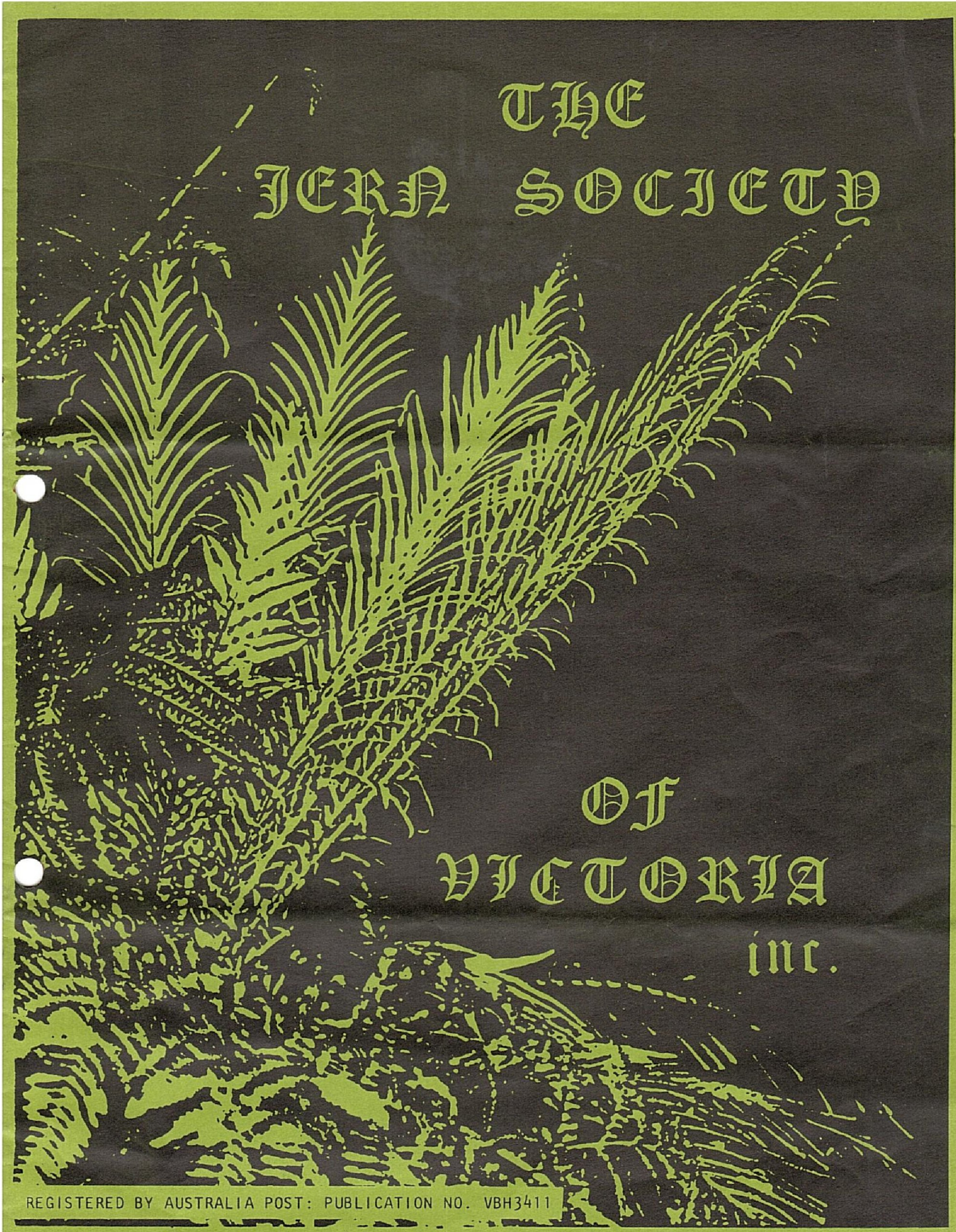
THE FERN SOCIETY OF VICTORIA inc.



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NEWSLETTER

VOLUME 8 NUMBER 5 JUNE 1986

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PRESIDENTS MESSAGE:

I was very pleased to see 91 members attend our May meeting even though our Newsletter was delayed due to illness of a vital member of our production team. Our past president Doug Thomas again proved his wonderful ability to enthuse all members new and old with the pleasures of beginning a fern collection. His thoroughness and dedication to every detail was a lesson in itself and I'm sure Doug has no peer in this aspect. Very well done Doug.

Fern Show.
Letters of congratulation to our Show Committee are still arriving. I feel the letter from Barry Hubbard of Parks N.S.W. is a good example and worth sharing with you. Thanks Barry.

Diary Dates.
Derek Griffiths our Secretary has been working tirelessly to finalize our program for the remainder of 1986 so please note the dates and speakers on Page 11. Your executive committee have invited Michael Garrett to speak at our November meeting and I am pleased to confirm his acceptance.

June Meeting.
Please make the effort to bring in at least one favourite fern as we hope to have the hall filled with ferns for our half yearly display. Our speaker for the evening is from Maxicrop.

Special Effort Winners.
1. Sue Gardner-Berry
2. John Hodges
3. Robert Dodson
4. Albert Chisolm
5. Derek Griffiths
6. Wendy Dodson
7. Margaret Radley
8. Bernadette Blackstock
9. Edna Fuhrmeister

Kindest Regards,

Keith Hutchinson.

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Slides Northern Victorian Trip.

Any members having slides of the recent trip to Northern Victoria are asked to make them available to the President- Keith Hutchinson for use at our August meeting.

JUNE MEETING - THURSDAY 12TH

AT 8.00 P.M. AT BURNLEY

SUBJECT - "MAXICROP"

A TALK BY THE PROPRIETORS

ALSO BRING YOUR FAVOURITE FERN NIGHT.

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NEW MEMBERS SINCE FEBRUARY 1986.

Mrs. D. G. Barton, Balaclava Road, Caulfield.
Mrs. S. Bussell, R.M.B. 1340 Milawa.
Mr. J. Davis, 10 Maralea Place, Doncaster.
Ms. E. Duxbury, 62 Kiora Road, Laverton.
Mrs. G. Donovan, 194 Princes Highway, Drouin.
S. Hitchen, P.O. Box 170. Berwick.
Pam Hammer, Oleanda Road, Nunawading.
Mrs. M. Meeham, Allans Flat Plant Farm R.M.B. 6330 Via Wodonga.
Jim & Anne Nicholson, 32 Millicent Street, Rosanna.
A. & C. Onslow, 8 White Street, Wangaratta.
Lynette & Colin Pike, R.M.B. 4553 Nirranda.
Y. Postlewaite, R.M.B. 541, St. Arnaud.
Rose Pulis, 181 Williams Street, St. Albans.
Mr. J. Robb, 9 Fintonia Street, Nth. Balwyn.
Mrs. O. L. Surgey, P.O. Box 864, Mildura.
Ms. J. Swayn, 6 Lorraine Street, Cheltenham.
C. Tooley, 25 Athol Avenue, Merlynston.
G. Toll, 18 Carnavon Avenue, The Basin.
Keith & Jane Vagg, 1 Aton Street, Warrandyte.
Darrell Wilson, C/o 13 Eden Street, West Heidelberg.
Mr. G. Wright, 4 Moorooklye Avenue, Oakleigh.
Joy Weibunger, 16 Arranmore Avenue, Black Rock.
Beryl & Roland Whiting, 28 Hurtle Street, Ascot Vale.
Janet Wallace, P.O. Box 28, Somers.
Joy Rees, 30 Buckley Street, Balnarring.
Mrs. Aileen Leslie, 1/10 Seymour Grove, Camberwell
Mr. & Mrs. B.J. & C.L. Cleary, 81 Villeneuve Street, Alexandra
Trevor Paul Gidding, 22 Kardinia Street, Belmont.
E. R. Harrison, 4 Croft Street, Essendon.
Joan F. Ballagh, 59 Polwarth Street, Colac.
Graham & Helen Cowin, 6 Pineda Court, Glen Waverley.
Veronica McNamara, 179 Hawdon Street, Heidelberg.
F. Bramwell, 8 Mack Street, Reservoir.

****

SPEAKER REPORT. - GENERAL MEETING-8th MAY, 1986.
SPEAKER: DOUG THOMAS - SUBJECT:"AN AEVENING FOR BEGINNERS".

1. Terrestrials and Epiphytes.

To illustrate the differences in the growing habits of terrestrial and epiphytic ferns, Doug presented slide photographs taken in the Mount Worth State Park. He pointed out that the terrestrials thrived on the ground in heavy leaf mulch laced with ample moisture whilst the epiphytes favoured tree fern trunks, beech trees and acacias. The epiphytes responded to a light diet of leaf mould plus an abundant water supply.

Using the information provided by nature should help us when we try to grow ferns at home in an artificial environment. But more of that later.

Continued . . .

2. Terrestrials at Home.

Doug recommended three species of terrestrials with which beginners could successfully start a fern collection. All are very hardy and attractive species; quite capable of providing a newcomer to the fancy with valuable experience. He showed common rasp fern (Doodia media), a decorative shield fern, (Dryopteris affinis cristata), and mother shield fern, (Polystichum Proliferum). Interesting characteristics of each were explained.

2:1 Basic Potting Mixture for Terrestrials (Pot Culture)

COMPONENT	PARTS (BY MEASURE)	FUNCTION IN THE MIX
Leaf Mould	4-5 parts	Nutriment
Tree Fern Fibre (minced)	2 parts	Aeration
Sphagnum Moss (minced)	2 parts	Moisture Holding
River Gravel (washed)	2 parts	Drainage
Cow Manure (pulverized)	1½ parts	fertilizer
Charcoal(crushed)	½ part	Purifier

3. Bulbils.

A method of propagating a mother shield fern from a bulbil was shown. It consisted of using some of the above mixture in a small pot and stapling the bulbil; still attached to the parent frond, into it. When the bulbil develops roots it can be severed from the old frond to become an independent fern.

Doug then showed a group of lovely young ferns of several different species which had been grown from bulbils by the above method. He said there are dozens of fern genera and species which produce bulbils and can be propagated in this way. The chances of success are very good.

4. Fern Enclosures.

In general ferns need to be housed in an environment which protects them from direct sunlight, draughts, strong winds and frost yet at the same time one which provides good light.

For many beginners enclosures affording the above specifications are often right at hand. To illustrate this Doug showed slides of a glassed in landing porch, a glassed in back vestibule, a carport adapted to a fern grotto and a back patio roofed over with corrugated fibre glass and having glass-clad walls. He then showed a sturdy shade house built in a lovely garden setting. The frames of timber had been painted and covered with shade cloth overhead and on the north and east sides. Some ferns had been planted in the soil, others in pots, tubs and hanging wire baskets. The ferns here were in immaculate condition as were those housed in the other structures described.

A tree fern garden plot which borders a luncheon shelter at the Ringwood Technical School, clearly illustrated that large as they are, tree ferns too do best when protected.

5. Epiphytes.

Doug recommended caterpillar fern (Polypodium Formosanum), hares' foot fern (Davallia Mariesii) and one of the Kangaroo ferns, (Microsorium Parksii) as being very hardy epiphytes with which a beginner could successfully start a collection.

Epiphytes need a different management to terrestrials. To simulate what we saw of the epiphytes at Mount Worth, we would need a lighter

Continued . . . . .

mixture and to hang the plants in wire baskets.

5:1 Basic Mixture for Epiphytes (Wire Basket Culture)

COMPONENT	PARTS (BY MEASURE)	FUNCTION IN THE MIX
Leaf Mould	2 parts	Nutrient
Tree Fern Fibre (Minced)	2 parts	Aeration
Sphagnum Moss(Minced)	2 parts	Moisture Holding
River Gravel(Washed)	1 part	Drainage
Cow Manure (pulverized)	1 part	Fertilizer
Charcoal (crushed)	½ part	Purifier

5:2 Propagation of Epiphytes.

A simple method for propagating epiphytes was shown. It consisted of a wire basket lined with any suitable material and filled with epiphytic mixture. Rhizome pieces with good healthy growing tips and some roots were selected, detached from the main plant and stapled either on the surface of the mixture or pushed into it at an angle of about 45°. The wire staples are made from light tie wire bent to the shape of a hair pin. The staples prevent the rhizome from wobbling about during the period of readjustment.

5:3 Maintenance of Epiphytes in Fern Baskets.

A method of refreshing the mixture in a fern basket was illustrated. The tang of an old file was used to loosen spent soil wherever possible between rhizomes and this loosened soil tipped out. The voids left by the scratching out of the old soil is then filled with fresh mixture.

When this method is applied, resoiling an epiphyte by removing it from the basket is not necessary. Doug said that in adition to this treatment the use of a liquid fertilizer or slow release fertilizer capsules is beneficial to these ferns in the warmer months.

6. Repotting.

It is a good policy to repot when ferns need it rather than wait till August-September. Doug presented four situations where ferns needed to be re-potted immediately regardless of the time of year.

6:1 A newly purchased fern which when knocked from the pot is seen to have been grown in a sterile medium of polystyrene beads and peat moss. Few fern fanciers or beginners are able to simulate the conditions under wish such ferns have been grown by nurseries. Most would lose their purchases. To ensure against loss, shake the mixture away from the roots and repot into either of the foregoing basic mixtures.

6:2 Potting Back: Two tiny ferns were shown obviously struggling in a large pot of mixture. Doug explained that when this happens the root system of a small fern is unable to take up the moisture in the mixture. The mixture remains soggy wet and in Winter becomes freezing cold. A pot small enough to avoid the above should be chosen and the fern transferred into it.

6:3 Deciduous Ferns: During May and June deciduous ferns lose all their fronds and become dormant for the Winter months. May is a good time to repot these so that they lie dormant in fresh soil. When they resurrect in the Spring the untouched mixture is readily available to them. They respond vigorously and beautifully. A Japanese painted fern (Athyrium goeringianum) was shown.

6:4 Pot bound specimen : A photograph was shown of a fern whose roots had tightly filled its pot. Doug advised us to leave the cast intact apart from teasing out the roots a little at the bottom. Repot into a larger pot.

Continued . . . .

7. Division.

In the selection of a maidenhair species with which to start a collection, none is hardier or more easy to grow than Adiantum banksiana. It is capable of filling a pot in one season and from then on will extend and enlarge until it reaches large tub status. It is then that Banksiana is ready for division.

Doug showed a Banksiana in prime condition which had tightly filled a large tub and was in dire need of breaking up into smaller portions.

An old file was used to define the division lines in the root cast and to afford a finger grip for breaking the pieces apart. In this example five fine portions were produced; each were inserted into a pot of suitable size. The mixture used was that recommended for terrestrials.

8. Make Your Own Wire Baskets.

Some two years ago Albert Jenkins showed members how to make their own wire baskets from weldmesh. The baskets are attractive, easy to make and are a fine example of the value of the fern society to its members. This sharing of expertise is a feature of Society activity. Thanks to Albert Jenkins, Doug now makes all his own wire baskets.

9. In the Garden.

Ferns can be grown quite beautifully in the garden. Soil preparation is similar to that required for any garden plot being set up in new soil. Trenching should be undertaken to build up the level of soil and provide drainage. Rubble, vegatation and strawy foul manure should be buried in the trenches and sandy loam and leaf mould added to the surface. Plants do well if they are inserted through the mulch. If overhead and wind protection is not available in the form of trees or buildings, artificial canopies of shade cloth need to be constructed.

10. Setting up a Terrarium.

Doug showed how a simple glass aquarium could be set up as a terrarium for growing a collection of ferns indoors.

Heavy river gravel is first sterilized with boiling water and laid in the bottom of the glass case. Crushed charcoal (sterilized) is spread over the gravel and sphagnum moss pressed into the sides to screen the gravel and charcoal from sight. Add a quantity of sterilized african violet mix which has been moistened with boiled water.

Choose the plants you need, shake all the soil from their roots and stand them in a medium dilution of Maxicrop for half an hour. Insert the plants into the mixture, cover the case over with a sheet of glass and set it up in the room or hall of your choice. Install a flourescent light on the top to complete the assembly. No watering or maintenance should be necessary, but be prepared to renew the terrarium when the ferns become too large and congested.

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Vote of thanks: President Keith Hutchinson ably expressed the thanks of himself and Members. His remarks were carried by acclamation.

ASPLENIUM NIDUS L.

(Ah splen' ee um nye' dus) The genus name Asplenium is derived from the Greek work for "spleen", referring to the supposed medicinal properties of some species. The species name nidus is Latin for "nest" and refers to the bowl-shaped positioning of the fronds.

COMMON NAMES: Asplenium nidus is commonly called Bird's-nest fern, Crow's-nest fern, or Nest fern.

CONFUSING SPECIES: As with many ferns with large geographical distribution and extreme variability, there is much confusion as to species and varietal status of the many forms of A. nidus in cultivation and in the wild. This fern is in desperate need of botanical work to help clarify the relationships of these many forms and establish the specific names indicating such clarification. One distinct species that may be confused with A. nidus is A. serratum L., the American bird's-nest fern or Wild bird's-nest fern.

DISTINGUISHING FEATURES: A. nidus is easily distinguished from other ferns by the rosette of bright yellow-green, entire fronds arising from the thick, dark-scaly, upright rhizome, and the parallel, linear sori arranged along every vein in the centre part of the frond.

HABITAT AND RANGE: A. nidus is found growing epiphytically or lithophytically in tropical rainforest or in protected locations in open forest of Malaysia and Australia.

GROWTH HABIT: The bird's-nest fern produces rosettes of beautiful light green, undivided paddle-like fronds from a thick, dark crown. This species can eventually become enormous, with fronds to 2m long and 20 cm wide.

DESCRIPTION: Rhizome stout, erect, the apex covered with scales, the base covered with persistent brown root hairs. Rhizome scales black to pale purple brown, clathrate, about 2 cm long and 2 mm wide, the margins with hairlike appendages. Fronds forming a rosette, simple, entire, light green, leathery, to 2m long and 20 cm wide, tapered to the base and to the apex which may be acuminate, acute or obtuse. Stipe to 5 m long, nearly black, as is the costa for much of its length. Sori linear on each vein in the distal part of the fertile frond, extending from near the midrib half to three-quarters of the frond width.

HORTICULTURAL INFORMATION: Asplenium nidus is one of the easiest and most versatile ferns to grow. It makes a great houseplant and a beautiful garden or patio specimen where weather permits. While small, A. nidus does nicely in terrariums and dish gardens. Of course it does beautifully in the greenhouse or outdoors in the humid tropics.

WATERING: A. nidus seems to best when the surface of the medium is allowed to become slightly dry to the touch between waterings. As the plants become potbound, and the furry root mass begins to cover the surface of the medium, watering may be more frequent.

HUMIDITY: Though A. nidus will withstand suprisingly dry air once the fronds are expanded, it does best with a relative humidity of 50 - 75% or so. High humidity while the fronds are expanding will help to produce larger, more luxuriant fronds. Expanding fronds exposed to dry air may have dried margins and/or become permanently malformed.

ASPLENIUM NIDUS L.

CONTAINERS AND MEDIA: A. nidus is most prized as a container speciemen plant. The container should be relatively small for the size of the plant - a three-foot plant can be comfortable in a 6 or 7 inch pot. The container may be of any type but drainage must be excellent. Unglazed ceramics should not be used where salts in the irrigation water are high.

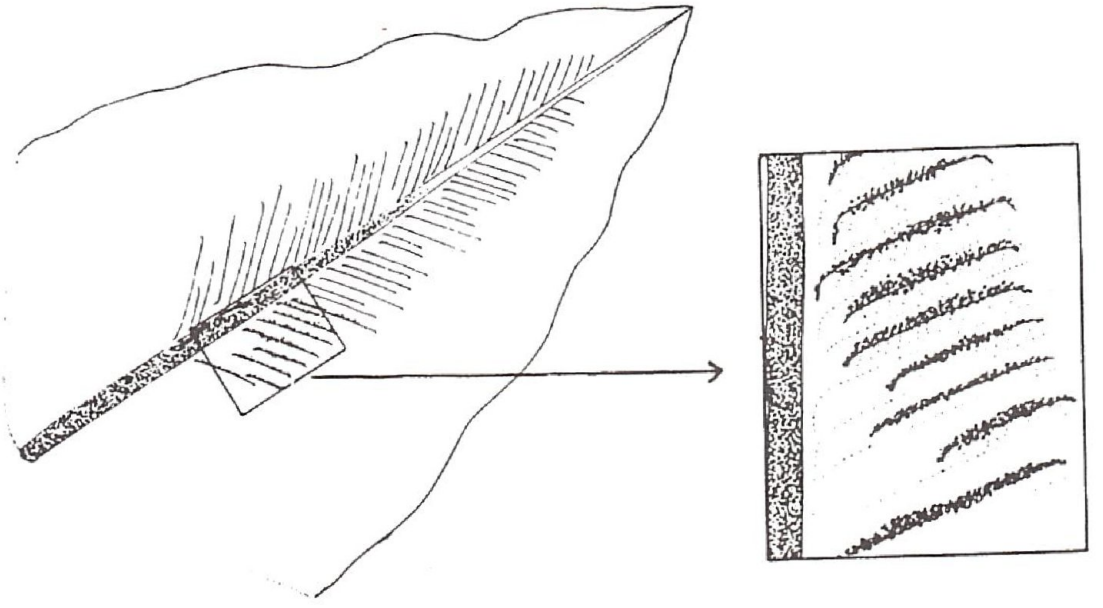
The media should be well-drained and well-aerated, but capable of holding plenty or moisture. Various media recommended for terrestrial orchids or bromeliads should suffice but this species would benefit from about 25% extra peat moss added. When planting A. nidus in the ground even the best of soils will most likely need substantial amending to improve drainage and aeration. Even better than just amending a soil is to use raised beds containing one of the above media or to sink the pot in the ground. To sink the pot a hole should be dug as wide as the pot but a foot or so deeper. Backfill the hole with coarse gravel or coarse bark and set the pot on this in the hole. This allows water to drain freely from the pot.

FERTILIZING: Fertilizing of the Bird's-nest fern should be done while the plants are actively growing. Some growers prefer to fertilize with every watering during the growing season. In such cases, a very dilute mixture of almost any soluble garden or houseplant fertilizer high in nitrogen may be used.

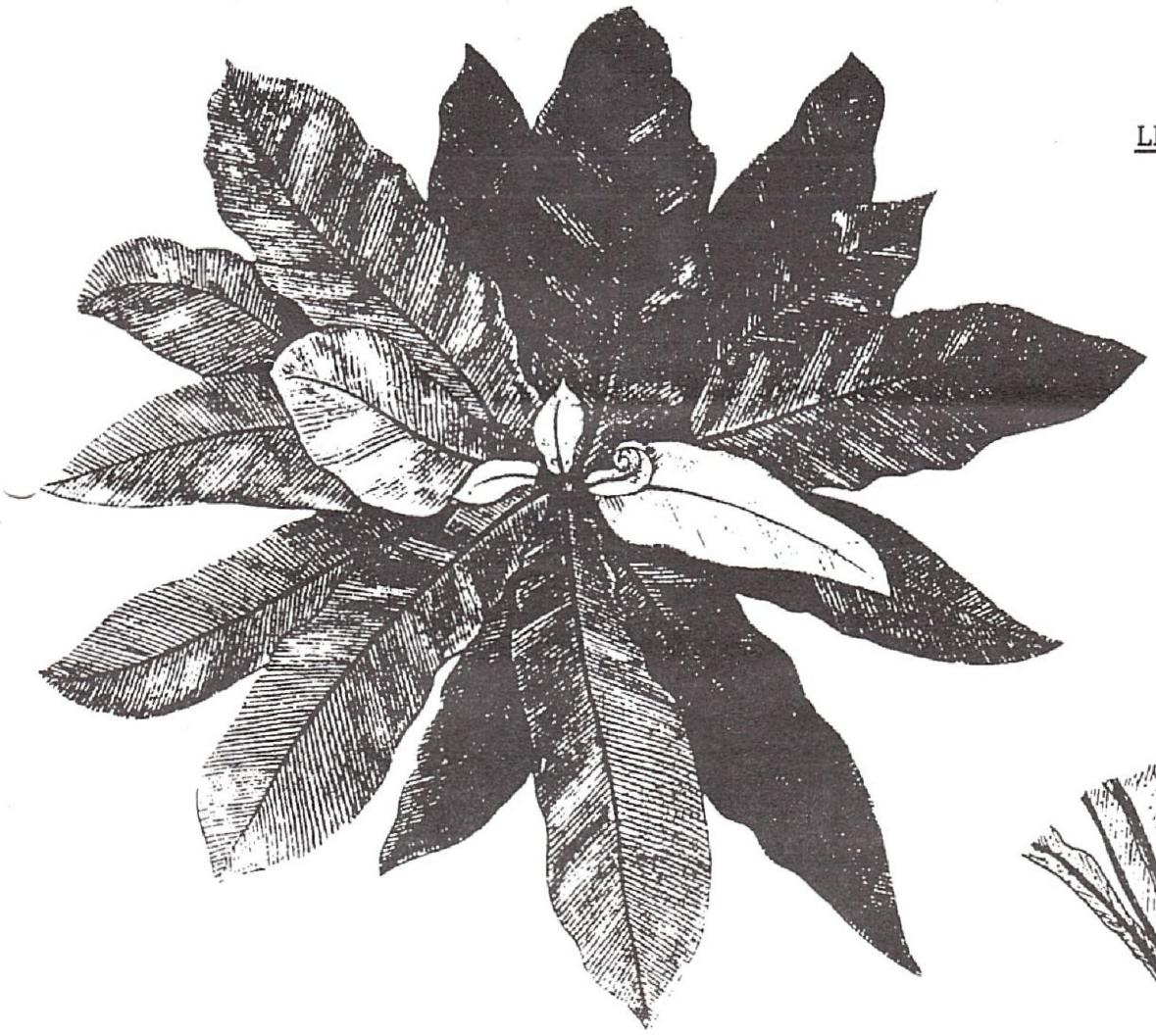
TEMPERATURE: A. nidus is not cold hardy but will usually withstand light frosts. This allows it to be grown outdoors in many subtropical areas. Preferably, a growing season temperature range of 21° C to 30°C during the day and 13° C minimum night temperature should be maintained.

PESTS: Aphids, scale insects, mealybugs and snails and slugs are probably the most serious pests. Aphids, mealybugs and scale insects should be sprayed regularly. Treatment should be done when temperatures are below 26° C and are expected to remain below that temperature for at least 6 hours and preferably 12 to 24 hours. Giving plants extra shade or spraying only on overcast days can help prevent foliage burn, but air movement must remain sufficient to dry the spray rapidly. Though not always practical, it is best to spray A. nidus after the foliage has hardened up in the summer as new growth may be damaged by the pesticide treatment. Snails and slugs may be treated manually or by sprinkling granules or bait. Follow directions carefully and do not get on fronds or in the crown.

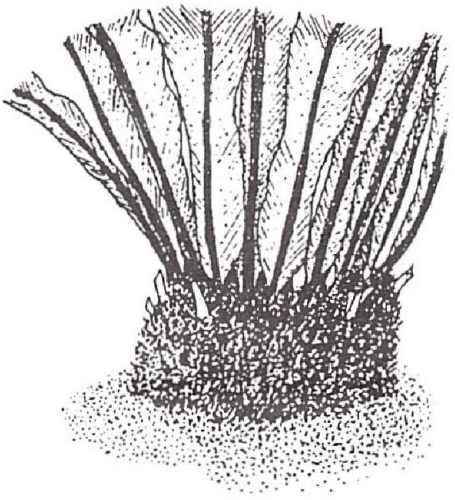
PROPAGATION: A. nidus is easily propagated by spore. The single crown cannot be divided.



ASPLENIUM NIDUS L.



LEFT: Looking down on plant.



RIGHT: Side view of plant.

GLOSSARY OF TERMS USED IN THE TEXT

Lithophytically - growing on rocks
Apex - the tip of a frond, pinna or segment
Clatherate - latticed;pierced with apertures
Acuminate - tapering to a slender point
Acute - distinctly and sharply pointed, but not drawn out
Obtuse - blunt; rounded at the apex
Costa - a rib, used especially of the midrib or midvein of a blade, pinna or pinnule
Distal - remote from the plant centre or the place of attachment

Reprinted by Courtesy of South Australian Fern Society.

BEGINNERS PAGE

The fern stems, from which the fronds arise, are called rhizomes and these are usually but not always underground. They can be long creeping, medium creeping or short creeping. Rhizomes can vary in many ways. Some can be upright and erect, either forming a caudex (or trunk) as in tree ferns, or clustering to form a crown - as in many ground ferns. Some rhizomes produce stolons, or horizontal stems, that creep over the ground's surface and from which new growth arises, as in the Nephrolepis species.

Roots and croziers

Rhizomes, short creeping

Rhizomes, medium creeping

Rhizomes, long creeping

Upright as in tree ferns

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TERMS FREQUENTLY USED IN DESCRIBING FERNS

discolor - dis'kul er. Having the two surfaces of a frond, pinna or pinule unlike in colour.

dorsiferous. Bearing clusters of sporangia on back of frond.

elongata - ē lon gā'tȧ. Elongated, lengthened, extended; removed.

endemic. Native to and confined to a particular region.

entire. A frond, pinna or segment whose margin is undivided, not serrate or notched.

epiphyte. A fern which gows on trees or other plants but receives no nourishment from the host.

exaltata - ex ȃl tā'tȧ. Exalted; very tall.

fertile. Having sporangia and producing spores.

fiddlehead. Crozier.

flabellata - fla bel ā'tȧ. Fan-shaped; with fan-like parts.

formosa - fôr mō'sȧ. Beautiful, handsome.

frond. A fern leaf including the stipe and blade.

Reprinted by Courtesy of South Australian Fern Society.

JUNE: CAN YOU NAME THIS FERN?

Answer in July Newsletter.

38 Bushman St.
PARKES. 2870

The Secretary,
Victorian Fern Society,

Dear Derek,

Please convey my congratulations to the organisers of the show last weekend. I know the amount of hard work that goes into getting "things" and people organised together for a show of this magnitude. The venue was ideal and am sure this made the setting up so much easier. I have suggested to our local council that it would be a good idea for Parkes to have a similar set up as the Nunawading Horticultural Centre.

The trip down and back by bus was well worth the few hours my wife and I spent at the show. We hired a car on Sunday morning and went for a drive around the Dandenongs, which we enjoyed immensely, and then back to the show for a couple of hours.

Being a novice, I found the demonstrations to be very interesting and informative. I have a few plants with sorus, so am going to try my hand at propogating. I can see I will have to obtain a glasshouse so that I can grow ferns such as Drynarias and Trogostolon falcinellus, which probably was my favourite of the whole show.

Once again congratulations on a great show and I am looking forward to my next trip to Melbourne for the trip to Tasmania.

Regards to All,
Yours Sincerely

Barry Hubbard.

FORTHCOMING MONTHLY MEETINGS:

Burnley 12th June: Maxicrop and favourite fern night.

Burnley 17th July: PLEASE NOTE 3RD THURSDAY THIS MONTH
Ferns of Vanuatu and Samoa
Keith Hutchinson.

Burnley 14th August: Annual General Meeting - Slides of our North Vict. trip, and our slide competition results.

Burnley 11th September: Two speakers from CIG. - Insecticides and Personal protection for the fern lover.

Burnley 9th October: Mr. David Lloyd of M.M.B.W. Drip Watering system.

Burnley 13th November: Michael Garrett - President of Tasmanian Fern Society.

DIARY DATES.

JUNE MEETING - THURSDAY 12th.

MAXICROP - BRING YOUR FAVOURITE FERN NIGHT.

Burnley Horticultural College Hall, Swan Street, Burnley, 8.00 p.m.

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

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