



FERNS SOCIETY
OF VICTORIA

NEWSLETTER

DATE JULY '81

3

VOLUME

6

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PRESIDENT'S MESSAGE

It is hard to settle down again after such a marvellous holiday. We arrived back on Tuesday, 16th June, after a very successful tour of the South Island of New Zealand. The weather was perfect, with only a couple of days of rain, and then only on days which didn't really matter. We travelled almost two thousand kilometres, among exciting and spectacular scenery. Towards the end of the tour, we spent a weekend with the Nelson Fern Society. As well as viewing their beautiful ferns, we also shared with them a social evening at our Rutherford Hotel in Nelson, and a field trip the following day to the Hira Forest.

Mr. J. H. Willis will be speaking at our July meeting. Mr. Willis, formerly Assistant Government Botanist in our Royal Botanic Gardens and Native Herbarium, is the author of quite a number of books. He devoted twelve years of research to the development of A Handbook to the Plants of Victoria, Volumes 1 and 2. Volume 1 covers most comprehensively the ferns native to this state. Mr. Willis also revised N. A. Wakefield's "Ferns of Victoria and Tasmania".

Nomination slips will be included in this edition of our newsletter. Please use them to nominate anyone who you feel would be willing to serve on the committee next year. Nominations must be received at the July meeting.

Have you read our Constitution? You will be asked to vote on it at our Annual General Meeting.

The fern for our next competition will be a Blechnum. If you have a nice specimen, bring it along - it could be a winner!

To end my message, I have included a newspaper clipping which appeared in the Nelson Evening Mail on Tuesday, 9th June, headed TO SEE NELSON FERNERIES....

"Fern Society members will act as hosts this weekend to 24 Australian visitors from three states. The party, on tour from Fern Societies from South Australia, Victoria and Queensland, will stay over the weekend at the Tahuna Motor Camp, said the Nelson President, Eric Ensor.

On Saturday morning they will visit two private ferneries - Mr. & Mrs. B. Jackson's at Riwaka, and Mr. & Mrs. Bob Williams, Westbank Road. They will return to Atawhai for lunch and visits to the Marks and Barnes Joint Fernery at Marybank and the Dow Fernery in the same locality. On Sunday they will visit Mrs. Shallcrass's Fernery in Maitai Valley, before walking the Pukatea Trail in the Hira Forest. They continue their tour on Monday."

CHRIS GOUDEY
President

SECRETARY'S REPORT

Members are reminded that the Annual General Meeting is approaching and nominations are sought for office bearers.

Please give this some thought, and forward nominations to me as soon as possible: we have to elect the following:

President
Vice-Presidents (2)
Secretary
Treasurer
Committee Members (7)

Rod Hill is organising a trip to Ripponlea - you will find all the details elsewhere in this Newsletter. I do urge you to come along this day if it is at all possible; not only will Rod show us the fernery, but we will also be shown over Ripponlea House itself.

Members who cannot get to meetings appreciate the transcript of the talk each month, and our thanks are due to Keith and Bernice Stubbs for their work in editing the tapes. We are grateful also for the help given by another member, John Langley; his assistance has saved the Society quite a lot of money.

Do try to come to hear this month's speaker, Dr. J. H. Willis. Everyone who knows their Wakefield appreciates his knowledge of native ferns, and his talk should be most interesting.

IRENE BOLSTER
Secretary

IMPORTANT !!!

As our membership subscriptions for the year July 81 - June 82 are now due, we have enclosed a PINK renewal slip in this month's Newsletter.

We ask all members to fill this in, and return it with your cheque as soon as possible, because on September 1st our Newsletter will be mailed only to those whose names and addresses are on our PINK LISTING.

Due to the enormous amount of work involved, we will not be able to meet requests for back copies, so do be sure your name is on the list by September 1st!

KEITH HUTCHINSON
Editor

NEED TO RECYCLE MATERIALS LED TO DEVELOPMENT OF NEW GROWING MEDIUM
Summary of talk given by Mr. David Beardsell

Who would have thought of using old tyres as a growing medium for plants? Or brown coal? Or pine chips? Or sawdust? These are only a few materials which David Beardsell and his fellow researchers considered in their search for a local growing medium to replace overseas materials which had become too costly and unavailable.

Mr. Beardsell was the Society's June speaker.

During his talk, Mr. Beardsell referred to the work carried out by the other team members, and particularly by Mr. D. G. Nichols of the Horticultural Research Institute, Knoxfield.

In recent years there have been great changes in the materials and fertilisers which are used to grow plants, Mr. Beardsell told us. The mixtures used today are usually more open and free-draining than the heavy soil mixtures of a few years ago. We also have fertilisers which have been designed specifically for container plants.

The functions of the potting mixture are to support the plant, and to supply air, water and nutrients. The way it does this is a function of the physical and chemical properties of the materials contained in the mixture.

Plant roots require oxygen for respiration and this is provided from the air spaces in a potting mixture. Only potting mixtures which contain large pores drain adequately enough to provide sufficient air space. Potting mixtures made of fine materials such as sandy loam contain only small pores which do not drain well, and this can lead to waterlogging. Coarse materials such as washed river sand drain rapidly and as a consequence have adequate air space. Organic materials like peat moss, pine bark and sawdust, because they are porous, also have good aeration.

The water-holding capacity of a potting material is the amount of water held after drainage has taken place. Not all of this water is available to plants, some being held so strongly that plants cannot extract it from the medium.

Brown coal, for instance, holds a third of its water in a form that is unavailable to plants, while peat moss and coarse sand have very little unavailable water. The difference between the amount of water held at the wilting point and the amount held at saturation is the actual amount of water that is available to plants. The best way to assess this is to measure the time it takes for plants to wilt in the medium. Pinebark has an excellent water-holding capacity, while that of coarse sand is poor. Brown coal and mountain soil are intermediates.

Water Penetration and Rewettability

Water should penetrate rapidly and easily throughout a potting mixture. Organic materials such as peat moss and pinebark actually repel water when they are dry. In order to improve water penetration they should be combined with easy-to-wet materials such as coarse sand or scoria.

Summary of Mr. David Beardsell's talk (cont'd.)

Other Physical Properties

A potting material should mix and bind well with other ingredients of the mixture. It should not break down too easily or become compacted. Other factors which affect the quality of a potting material are abrasiveness and dirtiness.

Nutrients dissolved in the water are readily leached from the pot, and thus the nutrients held onto the solid particles of the medium are very important to plants. A proportion of nutrients are held in a potting mix in a form that is unavailable to plants.

It is important for a potting mixture to have a high available nutrient holding capacity. Brown coal and some soils such as mountain loam are excellent in this regard.

A potting mix should not contain substances which are toxic to plants, e.g. excess salt or plant toxins such as the phenols found in fresh pinebark.

Preparation of Potting Mixtures

If a potting mixture is to satisfy the above requirements it must be made up of several ingredients. Firstly, a coarse material to allow drainage and aeration, secondly a material which has a good water-holding capacity, and thirdly a material which can hold nutrients available to the plant.

Since peat moss has become too expensive and mountain loam has generally deteriorated in quality, the ornamental research group at Knoxfield has developed several soil-less potting mixes based on pinebark, brown coal and coarse sand which satisfy most of the requirements of a good potting mixture.

The following basic potting mix has been used to produce excellent growth on a range of plant species including indoor plants.

2-4 parts pinebark* (depending on grade): 1 part brown coal:
1 part coarse sand.

Plant Nutrition and Fertilisers

The nutrition of plants is concerned with the application of chemical elements which are essential to plant growth. Most of this is carried out by the application of fertilisers; however, it is important to remember that three of the essential elements, viz. carbon, hydrogen and oxygen are supplied from air and water. Therefore, a nutritional programme should also ensure that the plants receive a continuous supply of water and have good aeration of the roots. Extra carbon may also be obtained by enriching the atmosphere with carbon dioxide although this is not yet common practice even though it has been shown to increase plant growth.

Methods of Supplying Fertilisers

There are four main ways of supplying fertilisers to container plants:

1. In the basic mixture
2. As a top dressing of solid fertiliser
3. As a liquid fertiliser
4. With a foliar spray.

Summary of Mr. David Beardsell's talk (cont'd.)

1. The Basic Mixture

Nurserymen often grow plants from a seedling or struck cutting to a saleable size using no more fertiliser than is contained in the basic mixture. This is possible through the use of solid fertilisers with regulated release rates which adequately supply nutrients for periods of from six weeks up to 12 months.

The problem facing the nurseryman is to select the fertilisers with release rates which will suit the range of plants he is growing.

The following are simple formulations (rates per cubic metre):

- (A) For short term indoor plants and fast growing outdoor plants
 *2-3 Kg Osmocote or Nutricote (3-5 months release rate)
 1 Kg Micromax (Trace elements)
 Dolomite to bring the pH to 5.5 - 6.0
- (B) For long term plants
 *3-4 Kg Osmocote or Nutricote (7-9 months release rate)
 1 Kg Micromax
 Dolomite to bring the pH to 5.5 - 6.0

* Use higher rates for mixtures without soil.

N.B. One cubic metre has a capacity of 1000 litres. A handy measure for small quantities is a 9 litre bucket. The rates of fertilisers used per bucket are therefore 9 times the value shown above but expressed in grams instead of kilograms.

2. Top Dressing

The basic fertilisers should be aimed at producing optimum growth for plants with moderate fertiliser requirements without harming those with low requirements. Plants with high requirements can be selectively top dressed with small quantities of Osmocote or Nutricote.

3. Liquid Fertilising

Liquid fertilisers can also be used to supplement the nutrients in the basic mixtures. There are a number of commercial products in powder or liquid form which can be used to make up complete solutions for liquid fertilising. They should be applied at the manufacturers' recommended rate. Often, however, only nitrogen, potassium and phosphorus are needed.

The following is an example of how these may be applied (rates per litre)

Ammonium nitrate	500 mg
Potassium nitrate	500 mg
Mono-ammonium phosphate	100 mg

4. Foliar Sprays

Plants can take up nutrients through their leaves. However, they are more efficient at taking the nutrients through their roots. Therefore, foliar sprays should only be used for supplementary feeding or corrective dressings.

EDITORIAL NOTE:

David Beardsell stressed that the foregoing comments did not necessarily relate to all fern growing conditions. The Horticultural Research Institute is now accelerating its research programme into growing media for ferns.

NOTES FROM THE SPORE BANK

by Rod Hill

Hereunder is the latest update of our spore list. As I will be on long-service leave shortly after the July meeting, there will be no spore bank in August, and mail orders this month may not be filled until my return.

My thanks to those who responded to the call for small boxes - I now have a good supply.

As usual, spore samples may be purchased at monthly meetings, or by sending a list of your requirements, with a stamped, self-addressed envelope, plus a 20¢ stamp for each species requested, to Mr. R. Hill, 41 Kareela Road, Frankston, Victoria, 3199. Alternatively, spore orders may be paid for by cheque, made payable to "Fern Society of Victoria". Printed notes on the collection and propagation of spore are also available for 5¢.

SPORE LIST - JULY, 1981

- ACROSTICHUM SPECIOSUM(10-80)
 ADIANTUM AETHIOPICUM(1-81)
 CAUDATUM(8-80)
 CONCINNUM(10-79)
 FORMOSUM(5-80)
 GRACILLIMUM(7-80)
 PERUVIANUM(4-81)
 RADDIANUM 'BRIDAL VEIL'(4-81)
 RADDIANUM 'ELEGANS'(8-80)
 RADDIANUM 'MULTICEPS'(8-80)
 RADDIANUM 'PACIFIC LADY'(8-80)
 RADDIANUM 'SLEEPING BEAUTY'(3-81)
 SYLVATICUM(8-80)
 TENERUM 'FERGUSSONII'(8-80)
 AMPHINEURON OPULENTUM(2-81)
 ANOGRAMMA LEPTOPHYLLA(11-80)
 ARACHNOIDES ARISTATA(8-80)
 ARISTATA VARIEGATA(2-80)
 ASPLENIUM AUSTRALASICUM(8-81)
 BULBIFERUM (NATIVE)(12-80)
 FLABELLIFOLIUM(11-80)
 NIIDUS(10-80)
 SCLEROPRIUM(7-80)
 ATHYRIUM ALPESTRE AMERICANUM(8-80)
 BLECHNUM AMBICUM(1-80)
 ARTICULATUM(11-80)
 CAMFIELDII(7-80)
 CARTILAGINEUM(5-81)
 CHAMBERSII(3-80)
 DISCOLOR(12-79)
 FLUVIATILE(4-80)
 GLEBUM(4-81)
 MINUS(8-80)
 NULUM(7-80)
 OCCIDENTALE(5-80)
 ORIENTALE(12-79)
 PATERSONII(7-80)
 PERNA-MARTINI(1-81)
 SPICANT(7-80)
 WATTSII(4-80)
 WHELANI(7-80)
 SP.(KING IS)(12-79)
 CHEILANTHES CALIFORNICA(8-80)
 DISTANS(1-81)
 TENUIFOLIA(11-79)
 SP.(S.E.OLD)(1-81)
 CHRISTELLA DENTATA(3-81)
 PARASITICA(5-80)
 CHRISTOPTERIS VARIENS(4-80)
 CIBOTIUM SCHIEDEL(12-78)
 COLYSIS AMPLA(1-80)
 CULCITA DUBIA(3-80)
 CYATHEA AUSTRALIS(10-80)
 BROWNII(2-80)
 CELEBRICA(7-80)
 CONTAMINANS(12-79)
 COOPERI(2-81)
 CUNNINGHAMII(2-80)
 DEALBATA(7-80)
 LEICHHARDTIANA(8-80)
 MEDULLARIS(5-80)
 MEDULLARIS & SMITHII(8-79)
 SMITHII(7-80)
 WOOLLSIANA(8-79)
 SP.(PHILIPPINES)(12-79)
 CYRTIDIUM FALLATUM(4-81)
 CYSTOPTERIS FRAGILIS(10-80)
 DICKSONIA ANTARCTICA(3-81)
 FIBROSA(8-81)
 LANATA(?)
 SQUARROSA(1-80)
 YOUNGIAE(5-80)
 SP.(OLD)(5-80)
 DIPLAZIUM AUSTRALE(3-80)
 DILATATUM(5-80)
 DOODIA ASPERA(3-81)
 MEDIA(12-80)
 DORYOPTERIS CONCOLOR(8-80)
 FEBATA(11-80)
 DRYOPTERIS AEMULA(?)
 CRASSIRHIZOMA(8-77)
 GOLDIANA(?)
 SP.(JAPAN)(4-80)
 GLEICHENIA MICROPHYLLA(10-80)

- HYPOLEPIS AUSTRALIS(1-81)
 LASTREOPSIS ACUMINATA(12-80)
 DECOMPOSITA(7-80)
 HISPIDA(4-80)
 MARGINANS(12-79)
 MUNITA(8-80)
 NEPHRODIOIDES(7-80)
 SMITHIANA(7-80)
 LORINERIA AREOLATA(11-79)
 LUNATHYRIUM JAPONICUM(1-81)
 LYGODIUM CIRCINNATUM(3-81)
 FLEXUOSUM(8-80)
 MACROTHELYPTERIS POLYPODIOIDES(11-79)
 MATTEUCCIA ORIENTALIS(?)
 STRUTHIOPTERIS(12-79)
 MICROLEPIA SPELUNCAE(8-80)
 MICROSORIUM PAFPEI(8-80)
 PELLAEA FALCATA(1-81)
 FALCATA NANA(11-80)
 PARADOXA(11-80)
 PLATYCERIUM KORONARIUM(12-79)
 HOLTUMII(12-79)
 SUPERBUM(6-81)
 VEITCHII(8-80)
 WANDAE('80)
 PNEUMATOPTERIS SOGERENSIS(12-80)
- POLYSTICHUM ACULEATUM(2-80)
 AUSTRALIENSE(5-80)
 FORMOSUM(5-81)
 LENTUM(12-80)
 MUNITUM(9-80)
 PROLIFERUM(8-80)
 SETIFERUM 'ACUTILOBUM'(6-81)
 STANDISHII(8-80)
 TSUSE-SIMENSE(7-80)
 VESTITUM(10-80)
 PTERIS BLUMEANA(12-79)
 COMANS(1-80)
 TREMULA(9-80)
 TRIPARTITA(12-79)
 UMBROSA(12-80)
 VITTATA(3-81)
 RUMOHRA ADIANTIFORMIS(EXOTIC)(1-81)
 ADIANTIFORMIS(NATIVE)(1-81)
 SPHAEROSTEPHANOS TAIWANENSIS(8-79)
 STICHERUS TENER(1-81)
 TECTARIA MUELLERI(7-80)
 TODEA BARBARA(3-81)
 TREEFERNS (MIXED CYATHEAS)(?)
 TRISMERIA TRIFOLIATA(2-80)
 WOODWARDIA RADICANS(7-80)

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SOME UNUSUAL STOCK AT THE MOMENT

Dryandria rigidula, Qld.	Dryopteris carthusiana, U.K.
Gleichenia microphylla, Vic.	Doodia media, Vic.
Sticherus lobatus, Vic.	Dryopteris filix-mas, U.K.
Gonophlebium subauriculatum var. knightii, Qld.	

SPECIES OF ADIANTUM

T V L M T K M U N A I D D A R
 X T F P U M U T A D E F I P A
 M U M I L L I C A R G T E L H
 Z O U A M G L M C R O M C U I
 V P H M P U U Y E L R X B T B
 O O U C S T C N H O E M K M J
 U M W B A Y I I F P U V U D M
 T A U D E F L I P L O N W U Z
 E E U N O S Z V U O A R S R O
 V A N R A E C D A I I O C A K
 C A M E P H I E V T M H N A Z
 Q E N A R P P U N R I C T U M
 L P R F S U R A O S E C R E C
 X T J I F E M F I P Y F U K A
 D Q H H P Q J L S D R S T M C

FIND THESE HIDDEN WORDS IN THE PUZZLE

- | | | |
|--------------|--------------|-------------|
| AETHIOPICUM | ANCEPS | CAUDATUM |
| DIAPHANUM | FORMOSUM | GRACILLIMUM |
| HISPIDULUM | MACROPHYLLUM | PEDATUM |
| PERUVIANUM | PUBESCENS | RADDIANUM |
| RENIFORME | SYLVATICUM | TENERUM |
| TRAPEZIFORME | | |

 STOP PRESS STOP PRESS STOP PRESS STOP PRESS
 GOOD NEWS - AT THE JULY MEETING, WE WILL HAVE AVAILABLE FOR SALE
BONE DUST. THIS CONTAINS 5% NITROGEN, 11% PHOSPHORUS, AND HAS
 A SLOW RELEASE FACTOR OF UP TO 12 MONTHS, WHICH MAKES IT IDEAL FOR FERNS.
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REPORT ON THE BADGER WEIR EXCURSION (20TH MAY, 1981)

by ROD HILL

Despite some problems finding the location (my apologies for poor directions) and locked entrance gates due to an industrial dispute (?), about thirty enthusiastic members, determined not to have our plans ruined, hopped the fence and converged on the Badger Weir picnic ground.

The weather was perfect for the time of year and despite recent heavy rain, the tracks were in excellent condition. As ferns became more numerous, the pace slackened to a slow crawl, and a short half-hour hike turned into a leisurely 2½ hour stroll through one of the most beautiful, unspoilt sections of mountain forest close to Melbourne.

In all, 32 fern species (and one of the fern allies) were sighted. Botanist Betty Duncan, accompanying the excursion, pointed out the tiny Annual Fern (*Anogramma leptophylla*) hiding among treefern sporelings along the track cuttings, and verified my earlier find of a large Slender Treefern (*Cyathea cunninghamii*), neither of which had previously been recorded for this area. Sickie Fern (*Pellaea falcata*) was also added to the fern flora of the area.

Apart from ferns, their first encounter with leeches was a "highlight" of the trip for many, and a great deal of interest was also shown in the wide variety of fungi and native birds in the park.

My thanks to those who took advantage of this opportunity to meet other members and their families and to get to know each other better, and helped make the day such a success.

OUR NEXT EXCURSION:

The next excursion will be held at the Ripponlea Mansion at Elsternwick (Hotham Street, about a kilometre north of the Nepean Highway, just over the railway line), on SATURDAY, JULY 11TH - NOT THE DATE PREVIOUSLY PUBLICISED. Wet-weather picnic facilities are not available, so it has been decided to gather at 1.00 p.m. sharp (near the swimming pool at the side of the house) and from there explore the fernery and grounds. The steel-framed, slatted fernery would be nearly the size of a suburban building block and about 40 feet high, and houses an excellent collection of ferns, including many tall treeferns, palms and other exotic plants in a "jungle" setting. At about 2.30 p.m., Irene has arranged for a guide to escort us on a tour of the Mansion, with its wealth of antiques and treasures. Admission is \$1.50 (70¢ pensioners) but I think you will find the visit worth every cent.

P.S. Remember to wear FSV name tags!

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EDITOR'S NOTE: The following is the second part of an article from the September, 1980, issue of the L.A.I.F.S. Journal. The article is under Copyright 1980 by Los Angeles International Fern Society, and can only be used with its permission.

SICK FERNS - NEW NEPHROLEPIS And Vice Versa (Cont'd.) L.A.I.F. Program
by James Downer
Report by LaVerne Hanell

Bacterial diseases occur mostly on the rhizomatous type ferns such as the Polypodiums and Davallias. Leaves may show spots as the bacteria invade the foliage. The bacteria seem to invade when the ferns are divided. Applying charcoal dust or sulfur to the cut ends of the rhizomes controls the spread of bacteria.

The effect of viruses on ferns is often mysterious. The plant may grow in a distorted manner or it may grow very fast. If a seemingly healthy plant dies very rapidly, it is usually because of a virus attack. Remedies for viruses are usually to remove the diseased plant and start over with new stock.

Salt burn is one of the most destructive diseases for ferns in southern California and other places where there is a high salt content in the water. Symptoms for salt burn include brown and dry tips and discolored foliage. The importance of good watering practices has already been mentioned in conjunction with other diseases. Some growers use reverse osmosis water for their plants. Plants that are grown in high light require more fertilizer than those grown in lower light. Leaching plants that grow in bright light is very important. Some growers add acid to neutralize alkaline water. The grower must remember that this practice does not remove salts from the water, but it does allow the salts to stay in suspension. When the pH is controlled, less fertilizer is needed.

Fluorine can damage ferns. This element comes from sponge rock, so it is a good idea to leach sponge rock before adding it to potting mixes. Three rinses are recommended.

A good soil for most ferns has a pH of about 6.5. It contains materials such as vermiculite and sponge rock to provide for good drainage and aeration. It also must contain some substances such as peat moss and other organic substances that have a high cation exchange equivalent. This holds nutrients at the root level where they can be available to the plant as needed.

Some interesting experiments have been conducted in Florida at the Department of Agriculture Research Station. Cuttings were planted in pots with the soil firmly tamped around the roots. A similar planting was done, but the soil only loosely covered the roots. Both sets of plants were watered in a like manner. It was observed that the plants in which the soil had been packed around the roots had 1½ times more soil in the pot and the pots held two times as much water as the pots that were not packed down. After eight weeks there was four times as much root growth in the unpacked soil and 60% greater foliage development. This demonstrated the need to plant without compacting the soil on the roots. When the soil is too firmly tamped, you are reducing the air spaces and increasing the risk of Phytophthora and Pythium infections.

SICK FERNS - NEW NEPHROLEPIS (Cont'd.)

Many growers "sterlize" their potting soil. What they really do is pasteurize it in such a way as to destroy the damaging pathogens but retain the beneficial bacteria. The beneficial bacteria are necessary to keep the nutrients in the soil available to the plant roots. Most of the pathogens are destroyed at 136 degrees, but it takes higher temperatures to kill the beneficials. This can be accomplished by using steam or pasteurizing in the oven, but care is needed so as not to create a biological vacuum. In this condition, the soil is very susceptible to invasion by all organisms including the most harmful. It is often easiest to purchase soils that have been pasteurized, or ingredients that have already been "sterilized."

One last word about nutrients was the suggestion that the grower occasionally use a fertilizer that is high in nitrogen in place of the normal balanced plant food. This is based on the fact that the phosphorous is a slow moving element and after a while it tends to accumulate in the soil so that more nitrogen should be added to bring the nutrients into balance once again. Micro nutrients may be applied once a year as a foliar spray.

It is possible to keep diseases from declimating your ferns if these basic rules are followed: Keep stock clean. Remove dead materials from the growing area. Keep tools and hands clean. Use sterilized potting soil and components. Pot plants loosely. Do not overwater. Leach the pots occasionally. Learn to recognize the symptoms of plant diseases and how to break the disease triangle.

"A PARADOX OF A FERN"

by RAY BEST

We sometimes hear a statement: - "What is in a name?". Well we do have to be careful about the use of titles, names and words. Checking out this word paradox we find the following description from "The Great Encyclopaedic Dictionary". Quote: - "Paradox :- Statement contrary to received opinion; seemingly absurd though perhaps well founded, statement self contradictory, essentially absurd or false, statement, person, thing, conflicting with preconceived notions of what is reasonable or possible."

Now to our original title "A Paradox Of A Fern"; the reference is to the Australian native fern *Pellaea paradoxa*. I am sure all will agree that this is an excellent title when we cover a little of its past history; involving quite a number of previous names that have fallen out of use. Reading through Volume Three of E. J. Lowe's "Ferns British and Exotic" 1853. One hundred and twenty-eight years ago, we find this fern beautifully illustrated in full colour (wood engraving by Francis Lydon). Absolutely unmistakable as is the description and location. The title however differs somewhat, it is called *Platyloma Brownii* J. Smith.

In explaining this title Lowe says "Platyloma meaning broad edge and Brownii from Robert Brown the botanist." Well it would be hard to deny the broad edge particularly when the frond is fertile. The professor in all his fern descriptions always gave a list of the previous titles of the species; in the present case we have four previous names as follows. The earliest being *Pteris paradoxa*, Desvaux. Then to *Pteris latizona*, A. Cunningham,

"A PARADOX OF A FERN" (Cont'd.)

followed by *Adiantum paradoxus*, Robert Brown, and finally *Allosorus paradoxus*, Kunze, with the ultimate title in 1853 of *Platyloma Brownii*, J. Smith.

Unfortunately recent botanical works do not attempt to list the previous changes as did Lowe; nor do they make any effort to explain the reasons for such. The professors description says "That *Platyloma Brownii* is a stout handsome looking, rare fern, whose fertile and barren fronds contrast greatly with one another. It is well worthy of cultivation yet seldom to be met with in our gardens. An evergreen greenhouse fern native to New South Wales, about Moreton Bay. Introduced into England in the year 1821." He continues with an excellent description of the fern relating it to *Platyloma falcata* (Now *Pellaea falcata*). Finally in conclusion as is usual with all his descriptions he explains where the fern is available. Quote:- "It is in the catalogues of Messrs. Sim of Foots Cray, A. Henderson of Pine-apple Place, Parker of Holloway, E. G. Henderson of St. John's Wood, Stansfield of Todmorden and Rollisson of Tooting." One wonders how many present day nurserys would feature this fern.

In yet another early work "Select Ferns and Lycopods" B. S. Williams 1873 we still find the title *Platyloma Brownii* in use. So much for the historical exercise, which does I am sure help us to understand better our ferns and gives us a deeper appreciation of our early botanists, who so generously shared their knowledge with interested persons.

To avoid any confusion the present title of this fern at the time of writing is *Pellaea paradoxa* (R.Br.) Hooker. Reference "Australian Ferns & Fern Allies Jones and Clemesha.

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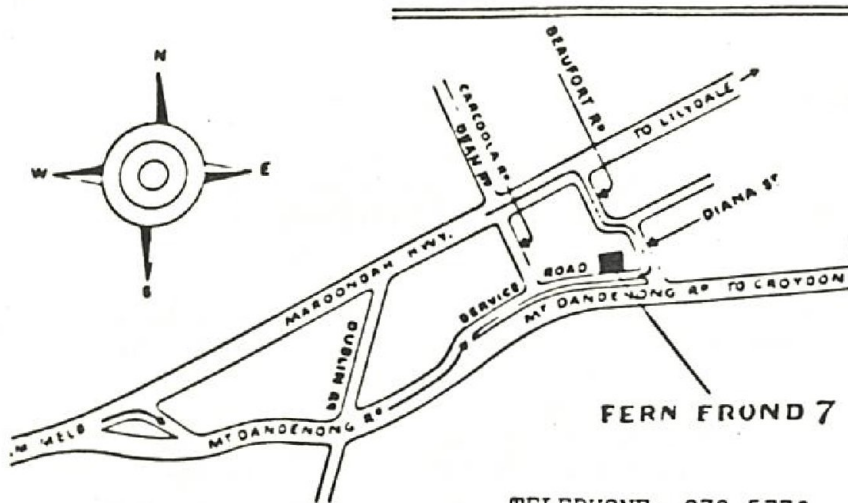
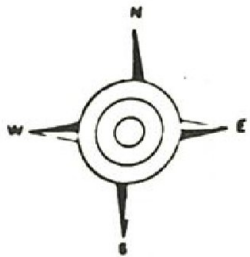
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AUGUST 13TH:	ANNUAL GENERAL MEETING
SEPTEMBER 10TH:	OPEN NIGHT - TALKS BY MEMBERS OF THE SOCIETY
OCTOBER 8TH:	NOEL FITTS, SPEAKING ON SPRINKLER INSTALLATIONS, GENERAL NURSERY EQUIPMENT, INCLUDING GREENHOUSES AND WATERING
NOVEMBER 12TH:	HARRY JACKSON
DECEMBER 10TH:	CHRISTMAS BREAK-UP

PREPARED AND PRINTED FOR THE FERN SOCIETY OF VICTORIA BY
JUDY BIELICKI'S EXECUTIVE SERVICES

153 Upper Heidelberg Road, Ivanhoe
Telephone: 497 1913, 49 2937

