

THE FERN  
SOCIETY OF  
VICTORIA

NEWSLETTER

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VOLUME 6 NUMBER 5 JUNE, 1984

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PRESIDENT'S MESSAGE

Dear Member,

In a thoroughly prepared and comprehensive address, former President, Chris Goudey, explained and used excellent colour slides to illustrate "Fern Families" at our General Meeting on 10th May.

To many of us the range of fern families discussed by Chris was enormous; some being completely new to us. Chris had also prepared charts which he used to explain the difference between a fern family and genera.

Next month we have an interstate Guest Speaker. Mr. Bob Chinnick, a Botanist from the State Herbarium in Adelaide who will speak on "Ferns of New Zealand". Mr. Chinnick is a M.Sc. formerly of New Zealand and author of the book, "Ferns and Fern Allies of New Zealand".

Meeting details: Thursday, 14th June, 1984 in the Burnley Horticultural College Hall, Swan Street, Burnley, commencing at 8.00 p.m.

Vacancy: Keith Stubbs will not be able to continue as Secretary of this Society after August this year. He has very capably carried out his duties for the past three years but because the pressure of work in his profession, Keith is not able to continue.

We must fill this position by the Annual Meeting in August and it would be a wonderful thing if we could do so with a volunteer.

To make the work load of secretarial duties easier on individuals, we may have to consider the appointment of two officers. One to handle minutes and records, the other correspondence and business contacts.

This is a very great "need" for the Society. I shall be delighted to have your support at this time. Girls or Boys.

S.G.A.P. Maroondah Group  
Wild-Flower Show

This Society is to present a display of native ferns at the Civic Centre, Ringwood on 4th and 5th August, 1984. Bill Taylor has undertaken the organization of our contribution and would appreciate offers of help with setting up and with loans of ferns from Members.

Marlene Adsett of 72 Denman Road, Torquay 4657, Hervey Bay, Queensland invites Queensland Members of the Fern Society to contact her concerning an interchange of interests, ideas and experiences in the cultivation of ferns.

With kindest regards,  
DOUG THOMAS



The June Guest Speaker will be Bob Chinnick from the South Australian Society who will speak on Ferns of New Zealand.

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WANTED - ONE SECRETARY

Due to increasing business pressure, our Secretary, Keith Stubbs, has indicated he will not be standing for the position after this, his third term.

Budding secretaries are asked to contact the President, Doug Thomas, to find out more about this position.

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MAROONDAH S.G.A.P. GROUP

WILDFLOWER SHOW

Ringwood Culture Centre  
4th and 5th August, 1984

The Fern Society of Victoria will again be participating with a display of mainly Australian Native Ferns.

Anyone who lives in this area and can assist or lend plants for display please contact:

Bill Taylor - 277 4310 (Bus.)  
63 3725 (A.H.)

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SALE OF GARDEN HAND TOOLS

One of our Melbourne Members, Mr. Alf Wallbridge, has secured a business arrangement with a large seed importing firm whereby he is able to offer a good range of top quality garden hand tools at prices only two thirds of normal retail. The Fern Society also benefits from a small profit on sales.

Tools available are secateurs, garden cutters, pruners, hand forks, hand shovels, hand hoes, etc.

Purchases may be made on an order basis by contacting Alf at 38 Hopetoun Street, Mitcham 3132, telephone: 874 4905. Pay when you receive your goods.

RAIN FORESTS AND FERN GULLIES  
(CONTINUED FROM THE MAY ISSUE)

Carnarvon National Park, Queensland  
(Continued)

In all of the walks which can be taken in the Park, each one follows either the main Carnarvon Creek or tributaries which empty into it. It doesn't really matter which walk you take for there is rich reward in the pleasure of discovery in any direction, be it ferns, wildflowers, native birds and animals, palms, aboriginal rock paintings or frogs.

There are several unique and unusual fern species to be seen. In places where sand and silt have piled up against bends in the banks of creeks, look for the incredible "walking fern" (*Ampelopteris Proliferum*). From the distance this fern can easily be mistaken for the soft water fern (*Blechnum Minus*) but closer in there is a surprise. At points along the upper portion of the frond stem (rachis) small plants will be seen in various stages of development. These little plantlets eventually develop roots and then become separate plants. By this means the species "walks" and proliferates into dense masses of beautiful plants.

The magnificent silver elkhorn (*Platycterium Veitchii*) is here. It is so plentiful throughout the gorge area that you will wonder why it is described by Botanists as rare. It has the unique habit of germinating from spores and multiplying by means of "pups" entirely on the faces of huge sandstone rocks, not necessarily shaded from the sun. Its food supply comes from dust, fallen leaves, debris and bird and animal droppings. Water comes firstly from rainfall and subsequently seepage. An absolutely beautiful fern.

At several situations throughout the Park, Aboriginal rock paintings will be found. These are fascinating and full of interest. Sites which are outstanding have been named. Balloon Cave, The Art Gallery and The Cathedral. The paintings are actually stencils made by holding objects against the rock face and "spray" painting an ochre based paint blown from the mouth.

Boomerangs of two types - Warring and food gathering, hands and arms, emu feet, stone axes, clubs and shields are all described. Food gathering is represented by fishing nets and the nuts and fruits of various plants.

One of the most outstanding ferns in the world has a ravine named for it in the Carnarvon Park - *Angeopteris Erecta*.

*A. Erecta* is a largest terrestrial fern in the world. It has occurred in all major continents where its fossilized remains have been found in coal deposits which have been age tested at forty five million years. The *Angeopteris Ravine* is the only area in the Park where *Erecta* is established. It appears to be reasonably secure on Fraser Island and in north eastern Queensland.

Mature fronds reach 4.5m (15 feet) length and are almost totally supported by water. Should water supply to the plant fail the frondage collapses but will revive again if water supply is restored. The *Angeopteris* develops a trunk up to one metre (3'4") in diameter. Look closely at this and in a mature specimen you will surely see small bulb-like appendages. These are called auricles and they provide a means by which propagation of new plants can be undertaken.

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In the Angeopteris Ravine and in other caves and gorges, other ferns of special interest include the Jungle Fern (*Macrothelypteris Torresiana*), the dainty maidenhair (*Adiantum Capillus Veneris*) and the ageless skeleton fork fern (*Psilotum Nudum*).

Yes, Carnarvon Gorge National Park is a remote wilderness, but an extremely interesting and beautiful place.

DOUG THOMAS

SLIDE BANK

When preparing colour slides for despatch and loan to the Slide Bank, would you please print your name and identity of the plant on each slide.

Thank you

BERNARD & BERNADETTE COLEMAN  
Slide Bank Convenors

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NEW MEMBERS

The Fern Society of Victoria wishes to extend a warm welcome to the following members who have joined the ranks over the past two months.

D.J. & H.E. Griffiths, 8 Susan Court, East Keilor 3033  
Peter T. Pollett, 228 Gap Road, Sunbury 3429  
Peter McCallum, 30 Manning Road, East Malvern 3145  
Mr. P.M. McKenzie, P.O. Box 199, Mansfield 3722  
Colin Ridout, 64 Grayson Street, Hackett 2602  
O.C. Lee, 12 East Terrace, Hawthorndene 5051  
Mrs. Maureen Arthur, R.M.B. 1140, Mooroopna 3629  
Paul G. Smith, 7 Atunga Court, Cheltenham East 3192  
Jansens Nurseries, 36 Bracknell Street, Keysborough 3173  
John L.M. Gherardi, 302 Spring Road, Dingley 3172  
Clive Dettman, Viewhaven Nursery Avon Road, Avonsleigh 3782  
Robert A. McPherson, 46 Robb Street, Essendon 3040  
Ms. Lynwen Sian Connick, 39 Loddon Avenue, Keilor 3036  
Donald & Alice Campbell, 12 Mills Street, Maffra 3860  
John & Judy Marley, 5 Seaview Street, Mt. Kuring 2080  
Mrs. Ivy Watson, 141 Seacombe Road, Dover Gardens 5048  
Marie Van Ettem, a new member from the United States

A REMINDER FROM THE TREASURER:

Subscriptions are due at the end of June for all 1983 members.

NATIVE PLANTS SUITABLE FOR RAINFOREST PLANTING:

All of the following native plants are sufficiently hardy in Melbourne to use in imitating rainforest conditions, ideal for growing ferns outdoors. In general the species from Victoria are more hardy, those from N.S.W. and Queensland often requiring some protection when young.

Small to Medium Trees

- Acacia floribunda* (Vic., N.S.W.) - very fast growing, finger-like flowers.
- Acacia howitti* (E.Vic) - very fast growing, attractive dark green leaves.
- Archontophoenix cunninghamii* (N.S.W., Qld.) Bangalow Palm - slow.
- Archontophoenix alexandrae* (Qld.) Alexander Palm - slow.
- Backhousia citriodora* (Qld.) - masses of cream flowers, strongly lemon-scented leaves.
- Brachychiton acerifolius* (N.S.W., Qld.) Illawarra Flame Tree - large attractive leaves, deciduous when in flower, masses of brilliant red flowers.
- Callistemon salignus* (N.S.W., Qld.) - pink new leaves, cream to red bottlebrush flowers.
- Castanospermum australe* (N.S.W., Qld.) Morton Bay Chestnut or Black Bean - attractive shiny pinnate leaves and large yellow and orange pea flowers, fairly slow.
- Ceratopetalum gummiferum* (N.S.W.) N.S.W. Christmas Bush - masses of pink flowers in summer.
- Eucalyptus crenulata* (Vic.) Silver Gum - small silver leaves, cream flowers.
- Eucalyptus kitsoniana* (Vic.) Bog Gum - large leathery leaves, cream flowers.
- Grevillea barkleyana* (Vic.) Pink toothbrush flowers.
- Grevillea robusta* (N.S.W., Qld.) Bright orange toothbrush flowers, may become too large for suburban gardens in time.
- Homalanthus populidoliis* (N.S.W., Qld.) Bleeding-heart Tree - rapid growing, large heart-shaped leaves aging to bright red.
- Melaleuca squarrosa* (S.A., Tas., Vic., N.S.W.) Scented Paperbark - small yellow bottlebrush flowers.
- Nothofagus cunninghamii* (Tas., Vic.) Myrtle Beech - very slow growing, attractive bronze new foliage.

Continued on next page

*Stenocarpus sinuatus* (N.S.W., Qld.) Firewheel Tree - very slow growing, attractive dark green leaves and red wheel-shaped flowers.

*Telopea oreades* (N.S.W., E.Vic.) Gippsland Waratah - loose terminal clusters of red flowers.

The following species are all worthy of cultivation but tend to be very susceptible to scale attack.

*Eugenia smithii* (Vic., N.S.W., Qld.) Lilly-Pilly - cream, fluffy flowers followed by white to purple berries.

*Hymenosporum flavum* (N.S.W., Qld.) Native Frangipani - white and yellow perfumed flowers.

*Pittosporum revolutum* (Vic., N.S.W., Qld.) - yellow bell-flowers.

*Pittosporum undulatum* (Vic., Tas., N.S.W., Qld.) - white fragrant bell-flowers, orange berries.

*Prostanthera lasianthos* (Tas., Vic., N.S.W., Qld.) Victorian Christmas Bush - masses of delicate white flowers in summer, fast growing.

*Tieghemopanax sambucifolius* (Tas., Vic., N.S.W., Qld.) - attractive bluish pinnate leaves, flowers insignificant, fast growing.

#### SHRUBS

*Acacia stricta* (Tas., S.A., Vic., N.S.W.) - narrow leaves, small bright yellow flowers, fast growing.

*Cordyline stricta* (N.S.W., Qld.) - small clumped palm, long narrow simple leaves clustered on long narrow stems, rapid growing.

*Correa lawrenciana* (Tas., Vic., N.S.W.) Mountain Correa - greenish or reddish tubular flowers.

*Linospadix monostachya* (N.S.W., Qld.) Walking-stick Palm - single narrow stem, small crown of pinnate fronds, very slow.

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#### SPORE LIST - JUNE

Spore samples may be purchased at monthly meetings, or by sending a list of your requirements with 20 cents for each species requested plus 50 cents for packaging and postage to Mr. W. Bright, 520 Burke Road, Camberwell 3124.

A cheque made payable to "The Fern Society of Victoria" is the preferred method of payment for spore. Postage stamps in 30c, 10c and 5c denominations may also be forwarded for small orders. Please allow two to three weeks for postage.

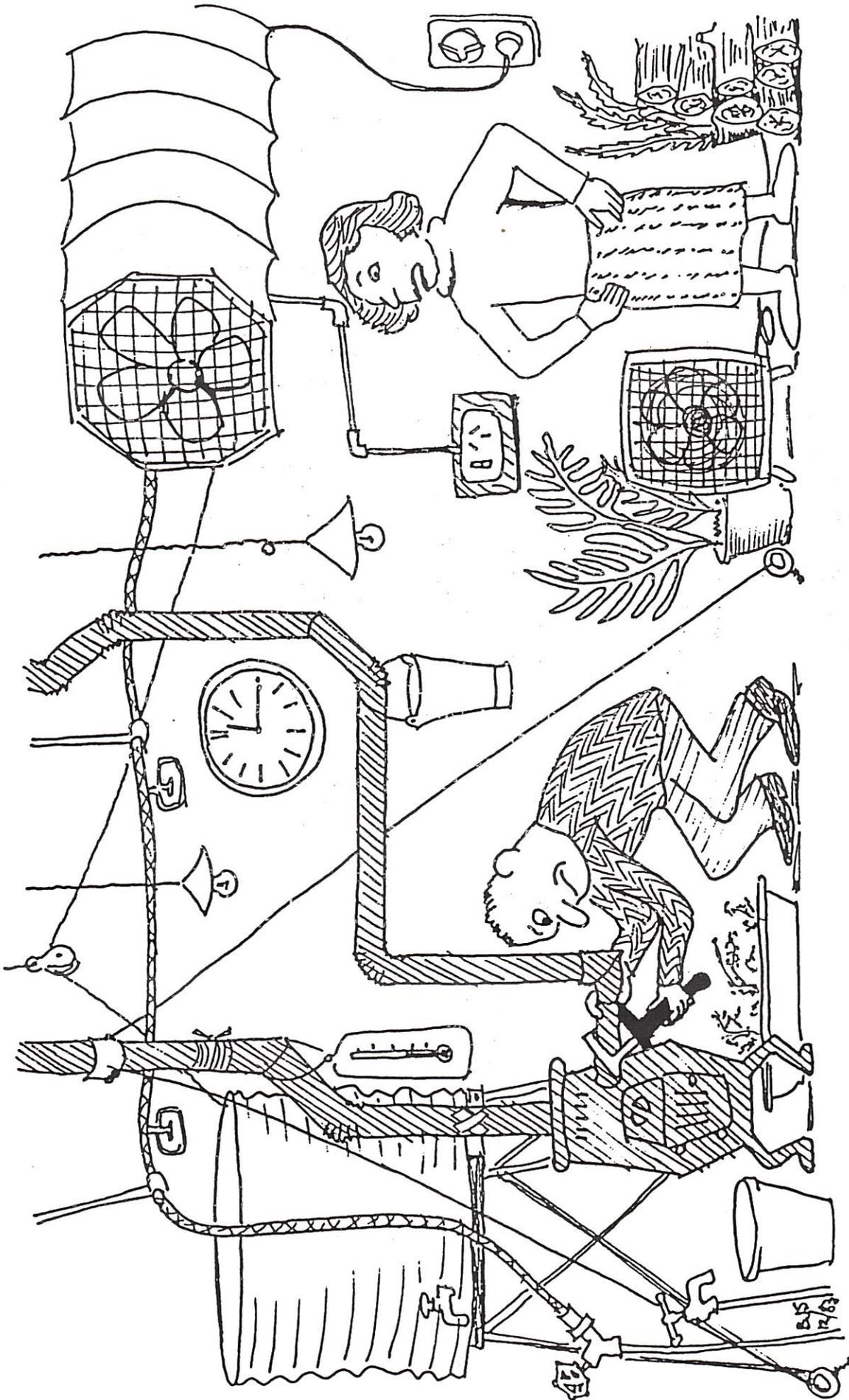
Many species are still available from the list published in the newsletter, but if ordering from this list, please include a supplementary list in case supplies of some species are depleted.

Instructions on propagation from spore are also still available for an extra 10 cents.

## JUNE SPORE LIST

(\*) INDICATES SPECIES IN SHORT SUPPLY  
(N) INDICATES NAIVE AUSTRALIAN SPECIES

- N ADIANTUM AETHIOPICUM(1-84)  
\* ANCEPS(12-83)  
N CAPILLUS-VENERIS(12-83)  
\* CAUDATUM(3-84)  
\* CONCINNUM:EDWINII:(11-83)  
N FORMOSUM(1-84)  
N\* HISPIDULUM(3-84)  
\* PEDATUM(12-83)  
PERUVIANUM(3-84)  
RADDIANUM(3-83)  
RADDIANUM :ELEGANS:(3-83)  
RADDIANUM :GRACILLINUM:(3-84)  
RADDIANUM :LEGRAND MORGAN:(12-83)  
RADDIANUM :MICROPINNULUM:(3-84)  
\* RADDIANUM :OLD LACE:(2-84)  
RADDIANUM :PACIFIC MAID:(2-84)  
RADDIANUM :VICTORIA/S ELEGANS:(3-84)  
N\* SILVATICUM(10-83)  
\* TENERUM :PINK SLEEPING BEAUTY :(4-84)  
N SP:(S:E:QLD)(3-84)  
N AMPHINEURON OPULENTUM(2-84)  
ANEMIA MEXICANA(12-83)  
PHYLLITIDIS(?)  
M ARACHNIODES ARISTATA(3-83)  
\* ARISTATA VARIEGATA(2-84)  
\* SIMPLICIOR(?)  
N\* ASPLENIUM BULBIFERUM(NATIVE)(3-84)  
\* BULBIFERUM (NZ)(3-84)  
DIMORPHUM(10-83)  
N\* FLABELLIFOLIUM(3-84)  
N\* TRICHOMACHES(3-83)  
ATHYUM FILIX-FEMINA(2-84)  
\* ATHYRIUM NIPONICUM :PICTUM:(3-84)  
N\* BLECHNUM AMBIGUUM(1-83)  
N CARTILAGINEUM(12-83)  
N CHAMBERSII(2-84)  
DISCOLOR(4-84)  
N FLUVIATILE(2-84)  
GIBBUM(4-84)  
N GREGSONII(1-83)  
N MINUS(2-84)  
N NUDUM(1-84)  
N NUDUM :FURCANS:(4-83)  
\* OCCIDENTALE(3-84)  
N\* PENNA-MARINA(3-83)  
\* REVOLUTUM(?)  
\* TABULARE(?)  
N WATTSII(2-84)  
N CHEILANTHES TENUIFOLIA(3-83)  
N CHRISTELLA DENTATA(3-83)  
N PARASITICA(1-84)  
N\* COLYSIS SAYERI(2-84)  
CONIOGRAMME INTERMEDIA(?)  
\* CONIOGRAMME FRAXINEA:MT SARAWAH(?)  
N CULCITA DUBIA(3-83)  
\* CTENITIS SLOANEI(3-84)  
N CYATHEA AUSTRALIS(1-84)  
N\* BAILEYANA(8-83)  
BROWNII(1-84)  
N COOPERI(1-84)  
N COOPERI:BLACK SCALES:(2-84)  
N CUNNINGHAMII(2-84)  
DEALBATA(1-84)  
N LEICHHARDTIANA(2-84)  
N MARCESCENS (CUNNINGHAMII-AUS'RALIS)(3-84)  
MEDULLARIS(3-84)  
\* SP:(LARGE/MALAYSIA)(10-82)  
\* SP:(NEW GUINEA)(2-84)  
CYCLOSORUS TRUNCATUS(3-84)  
CYRTOMIUM FALCATUM(3-84)  
N\* CYSTOPTERIS FILIX-FRAGILIS(2-83)  
N DAVALLIA PYXIDATA(2-84)  
\* SOLIDA :RUFFLED ORNATA:(3-84)  
N DAVALLIA PYXIDATA(2-84)  
\* SOLIDA :RUFFLED ORNATA:(3-84)  
N\* DENNSTAEDTIA DAVALLIOIDES(3-84)  
N DICKSONIA ANTARCTICA(2-84)  
FIBROSA(11-83)  
LANATA(10-83)  
SQUARROSA(3-84)  
N YOUNGIAE(S:QLD FORM)(12-83)  
N DIPLAZIUM ASSIMILE(10-83)  
N AUSTRALE(2-84)  
N\* DOODIA ASPERA(3-84)  
N\* CAUDATA(2-83)  
N MEDIA(3-84)  
\* DORYOPTERIS PEDATA(10-83)  
\* DRYOPTERIS ATRATA(1-84)  
\* CARTHUSIANA(7-82)  
ERYTHROSORA(4-84)  
GYMNOSORUS(3-83)  
SP:(FILIX-MAS)(3-84)  
SP:(MIXED)(3-83)  
SP(12-83)  
\* SP-2(2-84)  
N HYPOLEPIS PUNCTATA(3-84)  
N LASTREOPSIS ACUMINATA(2-84)  
N HISPIDA(4-84)  
N MICROSORA(4-84)  
N MUNITA(8-83)  
N\* SMITHIANA(2-83)  
N SP:(3 DIFFERENT SPECIES)(9-83)  
N SP:(6-UNKNOWN SPECIES)(9-83)  
N LUNATHYRIUM JAPONICUM(1-84)  
LYGODIUM SP:A(MALAYSIA)(10-82)  
SP:B(CIRCINNATUM/MALAYSIA)(10-82)  
N\* MARATTIA SP:(SALICIFOLIA)(4-83)  
N\* MICROSORIUM DIVERSIFOLIUM(2-84)  
\* PARKSII(2-84)  
\* NEPHROLEPIS CORDIFOLIA :PLUMOSA?:(10-83)  
\* :EASTERN ZIMBABWE GIANT:(?)  
\* OSHUNDA CINNAMOMEA(12-6-83)  
\* CLAYTONIANA(5-6-83)  
N\* PELLAEA FALCATA(3-83)  
N FALCATA NANA(11-83)  
N PARADOXA(11-83)  
\* ROTUNDIFOLIA(3-83)  
VIRIDIS(8-82)  
\* PHYLLITIS SCOLOPENDRIUM(3-84)  
N\* PLATYCERIUM SUPERBUM(2-84)  
N PLEUROSORUS RUTIFOLIUS(8-83)  
\* POLYPODIUM ANGUSTIFOLIUM(4-84)  
\* AUREUM(3-84)  
\* CRASSIFOLIUM(8-83)  
\* FORMOSANUM(12-83)  
N POLYSTICHUM AUSTRALIENSE(10-83)  
N FORMOSUM(12-83)  
N PROLIFERUM(12-83)  
\* SETIFERUM:CULTIVAR:(2-84)  
N PSILOTUM NUDUM(7-82)  
N PTERIS COHANS(2-84)  
CRETICA :ALBOLINEATA:(12-83)  
N\* ENSIFORMIS(10-83)  
HENDERSONII(2-84)  
MACILENTA(4-84)  
\* MULTIFIDA(2-84)  
\* SEMIPINNATA(2-84)  
N TREMULA(2-84)  
N UMBROSA(10-83)  
N VITTATA(4-84)  
RUMOHRA ADIANTIFORMIS(CAPE FORM)(2-84)  
N ADIANTIFORMIS(NATIVE)(2-84)  
\* SCYPHULARIA PENTAPHYLLA(4-84)  
N STENOCHLAENA PALUSTRIS(10-82)  
N TAENITIS BLECHNOIDES(10-82)  
\* THELYPTERIS PATENS :LEPIDA:(?)  
N TODEA BARBARA(12-83)  
GROUND-FERN(LARGE/BIPINNATIFID/MALAYSIA)(



"... I THOUGHT THAT WHEN YOU FINISHED WITH THE ENGINEERING THERE WAS SUPPOSED TO BE SOME ROOM IN HERE FOR FERNS...!"

PLATYCERIUM SUPERBUM  
in the Wild and in Cultivation

by Ralph H. Hughes

(Continued from last issue)

**CULTIVATION**

The giant staghorn does not offset plantlets (pups) nor lend itself to present methods of meristem culture, hence propagation by spore is routine. Success in spore culture depends on care needed to combat growth of algae and molds. An essential practice, aseptic spore culture, is described by Gmoser (1979).

The period of adolescence for sporelings is several months to a few years. Growth is unpredictable, irregular and sporadic, particularly in sizes two to six inches in diameter. As an example, spores sown in September 1978 and transplanted six times were as large as six inches in diameter in September 1981, and with shield fronds of a total height of eleven inches by August 1982. In another propagation, 20 of a lot of 100 2X *P. superbum* sporelings, received in April 1977, averaged twelve inches in diameter in September 1981, and fertile fronds appeared in 1982.

Viable spores are produced abundantly in cultivation. They may be obtained from a fern society spore store when donated or directly from the grower. Lacking any means of vegetative propagation, *P. superbum* historically has been a trade fern grown from spore under greenhouse culture, an industry largely concentrated in the Netherlands near Alsemeer. As an example, growers may order 2X transplants large enough to be transplanted into 2-inch pots. These are grown to larger sizes in Puerto Rico or domestically and marketed locally.

Plants are available on occasion from fern or houseplant specialty nurseries or nursery departments of large department stores or supermarkets. A dwindling supply of collected plants of all sizes permitted by the National Parks and Wildlife Service is available in Australia. Recovery from importation shock is possible in one or two years.

Since *P. superbum* does not produce offsets and is difficult to propagate from spore and to handle as young transplants, medium-sized commercially grown sporelings are to be recommended for growing in the home garden. Four or five-inch pot sizes or equivalent sizes on plaques are good.

Maintenance of the substratum in cultivation is a year-round undertaking. The grower must provide a medium that is well-drained and well-aerated, and capable of retaining only minimal moisture. Since young plants are pie-shaped, medium-sized sporelings should be transplanted to wooden plaques starting with size 8 x 8 inches or 12 x 12 inches, and in four to six years to 18 x 18 inches or 24 x 24 inches for mature plants with fertile fronds.

Continued on next page

Materials and methods proposed by Jerry Horne, as adopted for medium-sized *P. superbum*, were found satisfactory. Start with a 3/4 x 8 x 8 inch piece of board. Use wood such as marine plywood or cypress lumber that will not rot readily to prevent having to remount more often than necessary to accommodate growth. Drive a roofing nail into each corner and one nail in between on the edges. Drive two more nails at the sides or on the back to hold wire for a hanger. Add just enough moist, long staple sphagnum moss to provide a 1/2-inch layer over most of the board. Center the plant on the plaque and secure plant and sphagnum with insulated wire (telephone wire) wrapped back and forth across the sterile fronds and around the nails. The bud should be at the top. It is recognized as a small cone-shaped growing point in the center of the shield frond, pointing upward. String wire free of the bud to avoid critical damage and loss of plant. Most of the moss and wire will be covered by the growth of the new shield fronds. If medium becomes waterlogged as the plant grows, remove spent sphagnum and replace with osmunda to maintain aeration and drainage. Take care not to damage the developing roots. Osmunda is longer lived than sphagnum and provides better drainage.

#### HORTICULTURAL INFORMATION

Although probably the most exacting of the Australian platyceriums, the giant staghorn fern is cultured now and then outdoors in coastal California and Florida. It is a surprisingly tough plant when grown as an epiphyte with a porous substrate in a warm-temperate or cool-tropical climate where rainfall is not too high. Where flooding and rot fungus are problems, sheltered racks provide protection.

Flooding of this moisture-sensitive plant is a constant threat in warm, humid regions. It is found growing naturally in climates cooler and less humid than southern Florida where a common practice is to provide overhead shelter. Further precautions are to avoid overhead watering and automatic sprinkler irrigation. Hand-water sparingly to keep moderately moist while the plant is actively growing. Permit the plants to go nearly dry before rewatering. Cut away dry shield fronds in nest above. Plants raised outside are best kept rather dry during the winter.

In drier climates where rot is not a problem, as in parts of California, Hawaii, Queensland, and New South Wales, this remarkable epiphyte forms its own self-contained substratum and nutrient supply to grow outdoors unattended, but it does respond to regular feeding.

Apply plant food in moderation while plant is actually growing, with application timed to coincide with waterings. Fertilizing in dormant or rest periods during the year is apt to promote root disease. Almost any soluble or slow release garden or houseplant fertilizer may be used. Fish emulsion of half the strength recommended by producer for general use is satisfactory. Follow product directions. Some growers prefer to fertilize every eight to ten days with half-strength water-soluble 20-20-20 (percent N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O) during spring and summer, and one-fourth strength during fall and winter. Other growers favour slow release formulations, such as Osmocote 14-14-14, applied at three-month intervals during the growing season. With liquid fertilizers, aim for a slightly acid condition. One tablespoon (or as needed) of regular vinegar per gallon of alkaline water is prescribed.

Continued on next page

Many species of fungi and bacteria may cause decay or rot. *Platycterium superbum* is particularly susceptible. Most attacks coincide with conditions that keep the roots wet for long periods of time and with very slow or no growth. To prevent disease, start with healthy plants, avoid over-watering, and conduct a preventive spray program formulated to combat the specific problem at hand. A plan adapted by Jerry Horne for the Miami area is a spray each eight to ten days year-long with a 3/4 strength fungicide (alternating among Benlate, Captan, Daconil, and Dithane M-45) and 3/4 strength insecticides (alternating among Cygon, Malathion, Orthene, and Sevin). The two items are mixed with liquid fertilizer noted above and sprayed at one time. Be sure to cover all leaf surfaces and in the case of a specific problem, spray at least twice, one week apart. Water is needed prior to spraying.

Red spiders, common pests of platycteriums growing beneath shelters to prevent flooding, thrive in low humidity. Though rarely seen, they cause pale or whitish areas on the nest leaves and can eventually kill the plant. Examine plants regularly, particularly those against greenhouse walls or in crowded areas.

Records on phenology -- the relations between changes in season and growth, spore production, and other natural phenomena -- are preliminary. New shields emerge in February, March and April, grow rapidly from June through October, and show little or no growth from November through January. Inception and growth of fertile fronds are irregular, and spores may mature any month.

#### ACKNOWLEDGEMENTS

Phyllis P. Bates and Roy Vail have reviewed this paper and their critical comments and recommendations are greatly appreciated.

I also thank Barbara Hoshizaki for kindly granting permission to reprint figures from her publications.

#### LITERATURE CITED

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Fig. 1. *Platycerium superbum*: a. Habit, in Australia; b, right underside of a normal frond in cultivation. (Figure reprinted from Hoshizaki, B. J., A Review of the species of *Platycerium*. *Baileya* 12(3):69-126. 1964; with permission of the author).

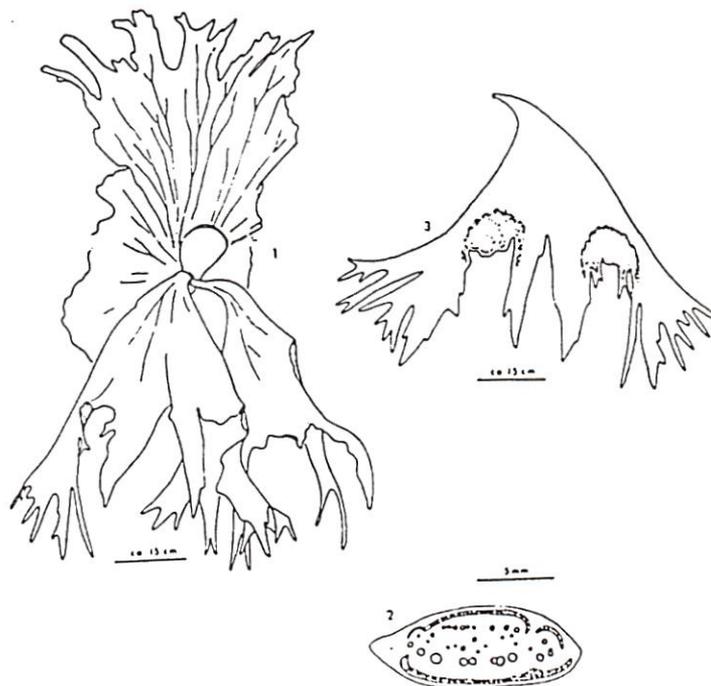


Fig. 2. *Platycerium X mentelosii* cv. *Fantastic Gardens*: 1. Habit; 2. Stipe of fertile frond, cross-section; 3. Fertile frond. (Figure reprinted from Hoshizaki, B. J. 1975; with permission of the author).

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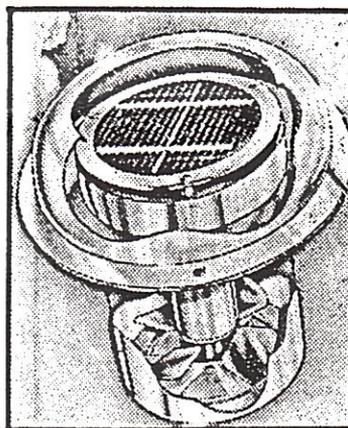
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THIS ARTICLE, WHICH APPEARED IN "THE AGE" ON MARCH 13, 1984, MAY BE OF INTEREST TO OUR MEMBERS.

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JULY 12	Albert Jenkins "Mini Rain Forests"
AUGUST 9	Annual General Meeting

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

VENUE OF MEETINGS: Burnley Horticultural School Hall, Burnley

TIME OF MEETINGS: 8 p.m.

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