



**FERN SOCIETY
OF VICTORIA**

NEWSLETTER

DATE SEPT. '80
VOLUME 2
NUMBER 8

OFFICE-BEARERS - 1980/1981:

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EDITOR: Keith Hutchinson, 17 Grandview Grove, Rosanna, 3084. Tel. 459 9716 (A.H.)

PRESIDENT'S MESSAGE:

First of all, I must congratulate the newly-elected committee members, and particularly the members who served on the committee last year and have chosen to stand again.

A new fern book has been released - "Growing Ferns", by Ray Best, published by Bay Books, Sydney. Ray's book is a soft cover book, with 80 pages of information on hardy ferns. It covers subjects such as growing from spores, identifying, controlling and treating diseases and pests, growing ferns successfully, etc.

The book has useful information on 61 different hardy ferns, with 62 colour photographs and 19 beautiful hand paintings of native and exotic ferns. Although it is meant to be a beginner's guide, I feel it would be a useful addition to any library of fern books.

The New Zealand Fern Tour:

Details have now been finalised for the 1981 Fern Tour of New Zealand, and bookings have been made for 45 people. The cost will depend upon the number of bookings received: 40 or more: \$429 per person, 30 - 39: \$469 per person, 20 - 29: \$483 per person.

The tour will depart Melbourne on Friday 5th June, 1981, for Christchurch, where we will be escorted to our waiting coach. This will be of high standard, with jet ventilation, heating and sheepskin seat covers, in the charge of a selected driver/courier who will have an interest in the flora and fauna of New Zealand.

Accommodation will be in Tourist Cabins at Motor Camps. The coach will travel south through the Canterbury Plains to Ashburton, then turning west into the foothills and the Southern Alps and then on to beautiful Queenstown.

A full day will be spent at Queenstown; activities could be a trip to Milford Sound for the day, or excursions to Arrowtown, Skippers Canyon, or perhaps a cruise on Lake Wakatipu or a ride on the Shatover jet boat.

The next day we will leave Queenstown for Fox Glacier, where we will visit the world famous Lake Matheson (famous for its mirrored reflections of Mt. Cook and Mt. Tasman, 12,000 ft.) and then see Franz Joseph and Fox Glaciers.

The whole area is rich in beautiful ferns, with well-graded walking tracks to the best areas. We will see large specimens of *Leptopteris superba* (The Prince of Wales Plume) which is regarded as the most beautiful fern in the world, and many, many others. We will spend two days in the Franz Joseph - Fox Glacier area, and then move on up the beautiful west coast to Greymouth.

The following day we will travel to Nelson, where we will meet up with members of the Nelson Fern Society.

Continued on next page.

PRESIDENT'S MESSAGE (Cont'd.)

A full day will be spent visiting local ferneries and socialising with members of the Nelson Fern Society.

The next day we will be taken on an excursion by Nelson Fern Society members to see the ferns of that area, many of which do not occur further south, such as the silver treefern, the black treefern, and many more.

After leaving Nelson, we will travel on to Picton and board the inter-island ferry which will travel through the Queen Charlotte Sound and on to Wellington, where we will be transferred by coach to the Airport.

This is just a quick rundown of the tour. I will have on hand shortly a full itinerary of the New Zealand Fern Tour to pass on to all those interested.

New Zealand is famous for its beautiful rainforests which abound with ferns.

For those interested, I will arrange for a permit to import ferns and spore into Australia from New Zealand.

- * Fern Competition for the next meeting: a fern of your own choice, so please look through your fernery, choose an entry and bring it along to the meeting.

CHRIS GOUDEY
President

SECRETARY'S REPORT:

As given at the Annual General Meeting

After our first year, we can look back with pride on what we have achieved.

Amongst our 300 or more members, we have seven overseas members, more than fifty interstate members, and 100 or so who live out of Melbourne, and are too far away to attend our meetings. In view of this widespread membership, we feel that we have a good turn-up at our meetings.

Perhaps the achievement of which we should be most proud is our Newsletter. Our congratulations and thanks are due to Keith Hutchinson and his band of helpers behind the scenes. Keith would be surprised to know just how many complimentary remarks have been made at times by members.

The cost of producing and posting the Newsletter is between \$180. and \$200 each month, and a quick calculation shows that this swallows up a large proportion of our subscriptions, but it is felt that this is the least we can do for our many country and interstate members to keep them in touch.

The various shows that the Society has attended to put on displays, etc., have all helped to spread our name and, hopefully, gather new members, while our field trips have proved enjoyable outings, giving us time to get to know each other better. We hope to arrange other trips during the next twelve months.

Rod Hill has done a sterling job in organising and running the Spore Bank, and we thank him for his efforts which not only have gained the Society more revenue, but have given so many of us an added interest.

Sales of plants at our meetings, as well as book sales, have helped in augmenting our funds, as has the Special Effort each month.

Continued overleaf.

SECRETARY'S REPORT (Cont'd.)

The monthly competition has attracted some very beautiful ferns, and we thank Norma Stafford for the record-keeping, and Glad Andrews and her fellow judges for their not-easy task of awarding the points.

Our speakers at the monthly meetings have covered a wide variety of topics, and we have all learnt something new during the year.

To all members who have given their help in various ways, and for all the assistance we have received from the staff at Burnley College - our thanks.

May the next year be even more enjoyable than the last!

IRENE BOLSTEN
Secretary

TREASURER'S REPORT:

It is my pleasure to submit to members the Society's financial report for the year ended 30th June, 1980.

The 1979-80 committee members should be commended for acknowledging the urgent need to have the Society's method of accounting updated, and I, as your newly appointed treasurer will ensure this is carried out. I hope to be in a position to produce a half-yearly statement early in January, 1981. This will enable us to reflect on our growth.

Unfortunately, the balance sheet would have looked more favourable had the long-awaited book sales order been fulfilled. Also, the inventory figures are exceptionally high, due to the large balance of members' badges held. If all members would purchase and wear these neat badges, I am sure that our membership numbers would swell by 50%.

My thanks to my predecessor, Mr. A. Jenkins (Vice-President), for his wonderful effort in keeping the set of accounts to a reasonably auditable standard.

R. B. CASMERE
Treasurer

AUDIT REPORT FOR YEAR ENDED 30TH JUNE, 1980:

R. B. Casmere

I have examined the books of account of the Fern Society of Victoria for the year ended the 30th June, 1980, and the supporting documentation.

It is my opinion that the accompanying balance sheet and income and expenditure statement indicates a true and fair position of the Society's affairs for the year. The accompanying balance sheet shows total assets of \$407.

It should be pointed out that this is the first financial report produced since the formation of the Society in May, 1979. Therefore, I am unable to submit comparable figures and growth rate.

THE FERN SOCIETY OF VICTORIA

FINANCIAL STATEMENT FOR YEAR ENDED 30th JUNE, 1980

CONSOLIDATED BALANCE SHEET

ASSETS

1000 Cash at Bank	\$ 132.00
1050 Cash on Hand	-
1200 Inventories	275.00
1400 Accounts Receivable	-
<u>TOTAL ASSETS</u>	<u>\$407.00</u>

LIABILITIES

2000 Accounts Payable	-
2500 Members Accumulated Funds	Nil
- Previous Year	407.00
- Current Year	<u>\$407.00</u>

INCOME

3000 Subscriptions	\$ 2,689.00
3010 Plant Sales	114.00
3020 Special Effort	580.00
3050 Donations	45.00
3060 Sundry Income	40.00
3070 Sundry Sales	187.00
3080 Social Functions	653.00
3090 Book Sales	557.00
3040 Refreshments	69.00
	<u>\$4,934.00</u>

EXPENDITURE

4010 Fern News	971.00
4020 Social Functions	544.00
4030 Rental of Premises	203.00
4040 Print & Stationery	810.00
4050 Postage	480.00
4060 Telephone	113.00
4070 Bank Charges	31.00
4080 Refreshments	50.00
4090 Subscriptions	13.00
4140 Books (Re-Sales)	1,090.00
4100 Special Effort	20.00
4150 General Purchases (Re-Sales)	452.00
4120 Demonstration Expenses	17.00
4130 Equipment Hire	7.00
	<u>\$4,801.00</u>

How to mount them



● The materials you will need are a tree fern slab, some sphagnum moss and a section of an elkhorn fern.



● Place a pad of sphagnum on the tree fern slab and sit the piece of elkhorn on this.



● Affix the piece of elkhorn in position with thin wire and twist tight.

● RIGHT: Here is the finished job with the new elkhorn fern-to-be neatly held on to the slab.



Elks and

by David L. Jones

The plants known as stags (see cover picture) and elks form an unusual group within the fern family.

In nature they grow as epiphytes: on trees or rocks and are rarely found on the ground.

(* EPIPHYTE: Plant that grows on another plant or object without being parasitic).

The best specimens grow in rain forests high on the trees to seek light, but they are also found in the open forest bordering rain forest in wetter areas along creeks and swamps.

Many people find it difficult to consider them as a normal plant because of their greatly modified leaves and apparent absence of roots.

But they do produce a normal root system which grows backwards on to the host and provides support.

The crown or growing point of the plant is situated near the centre and is responsible for producing the leaves or fronds.

These are of two types, commonly known as the sterile fronds or pad and the fertile or sporing frond. The two are entirely dissimilar and serve different functions.

The pad radiates from the growing centre and closely embraces the plant. It usually juts upwards and, in nature, acts as a collecting funnel for litter and debris from the surrounding trees. This rots and provides a growing medium for the root system.

New pads are produced once twice annually and cover the old pad which eventually rots and becomes part of the food of the plant.

In this way the plant builds up in size. The root system of a large plant ramifies through a series of layers of old pads and decomposed litter and forms the well known and useful staghorn or elkhorn peat.

When the young pads are new they are soft and green and contribute considerably to the beauty of the plant.

The fertile fronds arise from the growing point, but usually hang down to some degree and have an antlered appearance, hence the common names.

They are produced when conditions are favorable and release spores by which means the plants propagate themselves.

The genus is widespread throughout the tropics. In Australia we have four species all of which are found in tropical Australia although the well-known elkhorn extends well down into N.S.W.

Growing ferns from page 5

Ferns need little maintenance, but the following points should be considered:

Watering. — Hardy ferns are surprisingly drought resistant, but grow better with supplementary watering. The ground should be thoroughly soaked at least once every 10 days during summer.

Pruning. — Little pruning is needed except the removal of dead or dying fronds. Creeping species can be kept in check by severing the rhizome at a selected site. The unwanted piece can be removed and discarded or planted elsewhere. The severed rhizome will branch again and grow quite normally afterwards.

Fertilising. — Ferns are gross feeders and benefit greatly from light applications of slow-release fertilisers like blood and bone, Magamp or Osmocote.

Pest Control. — Slugs, snails, scales and aphids attack ferns from time to time. Slugs and snails are the worst pest and should be eliminated by regular baiting.

Scales are occasionally a problem and can be dealt with by applications of white oil.

Aphids may attack new fronds, especially in the autumn and spring. These should be dealt with by spraying, preferably using low toxicity materials.

staghorns

Three of the four species, however, can be cultivated easily in southern Australia.

They all need perfect drainage and a moist atmosphere, particularly during drying winds on summer days. This means regular watering from October to March — at least twice a week, but more frequently during drying or hot spells.

They do not need watering in winter and, indeed, seem to like drying out and resting. Spotting of the pads is a common disorder in winter when water remains on the foliage for too long.

Elks and stags are the nicknames for *Platycerium* ferns. In some places they are all called stags, or all called elks. Or they are reversed. Some prefer the spellings elk's-horn and stag's-horn. We've listed them in most common usage here.)

***P. bifurcatum* (elkhorn).** — This is easily the best known and the hardiest of the group. It is widely cultivated around the world and is one of the few that extends from the tropics into temperate regions.

It is completely frost hardy and can be grown in the open as far south as Tasmania. It propagates freely by suckers and quickly builds up into a big clump.

***P. grande* (staghorn).** — This species is regarded by many as the most



● *Platycerium grande* (staghorn) and *P. bifurcatum* (elkhorn) combine well together. *P. grande* is regarded as the most magnificent.

magnificent in the whole genus. A staghorn fern with antlers, spreading 1.8 to 2.4 metres (6 ft. to 8 ft.) is a sight never to be forgotten.

It is found in Queensland and is the only species which does not produce suckers at the roots.

The plants remain single and get bigger year by year. The species is frost tender when young and is best kept dry in winter.

P. hillii is a less-known species from the coastal areas of northern Queensland. In appearance it is similar to an elkhorn, but the fertile fronds are longer, thinner and give a very pleasing drooping appearance to the plant.

It is quite a vigorous grower, but is frost tender and needs protection in southern areas.

P. veitchii is a very rare member of

the group, native to the drier inland fringes of northern Queensland. The pad and fronds are covered with a dense, woolly tomentum giving the whole plant a silvery appearance. It is quite hardy, but is very slow growing.

All species, with the exception of *P. grande*, are easily propagated by suckers from the roots. These can be cut off with a sharp knife when big enough and mounted to form a separate plant.

They can be grown on species of hardwood, tree-fern slabs or attached directly to a tree.

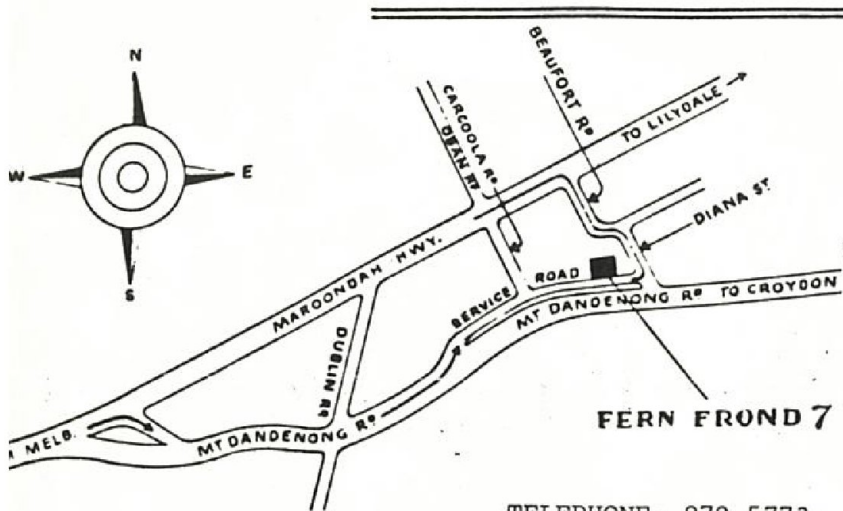
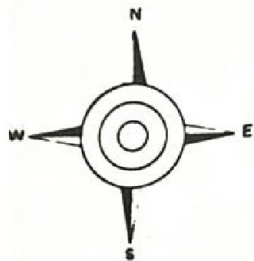
They are wired tightly to the support with a pad of some moist material such as sphagnum moss.

Peat moss or leaf mould should be added to the top of the plant each year.

They benefit greatly from some fertiliser like blood and bone in the spring. A handful is sufficient for a large established plant and less for smaller ones.

● LEFT: *P. bifurcatum* (elkhorn) is easily the best known and the hardiest.





TELEPHONE: 870 5773



Fern & Native orchid specialists,
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NOTES FROM THE EDITOR:

Listed hereunder are the names of all those elected to office for 1980 - 1981.

Executive Committee for 1980 - 1981, elected at Annual General Meeting 14/8/80

President: Chris Goudey

Vice-Presidents: Albert Jenkins
Keith Hutchinson

Treasurer: Ray Casmere

Secretary: Irene Bolster

Committee Members: (in alphabetical order)

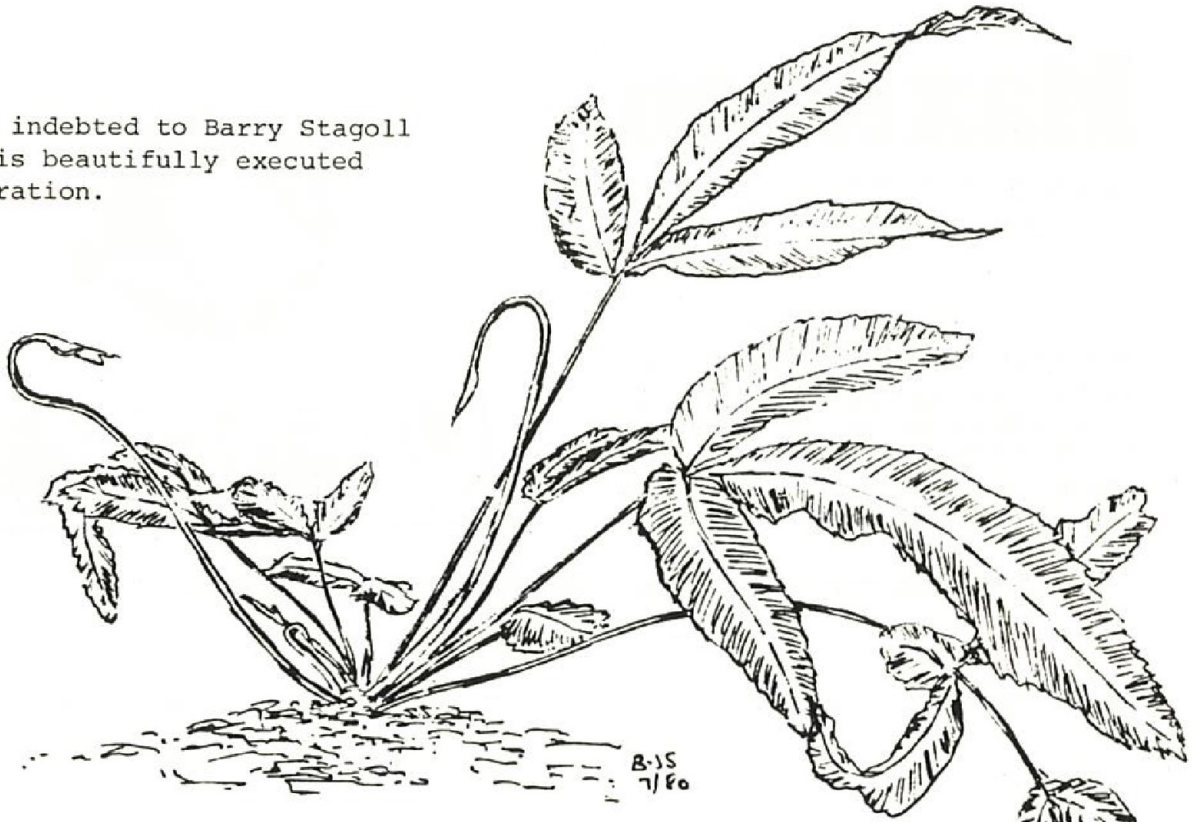
Ted Bolster
Kath Brown
Rod Caithness
Geoff Echburg
Mary McKeon
Bill Taylor
Jean Trudgeon

IMPORTANT NOTICE:

We have had a very good response from members renewing their membership for the 1980/81 year, but some members have not yet done so.

Commencing with the October issue of the Newsletter, we will be mailing only to financial members. If you enjoy receiving and reading the Newsletter, and have overlooked sending in your subscription, then may I suggest that you post your cheque as soon as possible, so that you will remain on our mailing list.

We are indebted to Barry Stagoll
for this beautifully executed
illustration.



PTERIS CRETICA
'ALBO-LINEATA'

Pteris cretica cv. Albo lineata - some notes by Chris Goudey

Members of this family are usually referred to as Brake Ferns.

Pteris cretica was first introduced into cultivation from the Isle of Crete, and *albo lineata* means "with a white line".

The species is native to the tropics and subtropics, from Africa through southern Europe, to Tropical America, and is often referred to as the Silver Brake Fern.

This form requires a good open well-drained soil which contains plenty of humus, coarse sharp sand and a little lime.

It is quite hardy in a fernery as far south as Melbourne, but needs shelter from draughts and direct sunlight, and does not like saturated conditions. *Pteris cretica* cultivars do not like being pot-bound, and will not tolerate drying out, which will result in an irreversable decline.

Pteris cretica cv *Albo lineata*, like all other Brake ferns, is easily raised from spore.

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Sydney, NSW 2000. Phone: (02) 235 8100.



A REPORT ON PINEBARK

from The Research Institute of
Horticulture, Knoxfield, Vic.

Pinebark is a waste product from the softwood industry, obtainable in large quantities. Various grades are available and the physical properties of the material are dependent on the grade.

The finer materials compare favourably with peat moss. The best grade is screened 6mm minus, with no more than 40 per cent dust. It fixes nitrogen, but not to the same extent as sawdust, pH is low (4.7) but rises rapidly as the material breaks down and acids are leached out (to 6.5).

Fresh pinebark is difficult to wet, and contains materials toxic to plant growth. Our research has shown that these toxins become inactivated if the pinebark is stored moist in a heap for 4 - 6 weeks before use.

In southern Australia, the bark available is the Monterey Pine (*Pinus radiata*) and this can be used quite satisfactorily in potting media, provided the above drawbacks are taken into account.

I have found that fine milled pinebark mixed 50-50 with pulverised cow manure and, after slight moistening, stored for six weeks, is very good to add to potting mix for ferns.

Note from the Editor:

Mr. David Beardsell, of The Research Institute of Horticulture, has informed me that further information on this subject will be available shortly.

We will include a further article in a future Newsletter.

SPORE LIST - SEPTEMBER, 1980

- Adiantum caudatum* (4-80)
A. concinnum (10-79)
A. formosum (5-80)

A. hispidulum (3-80)
A. mathewsii (3-80)
A. peruvianum (6-80)
A. raddianum 'Elegans' (8-80)
A. " 'Fragrantissimum' (8-80)
A. " 'Mist' (8-80)
A. " 'Multiceps' (8-80)
A. " 'Pacific Lady' (8-80)
A. " 'Triumph' (8-80)
A. tenerum 'Fergussonii' (8-80)
A. sylvaticum (5-80)
A. sp. (S.W.Qld) (5-80)
Aglaomorpha meyeniana (12-79)
Angiopteris palmiformis (12-79)
Arachniodes aristata variegata (2-80)
Asplenium flabellifolium (2-80)
A. scleropium (7-80)
A. trichomanes (6-80)
Athyrium asutrale (3-80)
A. dilatatum (5-80)
A. japonicum (4-80)
A. japonicum (Taiwan) (?)
Blechnum ambiguum (1-80)
B. brasiliense (12-79)
B. camfieldii (7-80)
B. cartilagineum (12-79)
B. chambersii (3-80)
B. discolor (12-79)
B. fluviatile (3-80)
B. gibbum (4-80)
B. minus (8-80)
B. nudum (7-80)
B. occidentale (5-80)
B. orientale (12-79)
B. patersonii (7-80)
B. penna-marina (1-80)
B. vulcanicum (3-80)
B. wattsii (4-80)
B. whelani (7-80)
B. sp. (King Is.) (12-79)
Cheilanthes distans (2-80)
C. tenuifolia (11-79)
Christella dentata (2-80)
C. parasitica (5-80)
Cibotium schiedei (12-78)
Colysis ampla (1-80)
Culcita dubia (3-80)
Christiopteris variens (4-80)
Cyathea australis (2-80)
C. baileyana (3-80)
C. brownii (2-80)
C. callosa (12-79)
C. celebica (7-80)

Cyathea contaminans (12-79)
C. cooperi (1-80)
C. cunninghamii (2-80)
C. cooperi (1-80)
C. cunninghamii (2-80)
C. dealbata (7-80)
C. leichhardtiana (5-80)
C. medullaris (5-80)
C. medullaris & Smithii (6-70)
C. rebecca (8-79)
C. woolsiana (8-79)
C. sp. (Borneo) (?)
Cyclosoorus truncatus (12-79)
C. sp. (4-80)
Cystopteris fragilis (2-80)
Dicksonia antarctica (11-79)
D. Squarrosa (1-80)
D. youngiae (5-80)
D. sp. (Qld.) (5-80)
Dryopteris aemula (?)
D. crassirhizoma (8-77)
D. sp. (Japan) (4-80)
Lastreopsis decomposita (7-80)
L. hispida (4-80)
L. marginans (12-79)
L. nephrodioides (7-80)
L. shepherdii (12-79)
L. smithiana (7-80)
Leptopteris fraseri (1-80)
Matteuccia orientalis (?)
M. struthiopteris (12-79)
Microsorium pappei (7-80)
Nephrolepis biserrata (12-79)
Osmunda regalis (contorted) (12-79)
Pallaea falcata nana (12-79)
Platycterium coronarium (12-79)
P. holttumii (12-79)
Polypodium aureum glaucum (1-80)
P. formosanum (Grub Fern) (7-80)
P. sanctae-rosae (4-80)
P. vulgare (10-78)
Polystichum aculeatum (2-80)
P. australiense (2-80)
P. braunii (8-78)
P. formosum (7-80)
P. fragile (7-80)
P. lentum (3-79)
P. munitum (11-79)
P. proliferum (2-80)
P. scopulinum ('78)
P. setiferum (3-80)
P. setiferum "Falcatum Dyce" (?)
P. tsuse-simense (7-80)
Pteris blumeana (12-79)
P. comans (1-80)
P. tremula (12-79)
P. tripartita (12-79)

Spore List continued overleaf.

SPORE LIST (Cont'd.)

Pyrosia longifolia (7-80)	Todea barbara (2-80)
Rumohra adiantiformis (5-79)	Treeferns (mixed Cyatheas - subgen. Sphaeropteris)
Sphaerostephanos taiwanensis (8-79)	Woodwardia radicans (7-80)
Sticherus lobatus (2-80)	
Tectaria Muelleri (7-80)	

Spore samples may be purchased at monthly meetings, or by sending a list of your requirements, with a stamped, self-addressed envelope, plus a 20¢ stamp for each species requested, to Mr. R. Hill, 41 Kareela Road, Frankston, Vic., 3199.

DIARY DATES - MAKE A NOTE!

September 11th:	ROSEMARY ISAN Department of Agriculture
October 9th:	CHRIS GOUDEY An illustrated talk on New Zealand
November 13th:	BOB BONE Fern growing
December 11th:	ALBERT JENKINS Creating a mini rainforest CHRISTMAS BREAK-UP
TIME OF MEETINGS:	8 p.m.
VENUE:	Burnley Horticultural School Hall, Burnley.
NOTE:	In the event of a power strike on the evening of any meeting, we regret that the meeting must be cancelled.

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