THE JERN SOCIETY

> OF PICTORIA inc.

REGISTERED BY AUSTRALIA POST: PUBLICATION NO. VBH3411

REBSLETTER

VOLUME

NUMBER

APRIL 1987

OFFICE BEARERS:

| PRESIDENT: Keith Hutchinson, 17 Grandview Grove, Rosanna | | 3084 |
|--|--------------|------|
| Telephone: | 45 | 2997 |
| TREASURER: Albert Ward, 82 Grandview Grove, Rosanna | THE STATE OF | 3084 |
| Telephone: | 459 | 4392 |
| SECRETARY: Derek Griffiths, 8 Susan Court, East Keilor | | |
| Telephone: | 336 | 3157 |
| BOOK SALES: Barry White, 24 Ruby Street, West Essendon | | 3040 |
| Telephone: | | 9793 |
| MEMBERSHIP SECRETARY: Jean Trudgeon P.O. Box 45, Heidelb | | |
| Telephone: | 459 | 4859 |
| EDITOR: Mac Gregory, 93 Mountainview Parade, Rosanna | | 3084 |
| Telephone:. | 458 | 2819 |
| SPORE BANK: Joel Macher, 31 Anora Crescent, Mulgrave. | | 3170 |

PRESIDENTS REPORT.

With a very successful excursion to Tasmania and an excellent March meeting our year is progressing very well. I'm sure with the dedication of Bob Lee and his show committee our seventh Annual Fern Show will also be equally successful. It is very reassuring to have such an active membership in our society.

April - May meetings. Again we have had to change the date. Thursday evening precedes the Easter period and the Fellows Group need to set up benches in the hall on thursday morning for their chrysanthemum show. This would give us a very cramped situation so we will now hold our meeting on tuesday 14th April at the Herbarium. Please note this change very carefully and our May meeting will also be on Tuesday the 12th May when we will have our slide presentation of the Tasmanian excursion.

Study Group. As Saturdays have proven to be a difficult day for many members it has been suggested that we have a half hour study session before meetings. The executive committee will discuss this proposal and a report should be available at our next meeting.

Life Membership. I had great pleasure on behalf of our executive committee to present a Life Membership to Kath Brown for six years of dedicated service to our society. Kath has been our door lady selling special effort tickets, and spending almost two complete days on the door at our Fern Shows every year as well as being a very active member of our Newsletter team. Well done Kath.

Finally I would like to say thankyou to Sue Yamins and Marie Van Etten for travelling from the United States of America to be with us on our Tasmanian excursion. We all enjoyed their company and hope they enjoyed their time with us and had a safe and pleasant journey home. Sincere thanks to you both. May I wish a happy and safe easter to all members.

Kindest Regards,

Keith Hutchinson.

TIJES DAY

PLEASE NOTE PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

PLEASE NOTE

FREAKER. KAREN READ - DECOR CORPORATION.
"GROWING FERMS IN WATER WELLS"

SPEAKER REPORTS - General Meeting, 19th March, 1987.

GUEST SPEAKER: Bill Taylor.

TITLE: Growing ferns from spores using sterilized African Violet Mix.

Three years ago Bill was called upon by an Aunt to re-pot her collection of African Violets. In response to this request he visited the Idaho Nursery in search of a suitable mix for the task. This then was Bill's first involvement with Sterilized African Violet Mix. It was an involvement which he later applied, by means of various experiments, to the propogation of ferns from spores. These experiments were kept secret for six months and Bill's findings were not made public until he was sure of success.

Through experimentation Bill has formulated a method which works really well. He displayed plastic soft drink bottles and plastic icecream containers full of perfectly healthy prothalli, developing sporelings and sporelings growing on.

Bill said that it doesn't matter what medium is used when growing from spores, it is essential that contamination of that medium is not allowed to occur. For example, the Sterilized African Violet Mix needs to be kept moist. To achieve this Bill opens the bag and pours a litre of boiled water into the contents. This has proved to be much more effective than trying to wet the mixture afterwards. If signs of contamination appear, Bill simply disposes of that batch of mix.

Bill sets up his spore containers filled to the brim with mixture, he then compacts it to assist capillary attraction of moisture. He leaves the set-up stand for a week to see if contamination occurs. If after this time, the mixture is still clean, Bill dusts the spore from a white paper bag on to the moist surface of the mix. He uses a small pencil paint brush to spread the spore thinly and evenly. He emphasised that all equipment must be sterilized; nothing must be overlooked. He uses methylated spirits but conceded that White King cleanser is also effective on the equipment. After treatment the

equipment is left to stand a day or so before being used.

Bill sets up spore cultures in a place providing good light, shelter from rain, good ventilation and no direct sunlight. Poor light slows the fertilization process and will often halt it.

When spore is brought in from sources other than his own fern collection, Bill finds that the resulting plants often include odd species other than those expected. This does not worry Bill; he finds all such happenings interesting.

Bill showed Members how he converts plastic soft drink bottles into spore growing containers. He particularly referred to the ease with which the lower part of the bottle comes apart from the rest and that it already contains drainage holes. This is why capillary attraction of moisture is so important in Bill's method and is the reason why his inverted bottles are placed in a shallow saucer of boiled water.

When the due processes of fern propagation are completed and the tiny sporelings appear, Bill prepares for the next stage; that is the growing on of his plants. For this he uses plastic icecream containers of 2 litre capacity. Into these he places a generous quantity of mix which has been pre-tested for contamination. Again he presses this down firmly into the container and makes sure that it is moist but not soggy wet. The icecream containers are not perforated but after the little plants have been inserted, Bill covers the top with clear cling wrap. The condensation which sets up in such a culture recycles making the addition of water unnecessary. Bill said that best results are obtained if containers can be left unopened until pricking out or tubing up is necessary. He uses tweezers for pricking out.

Bill said that the spores from different genera and species activate at different times and that in the growing on some are much faster than others. Some are so fast in fact that it is not unusual for him to be caught with a batch of sporelings which are too large and too congested to be seperated. In such cases Bill simply removes the cluster en masse and settles it into a six inch diameter pot. He said that the sporelings have a much better chance of survival if they are transplanted into a humid atmosphere and then slowly weaned to fern house or glass house conditions. Bill avoids overhead watering at all stages, relying on capillary attraction and condensation to supply the ferns moisture needs.

SECOND SPEAKER - JOEL MACHER - Spore Bank Manager. TITLE: How to use the Spore Bank.

Joel explained the history of the Spore Bank and paid tribute to the former Spore Bank Managers who worked so effectively in setting up and maintaining the service. Rod Hill was responsible for planning and developing the structure of the spore bank and his computerization of records and spore listings is a tremendous help today. Joel is very appreciative of the ongoing help and encouragement that Rod still accords him.

After Rod, Bill Bright carried on the work, again thoroughly and effectively. Bill however was beset by the demands of his employer and appealed to the Fern Society Membership for an assistant. Joel became that assistant and ultimately, the Manager.

Joel supported all of the points made by Bill Taylor in the preparation of equipment and soil mixes for spore propagation. In the case of the mix he suggested adding boiled water to it and then to set it aside for up to a month before using. If during that time any of the mixture turns green, throw it away. Use only that which remains clean. Sterilizing can be done by several different means. Joel said that the kitchen oven is ideal.

Like Bill Taylor, Joel uses icecream containers for his cultures, provides good light and makes sure that all equipment used is sterile. He said that poor light is something of a menace as it tends not only to slow down growth, but to bring on contamination. Joel pricks his sporelings straight into tubes at the rate of about four plants per tube.

The spore bank provides an on-going and pleasant contact with country, interstate and overseas members. It affords a splendid opportunity for such members to swap ideas, seek information and to disclose methods. Many have no other way of obtaining their supplies of ferns.

The spore bank is an educational facility from whence members may learn the scientific naming of ferns. It will give the opportunity to increase the range and scope of your collection.

Joel said that he had visited Ripponlea Mansion and had collected spore from a wide range of species. He felt proud that many species growing there had been propagated from spore distributed by the spore bank. He is keen to develop a rapport with Members who would come to him and offer a fertile frond or two from some of the magnificent specimens seen at our Fern Show and other displays. Adiantum species are keenly sought by Members but spore fronds from all species are very welcome.

Joel said that there is no specific time of year when fern spore is "ready to spit". Put simply, collect the spore when it is ripe.

One method which Joel uses to indicate where the fertile fronds are in his collection is to tie coloured wool on such fronds. He said it saves a lot of frond searching when the readiness of the spore to "spit" is becoming critical.

In answer to questions Joel said that overseas spore is allowed through Customs unchallenged, but live plants are not. Live plants are quarantined for quite some time.

Fronds for spore harvesting must be kept dry.

Joel does not sell the spore of Todea Barbara (King Fern). He said that the green spore of this species remains viable for only a very short time.

On average, the spore of most species remains viable for two years; but really fresh is best.

President Keith Hutchinson moved a vote of thanks to both speakers, complimenting them on the on the thoroughness of their preparation and clarity of delivery. Members present heartily agreed.

Doug Thomas

AN EXCURSION TO TASMANIA, THE FERN LOVERS ISLE.

At 5.30 p.m. friday 6th March, 47 Society Members boarded the Abel Tasman on the first stage of our excursion to the rain forests of Tasmania. After a pleasant although slightly rough Bass Strait crossing we arrived at Devonport to be met by Michael Garrett our guide, Coach Driver - Rob Standaloft, and our cook Judith. After boarding the coach we were soon on our way to Dove Lake at the base of Cradle Mountain. Although steady rain fell we were able to see many fern species along the way and after a short stop for lunch we arrived at our destination.

The Alpine Coral fern Gleichenia alpina was most prolific here and the scenery unique. As the air was quite fresh we were soon ready for the warmth of the coach and our return journey. The overnight stop was at the Uniting Church Camp at Turners Beach.

F 3

After an early sunday breakfast we set out for Copper Creek. On arrival a barbed wire fence was negotiated, then a one kilometer trek along an old railway track and to our dismay the bridge was almost demolished. With great teamwork most were able to cross on the single beam remaining and after a few hundred metres Michael led us into a very shaded valley to discover a cluster of Lime ferns, Pneumatopteris pennigera, a magnificent sight well worth the effort. Nearby were fine specimens of Austral Lady ferns, Diplazium australe, and a clump of Polystitchum proliferum so rich in colour and luxurient in growth they could easily have been mistaken for the beautiful Leptopteris superba of New Zealand.

After a two hour drive we arrived at Milkshakes Reserve for our lunch stop. This rainforest area is possibly the most beautiful in Tasmania. They say that it rains here 350 days each year and drips off the trees for the other 15. No-one could imagine the beauty of the filmy ferns covering almost every treefern, log, stump or rock. Hymenophyllums, cuppressiforme, flabellatum, and rarum were the species.

After lunch we reluctantly boarded our coach and after two false starts eventually arrived at Rapid River to find it in flood. We had to disembark, walk across the bridge, and watch in trepidation as our driver negotiated the crossing. Finally with all safely across Michael pointed out a lovely fern gully on the right bank and upon entering it we discovered a lovely specimen of Long Club Moss, Lycopodium myrtifolium about 8 feet up a tree. This being a quite dark gully flash bulbs were popping as we tried for photographs. A short time later Coral Fern - Gleichenia microphylla (see page 8 for an illustration) was noticed, our driver was asked to stop for some photos, little knowing that this fern would rarely be out of our sight for the next 1,000 kilometers. After a very enjoyable day we finally arrived at Detention River for our overnight stop.

Monday morning we set out for the far west coast touring the towns of Burnie, Penguin, Wynyard and Stanley before arriving at Arthur River. Here we boarded the "George Robinson" cruising to Turk's Landing, we enjoyed our lunch amongst a large array of ferns canopied by Leatherwood, Beech and Giant Eucalyptus trees. After a one hour bush walk on a wilderness trail climbing to 300 feet we again boarded "George Robinson" and our skipper cruised close inshore for an excellent view of the ferns lining the river banks. All were in extremely lush conditions with the maidenhair, Adiantum aethiopicum dipping its dainty fronds to within inches of the waterline. Cyathea australis and Dicksonia antarctica were very majestic as a backdrop to the Blechnum and Gleichenia. Returning on our coach Michael suggested a stop to inspect some Bristly Shield ferns Lastriopsis hispida if we prepared for a steep descent, most were, and were well rewarded as they were in perfect condition. On then to our overnight stop. Judith finding by now that the fresh mountain air and the healthy exercise were combining to improve our appetites, proved equal to the task and we enjoyed a very nice meal on our last night at Detention River.

Tuesday found us setting out early, stopping for a brief look around Wynyard and continuing on to Hellyer Gorge where Michael led us along the rivers edge in search of the rare Asplenium hookerianium. After some time we discovered a small specimen on a log close by the water with both Asplenium bulbiferum and Asplenium terrestre in close proximity. After lunch we again enjoyed the beauty of Hellyer Gorge, finally and with reluctance we set out for Queenstown. This road proved to be extremely winding and we were told the engineer after final construction counted the curves and was very dissappointed not to make his century (ninety nine was his score). Eventually we arrived at Queenstown. As members were always willing to assist Judith with preparing the meal and it was at Queenstown when, after finding the potatoes would not fit into the pot Judith said you have peeled tomorrows too!

I think at times she felt a little less help would have been advantagous. After our evening meal we all gathered around the table while Betty Duncan presented an excellent lecture on fern identification and culture. All agreed this provided a most enjoyable finale to an excellent day.

Wednesday morning our Coach Driver Rob who had become extremely popular with everyone had to enter hospital for a back problem. relief driver Barry felt he could not negotiate the narrow track to Kelly Basin so we were taken to Lynch Creek walking track. Here we found an interesting range of plant life. Native Clematis, Snowberries, Pittosporums, Titrees, and Heath were abundant also a good range of ferns and to our delight a magnificent specimen of bushy clubmoss Lycopodium deuterodensa. Our next stop by the lovely Hemmshirk Falls at Strahan for lunch proved to be a good choice as we discovered Asplenium flaccidum growing in two trees along the walk. suggested a visit to the renowned museum at Zeehan and all agreed it was a wonderful display of early life on the rugged west coast of Tasmania superbly presented in an elegant setting. Afternoon tea proved popular before we returned to Queenstown. During Wednesday evening, Sue Yamins and Marie Van Etten our American members gave us a brief but very interesting outline of their work with universities in their home states. Michael Garrett followed with a short lecture of Tasmanian ferns.

Thursday commenced the long journey to Hobart. A brief stop at Lake St. Clair for a tea break gave us a chance to feed the numerous Wallabies (very tame and in excellent condition) and buy souvenirs, then on to Tarraleah Power Station for lunch. Our afternoon stop at New Norfolk allowed a short visit to admire the magnificent stained glass windows at St. Matthews Church, a passing look at the Old Colony Inn and then on to Hobart in time to replenish our cash supplies. Rob presented a very comprehensive tour with commentary on his states Capital city and then allowed us time to browse before heading to Seven Mile Beach and our overnight stop at the Pines Resort. The accommodation was of a very high standard indeed.

Our first call on Friday was Mt. Wellington and after a short delay for cloud to move on we had an excellent panoramic view of Hobart, the Derwent River and surrounding suburbs. Travelling south we soon arrived at Eaglehawk Neck and then Pt. Arthur. The extremely green lawns dotted with huge english oaks, Elms and Chestnuts were enhanced by picturesque bays and inlets which proved a delightful setting for our lunch of barbecued steak and sausages prepared by our coach driver Rob. Several members remarked that the scene reminded them of the British Isles but with the remains of the Penal Settlement ever reminding us of the harsh existance of the early settlers.

Travelling further south we arrived at Remarkable Cove to observe this unusual fern the Shore Spleenwort Asplenium obtusatum growing to perfection in rock crevices or cliff faces always within the salt spray area. On our return journey Rob called at The Tasmanian Devil Park where we saw and (if game enough) patted this fierce looking animal (whilst feeding it with icecream). We were told it has extremely strong jaws which after biting cannot open again until swallowing the portion bitten.

On arrival at Pines Resort Rob suggested a Derwent River cruise and this was a most enjoyable experience to round off the evening.

On Saturday morning we made an early start for our trip to Strath Gordon on Lake Pedder, our first stop Russell Falls bordering Field National Park proved to be a photographers delight with ferns framing the Falls from every angle. Before re-boarding our coach a fellow photographer was seconded to take our Group photo and soon found approximately 20 cameras around his neck. He seemed to manage each brand of camera and eventually returned to his wife patiently waiting in their car with his reward, one Tasmanian apple!

Travelling further into the Tasmanian wilderness area we arrived at Serpentine Dam on Lake Pedder. After climbing down a very steep embankment, clambouring over rocks, logs and trees for about half a kilometer Michael suggested that the rare filmy fern Hymenophyllum marginatum was close by and he would allow us to find it. Finally with Betty Duncan getting close Michael pointed out the moss covered log with two specimens no larger than a little finger nail. This proved a remarkable achievement that Michael could not only find such a small fern in a wilderness area but lead our party back so precisely. He also pointed out a magnificent patch of dwarf Coral Fern - Gleichenia abscida growing about 10 feet above the water line and the wedge water fern Asplenium vulcanicum under a rock ledge by a waterfall. Sadly we made our way back to the coach reluctant to leave this magnificent Gorge which gave one the feeling of being in Scandinavia.

Arriving back at our lodgings Rob suggested a couple of hours at the Casino to round off our last evening and approximately 20 members tried their luck and all arrived back in good spirits.

Sunday morning Michael guided us through the extensive production areas of Westlands Nurseries which were very interesting. After thanking Michael very sincerely for his dedication to our care and enjoyment for the past nine days we set out for Devonport stopping for lunch at the historic town of Ross. Here the stone masonry buildings and bridges were magnificently built by fine craftsmen with the Uniting Church of very high architectural merit. Finally arriving at the Ferry Terminal we thanked both Rob, our superb driver, and Judith our Cook, said our farewells, boarded the Abel Tasman a little sad to be leaving this picturesque island with its very friendly people.

As President of the Victorian Fern Society I was proud to be a member of such a wonderful group of people. I'm sure we are all very grateful to Chris for his excellent planning of our itinerary.

Very sincere thanks to Chris and Michael.

Keith Hutchinson.

GLEICHENIA MICROPHYLLA.



VICTORIAN FERN SOCIETY BOOK SALES

| AUTHOR | TITLE | MEMBERS | MEMBERS | |
|------------------|---|---------|---------|--------------------------------------|
| | GROWING FERNS 1st Edit. GROWING FERNS 2nd Edit. HANDBOOK ON FERNS (U.S.A.) COMMON FERNS & FERN ALLIES (N.Z.) WHATS WRONG WITH MY SOIL ORGANIC MATTER AND SOILS COMPOSTING WHEN SHOULD I WATER POTTING MIXES FERNS FOR MODERN LIVING FERNS & ALLIED PLANTS OF VIC TAS & S.AUST FERNS FOR THE HOME & GARDEN ENCYCLOPAEDIA OF AUSTRALIAN PLANTS VOl. 1 ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 2 ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 3 ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 3 ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 4 POSTERS FERNS FROM MOTHER NATURE MAIDENHAIR FERNS IN CULTIVATION PALMS AND FERNS FERNS & FERN ALLIES OF THE UPPER YARRA ETC | | | |
| BEST | GROWING FERNS 1st Edit. | 3.95 | 3.20 | В |
| BEST | GROWING FERNS 2nd Edit. | 5.95 | 4.60 | В |
| BROOKLYN B.G. | HANDBOOK ON FERNS (U.S.A.) | 5.95 | 4.80 | A |
| CHINNOCK | COMMON FERNS & FERN ALLIES (N.Z.) | 7.95 | 6.00 | A |
| CSIRO | WHATS WRONG WITH MY SOIL | 1.95 | 1.60 | A |
| CSIRO | ORGANIC MATTER AND SOILS | 3.95 | 3.20 | Α |
| CSIRO | COMPOSTING | 1.95 | 1.60 | A |
| CS I RO | WHEN SHOULD I WATER | 3.95 | 3.20 | Α |
| CSIRO | POTTING MIXES | 3.00 | 2.40 | A |
| DAVENPORT | FERNS FOR MODERN LIVING | 6.95 | 5.60 | Α |
| DUNCAN & ISAAC | FERNS & ALLIED PLANTS OF VIC TAS & S.AUST | 25.00 | 20.00 | C C C C |
| DUNK | FERNS FOR THE HOME & GARDEN | 9.95 | 8.00 | В |
| ELLIOT & JONES | ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 1 | 45.00 | 36.00 | C |
| ELLIOT & JONES | ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 2 | 50.00 | 40.00 | C |
| ELLIOT & JONES | ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 3 | 50.00 | 40.00 | C |
| ELLIOT & JONES | ENCYCLOPAEDIA OF AUSTRALIAN PLANTS Vol. 4 | 70.00 | 50.00 | C |
| FORESTS COMM. | POSTERS | 2.00 | 1.80 | |
| GICK | FERNS FROM MOTHER NATURE | 5.95 | 4.80 | A |
| GOUDEY | MAIDENHAIR FERNS IN CULTIVATION | 59.95 | 43.00 | C |
| GOUGH | PALMS AND FERNS | 6.95 | 5.40 | В |
| GULLAN & WALSH | FERNS & FERN ALLIES OF THE UPPER YARRA ETC | 5.00 | 4.50 | В |
| HOSHIZAKI | FERN GROWERS MANUAL | 19.95 | 16.00 | C |
| JONES | FERNS & FERN ALLIES OF THE UPPER YARRA ETC FERN GROWERS MANUAL FERNS IN COLOUR AUSTRALIAN FERNS AND FERN ALLIES FERNS IN AUSTRALIA COMMON PARE & EVOTICE | 9.95 | 7.80 | C B C C C C A A |
| JONES & CLEMESHA | AUSTRALIAN FERNS AND FERN ALLIES | 19.95 | 15.60 | C |
| JONES & GOUDEY | FERNS IN AUSTRALIA, COMMON, RARE & EXOTIC | 12.95 | 10.30 | C |
| JONES & GOUDEY | EXOTIC FERNS IN AUSTRALIA | 9.95 | 9.95 | C |
| JONES D L | ENCYCLOPAEDIA OF FERNS | 100.00 | 75.00 | C |
| MARTIN R W | FERNS FOR FERNERIES (N.Z.) | 13.00 | 12.00 | A |
| MOLYNEAUX | AUSTRALFLORA HANDBOOK | 6.95 | 5.50 | A |
| RUSH | A GUIDE TO HARDY FERNS (U.K.) | 5.50 | 5.00 | A |
| S.G.A.P. | FERN STUDY GROUP BOOKLET | 2.50 | 2.00 | A |
| V.F.S. | EXOTIC FERNS IN AUSTRALIA, COMMON, RARE & EXOTIC EXOTIC FERNS IN AUSTRALIA ENCYCLOPAEDIA OF FERNS FERNS FOR FERNERIES (N.Z.) AUSTRALFLORA HANDBOOK A GUIDE TO HARDY FERNS (U.K.) FERN STUDY GROUP BOOKLET AUSTRALIAN FERN JOURNAL VOI 1 No 1 | 2.00 | 1.50 | A |

POSTAGE AND PACKING: CODE "A" \$1.50, CODE "B" \$2.50

CODE "C" VIC \$4 NSW TAS & SA \$5 QLD \$6 WA & NT \$7

AVAILABLE AT MONTHLY MEETINGS OR FROM THE BOOK SALES OFFICER

BARRY WHITE 24 RUBY ST WEST ESSENDON 3040 PH(A.H.)03-337 9793

(BUS.) 03-741 1300 EXT 161

^{*******} NOTE "ENCYCLOPAEDIA OF FERNS" BY DAVID JONES NOW AVAILABLE SPECIAL PRICE FOR MEMBERS \$75.00

From the never to be published 'Everything You Always Wanted To Know About Ferns, But Were Afraid To Ask' by A.B. Normal, comes the following interesting facts:

"In my backyard there is a single mediocre specimen of Manfern (Dicksonia antarctica) with a trunk of about 1m in height and fronds of about the same in length. While fiddling about with the pocket calculator trying to work out how to pay the bills, the following thoughts occured to me concerning this particular fern -

| no. spores per spe | orangia | | | 64 |
|--|-------------------------|-----|-------------|-----------|
| no. sporangia per | | 15 | (X64) | 960 |
| | secondary pinnule lobe | 2.5 | (x960) | 2400 |
| Av. no. lobes per | secondary pinnule | 16 | (X2400) | 38400 |
| The state of the s | pinnules per pinnule | 40 | (X38400) | 1536000 |
| | rond (not counting | 24 | (X1536000) | 36864000 |
| top + which are | usually devoid of spore |) | | |
| - | fronds this season | | (X36864000) | 442368000 |

So in one season, this one plant produces over 442 million spores. Now, utterly ridiculous though it is, lets assume that everyone of these spores germinates and grows into a mature Manfern. For ease of calculation lets also say that each mature plant takes up an area of 1 squ. metre.

Therefore in this case, in one season my Manfern will produce enough young to cover an area of 442 million square metres. Which is equal to 442 square kilometres. Now the area of Tasmania is 67,897 squ. kilometres, so it would only take 154 plants of my size Manfern to produce enough young to completely cover Tasmania.

The whole of Australia, with an area of 7,686,810 squ. k. would require 17,391 Manferns.

The complete land mass of The World (148,350,000 squ. k.) would require 335,633 Manferns.

Bear in mind when considering this, is that the estimated population of mature Manferns in Tasmania's state forests alone (and not including conservation areas) is 50,000,000 plants.

So allowing for the fact that the Manfern in my backyard is a relatively small one, lets say that there is a total of 100 million mature Manferns throughout the whole of Tasmania. This means that in one season they would shed enough spore to eventually produce plants that would cover 300 planets the size of Earth."

Maxicrop

FOR SALE

AZALEAS.

Azaleas - all you need over 60 varieties, all sizes.

Camellias & Rhodos also

BILL & JOAN TAYLOR 1 Princetown Road. MT. WAVERLEY. 3149

Phone: 277 4310

Maxicro "Goodness from the sea" * Contains over 60 elements and minerals

- * Safe and easy to use.
- * Made from fresh growing seaweed.
- * Ideally suited for ferns
- * Maxicrop is available from nurseries and other places where garden products are sold.

Maxicrop

4/375 Bayswater Rd., Bayswater, Vic. 3153. P.O. BOX 302, Bayswater, Vic. 3153. Tel. Melb. (03) 720 2200 In a recent issue of the $\underbrace{\text{Kew Bulletin}}_{\text{N.E.Holttum}}$, specially dedicated to R.E.Holttum on the occasion of his 90th birthday, this great fern taxonomist described for the first time, four recently collected Australian ferns. These were:

1. Cyathea exilis-("exilis", Latin-thin, slender)-a tree fern with a slender trunk up to 4m high, often with offshoots growing from the base, and fronds to 1m. The species was collected by D.L.Jones et al in swampy ground by a creek on Cape York Peninsula. It is unusual in that it appears to be a rheophyte ("likes flowing water") and can reproduce itself from its suckers even after its main shoot has been destroyed by flooding. In form it most closely resembles the New Guinean species, C.macgillivrayi.

The other three ferns are all in the complex Thelypteroid Family, which also includes the *Cyclosorus* and *Plesioneuron* genera. All appear to grow in the moist lowland rainforest between Innisfail and Cairns in North Qld. No information is presently to hand concerning their abundance or potential cultivation.

- 2. Amphineuron queenslandicum-This new species resembles
 A.opulentum, but has deeper pinnae lobes and some differences in its hairs and venation. It was also collected by David Jones.
- 3. Chingia australis-(R.C.Ching was a fern taxonomist)-This grows to about 1m on a tufted erect rhizome, with bipinnatafid fronds. This is the first record of a Chingia in Australia, although the genus is quite common in Malesia and the Pacific. It was collected by R.J.Chinnock and P.J.Brownsey.
- 4. Christella dentata var. caespitosa-("caespitosus"-Latin, growing in tufts or patches). This variety differs from the well known form by its tufted growth from an erect caudex rather from a short creeping rhizome. Another collection by Chinnock and Brownsey.

(Terry Turney)

BUYERS' GUIDE TO FERN NURSERIES.

NEW SOUTH WALES.

JIM & BERYL GEEKIE FERN NURSERY

Wholesale - Retail 6 Nelson Street Thornleigh 2120 Phone: (02) 84 2684 By Appointment

QUEENSLAND.

MORANS HIGHWAY NURSERY

Box 467, Woombye, 4559 1 km north of Big Pineapple Turn right into Kell Road, Woombye Wholesale & Retail Phone: (071) 42 1613

MARLEY'S FERNS.

5 Seaview Street Mt. Kuring-gai 2080 Phone: (02) 457 9168

DIARY DATES.

VENUE - HERBARIUM - Birdwood Avenue, South Yarra.

APRIL MEETING - Tuesday 14th - Karen Read - Decor Corporation.

MAY MEETING - Tuesday 12th - Slides of Tasmanian excursion.

JUNE MEETING - Thursday 18th- Chris Goudey.

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.

VICTORIA.

ALLGOOD PLANTS & FERNS.

Main Road, Emerald, Victoria Closed-Mondays. A.H. (059) 68 48 58 Retail

"FERN GLEN"

Garfield North, Victoria Ferns - Wholesale & Retail Visitors welcome Phone: (056) 29 2375

BEASLEY'S NURSERY

195 Warrandy to Road, Doncaster East Phone: (03) 844 3335

COOL WATERS FERN NURSERY.

(Wholesale Propagators)
Reach Forest 3237
Thone: (052) 37 3283
Specializing in cool climate native ferns.

THE FERN SPOT.

Cnr. Princes Hwy. and Potters Rd. Longwarry Nth. Th. (056) 299364 40 Min. from Dandenong. Melway map 256 T6 open 7 days

R. & M. FLETCHERS FERN NURSERY

62 Walker Road, Seville, 3139
Phone: (059) 64 4680
(look for sign on Warburton Highway
300 m east of Seville Shopping Centre)
(Closed Tuesdays except Public Holidays)

AUSTRAL FERNS.

(Wholesale propagators)
Specialising in supplying retail
nurseries with a wide range of hardy
ferns - no tubes.
Fhone: - 052 823084

VICTORIA.

MT. EVELYN FERN CENTRE.

63 York Road, Mt. Evelyn (Mail orders welcome) Fhone: 736 1729

ALLANS FLAT PLANT FARM.

Tomkins Lane.
Allans Flat.
(25 km south of Wodonga on the Yackandandah Rd)
Specialising in ferns and Indoor plants.
Open daily (except Wednesday) and all public holidays.
Phone (060) 27 1375.

RIDGE ROAD FERNERY.

WEEAPROINAH. 3237 Specialising in Otway Native Ferns Wholesale and Retail Phone (052) 359 383