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PRESIDENT'S MESSAGE

Dear Member,

Those of us who live within access of the Burnley Horticultural College will be looking forward with pleasure to our first General Meeting for 1983. It is to be held at the College on Thursday, February 10, commencing at 8.00 p.m. when the Guest Speaker will be our foremost authority on ferns, Chris Goudey. Chris will speak on "The Family Davalliaceae", a most beautiful topic with which to start any new year. For those unable to attend the meeting, a full report will be published in the March issue of the Newsletter.

The December, 1982, break-up meeting was most enjoyable for me and I hope that everyone else who attended found it so. Our committee members and their helpers worked wonders in decorating the hall, setting up the supper, making the hampers and arranging and rearranging furniture to suit the need. I was personally delighted with the display of fern specimens which members took the trouble to bring to the meeting. These were magnificent plants. I can recall admiring a Dryopteris Affinis Cristata, a huge Pteris Umbrosa, a South African form of Rumokra Ariantiformis and many others. Thank you to those members who helped in this way.

The Forum program was excellent entertainment with Keith Stubbs a capable compere, and the Forum Panel of Keith Hutchinson, Chris Goudey, Harold Olney and Rod Hill all contributing extremely useful information to the meeting. I was one member who went home content in the knowledge that I had learned a great deal. The sincere thanks of all of us is due to these valued members. I repeat, it really was a most enjoyable meeting!

Establishing an Outdoor Fern Garden

(Continued from December, 1982 issue)

4. PLANTING

Before discussing planting, recall that we had spread leaf mould over the prepared surface to a thickness of two or three inches (75 mm). This was done to simulate what we had seen in natural fern gullies; our objective was to insert the plants through the leaf mould and leave a thick ground mulch for retention of moisture and provision of nourishment.

Continued on next page.....

WE ARE FORTUNATE INDEED THAT
OUR SPEAKER FOR THE FEBRUARY
MEETING WILL BE CHRIS GOUDEY

HIS TOPIC WILL BE "THE FAMILY DAVALLIACEAE"

Continued from previous page

We were cautious in our selection of plants for our first fern garden plot and concentrated mostly on plants that did not like to be kept under cover in pots. Among these were the fairly local Blechnums - Nudum, Wattsii, Minus, Cartilagineum and Fluviatile. Polystichums - Proliferum and Formosum and the rasp ferns: Doodia Media and Aspera. Lastriopsis Acuminata (formerly Shepherdii), Pteris Tremula and Todea Barbara. All hardy local species.

To begin a natural overhead canopy we planted one or two soft tree fern trunks (Dicksonia Antarctica) a rough tree fern (Cyathea Australe) and Callistemon species. It is well to recall also that at this stage we had spread hessian at a height of about six feet (180 cm) to provide artifical overhead cover. Our intention was to remove the hessian when and if the natural canopy plants grew high enough to provide protection.

At the outset this was an experiment. We had no idea really what the outcome would be but once again the ferns themselves provided the answer. Within a few weeks they began to improve in appearance and afterwards became lush and luxuriant. They thrived through their first outdoor winter and by the following spring had spread so much in growth that the frondage covered the whole area.

The native trees, shrubs and tree ferns by this time were growing quickly, all being species which relished moist conditions and it was obvious that the overhead hessian could soon be removed. It had served well through the winter months.

(To be continued)

With kindest regards
Doug Thomas

DECEMBER FERN FORUM

One hundred and thirty members were present at the Society's December meeting which took the form of a Fern Forum. The meeting was conducted in a relaxed and very friendly atmosphere befitting the season of goodwill.

Secretary, Keith Stubbs, was moderator of a panel which consisted of Immediate Past President Chris Goudey, Keith Hutchinson, Harold Olney and Rod Hill. Replies to questions were so interesting that the report on the meeting will continue in the March Newsletter. Here is a precis of some of the comments.

1) In answer to a question on shields on platycerums browning off, the problem is usually created by the ferns receiving an excess of water. They will tolerate drought conditions and to do this they have dense moisture holding shield leaves and the whole of the plant is densely covered with minute hairs and these cut down moisture loss. You can let your stag or elk dry out to the extent that it will droop and it will stand up a couple of hours after watering -- that's how tough they are. The "finger test" can be used to determine if they have enough water - if the bottom is damp they have enough moisture to sustain healthy growth.

2) Slime on the top of soil in pots can be caused by a heavy mixture which does not allow adequate drainage - the mixture is not open enough. And the best way of combatting algae from coming up in spores is to sterilize the mix that is used. This will not always eliminate the problem because algae spore can come in with the fern spore and there is no way to stopping that. Let the pot of soil soak in almost boiling water. Again, the use of a very open mix when propagating spores will help eliminate algae.

3) One member raised a problem which he has. When indoor ferns get very dry they often get a silver grey layer on top of them. This is evident in pots where his mixture is one third sheep manure, on third peat moss and one third river sand. It was felt that there could be a build up of mineral salts (evidenced by a white crust around the water line). This often occurs when pots are stood in water. It was suggested that the plants should be put in a trough every month or so and given a good watering and let the water flow right through the plant and out the bottom.

4) Will the growing of club moss or other ground cover in pots with ferns harm the growth of the ferns? Some of these plants will fill up the whole pot with roots, thus retarding the growth or killing ferns. It is not recommended practice - "get rid of them" was the consensus of the panel.

5) How can I get tree ferns out of 14" to 16" pots to pot them up or plant them but not damage the root structure, the panel was asked? As most tree ferns don't like being in pots for very long, it was recommended that they be removed. Most tree ferns are hardy and they can be knocked out of their pots and the soil teased away from the roots. As long as the roots are not exposed for any great length of time, there will be no real prospect of damage to the root structure. Care should be taken with some big species e.g. Robertsiana. It is recommended that the pots be laid on their side for removal and the bottom tapped with a mallet until the pot separates from the root structure.

Continued from previous page

6) The panel was asked what can be done for maiden hair ferns that look well developed, keep on producing new fronds but always have a yellowish appearance? The problem could be too much light, too much water, could need repotting. An inspection of the root system would be desirable. If this condition was evident in say, Fragrans, it would be due to too much light.

7) When repotting maiden hair ferns, what depth should the plant be potted? It depends on the fern and the type of the rhizome. Generally, with a heavy rhizome, tropical Adiantum, usually the rhizome would be left just on the surface as most of these rhizomes like to creep. Tufted rhizomes can even be buried a little as long as the crown is not buried too deep and affect the incoming fronds. Most of the others should be repotted when the crown is on a level of the top of the soil.

8) The best time of the year to paint a glasshouse roof was sought from the panel and it was felt that the beginning of November was a good time, certainly well before the beginning of summer. A good indication of when painting is overdue is when ferns start to go white. Another alternative which should be considered is using 70% shade cloth - 80% for very delicate ferns. This removes the inconsistency of paint coverage from year to year and the effect it has on continuous healthy growth.

9) One member had trouble with her Cyathea Robertsiana. It is loose in the pot above the soil level. Although it is staked, it will not make new roots at the soil level. The query was what was needed to be done to encourage new roots? With great difficulty as it is a very difficult fern to grow without heat. (Rod Hill will not attempt to grow it for that reason). One way to encourage roots is to pack pieces of tree fern log around the base of it, put bush moss in it and the roots may grow well. This method is also good for slender tree ferns that may loosen in their pots.

More next month.

TREASURER'S REPORT

The bank account of The Fern Society of Victoria has a credit balance of $1,643.91, with a further $2,000.00 on fixed deposit.

Following are details of monies received since previous report printed in December issue of Newsletter.

Subscriptions		$384.00
Plant Sales	$173.00)	
Spore Sales	$24.35)	$197.35
Library		$30.00
Special Effort		$119.80
Sale of back copies of Newsletter		$28.50

JEAN TRUDGEON
Hon. Treasurer

A warm welcome is extended to the following new members of The Fern Society of Victoria.

Mrs. Pat Oliver, 52 Normanby Road, Inglewood, 6052
G.W. & V. Rowe, 52 Murray Road, Croydon, 3136
Bryan A. Kennaugh, Mitchell Road, Echuca Village, 3625
Geoffrey Rushworth, 120 Cecil Street, Williamstown, 3016

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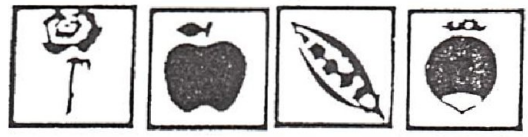

SOME NOTES ON THE TREE FERNS OF AUSTRALASIA & NEW ZEALAND

by Chris Goudey

CYATHEACEAE

Cyathea si ath'e a

A very large genus, of over eight hundred species distributed throughout the wetter parts of the tropics and subtropics, especially on mountains. A few species are found just north of the tropics, but the majority occur in the Southern Hemisphere.

Essentially a family of treeferns, Cyathea are usually characterised by an upright trunk, either massive or slender with a rosette of fronds on the top, which may vary considerably.

As a result of studies in America the family Cyathea has been grouped into five sub-families, these include Alsophila, Cyathea, Nephelea, Sphaeropteris and Trichopteris. However, some authorities still disagree with the name changes, so they are by no means widely used.

I have included the treeferns of the Cyathea group under the still widely used name, with the new names included also.

Treeferns make particularly good tub plants, but the majority need a good root run and grow better if planted in the ground. Must treeferns prefer semi-shade, in a frost free position, with ample water in hot dry weather.

Continued on next page.....

MARCH ANNUAL FERN SHOW - EXHIBITION OF FERNS

OUR FERN SHOW IS GETTING CLOSER - HAVE YOU SORTED OUT YOUR FERNS FOR THE SHOW, BOTH FOR EXHIBITING AND FOR SALE?

WE WOULD LIKE TO SEE YOUR FERNS AT YOUR SHOW. IT DOESN'T MATTER HOW COMMON THEY ARE. (THE MOST BASIC OF FERNS CAN BE SPECTACULAR IF GROWN WITH LOVE AND CARE)

PLEASE FILL IN THIS FORM AND RETURN IT TO A MEMBER OF THE FERN SHOW SUB-COMMITTEE BY OUR MARCH 1983 MEETING.

NAME OF FERN	SIZE	TUB/BASKET	DO YOU NEED IT TRANSPORTED	IF YES - ADDRESS

ALL EXHIBITION FERNS MUST HAVE OWNER'S NAME ON CONTAINER.

SALE OF FERNS

1. Plants must be labelled with price and where possible, name of Fern.
2. The form below must be filled in by Seller, grouping all the same priced ferns together, and pricing to be in multiples of 20¢. Present this together with your plant sales to a member of the sub-committee on the morning of the Fern Show in March 1983.

SELLERS NAME: ..... DATE: .....

POT SIZE	QUANTITY	RETURNS	SOLD	PRICE EACH	$	¢

ALL FERNS MUST BE NAMED - if you are not sure, bring them along to be identified.

We also need donations of small ferns (tubes 2" - 3") for our Children's table. IF you can bring some in, please let us know.

REMEMBER THE SUCCESS OF THE SHOW DEPENDS ON THE SUPPORT OF ALL MEMBERS.

Some Australian and New Zealand species have been introduced into cultivation in the United States and Great Britain, but are by no means popular.

Hawaiian treeferns of the genus Cibotium are shipped to the United States in large quantities, and have surpassed the Australasian treeferns in popularity, particularly in the sub-tropical coastal areas. Very few species can tolerate the cold winters of Britain; however, several sub-alpine species grow quite well in the milder parts of the country or in a Coldhouse, these include C. colensoi, C. dealbata and C. smithii from New Zealand and C. australis from Australia.

C. australis — Alsophila australis
A very hardy species from Eastern Australia ranging from central Queensland, south to Victoria and Tasmania. Commonly known as the Rough Treefern, this fern can be difficult to transplant, and is rarely cultivated outside Australia. A sub-species of C. australis occurs on Norfolk Island, but is rare in cultivation C. australis ssp norfolkiensis.

C. baileyana — Alsophila baileyana
More commonly known as the Wig Treefern, C. baileyana makes a very handsome subject. It is similar in appearance to C. rebeccae but differs mainly in having narrow more pointed pinnae and a most attractive green and brown wig, which seems to sit on top of the trunk.

Native to the mountains of North East Queensland, C. baileyana is very slow growing and quite frost tender, but will stand temperatures as low as zero.

C. brownii — Sphaeropteris excelsa
This magnificent treefern is endemic to Norfolk Island, and is closely related to C. cooperi, but much more robust. C. brownii can be seen growing in abundance in the Melbourne Botanic Gardens; plants of it were introduced many years ago and have now formed colonies in parts of the Gardens. C. brownii is a hardy fern, much sought after by collectors, and an easy one to raise from spores.

C. celebica — Sphaeropteris celebica
A species native to parts of Malesiana ranging from the Maluccas and Celebes Islands to New Guinea and just reaching North East Australia where it occurs in the rainforest of the Evelyn Tablelands. C. celebica is a high altitude treefern of the tropics often growing in open situations where temperatures can drop below zero. This fern will not tolerate being grown in a container and does best planted in the ground in a semi-sheltered position.

C. colensoi — Alsophila colensoi
This small semi-prostrate fern is native to New Zealand, where it is often called the "Creeping Tree Fern". A sub-alpine fern that usually occurs at high altitudes. C. colensoi is small and makes an ideal fern to grow in containers. It has pale green fronds with an attractive red brown scaley stipe & rachis. This fern has been cultivated in the milder parts of Britain.

Continued from previous page

C. cooperi — Sphaeropteris cooperi

Formerly known as Alsophila cooperi, this treefern is quite hardy; it thrives in full sun in warm coastal areas such as California and Florida. It is native to New South Wales and Queensland. An extremely variable fern throughout its range. I know of four different forms, two of which have been given names in America, cv. "Robusta" and cv. "Brentwood".

C. cooperi is an easy quick growing fern to cultivate and can stand temperatures as low as zero. A small colony has escaped cultivation and naturalized in Bedfordale, Western Australia.

C. cunninghamii — Alsophila cunninghamii

A treefern of the cool damp gullies of New Zealand, Tasmania and Victoria. Commonly called the Slender, or Gully Tree Fern, C. cunninghamii has a tall slender trunk with fine lacy fronds. This fern has been confused in the past with C. medullaris, a native of New Zealand. It is difficult to transplant and requires a cool well drained position.

C. dealbata — Alsophila tricolor

The Silver Treefern is New Zealand's National Emblem. It is usually called the "Silver Ponga" or "Ponga", a name given to it by the Maoris who used it to mark trails through the bush so that they could be followed in the dark of night. C. dealbata (meaning white washed) is well named with its pure white on the underside of the fronds, once seen, never forgotten. This fern is easy to cultivate, but can become very shabby if grown in an exposed position.

C. howeana — Alsophila howeana

A most attractive species that is restricted to Lord Howe Island. C. howeana has a narrow trunk neatly patterned with large oval scars, left by fallen fronds. The pinnules are cup- shaped, protecting the sori from the hot sun, as this species prefers to grow in an exposed situation, where the humidity is high. C. howeana is quite similar in appearance to C. robertsiana, a species native to North-east Queensland.

C. leichhardtiana Copel — Sphaeropteris australis

This species has a slender trunk with persistent prickly frond butts and is appropriately called "The Prickly Treefern". It is an attractive fern with dark green shiny fronds and pale straw colored scales.

A common treefern of Eastern Australia that is seldom cultivated. C. leichhardtiana is a difficult fern to transplant; it requires a well drained position, and will not tolerate full sun or dry winds.

C. macarthuri — Alsophila ferdinandii

This treefern is native to Lord Howe Island and was for a long time confused with C. dealbata, a species native to New Zealand. It is quite similar in appearance but lacks the white on the underside on the fronds. Mature specimens of C. macarthuri have a greyish colour to the back of the fronds; this seems to become more white with age, particularly with pressed specimens.

C. marcescens — Alsophila marcescens

Commonly known as the Skirted Treefern, C. marcescens is a rare fern which only occurs in several isolated locations in Victoria. C. marcescens along with C. cunninghamii were formerly confused with C. medullaris, the Black Treefern from New Zealand. A hardy quick growing treefern that is easy to cultivate, and yet seemingly impossible to grow from spores.

C. medullaris — Sphaeropteris medullaris

The Black Treefern is noted as one of the largest treeferns in the world, it can attain a height of up to 50 feet (15 m) or more, with a spread of up to 40 feet (12 m) in diameter. It is native to New Zealand but ranges throughout the Pacific Islands as far east as Tahiti.

This fern has been recorded erroneously from South-eastern Australia. C. medullaris is an easy quick growing treefern to cultivate if provided with partial shade and a moist position.

C. rebeccae — Alsophila rebeccae

A common treefern of the rain forests of North-eastern Queensland and the Island of Flores, Indonesia, where it grows from the coast to the highlands. C. rebeccae is similar in appearance to C. baileyana, but lacks the wig growth which is typical of that fern. The cultivation requirements are the same as for C. baileyana.

C. robertsiana — Alsophila robertsiana

This treefern is accepted as the most beautiful in Australia. It has a very thin woody trunk and soft pale green lacy fronds. C. robertsiana is an extremely quick growing treefern from the mountains of Nort-east Queensland. It is uncommmon in cultivation and resents disturbance; however, once established C. robertsiana can withstand temperatures as low as 32 F (0 C) provided it does not get frost on it. Plants are easily raised from spores.

C. robusta — Sphaeropteris robusta

A beautiful, extremely robust treefern that is endemic to Lord Howe Island. Visitors to my fernery never fail to comment on the beautiful almost pure white scales on this majestic treefern. An extremely quick growing and hardy species for a well shaded position.

A fourth species of the treefern occurs on Lord Howe Island, it is restricted to the summits of Mts. Gower and Lidgebird where it grows in fairly exposed situations. Cyathea brevipinnae, is a most attractive species with thick leathery upright fronds. Hardy in cultivation, but rarely cultivated.

Continued on next page.....

C. smithii — Alsophila smithii

Named after John Smith, a once Curator of the Kew Gardens, London. C. smithii is a cool climate treefern. It ranges from New Zealand, south through Stewart Island to the Auckland Islands, the extreme southern limit of treeferns.

This fern has been cultivated in Southern Eire, Britain, where it is quite hardy. C. smithii can tolerate temperatures well below freezing, but does best if not exposed to wind and direct sunlight.

C. woolsiana — Alsophila woolsiana

A rare high altitude treefern from the mountains of North-east Queensland. This fern usually grows in very damp sheltered gullies at a high altitude. It can stand temperatures as low as freezing provided it is given shelter. C. woolsiana has long arching pale green fronds with dark brown scaley stipes and midribs.

Dicksonia — dik so' ni a

A small family of about twenty-five species that are restricted to the Southern Hemisphere. Treeferns of this family once belonged to the genus Dicksoniaceae along with Cibotium and Culcita. But Dicksonia is now regarded as belonging to the genus Cyatheaceae, with Cibotium and Culcita belonging to Thyrsopteridaceae.

The two main differences between Cyathea and Dicksonia are as follows :- In Dicksonia, the spores are marginal and contained in a cup-shaped, two valved indusium, whereas in Cyathea, the spores are sited along the veins of the pinnules, away from the margins. The upper trunk and frond bases of Dicksonia are covered with fine blackish brown to pale brown hair, whereas in Cyathea the hairs are replaced with long triangular scales or both hairs and scales.

Continued on next page.....

CAN YOU MAKE A CONTRIBUTION TO OUR MARCH NEWSLETTER?

SHARE AN INTERESTING FERN ANECDOTE .... SUPPLY A PHOTO ... ASK A QUESTION .... MAKE A SUGGESTION .... LET US KNOW IF YOU HAVE ANY IDEAS FOR IMPROVING THE NEWSLETTER!

(Contributions don't have to be typed - we've served a long apprenticeship in deciphering notes on scraps of paper. Why not rush into print next month?)

D. antartica
Possibly the most widely cultivated treefern in the world. D. antartica is grown throughout Britain and Europe as well as America. An extremely hardy treefern that can stand temperatures as low as 20 F (-6 C) with its fronds covered with snow. The Soft Treefern is native to Eastern Australia and Tasmania where it grows in abundance in cool rain forest gullies. If this fern becomes too large in a fernery the top section can be removed and replanted, and if provided with ample moisture will re-establish itself quite quickly. Unlike other species of Dicksonia the stump of D. antartica will die once the top is removed.

D. fibrosa
A very similar species that is native to New Zealand, and the Chatham Islands. This fern along with D. squarrosa is also grown in Britain and occasionally in America, but is not as popular as D. antartica as they are more difficult to grow. D. fibrosa is very similar in appearance to D. antartica, but a much smaller fern with stiffer more harsh fronds. A hardy but slow growing fern.

D. lanata
This small semi-erect treefern is also native to New Zealand and is easily recognised from other treeferns by its prostrate or semi-erect habit. D. lanata is not widely cultivated but is worthy of a place in any fernery. Fronds of mature specimens look most attractive with their large cup-shaped indusium.

D. squarrosa
One of the most abundant treeferns in New Zealand, often forming large clumps. This fern produces an abundance of suckers which can colonise quite large areas. If care is taken, these suckers can be removed and planted independently. D. squarrosa is cultivated in parts of America, Britain and Australia, it can be seen growing in abundance in the ferneries at Ballarat, Victoria. D. squarrosa and D. youngiae have the ability to produce a new crown if for some reason the trunk is damaged.

D. youngiae
This most attractive, rare species is not often seen in cultivation. It is native to Northern Queensland and Northern New South Wales where it is confined to high altitude rain forest gullies. The upper trunk and stipes of this species are covered with stiff reddish brown hairs, that look very attractive with the sun shining on them. The New South Wales colony of D. youngiae occurs more than a thousand miles (1,600 km) south of the Queensland colony and seems to differ slightly from the northern form in having slightly darker, more shiny fronds. They also seem to sucker more readily than the Queensland ones. A hardy fast growing fern that needs a little protection particularly in hot dry areas.

FIRST MEETING FOR 1983

Thursday
FEBRUARY 10TH

CHRIS GOUDEY

"THE FAMILY DAVALLIACEAE"

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

VENUE OF MEETINGS: Burnley Horticultural School Hall, Burnley

TIME OF MEETINGS: 8 p.m.

** DETAILS OF SPEAKERS ARRANGED FOR OUR 1983 MEETINGS, TOGETHER WITH THEIR TOPICS, WILL BE LISTED IN OUR NEXT ISSUE OF THE FERN SOCIETY NEWSLETTER **

PREPARED AND PRINTED

FOR THE FERN SOCIETY

OF VICTORIA

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