

NEWSLETTER

VOLUME 14 Number 1, February 1992

FERN SOCIETY OF VICTORIA Inc.

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Overseas - A\$30.00 (by Airmail)

Subscriptions fall due on 1st July each year.

PRESIDENT'S MESSAGE:

The New Year is now with us and I trust it will be a good one both for members individually and for the Fern Society. Speaking personally, the cool start to the year has been a bonus for my ferns, and has helped keep down the water bill.

Items to look forward to this year include our annual show in April, a country meeting in May and a visit from U.S.A. fernies in October.

The Annual Fern Show will be again held at the Nunawading Horticultural Centre on the 4th and 5th of April. This is our major effort at promoting ferns and the Fern Society. We will need the full support of members to make it a success; don't leave it up to the few.

In May we are looking at arranging a Fern Society meeting and display in Wangaratta. Mary Frost is the initiator and organiser for this our first such effort in a country area. I hope that it will be followed by others, thus demonstrating the we are the Victorian Fern Society and not just a Melbourne one.

Country members are often isolated and many welcome visitors and an opportunity to share fern facts and fantasies. I have recently received letters from two members who have specifically invited other members who may be in the area to drop in and say hello. I pass on the invitations from Roy Pratt of the "Maidenhair Factory", 21 Park St, Yenda (just east of Griffith), NSW (Ph 069 681226); and from Rosemary and Les Vulcz of "Mr Fern", Amiet Track near Lavers Hill in the Otways (Ph 052 373216).

On the international front we have received advice that the Los Angeles International Fern Society (LAIFS) is arranging a visit to Australia in October. Included in the group will be Barbara Joe Hoshizaki, a well known fern expert and author of the book "Fern Growers Manual". The group will be in Victoria for about three days.

(continued p. 5)

NEXT MEETING

DATE: Thursday, 20th February, 1992.

TIME: Commencing at 7.45 p.m.

VENUE: The National Herbarium, Royal Botanic Gardens,

Birdwood Avenue, South Yarra. (Melway Directory Ref. 2L A1)

GUEST SPEAKER: Chris Goudey.

TOPIC: Fern Propagation Methods Other Than From Spore.

***** PLEASE NOTE DELAYED STARTING TIME ******
(See Note below).

MEETING TIMETABLE

7.45 p.m. Pre-Meeting Activities: - Sales of Ferns, Spore, Books and Special Effort Tickets; Library Loans.

8.15 p.m. October General Meeting.

8.45 p.m. Guest Speaker.

9.45 p.m. Fern Identification and Pathology.

9.55 p.m. Special Effort Competition.

10.00 p.m. Supper.

10.15 p.m. Close.

PLEASE NOTE:

We have agreed to start our meeting a little later than normal to allow the Friends of the Royal Botanic Gardens to precede it with a public meeting at which the noted British garden designer and author, Mr David Hicks, will speak on "My Kind of Garden". This is the only night on which Mr Hicks is available during a very brief stay in Malbourne.

The Friends have invited any of our members who are interested to attend the meeting, which will begin at 5.30 p.m. with a wine and cheese tasting, followed by Mr Hicks' talk at 6.00 p.m. and conclude at 7.30 p.m. There is an entry charge for the meeting, but members of the Fern Society will be admitted at the reduced rate of \$10.00 paid by members of the Friend's organisation (please identify yourself at the door).

Members coming to the Herbarium for our meeting only are asked not to enter the hall until it has been vacated by the Friends and their visitors.

1992 FERN SHOW

Saturday, 4th April - Sunday, 5th April

Our Annual Fern Show for 1992 will be held on the first weekend in April at the Nunawading Horticultural Centre, 82 Jolimont Road, Forest Hill. It will be open to the public during the usual hours of 10.00 a.m. - 6.00 p.m. on Saturday and 10.00 a.m. - 5.00 p.m. on Sunday. Setting up will begin at 12 noon on Friday, 3rd April (further details on times, etc. in the March Newsletter).

Publicity to make potential visitors aware of the event is a prime need from now right up until the time of the Show — and this is an area where everyone can help by distributing our advertising leaflets. Supplies of the leaflets will be available at the February monthly meeting. Everyone attending is asked to please take some and arrange to have them displayed in places where they are likely to attract the attention of potential visitors to the Show. The Show Committee will be organising as much publicity as possible through the established media channels, but the leaflets are a vital part of our efforts. Please take every opportunity to promote the Show during the coming weeks by any other means that occur to you.

All members who can are urged to contribute plants for the display — it takes many ferns to fill the hall and produce a spectacular effect. Do not be too modest in assessing the suitability of your own ferns for the display. We need a wide range of varieties of healthy and attractive specimens to stimulate an enthusiasm for ferns in the visitors. As long as plants are well—grown and well—groomed, size is of minor importance. Now is the time to make the decision to participate so that selected plants can be brought into prime condition by Show time. Please ensure that all display ferns are clearly named; if you are not sure of the correct name for a plant please try to have it identified in advance rather than hope that someone will recognise it at the Show.

The Show Committee would like to hear reasonably soon from members who are willing to help in the Show activities - setting up and staffing the display, helping in the fern sales area, providing the tea and coffee service, etc. We particularly encourage new members to join in, as the Show is an ideal opportunity to get to know other members and improve your knowledge of ferns. Do not be deterred by feeling that your knowledge of ferns is not yet adequate; there is always plenty of help available should you be asked a difficult question.

All members are welcome (and encouraged) to bring <u>ferns for sale</u> at the Show, but it is essential that they advise their intention in advance so that arrangements can be made. The only qualifications on plants offered for sale are that they are healthy, free from pests and have been grown on by the members (not just acquired for re-sale). There is no limit, either high or low, on the number of plants that can be offered for sale. However, we cannot accept small tubes as the difficulty and effort of handling them are disproportionately high.

Please remember that people selling ferns are expected to contribute a reasonable number of plants to the display in proportion to their sales volume. Where plants of small size are offered for sale, it would help if a specimen of each type of a reasonable size could be

brought along for inclusion in the display, so as to give customers a better idea of the appearance of the more mature fern.

We always need a large number of smallish cardboard boxes for packing ferns that have been sold. We should hence be grateful if members would save up any suitable boxes they acquire and bring them to the Show.

The members of the Show Committee for this year are:

Bob Lee (Chairman)	Phone	836	1528
Betty Allgood	" (059) 68	4858
Julian Basser	11	592	8944
Ian Broughton	" (059) 64	6402
Derek Griffiths	11	336	3157
John & Norma Hodges	11	878	9584
Barry & Gay Stagoll	"	844	1558
Bill Taylor	"	754	8275
Bernadette Thomson	"	399	1587
Barry White	11	337	9793

Please contact any of these for further information, assistance with any difficulties, suggestions for improvements and (most welcome) offers of help.

Bob Lee.

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PRESIDENT'S MESSAGE (cont'd):

We look forward to the opportunity to get together with them, either joining in an excursion and/or arranging a joint meeting. More details later in the year.

Finally, a precautionary note. There has been some publicity recently about potting mixes and legionnaire's disease. Earlier on there was a suggestion that the disease may also be associated with misting systems in ferneries. There is obviously a lot more to learn about the bacillus responsible for this disease. It appears that it is a common soil-borne organism, which under certain conditions may proliferate and present a health threat. The disease has probably been around a long time but only recently have medicos been looking for it and diagnosing it. Media reports tend to exaggerate, but nonetheless it would be sensible to avoid inhalation of dust from potting mixes and to minimise exposure to misting systems.

Barry White

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NEW COVER PHOTOGRAPH

The delightful photograph of <u>Rumohra adiantiformis</u> on the front cover is reproduced by kind permission of Betty Duncan and Golda Isaac. The photographer was Bruce Fuhrer.

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AN "ANT FERN" LOOK-ALIKE

by Ray Best

(The manuscript of this article was accompanied by a frond and a sample of rhizome from the <u>Polypodium</u> described. These were shown to members at the December meeting.)

Many years ago, an elderly garden friend of mine who loved his ferns said he had a very unique fern that I may be interested in. According to his records the fern was <u>Lecanopteris carnosa</u> (Reinw) Blume from Indonesia, commonly known as the Ant Fern.

Some six years later my plant became fully mature, so I decided to prepare a watercolour and a full description. However, problems arose. I recalled having read an article about the Ant Fern in the "Fern Gazette" (Vol. 11, 1975, Parts 2&3), the journal of the British Pteridological Society. This article by Clive Jermy (British Museum of Natural History) and T. G. Walker (Dept. of Plant Biology, Newcastle University, England) introduced a new "Ant Fern" from Indonesia (L. spinosa) and described all known species of Lecanopteris. These were:

Lecanopteris	carnosa	Lecanopteris	nieuwenhuisii
11	davallioides	11	philippensis
H	deparioides	11	sarcopus
11	incurvata	11	sinuosa
11	lomarioides	11.	spinosa
11	mirabilis		

After studying all this material thoroughly, I came to the conclusion that my plant was not a <u>Lecanopteris</u>. The material was forwarded to an American friend, Marie van Etten, who in reply stated that she considered the correct title should be <u>Polypodium leiorhizum</u>. Then, searching through my early fern works, I found a colour woodcut reproduction of my specimen with a full description in E.J.Lowe's "Ferns British and Exotic" (Vol.2, p.52). The fern was there called <u>Polypodium cuspidatum</u> Don; Kunze with <u>P. leiorhizum</u> listed as one of five previous titles.

The following description is taken from Lowe's book:

"A handsome fern with an extraordinary large, creeping, smooth, spotted, snake-like rhizome and smooth shining fronds. Native to the East Indies and Nepal.

Fronds glabrous, pinnate, the pinnae lanceolate-acuminate, ending in a very fine point; the inferior pinnae petiolate but the upper ones adnate and decurrent, about 20 pairs of pinnae on each frond. Length of frond from 24 to 44 inches, colour bright shining green, length of pinnae from six to eight inches.

Sori circular, uniserial, at first minute and white, eventually becoming very large and orange-yellow in colour; about 36 pairs of sori on each pinna and raising slight umbones on the upper surface. Fronds lateral, being articulated on a very thick, creeping, smooth, branched rhizome, bright green in colour, scattered over with large brown scales. Rhizome about two inches and one half in circumference. Introduced into the Royal Botanic Gardens, Kew in 1844 by Mr John Christie.

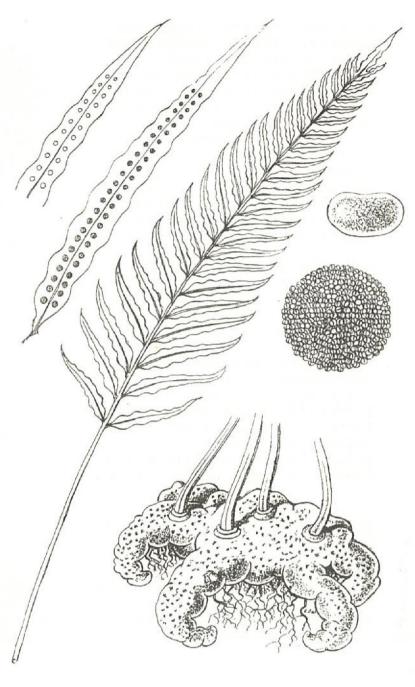
 $^{^{\}star}$ see Glossary of Terms on page 8.

Stipes pale green on the upper side, rich brown below, the two colours divided by a narrow belt of pale green. The fronds stand nearly erect whilst the pinnae can become pendulous. The width of the frond is the same, except towards the apex where it becomes narrower. The plant in my collection has fronds four feet in length with pinnae seven to eight inches long and not an inch wide in the broadest part. Stipes are about 14 inches in length. This fern is not in general cultivation and is best known under the name Drynaria leiorhiza."

I have used the title

Polypodium cuspidatum for my
drawing of this fern (based on
my own mature plant) as being
the most appropriate:
Polypodium = many-footed and
cuspidate = tipped with a firm
sharp point. The drawing shows
details of the large rhizome
along with the scales that
provide the markings on it,
back and front views of the
pinnae, a sorus and an
individual spore.

Being epiphytic in nature, my largest specimen is in a huge suspended basket in my fernery. It produces masses of spores, but as it propagates readily from sections of the large rhizome I have never bothered to try the spore. I have shared my plant with many local growers who also find it a hardy and strong fern.



Polypodium cuspidatum

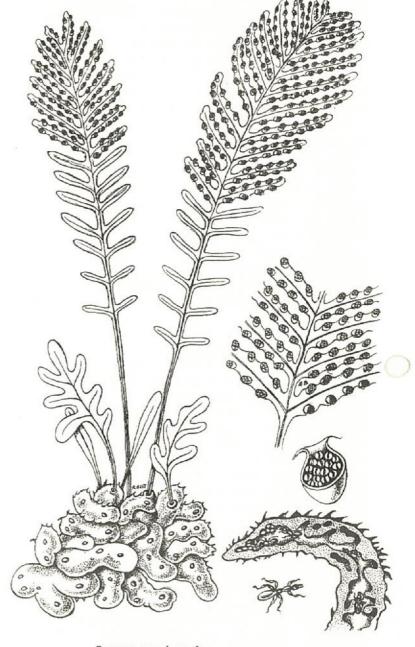
I have also prepared a drawing of the Ant Fern, <u>Lecanopteris carnosa</u>, and the following description:

Rhizome fleshy, hollow, ant-infested, green and glaucous when young, black and horny outside when old and quite bare of scales. Fronds borne on swollen podiums on much-branched rhizomes. Lobes at the base of blade reduced in length: opposite to slightly alternate, becoming closer and slightly longer and angled towards the apex. Stipes on mature fertile fronds to 15 cm long. Grooved on the upper side, rounded beneath. Lobes rounded at the tips and attached to the rachis

by a narrow wing. Young and infertile fronds shorter and wider as are the lobes. Sori are originally formed on the backs of lobes at the apex of the blade only, the lobes then twisting over and upwards until the cup-shaped indusia containing the sori become clearly visible at maturity on the upper surface of the blade (see illustration). These fertile lobes are somewhat longer and closely attached.

Ants appear to assist the growth and distribution of spores, using the interior section of the hollow rhizome as an effective protected accommodation. It is reported that these ants bite, making the removal of plants from their epiphytic position difficult if not impossible. Certain species of ants undoubtedly assist in protecting and assisting the growth of these unusual ferns.

Editor's Note: The manuscript for this article included full details of authors' names for the various species and synonyms listed, but these had to be omitted for lack of space. The information is available on request.



Lecanopteris carnosa

Glossary of Terms:

acuminate = tapering to a long slender point

adnate = grown together or fused with another part

articulated = jointed at point of attachment, separating easily
decurrent = running downwards beyond the point of junction

glabrous = smooth, free of hairs or scales

glaucous = covered with a waxy bloom, giving a bluish colour

lanceolate = lance-shaped; tapering at both ends but widest near base

lateral = borne on the side of an axis
petiolate = borne on a stalk or stipe

umbone = raised dome uniserial = in a single row

TRIP to LAMINGTON NATIONAL PARK

by Mary Frost

Dorothy Forte and Garnet and Mary Frost left Wangaratta on 22nd July last year for a trip to the Lamington National Park in south-east Queensland, with stops at a number of fern areas on the way. On the first day we drove via Albury and Wagga Wagga in pouring rain to an overnight stop at Coonabarabran.

We then proceeded through Tamworth and Armidale to the Woolomombi Falls, which had only a little water flowing over them, and then on to the New England National Park. We drove to Point Lookout where it snowed lightly and there was a strong, bitterly cold wind. We went on the Cascade Walk (6 km) and found the following ferns:

Asplenium bulbiferum

" flabellifolium
Athyrium australe
" japonicum
Blechnum minus
" nudum
" patersonii
" wattsii
Cyathea australis
Dicksonia antarctica
Gleichenia microphylla
Grammitis billardieri
Histiopteris incisa

Hymenophyllum cupressiforme

" flabellatum
Lastreopsis acuminata
" marginans
Microsorum diversifolium
" scandens
Pellaea falcata
Polyphlebium venosum
Polystichum proliferum
Pteridium esculentum
Pyrrosia rupestris
Sticherus lobatus
Todea barbara

We then viewed the Ebor Falls that had a lot of water flowing. We were told that perhaps some of the falls would have nothing in them, because the country was extremely dry with no rain in some areas for over nine months. The forests were very dry and in many places were burnt from controlled burning.

We stayed overnight at Dorrigo and next morning visited the Dorrigo National Park. We did a circular walk, starting and finishing at the lovely Park Headquarters. There had been a savage frost overnight (temperature $-7^{\circ}C$) and we think every plant in the gardens had been killed. We started our walk at 7.30 a.m. and so saw lyrebirds and brush turkeys; when we returned there were hundreds of people. The ferns found on the walk were:

Adiantum diaphanum

"formosum (beautiful)
hispidulum

Arthropteris beckleri (truly
tenella lovely)

Asplenium australasicum
polyodon

Athyrium australe
decedens
Blechnum cartilagineum
mudum
patersonii

Cyathea australis
leichardtiana

Dicksonia antarctica
Davallia pyxidata
Diplazium dilatatum
Doodia media
Histiopteris incisa
Hypolepis sp.
Lastreopsis acuminata
"marginans sp.
Lunathyrium japonicum
Platycerium bifurcatum
Pteridium esculentum
Pteris tremula
"umbrosa

At Never Never National Park, which is all regrowth, the timber is coming very thickly and the area will eventually have as many trees as originally. Ferns found here were:

Adiantum aethiopicum diaphanum

hispidulum silvaticum

Asplenium australasicum

polyodon

Blechnum cartilagineum

" minus

" patersonii

" wattsii (very prolific)

Cheilanthes sieberi
Cyathea leichardtiana
Davallia pyxidata
Grammitis billardieri
Hymenophyllum sp.
sp.
Platycerium bifurcatum
Sticherus flabellatus

After staying overnight at Grafton, we travelled to Wardell through lovely country with Macadamia plantations, then on to Ballina and out to Mingen Falls. These had very little water flowing over them and Forestry personnel had control burned the area above the falls. So our planned walk was abandoned and we went into Rummery Park which has been planted with re-introduced ferns. Ferns seen were:

Adiantum hispidulum

"silvaticum
Asplenium australasicum
Blechnum cartilagineum
Christella dentata
Culcita dubia
Cyathea australis
"cooperi
"leichardtiana

Gleichenia microphylla

Lindsaea linearis

" microphylla
Lycopodium cernuum (superb)
Platycerium bifurcatum

" superbum
Pyrrosia confluens
" rupestris
Sticherus flabellatus
" lobatus

We spent two days exploring the Lamington National Park, staying overnight at Beechmont. On the first day we visited the Binna Burra area. I think the Caves Circuit walk, which took us four hours, was the highlight of our trip. The bush was extremely dry and the filmy ferns were like dry chaff when touched, but the Platycerium superbum were spectacular with lovely new shields showing no dryness whatsoever. The orchids and the caves were really outstanding. We saw many ferns on this walk:

Adiantum aethiopicum diaphanum formosum hispidulum Arthropteris tenella Asplenium australasicum flabellifolium polyodon Athyrium assimile australe Blechnum cartilagineum Cheilanthes lasiophylla sieberi Christella dentata Culcita dubia Cyathea australis cooperi

leichardtiana

Davallia pyxidata Dictymia brownii Doodia heterophylla media Hypolepis punctata Lastreopsis decomposita marginans acuminata Microsorum scandens Pellaea falcata Platycerium bifurcatum superbum Psilotum nudum Pteris tremula tripartita umbrosa

(to be concluded)

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Maxicrop

DECEMBER MEETING WINNERS

Door Prize: John Hodges

Special Effort:

Margaret Radley (2)

Norma Hodges

Doug Thomas

Dave White (3)

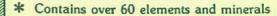
Jean Trudgeon

Lorraine Hansford

Britt Layton

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BUYERS' GUIDE TO NURSERIES

VICTORIA:

Andrew's Fern Nursery - Wholesale and Retail. Melbourne Road, Arcadia, 3613. Ph: (058) 26 7285. Large range of ferns for beginners and collectors. Open daily 10 am - 5 pm except Christmas Day.

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

<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 Christmas Day.

Fern Acres Nursery - Retail.

Kinglake West, 3757. Ph: (057) 86 5481.

(On main road, opposite Kinglake West Primary School).

Specialising in Stags, Elks and Bird's-nest Ferns.

Fern Glen - Wholesale and Retail. Visitors welcome. D. & I. Forte, Garfield North, 3814. Ph: (056) 29 2375.

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

Ridge Road Fernery - Wholesale and Retail. Weeaproinah, 3237. Ph: (052) 35 9383. Specialising in Otway native ferns.

<u>Viewhaven Nursery</u> - Wholesale and Retail. Avon Road, Avonsleigh (near Emerald), 3782. Ph: (059) 68 4282 Specialists in Stags, Elks, Bird's-nests and Native Orchids.

NEW SOUTH WALES:

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

Kanerley Fern Exhibition and Nursery - Wholesale and Retail. 204 Hinton Road, Nelsons Plains, via Raymond Terrace, 2324. Ph: (049) 87 2781. Closed Thursdays and Saturdays. Groups of more than 10 must book in advance, please.

Marley's Ferns - Retail.
5 Seaview Street, Mt. Kuring-gai, 2080. Ph: (02) 457 9168.

QUEENSLAND:

Moran's Highway Nursery - Wholesale and Retail. Bruce Highway, Woombye (1 km north of Big Pineapple; turn right into Kiel Mountain Road). P.O. Box 47, Woombye, 4559. Ph: (074) 42 1613.