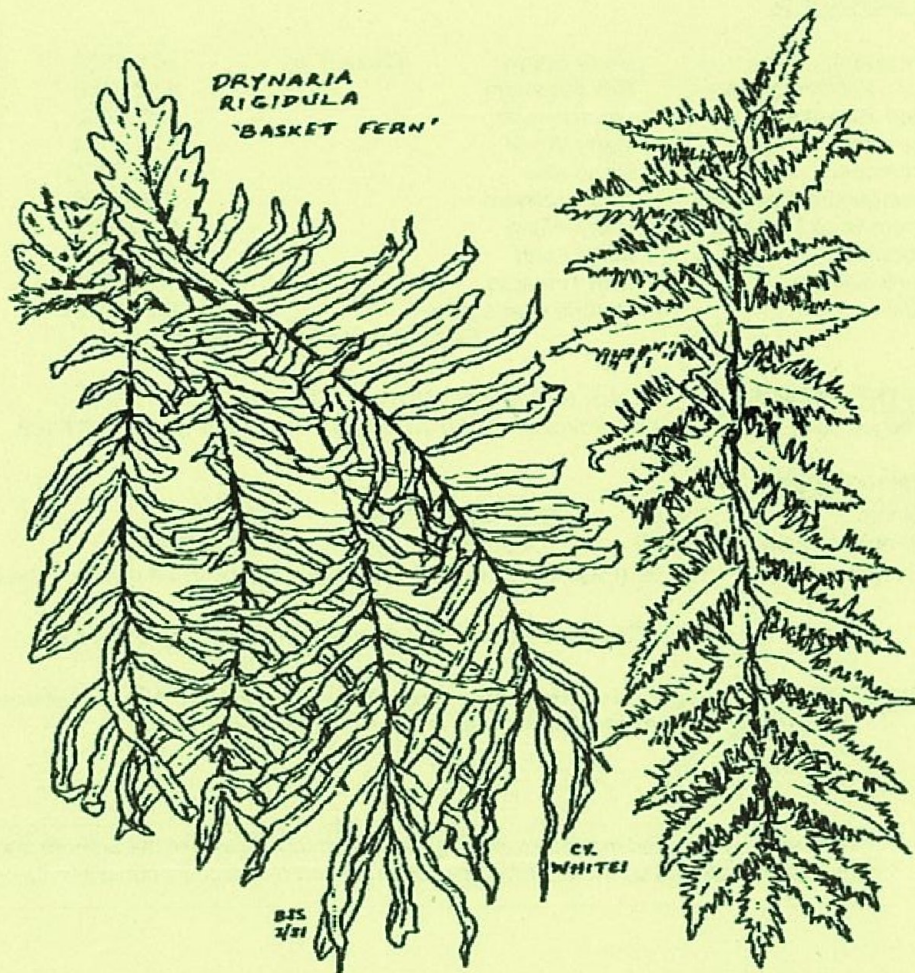


ABN 85 086 216 704

NEWSLETTER

CHIAPOCHI SOCIETY OF AUSTRALIA



VOL. 28, NUMBER 1
**JANUARY/
FEBRUARY 2006**

FERN SOCIETY OF VICTORIA Inc.

POSTAL ADDRESS: P.O. Box 45, Heidelberg West, Victoria, 3081
E-mail: http://gardenbed.com/clubs/clubs_vicferns.cfm
Web: <http://home.vicnet.net.au/~fermsvic/>

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: | Barry Stagoll | Phone/Fax | 98441558 |
| Imm. Past President | Rex Gresham | | 57962466 |
| Vice-President | George Start | | 59625059 |
| Secretary | Barry White | | 97402724 |
| Treasurer | Don Fuller | | 9306 5570 |
| Membership Secretary | Rex Gresham | | 57962466 |
| Spore Bank Manager | Barry White | | 97402724 |
| Librarian | Mirini Lang | | 98866109 |
| Book Sales | Ivan Traverso | | 98364658 |
| Editor | Brenda Girdlestone | | 93907073 |
| Email: macstone@hotmail.net.au | | | |

COMMITTEE MEMBERS: Jack Barrett 9375 3670, Gay Stagoll 9844 1558,
Norma Hodges 9878 9584. Brenda Girdlestone 9390 7073 and Mirini Lang 9886 6109.

SUBSCRIPTIONS:

| | | | | | |
|-------------------|--|--------------------|---------|---------|---------|
| *Single | \$15.00 | *Pensioner/student | \$12.00 | *Family | \$17.00 |
| *Pensioner Family | \$14.00 | *Organisation | \$17.00 | | |
| *Overseas | \$22.00 (Payment by international bank cheque in \$A please. Sent by Airmail.) | | | | |

***Subscriptions fall due on 1st July each year.**

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

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

Timetable for evening general meetings:

| | |
|-------|---|
| 7.30 | Pre-meeting activities - sale of ferns. Spore, books, merchandise and special effort tickets. Also library loans and lots of conversation. |
| 8.00 | General meeting |
| 8.15 | Workshops and demonstrations. |
| 9.15 | Fern identification and pathology, special effort draw. |
| 9.45 | Supper and another good yarn. |
| 10.00 | Close. |

CALENDER OF EVENTS 2006

Thursday the 16th February, 2006, 8.00pm at the Kevin Heinze Centre Weatherby Road, Doncaster.

This will be our first meeting for 2006, which will be:- Speaker

Michele Adler of Burnley Horticultural College, Univ of Melbourne, has agreed to speak about her working visit to Wisley Gardens, Royal Horticultural Society UK, in the northern autumn of 2005. She was invited originally to do cataloging work on the fern collection, recently augmented by plants donated by the British Pteridological Society. However, on arrival she was asked instead to work on Daboecia (a genus of erica commonly known as heath). However, her commentary on Wisley should be of interest in any case

Competition category for February is: a British fern

A few English ferns

Some Equisetums and Dryopteris; Osmunda regalis, Adiantum capillus-veneris; Polypodium vulgare, camptocarpum; Pteridium aquilinum; Asplenium trichomanes, scolopendrium, marinum; Athyrium filix-femina; Polystichum lonchitis, aculeatum, setiferum; Blechnum spicant.

Committee members are reminded that there will be a committee meeting at 7.00pm prior to the general meeting.

=====

MARCH MEETING

Thursday the 16th at 8.00pm at the Kevin Heinze Centre Weatherby Road, Doncaster.

The nights subject will be a talk on Rippon Lea Fernery, including a review of its history and the FSV involvement in later years.

APRIL SHOW

Saturday 22nd - Sunday 23rd

Further information page 9

APRIL OTWAYS

Saturday 29th - Sunday 30th

Further information page 11

PRESIDENTIAL PERORATION

At the time of writing, although we've had some relatively brief hot and dry periods over previous weeks, fortunately there's been enough cooler days - and some rain here and there - to help look after the gardens while we've all been involved with the usual round of activities in the lead-up to Christmas. This included the Society's Christmas Lunch at the Kevin Heinze Centre, which was well attended as usual. We were pleased to have former Treasurer Jean Trudgeon with us after a long absence from Society events, and Ron and Margaret Robbins again journeyed from South Australia. Sadly, Fran and Ray Harrison, and also Jean Boucher had to send their apologies this year. Our 'blind' auction again raised a good amount for a donation to the Centre.

Now that the Christmas tree is organised (and most of the gifts to go under it) along with the other preparations, at home we're beginning to focus on the certainty of the hot weather soon to arrive, and the things we need to do to look after our plants - especially if we are to take any time away from home whilst it's hot.

In our case, we've tried to repot as many as possible of our plants that would obviously benefit from this before the most stressful weather is on us. Over the years if there's one thing we've learned about potted plants it is that if they are not repotted when the potting mix needs renewing - either because it no longer re-wets readily when it's been through some drying weather, or because it's compacted and won't drain effectively - then we'll have greater losses. Moving plants about to try to optimise their locations is also important at this time - for instance, trying to give individuals more shade or a closer location to sprinklers, and making sure that larger plants haven't grown on so much during the spring that they shed water away from smaller ones.

We still have more to do, including attending to places where there's gaps in the shade cloth which is necessary to protect potted plants from the wind. But as gardeners, we don't begrudge the time and effort, because there's lots of satisfaction from succeeding with growing things.

We look forward to a successful Fern Society year in 2006 and to seeing you all at our activities. Don't forget to let us know if you have any suggestions for the Committee on specific subjects you'd like to have covered at meetings, or locations for possible excursions.

Barry Stagoll

TASSEL FERNS IN CULTIVATION

Bu Ron Robbins

The cultivation of tassel ferns differs in requirements to most other ferns. They can be tolerant to heat, cold, moist and dry conditions, with some reservations. These ferns can cope within a temperature range of between 3-35 degrees Celsius but require good drainage, air circulation, protection from winds and direct sunlight, preferring to be kept on the dry side of moist, but not wet, requiring more water in summer than in winter.

Tassel ferns **WILL NOT SURVIVE IN SOIL**, they need an open free draining potting medium.

Being an epiphyte, an excellent potting mix would be various grades of treated pine bark in the range of 5-12mm, peat and charcoal. Granulated styrene could be added to increase aeration around the roots, plus, at the discretion of the grower, an addition of fern fibre.

During spring and summer, tassels can be fertilised at regular intervals with the application of a liquid fertiliser at half strength. A slow release fertiliser could be used if desired. Watering is best carried out in the mornings, remembering not to over water or allow the ferns to be wet for long periods, as this can cause stem or root rot, hence the necessity for good drainage.

Tassel ferns are inclined to be brittle, handle with extreme care at all times.

The context of this article is a basic generalisation only for the growing of Huperzias (tassel ferns), and therefore should be used as a guide only, at the growers discretion.

Shadehouse Construction

How best to build a shadehouse for ferns economically?

Barry Stagoll

Steel Pipe Construction

Having constructed houses using a variety of materials over the years, my preference for a shadehouse is a structure made from steel pipe enclosed with shadecloth. It offers the advantage of being easily assembled and disassembled - very convenient if you decide that it would be preferable to relocate it (or even to relocate yourself and all your worldly possessions). It's very durable, and needs no painting. And, if your interests run to hanging baskets, with enough verticals installed and adequate bracing it will carry their weight happily. The finished house looks as neat and inoffensive as any garden structure of its size might. Hopefully this will avoid complaints from the neighbours as well as satisfy you!

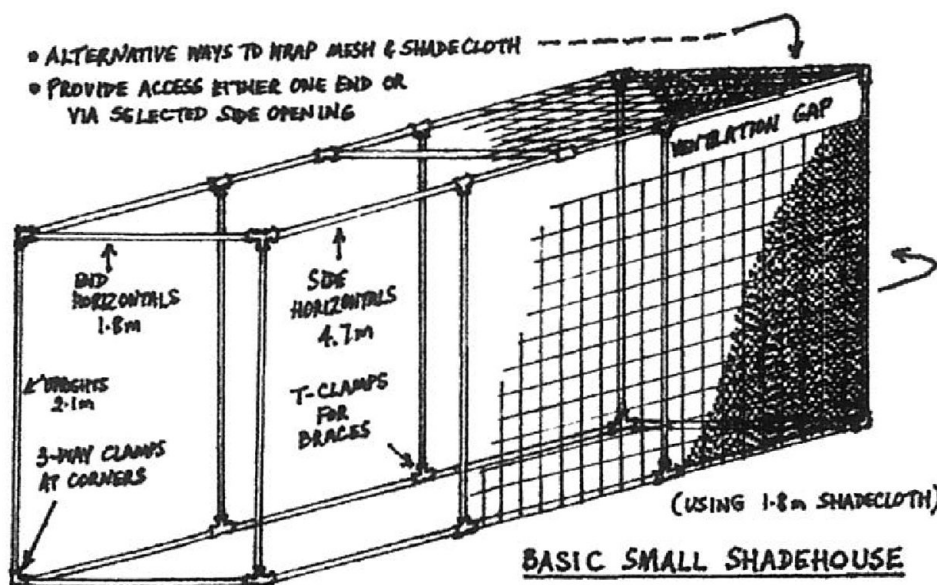
For smaller shadehouses, of the type I intend to cover in these notes, $\frac{3}{4}$ inch (19mm) inside diameter pipe (a little more than 1 inch - approximately 27mm - outside diameter) is the normal choice. Today at the steel distributor you're likely to be offered a "thin-wall" steel tube, which has a larger inside diameter - this is of similar strength, and is quite OK. Threaded ends are not necessary, as they will be joined using clamps, so the pipe can be simply cut to the required lengths. It used to be possible to buy pipe lengths in reasonable condition from second-hand building materials dealers, and they may occasionally still be found there. However, new pipe is

Once you've decided upon the dimensions, you'll need to cost the materials you'll need, before deciding whether to proceed. The main cost will be in the pipe and pipe fittings, obtainable from steel distributors who supply fencing contractors, etc. When obtaining prices from the distributor, you should be aware that they will cut pipe for a small extra charge to the quantities and lengths required. If delivery is required this will cost extra, of course. They will also be able to supply the required quantities of each type of pipe clamp. To form the corners - both at the base and the top - 8 "3-way" clamps are required; the intermediate uprights and cross-members each require 2 "T" clamps. The only other materials needed for the basic house are a roll of steel wire "roofing mesh", shadecloth, and fixings for the mesh and the shadecloth. These can be obtained from building materials outlets and hardware/garden supplies stores. The roofing mesh is an open, flexible mesh welded from a fairly light gauge of zinc-coated wire, and is designed for use as a safety measure under roof coverings - to avoid falls during installation or maintenance. In a shadehouse it can be used as a suitable and inexpensive way to limit sag in the shadecloth fitted to the roof, and wind-load distortion on the walls.

For small houses of this type, access might be merely via a door opening left in one side (preferably

not facing the prevailing wind), or by a shadecloth "flap". However, if desired, it's a simple enough matter to create a door using pipe & clamps (clamps which can serve as hinges can also be obtained) or a welded door frame and conventional hinges could be used. Of course, the door can also be covered in shadecloth.

It's preferable to decide on dimensions which will optimise the use of the materials, to save waste. For instance, the height, length and/or width of the shadehouse might be decided in light of the width of the shadecloth to



not so expensive that it will be worthwhile to go to too much trouble to locate pre-used material.

be used (1.8m or 3.6m - 6 feet or 12 feet).

continued page 8

AUDITORS REPORT

To the Committee and members of the Fern Society of Victoria Inc.
From Bernadette Thomson

I have examined the account books and bank records of the Fern Society of Victoria and I consider these accounts to be a true record of the finances for the operation for the year ending 30th June, 2005.

Bernadette Thomson

BALANCE SHEET AS AT 30th JUNE 2005. SUMMARY

| 2004 | | 2005 |
|----------|----------------------------|----------|
| \$ | | \$ |
| 3,840.17 | Income - General Account | 2,623.95 |
| 3,505.48 | Less - Expenditure | 2,558.64 |
| -665.31 | Operating Deficit/surplus | 65.31 |
| 607.86 | Plus Fern Show Surplus | 314.72 |
| -57.45 | Total Deficit for year | |
| | Operating surplus for year | 380.03 |

MEMBERS FUNDS

| | | |
|------------------|---------------------------------------|--------------------|
| 18,583.94 | Brought forward from previous balance | 18,526.49 |
| -665.31 | Surplus/Deficit - General Account | 65.31 |
| 607.86 | Surplus - Fern Show | 314.72 |
| <u>18,526.49</u> | TOTAL MEMBERS FUNDS | <u>\$18,906.52</u> |

REPRESENTED BY CURRENT ASSETS

CASH AT BANK

| | |
|----------|-----------------|
| 2,712.44 | General Account |
|----------|-----------------|

STOCK

| | | |
|--------|---------------------|-------|
| 92.85 | Mugs | |
| 92.85 | | |
| 100.00 | Miscellaneous Goods | 91.50 |

INVESTMENTS

| | | |
|-----------|---------------------|-----------|
| 15,715.20 | Term Deposits | 15,938.10 |
| 18,620.49 | TOTAL ASSETS | 19,103.52 |

CURRENT LIABILITIES

| | | |
|--------------------|------------------------------|--------------------|
| 94.00 | Prepaid Members subscription | 77.00 |
| | Unpresented cheques | 120.00 |
| <u>\$18,526.49</u> | TOTAL NET ASSETS | <u>\$18,906.52</u> |

GENERAL ACCOUNT INCOME

SUBSCRIPTIONS

| | | | | |
|----------|----------|-------------|----------|----------|
| 1,453.50 | 1,168.00 | Renewals | 1,215.50 | |
| | 285.00 | New Members | 95.00 | 1,310.50 |

SALES/ COMMISSIONS

| | | | | |
|--------|--------|---------------------------|--------|--------|
| 48.30 | | Spore Bank Sales | | 17.50 |
| 40.35 | | Commissions on fern sales | | 5.00 |
| | 387.60 | Misc. Sales to Members | 191.10 | |
| 145.12 | | 242.48 Less cost of goods | | 197.25 |
| -6.15 | | | | |
| | 15.00 | Sales of Mugs | - | |
| -1.40 | 16.40 | Less Cost of mugs | - | |
| | | Sales of books | 110.00 | |
| | | Less cost of books | 110.00 | - |

SPECIAL EFFORTS

| | | |
|-------------------|-------------------------------|--------------------------|
| 139.50 | General (Net) | 212.50 |
| | <u>OTHER INCOME</u> | |
| 126.00 | Advertising | 126.00 |
| 322.05 | Auction Receipts | 201.50 |
| | Donation | 3.00 |
| 2,273.42 | OPERATING INCOME | 1,869.35 |
| | ADD NON OPER'G INCOME | |
| 0.30 | Bank Interest General Account | .24 |
| | Interest from rollover fund | 222.90 |
| 566.75 | Interest on Term Deposits | 531.46 |
| <u>\$2,840.17</u> | <u>TOTAL INCOME</u> | <u>\$2,623.95</u> |

GENERAL ACCOUNT **EXPENDITURE**

| | | |
|-----------------|--|------------------------|
| | <u>NEWSLETTERS</u> | |
| 1,039.17 | Printing | 1,042.02 |
| 419.91 | Postage | 398.21 |
| <u>1459.08</u> | | <u>1440.23</u> |
| | <u>ADMINISTRATION</u> | |
| 150.00 | Honorariums | 150.00 |
| 35.00 | Regist'ns/Subs'ns | 35.80 |
| 19.80 | Admin/Secretarial | 64.71 |
| 281.0 | Supper/meals | 137.00 |
| 295.00 | Meeting venue hire | 225.00 |
| - | Guest Speaker Exp. | - |
| 27.60 | Bank Account Debits Tax | 24.90 |
| 55.00 | P.O.Box Rental | 56.00 |
| 160.00 | Donation Kevin Heinze centre | 100.00 |
| 260.00 | Insurance | 270.00 |
| - | Library Books | 55.00 |
| 363.00 | 25 th Anniversary Celebration | 363.00 |
| <u>2,046.40</u> | | <u>1,118.41</u> |
| <u>3505.48</u> | <u>TOTAL EXPENDITURE</u> | <u>2,558.64</u> |

FERN SHOW (Held jointly with Australian Rhododendron Society)

| | | |
|-----------------|--|-----------------|
| | <u>JOINT RECEIPTS/EXPENDITURE</u> | |
| 1,829.50 | Receipts | 1,254.10 |
| <u>1,261.27</u> | Expenditure | <u>1,594.86</u> |
| 568.23 | Joint deficit/surplus | -340.76 |
| 207.62 | FERN SOCIETY SHARE 50% | -170.38 |

| | | |
|---------------|-----------------------------------|---------------|
| | <u>INCOME FERN SOCIETY</u> | |
| 5,321.00 | Fern Sales | 4,413.15 |
| 4,830.15 | Less - Cost of Sales | 3792. 27 |
| 50.00 | Donation | 50.00 |
| <u>540.85</u> | | <u>670.88</u> |

| | | |
|---------------|--|--------|
| | <u>EXPENDITURE – FERN SOCIETY</u> | |
| 69.10 | Display Expenses | 75.78 |
| <u>148.00</u> | Travel & trailer hire expenses | 110.00 |
| 217.10 | | 185.78 |

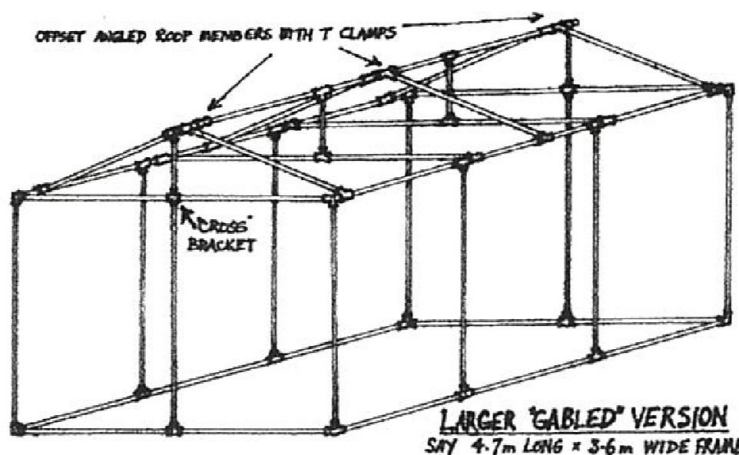
| | | |
|-----------------|---------------------------------------|------------------------|
| | <u>SURPLUS OF FERN SOCIETY</u> | |
| 323.75 | Income less expenditure | 485.10 |
| 284.12 | Plus – share of joint surplus/deficit | -170.38 |
| <u>\$764.60</u> | <u>FERNS SHOW SURPLUS</u> | <u>\$314.72</u> |

Continued from page 5

You might consider whether it would be an advantage to leave a gap above the top of the shade-cloth on the walls, to provide for extra ventilation (and especially venting of heated air in the warmer months). If there's an air gap at the top, usually it's best to fit the shade-cloth right down to the ground to avoid too much breeze going through the house, thus risking pots drying out too readily. A convenient width for a house is either 1.8m (6 feet) or 3.6m (12 feet) as this will accommodate either width of shade-cloth (make the house a bit less wide if you intend to raise the centre of the roof, so the shade-cloth on the top will still reach each side). The steel roofing mesh comes in rolls of 1.8m (6 feet) width. Length of a house might be, say, around 15 feet, using intermediate uprights at around 1.5m (5 feet) intervals. The steel pipe is sold in lengths of 6.5m (say 21½ feet), so it's convenient if the cut lengths required can readily be obtained out of a minimum number of full lengths. Uprights of 2.1m length (7 feet) allow for the use of 1.8m (6 feet) wide shade-cloth, leaving a 300mm (1 foot) air gap at the top.

The accompanying drawings show the general construction layout of two simple shadehouse designs using pipe and pipe fittings.

Shade-cloth



As to the choice of shade-cloth, the knitted types are generally more long-wearing than the woven ones. In a situation where the wind can be strong, a denser (higher % shading value) cloth is better on the walls. On the roof, a higher shading value cloth will tend to shed more rain to the sides than a lower shading value one (because of the denser knit) if the cloth is fitted at a reasonably steep pitch angle, whereas if it's horizontal rainfall will not be deflected much (but it will tend to "pond" in any sagging areas). It would be possible to use these different characteristics to build a house which can offer some slightly drier areas - where natural rainfall is deflected somewhat - should some of the plants you choose to grow prefer this.

As to the other factors to consider in choice of

shading value and colour, this depends on the intended use of the house. The shading value is an estimate of the reduction in the passage of UV, not "visible light".

Higher shading value will tend to provide somewhat better control over the build-up of heat within the house, and UV burn. The darker the colour of the cloth, the lower the level of visible light within the house. For flowering plants, to obtain maximum growth rates and flowering the lighter shades of cloth are recommended. But shade-loving ferns are at the other end of the scale and deep green is usually appropriate. The decision on the colour for walls is less critical unless they are exposed to a large amount of direct sunlight, and other colours might offer the possibility of some minor "zoning" within the house for plants with greater tolerance to bright light. The colour for the walls might also be chosen with some sensitivity to the external appearance of the shadehouse.

Construction

Once the site is selected and levelled, it's preferable to put down some heavy PVC building sheet ("black plastic" sheet). After the house is installed, this can then be covered with a layer of gravel or crushed rock screenings to provide a suitable floor.

No "foundations" as such are required. However, if the site is very windy some large tent pegs can be used to hold down the lengths of pipe at the bottom (make sure that there are no pipes underground when choosing where to install these).

Lay out the bottom horizontal lengths and fit "3-way" brackets to them. Then fit "3-way brackets" to one end of each of the corner posts, and attach these to the bottom. Tighten the lower brackets after checking that the corners of the rectangle on the ground are approximately square.

For the next stage, a couple of helpers are valuable, to steady components whilst fitting. First the 4 top "horizontals" to complete the outside framing of the walls, then the intermediate uprights along each side using "T" brackets, then those across the top. Then on to the short uprights and the "ridge" pipe if the roof is not to be flat, followed by the roof laterals, all fitted using "T" brackets.

If the house is to be provided with more uprights and braced (see the next section), this is the time to do this.

When the frame is complete, it's time to fit the "building mesh". Cut it to length as you go (it can be wrapped around corners to minimise the cutting) and attach it with loops of soft wire tightened off by turning with pliers.

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FERN and VIREYA RHODODENDRON SHOW

Saturday 22nd - Sunday 23th April 2006

Our Show in 2006 will again be a joint venture with the Australian Rhododendron Society (our 9th) and will be held on the weekend of the 22nd and 23th of April 2006. **Please put this date in your diary.** It will again be held at the Mount Waverley Community Centre (crn. Miller Cress and Stephenson Road, opposite the Mount Waverley Railway Station).

The Show will be open from 10-00am to 5-00pm on Saturday and 10-00am to 4-00pm on Sunday. The admission charge is unchanged at Adults \$4-00, Concession \$3-00, and Children under 15 free. **Members of both societies who contribute to either the competition or display, plus those acting in an official capacity for the day, will be admitted free. For other members the admission charge will be the concession rate of \$3-00.**

The Show is important to the Society as it provides us with the opportunity to attract new members which are so important to the Society. However as our active membership is aging and now quite few in number the Show provides us with a significant challenge. **We urgently need the help of more members, particularly those unable to attend the monthly meetings, with the setting up and the clearing up after the Show.** Other ways of assisting with the Show are -

1. Contribute to the fern competition and display
2. Grow ferns (or sell your excess ferns) for the sales bench
3. Publicise the Show

We especially invite those members unable to attend the monthly meetings to come along and contribute to the fern competition and display. Advertising flyers will be available at the February meeting and will also be included with the March/April newsletter.

We will again be holding a Fern Competition and it would be great to see even more

members enter the competition. Please remember that to enter a fern you must have owned it for 6 months. The categories are as follows,

1. **Adiantum**
2. **Asplenium**
3. **Davalliaceae**
- restricted to Arthropteris, Davallia, Humata, Rumohra, Scyphularia.
4. **Blechnaceae**
- Blechnum, Doodia, Woodwardia.
5. **Polypodiaceae**
- Goniophlebium, Microsorium, Phlebodium, Polypodium, Pyrrosia.
6. **Fern in Container 150mm or Less.**
7. **Any Other Fern**
- not covered by categories 1 - 5.

Our feature fern display will be **Adiantum Ferns** and we would like to have a large number and variety of these ferns.

The Show is a good opportunity to display your best and most interesting ferns so these start selecting and grooming them now. Please make sure that your ferns are free of pests and are clearly labelled with their botanical name. If you are unsure of the name you may be able to get help at our monthly meetings.

Members who enter the fern competition or display are able to bring in ferns for sale on a 15% commission basis. We are most interested in having some of the rarer and more unusual ferns for sale.

The members of the Show Committee are,
Brenda Girdlestone 9390 7073,
Norma and John Hodges 9878 9584,
Bernadette Thomson 9399 9793,
Barry White 9740 2724,
Don Fuller (Chairman) 9306 5570.

More information in the March/April 2006 Newsletter.

Don Fuller

Continued from page 8

Finally, the shadecloth can be attached with proprietary fixings to suit sold by the manufacturers (for instance plastic twine fixed around the pipe), but an alternative is to use plastic "electrical ties" passed through the mesh and around the pipe. These are cheap and easily cut away if you want to make changes or relocate the house. Make sure that you use enough fixings to avoid the cloth being lifted by wind, or sagging on the walls.

Beyond the "Basic House"

The basic house construction will need reinforcing if it is expected to provide hanging space for baskets (or to provide support for shelving for a heavy load of pots), unless separate free-standing stands or shelves are to be used.

There are two issues to consider. First, will extra "uprights" be necessary, to carry the weight through to the ground? (otherwise, the upper "horizontals" will sag). It's easy enough to provide more, using the same construction method of pipe cut-to-length and fixed in place with additional brackets, but always make sure that the "foot" of each upright is well secured against moving from its correct place - if placing in the centre they will either have to be fixed to an extra horizontal fitted across the floor, or provided with a sound concrete footing (say 150mm diameter, and deep enough to allow at least a few cm of concrete under the pipe). Also it's wise to consider pegging down the bottom pipe sections so they won't tend to move. Second, even if enough uprights are added, is there a risk that the upper parts of the structure may "tilt" under the weight? To insure against this, an inexpensive and convenient approach is to brace the walls - diagonally corner-to-corner - using sturdy zinc-coated wire or wire-rope tensioned by turnbuckles. Make sure that the wire is very firmly attached at each corner and to each end of the turnbuckle, as a wire escaping from a tensioned state can be dangerous.

In a typical installation, say intended to carry a dozen medium-sized baskets down the centre of a shadehouse built from "¾ inch" (27mm outside diameter) pipe, and around 4.5m (say 15 feet) long, I would suggest that a minimum of 2 centre posts be fitted (i.e. at around 1.5m intervals), and that all external walls (excluding the access opening) be braced corner to corner. The access could be braced at the top with a short steel strut fitted to each corner of the opening.

Of course, it's best to make these modifications before fitting up the "building mesh" and the shadecloth if possible, although they can be done afterwards. The "dismountable" character of these structures, and particularly the small unit size of the individual components and the ease of assembly, disassembly, and alteration, makes them a flexible system for housing plants.

Obviously, the materials and methods for using them discussed here are capable of being used to build larger structures - all the way up to commercial grower-sized ones using larger pipe sizes - and variations in dimensions or the detail of how they are put together is a relatively simple matter.

This article is an edited version of one first published in the Journal of the Australian Rhododendron Society. Barry also covered glasshouses in the talk at the November 2005 meeting, but it's likely that most members have greater use for shadehouse-type structures than for glasshouses.

Fading Memories

Reprinted from an unknown source

As the years slip by I find that I can't recall the name of a plant as quickly as I used to. I guess that's part of the human condition, but what I find hard to accept is when I pull a label from a pot and find it has faded to a blank. That was "permanent" ink that was used to write the label. Alas, the black pigment used in the ink does last forever but the carrier and binder used in the ink is not resistant to the harsh weathering conditions found where plants flourish. As a result all of the label's information is permanently washed away. The best solution to this problem is also the simplest; a soft lead pencil.

Plastic tags seem to be universal nowadays. Environmental factors cause the plastic tag to slowly erode away, but the area beneath the graphite, which will last for years, is protected from the erosion much longer.

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AUSTRAL FERNS

Wholesale Propagators.

Phone (03)5282 3084.

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



Otways Weekend

2006

The Society will be holding an excursion to the Otways on the weekend of 29th and 30th April 2006.

The tentative itinerary will include Melba Gulley, Maits Rest, Beauty Spot Scenic Reserve, Triplet Falls and the Otway Fly, Beauchamp Falls, Turtons Track, Les and Rosemary Vulcz's Nursery.

It will be a drive yourself weekend, with accommodation in cabins in Apollo Bay on the Friday and Saturday nights. This will enable an early start to the fern areas on the Saturday morning. We will meet at Apollo Bay at the accommodation cabins at a time of your convenience on Friday evening. If anyone cannot make it on the Friday evening a rendezvous point can be arranged for the Saturday morning.

Accommodation will be in cabins in Apollo Bay. These are one or two bedroom cabins with cooking facilities, costing about \$70 or \$110 per night. Members can also make their own private arrangements.

The one bedroom cabins have a double bed and two bunks, and the two bedroom ones have double that.

Bookings are not required for this weekend so if you are intending to go or just need more information then please contact Barry White on 9740 2724. As the time is getting closer please assist the organisers in letting them know early.



FERN POTTING MIXES

In our last issue, we published a request by new member Sherry Prince from Tasmania for some advice about potting mixes for ferns, etc. You may recall that Sherry opened a retail nursery in May 2005). Subsequently, Barry and Gay Stagoll sent an email reply to Sherry and, as promised, we're now publishing this. They certainly don't intend it to be taken as anything like the "last word" on potting mixes (or the other things discussed), and the views of other readers of the Newsletter are invited. We'll happily publish your contribution if you send it to the Editor.

Dear Sherry

We're all pretty familiar with the greater difficulty of growing ferns in pots compared with in the ground (that is, assuming that the micro-climate conditions in the open ground available to us are at least generally compatible with the preferences of the particular ferns). The main difficulty being that the growing medium in pots tend to dry out much more readily than soil, with consequent damage to roots. This is mainly because air movement (and warmth in the atmosphere during warmer months) limits the moisture retention between waterings.

A separate problem with growing ferns in pots (to which many ferns are more sensitive than others) is that some plants dislike their roots coming up against the barrier of the pot walls - this is particularly the case with many terrestrial ferns which produce stolons and therefore prefer to progressively extend their growth into new territory. Examples are native ground ferns such as those of the *Dennstaedtia* genus like *Calochlaena* (Rainbow fern) and *Microlepia*, and many *Adiantums* such as *A. formosum*. Unless we try to keep ferns in the last-mentioned category for long periods in pots, usually the most trouble with potted ferns will be either because of drying-out (particularly where they are on raised benches, or some such place where they'll catch a lot of air movement or heat builds up), or of inadvertently over-compensating for the risk that they will dry out by watering too often and thereby drowning roots.

The wettability and draining characters of the potting mix are therefore just as important as correct pH for potted ferns.

You didn't say whether you'd ascertained from your fern supplier what the composition of their potting mix was. This might be relevant in part to the problems you were having.

However, we can offer an opinion as to the sort of mix that might be appropriate for you.

We're hobbyist growers, rather than keeping ferns as a business. Our best success with potted ferns has generally been with a mix which has a high content of decomposed oak leaves (just as recommended by the local lady you mentioned), but unless you had a ready source for good quantities of this, as you've already indicated you'll need an alternative. Our preference for a mix without the leaf compost would be :

60% well-composted finely-chipped pine bark (a little bit more on the coarse side for epiphytic ferns).
We prefer only about
50% bark so we can include 10% composted cow manure (see below)
10% tree fern fibre
10%, Coprapeat (& substitute for the tree fern fibre also if that's unavailable).
20% coarse sharp sand

We also put in a small amount of crushed charcoal (we make our own up)

When making up a mix for *Adiantum*, and other ferns requiring less acidic conditions/more calcium, add a small quantity (say half a trowelful) of dolomite to a full barrowful of mix

In your situation where you would wish to avoid the need for regular individual fertilising, a small amount of fern-compatible slow release fertiliser could be added to the mix when you're ready to pot up.
Continued page 13

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Continued from page 12

You may not wish to consider adding natural fertiliser to the potting mix, but normally we would include a 10% proportion (reducing the pine bark content) of well-composted cow manure (rather than putting in the slow-release fertiliser). We also put a small amount of Blood & Bone into our mix. When we use extra fertiliser it's usually either by watering in dilute liquid fertiliser (mainly seaweed types) or occasionally a weak solution of Dynamic Lifter or similar.

We'd test the wettability of each batch by placing a potful in a tray of water for a while to see how readily it wets through. If it proves at all resistant to wetting, you could add wetting agent.

In answer to your question about potting up, we'd tend to be cautious about doing this unless on inspecting the root ball the plant looks ready to grow on. But there is the advantage in a larger pot that the moisture level will stay more consistent.

As to the yellow appearance of fronds, the most usual explanations are either too much bright light (tolerance varies between species, of course) or iron deficiency (could be low available iron in the growing medium or wrong pH). If the problem was the light level, a higher shade-value cloth should be helpful (always green for ferns to control visible light as well as UV light). In our conditions, we couldn't get away with using less than 70% green cloth overhead for ferns, unless the light was very well diffused by also having, say, translucent roof sheeting as well. But the light is strong here, and the summers pretty hot.

We aim to limit the air movement around potted ferns to the amount of ventilation necessary to avoid fungus invasion, etc. by a combination of solid shelter walls and shadecloth, as you are using. Not knowing exactly what amount of wind you typically get where your fern houses are situated, it occurs to us that where you have a gap at the bottom of your shadecloth walls at times this might have given you a bit too much air movement. Cold winds can be pretty drying, so it's not just a summer issue.

We hope that some at least of this might be helpful to you, and good luck with your venture. Please tell us if you have further questions on the subject.

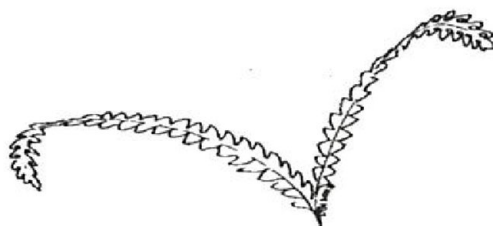
Barry and Gay Stagoll

Continued from page 10

As a consequence the written information is retained on the label in the form of very slightly raised letters. This may be retrieved by rubbing a dirty finger lightly along the tag and a ghostly image of vanished names reappears.

Some of my friends who delight in their frugality make their own tags out of bleach bottles. The gallon jugs are best for relatively flat labels. The trick here is to gently abrade the surface with steel wool or fine sandpaper before cutting the labels to produce a surface suitable for the pencil.

Needless to say there are many other ways to solve the age-old problem of long lasting plant labels. Most of them are costly and inconvenient using special metals or embossing tools. I believe that the soft lead pencil and plastic label have a lot going for them.



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There is no charge for spore for overseas members, however to cover postage two International Reply Coupons would be appreciated. Coupons can be purchased at the Post Office. Overseas non-members may purchase spore at three packets for each International Reply Coupon, plus two coupons per order to cover postage and handling. There is a limit of 20 packets per order. As some spores are in short supply please include alternatives.

Acrostichum sp. 6/04
Adiantum concinnum 1/05
Adiantum cunninghamii 1/05
Adiantum formosum 6/05
Adiantum hispidulum v. *whitei* 6/05
Adiantum pubescens 'Rosy Ruffles' 1/03
Adiantum radd. 'Fragrans' 3/05
Adiantum radd. 'Legrand Morgan' 3/03
Amphineuron opulentum 2/05
Anemia mexicana 7/05
Angiopteris evecta 7/05
Arachniodes aristata 12/05
Arachniodes simplicior 7/03
Asplenium aethiopicum 6/05
Asplenium polyodon 4/04
Athyrium filix-femina 12/05
Athyrium filix-femina (red stipe) 12/05
Athyrium niponicum 'Pictum' 4/05
Athyrium otophorum 12/04
Blechnum cartilagineum 12/05
Blechnum chambersii 4/05
Blechnum discolor 6/04
Blechnum gallanum ?? 12/05
Blechnum minus 5/05
Blechnum novae-zelandiae 1/05
Blechnum orientale 7/05
Blechnum patersonii 6/04
Blechnum spicant 12/04
Blechnum spicant 'lobatum' 12/04
Blechnum wattsii 4/05
Cheilanthes tomentosa 1/05
Christella dentata 1/05
Coniogramme intermedia 3/03
Cyathea australis 4/05
Cyathea brownii 2/04
Cyathea cooperi 1/04
Cyathea cooperi 'Cinnamon' 2/05
Cyathea dealbata 1/05
Cyathea medullaris 7/05
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Cyrtomium macrophyllum 5/05
Dennstaedtia davallioides 2/04
Deparia petersenii 12/04
Dicksonia antarctica 2/04
Dicksonia sellowiana /03
Diplazium assimile 12/04
Diplazium melanochlamys 12/04

Doodia australis 12/04
Doodia dissecta 6/05
Dryopteris affinis 'Cristata' 12/04
Dryopteris athamantica 4/05
Dryopteris cycadina 12/05
Dryopteris dilatata 'Crispa Whiteside' 12/05
Dryopteris erythrosora 2/04
Dryopteris guanchica 12/05
Dryopteris labordei 4/05
Dryopteris tokyoensis 12/04
Dryopteris wallichiana 5/05
Dryopteris sieboldii 12/05
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Histiopteris incisa 12/05
Hypolepis glandulifera 1/05
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Lastreopsis hispida (NZ) 1/05
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Pellaea viridis 2/05
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Platyterium superbum 8/04
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Polystichum onocolobatum 4/05
Polystichum proliferum 4/05
Polystichum setiferum 12/05
Polystichum setiferum 'Congestum' 12/05
Polystichum tsus-simense 11/04
Pteris biaurita 6/05
Pteris cretica 12/05
Pteris cretica 'Albo-lineata' 1/05
Pteris cretica 'Alexandrae' 3/03
Pteris dentata 12/05
Pteris macilenta 12/05
Pteris quadriaurita 4/05
Pteris sp. (Nepal) 1/05
Pteris tremula 1/05
Pteris umbrosa 3/04
Pteris vittata 6/05
Pyrrosia lingua 'Oba Oba' 4/02
Rumohra adiantiformis (Cape form) 3/05
Rumohra adiantiformis (Native) 4/05
Woodwardia fimbriata 3/03

Thankyou to the following spore donors
 Wendy Johnston, Keith Hutchison, Keith Ross,
 Ron Wilkins, Lorraine Deppeler, John and Judy
 Marley, Claire Schakel and Crosby Chase.

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