

Continues from previous page

Aphids

Aphids are also sap suckers. They can be removed by hosing with a water jet, or use a Pyrethrum-based spray.

Mealy Bug

Yet another sap-sucking pest, an infestation has the appearance of cotton wool collected at the bases and on the backs of fern fronds. Control these with a cotton tip dipped in methylated spirit, or spray with a Malathion and White Oil mixture.

Leaf-eating pests

These include grasshoppers and caterpillars, which eat fern fronds, especially newly emerging ones. Dipel is an effective control measure.

Staghorn Borer

As its name suggests, it attacks staghom and elkhorn ferns by boring a hole in which it lives. It emerges at night to feed. Control by means of a Pyrethrum-based spray, by Maldison or by a systemic insecticide.

Thrips

These tiny insects graze on the surfaces of young fronds. They seem to be particularly fond of Todea barbara, Polystichum, Doryopteris and Dryopteris species. Control with Maldison, Pyrethrum, Confidor, or a systemic insecticide.

Slaters (wood lice)

Slaters feed mainly on decaying plant tissue, and are commonly found on plants growing in a very open or coarse soil mix. They are also known to feed on the young emerging fronds of ferns. To control them, keep areas around pots free of plant debris, to eliminate places where they can hide or shelter. Place naphthalene flakes around benches, or use Carbary], Pyrethrum or Derris Dust.

Slugs and Snails

They damage new and emerging fronds by chewing them, and are particularly active in wet conditions. They feed mainly at night. They may be removed by hand, or killed by water-resistant snail baits. Use caution with regard to other animals which may be poisoned by the baits.

Coconut scale

This pest feeds by sucking on the undersides of fern fronds, and gets its name from its appearance, which is akin to desiccated coconut. It is fond of Asplenium species, Nephrolepis and Tassel Ferns. Control it with applications of soapy water or a Malathion and White Oil mix. Follow-up spraying at ten-day intervals is recommended. Coconut scale will remain on plants long after it has been killed.

Rats

They chew off fronds which they use for nest making, and are particularly fond of lacey Asplenium species. They also make nests by burrowing into hanging baskets. They may be controlled by use of commercial rat baits (use with care), and by rat traps of various designs. Removal of rubbish and debris from around fern houses will also reduce potential rat problems.

Red Spider Mites

These sucking insects congregate beneath frond surfaces, and normally can be seen only with the aid of a magnifying glass. They do not usually become a pest on ferns unless conditions are right for them - ie warm and dry however, they can build up very quickly in favourable conditions. The fronds will have the appearance of having been sand-blasted. Use Kelthane for controlling the mites.

White Fly

This occasional pest on ferns is usually found in colonies which create a white cloud when disturbed. They secrete a honeydew-like substance which in turn develops a sooty mould. They affect mainly Nephrolepis species. Apply Malathion or a Pyrethrum-based agent for control.

Mosses and Liverworts

These cut off fresh air supplies to the soil and also form a barrier against water. Continual removal by hand is the most effective means of control.

Sellaginella

This eventually will smother a fern and should be removed by hand.

Invasive ferns and sporelings

Remove by hand as soon as they appear, unless, of course, they happen to be one of the treasures you've been trying to propagate. Thanks to members for bringing in specimens. Short topic:

CALENDAR OF EVENTS FOR 2005

MARCH MEETING:

Thursday the 17th march, at the Kevin Heinze Centre, at 8.00pm

Topic: PREPARING FERNS FOR THE SHOW

This will take the format of a forum with a panel comprising of:-

Ray Harrison, who has been assisting the show judges for many years

Rex Gresham, who is a judge of dahlias

Brenda Girdlestone, is the newest member to assist the show judges

This will be a "not to miss" night for those members who are thinking about putting ferns in to the show, or if you have ever wondered what it takes to produce a good fern, There is sure to be some discussions and much learning to be had by all.

Competition category for the night will be Adiantum (Maidenhair) ferns

APRIL MEETING

As we have our show this month there will Not be a meeting on the usual Thursday the 21st.

Fern Show Saturday 16th and Sunday 17th

For more details on this please refer to page 21.

SATURDAY THE 30TH OF APRIL, TO BADGER CREEK,

There will however be an excursion to Badger Creek with fern walks, lunch and afternoon tea and many fern tales.

For more details see page 22.

PRESIDENTIAL PERORATION

This summer has certainly been different to the previous few, and on the whole it has been a lot kinder to gardens and fern collections. Following the big storm of Thursday February 3rd the weather turned pretty autumnal, in fact, and you may have noticed (as we have) that lots of ferns perked up as if autumn had in fact arrived. The heavy rainfall helped to improve ground moisture levels in the garden, too, and it may have set Melbourne up for a record February rain total (still 10 days to go at time of writing).

I trust that most members were less inconvenienced than Gay and I by the side effects of the storm (which the Bureau of Meteorology termed a "southern cyclonic event"). In our garden the winds caused a 25 metre tall Yellow Box tree to tip over about 35 degrees. Having propped itself partly on a nearby tree, it threatened to collapse on to the centre of our "rainforest area" and squash the best established of our ferns and rainforest plants (which took long enough to get going in our conditions in the first place). So rather than take the easy course and fell the tree, we decided to remove as many plants of value as we could and then demolish it from the top down. It's far from the first time we've done this sort of thing, but it's a very slow, and energetic, business working from extension ladders with ropes to lower segments gently and my long "reach-saw" to make the cuts. We've been going at it for a couple of hours at least pretty much daily for two weeks and still have a fair bit to do (some of it tricky) before we can claim success. Not a lot else has got done at our place, as a result.

This has helped to put us even further behind schedule on a long-delayed bathroom rebuilding project. If you've ever done this you'll appreciate that it's pretty much like building a small house, with all the many different trades involved (in our case 12 of them). As the work got behind schedule, they all started pointing to one another as the cause. Then they ganged up on the architect, who naturally resorted to blaming the client. Gay was wonderful - got all 10 of them still with work to do into a small room and talked sense into them. Hopefully won't be too much longer now before it's finished.

At least we haven't have the problems of moving house, and looking after a fern collection at the same time, in the middle of summer. Don and Margaret Fuller have just come through this exercise, seemingly preserving a sense of humour!

We've made mention in recent Newsletters of opportunities for more members to participate in the planning and running of various Society activities. We're pleased and grateful that Bernadette Thomson (who already does much work in connection with our Shows) has agreed to take up the role of auditor, which will save us incurring extra external costs in running the Society. There are still other tasks which it would really be beneficial to the Society to reallocate from Committee members who presently do them in addition to their main duties, or at least to appoint "understudies". Please let us know if you'd be prepared to consider assisting.

We have interesting activities coming up, including plans for several excursions during the year (most of which will be easily accessible for Melbourne-based members). The first of these will be a visit to Badger's Creek Reserve, Healesville on Saturday 30th April, and we intend to publicise this as an opportunity for non-members to come along (at no charge) and join us to observe and learn about indigenous ferns. It would be very useful if members could make efforts to invite individuals who they feel might be interested, and any suggestions as to organisations or publicity channels which might usefully be approached to reach a wider "target audience" for our invitation would be appreciated. On the day, as usual, we'd like all members to play a part in making visitors feel welcome and learning about ferns (please bring, and wear, name badges to help in this - we'll carry spares on the day).

Barry Stagoll

FRONT COVER:

lastreopsis hispida

The front cover, is a drawing by Barry Stagoll and appeared in a newsletter in 1980, and was accompanied by notes supplied by Chris Goudey for the article turn to page 26. Thank you to both Barry and Chris.

FERN AND VIREYA RHODODENDRON SHOW 2005 Saturday 16th April - Sunday 17th April

When you receive this newsletter the Show will only be 5-6 weeks away so I hope that you have selected and started to groom your ferns for the Show. Please make a special effort to contribute to both the display and competition.

A reminder of the Fern Competition categories (full details in the Jan/Feb newsletter).

- Cat. I. ADIANTUM
 - ASPLENIUM
 - 3. DAVALLIACEAE (restricted)
 - 4. A QUEENSLAND FERN
 - 5. POLYPODIACEAE (restricted)
 - 6. FERN IN CONTAINER 150mm OR LESS
 - 7. ANY OTHER FERN (not covered by Categories 1-5)

Category 6 is especially for members who do not, or can not, have larger ferns. ALL MEMBERS ARE URGED TO ENTER THIS CATEGORY.

Our feature display will be QUEENSLAND FERNS and we are aiming to display as larger range as possible. A comprehensive list of these was printed in the Jan/Feb newsletter.

If you are able to contribute to the Show but have a problem getting your ferns there please talk to any member of the Show Committee (listed in the last newsletter). Please ensure that your ferns are free of pest, correctly labelled and have some form of identification as this will ensure that your ferns are returned to you.

We will commence setting up for the Show on Friday 15th April at approximately 11-00am and should be in a position to start accepting ferns for the Competition, display and sales by 1 -00pm. If you are only able to bring in ferns after 6-00pm, or early Saturday morning, please contact Don Fuller (93065570).

We need the participation of a large number of members to make the Show function effectively, so please let the Show Committee members know when you can help. We need people to staff the door, sales area and be display area stewards. We especially need people to help with the setting up on the Friday and the packing up after the Show on Sunday.

We also are in need of assistance with the transport of our props needed to stage the Show. If you have a normal sized trailer or able to tow a hire trailer, please contact Don Fuller.

Those wishing to sell ferns are reminded that they must contribute to the competition/display and that you must obtain a "booking in" form from Bernadette Thomson (93991587). We also need a number of cardboard boxes suitable for fern sales. If you can help please bring them along.

The Fern Show is an important activity of our Society, and a great social occasion, so please give it your full support. Please publicise the Show where ever possible and Fern Show flyers are included with this newsletter for this purpose. Perhaps you can arrange for them to be displayed at such places as garden centres, libraries and community notice boards. If you belong to a Garden Club or another society please promote it there.

We would especially like to see those members unable to attend our regular meetings so please come along and participate.

Hope to see you all at the Show

EXCURSION TO BADGER CREEK

On Saturday 30th of April, 2005

On this day we will be meeting at Badger Creek Reserve near Healesville (Melways 512 ref S1).

It is planned that we meet around 10am (latest arrivals for the morning walk 10.30am) which will allow us to claim a good spot to set up for the day.

BYO picnic lunch & drinks (including hot drinks). Lunch will be on returning from our walk, with the chance to mingle and socialise with members and visitors to talk about our favourite subject "Ferns". After lunch there will be opportunity for a further walk (which can serve to walk off those extra calories that may have been consumed at lunch).

For those who'd like to stay on it's suggested they may like to enjoy afternoon tea together around 3 to 3.30pm. Or for an alternative way to finish off the day members may wish to call into Kuranga Native Plants Nursery located at 118 York Rd Mt Evelyn - a relatively short detour from the Maroondah Highway en-route back into Melbourne. This is a new site-opened a few months ago (much larger than their Ringwood site for those who know that) and promises to be a nursery experience with a difference. Kuranga is well known as a leading native nursery and the stock includes ferns (for those who have not been ferned out). They have a nice little café on-site for those who'd like to take afternoon tea there.

See Melways Map Ref 53 Ref K3 - travelling from Healesville turn left off Maroondah Highway at Hereford Rd (first traffic lights in Lilydale shopping strip), then right into Swansea Rd at the first roundabout and left into York Rd at the next roundabout.



In addition to lunch, we recommend you bring chairs, and afternoon tea if you wish to have this at the Reserve.

It has been many years since the society has visited Badger Creek so it will be interesting for those members who ventured on the last visit to see what has changed (for good or bad).

We propose to invite other clubs and the public, to give them the chance to see what we are all about, so bring along a couple of friends so they can be a part of the experience. This will be a good opportunity for us to publicise the Society - so come along and assist in spreading the word on ferns.

Badger Creek is a well renowned fern habitat area of the Yarra Ranges Region of Victoria, and amongst other things we can expect to find many varieties of treeferns, filmy ferns, blechnum, calochlaena, doodia, dennstaedtia, histiopteris, pellaea, polystichum, microsorum, adiantum, asplenium, lastreopsis, lindseae, gleichenia and hopefully still some todea barbara if we look closely. The pathways are graded and rated as easy walking.



Fern allies are generally very primitive plants with ancient fossil records. They have some features Similar to true ferns but they also have a number of obvious differences.

The genera which are generally included in the fern allies are Equisetum (Horsetails), Psilotum (Skeleton Fork Fern), Tmesipteris (Fork Ferns), Lyco--podium group (Tassel Ferns and Clubmosses), Selaginella, Isoetes (Quillworts) and Phylloglossum (Pigmy Clubmoss).

Fern allies do not have fronds; they have leaves which are small or linear with a single unbranched vein.

They do produce spores however the spores are often held in large sporangia with several hundred spore compared with the usual 64 spores in the sporangia of true ferns. The sporangia are also on the upper surface of the leaf in the leaf axil.

Some of the fern allies produce two types of spore; microspores which develop into male type prothalli, and megaspores which develop into female prothalli.

Equisetums (Horsetails, Scouring Rush)

Equisetums have a freely branching underground rhizome system. Some species are very weedy and their sale is banned. Vertical aerial stems arise along the rhizome. The aerial green stems are hollow with a partition at each node. The leaves are small, scale-like in a ring around each node. Fertile stems terminate in the spore bearing cylindrical cone or strobilus. The spores are green and of a single type. Each spore has four strap like attachments called elators. The elators tend to tangle together so that the spores are often shed in groups. Equisetums are widespread throughout the world but, apart from introduced species, absent from Australia and New Zealand however Equisetum arvense has become naturalised in both countries.

The genus name is derived from the Latin *equis*, meaning horse and *seta*, meaning bristle. (The horsetails range in size from the diminutive E. scirpoides (stems averaging 12.9 cm tall and 0.5 - 1.0 mm diameter) to the giant horsetails, E. giganteum and E. myriochaetum, reaching heights of 8 or more metres. Equisetum has a history stretching back to the Cretaceous and possibly as far back as the Triassic. As a result, Equisetum may perhaps be the oldest living genus of vascular plants.

There are 15 living species of the genus *Equisetum*. The seven species in the group called the scouring rushes have a rough silica impregnated surface and were used for scouring pots and pans. They include *E.giganteum*,

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Equisetum arvense



E.hyemale strobilus





Continued from previous page

E. myriochaetum, E. ramosissimum, E. laevigatum, E. hyemale, E. variegatum and *E. scirpoides.* The eight species of the group called the horsetails tend to be regularly branched and therefore resemble brushy horsetails. They include *E. arvense, E. pratense, E. sylvaticum, E. fluviatile, E. palustre, E. bogotense, E. diffusum, and E. telmateia*

Psilotum from the Greek psilo meaning naked.

Psilotums (Skeleton Fork Ferns or Whisk Ferns) have an underground rhizome without any roots but covered in rhizoidal hairs. The green stems are flattened or angular, and leaves, if present, are small scale-like structures. The aerial stems fork repeatedly. The spores are held in rounded sporangia which are grouped together in threes to form a synangium. There are two species; both are present in Australia and are also widely distributed in the tropics and subtropics. *P. nudum* has aerial shoots which are strongly angled. It occurs in all states except S.A. and Tasmania.

P. complanatum has distinctly flattened stems. It occurs in Queensland and N.E. NSW.

The spores of *Psilotum* germinate in the dark (i.e. when buried in soil). The germinating spore becomes associated with a fungus. The resulting prothallus is a tubular colourless structure with numerous hairs. After fertilization a colourless, leafless, rootless shoot works its way to the surface and develops chlorophyll. *P. nudum* will grow quite well in a pot or hanging basket, it likes a well drained slightly alkaline mixture.

<u>*Tmesipteris*</u> from the Greek *tmesis* meaning a cutting or incision referring to the divided fertile bracts.

Tmesipteris (Fork Fern) is related to Psilotum both belonging to the same family.

Tmesipteris also has an underground rhizome with no roots but possessing root hairs. The rhizome is more fleshy than *Psilotum* and less branched. The aerial shoots tend to rise at intervals instead of as a group with *Psilotum*. The aerial stems are not photosynthetic and the leaves are replaced by flattened bracts which are a direct continuation of the stem. The fertile bracts are bifurcated and the spore is held in elongated spore sacs which are usually paired.

The development of a new plant from spore is similar to Psilotum.

There are about 15 species and they occur in some of the Pacific Islands, and in Australia and New Zealand. There are 6 species in Australia with 4 occurring in Victoria. They are very difficult to transplant and seldom cultivated.

Lycopodiaceae This family includes *Phylloglossum*, *Lycopodium*, and the two genera which have been split off from *Lycopodium*, namely *Huperzia* and *Lycopodiella*.

Lycopodium and **Lycopodiella** (Clubmosses) Lycopodium comes from the Greek lykos (wolf) and pus (foot) from the resemblance of the stem tip of some species to a wolf's foot. The suffix *ella* means small. Both genera have an elongated rhizome or creeping stem with stems arising at intervals, and the stems have

unequal branching. The spores are of a single type and are held in a terminal strobilus. The two genera are very similar, the stems of *Lycopodium* tend to arise more from the side of the creeping stem, the spores have a different appearance, and gametophytes differ.

Both of these genera have about 40 species with four *Lycopodiums* in Australia and three in Victoria. There are five *Lycopodiellas* in Australia with two in Victoria. Both genera are seldom cultivated as they are resistant to domestication. *Lycopodiella cernua* is reported to be difficult to transplant but once established it is easy to keep growing.





Psilotum mudum



Psilotum mudum synangium



Tmesipteris tannensis

Continued from previous page

Huperzia Tassel ferns, named after the German botanist J.P.Huperz.

Huperzia are tufted plants with stems showing branching into two equal sections.

This is a widespread genus with over 200 species, with 12 in Australia, and only two in Victoria. *H. varia* and *H. australiana* which is an alpine species.

Tassel ferns are mostly epiphytes and also may be found growing in rock crevices. They grow well in hanging baskets, the growing medium needs to be open and well drained. Most appreciate warmer conditions. Common ones in cultivation are *H. squarrosa* (Water or Rock Tassel Fern), *H. phlegmaria* (Coarse or Common Tassel Fern) and *H. prolifera* (Square Tassel Fern). A beautiful but rare fern is *H. dalhousiana* (Blue Tassel Fern).

The spores are held in sporangia in the axis of the scale like leaf, and are commonly gathered at the end of the stem in a terminal strobilus.

The spores develop in the dark below the surface of the culture medium and need a my corrhizal fungus.

Phylloglossum from the Greek phyllon (leaf) and glossa (tongue)

There is only one species in this genus *Phylloglossum drummondii* and it only occurs in southern Australia and New Zealand. It is a small plant up to 5 cm. tall, with a basal rosette of leaves, an underground tuber, and a fleshy erect spore bearing section with the spore held in a terminal strobilus. It grows in association with a fungus. Tends to occur in wet low lying areas.

<u>Isoetes</u> (Quillworts) from the Greek *isos* (alike) and *etos* (a year) in that they look unchanged from year to year.

Isoetes are small ferns which grow submerged in shallow water. They superficially resemble a clump of grass. The base of each leaf is swollen like a corm. The spores are held at the base of the leaf and are of two types, microspores and megaspores. The former develop into male prothalli and the latter into female. There are about 100 species with 15 in Australia and 5 in Victoria.

<u>Selaginella</u> (Clubmoss) These ferns are similar to the *Lycopodiums* and share the same common name. The distinguishing characteristics from the *Lycopodiums* are firstly that the *Selaginellas* have a small ligule at the base of each leaf, and secondly they have micro- and megaspores. There are about 700 species, mainly in the tropics, with about 10 in Australia, and two in Victorian, plus one naturalized species *S. kraussiana*.

Most cultivated specimens come from overseas. *S. kraussiana* is an African species and tends to be weedy, although the golden '*aurea*' is an attractive plant. *S. martensii* (Clumping Clubmoss) and *S. pallescens* both from Mexico are commonly grown. *S. wildenovii* (Electric Fern) and *S. uncinata* (Rainbow Moss) both develop a blue-green iridescence are attractive ferns but require warmth.

Selaginellas usually develop their spores in terminal strobila and also produce microspores and megaspores.













Drawing featured in 1980 new/letter

lastreopsis hispida (hairy) BRISTLY SHIELD FERN

An exceedingly beautiful fern, easily recognised by its finely dissected fronds and the excessive hairiness of the stipe.

The Bristly Shield Fern is a common lowland fern of New Zealand, where it often covers large areas of open bush land. In Australia, this fern has been recorded from Tasmania, New South Wales and Victoria, where it usually occurs in deep rainforest. Rare in New South Wales and Tasmania, Lastreopsis hispida has been recorded from the Dandenong Ranges, Teenak along the Bunyip River, and at Healesville. It also occurs in the Otway Ranges, where it is quite common in several areas.

This fern usually grows in very wet boggy soil or on rotting logs, or the butts of Tree ferns such as the Soft Tree Fern, Dicksonia antarctica and always in the company of Antarctic Beech trees, Nothofagus cunninghamii.

Cultivation:

This fem is not difficult to cultivate, provided it is given a cool humid position free from direct sunlight and draughts. It likes an acid soil 4.5 pH, and does extremely well in a large tree fern log with a peaty mix. I find it does well in a fairly dark corner in a fernery or glasshouse. It is not suitable for an open fern garden or forgrowing indoors.

(Notes by Chris Goudey) From the Editor: Thank you, Barry Stagoll for making your excellent illustration available!

Reprinted with thanks to Western Australian and South Australian Fern Societies, dates unknown

Platycerium

The Staghorn and Elkhorn Ferns

Courtesy of Crosby Chase and John Banasiewicz and the West Australian Fern Society

Platycerium species grow on trees, rocks and cliff faces, preferring humid rain forest conditions, ranging from dense rain forest to open vegetation.

Cultivation

They will do well, given some protection, being able to adapt to temperate climates although they do prefer warmer climates. In cultivation they may be mounted on trees, or grown in pots or hanging baskets.

Potting Mix

Although these ferns do not grow in soil, a good

open mix (e.g. epiphyte mix) is essential if they are to be grown in pots or hanging baskets. If they are to be slab-mounted, a small amount of mix should be placed on the board together with a small quantity of sphagnum moss, following which the fern pad should be firmly secured to the board.

Water

Platycerium can cope with a good, regular watering in temperate climates during the warmer months. However, in the winter months watering continued next page

should be reduced. Plants grown in the garden will survive on rainfall received in the cooler months.

Fertilising

Use a small amount of well-rotted manure during the growing period, when temperatures are warmer, or, alternatively, a weak liquid fertiliser solution occasionally. Slow release fertilisers are also beneficial, but use them sparingly.

Situation

In temperate climates Platycerium bifurcatum will tolerate quite bright light and many specimens are often seen exposed to full sun for most or part of the day. In such conditions ensure that they receive adequate moisture and that they are protected from strong winds. On the other hand, Platycerium superbum does best in a shadier situation.

Many of the more delicate Platycerium varieties are more suited to shade house, glasshouse or covered patio situations where the quantities of light and moisture can be better controlled.

Pests

Platycerium generally are not troubled by many pests. However, the grower should keep checking specimens for mealy bug and coconut scale. The practice of feeding them with banana skins should be discontinued, as the skins attract cockroaches and slaters to the plants. Staghorn borer (Halticorcus platyceryi)is a moth caterpillar, which attacks the sterile fronds of the staghorn and elkhorn ferns. It bores a hole in which it lives during the day. At night it emerges to eat the young developing fronds. Treat with Pyrethrum or Maldison. Some members advise that a small amount of systematic granules behind the shield seems to be beneficial in treating this pest.

Propagation

Platycerium bifurcatum and Rsuperbum are propagated by spore or by division of plants. Tissue culture has become a popular method of propagating some Platycerium species and cultivars.

Platycerium superbum

And Courtesy of Ron Robbins, Fern Society of South Australia Inc

Propagation By Root Tips

How often have you tried growing Platyceriums from spore? You will have found out that even though rewarding, it can be a very long, tedious and time-consuming procedure that can take up to years. With the clumping or pupping-varieties, of "elks" we are led to believe that if we are to cut a pup from a parent plant, it should be at least 20% in size of the parent plant for a quick and successful result. These "elks" normally achieve the clumping effect by growing new eyes from root tips, which come in contact with light and moisture.

1 found by accident a quicker and much easier way to grow these plants, as an alternative to growing from spore. This seedier procedure to propagate "elks" could be tried as follows: Cut off a small, or smaller than usual pup, leaving on a healthy sized amount of pad, bed the pad into damp sphagnum moss and place in a sealed or semi sealed container; an excellent one is a Yates Mini Greenhouse, place in a well lit and warm position. After a period of time not only will you have a healthy pup, well attached to the sphagnum moss with a good root system, but several small new growths, plantlets or pups on the outer edge of the cut pad. These are plantlets that have developed from the root tips.

This growth 1 find is considerably faster than the time taken with spore and can be equally rewarding. Please realise that although this has worked successfully for me, the procedure is open for discussion, but in my opinion it is certainly worth a try.



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Specialising in elks, stags, bird's nest ferns, native epiphytic orchids; species and hybrids. 1052 Whittlesea-Kinglake Rd, Kinglake West (opposite Primary School) Melway 510 NII. Phone (03) 5786 5031.

For full list and photos; www.fernacres.com.au also; www.ferns.com.au

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FernWorld

Reprinted with thanks to San Diego Fern Society November 2001

North American northeast about impending winter, Keith e-mailed this literary, walk through his garden with a subject header of "Inspired." We all thought that, although he was taunting us a bit, he was right.

As 1 walk through my shadehouse and conservatory, 1 am in awe al natures way the warmth and longer days of spring often creates a burst of new fern fronds to receive that precious light for survival.

As long-term fernies already know, ferns are not all a myriad of combinations of green. There are a few hundred species that give us a change and decorate the scenery with a variety of bronze, orange and red. Unfortunately they will nearly all change to green after a short while.

Athyrium niponicum var pictum and A. drepanopteris are two exceptions to the rule. They look like fern natures imagination gone wild, with an intricate and colorful portrait of what a beautiful fern should look like in another world.

The *Todea barbara*, with erect and imposing fronds have a green spore patch which will release its green spore soon, before turning yellow and brown.

Polypodium pellucidum, up in its basket, its fertile fronds dotted below with spore patches which look like a thousand eyes. The Jap anese birdsnest, Asplenium antiguum cv Victoria, its dozen new fronds all spinning upwards towards the sky.

The four species of Osmunda here, with a stunning burst of previously dormant energy, the newly emerging fronds, stipes and pinnules range in color from all green to bronze. Stunning maidenhair.; from the Adianturn family, their great variety of shape and size, some glistening green, some with spots of white, others with tips of red to bronze or others their entire new frond will flush with red to bronze before changing back to their life - giving green.

Athyriumfilix -femina, quiet over the winter, also emerges. Some cultivars with almost grotesque pinnules, some crested, cv. Frizelliae, with its round and frilly tips and the stunningly different cv Victoriae, all crisscrossed and with crested tips. They have shorter fronds first and becoming longer as summer begins. Some of the Dryopteris are huge. *D. erythrosora*, its dark red fertile fronds with its spore arrangement showing through, looking like it has black dots as well. The almost furry fronds of Polystichum, *Onoclea sensibilis looks* tender and shy ... *Conniogramme gracillus* long, narrow and graceful.

All the Blechnum species range from verdant green to orange and red red. The Woodwardia has emerged with long fronds sagging from all the weight in its unfurling pinmiles.

The Platycerium, the Stags and Elks of the fern world, their mighty new shields are their life-giving water reservoirs which will cover their roots and rhizome like protective umbrellas. Their fertile fronds are long and erect.

Tassel ferns from the Huperzia family, some growing upwards before their weight causes them to bend and weep. These are all dividing towards the end and some more mature plants showing their frilly tasselled tips. Some of these fronds have a slight bend in them, waiting to be layered to produce more ferns

Davallia solida, its rhizomes growing in all directions out of its hanging basket, the new fronds still looking quite skeletal. D. solida var Ruffled Ornata just showing its rosy red crosiers. Other species of Davallia and also the Humata, wrapping around themselves with their long brown or silver scale covered rhizomes.

Cyathea, the treefems of dignity and strength. Their giant crosiers exploding as they unfurl to catch rain drops and shade the trunk. How does nature pack so much into such a small crozier. Their pneumathodes are like traffic or bird warning banners on their stipes, but really help in absorbing oxygen.

They all look real tender, but will toughen before the harshness of summer. The combination of fertiliser, a little water and often", shade, protection from the harsh dry winds, and my encouraging words will see them through.

They really enjoy spring and don't mind being in my alien climate. This has been an exceptionally wet late winter and spring here and everything is exploding into magnificent new life.

February competition Winners

Raffle Winners

- 1st Huperzia *cabinata* John Hodges
- 2nd Huperzia *little john* John Hodges
- 3rd Huperzia *squarosa* Don Fuller

Gaye Stagoll Lauren Radley x 2 Keith Hutchison Jack Barrett



Dot Miniken of 12 Bank St, Avenel, Victoria who due to health reasons needs to sell some of her ferns. They are all in excellent condition.

Any one is interested in the ferns they can contact Dot on 57962335 and make arrangements to visit her, she will give you directions on finding her when you ring.

Avenel is only 5 minutes off the freeway so a short country drive will see you there.

Some of the ferns Dot has for sale is:-A variety of Adiantums including A.diaphanum, A.heipiadulum A.radianum cv.gracillimum, A.raddiantum cv.tuffy tips, A. raddiantum cv. Elegans Anemia mexicana Aglaomorpha Roberts Asplenium mayii Dryopteris filix-mas, D.linearis cristate Humata tvermanii Lastreopsis tenera Mecrolepia strigose Nephrolepis cordifolia cv duffii, N. exaltataaura, N. fluffy ruffles, N. smithii, Polystichum seriferum dividilobum Ruohra adiantiformis

There are also some ladder ferns.

We wish Dot all the best with her health for the future



My Favourite Fern number 9 Pyrrosia lingua nokagiri ba By Keith Hutchison

Pyrrosia lingua commonly called the Japanese Felt Fern is easily grown in a basket or tree fern tub, in partial shade. It requires an open acid potting mix and although slow growing will soon creep over the edge and develop an attractive ball shape.

The fronds are dark green above and light brown below with a fine hairy down very like felt, hence the name. My variety is lingua nokogiri ba, with undulating and serrated edges to each frond making it very attractive.

During the years I have had mine I find it has been free of any pest or diseases.

A native of Japan, China, Vietnam and Taiwan where it grows in trees or on rocks and it is prized and regarded as a collectors favourite. I would recommend every fern enthusiast to obtain one whenever available.

Pests and diseases

Continued from page 14

Last issue

Ants

Ants farm aphids and scale insects for the harvest of their sugary secretions. They also invade sprinklers, blocking the water outlets. They may be controlled by application of Maldison, used at half-strength, or by the many commercial ant poisons available.

Scale insects

These weaken plants by sucking sap from their stems. Even when dead, they tend to remain attached to plants for long periods. They are easily removed by hand. Alternatively spray affected plants with a mixture of Malathion and White Oil on a cool day. The systemic insecticide Disyston is also effective.

Ku os

FERN SOCIETY OF VICTORIA Inc.

POSTAL ADDRESS: E-mail:

P.O. Box 45, Heidelberg West, Victoria, 3081 http://gardenbed.com/clubs/clubs_vicferns.cfm

Our Society's Objectives.

The objectives of the Society are:

- *to bring together persons interested in ferms and allied plants
- *to promote the gathering and dissemination of information about ferns
- *to stimulate public interest in ferns and
- *to promote the conservation of ferms and their habitats.

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SUBSCRI1PTIONS:

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Single	\$15.00	*Pensioner/student	\$12.00	*Family	\$17.00
Pensioner Family	\$14.00	*Organisation	\$17.00		
'Overseas	\$22.00 (P	ayment by international bar	nk cheque in \$A pl	lease. Sent b	y Airmail.)

*Subscriptions fall due on 1st July each year.

MEETING VENUES: The Kevin Heinze Garden Centre at 39 Wetherby Road, Doncaster (Melway 47; H1). Other meetings at members' gardens or as advextised on die following page.

Opinions expressed in this newsletter are the personal views of the authors and are not necessarily endorsed by the Society, nor does mention of a product constitute its endorsement.

Timetable for evening general meetings:

7.30 Pre-meeting activities - sale of ferns. Spore, books, merchandise and special effort tickets.

- Also library loans and lots of conversation.
- 8.00 General meeting
- 8.15 Workshops and demonstrations.
- 9.15 Fern identification and pathology, special effort draw.
- 9.45 Supper and another good yarn.
- 10.00 Close.

NEWSLETTER

If undeliverable return to: FERN SOCIETY OF VICTORIA INC. P 0 Box 45, Heidelberg West, 3081 Victoria Australia. print post approved PP334633/0002

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