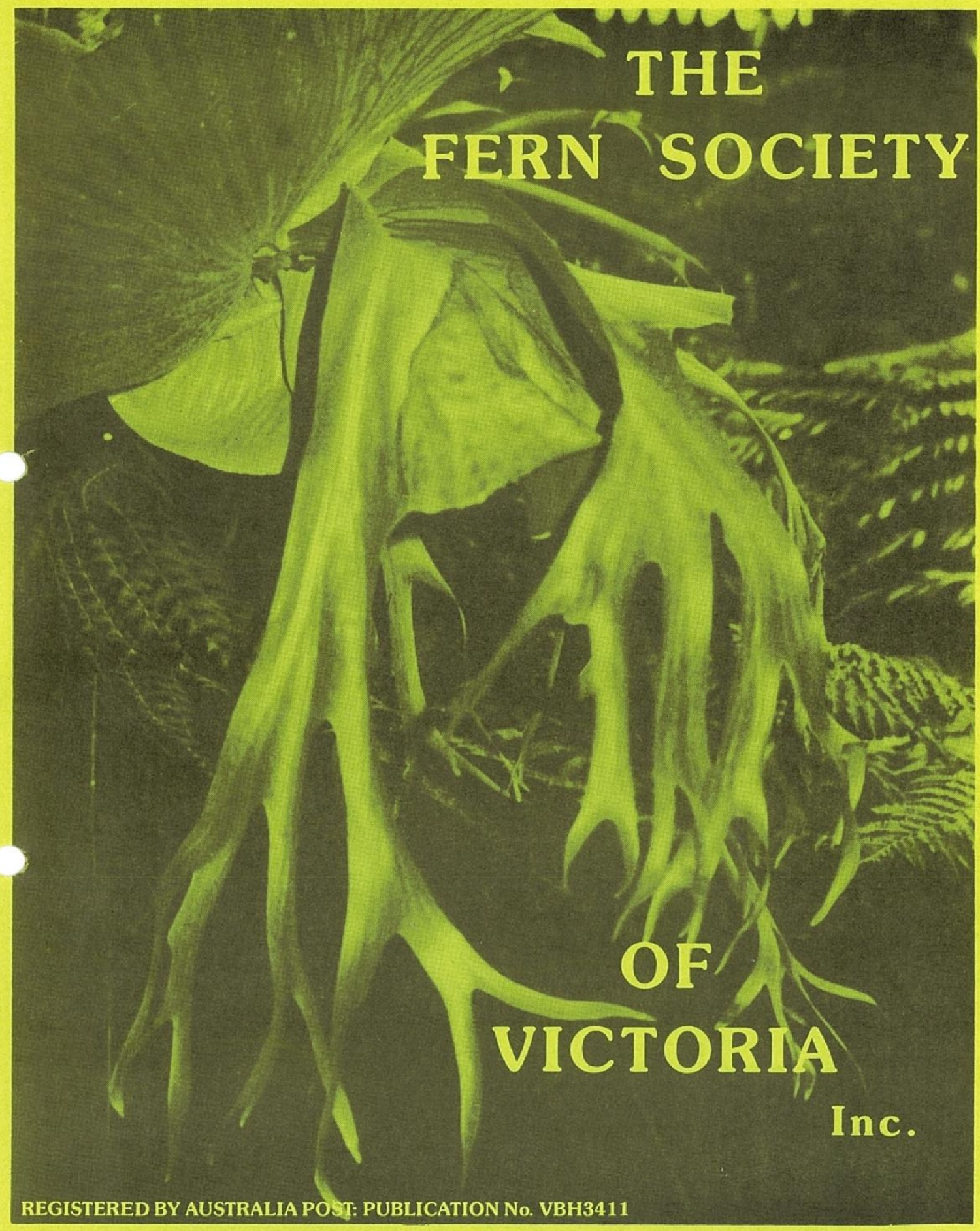

THE FERN SOCIETY OF VICTORIA Inc.

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NEWSLETTER

VOLUME 9 , NUMBER 11, 1987

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****

PRESIDENTS REPORT.

Our first meeting at Camberwell Elderly Citizens hall proved quite successful with over sixty members enjoying a very informative talk by Albert Jenkins. We welcomed new members Nel Caldwell and Simon Hardman to our society.

Our second edition glasses are sold out but I am hoping that we may have the third design ready by December 10th.

Our Christmas meeting will again be at Camberwell with Mary Frost and Dorothy Forte giving a talk on Nephrolepis so this will be a grand finale to our year. Please remember to bring some supper and a gift for our hampers. We again have a beautiful Christmas cake baked by Mavis Potter and decorated by Beth Ward as a prize also a very attractive five tier wrought iron fern stand as a special prize. This was made by Russell Miller of North Albury and we thank these people most sincerely.

To ensure your ticket in our door prize please bring along a fern for display, preferably a Nephrolepis if possible and we will have the hall filled with delightful ferns.

November special effort winners.

1. Edna Fuhrmeister
2. Norma Hodges
3. Jack Barrett
4. Coral Nicholson
5. Keith Salisbury
6. Beulah Powell
7. Les Kitson
8. June Pritchard

Congratulations All.

As our venue for next year is not finalized yet please watch for notification in our February Newsletter. We hope to meet on the second Thursday each month with every second meeting a fern study night.

In conclusion I would like to thank all who have assisted with the many tasks during the year and wish each member a Joyful Christmas and a healthy, happy New Year.

Kindest Regards,

Keith Hutchinson.

THURSDAY

- DECEMBER 10 -

elderly citizens hall

CAMBERWELL

XMAS GALA NIGHT

SPEAKERS: MARY FROST AND DOROTHY FORTE

SUBJECT: NEPHROLEPIS

GRAND SPECIAL EFFORT:- Christmas cake donated by Mavis Potter.
Five tier fern stand donated by Russell Miller.
Our giant hampers.

SUPPER: Always a delightful finale.

* *

SPEAKER REPORT - GENERAL MEETING, 19th NOVEMBER, 1987.
SPEAKER: ALBERT JENKINS - TITLE: "MY WAY WITH FERNS".

1. Double Potting.

For members who would like to grow a fern or two inside the house yet have difficulty in achieving this, Albert suggested the double potting method and provided a detailed description of how to set up the culture. He explained that the main reason for failure, especially in winter is that modern type room-heating systems have a drying effect on humidity. This super-heated environment also has the effect of over heating the plastic pots in which we buy our ferns today. The hot plastic burns off the ferns feeder roots and the fern is soon in trouble.

Albert said that the double potting method is designed to insulate against the heat and return humidity to the fern. To achieve this, transfer the fern to a terra-cotta pot of suitable size; choose a plastic pot of about 50mm(2") larger in diameter

Continued over .

and add pieces of charcoal sufficient to allow the heights of both pots to be the same. Stand the potted fern on the charcoal and lightly stuff moistened sphagnum moss between the two pots. Stand the assembly in a saucer and water the sphagnum moss as well as the potted fern.

Albert pointed out that the ability of the outer plastic pot to get hot in a heated atmosphere also has the effect of warming the moist sphagnum which in turn raises the humidity to a level beneficial to the plant.

2. Tree Fern Chunks as Containers for Maiden hairs and other Ferns.

Albert explained that in using this fibre he chooses what he describes as "standing pieces" in which he inserts the fern and then stands the assembly in water. The tree fern fibre keeps cool and moist and the ferns do particularly well when grown by this method. He warned however that the water must be kept to a reasonable level and that the saucer should be washed out thoroughly once a month. Albert said that he has suceeded with the restoration of ailing ferns by using this method.

3. What to do when Ferns sulk.

It is not uncommon to find individual ferns in a collection which do not develop and grow as they should. Albert said that by simply changing the position of the fern in the fernhouse a fern can be assisted to recovery and good health. He pointed out that good light is a factor which most ferns require and which we should keep in mind when we move them about. A position which Albert uses and which has proved to be ideal is a spot behind a glass door facing to the North.

In winter particularly we should make as much light as possible available to our ferns - good light can work wonders with a sulky fern.

4. Making Wire Fern Baskets and Providing the Necessary Maintenance for Ferns Grown in Them.

Albert makes very attractive wire fern baskets from welded mesh wire. He cuts out a portion of mesh to suit the size of basket he needs then folds it into a cylindrical shape and joins the ends. He has made a crimping tool which he uses to crimp each of the interstices of the mesh and to reduce the diameter at the base of the basket. Albert said that baskets made in this way need not be hung up in the conventional way but can be stood on a shelf or table. Albert also demonstrated how such things as ice-cream containers, paint tin lids and plastic pot drainers can be made useful in a fern house.

There are all sorts of materials which can be used as fern basket liners and Albert has used them all. He showed Members how he makes use of the green grocer's plastic mesh onion bag. These he uses as liners which he cuts to suit the contour of the basket allowing at least three inches extra in height. By cutting to allow for tie wires to pass through, he then binds the extra material over the rim of the basket and tucks it in around whatever liner is being used. Albert said that black plastic as an inside liner with the onion bag makes a very neat and attractive receptacle and there are no uneven ends of material poking up above the rim. All liners work well inside the onion bag material.

Albert adds a white granulated chemical called Terra soil to his potting mixtures. He said that Terra Soil works in the mixture in much the same way as Wettasoil. Both of these additives help to keep moisture in the mixture. One teaspoon of Terrasoil granules makes one margarine container of liquid.

5. Tassel Ferns.

Albert has had excellent success in growing Queensland Tassel ferns (Lycopodiums) and pointed out that tassel ferns do best for him in tree fern fibre, positioned in a good light situation with a cool humid atmosphere and fresh air movement. The only special treatment they receive is a drink of diluted Maxicrop once a week. They do not have any artificial heat.

Tassels must be protected from the ravages of snails and slugs and to this end Albert is presently tying cotton wool around the base of the fronds. He said that these pests will not crawl over the cotton wool.

Albert has struck cuttings of the rat'stail tassel in a mixture of minced tree fern fibre, Perlite and leaf mould.

6. The Silver Elk. (Platycerium veitchii)

Albert has observed that by moving his silver elks around in the fern house the plant prefers a good light position, one that provides some morning sun. It also does best if kept a little on the dry side.

7. Tree fern Basket Maintenance.

Albert displayed many beautiful and very healthy ferns including the Queensland Needle Fern, all growing on tree fern fibre baskets. He said that at this time of year he soaks the fibre in a solution of water and Wettasoil. This keeps the fibre moist for long periods.

8. Composting.

Albert's method of composting is to collect the leaves of deciduous trees such as liquid amber, English oak and the spent fronds from tree ferns and to run them through his shredder. He sets up the material in a compost area open to the elements. Albert said that the composting material should be turned regularly to keep it aerated and sweet and to prevent it becoming sludgey. A sludgey compost is a heavily acid compost. No other materials are added to this compost.

9. Light Intensity.

Albert related an experience he had when staying in the Atherton Table Lands area in North Queensland. He said that despite freezing cold nights and early mornings, the temperature rose rapidly reaching 20^{0} - 25^{0} within an hour or two of sunrise. He noticed that the sun appeared high in the heavens despite the fact that at the same time it was mid-winter in Melbourne where the light would be poor. Albert said that this extra light is the reason why ferns grow so profusely and in such great variety in northern Queensland. He felt that it may be a good idea to try to simulate the light intensity of Queensland by installing fluorescent electric lights in our southern fern houses during winter.

Vote of Thanks. In thanking Albert for his excellent talk, President Keith Hutchinson referred to the thoroughness of Albert's preparation and his willingness to share his knowledge and experience with other members. Keiths expression of thanks was supported enthusiastically.

NAMING THE FERNS OF VICTORIA - Part 2.

BLECHNUM: The name of this genus derives simply from the Greek word for fern. Linneaus, in his book "*Species Planetarum*", published in 1753, recognized only 14 different genera of ferns, of which this was one. His book formed the basis of the classification we now use for all plants and animals. He was first to use systematically a combination of two names, the genus and the species, to identify uniquely any particular living organism.

The genus, *Blechnum,* consists of about 200 different fern species, with about 8 being found in Victoria.

B.cartilagenum - gristle fern - The species name is an allusion to its tough, leathery fronds.

B.chambersii - lance water-fern - This fern was previously thought to be identical to related species from N.Z. and Sth Africa, but its uniqueness was established by Mary Tindale in 1972. It is named in honour of Carrick Chambers, a world authority on Blechnums. Until recently he was Professor of Botany at Melbourne University, and is now Curator of the Botanic Gardens in Sydney.

B.fluviatile - ray water-fern - Latin for "of a river". This is a species often found clinging to the banks of streams. It was among one of the 3400(!) plant specimens collected by Robert Brown as part of Matthew Flinder's expedition to Australia, aboard *H.M.S.Investigator*, between 1801-04. During his career, Brown, who was a protege of Sir Joseph Banks, made an enormous contribution to the science of Botany. It is interesting to note that he was also the one to discover the irregular movement of very small particles (caused by molecular collisions and now known as "Brownian Motion") while examining the spores of the fern allies, *Equisetum* and *Lycopodium*, in water under the microscope.

B.minus - soft water fern - the "small" species of *Blechnum*, also collected and named by Brown.

B.nudum - fishbone water-fern - First collected by Labilladiere in 1792 in Sth. Tasmania. The highly reduced pinnae on the fertile fronds probably gave rise to the name (Lat."bare").

B.patersoni - strap water-fern - Another species collected by Brown and named after William Paterson, amateur botanist, Fellow of the Royal Society and yet another protege of Joseph Banks. Paterson is better remembered as the founder of Launceston and as the Lieutenant-Governor of N.S.W., who sent Governor Bligh back to England after the Rum Rebellion.

B.penna-marina - alpine water-fern - meaning "resembling a sea-pen", a sedentary, invertebrate sea-creature, related to jellyfishes and corals.

B.vulcanicum - wedge water-fern - The same species was first found growing in a volcanic area in Java. The name may have also been chosen as a reference to the characteristic wedge-shape of the frond.

B.wattsii - hard water-fern - named by Mary Tindale in 1963. Rev. W.W. Watts was a pioneer researcher into Australian ferns. For many years it was placed with the ill-defined complex of N.Z. species known as *B.procerum.*

ECOLOGY AND DISTRIBUTION OF THE GENUS, *NEPHROLEPIS.*

Nephrolepis spp, commonly known as "fishbone ferns", are ecologically very adaptable, growing in a wide variety of habitats, from the boggy to the rather dry, and from partial shade to full sun. The species are often epiphytic or found growing over rocks ("rupestral" or "lithophytic") as well as in the ground. *Nephrolepis* spp usually grow well in disturbed ground such as by roadsides, in cuttings or other clearings.

Nephrolepis is a pantropical and subtropical genus of 20 to 35 species. The exact number is difficult to establish, owing to their widespread distribution and the ease with which they undergo minor mutations, as can be seen, for example, by the hundreds of different cultivars known for *N.exaltata.*

The following is a distribution list of the species reported:
Australia - *N.acutifolia, biserrata, cordifolia, hirsutula, obliterata.*
Pacific Is., Japan - *N.acutifolia, biserrata, cordifolia, hirsutula.*
Orient - *N.biserrata, cordifolia, hirsutula.*
America, Sth and Central - *N. biserrata, cordifolia, exaltata, multiflora, occidentalis, rivularis.*
America, Nth - *N. exaltata.*
Carribeean - *N. biserrata, cordifolia, exaltata, pectinata, rivularis.*
Africa - *N.acutifolia, biserrata, undulata.*
Malesia, S.E.Asia - *N.acuminata, acutifolia, biserrata, cordifolia, dicksonoides, falcata, hirsutula, radicans.* 18 other species have been reported in this region, but how many are synonymous with the above, is not known.

HYDATHODES

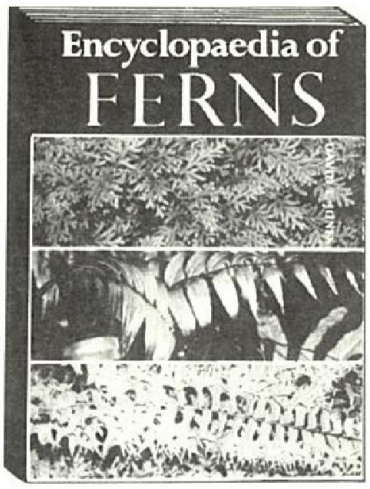
Ferns in the genus *Nephrolepis* and many species of *Pyrrosia*, *Microsorum*, *Polypodium* and *Niphidium* have veins with enlarged tips which are visible as pale spots on the upper surface of the pinnule. Through a small opening at that point, the fern can excrete water containing dissolved salts. This often occurs at night when the frond contains sufficient water, and by daytime the salts have dried to form a whitish circular cover (mainly of calcium carbonate) over the opening. This phenomenon is a consequence of the osmotic pressure built up during transpiration of water in the plant. It may also result from a mechanism which enables ferns to obtain large amounts of water quickly during times of stress, without having to use energy to remove all the excess of dissolved salts immediately. Many higher plants, such as nasturtiums and grasses, as well as mosses and fungi have hydathodes for removal large amounts of water.

ENCYCLOPAEDIA OF FERNS

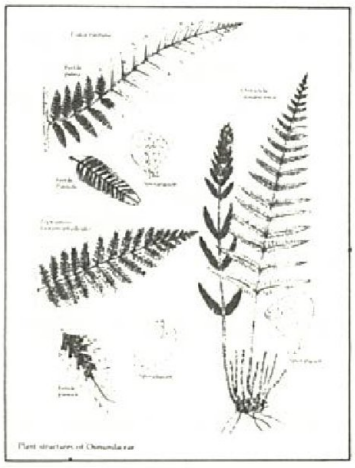
An Introduction to Ferns, their Structure, Biology, Economic Importance, Cultivation and Propagation.

DAVID L. JONES B.Ag.Sc., Dip. Hort.

Foreword by A. Clive Jermy, Head of Fern Section, British Museum (Natural History), London.



A BEAUTIFUL AND AUTHORITATIVE WORK ON THESE INTRIGUING GROUPS OF PLANTS



ENCYCLOPAEDIA of Ferns provides a much needed and extensive reference source on ferns. It is an outstanding work, every facet of which has been thoroughly researched and carefully documented.

Care has been taken to present the diverse material in simple language and in most chapters the written commentary is illustrated by photographs or sketches.

David L. Jones has previously written and co-written several successful fern books in Australia. He is a well qualified botanist highly experienced in field work, scientific studies and practical pursuits; in compiling this book his clear aim was to reach plant-orientated people throughout the world and to stimulate in them a lively interest in ferns.

The sequential structure of the book is sound, beginning with a fascinating chapter in which the pre-historic emergence of ferns in the world is discussed. Of particular interest here is a description of the strange life cycle of a fern including the events of the fertilisation process evolved by necessity in pre-historic times, yet persisting to the present day without change.

Scientific fern nomenclature has been used in the chapter describing 'Ferns to Grow', but whilst this in itself may be unpalatable to some readers, compensation in visual form has been provided by the insertion of a photograph or by a clear line sketch. The text accompanying each plant description includes information on its natural distribution and cultural needs.

A chapter is devoted to soils, all types of soils including sandy, alkaline, acid, clay and waterlogged. David Jones provides a study of individual soils right down to describing their major physical components. He even tells us the names of fern species which prefer to grow in each soil type. Excellent advice is given on how to use lime in soils for ferns.

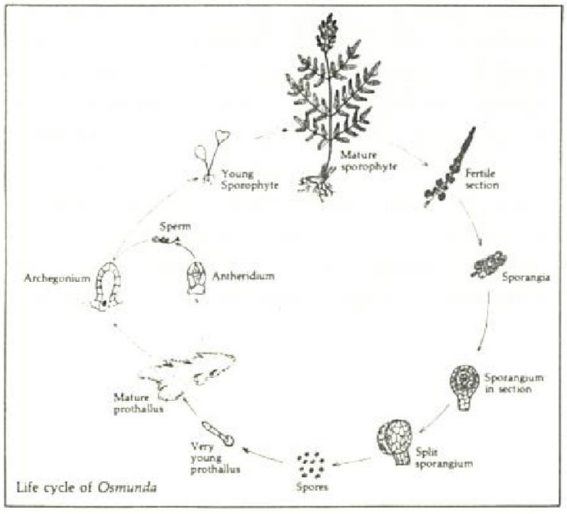
Precise studies have also been made of our oft-recommended potting mix additives. Peanut shells, peat moss, leaf mould, sphagnum moss and pine bark are just a few which are fully examined. Of particular interest is a segment devoted to pine bark, an additive which needs to be understood and carefully managed if best results are to be obtained.

There are splendid chapters setting out the cultivation needs of ferns. In this, readers are shown by sequential steps, the methods which they can apply to such processes as repotting, hybridisation and propagation.

In other chapters readers are shown how to control or eradicate insect pests and how to identify fern species. Identifying fern species is made easier for enthusiasts because of the excellent photography and art work.

Although this encyclopaedia is produced as an authoritative aid for fern enthusiasts, I am convinced that there is much in this volume which would serve the interests of any person who loves plants.

Reviewed by Doug Thomas, Immediate Past President of the Fern Society of Victoria Inc.



Life cycle of *Osmunda*

448 pages with 250 four-colour illustrations, 154 black and white photographs and 78 drawings
246 x 182mm, hard-covers, jacketed

Learning about Ferns:

Use good reference books; trial and error; note other peoples methods but remember that what works for one, may not work for another. There are good reasons for this. For instance, one person's shade house may be cooler or warmer or there may be differences in the soil or water. A neutral PH is probably sufficient for a start as plants absorb their needs more easily when the PH is neither too acid nor too alkaline.

It is a good idea to know what family your ferns belong to. Each fern has at least two names; the first is the family name like our sirname (generic) and the second is usually a descriptive name (specific). By knowing the family name and using reference books you can ascertain growing conditions and try to re-create something similar. For example, Blechnums, no matter what species, will not tolerate lime in the mixture. (There are over 200 of them in the Southern Hemisphere). In their natural habitat, they occur where the ground is wet and peaty and so prefer a mix that is a little on the acid side with plenty of water. Aspleniums in nature occur mostly on trees or rocks where there is very good drainage but enough old decayed leaves to prevent drying out. Leaf mould and sand is a good basic potting mix for ferns. Although rainforest soil is heavy and clay-like, the ferns occur either in the very thick layer of decayed leaves that acts like a sponge, holding its moisture yet letting the excess drain away, or on the damp trees. The canopy formed by leaves and branches above and the leaf mould below, help to keep the place humid, even in a dry season.

Ferns do not send roots down into the earth to obtain the minerals that they require but the trees do it for them. The tree draws essential minerals up into its leaves and when they fall and start rotting down as they return to the earth, the ferns growing in the leaf mould are able to absorb what they need from them. The uniform control method of growing plants was started in California years ago. Instead of using leaf mould, the gardeners used peat moss and sand and as there was no food in this, they added the nutrients that were required. Therefore, they were able to control the size and growth rate. The amount of light, water and warmth were also controlled as these have an effect on growth. Sufficient light is essential and here again, it is helpful to know your fern's name. Ferns that have a bluish look need more light than their green relatives. Ferns from darker areas of the rain forest have very dark green leaves; sometimes their new fronds are pink. The lighter green Pteris tremula and Todea barbara grow near waterfalls and open spaces where there is more light from above. Some ferns are covered with whitish hair or have silver or yellow dust on the underside of their leaves. The purpose of this is to conserve moisture and these ferns grow in dry areas; try to avoid watering their foliage. Platycerium veitchii is one of these and comes from inland areas of Queensland where it is dry and hot. They grow on rocks and get their moisture from seepage.

BY COURTESY OF W.A. FERN SOCIETY.

1988 FERN SHOW DEFERRED

The Fern Show Sub-Committee has recommended to the Committee of Management that the Annual Fern Show scheduled for April 1988 should be deferred until 1989. It is hoped that participation in some alternative events can be organised in 1988 for members' enjoyment and to keep the name of the Society before the public.

There were a number of factors involved in reaching this decision. One was the large number of activities planned for the Bicentennial celebrations in 1988, which will give the public a surfeit of functions to visit and inevitably result in low attendance at a regular event like our Show. Another main reason was our feeling that extra time was needed to plan for and develop an improved Show.

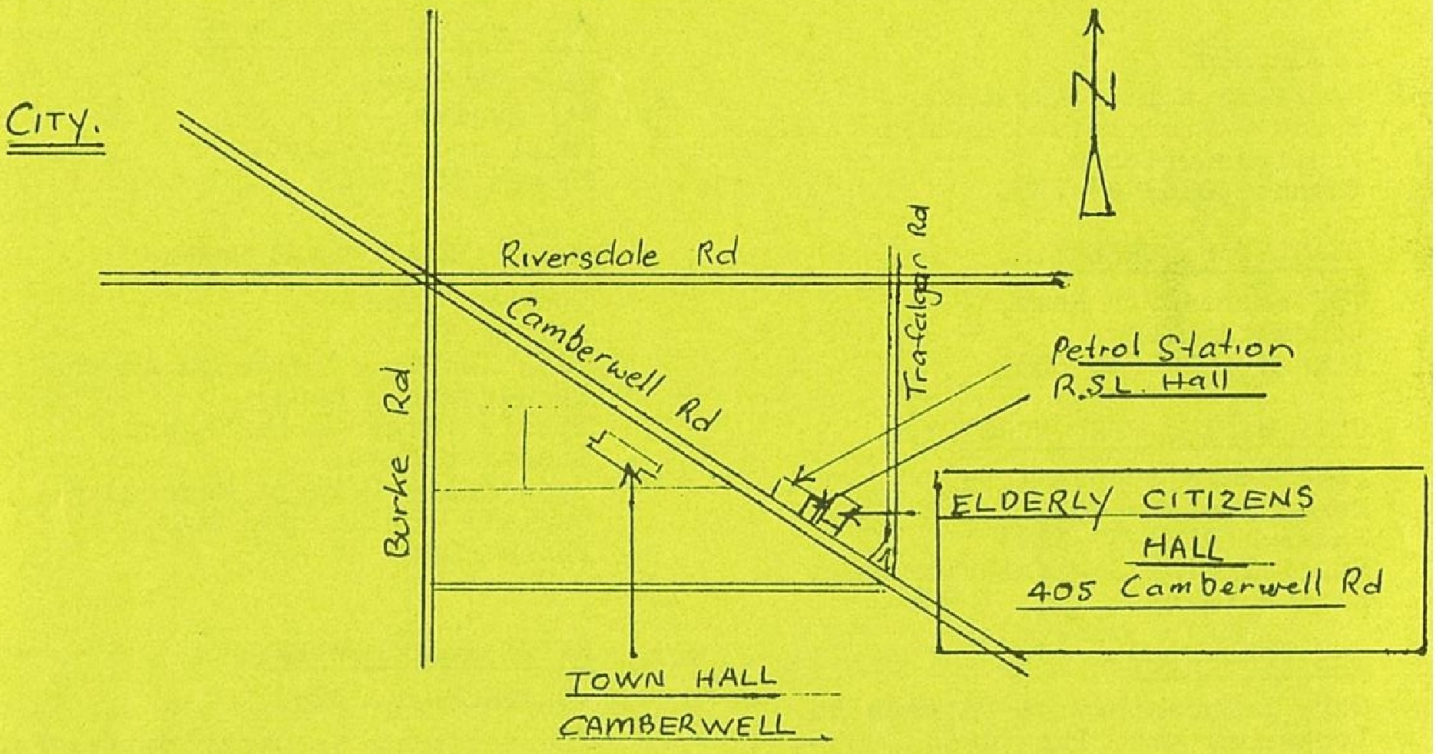
Our recent Shows have all had pretty much the same overall format and it seems time for a change in direction. We need new ideas and the time to develop and implement them. This is where you come in. We would like to hear as soon as possible from people who have any ideas on how the Show could be improved, be they minor points of detail or a broad concept that could form the basis for a major change in the format of the Show. Please talk to any member of the Sub-Committee. Names and telephone numbers are as follows:

Bob Lee (Chairman)	836 1528
Julian Basser	596 3132
Bernadette Blackstock	391 5517
Ian Broughton	(059) 64 6402
Peter Duell	592 9968
Sue Gardner-Berry	862 2595
Derek Griffiths	336 3157
John Hodges	878 9584
Barry Stagoll	729 2712
Gay Stagoll	729 2712
Bill Taylor	277 4310

BOB LEE

I would like to apologise to Normas Fernery and Fern Acres Nursery for missing their advertisement last month.

Editor.



BUYERS' GUIDE TO FERN NURSERIES.

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6 Nelson Street
Thornleigh 2120
Phone: (02) 84 2684
By Appointment

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Mt. Kuring-gai 2080
Phone: (02) 457 9168

QUEENSLAND.

MORANS HIGHWAY NURSERY

Box 467, Woombye, 4559
1 km north of Big Pineapple
Turn right into Kell Road, Woombye
Wholesale & Retail
Phone: (071) 42 1613

DIARY DATES.

VENUE - CAMBERWELL ELDERLEY CITIZENS HALL.
405 Camberwell Road, Camberwell.
(directions on page 11)

DECEMBER 10TH THURSDAY - Mary Frost and Dorothy Forte

SUBJECT: - Nephrolepis.

NOTE: In the event of a power strike on the evening of any meeting, we regret that the meeting must be cancelled.

BUYERS' GUIDE TO FERN NURSERIES.

VICTORIA.

"FERN GLEN"

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Visitors welcome
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Beech Forest 3237
Phone: (052) 37 3283
Specializing in cool climate native ferns.

THE FERN SPOT.

Cnr. Princes Hwy. & Potters Rd.
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40 Min. from Dandenong.
Melway map 256 T6 open 7 days

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(look for sign on Warburton Hwy.
300m east of Seville Shopping Centre)
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AUSTRAL FERNS.

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VICTORIA.

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Mt. Evelyn
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ALLANS FLAT PLANT FARM.

Tomkins Lane.
Allans Flat.
(25km south of Wodonga on the Yackandandah Road)
Specialising in ferns and indoor plants.
Open daily (except Wednesday) and all public holidays.
Phone (060) 27 1375

RIDGE ROAD FERNERY.

WEEAPROINAH. 3237

Specialising in Otway Native Ferns
Wholesale and Retail
Phone: (052) 359 383

NORMA'S FERNERY - CARBOUR.

52km south east of Wangaratta off the Milawa Rd.
Specialising in rare ferns.
Retail- closed Fridays only
057 295 516

FERN ACRES NURSERY.

main road Kinglake West
opposite Kinglake west Primary Sch.
Specialising in Stag's, Elk's & Birdsnest ferns, also native orchids Phone Gloria or Kevin on 057 865 481