

Fern Society of Victoria Inc.

NEWSLETTER



Please note this month's meeting date!!



ABN 85 086 216 704

**Vol. 24, Number 3
May/June 2002**

FERN SOCIETY OF VICTORIA Inc.

POSTAL ADDRESS: P.O. Box 45, Heidelberg West, Victoria, 3081
E-mail: http://gardenbed.com/clubs/clubs_vicferns.cfm

OUR SOCIETY'S OBJECTIVES.

The objectives of the Society are:

- *to bring together persons interested in ferns 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 ferns and their habitats.*

OFFICE BEARERS:


President:	Ian Broughton	Phone	(03) 5964 6402
Imm. Past President	Chris Goudey	"	5282 3084
Vice-President	George Start	"	5962 5059
Secretary	Barry White	"	9337 9793
Treasurer	Don Fuller	"	9306 5570
Membership Secretary	Rex Gresham	"	5796 2466
Spore Bank Manager	Barry White	"	9337 9793
Librarian	David Radford	"	9598 8398
Editor	Lyn Gresham	"	5796 2466
"Kilpara", Selectors	Road, Mangalore, Vic, 3663.	E-mail	<lynrex@mcmedia.com.au>
Book Sales	Ivan Traverso	"	9836 4658

COMMITTEE MEMBERS: Jean Boucher 9707 1592, Lyn Gresham 5796 2466, Brian Nicholls 9836 6507,
 Jack Barrett 9375 3670, Gay Stagoll 9844 1558, Norma Hodges 9878 9584.

SUBSCRIPTIONS:	Single -	\$14.00	Pensioner/student	\$11.00
	Family -	\$16.00	Pensioner Family	\$13.00
	Organisation	\$16.00		
	Overseas -	\$21.00 - Payment by international bank cheque in \$A please.		
		Overseas sent by Airmail.		

Subscriptions fall due on 1st July each year.

**Meeting times and venues will vary this year whilst we gather data on members' preferences.
 The Kevin Heinze Garden Centre is at 39 Weatherby Road, Doncaster (Melway 47; H1).**

 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.

THE BUSH HOUSE NURSERY **WHOLESALE AND RETAIL**



Visitors welcome

Lorraine Deppeler
 Phone (03) 5565 1665
 18 Hermitage Drive,
 Allansford 3277

AUSTRAL FERNS

Wholesale Propagators.

Phone (03)5282 3084.

▮ Specialising in supplying retail nurseries with
 a wide range of hardy ferns; no tubes.



2002 CALENDAR

MONTHLY EVENTS INCLUDING MEETINGS AND EXCURSIONS

**Please note this month's meeting date!!*

We need your co-operation and patience for the remainder of this calendar year while we trial various meeting times and formats in our pursuit of a possible permanent alternative to just Thursday evening meetings, which will be acceptable to the majority of members of our Society. The Committee is planning some Thursday evening and some Saturday afternoon meetings at our present venue, and some Saturday excursions/garden visits. We will value your feedback on these new ideas after they have been tried. Thank you.

**Don't forget - check your meeting dates!!!!*

SATURDAY 11th May Garden Visits

(or in case of inclement weather, substitute date is 18th May)

VENUE: (First garden) 20 Albion Street, Surrey Hills

Full details on page 39

THURSDAY 20th June

VENUE: Kevin Heinze Garden Centre, 39 Weatherby Road, Doncaster. (Melway 47:H1)

Chris Goudey

THE WORLD OF FOSSILS

An overview of the prehistoric timeline, also fern and marine fossils

Competition: Fern cultivars

SATURDAY 20th July at 1.30pm

VENUE: Kevin Heinze Garden Centre, 39 Weatherby Road, Doncaster. (Melway 47:H1)

Rod Noonan will demonstrate

MOUNTING ELK FERNS

Competition: Platyceriums

TIMETABLE for 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. |



THE PRESIDENTIAL PRONOUNCEMENT

Greetings to all. I'm going to show some self-control and not comment on the weather (this is Melbourne – if I start I won't

have room to write about anything else!)

On Sat 6th April, the committee met at Lyn and Rex Gresham's, up near Seymour, to plan for the rest of the year and also to consider the issues that were raised in the discussion in February regarding the future of the Society and how we can best meet the needs of our members. It was an enjoyable day with a break for a barbeque lunch – which included a very interesting potato salad with a sour cream based mayonnaise (see Lyn if you want the recipe). We have incorporated the suggestions from the February meeting in our program for the second half of the year and we will be trying some Saturday afternoon meetings at the Kevin Heinze Garden Centre and more outings. Because we will be changing between Thursday and Saturday meetings you will need to watch the announcements in each issue of the newsletter.

Our March meeting really lived up to all of the expectations we may have had of a talk on the sex life of ferns led by Terry Turney. With, among other things, a stunning presentation of pictures of fern spores and the antheridia and archegonia on fern prothalli, it was a night to remember – congratulations and grateful thanks to Terry. Because I am writing this a week earlier than usual to ensure we give you as much notice as possible of the changed plans for the May meeting, I can't comment on the April meeting. If Terry can bring the video projector from work, we will have had a presentation of ferns

on the internet led by Barry Stagoll. If not, then Barry will have spoken on one of their overseas trips. Either way, thanks Barry – in anticipation of what you did a few weeks ago!!!

I was about to promote our Fern and Vireya Rhododendron Show, but there is no point doing that. Although it is in the future as I write this; as you are reading it, it is in the past. There will be a report in the next issue. What I will say though, is that I really appreciate the work put in by Don Fuller throughout the year, in ensuring the best possible outcome for the show – thank you very much Don.

Please note the change of plans for our May meeting. Chris Goudey was to have been speaking on fossil ferns but he is now unavailable on the meeting night, so we have decided to have a tour of members' gardens on a Saturday afternoon instead. All of the details can be found elsewhere in the newsletter. Please read them carefully and note the provision for inclement weather on the chosen date.

In June, we will have Chris share with us. He will have some genuine fossils for us to examine as part of his presentation. The competition category will be fern cultivars (cultivated forms of plants that are different from the original species but that are NOT hybrids – eg. all of the domestic dog breeds could be said to be cultivars of the original wolf-like animal). I hope that's clear enough. This meeting is to be held on our normal Thursday evening.

I look forward to seeing you at these meetings,
Ian Broughton

A Selection of Gobletisms ...

- How did a fool and his money get together in the first place?
- What was the best thing before sliced bread?
- How much deeper would the ocean be if sponges didn't live there?
- Which sadist put an 's' in "lisp"?
- How did they describe clockwise and anti-clockwise before clocks?
- If man evolved from apes, why do we still have apes?
- And if the No. 2 pencil is the most popular, why is it still No. 2?

"If it were required to know the position of the fruit-dots or the character of the indusium, nothing could be easier than to ascertain it; but if it is required that you be affected by ferns, that they amount to anything, signify anything to you, that they be another sacred scripture and revelation to you, helping to redeem your life, this end is not so easily accomplished."

General Meeting 21.2.02

Ian Broughton outlined the purpose of the meeting, namely to discuss the future of the Society. Don Fuller summarised some of the problems – ageing membership, declining attendances and membership, Ian's departure in the near future and its effect on the fern show, fern sales at the show and at monthly meetings, ferns for the raffle, and the loss of Ian's expertise. The difficulty of some members in attending night meetings was also noted. On a brighter note there was a good attendance at the Kinglake outing despite poor weather. Finances are currently healthy.



interstate rivalry were significant impediments to amalgamation. It was noted that working in with the SGAP Fern study Group would be difficult because they are restricted to native ferns. The costs of organising a national society and the difficulty of arranging meetings were also raised.

Alternatively a combined newsletter by all the state societies was suggested. As a starting point it was suggested that discussions be held with the South Australian Fern Society

about a joint newsletter. Both the Dahlia and the Rhododendron Societies had encountered problems.

The idea of a Saturday or Sunday meeting was canvassed. The majority at the meeting would be able to attend a Saturday meeting, but a few would have difficulty. A regular Sunday meeting would cause problems for more people, particularly churchgoers.

The use of displays at shopping centres has been successful for some other societies. Keith Hutchinson stated the Sun Home Show was a great source of members in the early days. However Terry noted the poor response to the display at Garden World.

It was suggested that we have an occasional Saturday afternoon meeting to test the response. Also suggested was alternating Thursday evening with Saturday afternoon. It was noted that getting speakers on Saturday afternoon might be more difficult. The Saturday meeting could be in the form of an excursion, at the centre, or at members' homes.

Barry White
Secretary

◇◇◇◇◇

The nature of the Society was discussed as to whether it was just a garden club or a Society seriously interested in the study of ferns. The majority opinion was that the society is more than just a garden club. Terry Turney referred to the objectives of the Society in its constitution, which were wider than a garden club.

This meeting took the form of a brainstorming session rather than a decision-making one, therefore lots of ideas were tossed into the pot and so this report reflects the meeting. It's a bit like Mulligatawny soup - a bit of everything!

The roles of separate societies in each State was discussed and the merits and possible means of amalgamating. It was pointed out that finances and

As required by the Constitution, the ideas that were raised then went to the committee to decide what should be done. As a result, and as full accountability to the society members is a priority for the committee, please see the note at the top of page 35 and the year's programme on page 47.

Lyn.



What does cheese say when you take its picture?
Why doesn't glue stick to the inside of the gluepot?
Why is abbreviation such a long word?
At a taxi drivers' party, does everyone walk home?

MONTHLY FERN COMPETITION WINNERS!!!!

March 2002

- 1st Pat Nicholls
Diplazium tomitaroanum 'Giza Giza Hera Shida'.
2nd Don Fuller
Diplazium assimile
3rd Barry White
Athyrium filix femina 'Victoriae'.

Competitors' raffle - Dick Kissane

Special Effort - Fran Harrison,

Norma Hodges, Barry White,
Keith Hutchinson, Jack Barrett.

Report on our excursion to Kinglake

About 28 members and friends gathered at Fernacres fern and native orchid nursery in Kinglake West last October, to be greeted by a SCRUMPTIOUS and generous morning tea. We were given a talk about the nursery; the philosophy behind the business, some of the problems they faced in their initial learning phase and the solutions which worked for them in their situation.

There followed a tour of the facility, which is beautifully situated in moist, lush rainforest, including the propagating igloo. Firmly on the agenda for many of us was the opportunity to buy; ferns, orchids, potting medium and treefern slabs.

Jehosophat Gully was our next stop. We divided up and took two of the four or so walking tracks through beautiful forest with an abundance of ferns to see, returned to the picnic area to eat our picnic lunch in shelters erected by National Parks workers.

Before we left the nursery, Eddie had offered to take us to another, little known fern area so after lunch we followed him down a gravel track and stopped at three spots which shared a lovely, serene atmosphere and were truly beautiful oases of green; ferns, moss and even epiphytic orchids abounded in pockets of rainforest.

There was mention beforehand of some interesting places folk could also visit; the House of Bottles, an Azalea nursery, doll museum and harlequin glass museum were a few- but our day was taken up by enjoying Mother Nature and revelling in Her bounty.

Many thanks to committeeman Brian Nicholls for the planning he put into the day. I'm sure everyone who was there had a thoroughly good time. ◊◊◊◊◊

FERN GLEN

Wholesale and Retail.
Visitors welcome.



Garfield North,
3814.
Phone (03) 5629 2375

An Ode to the *Athyrium*
Where the copse wood is the greenest,
Where the fountain glistens sheenest,
Where the morning dew lies longest,
There the Lady Fern grows strongest.
Sir Walter Scott (1770-1850)

FERN ACRES NURSERY

Retail.

Phone (03)5786 5031.

1052 Whittlesea - Kinglake Road, Kinglake West
(opp. Primary School).

Melway Ref: 510 N11.

▯ Specialising in elks, stags, bird's-nest ferns and
native epiphytic orchids, species and hybrids.

Wide range, low prices.

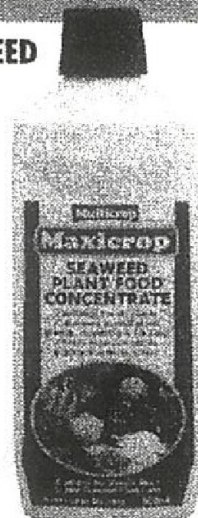
Multicrop

Maxicrop

Australia's original liquid SEAWEED
plant food concentrate

- Stimulates vigorous root development
- Builds resistance to insect and fungal attack
- Enhances fruit and flower formation
- Non burning, easy to use on all plants
- Minimise transplanting shock
- Harden plants during periods of stress
- Establishes plants quickly after planting or transplanting

Multicrop & Maxicrop products
are available at all leading
garden supply outlets.

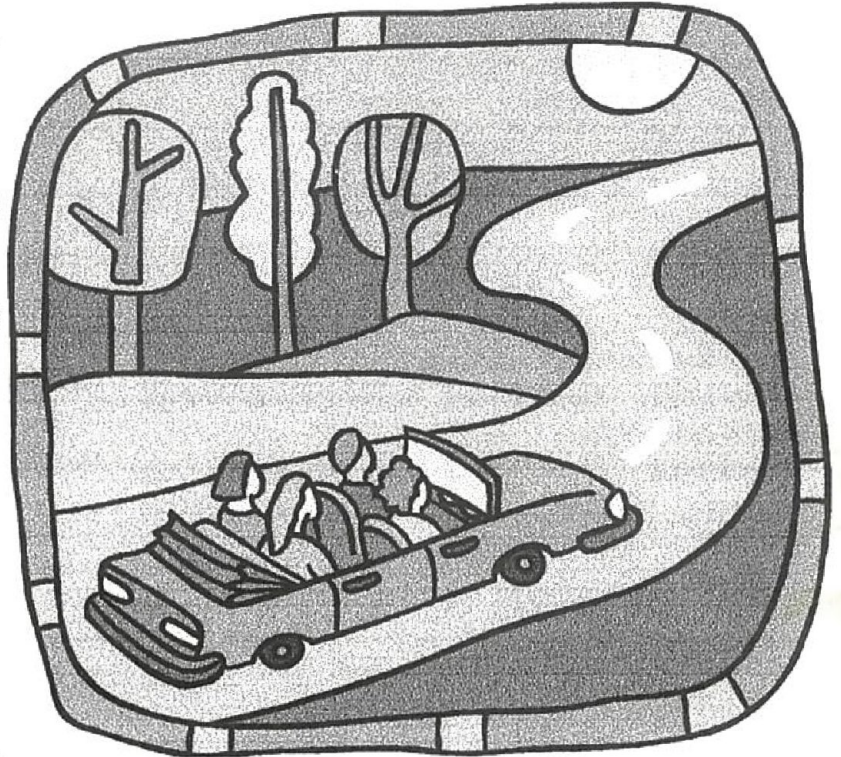


SATURDAY 16th May Garden Visits

(or in case of inclement weather, substitute date is 18th May)

If it should be raining heavily on the morning of 11th May, please phone Brian Nicholls on 9836 6507 to ascertain if the visits are to be postponed to the following Saturday. Arrangements for the day are as follows:

1. 10.00am - 11.15am Visit to Pat and Brian Nicholls' garden at **20 Albion Street, Surrey Hills** (Melways Map Ref. 60 F1) which includes a cuppa.
2. 11.45am - 12.30pm Visit to Olive and Archie Busby's garden at **73 Bradleys Lane, Warrandyte** (Melways Map Ref. 23 C11). Phone number is 9844 3991.
3. 12.35pm - 2.15pm BYO picnic lunch on the bank of the Yarra at Warrandyte (the Bakery, Deli & pie shop, and Fish and chip shop are all close at hand for those who may prefer take-away food). Recommend bringing a chair as limited seating available on site.
4. 2.30pm - 4.00pm Visit to Gay and Barry Stagoll's garden at **170 Knees Road, Park Orchards** (corner of Husseys Lane - Melways Map Ref. 35 E5) - includes afternoon tea. Phone number is 9844 1558.



As applies to all our functions and meetings, your guests and interested persons are very welcome to share this day with us so bring them along! □□□

Forty Two Shades of Green

I have never tried to count the shades of green in our forest, but one day while on a picnic a friend came across a group of handicapped people. My friend inquired if they were "having a nice time" and "what have they been doing." The group related what they had been doing and yes, definitely, they were having a lovely time. My friend said, "What did you see on your walkabout?" A man very deep in thought replied, "We saw 42 shades of green."

Have you ever really looked at all the shades of green in a forest? Maybe that's a big task.

But it's a good idea to slow down and give yourself time to really see the wonders large and small that surround you every day. This snippet was part of an article by Edith Shaw in the Nelson F.S. Newsletter, Sept.-Nov

WANTED TO BUY

Chris Goudey is seeking a number of copies of his book **"FERNS IN AUSTRALIA"** for his family. Do you know of anyone who no longer uses their copy and may like to sell it? Price is negotiable. Contact Chris on 03 5282 3084.

FERNS WHICH MAY BE SUITABLE FOR YOUR GARDEN.

Adiantum formosum **Black Stem Maidenhair or Giant Maidenhair**

Medium. Native of Vic., NSW, Qld & NZ.

Fronds can grow to 1.5 metres. Low - med. light. Difficult to establish, but hardy in shadehouse or garden once established.

A. hispidulum **Rough Maidenhair or Rosy Maidenhair** Small. Native Australia-wide, Pacific & southern continents. 15 - 45 cm fronds, attractive pink new growth. Plant against rocks or a log. If its feet are kept damp it will do well in the garden. Low to high light. Easy.

Arachniodes simplicior **Variegated Shield Fern**

Medium. Japan, China. Slow-growing. Moist soil, medium light.

A. standishii **Upside-down Fern.**

Large. Japan, Korea. Forms a clump fairly quickly. Moist soil, medium light.

Asplenium flabellifolium **Necklace Fern**

Small and dainty. Aust. & NZ. Hardy in a moist, sheltered spot. Resents disturbance.

A. nidus **Birdsnest Fern**

Large. Prefers a lightly shaded position protected from wind. Grow in the garden, a pot or mounted on a slab or tree. Beloved of snails!

A. obtusatum **Shore Spleenwort**

Chile, sub-Antarctic, NZ, Aust. Grows among coastal rock and undergrowth just above shoreline though in Tas. is found far inland. Loves the cold.

Athyrium filix-femina **Lady Fern.**

Northern hemisphere in the middle latitudes. A large, deciduous fern with beautiful, frilly but brittle fronds; it will break easily with handling or in wind. Keep damp.

A niponicum var. pictum **Japanese Painted Fern**

Small. Native to Japan, other parts of Asia. One of the most brightly coloured of all the ferns. Deciduous therefore hardy in cool climates. Requires well drained, mostly organic soil.

Blechnum brasiliense Red form -**Brazilian Tree fern.**

Brazil, Peru. Large fern which grows in wet jungles. A tropical species though the red form is slightly cold-hardy. May pay to pot one plant up to try in the greenhouse? Not a tree fern but can develop a two metre trunk. I have never seen this length in cultivation. Must be kept very moist in summer.

B. cartilagineum

B. nudum

B. patersonii

B. penna-marina

B. procerum

B. wattsii

Cheilanthes austrotenuifolium and C. myriophylla

Small xerophytic (desert) ferns which require lots of light and moist to dry, well drained soil. Many xerophytic ferns desiccate in dry conditions and rehydrate ('resurrect') when watered, and this is one. Resist the urge to trim dry fronds!

Christella dentata

Diplazium australe Austral Lady Fern.

500 - 1500 cm, can develop a small trunk. Damp, low light.

Doodia aspera Prickly Rasp Fern

Aust, Norfolk I. NZ. A small fern with gloriously coloured new fronds. Open forest & semi-exposed positions. Likes to grow near rocks and in plenty of moisture, & will form a large colony over time in good conditions.

D. caudata Small Rasp Fern

Aust, NZ. Up to 30 cm high, it is softer to the touch than *D. aspera*. Will grow in a sheltered position in open ground.

D. maxima

D. squarrosa

Has the broadest fronds of this list of Doodias and is harsh to handle. Grows up to 90 cm high in moist soil in open forest. Easily grown in a protected spot in the garden.

Dryopteris affinis Cv. Christata The King.

Europe. Grows to 150 cm (60") though I'd like to see that! Mine's maybe 60 cm. Very pretty, finely crested fern which is hardier than it looks. Grow in a moist spot in low light. Deciduous in winter.

D. erythrosora Autumn Fern

Japan, Korea, Taiwan, China. Bronze-pink new growth. Conditions as for the above *Dryopteris*.

D. filix-mas Male Fern

Widely distributed throughout the Northern Hemisphere and popular in cultivation here. Easy to grow but a little dull. Hardy in moderate shelter in a moist spot. Deciduous? 35cm (15").

D. sieboldii

Japan, China. Hardy in fernery in Vic.

Equisetum bogatense

- E. scirpoides** **Dwarf Horse-tail**
Grows to 6", flaccid. Wet feet.
- Gleichenia dicarpa** **Pouched Coral Fern**
Grows in full sun or light shade but needs to have wet feet at all times. Difficult to establish but hardy once it settles in.
- Lastreopsis microsora**
- Microsorium diversifolium** **Kangaroo Fern**
- M. fortunii**
- M. scandens** **Fragrant Fern**
- Notholaena sinuata**
A resurrection fern which will look its best with a good water supply. Likes high light. Grow beside rocks. Very attractive, wavy edges.
- Osmunda banksiifolia**
A large, deciduous fern for a damp spot in low light.
- O. regalis** **Royal fern.**
A large, deciduous fern for a damp spot in low light.
- Paesia scaberula** **Ring Fern**
From New Zealand. Will tolerate a dryish spot in good light, will even tolerate some sun. In my experience the Ring fern resents disturbance though it may spread once established. This fern has fine, lacy fronds and a sweet musk fragrance.
- Pellaea falcata** **Sickle Fern, Australian Cliff Brake.**
Aust, NZ, India, Malay Peninsular. Semi-shade, moist - dry soil. Looks scrappy unless watered enough. Deep green. There is a small form which is attractive.
- P. falcata var. Nana (shiny leaf form)**
Shiny Sickle Fern
Cultivation as above.
- P. ovata**
High light, moist, well drained soil. 8-24"
- P. rotundifolia** **Button Fern**
NZ. Damp, rocky open forest to dryish, less sun, difficult to establish in garden, though I've had no trouble. Keep moist while settling in.
- Platycterium veitchii** **Silver Elkhorn.**
Qld, NSW. High light, heat, cold (but not frost) and drought tolerant. Will sunburn in extreme sunshine. Do not trim old shield leaves as they soak up moisture. Water, but let it dry to just damp between waterings. The hardest Stag or Elkhorn.
- P. bifurcatum** **Elkhorn ("Elk") Fern**
- P. superbum** **Staghorn ("Stag") Fern**
- Pleurosorus rutifolius** **Blanket Fern**
Arid.

- Polypodium australe** **Southern Polypody**
syn. *P. vulgatum*.
Britain. Native to damp, rocky country.
- P. australe cv. Cambricum** **Welsh Polypody**
Britain. Native to damp, rocky country.
- Polystichum aculeatum** **Hard Shield Fern.**
Britain. Native to damp, rocky country. Moist, medium light.
- P. australiense**
- P. proliferum** **Mother Shield Fern**
NSW, Vic, Tas. 2 feet. Cut off old fronds after winter and as necessary. Love water.
- P. setiferum** **Soft Shield Fern.**
Europe. Damp, tolerates low light
- P. tsus-simense** **Dwarf Leather Fern**
China, Korea, Japan, Taiwan. Moist, shaded woods. 30 cm. Attractive, popular.
- Pteris cretica & cvs.** **Cretan Brake**
Moist garden, medium to high light. Grubs like it - cut damaged fronds off to get a flush of new growth.
- P. faureii**
May be a little tender. Plenty of water. Smells, sometimes of cat's wee.
- P. microptera**
Rarish. Lord Howe Island only. A large fern, it should suit a moist garden in light shade.
- P. umbrosa** **Jungle Brake**
Large. Trim tatty fronds in late summer/autumn. Damp, shaded garden. Will take more sun/light if watered madly.
- Rumohra adiantiformis (Cape form)**
More hardy form of Rumohra.
- Sticherus tener**
Moist, warm, transplant when small, slow to establish.
- Todea barbara** **King Fern**
Aust, NZ, S. Africa. Fronds to 2m, trunk eventually to 1½m, slow growing, long lived. Moist, a little sun OK.
Fronds grow upright to horizontal, depending on light level.
- Woodwardia orientalis**
- W. radicans**
- W. fimbriata**

FRONDLY FERNS.

Ferns. They have been around for millions of years. Looking at these delicate and elegant plants, it's hard to believe that they've survived for so long, yet at one time the ancestors of ferns like the ones we see today were the dominant plant species over most of the earth. Today they are found in cool, temperate and tropical areas, mainly rain forests, with some species growing close to the sea, others high on the alpine plateau.

We're very lucky in Australia because we have such a huge range of ferns growing everywhere apart from the desert regions. Probably the most common of all in our gardens is the one usually called the Fishbone Fern. You can see why when you look at a frond, with its leaves growing at rightangles to its stem, rather like a fish's ribs. The wonderful thing about these is that they can be grown in pots or in the garden - and even if they're burnt in a bushfire they can still come up again.

Sometimes you will notice that the fronds in the centre of the plant are a different shape, texture and a different colour. They're what is called fertile fronds. They're full of spore - remember that ferns don't have seeds. This is the way they reproduce, and this makes ferns fascinating. Compare the different spore patterns on the underside of the fertile fronds of your different ferns - they're quite beautiful and they're also the easiest way to identify which is which.

Almost all ferns need protection from strong winds and the blazing sun, which can destroy them. So we construct shady structures which we variously call a shade house, fern house or bush house. In the glorious days when the fern craze was at its peak, huge fern houses were built in the gardens of large estates, palaces and public gardens but of course we can build perfectly adequate and attractive smaller versions in our own gardens today. Inside it's a totally different world to the rest of the garden. Suddenly, it's a soft and green gloom and everywhere is the earthy smell of moist soil and foliage. These are the conditions most ferns love most of all, and in which they thrive. Huge tree ferns can dominate a shade house with a high enough roof. Their powerful trunks are in fact enormous rhizomes and they are topped by massive buds and a cascade of enormous fronds. Their beauty is virtually unchanging all year around.

But what about growing them in pots or as house plants? They grow marvellously in a container, but you've got to have the right soil. To moist, good quality, bought potting soil add some slow-release fertilizer, a handful of dolomite limestone and a good handful of blood and bone. But there's one other thing

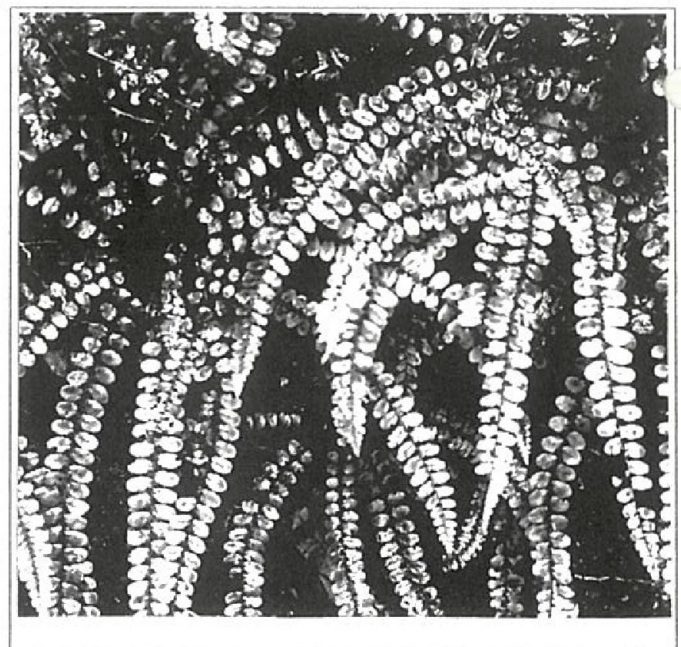
ferns love; organic matter, either matured compost (humus) from your compost heap or bin, or in the form of peatmoss (or better still, copra peat, a coconut fibre product). Add a couple of handfuls to the mix, mix thoroughly and you've got a lovely, ferny mix which will hold the moisture and at the same time drain well.

Ferns hate having wet feet from sitting in heavy, soggy, stagnant soil so they need repotting into fresh medium whenever the mix breaks down into mud; it often has a sour smell, too. Get rid of it. Unless the fern roots are crowded, you can repot your fern back into the same container, but with our lovely, fresh ferny mix this time. Lastly, water it in. You will have given the plant a new lease of life.

Now, I would like to say to you that you can have a most marvellous fern garden in the grand style - and size, but it's just not necessarily true; most of us simply don't have the room. But almost every garden has a little corner that is shady and moist and would grow the most wonderful selection of ferns. If you don't even have that, you can grow them as house plants; just keep the moisture content of the air around them up, by misting with a trigger sprayer adjusted accordingly and sitting their pots on moist pebbles or sand. Just don't have them sitting in water, but above it.

Have a go at growing some of our beautiful native ferns - you'll be glad you did because they'll light up your life!

This article was written by Lyn Gresham. It was based on a segment of "Gardening Australia". ☺☺



Speaker ReportPlatycteriumsStags and ElksRon Robbins

- Platycteriums belong to the Polypodiaceae family. There are 18 recognized species of Platycteriums.
- Africa, Madagascar, Indochina (Laos, Vietnam, Cambodia and Thailand), Malaya, Java, Borneo, Burma, New Guinea and through tropical Australia.
- Relatively easy to grow ranging from pantropical conditions to semi tropical. Most species are not difficult but we should try to give them as near as possible to a natural habitat.
- Some species have a distinctive wet and dry season—it is best to try and determine which is which and adjust conditions accordingly.
- Most people tend to over-water—try to regulate; best to keep damp as over-watering causes rot (can be determined by the dark staining of the base fronds). Platys like well lit areas preferably without draughts but good air circulation. *P. veitchii* can tolerate dry and hot conditions (they say full sun but discretion should be used). Try to grow in bright conditions with moderate warmth.
- Platys do better in high humidity. This can be achieved by trying to simulate these conditions.

PROPAGATION BY ROOT TIPS.

How often have you tried growing Platycteriums 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.

I found by accident a quicker and much easier way to grow these plants, as an alternative to growing from spore. This speedier 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 I find is considerably faster than the time taken with spore and can be equally rewarding.

Please realize that although this has worked successfully for me, the procedure is open for discussion, but in my opinion it is certainly worth a try.

NATURAL GROWING CONDITIONSWETTEST

Madagascariense	Cloud forests in central Africa.
hillii	Tropical rainforest of N.Qld (coastal plains), New Guinea
alicorne (Vassei)	Madagascar and east African coast
ellisii	Eastern Madagascar
ridleyi	Borneo, Sumatra, Malay Peninsula

WET AND DRY SEASONS

coronarium	Philippines, Vietnam, Burma, Thailand, Laos, Indo China
bifurcatum	Eastern Australia
willinckii	Java
andinum	Isolated pockets Peru, Bolivia
elaphantosis	Central Equatorial Africa but not Congo basin.
Stemmaria	Central western tropical Africa
Superbum	Australia, about the same as <i>P. bifurcatum</i>
Grande	True Grande from the Philippines
Holttumii	Thailand, Vietnam, Laos, Cambodia, Malay Peninsula
Wandae	New Guinea
Wallichii	Thailand, Malaysia, India, Burma, Yunnan, Indo China

(Continued on page 47)

THIS IS A FERN? YOU MUST BE JOKING!

By Estelle Brink

Reproduced in "Fern World", the San Diego Fern Society's publication of August 2001 from "A Leaf from the Herbarium, NOTES FROM THE SELMAR SCHONLAND HERBARIUM Grahamstown, South Africa" Issue 2, September 1995 and further reproduced here, with thanks to SDFS.

One expects to find ferns growing around the trunks of tall trees in shady forests - but in water? Well yes, there are a number of water ferns as different from each other as they are from terrestrial ferns. There is *Azolla*, the Red Waterfern; minute 1 cm plants floating on bodies of water but multiplying so prolifically that they have become weeds to reckon with, affecting fish life and farming all over the country. There is *Marsilea*, rooted in the underwater sludge and mud of vleis with floating fronds that look for all the world like 4-leaf clovers. And there is *Isoetes* which is also a pteridophyte but has an order all its own, the Isoetales. Insignificant as they might appear to us with their roots in mud and limp, pale green, strap-shaped leaves swirling on the surface at the whim of the slightest current, these are plants with a long, proud ancestry which can trace their descent directly to the 16 m tall columnar fossil trees, *Sigillaria**, of the Carboniferous period.

Of course these have long been extinct but the tail end of their genetic line, *Isoetes*, has 75 species flourishing in temperate and tropical areas of the world to this day. Eight of these species are Southern African but only one occurs in the Eastern Cape Province. This species, *Isoetes wormaldii*, has had botanists and nature lovers very worried for, search as they might, it seems to have disappeared from its favourite haunts around Grahamstown. For over twenty years there has been no sign of the plants in the seasonal ponds and vleis ... Where Pocock, Seagrief and Jacob Quillarmod had collected them.

Has it too become extinct like its forebears? Well, not quite. After searching unsuccessfully in all the known locations, Tony Dold has found a small colony in Peddie, miles north from where it was known to occur before. It is still hanging in there - but its distribution range seems to have been severely reduced by the repeated droughts that have afflicted our veld with increasing intensity. It seems unlikely that the delicate plants would survive desiccation, so probably it is the dormant spores that survive for years on end and grow again when the depression fills with water.

Tony's recent find was in a small, shallow (only half a metre deep) pond on the commonage of Peddie in open grassland. There were only four or five plants growing far apart and the flat, floppy leaves hung in an untidy tangle just below the surface of the water. They were only about 30 cm long but in deeper water this species can have leaves up to 50 cm long. However, they remain narrow, from 2 to 3 mm wide at most. The leaves have large air pockets below making the underside semi-transparent and shiny. Each plant has from 5 to 70 leaves all growing from the rhizomorph which is anchored in the mud by numerous long, horizontal roots. It is at the base of these leaves (more correctly, sporophylls) that the two kinds of spores are borne in in megasporangia and microsporangia. The latter gives rise to a male prothallus and the former to the female prothallus which, when fertilized by the antherozoids formed by the male plantlets will grow into a new plant.

In 1928 Miss Duthie of Stellenbosch University made some interesting observations when she studied the *Isoetes* species of the Cape Flats. She was particularly interested in the methods of dispersal of the spores as she found that only a few months after the wet season ended there were very few spores left among the old leaf bases and that new prothalli appeared the next season at quite a distance from the old plants. In digging up some of the plants she saw large numbers of earthworms of several different species. Some of these were removed and after three days the castings were examined and, lo and behold, there were the mega- and microsporangia undamaged and in abundance! All of which bears out what life in the herbarium has taught me - truth is always stranger than fiction! This unpretentious little waterfern, scion of the proud fossil trees is still in the ring, fighting for survival alongside the rhinos and the elephants.

GOING TO TASSIE? READ ON..... MAVISTA FALLS (BRUNY ISLAND)

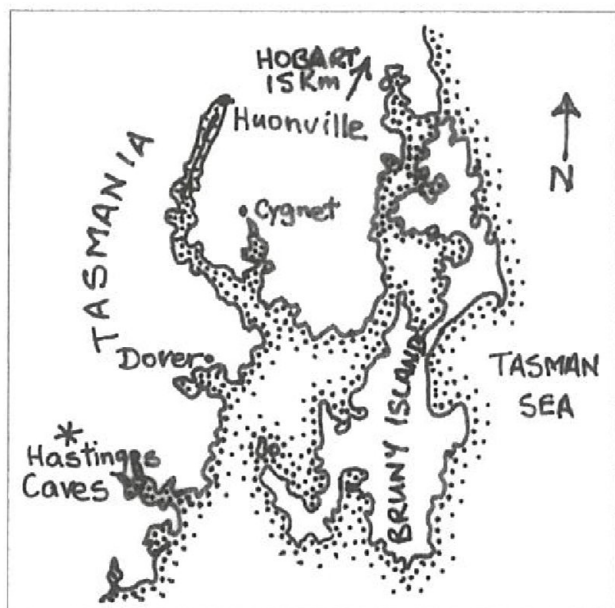
ARTHUR GREENE

On the south east of Bruny Is. (pretty well the same latitude as Hastings Caves) there is a short, easy walk along Waterfall Creek to Mavista Falls. Only the last section, immediately before the falls requires the odd bit of scrambling and climbing over large boulders.

The most outstanding feature of this creek is the abundance of *Blechnum chambersii*. This is by no means a rare fern in Tasmania, in fact it is found in the majority of our wetter gullies. But at Waterfall Creek they are at their best in an idyllic setting. This is the only place I have seen them growing in level ground away from a creek and amongst more usual ground ferns. Until now, I was used to seeing it as a creekside fern or growing from wet rock faces.

Two plants of *Asplenium flaccidum* are growing side by side on a tree trunk in a rather dangerous position, less than half a metre off the side of the track. I have been to this area 3 or 4 times and, although I have kept my eyes up all the time I have yet to see any more specimens. The nearest sighting I have had is 80 km away at Louisa River on the south coast, and even there I only saw a few specimens.

Asplenium terrestre is scattered along the creek, usually growing on the trunk or branches of Myrtle, with *A. bulbiferum* growing in the ground at their base. In one section of the creek not far from the falls, where both of the above ferns are common, a sheer rock face covered with *Blechnum vulcanicum* and *B. chambersii* almost completely overhangs the creek.



There are some extremely robust plants of *Dicksonia antarctica* here, with very thick trunks, jet black stipes and the fertile fronds appearing to be more skeletonised than usual. The attractive Filmy Fern, *Hymenophyllum australe*, is everywhere, covering rocks both in and beside the creek. Luxuriant specimens of *Sticherus tener* and *Blechnum minus* can be seen beside the creek under the protection of the forest canopy. Out in the sun at the very beginning of the walk they exist as much smaller specimens. Beside the road were also the light loving *Gleichenia microphylla* and *Cyathea australis* which are not seen on the way to the falls.

A complete list of the ferns seen is as follows:

Asplenium bulbiferum

A. flaccidum

A. terrestre

Blechnum chambersii

B. fluviatile

B. minus

B. nudum

B. vulcanicum

B. wattsii

Ctenopteris heterophylla

Cyathea australis

Dicksonia antarctica

Gleichenia microphylla

Grammitis billardieri

Histiopteris incisa

Hymenophyllum australe

H. cupressiforme

H. flabellatum

H. rarum

Hypolepis rugosula

Microsorium diversifolium

Polyphebiium venosum

Polystichum proliferum

Pteridium esculentum

Rumohra adiantiformis

Sticherus tener

Tmesipteris billardieri

000

Before you rush out and book your ticket, I should point out that this article came from the now extinct Tasmanian Fern Society's newsletter (Issue # 20) of September 1986. Things may have changed though one hopes not. Sounds interesting, doesn't it?!

-Lyn.

GROWING CORAL FERNS

Gleichenias

As so many good topics do, this one arrived at our meeting unannounced and of its own volition and most people present learned something from it. This article is a collection of many people's remarks.

If you look at ferns growing in their natural habitat, you will notice that most of them are growing in strong, filtered light. Very, very few grow in either heavy shade or full sun.

The Coral fern is an exception. It needs to have its feet moist all the time and it must be in either very strong, filtered light or full morning sun. It will tolerate more shade but not if it is in competition with other plants. One member has found that it grows better under trees, where there is not a lot of foliage from other plants around it. It will also tolerate more sun if everything else is ideal for it, ie, well drained, wet, clay soil. Air movement is important to them.

In their natural habitat, you will very often see Coral ferns growing out in the open or with very little shade, on clay banks where there is water seepage. They absolutely thrive on it.

If your Coral fern is in a pot, a good idea is to sit the pot in a pot saucer with water in it. I don't usually approve of saucers under pots but this is an exception which has been successful. It MUST receive a LOT of light, maybe even full sun, though.

Coral ferns are notoriously difficult to propagate using

a standard spore raising mix. But in fact it is quite possibly due to inappropriate medium. It has been reported that a good way to propagate them from spore is to mix clay soil with the basic medium (perhaps peat moss).

It is quite possible to grow Coral ferns in a commercial mix. Ian does it successfully all the time but he uses plants which have been propagated from spore, not plant division, are planted up when quite small and he gets a special, low phosphorus mix made up. They hate having their roots disturbed and they hate phosphorus.

If you're growing them in a soil-less mix, you absolutely HAVE to use one which doesn't contain nutrients (which almost always include superphosphate) and a low phosphorus fertilizer or else just don't feed them much at all. Soils bind phosphorus (so it is not available to the plant) - soil-less mixes don't so plants take up and use all the phosphorus in the mix*. The only slow-release fertilizers which can be used safely are those which are designed for native plants.

*Worth remembering if you are potting up any member of the Protiaceae family, which will suffer from phosphorus toxicity in soil-less mixes. ☼☼☼

Growing *Notholaena sinuata* Successfully.

Don Fuller was the winner of our fern competition one night and told us that his plant struggled for some time after he got it, until he moved it out into the open. Now it is in full sun for a large part of the day and looks magnificent. When he took many of his ferns out onto his back lawn ready for the Fern Show and they thrived there, Don decided that he must not be giving them enough light in lots of cases, mainly because he had been worried about protecting them from the northerly and westerly winds which prevail in his area. He has been trying to find a way of catering to these apparently conflicting requirements.

Getting back to the *Notholaena*; the only fertilizer he gives it is Osmocote for Natives in early Spring - if any.

It doesn't get much water, either. (Does that mean I should be growing it and my Silver Elk together? Sounds like it.)

Ian added that *Notholaena* and *Cheilanthes* have an advantage regarding tolerating sun and wind, in their copious protective scales or waxy coatings on the backs of the foliage which give the appearance of grey or light coloured foliage which reflects the light.

◆◆ This page is starting to sound like nagging, isn't it!! "Give 'em more light and don't give 'em phosphorus". ◆◆

THE YEAR AT A GLANCE

You may find this diary useful during the transition period of our meetings.

May 11th	Saturday	10.00am	20 Albion Street, Surrey Hills	Garden Visits
June 20th	Thursday	8.00pm	Kevin Heinze Garden Centre	Fern Fossils with Chris Goudey
July 20th	Saturday	1.30pm	Kevin Heinze Garden Centre	Mounting Elks—demo. by Rod Noonan
August 17th	Saturday	1.30pm	Kevin Heinze Garden Centre	Get a Little Dirt on your hands.....
September 19th	Thursday	8.00pm	Kevin Heinze Garden Centre	Annual General Meeting
October 17th	Thursday	8.00pm	Kevin Heinze Garden Centre	Dahlia cultivation with Rex Gresham
November	Saturday	Details to be announced		Excursion
December 1st	Sunday	TBA	Kevin Heinze Garden Centre	Holiday Celebration

The Mystery of the Vanishing Variegations.

It started with a phone call. They asked me to drive up to Orlando and meet with some tissue culture people. They were having problems with a big crop of variegated *Alpinia zerumbet*. When I got there I saw the cause of their concern. Instead of bright splashes of white on the green leaves, there were streaks and blotches of dead brown tissue. An analysis revealed no mineral problems. No salt or fluoride problems either. The pathologists could not isolate any pathogen from the plants. What was wrong? It took awhile for observations made over the years to come together in a eureka moment.

I loved the colorful masses of *Ctenanthe oppenheimiana* variety *tricolor* growing near Bob Wilson's place in Costa Rica. His garden was at an elevation of over 2,000 feet. The rich purplish reds, pinks, whites and creams of the leaves were replaced with drab reds, greens and browns when I tried to grow the plants in Miami. I assumed that the Miami temperatures were to blame.

The rare and beautiful AeAe; variegated Hawaiian

banana generates sad memories for me. Even before the plant was killed by the disgusting banana moth (*Opogona sacchar*) the large white sections of the leaves died and turned into dry brown tissue. The banana plant had looked best in the cooler winter weather.

The answer was simple. Starvation! As the temperature rose so did the respiration rate in the leaves. The white tissue could not produce any sugar so it had to depend upon the green areas of the leaf to supply the needed sugar. Observations confirmed that the white areas furthest from any green area died first. The solution to the *Alpinia* problem was to reduce greenhouse temperatures. It worked.

So, If you grow variegated plants, don't fret too much when the white areas turn brown during those hot summer nights. It's just a case of starvation. □□□

Source unknown—one of the American fern magazines and used with apologies and thanks to the author.

(Continued from page 43)

SEMI DESERT

Quadridichotomum N.W. Madagascar on the dry side (limestone rocks)

Veitchei Eastern Queensland and inland.

DEGREE OF DIFFICULTY

Easiest to grow bifurcatum, alicorne, hillii, veitchii, willinckii.

Fairly easy superbum, grande, wandae.

Not difficult andinum, elaphantosis, ellisii, holttumii, stemmaria.

Somewhat difficult coronarium, madagascariense.

Difficult quadridichotomum, ridleyi, wallichii.

Solitary Species grande, ridleyi, wallichii, holttumii, superbum, - wandae.

Pupping Species alicorne, elaphantos, quadridichotomum, andinum, ellisii, stemmaria, bifurcatum, hillii, veitchii, coronarium, madagascariense and willinckii

I hope these notes will help you grow healthier, more beautiful *Platyteriums*.

Ron.

PLEASE OPEN IMMEDIATELY!!
Important date change advice
inside.

NEWSLETTER

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

**SURFACE
MAIL**

Postage
Paid
West
Heidelberg
Vic. Aust.
3081

MR. B. WHITE
24 RUBY STREET,
WEST ESSENDON,
VIC 3040

PLEASE OPEN IMMEDIATELY!!
Important date change advice
inside.

Correct date for Garden Visits is 11th May.

Please open immediately

Please open immediately