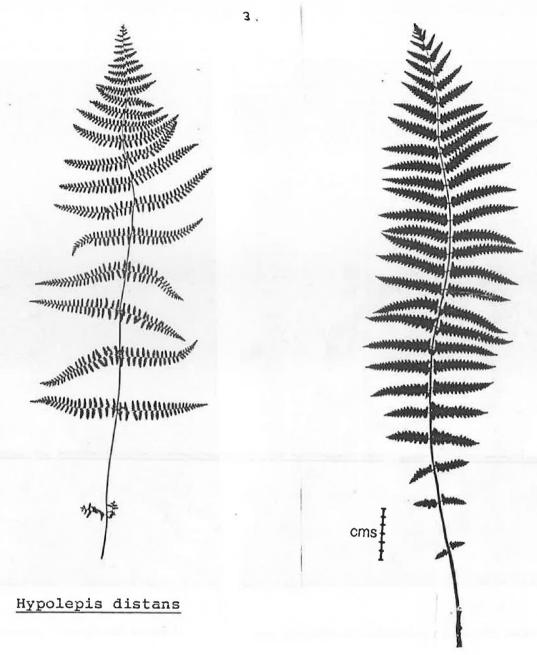
When Mr Max Cross, the owner of the Allendale Tea Gardens near Edith Creek, who also came along to look at the Lime Fern, happened to mention that <u>Hypolepis distans</u> was discovered at his property only a few years ago, 5 of us took the opportunity at the end of the day to drive to Edith Creek, where we were directed to the location.

Hypolepis distans was believed to be a New Zealand endemic, but in 1973 some species were discovered on King Island and recently in North West Tasmania. The ferns were growing in a damp spot under <u>Eucalyptus requans</u>. You can't miss seeing them, a beautiful weeping frond— the stipe is too thin to support its own weight— quite different from the other Tasmanian <u>Hypolepis spp</u>, which are difficult to separate. The stipe is red brown in colour, the fronds are narrow. We were all quite delighted seeing this lovely fern; it is well worth a visit to these gardens owned by Mr & Mrs Cross, who were most helpful and cooperative.

In the Tasmanian Naturalist October 1989 is an article by Mark Neyland on this newly recorded species.

#### Subscriptions Due for 1993

Subscriptions for the Fern Study Group for the 1993 calendar year are due in January. The current rate of subscriptions is \$4. If you are a financial member of SGAP, the payment gives you free access to meetings and excursions, advice from the Leader and for the cost of a stamped addressed emvelope, free spore. For non SGAP members, the \$4 gives an entitlement to receive copies of the quarterly Newsletter only. Subscriptions should be forwarded to the Treasurer, Joan Moore, 2 Gannet Street, Gladesville, 2110.



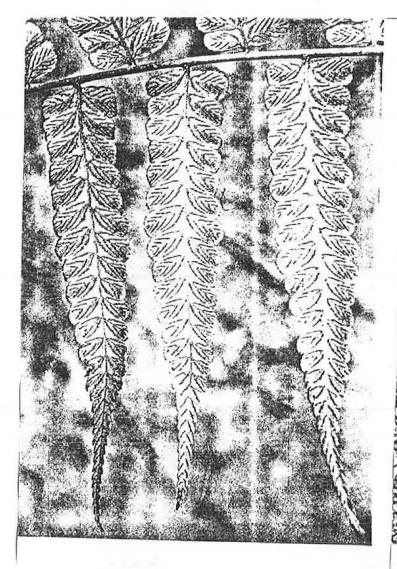
## Pneumatopteris pennigera

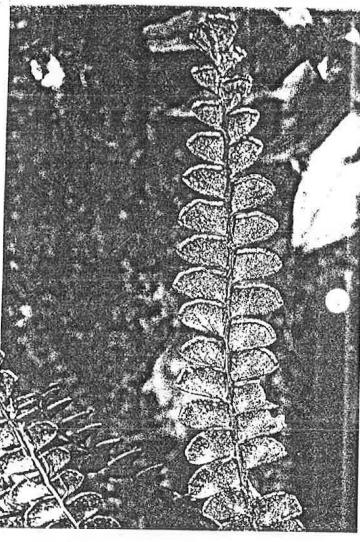
The above draawings were copied from "New Zealand Ferns and Allied Plants" by Brownsey & Smith-Dodsworth, published by David Bateman.

#### Change of Officers for Spore Bank

After six years of efficient service as our Spore Bank Officer, Jenny Thompson has decided because of family and work commitments to relinquish this position. For all the help that you have provided in the past, thank you Jenny; we are pleased that you intend to continue to join us in our activities, whenever you are able.

Dulcie Buddee has kindly agreed to assume the responsibilities associated with the Spore Bank. Requests for spore should be accompanied by a stamped addressed envelope and forwarded to Dulcie at the address shown at the head of this Newsletter. Please remember too, that the Spore Bank's stock of spore is derived from members who have collected the spore and forwarded it to our Spore Bank. All donations of spore, including that from the so-called common species, are greatly appreciated.





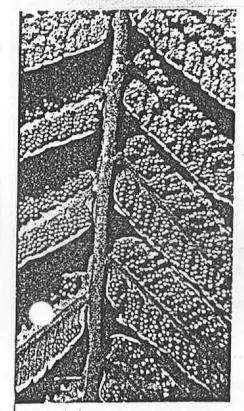
Diplazium dilatatum - underside of leaf showing sori.

Lindsaea brachypoda - underside of leaf showing sori.

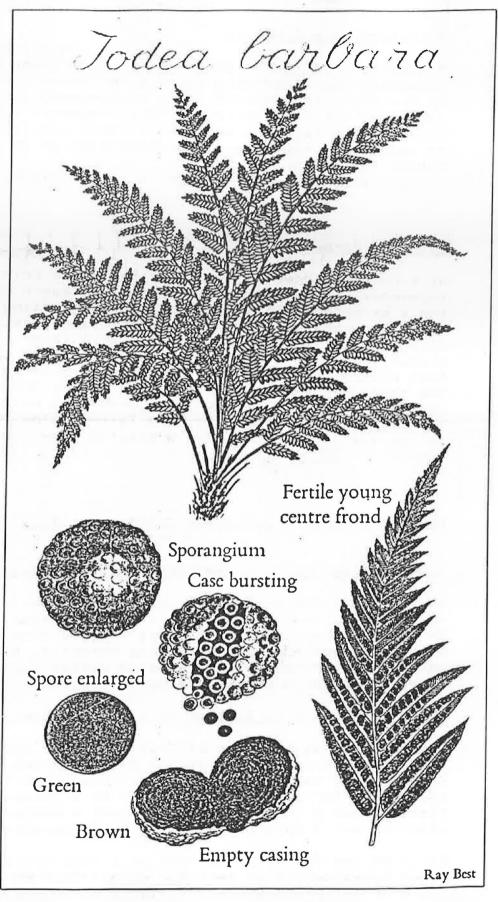
The above photos were copied from a fine, newly released book titled "Rainforest Plants of Eastern Australia" by Steve and Alison Pearson, published by Kangaroo Press. The black and white reproduction doesn't show the real beauty of the wonderful colour plates featured in this book. Some members may already be familiar with the Pearson photographic skill having seen their earlier book "Plants of Central Queensland". Their latest effort is a hard cover volume, 28 x 20 cm and includes some 550 plants arranged in alphabetical order of genus. Ferns are featured throughout photos being just slightly larger than the ones shown above which had to be trimmed to fit here.

A notable innovation is a colour page key for easy identification of plants by flower colour. This doesn't work with the ferns of course, but to assist in locating ferns, they have been listed according to whether they are Terrestrial - Ground, Lithophytic - Rocks, Epiphytic - Trees, Climbing Ferns or Tree Ferns.

Our copy of "Rainforest Plants of Eastern Australia" was supplied by Geoff Long. If you are interested in obtaining a copy and don't have a ready supply, Geoff may be able to help - his phone number is (02) 519 5536.



Todea barbara



The above was copied from "Growing Ferns" by Ray Best, publisher Bay Books. This classic in Australian fern literature is still available from most good book sellers; we saw it recently in a bright new cover. It can be bought for less than \$5 - great value. All photos and illustrations are in colour and the drawings are invaluable for demonstrating the diagnostic features.

### Millimicrons - A Puzzle

(Contributed by Ray Best)

A question if I may. Spores are I understand measured in n M or Millimicrons. According to my work "Virus Hunter in Australia" by Sir Macfarlane Burnet, this measurement is quoted as one millionth of one millimetre. I have requested verification of this title of Millimicrons by the Standards Commission, being given to understand that this is a contradiction in terms. Metric Terms milli = one thousand, micron = one million.

#### Eat More Sprouts!

At a recent Sydney get-together Betty and Eric Rymer exhibited an ingeneously adapted container for fern spore growing. Low cost and a by-product of the heathy habit of eating bean sprouts. Sprouts purchased in square-shaped clear plastic containers. The Rymers sprinkle spore on top of a 2 cm layer of spagnum moss placed in the lid of the container. The base of the container is then placed over the top - air tight except for the few holes in the container lid now upside down holding the spagnum moss. So far the Rymers report having successfully raised Dicksonia antarctica and Todea barbara, the latter using very fresh spore. Incidently, the Rymers have a healthy glow - could it be their diet?

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

#### Report on Outing to Coopernook on 15 & 16 August 1992

We camped at the Forest Picnic Area, our party consisting of Julie, Phil, Jean, John, Phyllis, Rose, Patsy, Judy and Charlie. On our drive around the Vincents Outlook area we found 43 different fern species, including Adiantum, Blechnum and Doodias on the Newby Forest Road. We also walked around Big Nellie Flora Reserve and Marrs Creek looking for ferns.

#### Report on Outing to Kempsey on 7 & 8 November 1992

Our base was at the home of Phil Avery and Julie McIntyre on their large property of natural bush at Jacks Crossing, west of Kempsey. We walked around through the property and found 40 species of ferns and also a number of orchids. On the Saturday night we had a lovely barbecue around a wonderful camp fire, planning our 3 days camping trip to Gloucester in the new year.

Early on the Sunday we set off on a long drive to Nulla Nulla State Forest where we left our cars. Then on a long walk we found 40 different species of ferns before returning for lunch at that beautiful picnic area.

We hope to provide a complete list of ferns for publication in the March 1993 Newsletter together with a story of the trip made by some of our Group to Eungella Range National Park, 80 km west of Mackay.

#### Report on Activities at Dural, 18 October 1992

There were 19 members present to pot up the 500 fernlings bought in for sale at the September 1993 Great Garden Show at North Rocks. Thanks to the generosity of Graham and Sandra Ross and the Arthur Yates Company (encouraged by Betty Ryner) pots and potting mixture were provided to us at no cost. As a consequence of Ted's efficient organisation the task was finished well before lunch.

All that was left to complete the day was a short business session — this was more difficult to arrange what with lunch to be disposed of and the distracton of Ted and Pat's wonderful property. This now has to be one of the best gardens in Sydney, a superb natural area with a backdrop of tall forest blended brilliantly with large raised garden beds planted with some absolute gems of shrubs growing to perfection. Congratulations Pat and Ted, and thank you for hosting and master minding a day of achievement. The fernlings have been boarded out to various members who hopefully will provide the tender loving care necessary to make them grow over the ensuing year into robust ferns. The next stage of the project is to plan for the logistics required to get our ferns to the North Rocks Great Garden Show, for sale, on 4 and 5 September 1993. Would-be volunteers, please reserve at least part of that week end for fern business.

#### Report on Outing to Girakool National Park, 14 November 1992

In the absence of our Leader, 17 members set off along Pile Creek on what was expected to be a 4 km loop walk. Two dainty Lindsaeas, L.microphylla and L.linearis were among the first ferns admired, then the not so admirable Pteridium esculentum. After initial indecision, we chose the path to the right, crossed over a stream and followed a shaded gorge along Piles Creek. Near the water we then identified Todea barbara, Gleichenia dicarpa, Blechnum wattsii and Schizea rupestris. The damp rock ledges supported numerous ferns and progress was slow as we examined Sticherus flabellatus, Blechnum ambiquum (probably), Gleichenia rupestris and Blechnum cartilagineum. At about this point contact was lost with four members in the vanguard as we lingered over a group of Lycopodium laterale - a Tassel Fern, Grammitis billardieri and <u>Tmisipteris truncata</u>. Further along we noticed Calochlaena dubia, Blechnum nudum, Hymenophyllum cupressiforme, Cheilanthes sieberi, Asplenium flabellatum, and Davallia pyxidata. After sighting the first tree fern for the day, Cyathea australis and then the first Adiantum, Adiantum hispidulum, the decison was made to turn back - we obviously hadn't reached nearly half-way around the loop track. The vanguard caught up with us shortly afterwards, they too deciding that the track showed no signs of turning, and telling us about other ferns which they had seen, including Adiantum aethiopicum and a Lastreopsis sp. On the return walk ferns noticed that had been overlooked earlier by at least one one us, were Cyathea cooperii and Hypolepis glandulifera.

In all a thoroughly relaxing day among numerous ferns and enhanced by some fine flowering shrubs growing to perfection in the shallow sandy soil.

#### FORTHCOMING EVENTS

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

Week end Plus - 3 Days from 16 January 1993, Outing to Gloucester For details and meeting place contact Charlie Charters phone (065) 85 6296.

#### IN THE SYDNEY REGION

Sunday 6 December 1992 Christmas Function at Pennant Hills
Our end of year get-together is being held at the Environment
Centre, Forestry Commission of N.S.W., 95 Castle Hill Road, West
Pennant Hills. Follow the signs to the Nursery, then deviate on
side road to Delivery area. Park along side road. Please inform
Pat 651 2765 at least a week before the date, whether bringing
meat, salad, or sweets for pooled luncheon. Plan to arrive from
10.o'clock as we need to organize tables, food, etc. You will
need to have your own crockery and cutlery. In keeping with the
tradition of these functions bring a gift (or several according
to number in your party).

Saturday 20 February 1993, Outing to Mt. Wilson
Drive past the Mt Wilson Post Office and take right hand turn.
Meet at Park opposite Chimney Cottage at 9.30 for 10 am start.
This is a short loop walk through rainforest. Lunch at cars.
Enquiries to Peter 625 8705.

Sunday 21 March 1993, Meeting at Turramurra
Meet at the home of Pam & Max Hill, 8 Denman Street, Turramurra.
Study session and meeting at 11 am sharp, Peter is to discuss
"Collecting in North Queensland". A Members Fern will be
presented by Pat Kenyon. Enquiries to Max 44 2062

Saturday 17 April 1993, Outing to Kareela Meet at 10 am at Joseph Banks Native Plants Reserve, Manooka Place, Kareela. Details next Newsletter.

#### IN SOUTH EASTERN QUEENSLAND

Sunday 7 February 1993, Meeting at Pullen Vale
First meeting of the year. Meet 9.30 am at Geoff and Merle
Goadby's home, 123 Haven Road, Pullen Vale. Discussion will be
"Fern Problems". Bring specimens or samples of the fern problem
you seek advice on. Remember that 1993 membership subscription
of \$4 will be due.

#### Deadline for Copy

Contributions to the Newsletter are always welcome — in fact we depend on them. The Newsletter can be larger if we have more articles. How about sharing your experiences growing ferns, or tell us about a ferny area you have visited. Closing date for copy for the next Newsletter is 15 February 1993.