

Fern Society of Victoria Inc. NEWSLETTER



Print Post approved PP334633/0002

ABN 85 086 216 704

Vol. 22, Number 5 - September/October 2000

FERN SOCIETY OF VICTORIA Inc.

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

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	John Oliver	"	9879 1976
Spore Bank Manager	Barry White	"	9337 9793
Librarian	David Radford	"	9598 8398
Editor	Lyn Gresham	"	5796 2466
Book Sales	Ivan Traverso	"	9836 4658

(“Kilpara”, Goulburn Valley Hwy, Mangalore, Vic, 3663)
 (19 Alta Street, Canterbury, Vic., 3126)

COMMITTEE MEMBERS: Jean Boucher 9707 1592, Lyn Gresham 5796 2466,
 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.

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.*

Asplenium ceterach



COACH ROAD FERNS

Wholesale.

Phone (03) 9756 6676. Monbulk 3793.

Retail each Saturday and Sunday at Upper Fern-tree Gully Market (railway station car park)

Melway Ref: 74 F5.

▮ Wide selection of native and other ferns.

MEETINGS & EVENTS IN 2000

ANNUAL GENERAL MEETING

Thursday September 21st

General Meeting to follow

NATIVE ORCHIDS

B & T Orchids (and Ferns)

Five minute fern talk has been cancelled for this night. We'll catch Norma Hodges' talk when she least expects it!

Monthly Competition: A Fern containing colour other than green.

General Meeting on Thursday October 19th

FERNS OF NEW ZEALAND

Barry White

Five minute fern talk by David Radford

Monthly Competition: A fern of New Zealand

Overnight Excursion on 28th and 29th October

BYADUK CAVES and OTHER FERNY PLACES

See out Beloved Leader in the Great Outdoors!!

Read the article outlining all the details on page 69.

Alternate activities have been arranged for more genteel (unfit) persons so when the going gets tough, we can get going and still fully enjoy this experience.

Register today with Barry (9337 9793) and start saving NOW!

November's General Meeting will be on Thursday 16th

Monthly Competition: *Dryopteris*

GENERAL MEETING TIMETABLE:

7.30	<i>Pre-meeting activities - Sale of ferns, spore, books, merchandise and Special Effort tickets. Also library loans and lots of conversation.</i>
8.00	<i>General Meeting.</i>
8.15	<i>Workshops and demonstrations.</i>
9.15	<i>Fern identification and pathology, Special Effort draw.</i>
9.45	<i>Supper and a good yarn.</i>
10.00	<i>Close.</i>

FROM THE PRESIDENTIAL ~~SWEET~~ SUITE

(well, some people think I'm sweet)

Spring is springing; we have Bourke's Parrots falling madly in love, a female Cockatiel that wishes the male was just a little older and hundreds of deciduous and winter dormant ferns firing on all cylinders. Isn't it a terrific time in the garden? (Not that I get to see much of the garden, we're much too busy in the nursery). The windstorms of the last few weeks knocked some limbs out of a huge Silver Wattle and flattened a 30-year-old *Banksia ericifolia* in the middle of our backyard. It blew over about ten years ago but I was able to prune it severely and stand it up again and it survived. This time however, when we stood it up it pulled right out of the ground so it has been added to next year's firewood stack.

It seems we had some confusion over the date of our AGM. It is now to be held at our September meeting. We will be receiving the financial report; the President's report can be found on page 76 of this issue. It won't be presented verbally on the night, to save time and allow as much time as possible for our guest speaker. There will also be the election of the Committee and office bearers. I believe that all present members are willing to stand again next year, however, there is a nomination form available elsewhere* in this newsletter. Feel free, in fact you are encouraged, to use it to put yourself or a friend up for nomination to the Committee. We would be delighted to have some new blood and ideas.

Barry White is organizing an excursion to the Timboon area - read further into the newsletter ⇨ to find the details. The cost will be about \$55 per person for the hire of a minibus and fuel (probably less if we get enough to fill a 20 seater instead of a 12) plus around \$90-100 a double for accommodation and meals at a motel in Portland. It should be a really great weekend and a lot of fun, so do try to make the effort and join the trip. I am somewhat ashamed to say that it will be the first Society excursion I have been on.

Don't forget that membership subscriptions are due for renewal. The committee spend a lot of time worrying about late renewals and what to do about them - you can

make our job much easier by sending in your renewal as soon as possible if you haven't already done so.

At our September meeting we will have Bill of B & T Orchids speaking about native orchids. He is sure to have many very impressive plants in flower, so attend, if you can, to broaden your horizons. The competition category is a fern with a colour other than green and we have decided not to have the 5-minute fern talk because of the time that will be taken up with the AGM.

In October, Barry White will be addressing us on the ferns of New Zealand. Quite coincidentally, the competition category is to be New Zealand ferns (isn't it interesting the way these things turn out sometimes?!) (Yeah, riiight. -Lyn) The 5-minute fern talk will be by David Radford.


Finally for your diaries, the Christmas meeting will be held at our normal venue on 3rd December starting from 11:30am for a barbeque. Bring your own meat, any drinks you would like other than tea or coffee and a plate (of food) for afternoon tea. Salads and sweets will be provided. We would also like you to bring a wrapped gift up to \$5 value. Bring one for a girl if you're a girl and for a boy if you're a boy. We have held our Christmas meeting at the Kevin Heinze Garden Centre for the last few years and they have been really enjoyable occasions; very relaxed and much chin-wagging. If you can come too it will be even more enjoyable. We are planning to show a video Don Fuller took of a trip to North America and Jack Barrett is to give a demonstration on making up a terrarium.

That's all for now. I hope you are frond of all the activity that is taking place in your ferneries. *(Corny! -Lyn)*

Regards
Ian Broughton

* inside the back cover



 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.

Membership Fees - Year 2000/1.

Membership Fees for the year July 1st 2000 - June 30th 2001 are now due. It will help us greatly if you please use the membership renewal form provided in the last newsletter.

Disregard this notice if you have already attended to this matter, otherwise act now and secure your membership for another year.

EXCURSION TO BYADUK CAVES AND LIME FERN.

Saturday 28th and Sunday 29th October 2000.

It is proposed to hold an excursion to the Byaduk Caves and the Lime Fern on the weekend 28th and 29th of October.

The Byaduk Caves are located just South of Hamilton. They were formed by lava flows from Mt. Napier down a river valley. The resultant stream caused bubbles up to 20 metres high to form in the lava. Later on the tops collapsed forming the caves. There are about 12 caves in the area we will visit. The caves are up to 200 metres long and the floors are covered with rough boulders making progress difficult. Some caves are precipitous circular holes requiring a rope for the descent. It is an area for the reasonably agile but well worth it. Twenty fern species have been recorded in the caves.

We will also visit the nearby Lake Surprise, a very scenic spot.

The overnight stay will be in Port Fairy. On Sunday morning we will visit Lorraine Dappeler's nursery in Allansford followed by morning tea at Lorraine's home on the Cobden Road and a look at her ferny stream. Lorraine has been a member of the Society for many years and has a wholesale and retail fern nursery in Allansford.

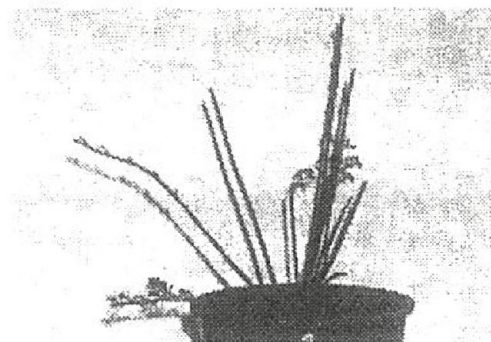
After Lorraine's place the next stop will be the Kurdeez lime works near Timboon. The old railway reserve has some very large specimens of *Pneumatopteris pennigera* (Lime Fern) which is extremely rare in Victoria. At

least a dozen other ferns have been recorded including *Pteris comans* (Netted Brake) which has a restricted distribution in Victoria. The walk along the old railway line is easy but the old bridges are dangerous to cross necessitating a scramble across the creek bed.

It is proposed to take a 12 seater minibus, cost of transport will be about \$55. If numbers are greater, or much less, than 12 then private transport may be used. Accommodation at the Lady Julia Percy Motor Inn in Port Fairy is \$70 a double. Evening meal at the same spot is about \$18.

Bookings for the excursion may be made with Barry White on 9337 9793.

**What is this??
What caused it??**



See page 75.

FAR NORTH QUEENSLAND AUSTRALIA'S FERN GARDEN.

Including points from the talks by Don Fuller and Ian Broughton.

Lyn Gresham

Don spoke about his first visit to North Q'd; the joys and some of the 'new chum' experiences he had. They may assist others in the decisions they make on their first trip. It's easy to miss the best places unless you go armed with screeds of 'inside information'. Tropical weather, flora and fauna (including ferals of both), health matters, safety and pace of living are all rather foreign to the down-souther so the first trip can be a bit bewildering!

By now you've probably gone right off the idea of going north let me change your mind. It's a wonderfully varied, beautiful and exciting place, full of fern treasures which I, for one (and Pres. Ian, for two) are very keen to experience as often as possible.

I suggest that you take "Ferns of Queensland" by S.B. Andrews. It is an essential reference work to have handy while you're there because you will come across so many ferns with which you are unfamiliar. A few of the ferns you will find are garden escapees and not natives at all, and Andrews' book covers the commonly found ones. There was even confusion about which were native ferns among the fern 'specialist' nurserypersons I visited (I didn't seek out recognised experts), the general attitude being that if it was collected from the bush it must be native, and if it grows easily up there - who cares? So when your turn comes, buy or borrow "Ferns of Queensland", put it in a snap-lock plastic bag and take it on your forays. - Lyn

Don went via Cairns to the Daintree Cape Tribulation Heritage Lodge on Cooper Creek in the foothills of the Thornton Peak area, where his party stayed. It is on the edge of the Daintree National Park and like a lot of places up there, it is hard to see where the N.P. starts and private property ends, because of the rampant tropical rainforest and the difficult terrain. In the area near Cooper

Creek Don saw lots of ferns he'd never seen before.

- There is an Eco(logy) Centre which has boardwalks and a 5-level observation tower which is interesting; you can view the forest at five different levels, right up into the canopy. It has quite a lot of good information in displays and lectures, too.
- There are feral pigs which do a lot of damage to the forest. If you encounter any of them, give them a very wide berth as they are dangerous and aggressive. You could also encounter native cassowaries which must be avoided for the same reason.

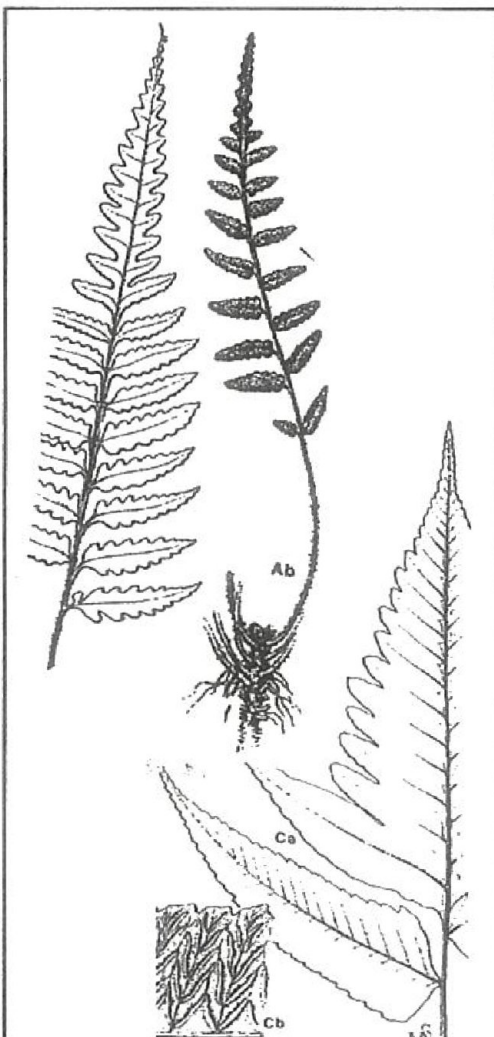
• It doesn't always pay to not take photographs because of overcast weather conditions. As Don discovered, it could turn out to be the best weather of your stay and the best opportunity to take photographs. A flash is essential for photographing ferns.

• If you go through Mossman, slow down and marvel at the *Pyrrhosia longifolia* thickly festooning the avenue of trees lining the roadside - right out in the open, too.

• The Boulders Reserve, though not publicised as a primary tourist venue, is a beautiful spot 'full' of ferns, and well worth a visit. Recommended by both Don and Ian, it is found south of Cairns on the way to the Atherton Tableland.

Despite the terrible weather he endured, Don had a nice lot of slides to show us.

Ian. After their first frustrating trip to national parks in Nth Qld, the Broughtons took pains to line up the permits they needed, in Atherton. This time they were foiled by storms which had closed many areas on their wish list, and by the small detail that many permits were for areas now closed for 'forest harvesting' (new political term for logging).



A. *Bolbitis taylorii*. Aa. part of sterile frond. Ab. Rhizome and fertile frond.
C. *Callipteris proliferata*. Ca. portion of upper part of lamina. Cb. part of fertile pinna.

(Continued on page 71)

Some of the areas Ian and family visited, and which he recommends are:

Mt Edith; Moomin Road, going up to the Tineroo Hills area; Tully Gorge; Little Millstream Falls near Ravenshoe; Mossman Gorge; Mt Lewis (a MUST but access to the best spots requires a 4WD vehicle); Black Mountain and along Black Mountain Road to Kuranda; Lakefield N.P. (Nardoo, Azolla and crocodiles); Cape Tribulation; Mt Father Clancy track to Wooroonooran N.P. and Nandroya Falls; Koombooloomba Dam and south along Culpa Rd; Mt Hypipamee; Mt Bartle Frere; NOT Cape Melrose unless you have at least 4 days to just get in and out the 120 km access, without looking time.

Ian, too, brought beautiful slides which gave us a good taste of the ferns and scenery he enjoys on his northern visits.

All members present enjoyed and appreciated the presentation Don and Ian gave, particularly in view of the circumstances - they had very short notice due to the cancellation of the scheduled speaker.

IAN'S LIST OF FERNS SEEN IN THE CAIRNS REGION IN 1998 AND 1999.

Acrostichum speciosum	Mangrove Fern
Adiantum aethiopicum	Common Maidenhair
Adiantum capillus-veneris	Venus-hair Fern
Adiantum diaphanum	Filmy Maidenhair
Adiantum hispidulum	Rough Maidenhair
Adiantum sylvaticum	
Angiopteris evecta	Giant Fern
Antrophyum plantagineum	
Antrophyum reticulatum	Ox Tongue Fern
Antrophyum subfalcatum	
Arachniodes aristata	Prickly Shield Fern
Arthropteris palisotii	
Arthropteris tenella	
Asplenium australasicum	Bird's Nest Fern
Asplenium baileyana	
Asplenium excisum	
Asplenium laserpitiiifolium	Johnston River Fern
Asplenium nidus	Bird's Nest Fern
Asplenium paleaceum	
Asplenium parvum	
Asplenium pellucidum	
Asplenium polyodon	Mare's Tail Fern
Asplenium simplicifrons	
Azolla pinnata	Ferny Azolla
Belvisia mucronata	Needle Fern
Blechnum articulatum	Rosy Water Fern
Blechnum Cartilagineum	Gristle Fern
Blechnum nudum	Fishbone Water Fern
Blechnum orientale	
Blechnum patersonii	Strap Water Fern
Blechnum whelanii	
Bolbitis taylori	

THE BUSH HOUSE NURSERY

WHOLESALE AND RETAIL
VISITORS WELCOME

Phone (03) 5566 2331
Cobden Road, Naringal
(35 km east of Warrnambool)



Ferns -trays to advanced.

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.

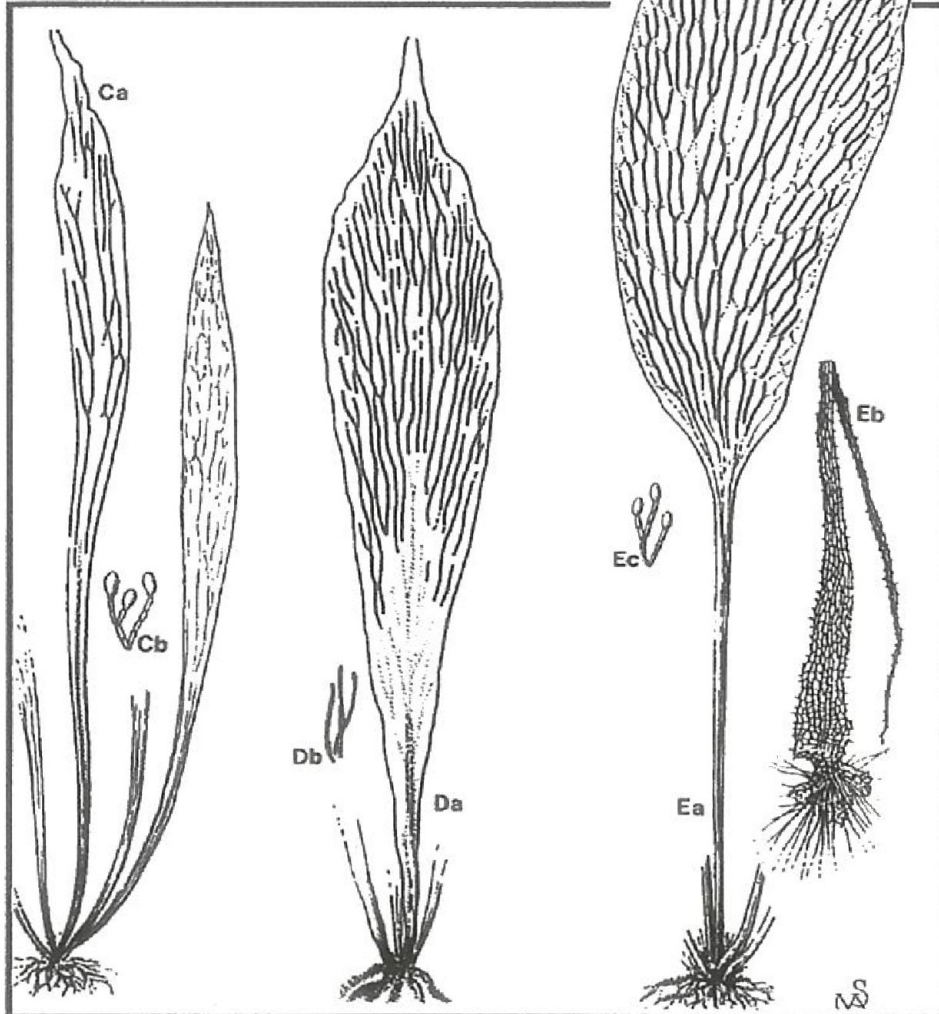


Callipteris prolifera	
Calochlaena dubia	Rainbow Fern
Cheilanthes distans	Bristly Cloak Fern
Cheilanthes hirsuta	
Cheilanthes prenticei	
Cheilanthes pumilio	
Cheilanthes sieberi	Mulga Fern
Cheilanthes tenuifolia	Rock Fern
Cheilanthes tenuifolia ssp shirleyana	Rock Fern
Cheilanthes vellaea	
Christella dentata	Binung
Christella hispidula	
Christella parasitica	
Christella subpubescens	
Colysis ampla	
Colysis sayeri	
Coveniella poecilophlobia	
Crepidomanes binunctatum var. binunctatum	
Crypsinus simplicissimus	
Ctenopteris gordonii	
Ctenopteris maidenii	
Cyathea baileyana	Wig Tree Fern
Cyathea celebica	

(Continued on page 72)

- C. *Antrophyum subfalcatum*. Ca. fronds and rhizome $\times \frac{2}{3}$.
Cb. paraphyses $\times 33$.
D. *Antrophyum reticulatum*. Da. frond and rhizome $\times \frac{4}{9}$.
Db. paraphyses $\times 24$.
E. *Antrophyum plantagineum*. Ea. frond and rhizome $\times \frac{2}{3}$.
Eb. rhizome scale $\times 8$. Ec. paraphyses $\times 33$.

*A paraphysis (pl. paraphyses) is a hair or scale of varying type borne among sporangia.



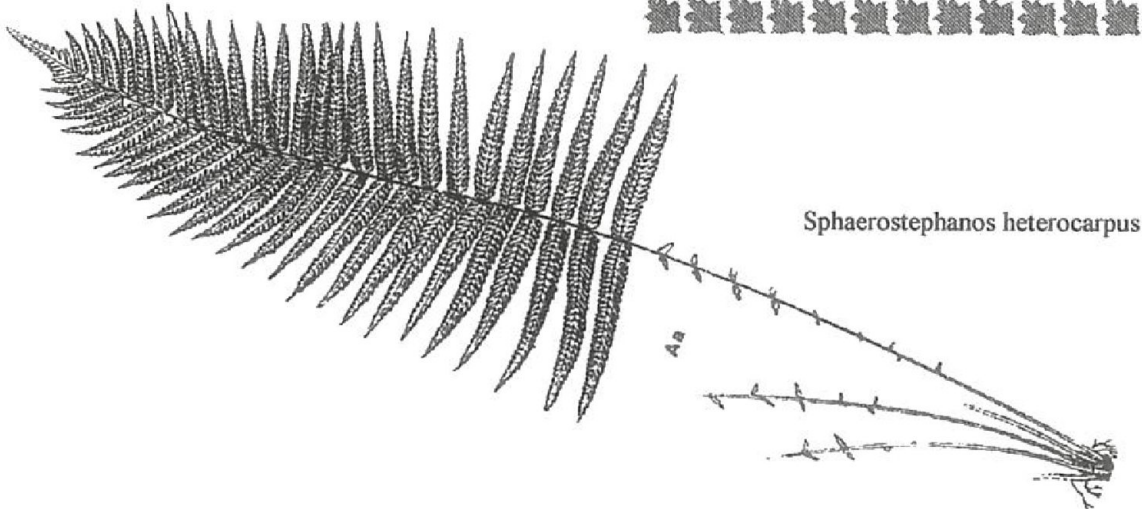
- Doodia media
Common Rasp Fern
Doryopteris concolor
Drynaria quercifolia
Drynaria rigidula
Basket Fern
Drynaria sparsisora
Dryopteris sparsa
Elaphoglossum callifolia
Elaphoglossum queenslandicum
Tongue Fern
Gleichenia dicarpa
Pouched Coral Fern
Grammitis meridionalis
Grammitis stenophylla
Grammitis wurunuran
Histiopteris incisa
Bat's Wing Fern
Humata repens
Dwarf Hare's Foot
Hypolepis glandulifera
Downy Ground Fern
Lastreopsis marginans
Glossy Shield Fern
Lastreopsis munita
Lastreopsis rufescens
Lastreopsis tenera
Broad Shield Fern
Lastreopsis wurunuran
Lindsaea brachypoda
Lindsaea ensifolia
Lindsaea ensifolia ssp. Agatii
Lindsaea media
Lindsaea obtusa
Lomariopsis kingii
Lunathyrium japonicum
Japanese Lady Fern
Lycopodium cernuum
Queensland Coral Fern
Lycopodium phlegmaria
Common Tassel Fern

- | | | | |
|----------------------------|-----------------------|--------------------------------|---------------|
| Cyathea cooperi | Coin Spot Tree Fern | Lygodium flexuosum | |
| Cyathea rebecca | | Lygodium reticulatum | |
| Cyathea robertsiana | Lacy Tree Fern | Macroglaua brassii | |
| Cyathea woolsiana | | Macrothelypteris polypodioides | |
| Cyclosorus interruptus | | Macrothelypteris torresiana | |
| Davallia denticulata | | Marattia salicina | Potato Fern |
| Davallia pyxidata | NSW Hare's Foot Fern | Marsilea drummondii | Nardoo |
| Dicksonia herbertii | | Microlepis speluncae | |
| Dictymia brownii | | Microsorium membranifolium | Pimple Fern |
| Diplazium assimile | | Microsorium punctatum | |
| Diplazium australe | Austral Lady Fern | Microsorium scandens | Fragrant Fern |
| Diplazium dietrichianum | | Microsorium superficiale | |
| Diplazium dilatatum | | Nephrolepis acutifolia | |
| Diplazium sp. | | Nephrolepis biserrata | |
| Diplopterygium longissimum | Giant Scrambling Fern | Nephrolepis cordifolia | Fishbone Fern |
| Doodia aspera | Prickly Rasp Fern | Nephrolepis hirsutula | |
| Doodia caudata | Small Rasp Fern | | |

(Continued on page 73)

Oenotrichia tripinnata	Hairy Lace Fern
Ophioglossum pendulum	Ribbon Fern
Pellaea falcata	Sickle Fern
Pellaea falcata - silver form	Silver Sickle Fern
Pellaea paradoxa	Cliff Brake
Platycterium bifurcatum	Elkhorn
Platycterium hillii	Northern Elkhorn
Platycterium superbum	Staghorn
Platycterium sp. - Mt Lewis	
Pronephrium asperum	
Pronephrium triphyllum	
Psilotum complanatum	Flat Fork Fern
Psilotum nudum	Skeleton Fork Fern
Pteridium esculentum	Common Bracken
Pteridium revolutum	Hairy Bracken
Pteridium semibastatum	Northern Bracken
Pteridoblechnum neglectum	
Pteris ensiformis	Slender Brake
Pteris pacifica	
Pteris tremula	Australian Brake
Pteris tripartita	Giant Brake
Pteris umbrosa	Jungle Brake
Pyrrosia confluens	Robber Fern
Pyrrosia lanceolata	
Pyrrosia longifolia	
Pyrrosia rupestris	Rock Felt Fern
Schellolepis percussa	
Schellolepis subauriculata	
Schizaea dichotoma	Branched Comb Fern
Selaginella australiensis	
Selaginella longipinna	
Sphaerostephanos heterocarpus	(serves it right!!)
Stenochlaena palustris	Climbing Swamp Fern
Sticherus flabellatus	Shiny Fan Fern
Sticherus lobatus	Spreading Fan Fern
Taenitis pinnata	
Tectaria muelleri	
Tetraphyllum brightiae	
Tmesipteris truncata	
Vittaria elongata	Tape Fern
Vittaria ensiformis	Tape Fern

*The illustrations accompanying this article were all taken from "Ferns of Queensland", S.B. Andrews.



COMPETITION WINNERS

June Monthly Competition:

A Favourite Fern

1. Dorothy Forte's *Adiantum reniforme*
2. Keith Hutchinson's, ? *victorii*
3. Don Fuller's fern

Exhibitors' Draw; Norma Hodges
Special Effort; Keith Hutchinson, Fran Harrison, Don Fuller, Jack Barrett, Pat Nicholls.

July Monthly Competition:

Epiphytic Ferns

1. Don Fuller's *Drynaria rigidula* cv. *Whiteii*
2. Fran Harrison's *Pyrrosia rupestris* (Rock Felt Fern)
3. Ian Broughton's *Pyrrosia lingua* cv.

Exhibitors' Draw; Ian Broughton (declined), Barry White.

Special Effort; Fran Harrison, Lyle Timms, Pat Nicholls, Margaret Radley, Richard Hartland.

August Monthly Competition:

Aspleniums

1. Ian Broughton's *Asplenium polyodon*
2. Fran Harrison's *Asplenium mayii*
3. Fran Harrison's *Asplenium flaccidum*

Exhibitors' Draw; Jack Barrett
Special Effort; Dick Kissane, Fran Harrison, Terry Turney, Fran H. again and Mavis Potter.

A CONVERSATION ON THE NET

* I am searching some papers or other sources to learn about the size of fern spores especially from *Platycerium*. I have looked in some books, but have found nothing about the size. Who can help me? For sterilizing spores I put them in filter paper & I have the strong feeling that some papers are too coarse and the spore go through the pores of the papers. This made me thinking about the size of fern spores and I noticed I know nothing about this matter.
Hermann Wistuba Mannheim Germany

* A few months ago, our company was evaluating stereo microscopes. Of course I couldn't resist taking some of my fern stuff down for a look.

What I saw ranked right up there with some of the best special effects in an alien movie! Although the fiber optic light guides delivered light that was cold-filtered (most of the infrared blocked), it was still pretty warm under the eyepiece. It was so intense that if you looked at the lit area with the naked eye, it was so bright you actually couldn't see anything at all. This level of light intensity is needed for the higher magnifications. With a 5-to-60 zoom, a removable doubler, and a 10x eyepiece, the effective magnification could be zoomed from 50 to 1200. I work for an electronics company and am involved with the design of integrated circuits so I happen to have a ruler that is marked in half-thousandths of an inch (not a household item!).

The first thing I looked at was the bottom of a ripe frond from what I think was a *Dicksonia* Antarctica. Upon a closer zoom, the little dots looked like little fuzzy clumps of dark brown grass. Looking closer, I could see that they were actually moving! A little bump in the clump would begin to rise up like the thing coming out of the guy's chest in "Alien". I didn't count, but it looked like there were about 20 or 30 bumps per clump. Shortly, the bump began to look like a balloon held in a person's hand. Under the warmth of the lamp, the arm kept moving back and back like a baseball pitcher in a slow-motion windup, then, ping! it would spring forward, shooting the little ball away.

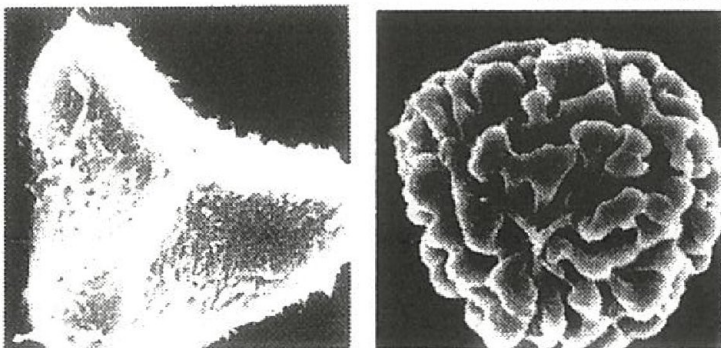
There were thousands of these shooting all

over the place! It looked like a rioting mob of hyperactive fleas under there!

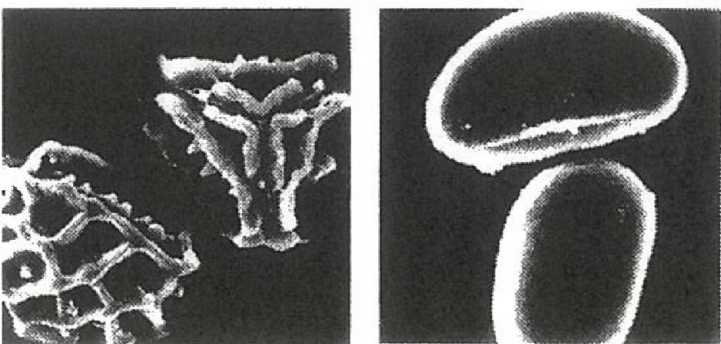
I zoomed in closer on the ball. Aaahhh! Another alien device! This was a honey-coloured sac with a striped ridge around it, looking like a translucent balloon filled with yellow marbles that someone had encircled with a skin from the belly of a snake. Dunn-ta-dunn! (Play creepy monster music here) While I'm watching this thing, it begins to wiggle around, then split slowly open. "The Attack of the Pod People" would be a good movie title! The snake-belly ridge opened up like an overstretched capital letter "C", then sprung back partially shut so fast I couldn't follow it; the result being that it scattered it's load of "marbles" everywhere.

O.K., so I now zoom in on these latest things (I'm now at max zoom). I first thought that the snakeballs were the spore, but I realized that they must be spore cases. The marbles inside turned out not to look much like marbles after all, and I am guessing that they are actually the real spores. These were a cheery lemon yellow, with a hard-to-describe shape. Try to envision a yellow triangular blood cell, a triangular

(Continued on page 75)



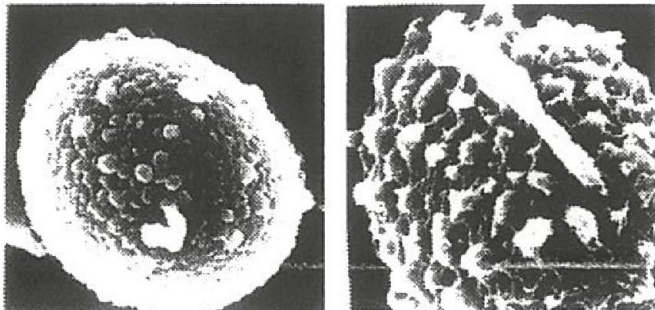
Scanning electronmicrographs of spores;
above left, *Cyathea lepifera*
above right, *Lygodium microphyllum* (Climbing Fern)
below left, *Pteris vittata* (Chinese Brake)
below right, *Platycerium bifurcatum*. (Elkhorn)



(Continued from page 74)

Cheerio (with no hole) or a rugby ball with three points.

After sowing these on moist potting soil under bright fluorescent light and waiting a week, I took them back for another look. Aaahh! "Invasion of the Green Slime Ghosts!" (another



Scanning electronmicrographs of spores;
left, *Nephrolepis cordifolia* (Fishbone Fern)
right, *Cyrtomium falcatum* (Holly Fern)

movie title) Coming out of each spore was a clear, green, shiny bump that looked like an upside-down water drip about to detach from the faucet. At maximum magnification, I might have been seeing some little things inside that looked like green blood cells, but I'm unsure. These drips eventually divided

into more and more sections until you could actually begin to see the shape of an emerging prothallia(?). At the early stages, they looked like you tried to make a prothallia leaf model by gluing green balloons together. Maybe these were the actual cells?

O.K., so I made you wade through my monologue to finally get to the answer to your question! Remember the ruler? The finest divisions looked a lot like a ruler only marked in inches and half-inches, 0 1 2 ...except the whole numbers would be thousandths of an inch (0.001), and each short mark would be one half of a thousandth of an inch (0.0005). I found that four spores would fit nicely across the shortest mark, making a spore of *Dicksonia Antarctica*(?) about one eighth of a thousandth of an inch across. This is 0.000125", or 1.25 E-04".

I'd be interested to know how close my observations are and to establish data by more reputable observers, as well as the names of all the creepy stuff I saw.now, if I can just sleep without the hall light on.....

-frondly yours, -fernie Bob

Oh...aren't they cute little darlings!! You're so lucky to live so close to Nature!

...fallacies about rural gardening.

Lyn Gresham

A friend lives in a beautiful spot in rural Victoria; nice, comfortable house, good farming conditions, ideal spot for her ferns etc. etc. and natural forest just across the valley. She and her family do indeed count themselves fortunate and I agree.

But so too do some of the locals. Of the furry, four footed variety, I mean. When times are lean in the bush larder, the *Antechinus* population remember where lush plants and ground-burrowing protein morsels are plentiful and head for it; The Fernery. I wouldn't be surprised to sometime find a flashing neon sign over the door, "Antechinus Gourmet Smorgasbord Restaurant - please enter".

These tiny marsupials, distantly related to possums, burrow down the sides of pots, scattering potting medium far and wide in pursuit of the tasty worms, insects and larvae hidden there.

They are protected by law and seem to know it - or maybe they're just thick. Often they will 'freeze' on

rafters rather than flee when someone is coming and sit, peering down as though they think they're invisible, waiting for the coast to be clear before once more tucking in.

In the process of partially emptying out plant pots, delicate roots get broken, others are left bare and dry and also water runs straight through the pots' drainage holes before it soaks into the medium. Constant vigilance is needed and when necessary pots refilled, to prevent the plants drying out and expiring.

Of course when targeted, pots of prothalli are completely devastated.

Rats can also wreak havoc in your ferns. Denuded stipes which look like the results of a feeding frenzy by a hundred ravenous snails could be the bits Captain Rat rejected as nest material. They seem to love *Bowenia*, *Zamia* (cycads) and *Asplenium* leaves.


Hints on deterring or eradicating these or other garden creatures are invited. □□


The President's Annual Report.




I think I can speak for most, if not all, of the committee in saying that we have enjoyed another year at the helm of the Fern Society of Victoria.

We all enjoy many laughs at the committee meetings and I hope that some of our enjoyment carries through to the general meetings.

 The past year has certainly been dominated by our 21st anniversary. We had a terrific afternoon and many thanks once again to Keith and Joyce Hutchinson, Brian and Pat Nicholls and Reg and Mary Kenealy. They put in a lot of work in organizing the afternoon and I am sure they would have felt suitably rewarded in seeing how much everyone enjoyed themselves. Thanks again to David Jones for his very entertaining presentation – superbly illustrated with slides.

 Congratulations again to the other office bearers; Barry White and Don Fuller as Secretary and Treasurer respectively. They continue to work diligently to ensure the month to month running of the society is as smooth as possible. I know that my job is a lot easier because of their commitment. And to our Editor, Lyn Gresham, I can only repeat what I said at the last meeting: we receive newsletters from a number of other fern societies and I think that very few of them produce a better newsletter. (*How embarrassment.* Lyn) Congratulations Lyn, and thank you for a job well done. And, of course, Don doubles up as Chairman of the Show Committee which involves a lot of work and I think he can be justifiably proud of the success of this year's show.

 Thanks also go the George Start our Vice-President, John Oliver our Membership Secretary, Barry who also has the role of Spore Bank Manager, David Radford our Librarian and Ivan Traverso who looks after Book Sales. Many other people are involved in the running of the Society; the other Committee members (Norma, Jean, Gay and Jack), Joy and Margaret who man (whoops, maybe I should have said 'look after') the special effort table at our meetings and the admission table at our show every year, Dick who looks after the sound system, John and Norma Hodges who are always last to leave after our meetings (because they clean up after me!),

Norma and Jean who serve tea and coffee with a smile and put a lot of effort into salads and sweets for our Christmas meeting, the Show Sub-Committee and all who help every year at the show.



We have had a few ring-in speakers at our meetings during the last year – with Bob Fletcher speaking on Palms and Cycads, Wayne Turville on Native Orchids and Bill Taylor and I speaking on Vireya Rhododendrons; but they are all plants that can be used to great effect with ferns. Our ferny talks have included a last minute fill-in presentation on trips to the Cairns region by Don Fuller and myself (see report on page 70) Keith Hutchinson speaking about the use of fertilizers and reminiscences of excursions past. Jack Douglas spoke about ferns through the (geological) ages, Richard Hartland (one of our early members) gave us a presentation on trips to Mt. Kinabalu, Barry Stagoll gave a trip talk titled "Wish You Were There" (but I bet Gay was glad we weren't), Chris Goudey spoke on the Asplenium genus and, in June, we had a discussion night on our favourite June fern or least favourite fern problem. We have continued with the Five Minute Fern Talks by different members each month – it is interesting to share in other people's experiences. Many thanks to you all.



As far as the year ahead is concerned, we see the society at the crossroads at the moment and we're not really sure of which way to turn. Slowly declining membership and the lack of younger people becoming involved (I'm almost invariably the youngest person at meetings unless someone brings a grandchild; and I'm accelerating through my forties) means that we don't think we can continue to operate indefinitely into the future the way we have in the past. We are beginning to consider a number of options including joining forces with another group or moving to a different format based more around informal gatherings and fewer organized meetings. We would really appreciate any suggestions you would like to make. After all, this is your society so our future concerns you.

Ian Broughton.

FERNS

Part 2

of text from "The Illustrated Dictionary of Gardening"

L. Upcott Gill.

Published in February 1885.

GREENHOUSE FERNS. A large number of Ferns, usually grown and treated as stove subjects succeed equally well, but do not grow quite so fast, in a greenhouse temperature, and, wherever employed, either alone or in combination with flowering plants, are much appreciated. A more interesting structure than a cool Fernery attached to a conservatory, when well stocked and carefully arranged, can scarcely be imagined. The majority of Ferns succeed in comparatively small pots and are consequently well suited for mixing with other occupants of the side stages. The stronger-growing ones are also well adapted for planting in permanent beds or amongst other plants such as Camellias, &c where not too much crowded, the partial shade and moisture suiting the Ferns admirably.

Nearly all Adiantums do well under greenhouse treatment in summer, but must be removed to warmer quarters for the winter. Many Nephrodiums and species of Pteris, particularly *P. longifolia*, *P. serrulata* and its varieties and *P. Tremula*, do better planted out in a cool structure than anywhere else. *Lomaria gibba*, and other species are among the most beautiful of cool decorative Ferns, and the same may be said of *Asplenium bulbiferum*, and others from Australia and New Zealand: *Davallia canariensis*, *Nephrolepis exaltata*, *Onychium japonicum*, *Woodwardia radicans*, &c. *Todea barbara* is well adapted for planting out in a position where considerable space can be allowed for its large fronds to develop; it may also be grown in pots, any cool house or even a sheltered position outdoors with protection in frosty weather, suiting it. The genus *Gleichenia* contains many beautiful species that do not require much heat excepting two or three from tropical countries. If grown in large pans and tied out with neat stakes; beautiful specimens may be obtained under greenhouse treatment. These are propagated by layering the slender rhizome, or by separating rather large pieces from established plants, and potting separately. The shade necessary for ordinary greenhouse flowering plants in summer will also be suitable for Ferns, plenty of moisture being at that season supplied at the roots and, with few exceptions, such as Adiantums, overhead.

FERNS SUITABLE FOR BASKETS. Hanging baskets, either in the stove or greenhouse, are, at all times, an additional attraction, and the elegant and graceful habit of many Ferns constitutes them excellent subjects for use in that way. Baskets made in different sizes, of stout galvanised wire may be suspended from the roof, and, if carefully watered, the plants will succeed extremely well in most cases. Many are seen to much better advantage, especially those with long and drooping fronds, than when grown in pots for stage decoration. Some of the fast-growing Selaginellas are most useful to plant with basket Ferns, for covering the soil or hanging down. Adiantums will, again, be found very attractive, particularly *A. caudatum*, *A. cuneatum*, *A. gracillimum*, and *A. Moorei* with *Adiantum Belangeri*, *A. longissimum*, and *A. viviparum*; *Davallia dissecta* and *D. pallida*; *Gymnogramme schizophylla*; *Nephrolepis davallioides* and *N. exaltata*, and many others that are of somewhat similar habit. Nearly all of these are amenable to cool-house treatment in summer.

FILMY FERNS. These constitute a distinct class, requiring different treatment from any other members of the family. Very few do well in an open house, as sufficient atmospheric moisture cannot be obtained. On the whole, they do not require much heat, being often found to grow stronger and keep in better health when cultivated in close cases, in a cool Fernery, than when placed in similar cases in the stove. Filmy Ferns should never be watered overhead, but the stones and mesa amongst which they are generally grown must be kept continually moist by having water poured on from the small spout of a can. This, when evaporating inside the closed case, becomes condensed on the extremely numerous divisions of the fronds as represented in the majority of species, and its continued presence there invariably indicates good health and the frequency with which it will be necessary to give water. Pieces of rough fibry peat and loam, with charcoal and sphagnum, are most suitable for Filmy Ferns.

Nearly all that grow in soil succeed better when planted amongst stones, while those that form rhizomes should be placed on blocks of peat, dead



Don't miss this great day - all the better for your being there.

Mark our Christmas Do (December meeting) in your diary now... Sunday 3rd December at 11-30a.m. Kevin Heinze Garden Centre.

Horticultural Judges TRAINING COURSE run by Aust. Hort. Judges Assoc.: 2 year course starts Feb. 2001: Echuca or Glen Iris: Application closes Oct. 31, 2000: Application form & Inquiries: Melb. 9772 4582 or 9889 3045: Echuca 5825 2243 or 5482 2040.
Australian Plant Society (formerly Society for Growing Aust. Plants) SPRING PLANT SALE: 9 - 10 September: Wilson Botanic Park, Berwick: Melways 111 A7: Entry 55c per person, \$2.20 family: Contact 9700 1239 or 9764 9135.


Marysville Mystic Mountains OPEN GARDENS 4-7 November (Melb. Cup weekend): 16 gardens open: Admission \$2 (\$1 conc.) per adult per garden or \$10 the lot: Enquiries ph. 5963 3552.

NEWS SNIPPETS FROM LAST MEETING.



WARDIAN CASES. Ferns used for decorating Wardian cases must only include those of small or moderate growth, the space inside being very limited. The system admits of more moisture being kept round the plants than would be possible in an open room where the air is frequently dried either by burning gas or a fire. It is always important, in changing plants in these cases that become unhealthy, to substitute others from a cool house as, if insufficiently hardened, the young fronds soon wither and die. Ample drainage must be provided, and, if plants in pots are used, the latter should be covered with growing sphagnum. Ferns in Wardian cases keep fresh and attractive for a long time if they

grown than the majority of the plants in this section. very desirable; both being beautiful and more easily texture; and *T. hymenophylloides* is smaller-growing but is a vigorous species, having large fronds of a filmy the principal genera among Filmy Ferns. *Todea superba* Hymenophyllum, Todea and Trichomanes are three of create the treatment is, in most cases, simple enough. ing the plants; when once they begin to grow and in- time. The difficulty generally experienced is in establish- from sunshine; and not much light is required at any pieces of Tree Fern, &c. They must always be shaded



MORAN'S MIGINWAY NURSERY
Wholesale and Retail.
Phone 075442 1613. Bruce Hwy, Woombye
(1 km north of Big Pineapple; turn right into
Kiel Mountain Road). P.O. Box 47, Woombye,
Qld, 4559.

receive proper attention. Cases somewhat similar in construction may be used in cool houses for small collec- tions of Filmy Ferns. □
A few notes on the contents of the above article are in order.
• This is an English publication so ferns described as common are quite likely not to us.
• The seasons are opposite here so we should add about 6 months to quoted dates. □ □ □

ELECTION OF OFFICERS AND ORDINARY COMMITTEE MEMBERS

Nominations of candidates for election as officers of the Association or as ordinary members of the Committee shall be made in writing, signed by two members of the Association and accompanied by the written consent of the candidate (which may be endorsed on the form of nomination).

You are urged to consider nominating at least one committee member at or before the Annual General Meeting which will be held on Thursday 21st September 2000.

Fern Society of Victoria Inc.

NOMINATION FORM FOR 2000 ELECTION/RE-ELECTION OF COMMITTEE MEMBERS

I nominate

for the position of for the year 2000 - 2001.

Signature of person nominating.....

Signature of person seconding nomination.....

I accept my nomination and am willing to take the above position if elected.

Signature

Fern Society of Victoria Inc.

NOMINATION FORM FOR 2000 ELECTION/RE-ELECTION OF COMMITTEE MEMBERS

I nominate

for the position of for the year 2000 - 2001.

Signature of person nominating.....

Signature of person seconding nomination.....

I accept my nomination and am willing to take the above position if elected.

Signature

NEWSLETTER

If undeliverable return to:
FERN SOCIETY OF VICTORIA INC.
P O Box 45, Heidelberg West, 3081
Victoria Australia.
Print Post approved
PP334633/0002
ABN 85 086 216 704

SURFACE
MAIL

Postage
Paid
West
Heidelberg
Vic. Aust.
3081

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.



AUSTRAL FERNS

Wholesale Propagators.

Phone (03)5282 3084.

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

