THE FERN SOCIETY

VICTORIA Inc.

REGISTERED BY AUSTRALIA POST: PUBLICATION No. VBH3411

NEWSLETTER VOLUME 12, Number 10, October 1990

FERN SOCIETY OF VICTORIA INC.

POSTAL ADDRESS: P.O. Box 45. Heidelberg West. Victoria. Australia. 3081.

OFFICE BEARERS:

PRESIDENT:	Robert Lee	-	Ph. 836	1528
IMM. PAST PRESIDENT:	Keith Hutchinson		457	2997
VICE PRESIDENT:	Terry Turney	- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1		8169
TREASURER:	Marilyn Wood			3978
SECRETARY:	Bernadette Thomson	1997 <u>-</u> 1997 - 19		5517
SPORE BANK MANAGER:	Barry White			9793
MEMBERSHIP SECRETARY:	John Oliver			1976
EDITOR:	Doug Thomas	100 L		7229
BOOK SALES:	Derek Griffiths	[이 이 <mark>말</mark> 이 이 있다.		3157
	8 Susan Court, E. K	eilor, Vic	3033	0107
TYPIST:	Joan Taylor			
				AND STREET STORE

SUBSCRIPTIONS: Single: - \$13.00 (Pensioner/Student - \$9.00): Family: - \$16.00 (Pensioners - \$11.00): Overseas: - A\$30.00 (by Airmail): (Subscriptions fall due on 1st July each year).

PRESIDENT'S MESSAGE:

My welcome in the September Newsletter to the new members of the Committee of Management elected at the Annual General Meeting in August had to be expressed without mentioning specific names, as my note was written prior to the A.G.M. to meet copy deadlines.

So, even though it is a little late, I should like to advise now that those concerned, were our new Treasurer, Marilyn Wood and new Committee Members, Don Fuller, George Start and Barry White (who also continues in his position as Spore Bank Manager). The occupants of the various executive positions on the Committee are as shown in the listing above (not a change in Secretary, incidentally, just in surname) and the continuing Committee Members are John Hodges, David Radford and Margaret Radley. The other Vice Presidents positon vacated by John Oliver has not been filled yet.

Please note that it will not be possible to contact our Secretary at the telephone no.above for the next four months, although postal communication will continue as usual. Would anyone needing to make contact by phone during this period please ring either myself or another appropriate member of the Committee.

At our December meeting this year we hope to continue our custom of including in the Special Effort prizes some Christmas hampers assembled from items donated by members. The ladies who pack the hampers have found that the work is very rushed when the items are received at the December meeting and would be grateful if members could bring their donations along to the November meeting.

Best regards Bob Lee.

NEXT MEETING

- DATE: Thursday 18th October, 1990
- TIME: Commencing at 7.30 p.m.
- <u>VENUE</u>: The National Herbarium, Royal Botanic Gardens, Birdwood Avenue, South Yarra.
- <u>GUEST SPEAKER</u>: Chris Goudey
- <u>TOPIC</u>: A further screening of photographic highlights of English Botanic Gardens.

MEETING TIME-TABLE.

- 7.30 p.m. Pre-meeting activities; Fern, Book, Spore & Special Effort Ticket Sales; Library Loans.
- 8.00 p.m. October General Meeting Commences.
- 8.30 p.m. Guest Speaker.
- 9.30 p.m. Fern Pathology and Fern Identifications.
- 9.40 p.m. Special Effort Competition.
- 9.45 p.m. Supper.
- 10.00 p.m. Close.

STRINGYBARK BUSH FESTIVAL.

To be held at the Rowville Community Centre, Fulham Road, Rowville, on Saturday 27th and Sunday 28th October. The hours will be from 9.30 a.m. to 5.00 p.m. on both days.

If you can assist, please contact Bill Taylor on Ph. (03) 754 8275.

The Festival will be staged in the hall thereby affording protection for the more delicate species of ferns on display. There will be a small area available for fern sales.

Bill Taylor.

THE DECEMBER MEETING:

The December Meeting of this Society will be held on **Tuesday**, 11th December, 1990 in lieu of the usual third Thursday in the month.

SPEAKER REPORT - GENERAL MEETING SEPTEMBER, 1990

Guest Speaker: Bob Campbell.

Topic: Glasshouses and Glasshouse equipment.

Before commencing his talk, Bob briefly commented on his recent trip to Japan where he attended the Australia Day of Expo 90 for the opening of our Stand. It proved very successful and a highlight was the four and a half hour queue of Japanese people waiting to buy one of our Kangaroo Paws in a 5" pot. Australian native plants and our Kentia Palms have become very marketable in Japan and Bob feels the industry has a big future over there.

During his stay there he inspected the latest technology available in building greenhouses and shadehouses. Many unique fittings being manufactured by the million and therefore cheaper, will soon be on the market throughout Australia. It is now possible to erect a framework for a greenhouse or shadehouse very quickly and simply with just hacksaw and a hammer. Vents can be fitted into walls and roof of iglo with simple fittings and doors can be added at any time in sides or ends. A new type of polythene covering is now available. It has about a five year life expectancy, is very pliable, very clear and is 200 U.M.S. thick. It is manufactured in three layers, extruded separately and then joined together forming a superior product.

Some excellent large colour photographs taken in France gave examples of the extent of use of these products in building greenhouses. The cost of a completed house is approximately \$5.50 per sq. ft.

Bob now turned to the methods of giving the greenhouse better climatic conditions. A new material called L S 50 has ability to both shade a greenhouse in summer (with several percentages available) and with the aid of a reflective undersurface returns the plants magnetic energy and warmth back towards it in winter. As this material has very little friction, it can be connected to mono filament nylon wires strung along a house and moved backwards and forwards as the need arises. By using an automatic light meter which measures the lux every five minutes, a small motor connected to the meter then slides the material into position which needed, thus eliminating the need to ever paint the outside of the greenhouse in summer. L S 50 is UV stabilized, has a life expectancy of about ten years and costs \$7.00 per square meter. As this material can be used under or over the igloo or greenhouse covering, the Forestry nursery at Mt. Macedon are removing the shadecloth from one of their one acre shadehouses and replacing it with L S 50, so that they can heat it in Winter. Small samples were available for members to try out with a fern.

Another recent product is white shadecloth which has produced far better growth than green or black with a temperature five degrees cooler in summer and no frost damage in minus seven degrees celsius Winter temperature. One requirement though is a little more nitrogenous fertilizer to assist the faster growth rate.

A uniquely designed polystyrene growing box has proved very successful in growing tomatoes, gerberas, many vegetables and also ferns. It has a very effective self watering system with a small tank and a magnetic ball valve (for which Bob has a World Patent) and float which can be adjusted to whatever height of water is required in the wells at the base. It has slots designed for aeration, can be fitted with a thermostaticaly controlled heater and a plastic domed top for retaining humidity which means it can also be used as a propagator or deflasking box.

An electric heater for the small greenhouse was available and gives excellent results at reasonable cost. Bob stressed the important factor with greenhouse heating is that most plants need only a small lift in the night temperatures to grow successfully during winter. Another important aid to plant growth is air movement, this can be achieved by using a good sturdy fan. For the small greenhouse it is best to change the air each minute and although this seems a lot, Bob assured us it is not a gale by any means. The fan must be rust resistant or it will need replacing each year and almost noiseless if you wish to keep your neighbours happy. The model on display had all these qualities.

Other quality products displayed were knee pads, disposable overalls (after about seven wearings), mist sprays, fog nozzels and a clore kit for propagation or seed raising, with detailed instructions.

All products can be pruchased at Sage of Cheltenham or Banksia Nursery Wantirna.

President Bob Lee thanked Bob for his presentation and all members responded warmly.

Keith's recent trip to Queensland.

Recently whilst holidaying in Queensland, I drove along the Currumbin Valley. The road follows the Currumbin creek for about 16 Km's past a beautiful picnic area called Currumbin Rock Pool, until it reaches the National Park at the base of Mt. Bougal 3515 metres.

The walking track is easy walking and offers some panoramic views along the valley with several platforms built out clear of the lush vegetation. I found over twelve species of ferns growing along the track, but the highlight was the abundance of Cyathea leichardtiana growing to perfection some over 6 metres high and four metres wide. At the end of the walking track approx. 1 kilometre, there is an old timber mill with several large hand saws jammed into cuts in logs about 1.5 metres round.

Large patches of Lycopodium deuterodensa were to be found growing amongst the grasses in full sun.

One rather unique feature of the trip was that Camphor Laurels far outnumber the Eucalyptus along the roadway as they are not natives of Australia. It is unusual to see how they have become so dominant in this area. I would recommend this as a very enjoyable afternoon excursion.

Keith Hutchinson.

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WHAT IS A FERN

by Chris Goudey

The Life History of Ferns: continued from a previous issue.

The life history of ferns is a most fascinating one, and it is only within the last hundred years that the mysteries of their sexual processes have been discovered. Until the advent of the microscope no one had any idea how they reproduced, for this reason they were named the Cryptograms, which means "hidden marriage".

Spores are ejected from the parent plant by a complex mechanism and float around in wind currents. If you collect and press fertile fronds you will often see the spore cases burst open, scattering their granular contents into the air. Large numbers of spores are floating around in the air currents, so it only takes a suitable site and they will show their presence.

When a spore lands on a suitable site, it absorbs moisture and grows into a small membranous, usually heart shaped object, called a prothallus or gametophyte, which is usually less than a quarter of an inch long even in large tree ferns.

On the underside of this tiny plant are the male sexual organs, called Antheridia, and the female organs called Archegonia. When the female egg is ready to be fertilized it secretes a fluid which attracts the sperm from the antheridia, and fertilization takes place. A film of water must be present on the prothallus to allow the sperm to swim to the archegonia.

On rare occasions the sperm from one prothallus fertilizes the female egg of another species, this will result in a hybrid being produced. Natural hybrids do occur in the wild but they are by no means common. Once fertilization has taken place the gametophyte becomes a sporophyte, which is the familiar fern as we usually see it, with stems roots and leaves.

As young sporophyte develops, the prothallus disintegrates. If fertilization does not take place the prothallus can live on for quite some time, years in fact, if conditions remain favourable. 5

The Annual Fern Anogramma leptophylla which occurs in this state has a prothallus, and the sporophyte, or adult fern as we know it is only short lived.

The fronds of this small fern usually appear towards the end of summer and last through the winter, sporing in spring before dying back again, but the prothallus lives on.

As well as reproducing by spores many ferns also reproduce vegetatively. They produce what are known as proliferous buds such as the Hen and Chicken Fern, Asplenium bulbiferum or the Mother Shield Fern, Polystichum proliferum. These proliferous buds can either take root as the old frond dies or drop off and then take root.

The Life History of Ferns: continued.

Other ferns send out long adventitious shoots called stolons. These stolons produce buds which can develop into separate plants if conditions are favourable, examples of this are the Lace Ferns, Nephrolepis, some tree ferns such as Cyathea rebeccae and Dicksonia squarrosa and many of the fishbone water ferns such as Blechnum nudum.

To be continued - next instalment - THE SCIENTIFIC NAMING OF FERNS:

MARYSVILLE EXCURSION - October 20th & 21st.

We will be setting out from my home at 17 Grandview Ave., Rosanna at 7.30 a.m. on the Saturday morning with pick-up points at :-

crn. Burke Road & Whitehorse Road.
crn. Whitehorse Road & Springvale Road.

Our first stop will be at Fernshaw for a short walk and a cup of coffee then on to Nanda Binya Lodge, where we will have our cut lunch which we supply. After lunch and room allocation, we will travel by bus to Cumberland Falls for a stay of about 2 hours. There are plenty of Ferns to view here and the walk is an excellent one.. After our evening meal, we travel to Stevensen Falls to view the falls which are floodlit at night. Sunday morning we breakfast at 7.30 a.m. and hope to leave by 8.30 a.m. travelling through the Acheron Way to Cement Creek, where there are ferns in abundance along the old tram track. We lunch there, supplied by Nanda Binya Lodge and then travel on to Badger Creek Weir for about 2 hours stay and then back home to Rosanna by about 5.00 p.m.

Our numbers have fallen a little, so it would be very nice to have a few additional members coming, so if you could make it, please ring me on (03) 457 2997.

Cost will be \$65 which includes - Bus, overnight accommodation and three meals.

Be sure to bring one cut lunch and a thermos of tea or coffee.

Keith Hutchinson.

THE FERN SOCIETY BASICS PAGE.

Essential Factors. - Aeration Materials - continued.

<u>PERLITE</u> is a material which originates from volcanic activity. It is processed under super heat conditions and consequently comes to us as a sterile product, greyish white in colour, spongy, free flowing and light in weight. The value of Perlite in potting mixes is that it is capable of holding moisture, assisting drainage and for providing aeration.

Moisture and Drainage.

Moisture and drainage are basic factors in fern cultivation which combine closely with aeration.

Ferns appreciate moisture and will thrive when an adequate system of water replenishment is implemented. In nature, fern species which grow on trees (epiphytes) or boulders receive their moisture directly from rainfall; the roots of these plants are kept moist by this means and surplus water is effectively drained off. Their roots never stand in stagnant water.

Terrestrial ferns i.e. soil growers, also thrive on a system of regular water replenishment and again the system must provide for a run-off by surplus water. Even those ferns which appear to be standing in the water of a mountain stream actually take only the moisture that each plant needs; the surplus is simply drained away in the fast flowing stream. Some fern species prefer to grow in swamps - Blechnum indicum is one such species. And whilst the water in swamps appear to be still, there are so many other plant species interacting with one another that the water does not become stagnant nor the soil sour.

Some materials which will provide good drainage are :- GRAVELLY SAND with granules of variable size 6 mm $(\frac{1}{4})$. The propagating sand used by native plant propagators is close to ideal providing that it is not too fine. Sieving the fine sand off and using only the coarser granules provides the most beneficial drainage. There is no nutritional value in propagating gravel.

SCORIA is a material derived from soft volcanic lava rock. It is usually pinkish in colour and is crushed and screened to various granule sizes. Scoria is porous and strongly alkaline. When freshly mined this material can still contain volcanic gasses and dusts which can be harmful to ferns. Sieving out the dust and then allowing a time of quarantine in the open will correct this. Scoria provides good drainage, it will retain moisture and assist aeration.

To be continued.

THE FERN SOCIETY OF VICTORIA INCORPORATED

BALANCE SHEET AS AT 30TH JUNE, 1990

	1990	1989
Members Funds		
As at 1st July, 1989 & 1988 <u>Add</u> Surplus	21,336.67 712.30	2,406.73
TOTAL MEMBERS FUNDS		21,336.67
Represented by:-		
Current Assets		
Cash at Bank Book Sales (WBC) Cash at Bank Show Subcommittee (NAB) Cash at Bank Book Sales (WBC) Stock Cash on Hand Cash at Bank (NAB) Cash at Bank - Investment Account Cash on hand - Fern sales & stock Cash at Bank - Cash Management A/c Cash at Bank - Show Committee (NAB)	587.81 0.00 2,402.32 1,199.30 39.20 1,579.69 0.00 100.00 11,461.97 2,641.68	400.12 3,834.26 2,002.32 1,323.43 260.95 338.95 11,483.64 100.00 0.00 0.00
	20,011.97	19,743.67
Fixed Assets		
Library - Less depreciation Plant & equipment - Less depreciation	253.00 1,784.00	309.00 1,284.00
	2,037.00	1,593.00
TOTAL NET ASSETS	\$22,048.97	\$21,336.67

THE FERN SOCIETY OF VICTORIA INCORPORATED

STATEMENT OF INCOME & EXPENDITURE

FOR THE YEAR ENDED 30TH JUNE, 1990

SHOW COMMITTEE

	<u>1990</u>	1989
INCOME		
Door Plant Sales Commissions Refreshments (Net) Interest	1,776.71 2,443.81 48.25 3.51	1,611.70 2,377.60 35.22 2.10
Less Cash Float	4,272.28 862.00	4,026.62 750.00
	3,410.28	3,276.62
LESS EXPENSES		
Bank charges Show expenses incl. Hall Hire	16.51 886.35	48.03 984.97
	902.86	1,033.00
Surplus for year	\$2,507.42	\$2,243.62
AU	DIT REPORT	

The attached statements are drawn up to show the financial position of the Fern Society of Victoria Incorporated according to the information at our disposal and as shown by the books of account and vouchers of the Society.

MCDONALD CARTER

W.C. KEENAN F.C.A.

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STATEMENT OF INCOME & EXPENDITURE FOR THE YEAR ENDING 30TH JUNE, 1990

	1990	1989
INCOME	3 102 01	3,555.34
Subscriptions Spore bank	3,182.91 64.40	91.20
Special efforts	236.90	418.00
Fern Sales Commissions	358.20	398.56
Glasses	106.50	78.00
Donations	1.00	0.00
Advertising	20.00	45.00
Interest	1,238.59	1,055.00
Tea money	0.00	50.00
Fern Badges	25.00	0.00
Library	16.00	0.00
Journal Sales	0.00	91.00
Book sales & exhibitions	1,089.00	0.00
LOR SITES & EXHIBITIONS		
LESS EXPENSES	6,338.50	5,782.10
Newsletter	2,843.32	2,319.41
Postage	902.62	854.14
Hall Hire	206.00	240.00
Bank Charges	107.77	44.57
Executive & secretary expenses	285.72	291.02
Speaker expenses	360.00	70.00
Glasses	678.58	194.72
Stationery	240.60	0.00
Show expenses	276.68	0.00
Donations	30.00	430.00
Subscriptions	60.00	65.20
Library books	250.75	143.04
Corporate affairs	24.10	23.00
Honorariums	300.00	300.00
Badges	206.45	0.00
Prize money	370.90	0.00
Library expenses	37.10	0.00
Audit fees	350.00	300.00
Rental	0.00	140.00
Spagnum moss - (plant sales)	0.00	53.00
Publication "What To Do With Ferms"	0.00	450.00
Slide bank	78.85	49.65
Repairs & maintenance	49.75	21.45
Travel	67.00	0.00
Depreciation	649.24	355.00
	8,375.43	6,344.20
(Deficit) on General account	(2,036.93)	(562.10)
Less Surplus on:-		
Show Sub-committee account	2,507.42	2,243.62
Book Sales	241.81	725.21
Surplus (Deficit) for year	\$712.30	2,406.73
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THE FERN SOCIETY OF VICTORIA INCORPORATED

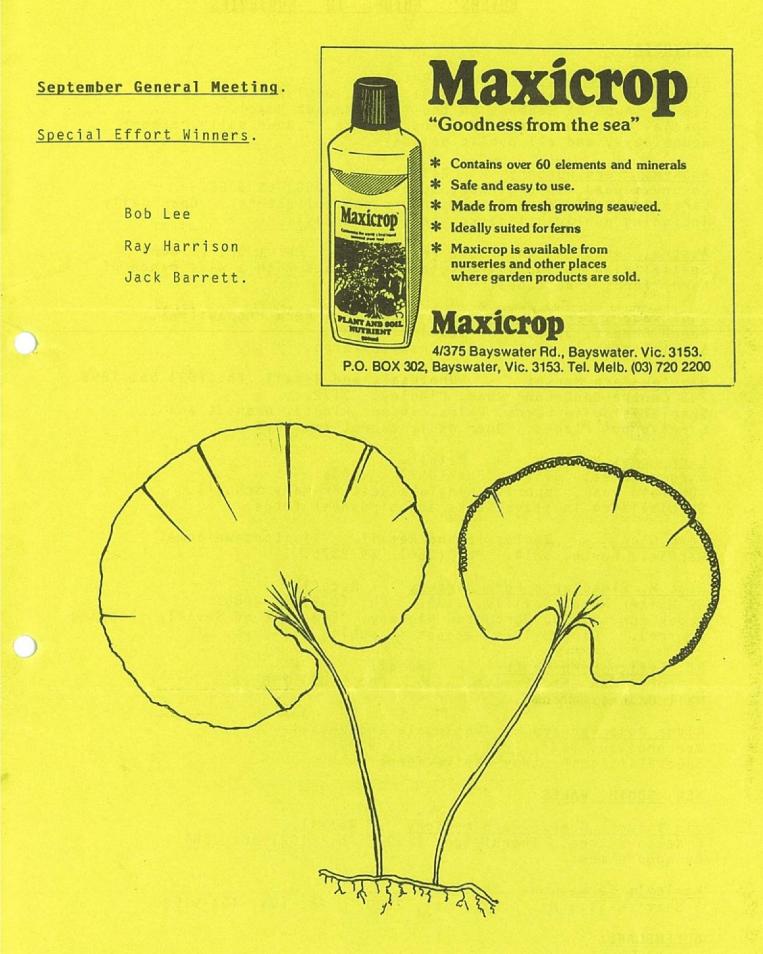
STATEMENT OF INCOME & EXPENDITURE

FOR THE YEAR ENDING 30TH JUNE, 1990

BOOK SALES

INCOME	1990	<u>1989</u>
Book sales & exhibitions Interest	1,653.21 165.47	2,243.48 158.22
	1,818.68	2,401.70
LESS EXPENSES		
Cost of books sold Postage Bank charges	1,513.54 0.00 63.33	1,572.97 58.25 45.27
	1,576.87	1,676.49

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Trichomanes reniforme Kidney fern of New Zealand life size

KAH 10/90

BUYERS' GUIDE TO NURSERIES:

VICTORIA:

<u>Allans Flat Plant Farm</u> - Retail. Tomkins Lane, Allans Flat, 3691. Ph: (060) 27 1375. (25 Km south of Wodonga on the Yackandandah Road). Specializing in ferns and indoor plants. Open daily, except Wednesdays, and all public holidays.

<u>Andrew's Fern Nursery</u> - Retail. Cosgrove Road, Invergordon, 3636. Ph: (058) 65 5369. Large range of ferns for beginners and collectors. Open daily, including public holidays, except Saturdays.

<u>Austral Ferns</u> - Wholesale Propagators. Ph: (052) 82 3084. Specializing in supplying retail nurseries with a wide range of hardy ferns - no tubes.

<u>Cool Waters Fern Nursery</u> - Wholesale Fern Propagators. Beech Forest, 3237. Ph: (052) 37 3283. Specializing in cool climate native ferns.

<u>Dingley Fern Market</u> - Wholesale and Retail. Ph: (03) 551 1868. 233 Centre Dandenong Road. Dingley. 3172. Specialising in Ferns, Palms, Indoor Plants, Orchids and Carnivorous Plants. Open daily except Xmas Day.

Fern Acres Nursery - Retail. Kinglake West, 3757. Ph: (057) 86 5481. (On main road, opposite Kinglake West Primary School). Specializing in stags, elks and birdsnest ferns.

<u>Fern Glen</u> - Wholesale and Retail. Visitors welcome. Garfield North, 3814. Ph: (056) 29 2375.

<u>R. & M. Fletcher's Fern Nursery</u> - Retail. 62 Walker Road, Seville, 3139. Ph: (059) 64 4680. (Look for sign on Warburton Highway, 300m east of Seville shopping centre). Closed Tues. except on public holidays.

<u>Mt. Evelyn Fern Centre</u> - Retail. 63 York Road, Mt. Evelyn, 3796. Ph: (03) 736 1729. Mail Orders welcome.

<u>Ridge Road Fernery</u> - Wholesale and Retail. Weeaproinah, 3237. Ph: (052) 35 9383. Specializing in Otway native ferns.

NEW SOUTH WALES:

<u>Jim & Beryl Geekie Fern Nursery</u> - Retail. 6 Nelson Street, Thornleigh, 2120. Ph: (02) 484 2684. By appointment.

<u>Marley's Ferns</u> - Retail. 5 Seaview St., Mt. Kuring-gai, 2080. Ph: (02) 457 9168.

QUEENSLAND:

<u>Moran's Highway Nursery</u> - Wholesale and Retail. P.O. Box 467. Woombye, 4559. Ph: (071) 42 1613. (1 Km. north of Big Pineapple. Turn right into Kell Road).