

THE FERN
SOCIETY OF
VICTORIA

NEWSLETTER

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PRESIDENT'S MESSAGE

Dear Member,

Our "Beginners and Gadget Night" of April 12th proved to be a night of non-stop activity from start to finish. Basically a format such as this depends heavily on the willingness of individual members to share their knowledge and personal skills with other members. In this we were in no way disappointed and the meeting proved to be informative and full of interest throughout.

Three excellent mini talks were presented and these were interspersed with the demonstration of gadgets by several members.

Keith Hutchinson demonstrated soil testing by means of chemicals. He explained that the colour produced by the effect of the chemical solution on various soil components, had a corresponding evaluation as to their pH level.

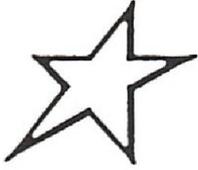
Rod Hill used highly magnified colour slides to show us how to choose the right time to pick fertile fern fronds so that spores and not sporangia husks are collected. Three stages of the development of sporangia were clearly illustrated by Rod's photographs with the all-important one being that which shows the sporangia still capped by the indusium, but with shrivelling of

the cap beginning. Rod said that the correct stage for collection could be easily recognised through a 10 x magnifying glass. He also urged members to become more active with spore collection and to forward surplus spore to the Spore Bank. Such donations are always needed and would be very much appreciated.

The third mini-talk was delivered by Ms. Betty Allgood, whose talk described the basic requirements necessary for keeping a fern or two in good health within the house. Betty demonstrated a method called "double potting". By this method two pots are used; one inside the other, the larger one being at least 50mm (2") larger in diameter than the other. The smaller pot contains the potting mixture and fern. The void between the two pots is stuffed with sphagnum moss with a little crock in the bottom for drainage.

The sphagnum, when kept moist, provides humidity around the plant supplementing that which would otherwise be drawn off by indoor heating. Betty showed us how attractively this can be done when the outer container is of a decorative type such as brass, ceramic, painted glassware, etc.

Continued next page



Past President, Chris Goudey (our first Life Member) will be the Society's speaker on Thursday, May 10th, on the subject - "Identification of Fern Families"

Continued from previous page

Gadgets were once again ingenious and full of interest. Albert Jenkins showed us a simple but remarkably efficient method of making a climbing facility for a *Lygodium* species kept in a plastic pot.

Bill Taylor had collected an amazing variety of packaging containers which he was able to convert to sporeling holders, humid cribs for sporelings, spore trays, foil as insulation, and so on.

Keith Stubbs showed a can of fern croziers marketed as edible which he had obtained in America recently. Dorothy Forte brought in a remarkable frond of *Polystichum proliferum* (Mother Shield Fern) which had developed bulbils and plantlets on the ends of secondary pinnae as well as in the conventional position on the ends of the frond.

A very old bottle was brought to the meeting. It had been found half covered by silt in the bed of a creek. The neck of the bottle had been silted up to form a tight cork, but inside were several tiny but thriving ferns.

Finally, a method of securing a silver elk (*Platycterium Veitchii*) to the side of a terra cotta pot was demonstrated.

Thank you all very much.

The Annual Fern Show at the National Herbarium was once again an outstanding success. The display of ferns in containers and baskets was beautifully presented. It very effectively projected the presence of our Fern Society into the public arena.

The work of Show Sub-Committee members, led by Robert Lee and Bill Taylor, was extraordinary; in fact, many of these members worked so hard throughout the weekend that they must have finished it near to exhaustion. To those members, I humbly offer the thanks of all of the rest of us.

Their efforts have placed the Society in a sound financial position.

Next Meeting: Chris Goudey is to be Guest Speaker at our General Meeting on 10th May, 1984. The title of Chris's talk is "Identification of Fern Families". This is a topic which we should all appreciate because we all have difficulty at some stage in "naming that fern".

With kindest regards,
DOUG THOMAS

FOURTH ANNUAL FERN SHOW

An atmosphere of relaxed calm appropriate to ferns prevailed in the display hall when the Fern Show opened on schedule on the morning of Saturday, 24th March, but this belied the hectic activity of the setting-up process which had gone on from early Friday morning till late at night.

The display at this year's Show was generally agreed to have kept up the high standard now expected, following the achievements of previous years. We had hoped to publish some photographs of the display for the benefit of those who were unable to attend but this plan was frustrated when the processing laboratory to which the films had been sent was wrecked by vandals. The following description may give some idea of the arrangement as a poor substitute for the photographs.

In keeping with the Tree Fern theme, the centre of the hall was filled with a large display in the form of an elongated pyramid with small tree ferns and other varieties (mainly natives) rising in several tiers up to a top row of three large tree ferns reaching nearly to the high ceiling. Hanging baskets were displayed on a modified pergola along one wall and on two large circular stands. The stage area featured a massed display of Adiantums with a backdrop of exotic tree ferns. One of the remaining walls was devoted to a bench display of exotics (predominantly Adiantums) while a formal display in a paved patio setting along the adjoining wall provided a contrast to the natural look of the rest of the hall. A tightly-organised spore bank occupied one corner of the hall, book sales were located in the exit corridor (to catch new enthusiasts!) and lawn area outside was a hive of activity with plant sales and the occasional crowd-drawing potting demonstration.

Nearly 1900 people (not counting children) visited the Show during the weekend, fewer than last year but a good attendance considering the uncertain weather and the fact that we did not get the flow-on of bus loads of country visitors from Garden Week as happened last year when their date coincided with ours. A total of 30 new members joined the Society as a result of their visit to the Show.

The Show made a substantial contribution to the Society's finances. Income from the various sections was

Door takings	\$1700
Plant Sales	\$2037
Spore Sales	\$ 297
Book & Poster Sales	\$ 390
	—————
	\$4424
	—————

giving a net profit of \$3430 after deducting the expenses incurred.

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The thanks of the Show Sub-Committee go to all those people who helped in so many ways with the preparation and running of the Show. Some provided their prized ferns for the display, some gave their services and many did both. Everyone who participated can feel proud of the result of their efforts. We hope you also enjoyed taking part and that the Show was a social as well as an aesthetic and financial success. Special thanks are due to Aztec Greenhouses for the loan of the glasshouses in which the sale ferns were housed.

The Sub-Committee has already had a meeting to discuss the results of this year's Show and begin planning for the next. We will be seeking your comments and suggestions in due course and hope that even more members will participate next year.

BOB LEE
Chairman
Fern Show Sub-Committee

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

Carnarvon National Park, Queensland

The Carnarvon National Park is located 783 kilometres (470 miles) north west of Brisbane. It can be approached from the north through Rolleston and from the south through Roma and Injune.

At a point 117 kilometres (70 miles) north of Injune the entrance road heading west, will be reached. This entrance road, impassable for conventional vehicles in wet weather, covers 38 kms. (23 miles) to the "Lodge" and then an additional 3-1/2 kms (2 miles) of the camp and anger centre. Accommodation, meals, petrol and food supplies are all available at the Lodge.

The road terminates at the camp and all exploration taken from there must be on foot. A resident Parks Ranger will cheerfully advise you as to the many wonderful walks and places of special interest.

Walks of up to 34 kms (20 miles) have been prepared and can be attempted without fear of becoming lost. The main water course is the Carnarvon Creek, whose bed is wide, covered with water-worn rocks and

whose water is shallow and crystal clear. Over countless years this creek has carved its way through sandstone to form spectacular cliffs up to 180 metres (600 feet) high. Tributaries of the Carnarvon Creek have also carved out deep, twisting ravines which provide the protection and moisture which ferns love so well. Actually there are more fern species in the gorge area than have been listed by park authorities.

Walks to many of the places of interest follow the course of the creek which has to be crossed and re-crossed man times. This is no hardship however because there is so much in compensation to be seen in the beauty and wonder of Nature. Walking here is really a pleasure.

Cabbage tree palms are probably the dominant vegetation which produce festoons of lovely yellow flowers in the Spring. Other wildflowers are prominent at this time too, and form very impressive displays. On protected faces of the sand stone cliffs the native Dendrobium Kingianum orchids are in bloom producing masses of pink and white decoration.

Next month, more about Carnarvon Gorge and its unique and magnificent ferns and aboriginal rock paintings.

(To be continued)

NEW MEMBERS AND GADGETS NIGHT

The Society's April meeting was a New Members and Gadgets Night. About 170 Members attended the second such function and this event has become a popular fixture for the Society - not only for beginners, but also for "old stagers" to learn a few new tricks.

Three mini talks were presented - Keith Hutchison on Testing Soil for Maximum Results, Betty Allgood on Growing Ferns Indoors and Rod Hill on Growing Fern from Spore together with requirements and activities of the Spore Bank.

Between the mini talks, Doug Thomas, who chaired the evening, interspersed demonstration of gadgets and unusual items. Those who brought along interesting things for members were:

The President, Doug Thomas, Bill Taylor, Albert Jenkins, Keith Hutchinson and Keith Stubbs.

Keith Hutchison -

Keith Hutchison's demonstration was split into two parts. In his presentation he showed how to achieve good and accurate results testing growing conditions for plants. He showed how to determine the pH of the soil and its effect on plants' growth. Keith explained that the lack of calcium means that some plants cannot absorb various minerals and conversely too much calcium can affect the root growth and also cause iron and magnesium deficiencies.

During the demonstration, Keith used a Sudbury kit to conduct various tests on soil and other matter. Keith has offered to supply these kits to members at wholesale price and details will be published shortly. The kits retail at \$17.95 approx.

Keith said that the pH of the soil is the key to allowing plants to consume fertilizer and nutrients. pH is a numerical measure of the acidity or alkalinity level of the soil. The pH scale ranges from 1 to 14 with 7 indicating neutral soil conditions. When the pH is at a proper level nourishment, the soil, is unlocked which allows the plant to grow and resist disease. Some plants can survive in only acid soils and others require alkaline soils. However most garden plants do best when the pH level is between 6 to 6.9, which is a shade on the acid side. Plants can starve in highly acid or highly alkaline soil.

It was pointed out that Australian soils generally lack phosphorus. This is the reason why, over the years, the island of Nauru, where Superphosphate is obtained, has now virtually been spread over the surface of Australia's wheat growing areas to correct this soil deficiency.

Keith chose a selection of common materials used in growing ferns to demonstrate his tests. Those items included were sandy loam, perlite, peat moss, crushed scoria, decomposed sawdust and two samples of Keith's best compost. He showed how easy it is to put the chemical into test tubes which are included in the kit.

At the end of the evening, Keith returned to reveal the findings and compared the chemical change of the liquid in the test tubes with a colour chart which gave a ready read-out of the pH of the various materials. Keith also tested the compost and was able to determine the amount of Nitrogen and Potash left in the compost after a period of 9 months.

Spoke about the Spore Bank's activities and followed this with some excellent slides and commentary on how to recognise when spore is ready to be collected for sowing. Rod has prepared extensive notes on the Spore Bank and these are included elsewhere in this issue.

Rod indicated that there are difficulties in collecting spore to determine when it is ripe. He showed, by slides, how spore can be determined to be ripe for variety of species. When the spore is ripe, most species have a very distinctive dark discoloration, a shiny appearance of sporangia which are the containers which hold the spore around the edge. The protective covering will also start to shrivel up when the spore is approaching ripeness. The last stage is when the spore has been shed and the protective covering has completely shrivelled up. Unfortunately, this is the time when many people go to collect their spore thinking that it is the ripe stage, but Rod told us that this is the worst time because the spore has already gone. The black shininess is a very good indicator of when the spore is ripe. Rod showed many slides including some taken under a microscope of sporangia in various stages of ripeness. Once the spore is released, most sporangia turn furry - many people mistake this stage as ripeness when, in fact, the spore has already gone.

The easiest way to determine if spore is ready for collection is to use a magnifying glass (about 10 times magnification) which enables one to see if the sporangia have burst open or are still intact. Rod pointed out that, to collect spore, simply take suitable pieces of fern, put them on a sheet of white paper which preferably has a little roughness to its surface and in a couple of hours on a reasonably warm day, the spore will burst out and be collected on paper. When the fern frond is taken away from the collecting paper, a pattern outlining the fern will be made. This is a combination of spore and husks. It is desirable to separate the husks as this gives one a better idea of how much spore is being sown. To do this turn the paper to a slight angle tapping it lightly and the husks will then separate and fall below the ripe spore which will generally remain attached to the paper.

Betty Allgood -

Talked about how to grow ferns in the house and reminded us that this is not an easy task.

The first thing that Betty considers important about growing ferns inside a house is to get the right light. This means that too much sun should not come in. Some people have these ideal growing conditions in bathrooms or sunrooms but it is essential to keep all ferns well back from the direct sunlight.

Another difficulty in wintertime, particularly, is the lack of humidity. There are a number of ways that humidity can be increased and the simplest is by standing the fern on a tray of water with pebbles as this creates a favourable atmosphere.

Ferns with a leathery foliage adapt better inside a house than soft ferns. These ferns, such as fishbone ferns, red crown ferns etc. are tougher types.

Betty cautioned about taking ferns straight from a hot house and taking them into the house. It is desirable to harden them in a dry area first to adjust and allow them to harden up and this is particularly so for Maidenhairs. It is a good idea also to rotate ferns on a ratio of one inside to two outside and to replace the fern before it becomes too soft.

Continued from previous page

Ferns which Betty feels are good for growing inside include:

Adiantum: Hispidulum, Elegans, Fritz Luthi, Gracillimum
 Asplenium Bulbiferum, Nidus
 Cyrtomium Falcatum (Holly)
 Some Davallia
 Nephrolepis cordifolia (Plumosa)
 Staghorn (dry)
 Tree Ferns.

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SPORE LIST - MAY, 1984 : (SEE PAGES 12 and 13)

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. 3126

Payment for orders may be made by postage stamp (30 cent stamps preferred where possible) or by cheque (payable to "Fern Society of Victoria").

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 5 cents.



REQUIREMENTS FOR THE SPORE BANK TO OPERATE EFFECTIVELY

(Part of Rod Hill's April talk at the New Members & Gadget Night)

(1) SPORE:

Who do you think collects the spore? Do you expect your bank manager to provide the bank's assets? To date only a very small handful of members have contributed fern spore to the bank.

Here then is one way every member can participate -- become actively involved in your society, even if you only contribute one or two species each year!

(2) GOOD SPORE: i.e. a reasonable quantity of good quality spore (not husks!)

Perhaps you are a little uncertain as to how to collect good spore. Have you read the instructions in the leaflet available from the spore bank (& reprinted in the Newsletter - Vol. 5, No. 11, p.8)? Have you tried?

If you have tried and still feel unsure, bring your potted ferns in to a meeting or invite the spore bank manager to visit your fernery.

(3) WORTHWHILE SPORE:

The spore bank already has good supplies of spore of many fairly common species. However, I'm sure many members have one or two rare or interesting species in their collections that are not always available from the spore bank.

The philosophy "If you treasure a fern, then give it away" (or at least its spore!) is one that works, but does not seem to be practised often enough in our society.

What will happen if you lose that rare & valued fern in your collection? If it is being propagated by other members, then it can always be replaced, and your precious fern will be no less beautiful if other members are also able to grow it!

Do you ever travel interstate or overseas? Consider attempting to collect some interesting fern spore on the way. Perhaps you have friends or relatives interstate or overseas. Might they be able to collect spore for the spore bank or perhaps they may have an acquaintance with an interest in ferns? Send them a set of instructions and some encouragement!

Incidentally, it is quite legal to send fern spore through the mail (even overseas) but care should be taken to ensure the spore is completely sealed in small paper envelopes with corners secured to prevent spore escaping.

Always label spore for the bank with name and collection date. If spore is collected from ferns which you are unable to identify positively, always ensure that a record of the fern is kept by at least pressing a piece of fertile frond (and perhaps even take photographs or slides).

Rod Hill

PLATYCERIUM SUPERBUM
in the Wild and in Cultivation

by Ralph H. Hughes

(Continued from last issue)

HABITAT

The species grows on trees or rocks in or near the tropical and subtropical rainforests of coastal Queensland, northern New South Wales, and also Malaysia. It occurs at elevations of 2500 feet above sea level in the McPherson Ranges near Brisbane and between 200 and 2500 feet on Cape York Peninsula in northern Queensland. Inland from Brisbane it self propagates on trees at 1600 feet in the Mt. Tamborine community, whereas at O'Reilly's Guest House, at 3000 feet, only harvested plants were found, these growing in the botanical garden.

Platynerium bifurcatum grows in association with *P. suberbum* throughout the latter's range and extends beyond it in all directions, and it is the more cold-hardy. In localities where both species are present - in Queensland and New South Wales - there are no clear cases of *P. bifurcatum* being absent from a *P. suberbum* locality. They frequently are observed growing on the same tree or rock.

Growth habit in nature tends to be gregarious. Several generations may be seen growing on trees or boulders near the parent plant, or single specimens emerge through natural selection. Mature plants may weigh 100 to 200 pounds and display pendulous fertile fronds three to six feet in length, thus the common name "giant staghorn." Space limitations can be a problem, but growth in cultivation is slower than in most terrestrial ferns. Younger plants, three to five years from spore, are favored in the nursery trade; these have well-developed shield fronds six to twelve inches in diameter.

TEMPERATURE, LIGHT & HUMIDITY

Although classed as semi-tender for cultivating in semi-tropical areas, *P. suberbum* is extremely versatile. It survives short periods below 32°F, remaining evergreen. It can also withstand occasional temperatures of 100°F, if humidity is high. In nature, it self-propagates with temperature extremes varying from 32° in winter to 100° in summer. Most rapid growth in Fort Myers, Florida is during a mid summer (wet season) daily temperature range of about 75° to 95°F. Little or no growth is observed in mid-winter when temperatures are 55°F. In Florida *P. suberbum* may be grown outdoors year-long in hardiness zone 10b and with protection during cold snaps in hardiness zone 10a (Hughes 1982). It is tender in hardiness zone 9.

Adult plants prefer more light than younger ones. The requirement is for high light, 600 or more footcandles for adults and 300 to 400 for young sporelings two to six inches in diameter. In a greenhouse, fibreglass structure, or polyethylene shelter, 50 to 75 percent shade is normal. With high humidity outdoors as little as 25 percent shade is satisfactory. In or near tropical rainforests, *P. suberbum* is found on occasion in full sun, high in the crown of emergent trees, on trunks of depauperate trees, in open park-like forests, and mostly exposed boulders. Full sun is also compatible along overcast coastal areas of California. While adaptation in the open is feasible, sub-normal growth accompanies full exposure during the high light season in southern Florida.

Continued on next page

Plants benefit from more light than is generally provided nursery stock, hence they are receptive to improved habitat through increased lighting. In the upper end of the intensity range, shield fronds become leathery, shorter, thicker, more clasping, and tolerant of habitat changes. Larger sporelings and adults suffering from too much light (and heat) are smaller, less luxuriant, yellowish green, and may develop brown margins. Sporelings in smaller sizes may be grown under artificial lights.

Ranges in humidity are highly variable, poorly understood, and difficult to control. In a frost-free climate with selective hand-watering and free drainage, the giant staghorn fern thrives with or without overhead shelter in a relative humidity range of 50 to 90 percent. Inside, with supplemental heat during cold weather, a range of 40 to 60 percent is recommended.

In the wild near Mt. Tamborine, Australia, *P. superbum* self-propagates on the bark of trees in a mean monthly humidity range of 64 to 80 percent at 9 a.m. and 53 to 75 percent at 3 p.m. Highest monthly temperatures in summer average 78°F. Minimums in winter average 45°.

(To be continued in next issue)

SOME IDEAS FOR SLIDES FOR OUR SLIDE BANK

Fernery, Shadehouse, Glasshouse, Pergola, Leanto, Native garden, Formal garden, Indoor - sunroom, verandah, etc., Dish garden, Wardian case, Terrariums

Baskets, Hanging containers, Pots, Ground, Ponds, Bog gardens, Aquariums, Mounted on boards, Walls - brick, paling, etc., Totem poles

Terrestrial ferns, Epiphytic ferns, Aquatic ferns

Ferns in natural habitats and Natural habitats of ferns

Spore, Sporangia, Prothallis, Fernlets

Series photographs, e.g.

Spore, Prothallis, Fernlet, Frond, Plant

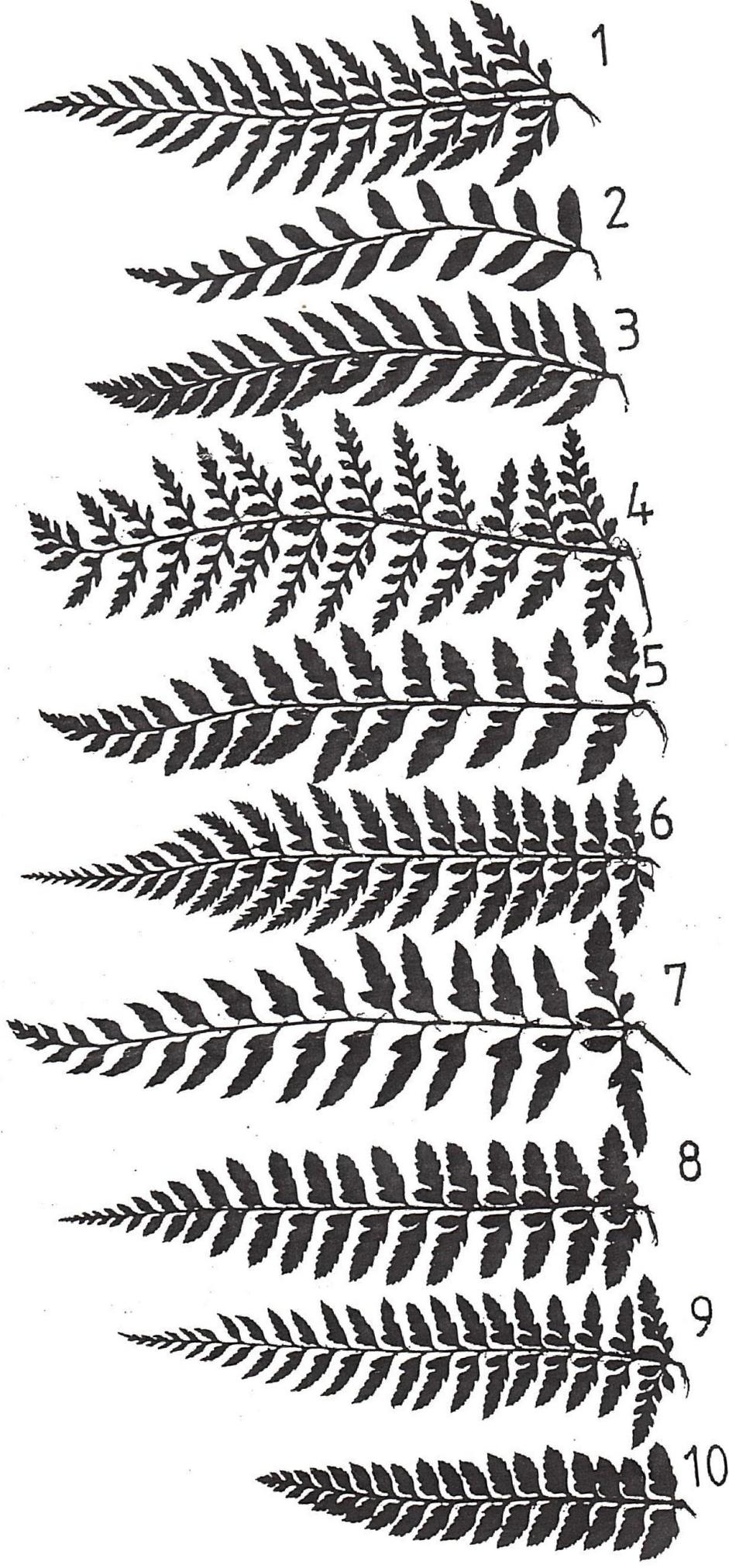
Multi-coloured growth, Individual fronds, Specimen plants

Fern Allies: Lycopodium, Selaginella, Psilotum, Isortia, etc.

Individual Genera, e.g.

Adiantum, Nephrolepis, Polypodiums, Polystichum, Blechnum, etc.

Bernard Coleman



VARIATION IN POLYSTICHUM PROLIFERUM

In 1890, Lowe described over 360 varieties of the British fern Polystichum setiferum. Even after discarding insignificant forms, Druery, in 1902, still recognised 173 varieties.

That so many varieties of the one species are recorded from such a small region seems rather amazing to me and it would be reasonable to assume that some variation is to be expected in other species, including our own native ferns.

Polystichum proliferum has proven to be a rather interesting subject for study as the 10 pinnae illustrated show. While growing conditions will influence the appearance of a fern, several groups of pinnae shown were collected from plants growing in close proximity.

For example:

Nos. 1 & 2 are from near Silverband Falls in the Grampians (and were growing in the company of more "normal" looking ferns)

Nos. 3 - 5 are from Mt. Cole State Forest

No. 6 is from Mt. Wilson (N.S.W.)

Nos. 7 - 10 are from plants established in my own fernery (7 - 9 originally from the Dividing Range east of Melbourne, 10 from near Apollo Bay).

While my experience with these forms of Polystichum proliferum in cultivation is still rather limited, it is certain that some of them do retain their distinctive characteristics and are very worthy of our attention. Although a rather long term project, it would also be interesting to propagate these forms from spore in the hope of finding even more diverse forms. Spore available from the spore bank is in fact a mixture of a few of these forms and for anyone interested, Nos. 1 to 5, and 10, are also available separately.

Who knows, perhaps in time, P. proliferum may even rival P. setiferum with its 173 varieties! And what other native ferns have worthy forms waiting to be discovered?

Rod Hill

MAY SPORE LIST

(*) INDICATES SPECIES IN SHORT SUPPLY
 (N) INDICATES NATIVE AUSTRALIAN SPECIES

N	ADIANTUM AETHIOPICUM(1-84)	COMMON MAIDENHAIR
*	ANCEPS(12-83)	
N	CAPILLUS-VENERIS(12-83)	VENUS-HAIR FERN
*	CAUDATUM(3-84)	TRAILING MAIDENHAIR
*	CONCINNUM:EDWINII:(11-83)	
N	FORMOSUM(1-84)	BLACK STEM
N*	HISPIDULUM(3-84)	ROUGH MAIDENHAIR
	PATENS(10-83)	
*	PEDATUM(12-83)	
	PERUVIANUM(3-84)	SILVER DOLLAR
	RADDIANUM(3-83)	DELTA MAIDENHAIR
	RADDIANUM :ELEGANS:(3-83)	
	RADDIANUM :GRACILLIMUM:(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)	
*	RENIFORME(1-84)	KIDNEY MAIDENHAIR
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)	FLOWERING HOLLY-FERN
	PHYLLITIDIS(?)	
N	ARACHNIODES ARISTATA(3-83)	PRICKLY SHIELD-FERN
*	ARISTATA VARIEGATA(2-84)	
*	SIMPLICIOR(?)	
N*	ASPLENIUM BULBIFERUM(NATIVE)(3-84)	MOTHER SPLEENWORT
*	BULBIFERUM (NZ)(3-84)	MOTHER SPLEENWORT
	DIMORPHUM(10-83)	THREE IN ONE FERN
N*	FLABELLIFOLIUM(3-84)	NECKLACE FERN
N*	TRICHOMANES(3-83)	COMMON SPLEENWORT
	ATHYNUM FILIX-FEMINA(2-84)	
*	ATHYRIUM NIPONICUM :PICTUM:(3-84)	JAPANESE PAINTED FERN
N*	BLECHNUM AMBIGUUM(1-83)	
N	CARTILAGINEUM(12-83)	GRISTLE FERN
N	CHAMBERSII(2-84)	LANCE WATER-FERN
	DISCOLOR(4-84)	CROWN FERN
N	FLUVIATILE(2-84)	RAY WATER-FERN
	GIBBUM(4-84)	DWARF TREE-FERN
N	GREGSONII(1-83)	
N	MINUS(2-84)	SOFT WATER-FERN
N	NUDUM(1-84)	FISHBONE WATER-FERN
N	NUDUM :FURCANS:(6-83)	
*	OCCIDENTALE(3-84)	HAMMOCK FERN
N*	PENNA-MARINA(3-83)	ALPINE WATER-FERN
*	REVOLUTUM(?)	
*	TABULARE(?)	
N	WATTSII(2-84)	HARD WATER-FERN
N	CHEILANTHES TENUIFOLIA(3-83)	ROCK FERN
N	CHRISTELLA DENTATA(3-83)	BINUNG
N	PARASITICA(1-84)	
N*	COLYSIS SAYERI(2-84)	
	CONIOGRAMME INTERMEDIA(?)	
*	CONIOGRAMME FRAXINEA:MT SARAWAHET(?)	
N	CULCITA DUBIA(3-83)	COMMON GROUND-FERN
*	CTENITIS SLOANEI(3-84)	FLORIDA TREE FERN
N	CYATHEA AUSTRALIS(1-84)	ROUGH TREE-FERN
N*	BAILEYANA(8-83)	WIG TREE-FERN
	BROWNII(1-84)	
N	COOPERI(1-84)	COIN-SPOT TREE-FERN
N	COOPERI:BLACK SCALES:(2-84)	COIN-SPOT TREE-FERN
N	CUNNINGHAMII(2-84)	SLENDER TREE-FERN
	DEALBATA(1-84)	SILVER TREE-FERN
N	LEICHHARDTIANA(2-84)	PRICKLY TREE-FERN
N	MARCESCENS (CUNNINGHAMII-AUSTRALIS)(3-84)	
	MEDULLARIS(3-84)	BLACK TREE-FERN
*	SP:(LARGE/MALAYSIA)(10-82)	
	SP:(NEW GUINEA)(2-84)	

	CYCLOSORUS TRUNCATUS(3-84)	
	CYRTOMIUM FALCATUM(3-84)	HOLLY FERN
N*	CYSTOPTERIS FILIX-FRAGILIS(2-83)	BRITTLE BLADDER-FERN
N	DAVALLIA PYXIDATA(2-84)	HARE/S FOOT FERN
*	SOLIDA FRUTLEA ORNATA:(3-84)	
N*	DENNSTAEDTIA DAVALLIOIDES(3-84)	LACY GROUND-FERN
N	DICKSONIA ANTARCTICA(2-84)	SOFT TREE-FERN
	FIBROSA(11-83)	WIKI-PONGA
	LANATA(10-83)	
	SQUARROSA(3-84)	WHEKI
N	YOUNGIAL(S:GLD FORM)(12-83)	BRISTLY TREE-FERN
N	DIPLAZIUM ASSIMILE(10-83)	
	FIBROSA(11-83)	WIKI-PONGA
	LANATA(10-83)	
	SQUARROSA(3-84)	WHEKI
N	YOUNGIAL(S:GLD FORM)(12-83)	BRISTLY TREE-FERN
N	DIPLAZIUM ASSIMILE(10-83)	
N	AUSTRALE(2-84)	AUSTRAL LADY-FERN
N*	DOODIA ASPERA(3-84)	PRICKLY RASP-FERN
N*	CAUDATA(2-83)	SMALL RASP-FERN
N	MEDIA(3-84)	COMMON RASP-FERN
*	DORYOPTERIS PEDATA(10-83)	HAND FERN
*	DRYOPTERIS ATRATA(1-84)	SHAGGY SHIELD FERN
	CARTHUSIANA(7-82)	NARROW BUCKLER-FERN
	ERYTHROSORA(4-84)	AUTUMN FERN
	GYMNOSORUS(3-83)	
	SP:(FILIX-MAS)(3-84)	(MALE FERN)
	SP:(MIXED)(3-83)	
	SP(12-83)	
*	SP-2(2-84)	
N	HYPOLEPIS PUNCTATA(3-84)	DOWNY GROUND FERN
N	LASTREOPSIS ACUMINATA(2-84)	SHINY SHIELD-FERN
N	HISPIDA(4-84)	BRISTLY SHIELD-FERN
N	MICROSORA(4-84)	CREEPING SHIELD-FERN
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)	JAPANESE LADY-FERN
	LYGODIUM SP:A(MALAYSIA)(10-82)	
	SP:B(CIRCINNATUM/MALAYSIA)(10-82)	
	MARATTIA SP:(SALICIFOLIA)(6-83)	
N*	MICROSORIUM DIVERSIFOLIUM(2-84)	KANGAROO FERN
*	PARKSII(2-84)	
	NEPHROLEPIS CORDIFOLIA :PLUMOSA?:(10-83)	
*	:EASTERN ZIMBABWE GIANT:(?)	
*	OSMUNDA CINNAMOMEA(12-6-83)	CINNAMON FERN
*	CLAYTONIANA(5-6-83)	INTERRUPTED FERN
N*	PELLAEA FALCATA(3-83)	SICKLE FERN
N	FALCATA NANA(11-83)	DWARF SICKLE-FERN
N	PARADOXA(11-83)	
*	ROTUNDIFOLIA(3-83)	BUTTON FERN
	VIRIDIS(8-82)	
*	PHYLLITIS SCOLOPENDRIUM(3-84)	HART/S-TONGUE FERN
N*	PLATYCERIUM SUPERBUM(2-84)	STAGHORN FERN
N	PLEUROSORUS RUTIFOLIUS(8-83)	BLANKET FERN
*	POLYPODIUM AUREUM(3-84)	GOLDEN POLYPODY
*	CRASSIFOLIUM(8-83)	
*	FORMOSANUM(12-83)	GRUB FERN
N	POLYSTICHUM AUSTRALIENSE(10-83)	
N	FORMOSUM(12-83)	BROAD SHIELD-FERN
N	PROLIFERUM(12-83)	MOTHER SHIELD-FERN
*	SETIFERUM:CULTIVAR:(2-84)	
N	PSILOTUM NUDUM(7-82)	SKELETON FORK-FERN
N	PTERIS COMANS(2-84)	NETTED BRAKE
	CRETICA :ALBOLINEATA:(12-83)	RIBBON BRAKE
N*	ENSIFORMIS(10-83)	SLENDER BRAKE
	HENDERSONII(2-84)	
	MACILENTA(4-84)	NEW ZEALAND BRAKE
*	MULTIFIDA(2-84)	SPIDER BRAKE
	SEMPINNATA(2-84)	
N	TREMULACA(3-84)	TENDER BRAKE
N	UMBROSA(10-83)	JUNGLE BRAKE
N	VITTATA(2-83)	CHINESE BRAKE
	RUMOHRA ADIANTIFORMIS(CAPE FORM)(2-84)	LEATHER FERN
N	ADIANTIFORMIS(NATIVE)(2-84)	LEATHERY SHIELD-FERN
N	STENOCHLOENA PALUSTRIS(10-82)	CLIMBING SWAMP-FERN
N	TAENITIUM BLECHNOIDES(10-82)	
*	PHILLYPIERIS PATENS :ELPIDA:(?)	
N	TODIA BARBATA(12-83)	RING FERN
	GROUND-FERN(CAPE ZEPHYRUS/MALAYSIA)(10-82)	

The following article on a visit to the Fern Show appeared in "The Independent Mounteasterly", a Melbourne suburban newspaper and is reproduced by kind permission of the writer and publishers.

NATURE TRAIL By Doug Western

Fern addict

HAVE you ever been to a fern show in the company of a person addicted to these plants that could be described as just a boring and dull green, flowerless lot?

I recently experienced this for the first time.

A true friend of such an addict undertakes much hardship to further the relationship so I woke before midday in an effort to ensure our early arrival at the show.

Instructions were issued on entry to the National Herbarium, the site of the show, to go straight to the sales area.

My companion didn't need convincing that ferns are beautiful, nor did she need assistance in deciding what to buy. Indeed the thought of the rarities being sold often at bargain prices was her major motivation.

I viewed the sales area, three hot-houses, two small and one large, some benches and a cash register that was ringing viciously.

Clusters of victims stood around discussing their addiction while others with great glee scanned the subjects of their fetish.

To the fern addict — who can be just about anyone — these plants are living things of great beauty. Each species is different, not only in height and growth habit but also in leaf structure and in the very shade of color of leaf green.

Ferns can be trunked as in tree-ferns, or spread on underground creeping rhizomes as in the Batswing fern.

Their leaves can be huge and solid, again as in tree-ferns or tiny and thin as in the filmy-ferns.

As well their leaves can be structured in any number of ways — from strap-like as in the Strap Water-fern to the divided leaves which can be once, twice or even I suspect thrice pinnate. Their leaf color can vary from very dark green to almost any lighter shade and there are some almost verging on variegation of color.

All these variations could be observed in the sales area where the busy basket I held was filling.

First, two tiny Slender Tree-ferns jumped in almost automatically — the only indecision related to the health and size and price of each. I agreed we had to get the best value for money.

My companion thankfully demonstrated that her addiction hadn't overwhelmed her, a masterful exhibition of self-control. She didn't purchase anything needing the habitat of her already full glasshouse.

Rather she chose plants for her outdoor fernery where room still exists.

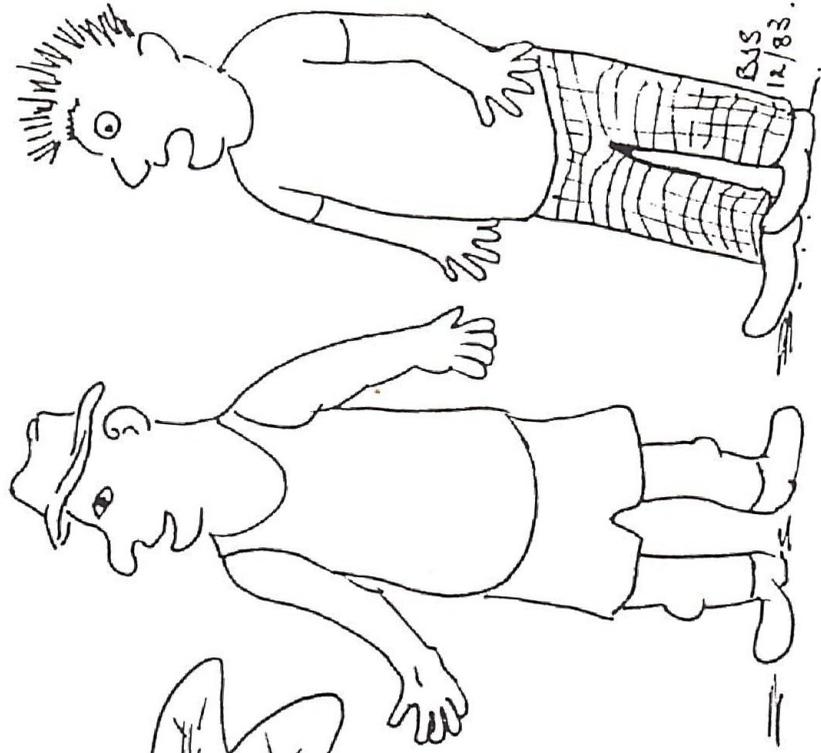
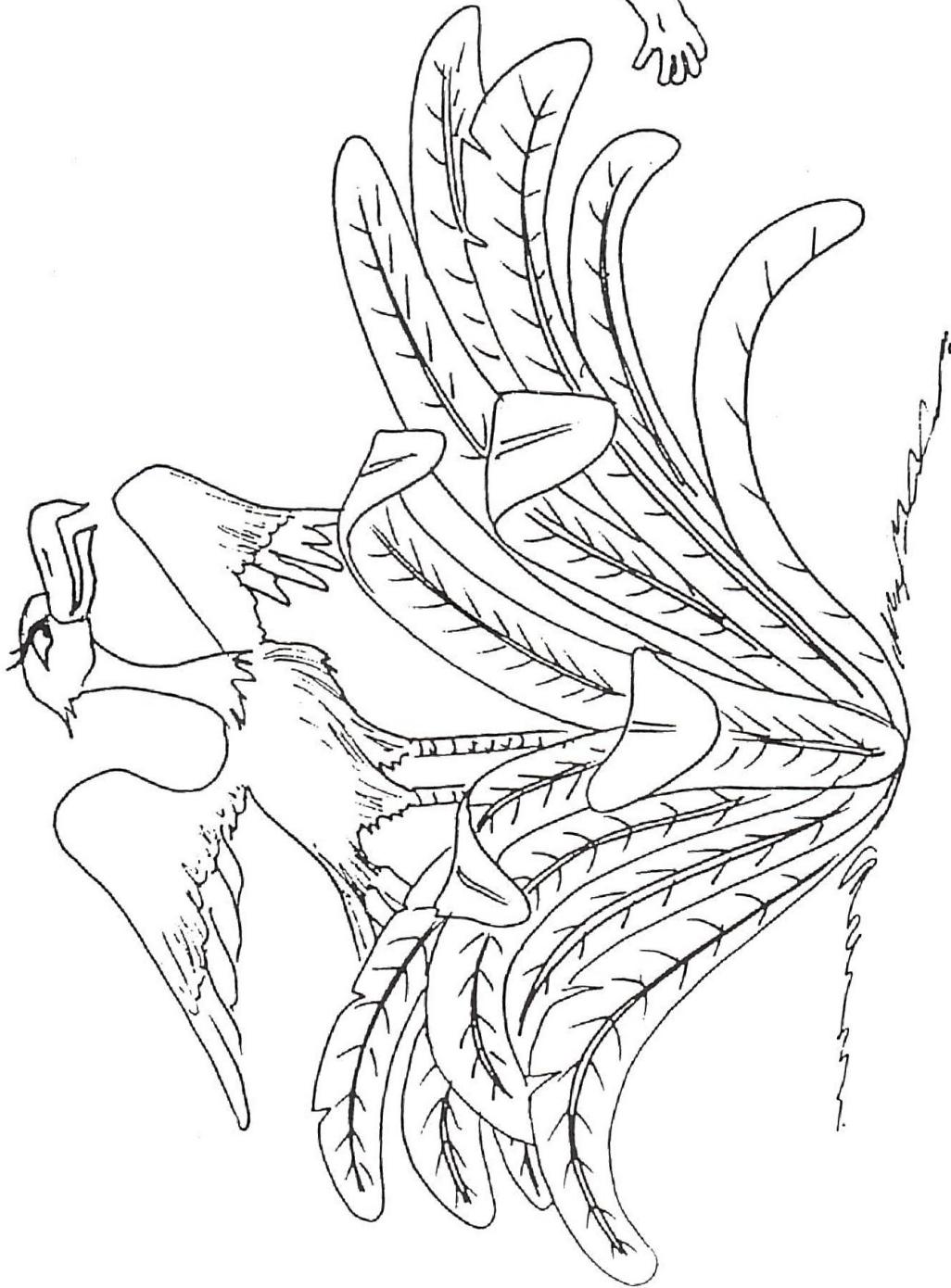
We fronted the cashier — \$28 for 7 plants (some fairly large) wasn't bad and the friendly, helpful sales assistant made it even more bearable.

Years ago I would not have written an article encouraging people to grow ferns because the chief source of plants were those ripped from the bush. Now however, many more of the plants are being propagated from sizeable spore grown specimens are obtainable.

My companion purchased a beginner's spore growing kit from the show. For \$1 she received 3 capsules each containing the spores of a different species of fern (a choice was available) and instructions of what to do and expect when attempting to germinate them.

I congratulate The Fern Society of Victoria, the show organisers for encouraging people to grow ferns in this way. Thus a pastime that could have very destructive consequences to our natural bush is being harnessed by this responsible group.

No matter what the avid fern grower achieves or says, for me there will never be anything quite like the magnificence of the naturally evolved fern gully like Melba Gully in the Otways.



BJS
12/83.

"NOW THAT'S WHAT I CALL A BIRD'S NEST FERN . . . !"

BEGINNERS' PAGEComposting

During my soil testing demonstration at our April meeting, I was very surprised to find the nitrogen and potash content of my compost at maximum reading on the chart. As this compost was only partly protected by a Jacaranda tree, I had expected most nutrients to be washed out. This strengthens my belief that the best type of compost bin available is the 21 cub.ft. wire bin by ARC.

The CSIRO book on composting recommends a bin which allows plenty of air circulation throughout the materials decomposing rather than a sealed bin.

Some may ask "what about flies?" Recently I was asked to call and see a fibreglass bin secreting a stream of green jelly-like slime. On opening the lid I found the bin full of what looked like green vegetable soup. The lady had been putting all decomposing fruit and vegetables in without any dry material. A few dry leaves, some sawdust, or buzzer chips from the local joinery shop, or even strips of newspaper, etc. would have made this into reasonable compost. Of course, there were plenty of flies around her bin.

After collecting a good mixture of material for your compost bin, add half a cup of Blood & Bone, half a cup of Sulphate of Ammonia for each barrowfull, and I can assure you this will make good compost without any problem from flies. If your compost does become too moist a plastic cover drawn over in tent fashion with ends left open for aeration will suffice, and if lack of moisture is the problem, a two gallon can of half strength Maxicrop is excellent.

With the Autumn season in full swing, Happy Composting!

Keith Hutchinson

Glossary of Terminology (Cont'd.)

Gametophyte Prothallus, Prothallium

Generic Of or pertaining to genus

Genus (plural, genera). A group or species resembling each other so distinctly that a close relationship is indicated. The smallest natural group containing distinct species.

Gland A minute growth on a fern part, like hair tips, which usually secretes an oil or resinous liquid.

Gloriosa Glorious, superb

Gracilis Slender, graceful

The Sudbury Soil Test Kit will be available at \$12.50 at our May meeting.

They normally retail for approximately \$17.95, so are an excellent buy. If you require one, it may be preferable to place an order, as I have a limited number. Telephone 459 9716 between 9 am and 5 pm.

BUYERS' GUIDE TO FERN NURSERIES:

VICTORIA

ALLGOOD PLANTS & FERNS
Main Road, Emerald, Victoria
Closed Mondays.
A.H. (059) 684858
Retail

FERN FROND 7
391-393 Maroondah Highway,
Ringwood, Victoria
Retail

"FERN GLEN"
Garfield North, Victoria
Ferns - Wholesale & Retail
Visitors welcome.
Phone: (056) 292 375

M. & G. FFROST
Frost Road - Peechelba
(near Wangaratta)
Phone: (057) 269 287

THE FERN FARM
Kangaroo Flat 3555
Retail.
Phone: (054) 478 807

"MARION'S NURSERY"
4 Hope Street, Rosebud, 3939

MULOORINA FERN NURSERY
Freshwater Road, Kilmany via
Sale, Victoria.
Wholesale.
Phone: (051) 49 2231

BEASLEY'S NURSERY
195 Warrandyte Road
Doncaster East.
Phone: 844 3335

WAYNE LONG FERN NURSERY
63 Athol Road, Noble Park
Phone: 546 5383

VALENTINES FERNERY
80 - 81 Wells Road,
Seaford.
Map Reference: Melway 99H1
Please enter Wells Road
through Patterson Lakes

NORMA'S FERNERY
Carbour, via Milawa

QUEENSLAND

MORANS HIGHWAY NURSERY
Box 47, Woombye 4559
1 km north of Big Pineapple
Turn right into Kell Road,
Woombye. Wholesale & Retail
Phone: (079) 42 1613

NEW SOUTH WALES

FERN NURSERY
6 Nelson Street,
Thornleigh 2120
Wholesale & Retail
Phone: 84 2684

GREEN FROND NURSERY
39 Fisher Road
Maraylya N.S.W. 2765
Near Windsor, N.S.W.
Wholesale Propagation Sporelings
Phone: (045) 73 6207

HIBISCUS GARDENS
Pacific Highway, Tyndale
30 km north of Grafton, N.S.W.
Closed Tuesday only
Ferns and other indoor plants
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Deviot. Phone: (003) 947177
Retail Native & Exotic Ferns

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Mt. Evelyn, 3796.
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(03) 221 1411 (A.H.)

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BEECH FOREST 3237
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Specializing in cool climate native ferns

- DIARY DATES -

MAY 10th	Chris Goudey: "Identification of Fern Families"
JUNE 14th	Bob Chinnick from South Australia: "N.Z. Ferns"

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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