

# Fern Society of Victoria Inc. NEWSLETTER



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**Vol. 22, Number 6 - November/December 2000**



# **FERN SOCIETY OF VICTORIA Inc.**

## **POSTAL ADDRESS:**

P.O. Box 45, Heidelberg West, Victoria, 3081

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## **OUR SOCIETY'S OBJECTIVES.**

*The objectives of the Society are;*

- \*to bring together persons interested in ferns and allied plants*
- \*to promote the gathering and dissemination of information about ferns*
- \*to stimulate public interest in ferns and*
- \*to promote the conservation of ferns and their habitats.*

## **OFFICE BEARERS:**

President:	Ian Broughton	Phone	(03) 5964 6402
Imm. Past President	Chris Goudey	"	5282 3084
Vice-President	George Start	"	5962 5059
Secretary	Barry White	"	9337 9793
Treasurer	Don Fuller	"	9306 5570
Membership Secretary	John Oliver	"	9879 1976
Spore Bank Manager	Barry White	"	9337 9793
Librarian	David Radford	"	9598 8398
Editor	Lyn Gresham	"	5796 2466
	("Kilpara", Goulburn Valley Hwy, Mangalore, Vic, 3663)		
Book Sales	Ivan Traverso	"	9836 4658

**COMMITTEE MEMBERS:** Jean Boucher 9707 1592, Lyn Gresham 5796 2466, Brian Nicolls, Jack Barrett 9375 3670, Gay Stagoll 9844 1558, Norma Hodges 9878 9584.

## **SUBSCRIPTIONS:**

Single -	\$14.00	Pensioner/student \$11.00
Family -	\$16.00	Pensioner Family \$13.00
Organisation	\$16.00	
Overseas -	\$21.00 - Payment by international bank cheque in \$A please. Overseas sent by Airmail.	

Subscriptions fall due on 1st July each year.

Meetings are held on the third Thursday of each month except December and January at the Kevin Heinze Garden Centre, 39 Weatherby Road, Doncaster (Melway 47; H1).

## **FERN ACRES NURSERY**

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## MEETINGS & EVENTS IN 2000 - 2001

### The November 2000 meeting has been cancelled.

There will not be a November meeting of the Fern Society of Victoria because the Kevin Heinze Centre is not available to us on that date. It is sandwiched fairly closely between the Byaduk Caves weekend and the Christmas celebration, leaving very little choice of alternate dates.

**So don't come this month.**

Best Wishes to all our members for

**A Wonderful Christmas**

and

**A Happy and Healthy New Year**

from the members of the Executive and Management Committees.

### The Christmas Celebration

is on Sunday December 3rd from 11.30 a.m. on and you and your family are most welcome to join in the fun. It will be held in the shady courtyard of the beautiful garden at the Kevin Heinze Garden Centre.

Salads and desserts will be provided by the committee so you will just need to bring some meat to BBQ and something cold to drink. This year we ask you to BYO cutlery and crockery. Our tradition of gift giving, plant sales and a jolly good time is continued this festive season. For details turn the page for Ian's column(s).

**The next monthly meeting will be held on 18<sup>th</sup> February 2001  
at this stage Terry Turney will speak on the genus *Pteris***

Competition category; *Pteris*

5 Minute Fern Talk; Norma Hodges

*Meeting timetable;*

7.30	Pre-meeting activities - Sale of ferns, spore, books, merchandise and Special Effort tickets. Also library loans and lots of conversation.
8.00	General Meeting.
8.15	Workshops and demonstrations.
9.15	5 Minute Fern talk, Fern identification and pathology, Special Effort draw, Competition results, Winner's tips.
9.45	Supper and a good yarn.
10.00	Close.



# PRESIDENTIAL POINTS



Firstly, while I have your complete attention, we are NOT having a meeting in November. The Kevin Heinze Garden Centre are having their AGM on the same night and had printed all their information before they realized there was a clash of dates. They are very apologetic for the inconvenience they have caused. Because we are having (read - have had!) an excursion on Oct 28th-29th and then the Christmas barbie on Dec 3rd, and also because we couldn't get another venue at such short notice, we decided to cancel our November meeting.

Bernadette Thomson's husband passed away recently. Bernadette has been very actively involved in the Society for many years and our hearts go out to her in this time of grieving and adjustment. Keep her in your thoughts and prayers over the coming months.

By the time you are reading this we will have had our excursion to the Byaduk Caves. We had a fantastic weekend. The weather, despite the forecast of rain, was delightful and there was much hilarity over climbing down and up the rope ladder. Fortunately there were no worse injuries than scratches and wounded pride. I think I will stop my prophetic insights there as I recall that the punishment meted out to false prophets in ancient Israel was death by stoning!! We certainly

hope that all of the above are true (apart from a stoned president)! You could come along in December and hear of our adventures in fern-finding, I am sure there will be many people at the bar-b-que who will be more than eager to tell you all about our trip. Many thanks to Barry White for organizing the weekend for us.

Our Christmas bar-b-que on Dec 3rd will be a terrific afternoon as usual, so make sure you join us if you possibly can. Remember to bring your own meat and any drinks other than tea or coffee - salads and sweets will be provided (thanks Norma and Jean). You will also need to bring cutlery and crockery, a wrapped gift up to \$5 value suitable for the same gender as yourself and something to share for afternoon tea. We will be having the usual raffle and Jack Barrett will be giving a demonstration on preparing a terrarium. Don Fuller will be showing video highlights of a trip to North America. But, best of all, we will be having a very enjoyable afternoon in great company - see you there from 11:30am on Sunday Dec 3rd. Don't forget that we are also having a plant sale: you can bring up to 20 plants to sell (and money to buy other people's plants), which don't have to be ferns and the Society will take the usual 15% commission which leaves 85% for you.

With the rain we have had around Melbourne recently, we can now begin to relax about the thought of water restrictions during the coming Summer and enjoy the prospect of cool moist ferneries during Summer's heat. Now might be a good time to look for a suitably large and flat rock to place in a suitably cool and shady position where you can sit and watch your ferns grow. If you are as fortunate as we are, you might even have some avian visitors such as Yellow, Rose and Scarlet Robins, Thornbills of various species, Tree Creepers, Wrens, Fantails and others coming to enjoy the cool, moist shade and to feast on the insects attracted by the decomposing mulch and the fern banquet you so thoughtfully provide.

I would like to wish you all a very safe and happy Christmas and New Year - the true start of the new millennium. May the pleasure you draw from your interest in ferns continue to grow.

Kind regards

IAN BROUGHTON



# THE FERN SOCIETY OF VICTORIA INC. 1999 - 2000 FINANCIAL REPORT.

## AUDITOR'S REPORT.

R. T. Angwin  
6 Tenterden Street  
Yarraville 3013  
22nd August 2000

The President  
Fern Society of Victoria Inc.

### AUDITORS REPORT

I have examined the books of account and associated records of the Fern Society of Victoria Inc, for the year ended 30th June 2000 and have been provided with all the information and explanations required.

I consider the Statements of Receipts and Payments and Balance Sheet reflect a true and proper view of the financial operations of the Society for the year ended 30th June 2000.

I wish to thank the officers of the Society for their co-operation and assistance.

  
R.T. Angwin FCPA

## BALANCE SHEET AS AT 30<sup>TH</sup> JUNE 2000.

1999	2000
\$	\$
18991.34	18295.80
As/1997 Balance Sheet	
-695.54	-62.00
Deficit	
<u>\$18295.80</u>	<u>\$18233.80</u>
<b>TOTAL MEMBERS FUNDS</b>	

### REPRESENTED BY

#### CURRENT ASSETS

257.31	Cash on hand - book sales	100.00
100.00	Prepaid deposit - Fern Show Hall	10.00
-	Prepaid GST	110.00

#### CASH AT BANK

1796.44	General Account	1522.17
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#### STOCK

256.00	Books	180.00
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## CURRENT ASSETS continued

78.03	Glasses	19.50
-	Mugs	311.36

## INVESTMENTS

15880.02	Term Deposit	16103.77
18367.80	<b>TOTAL ASSETS</b>	18246.80

## CURRENT LIABILITIES

72.00	Prepaid Fees	13.00
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## TOTAL NET ASSETS

<u>\$18295.80</u>	<u>\$18233.80</u>
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## STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 30<sup>TH</sup> JUNE 2000.

### SUMMARY

1999	2000
\$	\$
Income - General Account	2746.72
Less - Expenditure	<u>3140.89</u>
	-394.17
Operating Deficit	-394.17
Add	
21st Birthday Function Deficit	-312.80
Fern Show	
Book Sales	-
	-
Less	
Fern Show Surplus	<u>644.97</u>
	-
<b>TOTAL DEFICIT</b>	<b><u>-\$62.00</u></b>



# GENERAL ACCOUNT

## INCOME

## EXPENDITURE

1999	2000	1999	2000
\$	\$	\$	\$
<u>SUBSCRIPTIONS</u>		<u>NEWSLETTERS</u>	
Renewals	1300.00	Printing	1316.00
New Members	126.00	Postage	354.66
	1426.00		1670.66
<u>SALES/COMMISSIONS</u>		<u>ADMINISTRATION</u>	
Spore Bank	-	Honorariums	150.00
Commissions	174.55	Registrations/Subscriptions	63.00
Misc. Sales	239.55	Administration/Secretarial	149.18
Less - Cost of Sales	201.40	Entertainment	40.00
Mugs	595.00	Hall hire	340.00
Less - Cost of Sales	453.81	Guest Speaker Expenses	20.39
Glasses	60.00	Audit fee	320.00
Less - Cost of Sales	48.77	Bank Charges	33.36
Books	50.00	Presentation	50.00
Less - Cost of Sales	76.00	P.O. Box rental	48.35
	339.12	Sundries	15.95
<u>SPECIAL EFFORTS</u>		Insurance	240.00
General	184.00	Library books	-
Less - Expenses	-		1470.23
	184.00	<u>TOTAL EXPENDITURE</u>	<u>\$3140.89</u>
<u>OTHER INCOME</u>			
Advertising	205.00		
Sundry Income	-		
	205.00		
<u>OPERATING INCOME</u>	2154.12		
		<u>RECEIPTS</u>	\$
<u>ADD NON-OPERATING INCOME</u>		Admission	1260.00
Bank Interest	1.50		
General Account	591.10	<u>EXPENDITURE</u>	
Term Deposit	592.60	Food/Refreshments	1134.40
	\$2746.72	Presentation	40.00
<u>TOTAL INCOME</u>		Travel	300.00
\$2828.58		Sundries	39.40
		<u>DEFICIT</u>	<u>-\$312.80</u>

### TWENTY FIRST BIRTHDAY FUNCTION.



# FERN SHOW

(Held jointly with the Australian Rhododendron Society)

	2000	
	\$	
<b>JOINT RECEIPTS/EXPENDITURE</b>		
Receipts	2058.80	
Expenditure	<u>1633.65</u>	
<b>JOINT SURPLUS</b>		425.15
<b>FERN SOCIETY SHARE 50%</b>		<u>\$212.57</u>
<b>INCOME</b>		
Door Receipts		
Fern Sales	4467.50	
Less - Cost of Sales	<u>-3808.05</u>	
Donation	659.45	
Refreshments	50.00	
	-	709.45
<b>EXPENDITURE</b>		
Insurance	-	
Display Expenses	157.65	
Administration Expenses	69.40	
Hire of Venue	-	
Travel	50.00	
Awards/Presentations	-	
Expense Recovery from A.R.S.	277.05	
	<u>432.40</u>	
	-	
	-	
	432.40	
	<u>212.57</u>	
		\$644.97
<b>FERN SOCIETY - DEFICIT - SURPLUS</b>		
<b>PLUS - JOINT SHARE</b>		
<b>FERN SHOW SURPLUS</b>		

# 1999 FERN NAME CHANGES

Previous Name	New Name
Asplenium terrestre	Asplenium appendiculatum
New Species	Asplenium cimimeriorum
Blechnum banksii	Blechnum blechnoides
Blechnum minus	Blechnum "gracilis"
	novae - zelandiae
Blechnum capense	
Sp.1. Kiokio	Blechnum novae - zelandiae
Blechnum capense	
Sp.2. Mountain	Blechnum montanum
Blechnum capense	
Sp.3. Green Bay	Blechnum triangularifolium
Cheilanthes humilis	
Subsp. Sieberi	Cheilanthes sieberi
New Species	Grammitis gunnii
Lycopodium australianum	Huperzia australiana
Lycopodium cernuum	Lycopodiella ceruum
Lycopodium deutrodensum	unchanged
Lycopodium fastigiatum	unchanged
Lycopodium laterale	Lycopodiella lateralis
Lycopodium ramulosum	Lycopodiella diffusa
Lycopodium scariosum	unchanged
Lycopodium serpentinum	unchanged
Lycopodium varium	Huperzia varia
Lycopodium volubile	unchanged
Phymatosorus pustulatus	Microsorium pustulatus
Phymatosorus genus	Microsorium genus
Pteris hybrid	Pteris "Punakaiki"
Trichomanes venosum	Crepidomanes venosum.



## UNUSUAL WAYS TO GROW FOOTED FERNS.

*This is a very loose version of an article, which was a demonstration report, in the LAIFS Fern Journal Volume 26, No. 4/June 1999. The speaker was Bob Manthorne and the article written by Laverne Hanell.*

Have you ever thought about doing something radical when looking at a fern you have ready to pot? Well, one of LAIFS members, Bob Manthorne has. Soon after starting to grow 'footed' ferns, he ran short of room for hanging baskets so, necessity being the mother of invention, decided to try rocks. He has found this method suits him, many show judges - and most important of all, many of his ferns.

Most footed ferns are epiphytic and so perfect subjects for mounting on rocks. Some even prefer rocks to soil. Planting ferns this way can be creative and shows imagination.

### THE NITTY GRITTIES

(if you'll pardon the pun!)

Several kinds of textured rock which are suitable for planting may be found at landscape suppliers, building yards etc. Do not help yourself from the bush or farmland, of course. The rocks mentioned are lava, waterfall rock or concretion, and feather rock, a soft, light, volcanic rock which is very difficult to handle as it comprises almost invisible slivers of glass-like material which can cause injury. Try the rocks you can get in your area.

Choose a large, interesting rock that sits flat, big enough for a fern to grow into but light enough for you to move. I have tried sandstone and find it good. I wonder about that lightweight, expanded concrete that is available now? View each rock and fern individually, trying to consider how the fern will fit into the rock's openings and cracks and how it will look after several years of growth.

If the rock you like doesn't have drainage, drill enough holes in it for good, free drainage. Use a masonry drill with carbide tip. An electric drill is better than a cordless one because it has more power. Hazards you encounter could be rock dust, flying bits (wear a safety mask and glasses for protection) or a split rock. If this last happens,

consider planting both halves. Leave some irregularities or outcroppings for both character and a more natural background for your fern.

Always start with a small fern because the larger the rhizome, the harder it will be to fit in to the crevices and openings on the rock. Now, experiment with your fern. Observe how it grows and try to place it in a similar position on your rock. Try to fit the fern into the rock so it is planted at the same depth as it was before.

Remove soil and moss from the roots before planting. Put damp moss in the area where the ferns will go, then pack the plant in with more moss. You can use some soil mix, but it decomposed faster and needs replacing sooner than moss does. Always use more moss than soil. It is a good idea to use gloves when handling moss as it can contain a fungus.

Secure the fern to the rock with thirty pound monofilament (nylon fishing line) by winding the line tightly around the rock so that the plant and the moss are in close contact with the rock. The rhizomes will soon cover much of the line, or you can remove it altogether after a year or two, once the roots have a tight hold on the rock surface. Be patient and let the fern grow into its mounting.

Since it will decompose over time, moss must occasionally be replaced. When it has obviously deteriorated just pack fresh, damp moss around the rhizomes as before.

Bob rarely fertilizes his ferns, perhaps spraying them once a month with a dilute 10:10:10 liquid fertilizer. He is also careful not to overwater, as footed ferns live for many years and seem to thrive on neglect.

Rocks provide a natural background for Davallias. Bob has also tried *Microsorium punctatum*, *M. serrulatum* and *Polypodium polycarpon* and *P. muscifolium*.

As an alternative to rocks, try cork bark. Commonly used for mounting orchids, it can be inverted and the concave side filled with moss in which to plant your fern. Bob has planted *Pyrrosia polydactylis* in this way. Drynarias are also suitable subjects.

Bob also mounts ferns on redwood fence boards and hangs them, a process with which most of us will be familiar for Platyceriums. We may have to substitute a more accessible timber, eg., seasoned redgum? No treated pine, please!

Whether mounted on rocks, bark or boards, these footed ferns become living sculptures which can add accent to a patio, entry or doorway. Try them! ●●●

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## Vocabulary

by Bob Halley

I have found a new (to me) word. It is useful and I like it and it isn't even slang. The word is Jizz'.

It was invented by the British ornithologist

T.A. Coward, and I found it being used by Martin Rickard in his new book 'The Plant-finder's Guide to Garden Ferns'. This book is available in our library. Since I had never encountered the word before I looked for it on the Internet and found it in Peter Weaver's 'Birdwatcher's Dictionary'. There it is described as "The overall impression which a bird gives an observer, enabling an experienced birdwatcher at least to suspect its identity, even if the plumage details and other diagnostic features cannot be seen." This general concept certainly applies equally well to ferns and to many other things. I have constantly seen folks more experienced (and perhaps more noticing) than I take a casual look at a fern and make a good educated guess as to its

genus and perhaps even its species. That is Jizz'. I wish I had the knack.

Taken with thanks from the San Diego F.S. "Fern World" Vol XXIV, No. 6 June 2000.

...& & &...

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## COMPETITION WINNERS

### September's Monthly Competition:

- |    |               |  |
|----|---------------|--|
| 1. | Dick Kissane  | <i>Blechnum cartilagineum 'cristata'</i> |
| 2. | Dorothy Forte | <i>Pteris argyrea</i>                    |
| 3. | Barry White   | <i>Athyrium niponicum 'pictum'</i>       |

**Exhibitors' Draw;** Dorothy Forte  
**Special Effort;** Mavis Potter, Ray Harrison, Reg Kenealy, Mary Kenealy, Pat Nicolls, Barry White.

### October's Monthly Competition:

- |    |               |                             |
|----|---------------|-----------------------------|
| 1. | Don Fuller    | <i>Blechnum tasmanii</i>    |
| 2. | Dorothy Forte | <i>Polystichum vestitum</i> |
| 3. | Ian Broughton | <i>Dicksonia squarrosa</i>  |

**Exhibitors' Draw;** Dorothy Forte  
**Special Effort;** Joy Horman (3 - and she kept them all!) Barry White, Lyn Gresham, Dorothy Forte.

\*Thanks to Mary and Reg Kenealy for donating a 2-day, 10-garden pass to the Marysville Open



## Edanyoa - A fern oddity.

Like *Didymochlaena*, the genus *Edanyoa* is an oddity in the fern world in that it contains only one species - *Edanyoa difformis*. This fern is endemic to the islands of the Philippines.

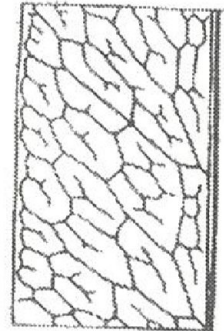
*Edanyoa difformis* is a small fern with a creeping rhizome. It produces dimorphic fronds. The stipes of the fertile fronds are about  $\frac{1}{4}$  to  $\frac{3}{4}$  inch tall



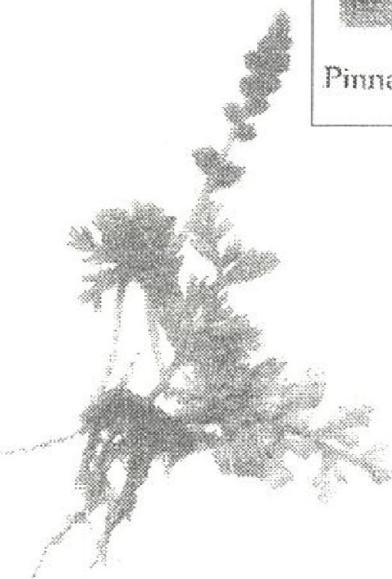
Pinna of *Edanyoa difformis*

free veins

reticulated veins



Section of lamina of *Bolbitis hastata*



*Edanyoa ensiformis*, lifesize.

and the lamina is  $1\frac{1}{2} \times \frac{1}{2}$  to  $\frac{3}{4}$  inch. The sterile frond is bipinnate and the fertile one pinnate. This fern is very closely related to the genus *Bolbitis* and many taxonomists have included it in that genus. It differs from *Bolbitis* as it has free veins whereas *Bolbitis* has reticulated veins. The fertile frond of *E. difformis* is acrostichoid just as in the genus *Bolbitis*.

## Transporting Your Ferns to a Show.

Transporting your plants to the show can be a little tricky, but after seventeen years I have the following recommendations:

- \* Pack your ferns closely together. They seem to take this well and it's preferable to the plants falling down and rolling around because they were loosely packed.

You can put the plants into cardboard or plastic boxes to help keep them together and upright.

- \* Water your ferns two days before the show. That way they're well-watered during the weekend but you're not carrying around a heavy, dripping plant.

- \* Put your hanging plants into plastic waste basket or garbage bin bags to protect the fronds.

If you have a car clothing rack, try hanging your hanging plants from that. Hanging racks aren't very expensive and you can find them at a travel store.

- \* If you're travelling during the day, protect your plants from the sun and make sure they get a little ventilation. You don't want to fry your babies on the eve of their debut.

-From "Fern World" Volume XXIII, Number 8.



# PSEUDODRYNARIA CORONANS

## A Five-Minute Talk By Don Fuller

This fern belongs to a single-species genus which sometimes in the past has been included with *Aglaomorpha* and *Drynaria*.

It is a large, epiphytic fern which grows on trees and rocks. It has thick, tan coloured rhizomes and fairly rigid, pinnatifid fronds which narrow towards the base then spread out to provide an effective humus collecting shield.

This fern is native to south east Asia from Northern India to China and Taiwan and was one of the ferns which Richard Hartland showed us a photo of when he was speaking to us. I think it was taken in Thailand.

I grow my *Pseudodrynaria coronans* in my standard epiphyte mix (based on Ed Thomas' book). It contains tree fern fibre, using coarser and faster draining material than in my standard fern mix.

I fertilize it each Spring and generally again in Autumn with slow release pellets, Dynamic Lifter and cow manure, watered in with Maxicrop. I also apply Maxicrop several other times a year and sometimes use Saturade or a soil wetting agent.

My reference books say that this fern is a hardy fern best suited to tropical and sub-tropical areas but

can be grown in temperate areas if kept dry over winter and may need a heated glasshouse.

Don brought in two specimens which receive slightly different treatment. The first was growing in a tree fern log in a structure which has fibreglass roof, brown polyshade sides and no overhead watering system. The other was growing in a hanging basket in a fernery area which was part of a barbecue area. The fern area was covered by shade cloth but the rest of the area protected by fibreglass and steel decked roof. There was no side covering but the area was protected from wind. It has probably received more rain water, more light and breeze and I think it is in better condition.

My reference books claim that this fern is drought resistant, sensitive to overwatering and prefers some exposure to sun during the day. I believe that it is quite growable in Melbourne provided it receives good lighting, is kept reasonably dry over winter, has frost protection (shade cloth appears to be okay) and is in a well drained mix. Small plants may need more protection until established. Heating does not appear to be necessary. □□□□

The following article appeared in the Western Australian Fern Soc. Newsletter of September 1999 and is reproduced with thanks.

## FERN ALLIES

*Isoetes*, *Lycopodium*, *Phylloglossum*, *Selaginella* and *Tmesipteris* are all fern allies.

The fern allies are a polymorphic group of plants related to ferns but with important structural differences. They do not possess a distinctive frond as do true ferns, but the leaves are usually small and scattered along a simple or branched stem. They contain vascular tissues and while most have a woody stem structure, a few appear closer to mosses. They form a very diverse group which is found throughout the world, but probably reach their best development in tropical regions. Many of the groups are very ancient and their present status is but a fraction of the great proliferation and development that occurred in the Carboniferous era, when they reached their peak.

The sporangia of fern allies are not borne on the lower surface of the leaf lamina, but in the axils or

apices of specialised sporophylls. These sporophylls may be crowded into cones (termed strobili), either bearing spores of one type on leafy spikes (*Lycopodium*) or on a leafless stalk (*Phylloglossum*), or bearing spores of two types on a leafy spike (*Selaginella*) or clustered into a bulbous base (*Isoetes*). Another group bears united sporangia, sessile on branched stems (*Psilotum*) or on forked appendages on unbranched stems (*Tmesipteris*), each sporangia bearing one type of spore.

*Psilotum* and *Tmesipteris* are the simplest constructed vascular plants surviving today, since they bear rhizomes and stems with no roots and there is very little differentiation between them.

Crosby Chase.  
Sporenbank Officer, W. A. Fern Society



# FERNS

## 3rd and final part

of the extract from "The Illustrated Dictionary of Gardening"

L. Upcott Gill

**TREE FERNS.** Considerable space and lofty houses are essential for growing and exhibiting Tree Ferns in their true characters. In Ferneries of limited size, where a few are cultivated, it is best to restrict their root growth in large pots or tubs which also allows of their being re-arranged occasionally when overgrowing other smaller plants. In very large conservatories, a few permanent specimens planted out in well-drained borders succeed, perhaps, better than in any other position, and always present a majestic appearance unexcelled by any other plants similarly employed. *Alsophila australis* and *A. excelsa*, *Cyathea dealbata* and *C. medullaris* (the latter is probably the tallest-growing of all our cultivated Ferns), with *Dicksonia antarctica*, are the best for culture in the greenhouse. All these may also be used in sub-tropical gardening outside in summer, in sheltered, shady places. There are many stove species of Tree Ferns, all of which are beautiful, and worthy of cultivation in large heated structures. They all, especially *Alsophilas*, delight in plenty of atmospheric moisture and shade. The stems of imported Tree Ferns should, on

their arrival, be covered with damp moss or canvas and be kept moist by syringing until the new fronds appear. The time this takes varies according to the condition in which they arrive, and the season. When the head of fronds is established, the covering may be removed from the stem; but frequent syringing in summer time is of the highest importance, as by far the greater portion of the stems of many is literally a mass of roots requiring a quantity of water. Tree Ferns, in bad health, may often be greatly improved by covering the stem from the base to the fronds with 1 inch of sphagnum, and tying it on with string. If kept moist the roots soon fill the moss, and the stem is thus considerably enlarged. Tree Ferns that are dead on arrival may be utilised by covering with epiphytal or other small Ferns for stove or greenhouse decoration (see figure on this page), the top being scooped out, and a free-growing variety with a pendent habit inserted and planted in soil; others being fastened on the side with blocks of peat and some small wire.



**Hardy Ferns.** These are all attractive, and the majority succeed best when planted on rockwork in a shady situation, sheltered from high winds. A great diversity, both in size and habit, is represented by the British species and their innumerable varieties, apart from those introduced from North America, Japan, &c. Many suitable positions for hardy Ferns may be found in most gardens where their culture is not now attempted. They should have a good depth of soil, and plenty of water in summer. In the case of a collection, a pile of rockwork, built with rough stones, allows of a place being selected for all, according to their size and habit. A good clump of those which are plentiful should be planted together, and sufficient space allowed them to grow and develop, as in this way the different characters are much better shown than when only single plants are used. Attention in their arrangement should also be directed in placing the evergreen and deciduous species irregularly throughout the space covered, so that the whole may be, more or less, furnished at all seasons. In building a rockwork for hardy Ferns, the requirements of the plants must be the

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main object, large, well-drained pockets being insured in preference to the appearance of the stones that are, in great part, hidden by the fronds. Loam and peat, with a quantity of crushed stone or brick, intermixed and used round the roots when planting, materially assist them to become established. The Royal Fern (*Osmunda regalis*) is one of the most handsome and succeeds best when planted in a partial bog, or by the side of water.

**UNDERGROUND FERNERY.** This is an interesting structure, to be seen only in a few places where the owners bestow special attention on Fern culture in its various aspects. It consists of a large cavity, dug in the middle of a hill, and covered with sheet glass, the hill itself being surrounded on the summit with trees. A flight of steps communicates with the interior, where Ferns are grown on the inside of the cavity in prepared soil, narrow paths or stepping stones being provided on which to walk amongst them. A fountain, or other arrangement for water, supplies the necessary moisture. The plants do not require artificial heat, as they are not much affected by fluctuations of temperature outside, and a subdued light is constantly admitted by the glass overhead.



View of Underground Fernery.

#### Soil, Pots &c., for Fern Culture.

Nearly all Ferns require a quantity of water in summer, and rarely need to be dry at the roots at any season, consequently a very important matter is that of efficient drainage. Anything like a sour or waterlogged soil is either detrimental or fatal, even to those which are not

quickly injured in other respects. Success in the cultivation of established plants depends more on this, with careful watering, temperature, atmospheric moisture, proper shade &c., than on any soil in which they may be grown. Adiantums, for instance, succeed well either in peat or loam alone, the texture of the fronds being firmer in the latter instance, and presenting apparently the only difference. A large proportion of peat was at one time considered necessary for all Ferns, but the superior qualities of leaf soil in their culture, where it can be obtained, have been more fully recognised of late, with considerable advantage to the plants. Soft sandstone, mixed with the soil, tends to keep it porous, and suits some varieties better than others; and charcoal may be used freely with all. The different habits will often suggest the mode of treatment required. It will not be far wrong to say that a compost of half loam, to which is added an equal quantity of leaf soil and peat combined, and sufficient charcoal, small pieces of crock or sharp sand, to keep the whole open, may be used successfully for all Tree Ferns and any established plants of *Adiantum*, *Aspidium*, *Asplenium*, many species of *Davallia*, *Gymnogramme*, *Lomaria*, *Nephrodium*, *Pteris* and any others of similar habit. The species of *Acrostichum*, *Davallia*, &c., that form slender rhizomes must be attached to something on which they can grow. A good plan is to cultivate in pans, placing an inverted pot or a piece of Tree Fern stem in the middle, and then building a small mound on the top with lumps of peat, loam, and sphagnum, afterwards fixing the rhizomes to the surface with small pegs. Epiphytal Ferns, of which *Platyserium* is a well-known and distinct genus, often succeed admirably if fastened with a little moss and peat to a block of wood, and suspended in the stove. They should be kept rather dry in winter. Similar composts, as advised above, if passed through a sieve, may be used for young plants. Ferns succeed in pots comparatively small for the size of plants, if due attention is given to watering. Small pots have also an advantage in appearance; and any deficiency in the quantity of food contained in the soil may be supplied with applications of manure water during the growing season.

(Continued on page 94)

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## February 2000 - 5 minute fern talk

# MY LOVE AFFAIR WITH FERNS

First of all I want to say "thank you" to everybody here. You wouldn't believe it but before I came to the Club I had quite a few tree ferns in my yard and I thought; tree ferns, fishbone and maidenhair ferns - that was it!

I used to do some skiting and ask different ones in to see my tree ferns and one lady said "really, you have to join the fern club." And I said "I don't want to join the fern club. I've got plenty of ferns." Anyhow, haven't my eyes been opened! All the different....I mean I thought.....those three.....tonight seeing all these different ferns.....it really does something for you. And the friendship and help I have got from different members just wonderful!

When Albert (Jenkins) when he was alive, saw all my tree ferns he said, "Pat, you've got to get rid of half of them, you've got too many." And I said "I love my tree ferns." Anyhow, he used to call in occasionally and not long before he died, I said "Come and see my ferns

now." He said "I've got to admit, you've got green fingers." So from Albert I thought that was really high praise.

He also told me to do a lot of mulching, so we got a mulcher and now everything goes through the mulcher at our place. I can't really tell you anything except that yes, I do a lot of mulching which really helps, especially in this weather, and again, THANK YOU TO EVERYBODY.

Pat.

In his response Ian endorsed Pat's belief in mulch, saying that mulch is all the feeding the ferns in his garden get.

*Thank you Pat, for the inspiration you spread among members with your talk. I think maybe we'll get you to write our promotional pamphlets from now on!!!*

-Lyn.

□□□□

## FERNS.

(Continued from page 93)

### Insects.

Ferns, especially those under stove treatment, are liable to be attacked by several destructive insect pests. Thrips are their greatest enemies, causing irreparable damage to the fronds. Frequent fumigating becomes a necessity; this must be done lightly and with the greatest care, on account of the tender growth. Any Aphides will also be destroyed by tile smoke at the same time. Brown and White Scale are sometimes plentiful, and these must be removed by sponge or brush. The first-named is the one most common on Ferns, the other, fortunately, being more rarely found, as, when once established it is very difficult to eradicate. Mealy Bug must be destroyed in a similar way to Scale, as an insecticide strong enough to kill either will, to say the least, be dangerous to use, in consequence of causing injury to the fronds of delicate texture. In winter, when the plants are at rest, the whole should be examined and cleaned, as stronger measures may then be adopted, by fumigation or the use of an insecticide, than would be safe after growth commences. At all times, a watch must be kept for the first appearance of insects, as proper means for destruction then applied are always more effective in their results.



## WHAT THE WINNER SAID.....

*Ian Broughton on  
Cheilanthes myriophylla*

The Central American Lace Fern likes high light.

It will tolerate drying out, which it does fairly quickly but in contrast to a lot of Cheilanthes, it likes to be fairly well watered; in fact, it doesn't mind being relatively wet.

This fern makes an EXCELLENT tub plant; I had a couple in 12" tubs which went very well. If you repot it reasonably regularly (at least every second year) it will last a long time. If you let it sit in the same mix year after year, expect it to survive for about three years and then fizzle out. To repot back into the pot it came out of, remove at least half the roots and cut back the foliage accordingly. It will be fine.

*Cheilanthes myriophylla* is not particularly difficult to propagate from spore though it took me 5 or 6 years to successfully collect ripe spore, because the back of the frond is very scaly.

It is surprisingly tolerant of conditions here and relatively easy to grow. Keith even said his goes well indoors! I would protect it from anything but the lightest frost, and DO GIVE IT HIGH LIGHT. It hates the dark.





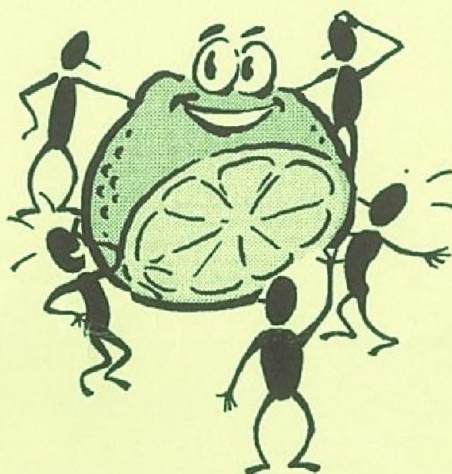
# LIME LOVERS

From a talk given at a Western Australian Fern Society meeting by John Banasiewicz.

"Some ferns that are suffering in our greenhouses probably could do with a dose of lime."

Like most of us, John fed his ferns on a steady diet of 'normal' fertiliser but this comment by Shirley Fisher set John thinking - and researching. Which ones would benefit from added lime? He found that some which were struggling were described as "lime lovers" or "lime tolerant".

John asked members of the W.A.F.S. to bring their lime lovers to a meeting. Here is the list of them. All of these are lime tolerant and seem to benefit from an annual dressing of lime. Those marked \* are known to grow in limestone.



*Adiantum* "Crested Fritz"  
*Adiantum* "Pacific Gem"  
*Anemia mexicana*  
*Asplenium scolopendrium*\*  
*Athyrium felix-femina*  
*Davallia solida*

*Cheilanthes myriophylla*  
*Cheilanthes hirsuta*  
*Drynaria rigidula*  
*Dryopteris affinis*  
*Microlepia speluncae*  
*Pteris cretica*\*  
*Pteris ensiformis*  
*Pteris vittata*\*  
*Plystichum setiferum congestum cristanum*  
*Polypodium australe*  
*Polypodium aureum*  
*Pellaea most*  
*Blechnum occidentale*  
*Cyrtomium falcatum*\*  
*Asplenium dimorphum*  
*Asplenium lyallii*  
*Asplenium marinum*  
*Lunathyrium japonicum* ♦♦♦

## PLANT NAMES BY THE MILLIONS

In June this year Botanists from the Australian National Herbarium in Canberra, the Royal Botanic Gardens at Kew in the U.K. and the Harvard University Herbarium in the U.S.A. joined to announce the Internet launch of the International Plant Names Index. IPNI is a comprehensive index of over 1.3 million scientific names for SEEDDED plants, combining the plant name databases of many scientific organisations around the world. It is the first time that a comprehensive global system is freely available through the Internet.

IPNI will be used by biologists, conservationists, ecologists, horticulturists and ethnobiologists as a resource to check the names and publication details of the plants with which they are working.

It is anticipated that IPNI will have a broader appeal as a 'plant name spell checker' for anyone whose interests bring them into contact with scientific plant names - herbalists, journalists and keen gardeners. Eventually, links will lead the user to sites containing further information about their chosen tree, shrub or herb.

The IPNI will never be completed. Ever since the first index was instituted 120 or so years ago, there have been up to 6,000 annual additions as new species are described and scientific understanding of relationships between organisms improves. This process will continue as the latest thinking is constantly reflected in the IPNI.

For more information see the International Plant Names Index site at < <http://www.ipni.org> >

Source: "Indigenotes" Vol. 13, No. 5, 2000 reproduced from "Nature News" Sept. 2000.

But what about the spore bearers?? Maybe we need the same international co-operation to set up a site? -Lyn.

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