THE THE JERN SOCIETY

OF PICTORIA

REWSIETTER

VOLUME 7 NUMBER 3 APRIL, 1985

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PRESIDENT'S MESSAGE

The March Meeting:

Despite an enforced change of venue and date, the March meeting was gratifyingly well attended. It was interesting and enjoyable throughout.

All of the normal services were available to Members and our dual guest speaker format was a great success. Both Neil Baillie and Bill Taylor provided practical demonstrations in explaining their methods for cultivating specific fern species. The collection of plants which they brought to the meeting was a joy to see. Many of the species exhibited are quite rare in local collections and it was delightful to see them in such excellent condition.

A full report of the talks is given on other pages.

The Special Effort competition for two bottles of Maxicrop and four well grown potted ferns resulted as follows:

- 1. Albert Ward
- 2. Joel Machar
- 3. Doug Thomas
- 4. Rob Fletcher
- 5. John McClone
- 6. Joan Taylor

Congratulations Winners!

Thank you Jean Boucher and Thelma Knight for your work in providing supper for Members at the meeting. Your efforts are much appreciated.

An Explanation:

The Society's sixth birthday meeting will be remembered not so much for the fact that it was a birthday, but because of the sudden enforced change of venue and date.

At very short notice we were denied the use of Burnley College Hall for the 14th March because of Garden Week preparation by the Nurserymen's Association.

That we were able to hold a meeting at all and notify Members of the changes was due to the efforts of Bernadette Blackstock and Bill Taylor. It was they who engineered the re-arrangement and in turn received excellent co-operation from Keith Hutchinson, Jean Trudgeon, Kath Brown, Margaret Radley and our Newsletter Publisher, Judy Bielicki.

We thank all most sincerely for their efforts.

Next month we shall return to the Burnley Hall.

Ripponlea:

Organisation of the re-establishment of the huge Fern House at "Ripponlea Mansion" is shaping up well.

Our representative for this project, Chris Goudey, has reported that we will give the Ripponlea project some public notice at our Fern Show. The response to the appeal for ferns from our Members has been slow at this stage. However this may well be due to the closeness of the Fern Show.

Continued on next page

NEXT MEETING THURSDAY, 11TH APRIL

THREE speakers - Betty Allgood:

"Mounting Elks on Wire Baskets"

Barry White: "My Glasshouse"

Albert Jenkins: "Something Practical"

ALSO

an exhibition of Members' gadgets.

TERRIFIC VALUE! WE HOPE TO SEE YOU THERE - BURNLEY, 8 P.M.

Continued from previous page

A further development has arisen also which should enable us to inform Members of the species of ferns needed. Several Members of the Society have been invited to visit Ripponlea so that a first hand appreciation of the project can be ascertained.

The importance of the Fern Society's involvement in such a project cannot be over-emphasised. If our involvement is significant and our contribution publicly recognized, then we shall be placed on public notice for all Ripponlea visitors to see.

It can do no harm at all to be so placed.

Next Month:

Date: Thursday, 11th April, 1985
Venue: Burnley Horticultural College
Hall, Swan Street, Burnley

Time: 8.00 p.m.

Highlights: Three short talks and practical demonstrations and hopefully an exhibition of Members' gadgets.

Our Speakers will be:
Betty Allgood - "Mounting Elks
on wire baskets"
Barry White - "My Glasshouse"
Albert Jenkins - "Something
Practical"

In the matter of gadgets, you are invited to bring to the meeting any piece of equipment, material or implement that is found useful in your work with ferns.

Keep in mind that this is to be a night specifically designed to help beginners. It doesn't matter at all if you bring in a gadget which you may have brought before. The simplest piece of equipment could be of profound interest to the rest of us.

With kindest regards,

DOUG THOMAS

It is with much regret that we announce the passing of one of our esteemed members, Mr. Bert Boothman.

Bert was a foundation member of the Fern Society, and was well regarded by all members for his friendly and co-operative manner.

We extend our sympathy to his family.

MEETING REPORT

Members were treated to an excellent presentation of practical hints and processes by both Neil Baillie and Bill Taylor at the March meeting.

Neil spoke first and introduced members to a lovely collection of exotic Platyceriums. These were all magnificent specimens gathered from Continents all over the world.

We saw at first hand: Platycerium Elisie (Madagascar), P.Elephantitis (Angola), P.Steomaria (Africa), P.Ardimum (South America), P.Holtumii (Indo-China), P.Wandae (New Guinea).

Neil then showed us how to mount an elk on a back board. Firstly, small diameter holes are drilled through the back board through which strings for attaching the plants are passed. Then a mixture is made up of equal parts Sphagnum Moss and leaf mould (English Oak leaves).

Neil uses liquid fertilizer with the above mixture when Platyceriums are housed in a heated glasshouse but says that plants placed outside in a garden situation could have a little blood and bone or pulverised cow manure added to the mixture.

A liberal quantity of the above mixture is heaped on the back board and the plant pressed to the mount. Strings are then drawn through the holes and carefully positioned to avoid damaging the buds or rhizomes. Once securely tied to the board, the plant is then hung in a position affording good light and air circulation.

Neil's collection of exotics is housed in a heated glasshouse which provides a minimum night temperature of 20°C all year around. Day temperature minimum is 28°C . Heating is achieved by slow combustion stove with a back up electric heater for use if needed.

The following notes were compiled by Bill Taylor in preparing for his talk at the March meeting.

VEGETATIVE PROPAGATION BY RHIZOMES:

ADIANTUM:

DIVISION, SECTIONS

DAVALLIA:

TIP CUTTINGS

DIDYMOCLEANA, POLYSTICHUM AND BLECHNUM:

OFF SETS

First, and most important, is that you select a good healthy plant with good healthy growing tips on rhizome. The plant should be well watered 24 hours prior to taking cuttings to ensure there is good strong sap flow.

Some of the more exotic and difficult varieties may need bottom heat to get them started, but the time of the year you attempt this is important - EARLY SPRING.

Continued on next page

Always select good healthy clean growth for cuttings, sever with a clean cut using a sterile sharp knife or razor blade, this is to avoid any bruising which can cause rotting or allow fungi to set up, then placing the cutting in a solution of fungicide (mancozeb) for a few minutes before inserting in the media. If you can find a nice new growth with roots and few new fronds with growth buds, this is always easier to get started, but take care not to damage the roots when removing from the soil. I have found some varieties need the severed end dipped in charcoal dust to help seal the wound before being inserted in the media. Some cuttings can be just laid on top of the media, some need to be placed on a 45° angle. When cuttings have been placed in the media, they need to be watered in, the best way is to place the pot or punnet on a tray of boiled water and water by capillary action. Retain moisture in the media but not wet, but do not let dry out.

Place in glasshouse or on table near a window, as light is most important at this stage.

Types of media should be of an open mixture to allow roots to form and travel freely, i.e. sand and peat 50/50. Harry Jackson's African Violet Mix, shredded spagnum moss and sand, all should be sterilised to avoid fungal contamination, also no fertilisers. For those who don't want to go to a lot of trouble and are not in a hurry, the surest and easiest way is to place another container next to the parent plant and allow a rhizome or two to grow into it i.e. pot or punnet. When the rhizome has grown into the new container and has established a good rich root system, sever with a sharp clean knife, but do not disturb for some months to allow the new plant to get over the shock of separation. Then pot on or basket up, but do not use strong fertilisers for 6-12 months.

Rhizomes:

 Types of rhizomes include: tufted, short creeping, medium and long creeping, upright, as in the tree fern (cordex) also platercyrium.

They can be smooth (caterpillar), hairy (silver), thin (pyrossia), thick (polypodium), broad (club foot) and many in between.

- The rhizome has a double purpose, as it produces both roots and fronds from its body.
- 3. The rhizome is that part of a fern that travels either below or above the soil. This is the most important part of the plant for its survival, as in a lot of cases if the growing tip is damaged, it can be detrimental, but on the other hand if the end is removed carefully with a clean cut, it induces branching further back in the rhizome, giving a more compact plant.
- 4. Re-basketing can sometimes be very difficult. If this can't be done, just feeding will suffice with dry pulverised cow manure or very old dry poultry manure, liquid fertiliser or blood and bone.

DISCUSSION ON BUILDING GLASSHOUSES

by BARRY STAGOLL

(Continued from November 1984 Issue)

AIR

Design consideration:

* Ventilation (passive or mechanical)

One aspect of ventilation could just as easily have been dealt with under the heading of temperature control, and that is the need to have a means of venting warm air from the top of the house. One good-sized vent should prove enough provided you can place it in such a way that when open it does not act as a "scoop" for hot northerly winds in summer. South is a reliable direction for it to vent to, as it will probably be little used during the cooler months.

A considerable potential for air movement through the house is essential. This is just as much a need during the cooler months (to avoid fungal problems which come with stale, dank air) as in the warmer weather. It is best if in addition to roof vents the house has windows on all sides, a selection of which can be opened depending on the direction and character of winds being experienced. Louvre-type windows are ideal as they can be adjusted to allow air circulation whilst inhibiting direct flow which may be too strong for delicate fronds. Placement of some at least low in the walls will allow you to arrange good air movement at all levels of the house. As to quantity of opening space, 10 square feet for every 350 cubic feet of enclosed air is suggested as a guide to adequacy.

Mechanical ventilation (fans) will require an electrical supply to be provided (although an interesting product is available which consists of a fan powered by solar cells, this is probably likely to be of most use for aiding in temperature control due to its operation being sensitive to the intensity of the sunlight).

MOISTURE

Design considerations:

- * Convenience
- * Drainage
- * Relationship with floor type

Position of the house in relation to water supply is a convenience factor, but a convenient supply could always be arranged by extending the line. What is more in mind here is the question of arranging the interior layout so as to provide easy watering access to the plants, and also the question of providing some form of semi-automated moisture delivery rather than relying totally upon hand-watering. This could be by sprays, drip emitters, or alternative systems of both types for use according to the conditions.

A full discussion of this question will not be attempted here. However, you should try to anticipate the design implications of an intention to install some such system (for instance, the increased importance of using water-resistant construction materials, as water distribution may be much more general than with hand-watering).

The selection of floor type will have considerable influence on the degree of success you will have in maintaining adequate levels of air humidity in the house during dry weather with the application of any given amount of water. More on this subject later.

Drainage of the floor will not usually be a major problem, but rainwater flowing from the roof may be, unless you take the trouble to install gutters and downpipes and arrange for suitable dispersal.

PLANT ACCOMMODATION

Design considerations:

- * Shelving
- * Strength of structure

On shelving, we will observe only that it is desirable to avoid heavy construction if possible, except perhaps for shelving which will occupy the centre of the house, as otherwise we will lose much of the benefits of designing the house to admit good light levels. Rigid galvanised wire mesh is a useful product on which to hang half-baskets, and ferns like elks and stags mounted on boards or fibre. It can usefully be employed both to accommodate plants in this way and also to contribute to the solidity of a house if it is used to span the gap between adjacent poles placed in the centre (assuming it is too difficult or expensive to build a clear span of the desired width).

If it is desired to hang baskets, obviously it is necessary to consider the implications of their combined weight in deciding on the size of the structural members to be used both in supporting the roof and in the roof itself. If in doubt, take the cautious layman's approach and err on the side of overdoing things. An economical way of providing cross-bracing in the walls so that the uprights never leave the vertical, and to reduce the risk of the whole thing collapsing sideways, is to use heavy gauge fencing wire from corner to corner, tensioning it with turnbuckles. This method also has the advantage of having virtually no influence on the entry of light.

UNDERFOOT CONDITIONS

Design consideration:

* Floor construction

A solid concrete floor will be much less satisfactory from the aspect of controlling air humidity than a porous floor, of say, scoria pebbles laid over a film of building plastic. However, if concrete is to be used, either in the form of a pathway or a full floor (where it certainly has the advantage of being easier to rid of pests when you decide to have a clean out), don't use concrete trowelled smooth. This type of floor is too dangerous in the moist, slippery conditions which will often exist in the house. Similarly an earthen floor will probably have the same disadvantage, and moreover it may allow weeds to grow and harbour pests such as snails and slugs.

Continued overleaf

The other beneficial contribution of the floor may be to assist in storing warmth in cooler weather and releasing it to the air overnight. A relatively dark coloured material such as scoria or crushed granite is probably useful in this respect. If well watered in warmer weather the extra humidity it will create, will probably compensate for the heat it will release at that time.

HEATING

Design considerations:

- * Insulation
- * Heat source

This is a subject in itself. Suffice it to say here that if you wish to use the house to grow plants which are intolerant of our winter temperatures, you will need to make a careful choice between alternative heat sources. You will need to weigh up issues of capital and running costs versus convenience and controllability. You will, of course, also need to make an informed decision about the optimal size of heating plant required. On these aspects there are sources of expert advice available, for instance the S.E.C. and Gas & Fuel, and various suppliers of horticultural heating equipment.

However, you must insulate any house which you intend to heat, or your fuel costs will be multiplied. Plastic film applied to the interior so as to trap a layer of air is the most basic approach. Joins can be achieved by using one of the glues sold for sticking vinyl wallpapers. One of the larger difficulties is in finding the optinal compromise between having plenty of potential ventilation in warmer weather and the degree of insulation, as it is hard work arranging insulation for opening parts such as windows or louvres.

DURABILITY/APPEARANCE

Design considerations:

- * Profile
- * Structural materials
- * Cost

The profile (together with, particularly, the location) of your glasshouse requires consideration from the viewpoint of the impact on your garden, your neighbour's garden, and the possible interest of the municipal building office (although this paper assumes your interest is in building a structure which can be disassembled and relocated, and which by definition is not intended for human habitation). So the house should not offend any of the parties mentioned.

The profile will also be important from the viewpoint of the ability of the house to withstand strong winds. It is preferable not to have any overhang on the roof for this reason, and to "flash" the joins between roof and walls with securely-attached metal sheeting.

Make sure there is adequate framing to which you can attach the external cladding. Flat fibreglass needs the support of a good deal closer framing (say maximum areas of around 2 feet 6 inches x 3 feet unsupported) than corrugated (this can be attached in long runs with around 4 feet between fixings, with the corrugations at right angles to the framing).

Uprights and framing used in the walls should preferably be of rotproof timbers, of which impregnated pine is currently the most
economical and also enjoys the advantage of light weight. There
should be little need to go to the trouble of permanent-type
foundations. Standing the uprights on small concrete slabs or pavers
should suffice. Roof timbers may usually be of non-weather resistant
timber, and the main consideration will be adequacy in size and
number, particularly if numbers of baskets are to be hung. If the
design includes a wide span, you may consider using rolled steel or
steel truss spanning members. However, you will need to be mindful of
their weight when planning the construction, and also the need to
consider protecting this material from rust as, although it should be
feasible to avoid sprays contacting them, frequent high levels of
humidity could create a problem.

If possible, the house should be constructed so that future disassembly would not be an impossible task. Although it will involve more expense on hardware and will add to construction time, for this reason you should consider maximising the use of bolts and screws rather than nails, particularly in completing the main structural joints, and attaching fibreglass and flashing. It is almost impossible to remove fibreglass without damage once it has been nailed into place, and, for that matter, fairly difficult to attach it with the right degree of firmness in the first place without some damage occurring. Apart from the possibility that it may be convenient to relocate the house in the future, the same observations may apply to a future desire to extend it.

Cost of the house will, naturally, vary both with its size and the final selection of construction materials. However, it is useful to look around for second-hand materials to meet at least some of your needs. For instance, suitable timbers for the roof members may well be available second-hand. Both louvre frames (which may be cut down carefully with a hacksaw if too high for your needs) and glass louvre blades are fairly readily available at demolition disposals yards at large savings on new costs. Sheet metal for rainwater drainage and for roof and window flashings is also easily obtained. A cast-off aluminium screen door (to which a piece of fibreglass can easily be attached) makes an excellent glasshouse door.

As an indication of the cost of materials for a fibreglass covered, wooden framed house (treated pine used in all wall framing), with adequate ventilation provided for on all sides by glass-bladed louvres, a house measuring around 18 feet square and with an average roof height of around 10 feet would probably require expenditure of around \$1,00 - \$1,150 using mostly new materials. (The figure assumes both louvre frames and and glasses are obtained second-hand.) This would represent a fairly large house for the average suburban garden.

A smaller, although usable, house measuring say, 9 feet square, might require around \$400 in materials. Shelving and, if required, shadecloth and supporting framing, plumbing and watering gear, provision of electricity supply, installation of fans, insulation and heating would all require additional spending. With energetic searching, and some ability to tailor construction to the materials available second-hand, savings to a maximum of around 25% might be possible. Main cost will be in the fibreglass, which will almost certainly be purchased new, and in the timber and other materials used for the structure itself.

The other main input will be a considerable amount of hard work on your part, but the rewards of providing appropriate housing for your ferns will be worth it.

FROM THE EDITOR:

During the past twelve months, our newsletter costs have risen substantially due to the State Tax imposed on the production of the newsletter at 20% (approximately \$1,200 per annum) and increased postage.

Our Committee looked at the following alternatives:

- Change to bi-monthly.
- 2 a) Limit size of newsletter to twelve pages.
 - b) Increase fees (first increase September 1984 increased since our inception)
 - c) Impose small charge on entries in our Buyer's Guide.

It was decided the alternatives 2a and 2c would be preferable and we do apologize for these unavoidable measures.

We appreciate that most subscribers with entries in our Buyer's Guide have accepted this and remained with us.

KEITH HUTCHINSON EDITOR

FIFTH ANNUAL FERN SHOW

As this month's Newsletter goes to print, our Fern Show is all set up for opening tomorrow morning. I feel it is of a very high standard. A full report will appear in next month's issue.

EDITOR

NEW MEMBERS:

We wish to extend a warm welcome to the following new members who have joined the ranks of the Fern Society:

Mr. & Mrs. Wilson, 25 Curlew Avenue, ALTONA Mr. Neville Currell, 12 Kilpatrick Court, CORIO The Fern Spot, Roseanne & Bob White, Cnr. Princes Highway and Patters Road, LONGWARRY NORTH 3816 Gloria Biddle, 27 MacMillan Street, AYR T. Tomlinson, 23 Geddes Street, ASCOT VALE Eric Shugg, 8 Burley Griffin Place, EAGLEMONT 3084 J. Heath, 7 Murdoch Street, CAMBERWELL C.K. Voon, 14 Mildura Crescent, ENDEAVOUR HILLS Mrs. Lyn R. Hurford, 32 Jeffrey Street, HAMPTON PARK 3976 Lucy Calleja, 42 Henry Street, ST. ALBANS 3021 Rose Pulis, 181 William Street, ST. ALBANS Norma Schoch, 4 Eddie Street, PASCOE VALE 3044 Mrs. D. Clough, 22 Canterbury Road, SOUTH BLACKBURN 3130 D.L. & L.J. Waffler, P.O. Box 334, BORONIA Diane Sisely, 98 Wellington Street, ST. KILDA David Wileman, 48 Northcote Street, ROCHESTER 3561 Mrs. Natalia Jayanata, Jl. Batutulis 16, BOGOR 16131 C.V.J. & J. Haden, M/S 437, GATTON 4343 Susan B. Yamins, University of Chicago, Greenhouse - Barnes Lab. 5630 South Ingleside Avenue, CHICAGO IL. 60637 U.S.A. Dr. W.J. Pierozynski, 2 Highlea Avenue, Flackwell Heath, Bucks, UNITED KINGDOM Roger Johnson, 169 Cape Street, HEIDELBERG Priscilla Argent, l Ferndale Avenue, EAST BLAXLAND 2774 Barry F. Hubbard, 38 Bushman Street, PARKES Mrs. Beverley A. Chitty, Point Wells, R.D.2, MATAKANA NEW ZEALAND

ANNUAL SUBSCRIPTION RATES

Singles: \$12.00

Family: \$15.00

Pensioner Single: \$ 8.00 Pensioner Married: \$10.00

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Maxicrop plant and soil nutrient is available in six different sizes and is sold by nurseries and other places where garden products are sold.



DIARY DATES

Thursday April 11th Beginners' Night
'Back to the Basics'

Thursday May 9th

Phillip Hicks
"Plant Pests"

Burnley Horticultural School Hall, Burnley, 8 p.m.

NOTE: In the event of a power strike on the evening of any meeting, we regret that the meeting must be cancelled.

BUYERS' GUIDE TO FERN NURSERIES

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ALLGOOD PLANTS & FERNS
Main Road, Emerald, Victoria
Closed Mondays
A.H. (059) 68 4858
Retail

"FERN GLEN"
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BEASLEY'S NURSERY
195 Warrandyte Road
Doncaster East
Phone: (03) 844 3335

COOL WATERS FERN NURSERY
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Specializing in cool climate native ferns.

R. & M. FLETCHERS FERN NURSERY
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Phone: (059) 64 4680
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300m east of Seville Shopping Centre)
(Closed Tuesdays except Public Holidays)

NEW SOUTH WALES

FERN NURSERY
6 Nelson Street,
Thornleigh 2120
Wholesale & Retail
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MARLEY'S FERNS
5 Seaview Street
Mt. Kuring-gai 2080
Phone: (02) 457 9168

FERN NURSERY
108 King Street
Shortland 2307
Phone: (049) 51 1445
Retail

MARGLEN FERN NURSERY
108 King Street, Shortland, 2307
Phone: (049) 51 1445
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