



Fern Society of Victoria Inc. **NEWSLETTER**



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January/February 2001

FERN SOCIETY OF VICTORIA Inc.

POSTAL ADDRESS:

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NEW E-mail: http://gardenbed.com/clubs/clubs_vicferns.cfm

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COMMITTEE MEMBERS:

Jean Boucher 9707 1592, Lyn Gresham 5796 2466, Brian Nicolls,
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.

Meetings are held on the third Thursday of each month except December and January at the Kevin Heinze Garden Centre, 39 Weatherby Road, Doncaster (Melway 47; H1).

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.*

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CALENDAR OF EVENTS IN 2001

February monthly meeting will be held on 18th February

Terry Turney will speak on
The Genus Pteris

Competition category; Pteris
 5 Minute Fern Talk; Norma Hodges

***Terry has particularly asked that members bring along as many Pteris plants as possible to present a good display and assist in his talk.** They need not be included in the competition if you prefer.

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

March monthly meeting will be held on 15th March

Barry Sheppard from the Australian Begonia Society will talk about

Begonias

Competition category; Lastreopsis
 5 Minute Fern Talk; Gay Stagoll

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April monthly meeting will be held on 19th April

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Our Fern Show will be held on 21st - 22nd April

***See page 5 for necessary details
 and start grooming your ferns NOW!***

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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>5 Minute Fern talk, Fern identification and pathology, Special Effort draw, Competition results, Winner's tips.</i> |
| 9.45 | <i>Supper and a good yarn.</i> |
| 10.00 | <i>Close.</i> |

Of course, all members, friends and visitors are welcome to attend any of our meetings and activities - we'd love to see you!!

**When people become grand you should not cut them down;
 Allow them to blow themselves out or up!*

- Arthur Boyd, 1994.



PRESIDENTIAL POINTS

A very happy new year to you all. I hope you had an enjoyable and meaningful Christmas and that the new year/millennium brings new excitement and challenges. The biggest challenge at the moment for our Victorian Fernies would be in keeping our ferns alive without incurring national deficit sized water bills. At one nursery I called on in November, the owner complained bitterly about the rain we were having and since then we have only had 50mm in 2 months and that's in the relatively soggy Upper Yarra Valley. When he complained about the rain, I felt like punching him on the nose for his shortsighted foolishness, now I almost wish I had - I'm not really the violent type!

Our Christmas barbecue was, as usual, a very enjoyable and successful afternoon. Thanks again to Norma and Jean (I can never think of their names together without thinking of M M; but our Norma & Jean are much nicer people than she ever was) for organizing the food, to Lyn who prepared the quiz and prizes and to Jack for his excellent demonstration of planting up and care of a terrarium. Thanks also to those who set up and packed up; a task that often seems to be rather thankless but without which, nothing would ever happen. We also enjoyed Don's video of our excursion to the Byaduk Caves.

My prophetic comments in the last newsletter about the excursion, turned out to be fairly accurate. The weather was perfect; the only injuries were a few bumps and bruises, and a broken rib most embarrassingly suffered by the President and a severely bruised ego, again suffered by yours truly. I hate ladders at the best and most solid of times but I wasn't going to miss the opportunity to go down the rope ladder to explore one of the caves. When I was half way down, I realized that I would have to go back up that rope ladder again, which caused my legs to go to jelly instantly;

going over the side of the hole caused the broken rib! Fortunately Don missed catching the most embarrassing moments on the video; thank you very much Don, your cheque is in the mail. The accommodation and meals were really good. The only blot on the weekend came when we returned home to find that Diana's car had been crunched by a passing van; fortunately the damage wasn't serious and the rego number of the offender was provided. Many thanks to Barry for organizing a fabulous weekend for us.

Our February meeting will feature Terry Turney talking on the Pteris genus, the competition will, naturally, be Pteris and the 5 Minute Fern Talk will be delivered by Norma Hodges (that in itself will be reason enough to come).

In March we will have Barry Sheppard of the Australian Begonia Society speaking on Begonias, the competition category will be Lastreopsis and the 5 Minute Talk will be by Gay Stagoll.

If you receive this newsletter, spare a moment in your thoughts for Lyn who had to prepare it (and hassle the President - sorry Lyn!) while suffering from the fairly serious effects of a bee sting. We look forward to seeing you at the meetings.
Ian Broughton

Food for Thought

*Nothing in the world can take the place of Persistence
Talent will not;*

Nothing is more common than an unsuccessful man with talent.

Genius will not;

Underrated genius is almost a proverb.

Education alone will not;

The world is full of educated derelicts.

Persistence and determination alone are omnipotent.

- Author unknown.

THE TEN COMMANDMENTS OF SUCCESS

1. SPEAK TO PEOPLE... There is nothing as nice as a cheerful greeting.



FERN SHOW 2001

Combined Fern and Vireya Rhododendron Show.

The Fern Show in 2001 will, for the fourth year, be a joined venture with the Australian Rhododendron Society (Victorian Branch). The date will be Saturday 21st April - Sunday 22nd April (the weekend after Easter) and the venue will again be the great facilities of the Mount Waverley Community Centre (corner Miller Crescent and Stephenson Rd - opposite Mount Waverley Railway Station) Melway Ref. 70 - E1.

The Show will be open from 10.00 am to 5.00 pm both days and the admission charge for the public will be Adults \$4, Concession \$3. Members of both Societies who contribute to either the competition or the display, plus those active in an official capacity for the day, will be entitled to free admission. For other members the admission charge is the concession rate of \$3.

Our Show is a very important activity for the Society as it provides for an opportunity for a "public face", hopefully attracting new members which are needed for the long-term viability of the Society. We therefore need to ensure that it is a success which can only be achieved with the support of many members. You can contribute to this success by the following:

- ◆ **Publicise the Show**
- ◆ **Contribute to the display and enter competition**
- ◆ **Attend the Show and assist in its activities**

This is an excellent opportunity for those unable to attend our monthly meetings to come along, make yourself known and participate.

Advertising flyers will be included in the March newsletter but will be available at the February meeting or from Don Fuller.

COMPETITION

A fern competition will again be held and we ask all members to enter into the spirit of the competition. Please remember that to be eligible to enter a member must have owned the fern for at least 6 months.

The categories this year are as follows;

- 1 Adiantum
- 2 Asplenium
- 3 Davallia
- 4 Nephrolepis
- 5 Pyrrosia
- 6 Shield Fern (i.e., Lastreopsis, Dryopteris, Polystichum, Cyrtomium)
- 7 Fern in Hanging Container
- 8 Any Fern In A Container 150mm (6 inch) or less.

This last category is include to encourage all members to participate.

FERN DISPLAY

Our feature display will be the genus "Adiantum" and we want to show in the competition and display a large number of these ferns. If you have some rare species, cultivars etc. please ensure that you have them in good condition for the Show.

There will also be a display section for other non-competition ferns.

The Show is a great opportunity for you to display your best and most interesting ferns so please give the competition and display some thought and start grooming them now as time passes quickly. Please ensure that all plants are clearly labelled with their botanical name. There is time to get help if you do not know the name of any fern.

SALES

Members who enter ferns in the competition and/or display have the opportunity to bring in ferns for sale. Further details in the March Newsletter.

COMMITTEE

The Show Committee members are Jack Barrett, Ian Broughton, Fran and Ray Harrison, John and Norma Hodges and Barry White. If you have any queries or suggestions (always welcome) please contact them.

More Show details in the March Newsletter. □□□

THE TEN COMMANDMENTS OF SUCCESS

**2. SMILE...It takes 72 muscles to frown,
only 14 to smile.**



SPORE LIST

THESE SPORES ARE NOW AVAILABLE.

SPORE LIST ORDERING

The following spore is free to members who donate spore. Otherwise members 20 cents per sample, non-members 50 cents, plus \$1.00 to cover postage and handling.

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There is no charge for overseas members however to cover postage two international coupons would be appreciated. Overseas non-members may purchase spore at three packets for one international reply coupon plus two coupons for postage and handling.

- | | |
|--|-------------------------------------|
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| Coniogramme japonica 2/00 | Elaphoglossum sp. 6/00 |

THE TEN COMMANDMENTS OF SUCCESS

3. CALL PEOPLE BY NAME. Everyone is pleased when you remember their name.



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THE TEN COMMANDMENTS OF SUCCESS

4. BE FRIENDLY AND HELPFUL ...

and others will respond in like manner.



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ARE YOUR FERNS DYING FOR ATTENTION? GIVE THEM A POTASH TREAT!

Over recent years we've seen an increasing interest in the use of organic fertilisers for both vegetable and ornamental gardens. Although this is to be commended, it must be recognised that there can be a downside to the practice. It is well known that Australian soils are low in Phosphorus but what is not so well known is that many of our soils are low in Potassium, which means that the animal manures that we use on our garden are also low in Potassium. This has led to an increase in the incidence of plant diseases. Although potash could never be described as a fungicide, its correct use can certainly minimize disease.

Consistent use of low Potassium organic fertilisers has meant that more and more plants are vulnerable to disease. While it is incorrect to assume that the use of Potassium alone will prevent plant diseases, it is a fact that adequate levels of this nutrient in plants will help to minimize the impact of disease organisms. Scientists have shown that Potassium has a multiplicity of roles in a plant, some of which are obvious whilst others remain somewhat of a mystery. Plant material is composed of cells and Potassium helps to build cellulose, a component of the cell wall. It doesn't form organic compounds as do the nutrients of Nitrogen and Phosphorus, but it does aid more than forty enzyme actions which help control many plant functions. The general health of a plant will affect the amount of damage caused by disease.

Another role of this plant nutrient gives us a clue as to why Potassium is so important in the management of all plant diseases. If conditions are suitable, a spore, shortly after

landing on a host plant, will germinate and form a tiny root system. This produces an organic chemical designed to break down the cellulose barrier of the cell wall and allow the fungi to reach the sap stream on which the fungi then feed. If the cell wall is thin, this is achieved with relative ease and the fungi flourishes while the host plant suffers. If the cell wall is thick the fungal spore is unable to penetrate the cell wall and it eventually dies before it can reach the life-giving sap of the host plant.

When using organic fertilisers look at the analysis on the back of the bag. If it contains less than 3% Potassium, you would be wise to add some to it. About 10% Sulphate of Potash will usually do the trick. For plants that are particularly susceptible to disease, such as roses, it is good practice to apply about 150g of Sulphate of Potash to each bush at 3 - 4 monthly intervals. It is also known to improve the quality and colour of flowers.

Potash also enhances the formation of protein and sugars, probably because it enhances photosynthesis, the process by which these sugars are made.

Another advantage that Potassium has is that in frost-prone areas plants are better able to withstand the frost because of the higher cellulose content of the cell walls. Plants with slender stems and large flower heads, such as iceland poppies and Gerberas, will hold their heads erect if adequate levels of Potassium are used.

So there it is; the plant nutrient for a colourful and healthy garden.

THE TEN COMMANDMENTS OF SUCCESS

5. SPEAK AND ACT as if everything you do
was a genuine pleasure.



The Family Osmundaceae

Thanks to the Fern Society of South Africa for this article which was inspired by and largely copied from one written by Jolanda Nel in FERNATIX*ZA February 2000.



Leptopteris hymenophylloides,
Crepe Fern

There are only about twenty known species in the family Osmundaceae, which is divided into three genera namely *Leptopteris*, *Todea* and *Osmunda*.

These are true ferns although they do have primitive characteristics. There are rich fossil records of these ferns, dating from the Carboniferous period.

All the species have green spores, which means that the spores contain chlorophyll. Such spores are viable for a short period, some for only a couple of days. The spores of *Osmunda* I have found viable for up to six months if kept in a cold place like the deep freezer.

The rhizomes of Osmundaceae are erect or prostrate. They have a woody texture and form a trunk although they are not considered tree ferns. I know of a *Todea*

barbara with two cordexes, each of about 1.6 metres, growing near Graskop, in Mpumalanga.

Crepe ferns, *Leptopteris* (meaning Thin-fern) is a genus consisting of seven species native only to New Guinea, Polynesia, New Zealand and Australia.

The King Fern, *Todea* is a monotypic genus, *Todea barbara*. This fern occurs only south of the equator in Southern Africa, Australia and New Zealand. It was named after H.J. Tode (1733 - 1797), a German botanist. Linnaeus described it in 1753, regarded it as strange and named it *barbara*. (My apologies to all the Barbaras out there - we don't all regard you as necessarily strange, although....)

Todea barbara prefers wet, sandy soil. In nature it occurs along mountain creeks and rivers. It is easily cultivated as long as it is watered frequently.

□□□



COMPETITION WINNERS

Christmas Celebration

Winners of the special Special Effort were

Jean Boucher, Margaret Radley, Ian Broughton, Brian Nicholls, Reg Kenealy, Bill Gouge, Ray Harrison.

Many thanks to the donors of the lovely range of goods for this draw. They certainly enhanced the day for the above people, and added to the fun for everyone!

Because November's meeting was cancelled there are no more competition results to report.

THE TEN COMMANDMENTS OF SUCCESS

6. BE GENUINELY interested in people.



Trip to Byaduk Caves and Kurdeez Lime Works.

Thanks to Barry White for this article.

Eighteen members of The FSV joined in the weekend excursion in a mini bus chauffeured by our president Ian Broughton. Despite an odd disagreement with the gear shift Ian proved that he at least has a future as a chauffeur piloting the group.

After a morning tea/early lunch break at Lake Bolac the group arrived at the Byaduk caves at about 1 o'clock. The caves are located a few miles south of Hamilton in the western district of Victoria. The volcanic activity of Mt. Napier about 20 kilometres away produced periodic lava flows down the valleys. The last one was about 10,000 years ago. Steam caused large caverns to form, some of the roofs collapsed leaving rocky depressions with caves leading off the end. The protected situation in the depressions and the entrances to the caves has allowed ferns to develop in an area otherwise inhospitable to ferns.

There are a number of depressions and caves at the Byaduk site. The group had a close look at only three caves. The first was the one nearest the car park and known as Harman No.1. It is also probably the easiest one to access. The second one visited was the church cave, also reasonably accessible. The third cave visited is known as the "Fern Cave" because of the presence of a number of *Dicksonia antarctica* tree ferns. Access to this cave is impossible without a rope or ladder as the rim around the circular depression has an overhang all around it. Barry Stagoll provided a collapsible ladder which he securely affixed to some nearby trees. Four members made the seven metre descent to the floor of the depression and explored the surrounding cave. Ian Broughton added to his chauffeuring credentials by showing ability to perform acrobatics on a swaying ladder. The area between the caves was very rocky which helped to produce sites suitable for *Adiantum aethiopicum* to proliferate. Unusual ferns noted were the annual fern *Anogramma leptophylla* and the blanket fern *Pleurosorus rutifolius*.

The full list of ferns identified in the caves is listed on page 11. The three years of very dry weather obviously had a serious effect on the ferns. There were some good

areas of ferns and many dead ferns. Also the group was not able to locate all the ferns listed for the caves. However the recent rains were probably also responsible for the large number of prothalli observed which perhaps augurs well for the future.

The inspection of the three caves took about five and a half hours and meant that we had to cancel the side trip to Mt. Eccles National Park in order to get to our evening meal on time. In the metropolis of Macarthur an underworked policeman pulled Ian over for a breathalyser test. Despite suggestions from the passengers to the contrary Ian passed with flying colours. The over night stay was at the Lady Julia Percy Motel in Port Fairy. It is a delightful seaside town with many historic buildings and well worth a prolonged stay although this was denied to us. The evening meal at the motel was also delightful justifying bypassing Mt. Eccles.

On the Sunday morning the first stop was at Lorraine Deppeler's fern nursery in Allansford. Lorraine was in the process of moving from Naringal; the nursery building at Allansford was almost completed and was partly stocked, mostly with ferns grown by Lorraine from spore. After inspecting the nursery and purchasing some ferns we moved to Lorraine's home at Naringal where she turned on morning tea. Lorraine still had an extensive collection of ferns and other plants not yet transferred to Allansford. We also inspected some of the ferns growing naturally along the creek in the bush surrounding her house. The group was very appreciative of Lorraine hosting our visit at a time when she was in the middle of moving house and nursery.

After a lunch break at Timboon the group headed up to the Kurdeez lime works a few kilometres north of Timboon. The Kurdeez lime works is still active and much of the surrounding area is covered with fine dust from the factory. The main purpose of the visit was to see *Pneumatopteris pennigera* whose common name is the Lime Fern. In Australia it occurs mainly on calcareous soils. It is rare in Victoria. It also occurs at Mt.

(Continued on page 11)

THE TEN COMMANDMENTS OF SUCCESS

**7. BE GENEROUS....with praise -
cautious with criticism.**



(Continued from page 10)

Lamington in S.E. Queensland, King Island, Tasmania and New Zealand. In New Zealand it is common and not confined to calcareous soils. It has a common name of Gully Fern, or if you are into Maori words Pakauroroha. The New Zealand form is more responsive to cultivation.

The defunct Timboon-Camperdown railway line runs past the factory. The group followed the railway line north for about two kilometres. The railway line made for easy walking but the old bridges were in a state of disrepair and had to be traversed very carefully ignoring signs not to cross. There were some very good fern areas along the creek which crisscrossed the railway line. Some very large specimens of *Pneumatopteris pennigera* were observed. Also of note were specimens

of *Pteris comans* (Netted Brake) which has a restricted distribution in Victoria.

Approaching Melbourne on the return journey a vote was taken and those wanting to go straight home lost. A quick phone call was put through to Chris Goudey and we invited ourselves in for a visit to his fernery in Lara. Many of us have been there a number of times but there is so much to see that it is always worth a visit even though this one was of necessity a short one. The visit rounded off a very successful weekend.

The lucky people who went on this weekend trip late last year would like to heartily thank Barry White for organising this excursion and Ian for his sterling effort on the steering wheel. A job well done, both of you. - Lyn.

Ferns observed in the two sites.

Byaduk Caves

Adiantum aethiopicum
Anogramma leptophylla
Asplenium bulbiferum
Cheilanthes austrotenuifolia
Cheilanthes seiberi
Dicksonia antarctica
Histiopteris incisa
Hypolepis rugosula
Lastreopsis acuminata
Microsorium pustulatum
Pelaea falcata
Pleurosorus rutifolius
Polyphlebium venosum
Polystichum proliferum
Pteridium esculentum
Pteris tremula

Kurdeez Lime Works

Adiantum aethiopicum
Asplenium bulbiferum
Blechnum chambersii
Blechnum fluviatile
Blechnum minus

Blechnum wattsi
Calochlaena dubia
Cyathea australis
Dicksonia antarctica
Histiopteris incisa
Hypolepis rugosula
Polystichum proliferum
Pneumatopteris pennigera
Pteridium esculentum
Pteris comans
Pteris tremula

□□

FERN GLEN
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THE TEN COMMANDMENTS OF SUCCESS

8. BE CONSIDERATE with the feelings
of others - it will be appreciated.



Asplenium

from the lecture by Chris Goudey

The word 'Asplenium' has its origins in ancient Greek; *A* = without and *splen* = of the spleen. In mediæval times it had to do with shrinking of the spleen, I believe.

The Genus, which is one of the largest in the world, consists of 700 species. It is divided into roughly seven sub-genera including:

Asplenium,

Camptosorus (one of which is the Walking Fern),

Pleurosorus (of which there are two in Australia),

Ceterach and many others.

By far the biggest sub-genus is *Asplenium*, which has about 650 of the 700 species. The remaining sub-genera make up about 40 species.

Worldwide Distribution.

*Asplenium*s occur worldwide from the sub-Antarctic to the tropics; every continent and just about every country has some native *Asplenium*s. There are about 30 species in Australia, 28 of which grow in Queensland. New Zealand, which is famous for its ferns and *Asplenium*s, has only got 15 plus 3 sub-species. Africa has got 50.

Characteristics.

*Asplenium*s grow terrestrially, rupestrally and epiphytically.

It is a very diverse family, from tiny, grass-like species like *A. septentrionale* which grows in northern Europe to giant *A. australasicum* which can measure metres across.

As well as their size, the frond forms are diverse, from simple (e.g., Birds Nest ferns) to bipinnate, quadripinnate, pinnatifid, bipinnatifid - you name it, you can get it. Also there are infinite variations as a lot of the *Asplenium*s will hybridise - in fact, of the 18 New Zealand species and subspecies only one (*A. trichomanes*) does not hybridise.

Habitats.

Most species grow in the tropics or subtropics, usually in rainforest but my favourites are the cool

climate, hardy species, particularly the maritime ones (which grow in coastal regions). There are quite a few of them; *A. obtusatum*, *A. difforme*, *A. marinum*, *A. terrestre subsp. marinum*, *goudeyi* and even *A. flaccidum* will grow on coastal rocks.

Identification.

*Asplenium*s are fairly easy to identify, all having linear or elongated spore capsules. "Boat shaped" is a good description, the open side of the boat usually facing the midrib - or the veins if the frond is more complex. They can be confused with *Athyrium* as some species of *Athyrium* have long spore cases but the vascular bundles (which are bundles of conductive tissue inside the stems) are quite different. Also a lot of *Athyrium*s are dull and hairy whereas *Asplenium*s aren't.

Cultivation.

They are fairly easy to cultivate, particularly the ones which grow in wet sclerophyl forests and the maritime ones. In fact, all of the terrestrial ones are good but some of the tropical ones can be troublesome for us. A lot of these have long, simple fronds and only one or two per plant so don't lend themselves to cultivation.

Subgeneric Classification.

Not a great deal of work has been done on *Asplenium*. Prof. Holttum in 1974 separated one group, *Thamnopteris*, which is the Birds Nests. In Australia we have *A. harmanii*, *A. nidis*, *A. australasicum* and *A. goudeyi*. Tryon and Tryon split up fairly thoroughly the Americal species into 7 sub-genera and more recently Patrick Brownsey in his "Flora Australiensis Vol. 48" proposed ten different groups. They are included in full On page 13 - 14.

- *Asplenium trichomanes* group

A. flabellifolium, *A. trichomanes*.

Pinnate fronds; spores with narrow ridges or wings, non-fenestrate; plants lithophytic or terrestrial.

Widespread in northern- and southern-temperate regions.

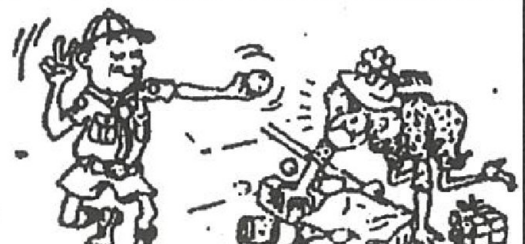
THE TEN COMMANDMENTS OF SUCCESS

9. BE THOUGHTFUL of the opinions of others - there are three sides to any controversy; yours, the other person's and the right one..

- ***Asplenium simplicifrons* group**
A. simplicifrons.
Simple fronds with free veins; spores ridged, non-fenestrate; plants epiphytic. Single Australian representative of a tropical group that includes *A. amboinense*.
- ***Asplenium nidis* group**
A. australasicum, *A. harmanii*, *A. nidis*.
Simple fronds with veins connected at margins; spores with broad ridges, fenestrate. epiphytic bird's nest ferns. Old World tropics and sub-tropics.
- ***Asplenium obtusatum* group**
A. appendiculatum, *A. difforme*, *A. flaccidum*, *A. obtusatum*.
Fronds 1 - 2-pinnate, leathery or fleshy; spores with broad ridges, fenestrate; plants mostly coastal or epiphytic. Predominantly southern-temperate regions.
- ***Asplenium bulbiferum* group**
A. athertonense, *A. attenuatum*, *A. baileyianum*, *A. bicentenniale*, *A. bulbiferum*, *A. hookerianum*, *A. paleaceum*.
Simple to 2-pinnate fronds, often proliferous; spores winged, non-fenestrate; plants mostly lithophytic or terrestrial. Predominantly temperate and tropical Australasia.
- ***Asplenium capitisyork* group**
A. capitisyork, *A. carnarvonense*.
Pinnate fronds, proliferous; spores with smooth, broad ridges, non-fenestrate; terrestrial. Australian tropics and subtropics.
- ***Asplenium polyodon* group**
A. pellucidum, *A. polyodon*.
Pinnate fronds with dark rachises; spores with smooth, broad ridges, non-fenestrate; plants terrestrial or epiphytic. Widespread in Old World tropics and southern-temperate regions.
- ***Asplenium aethiopicum* group**
A. aethiopicum, *A. cuneatum*, *A. laserpitifolium*.
Fronds 2-3-pinnate with dark rachises; spores with broad ridges, non-fenestrate; plants lithophytic or epiphytic. Widespread in tropics and southern-temperate regions.
- ***Asplenium unilaterale* group**
A. excisum, *A. unilaterale*, *A. wildii*.
Pinnate fronds with basiscopically excised oinnae; rhizomes creeping; spores winged, non-fenestrate; plants lithophytic or terrestrial. Old World tropics and subtropics.
- ***Asplenium parvum* group**
A. normale, *A. parvum*, *A. tenerum*.
Asplenium parvum group cont.,
Fronds 1-2-pinnate; spores reticulate fenestrate; plants mostly lithophytic. Old World tropics. An ill-defined group sharing reticulate fenestrate spores; individual species may be more closely related to other groups.

THE TEN COMMANDMENTS OF SUCCESS

10. BE WILLING to give service. What counts most in life is what we do for others.



Remarks

Chris shared lots of hints and information while we enjoyed a selection of his slides and he also talked about the *Aspleniums* he and others had brought to the meeting. I have tried to select some of the most interesting data for you. *Asplenium aethiopicum* (African form) is sold here as *A. lividum*. Chris discovered this when he was 'mouthing off' (his words!!) over there that what he was looking at was *A. lividum*. He was soon put straight. Oooops!!!

Asplenium attenuatum is from central to northern Queensland. It is extremely variable.

Asplenium belangeri is a slow-growing fern here. Though a heat-lover it will grow in colder parts but the further north it is, the more quickly and vigorously it grows.

Asplenium bulbiferum × *A. hookerianum* is from New Zealand though Michael Garrett has found the same cross in Tasmania. It is a lovely, dainty little fern.

"Austral Gem" which Chris has released onto the market is *Asplenium difforme* × *dimorphum*. (*A. dimorphum* is the Three-in-one Fern) and this hybrid form is quite dimorphic, the juvenile frond being much coarser than the mature one. A very rare fern, it grows in coastal positions on Norfolk Island.

Tried to grow *Asplenium friesorium* without success? Maybe this will help; it was seen growing in a pine forest in Zimbabwe. A slow growing, pretty fern, it produces bulbils but not many. Fronds get to 150 cm long.

Asplenium hookerianum nearly always grows among the roots of Beech trees in both New Zealand and Tasmania. A symbiotic relationship between them - or between *A. hookerianum* and something else growing under or on Beech trees - seems indicated.

Asplenium laserpitifolium, known as the Johnson River fern,

is a huge plant that grows at the bottom of Stags and Elks, Birds Nest ferns or in the clefts of trees in northern Queensland. It is a beautiful fern which can produce fronds over a metre long. (Take your binoculars - they can grow very high up! -Lyn)

Don't try and grow *Asplenium laterale* var. *australiense* in Victoria. It's a Queensland one which won't grow here.

Asplenium millnei grows on nearly pure limestone on Lord Howe Island. It is abundant on the lowland, limey areas of that island.

Asplenium obtusatum and *A. oblongifolium* look similar and you could be excused for thinking that the *A. oblongifolium* you see growing in New Zealand's north extends right through the country but the further south you go the more likely it is that you are seeing *A. obtusatum*.

Asplenium surrogatum is another Lord Howe fern, this one growing on the mountains there. It was previously known as *A. pterioides*.

Asplenium terrestre usually grows on rotting logs in Tasmania but in Victoria all the finds have been growing on basalt, usually in caves (such as Byaduk Caves).

Hints, Tips and Gossip.

When you grow ferns in commercial media, either because they were bought in them or you used it when repotting, you can't let them get pushed to the back of the bench where they miss feeding, even for a short time. These media are sterile and the plants will just starve to death.

Watch out for coconut scale - they just love Spleenworts.

One way to try and produce hybrids from spore, and the easiest way, is to oversow one type of spore on another . . . and wait. The chances that something interesting will be produced among all the sporelings are pretty good and this method is much less painstaking, time consuming (and expensive) than other methods.

When in New Zealand once, Chris met a lady who sold small, clear plastic, egg-shaped containers in which were potted up tiny prince of Wales ferns in soil with moss etc. Can you think of any novel ways of presenting ferns for sale? Maybe for our Show.....


Martin Rickard has a new (well, not so new now, thanks to some tardy reporting) book out on ferns in Great Britain which is excellent. You can form your own opinion on the chapter dealing with the importing of tree ferns from Victoria.

Let me finish with a story. Years ago a man was rescued from a sea cliff on the south coast of Tasmania after a boating accident. During the rescue, one of the rescuers noticed a very unusual *Asplenium* growing down the cliff face. He brought back fronds which he pressed and had these identified as a hybrid between our *Asplenium obtusatum* and our *A. bulbiferum*.

Hearing about this, Chris worked on Michael Garrett, who meanwhile worked on the rescuer, to take him there and show him this plant. It took two years and when they finally got there it took a long time to find the spot - but when they did they were excited to find a patch of fifty or sixty plants. Of these only the youngest were producing bulbils.

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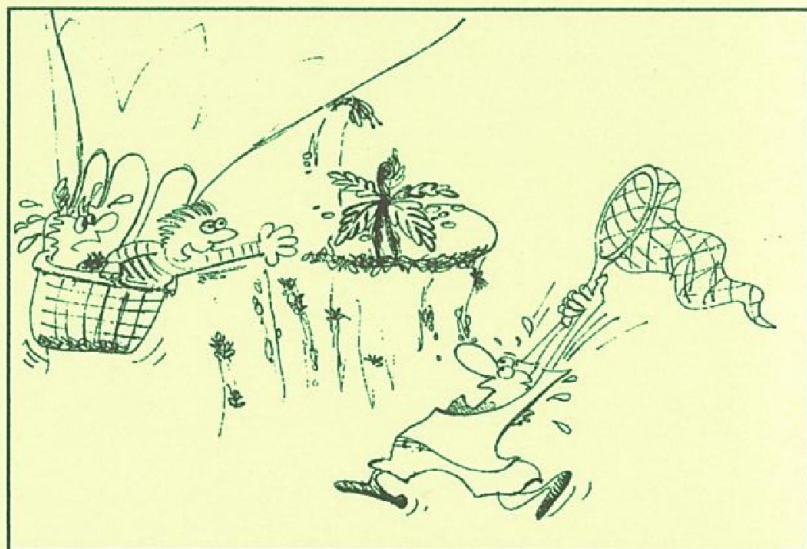
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 Opinions expressed in this newsletter are the personal views of the authors and are not necessarily endorsed by the Society, nor does mention of a product constitute its endorsement.

Patrick Brownsey identified it as *Asplenium bulbiferum* subsp. *gracillimum* and this was the first record of it in Australia.

It is a peculiarity of this hybrid that the mature plants do not bear bulbils at all. The one tiny plant that Chris was allowed to take home is still going but is now too old to produce bulbils so it is the end of the line for him. He has in the past taken some bulbils from it, not many because this fern doesn't produce many at all but unfortunately he has only kept the original plant.

□□□



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