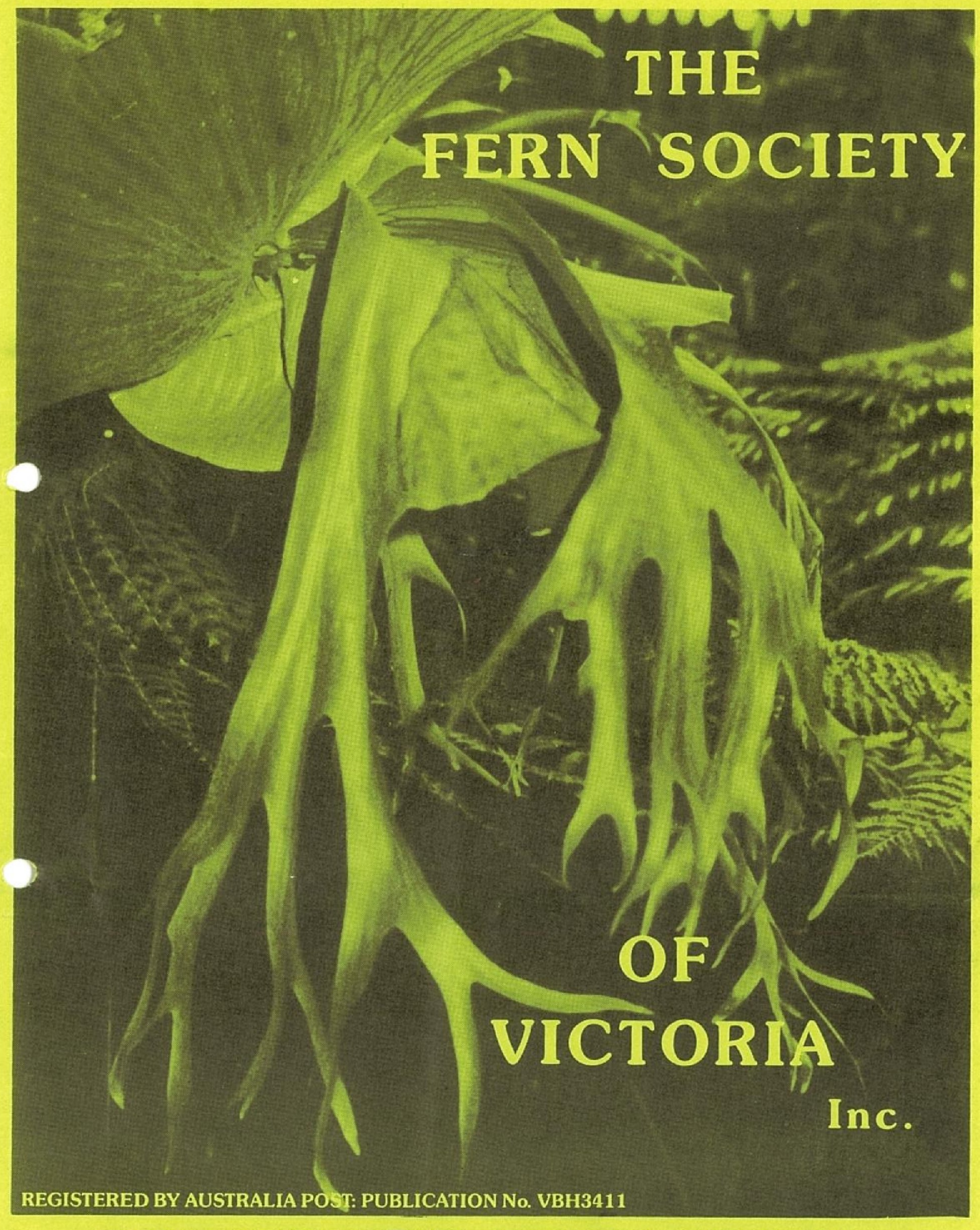

THE FERN SOCIETY OF VICTORIA Inc.

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NEWSLETTER

VOLUME 11, Number 11, November 1989

FERN SOCIETY OF VICTORIA Inc.

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Heidelberg West, Victoria, Australia, 3081

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Membership Secretary:	John Oliver	-	879 1976
Editor:	Terry Turney	-	211 8169
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Subscriptions: **Single** - $13.00 (Pensioner/Student -$9.00);
Family - $16.00 (Pensioners - $11.00);
Overseas - A$30.00 (by Airmail).
(Subscriptions fall due on 1st July each year)

President's Message:

Bill Taylor reports that our participation in the Stringybark Festival was very worthwhile for the Society and enjoyable for himself and his co-workers. See report in this edition. Many thanks to you Bill, for your effort in organising the event and to the others for their contribution.

The official title nominated by the speaker for the talk at our November meeting looks at first sight to have little to do with ferns! However, bryophytes is just the collective botanical name give to the mosses and liverworts, familiar to all of us, which form the division of the plant kingdom between the ferns and the algae. Our speaker, Dr George Scott, has specialised in this field for many years, and as he is also an excellent speaker we should have a very informative and entertaining evening.

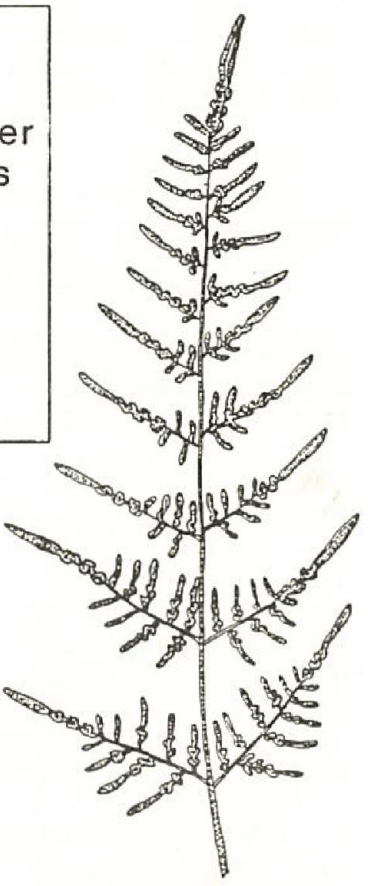
For the December meeting we will have another Fern Forum, several of which have proved very successful in past years. A panel of Society experts will answer questions from members at the meeting and, hopefully, promote general discussion an some of the topics. So start thinking well ahead of time of the problems or other points you would like covered and have your questions ready on the night. Receiving some of the questions in written form in advance would help to get the programme started. Queries posted into the Secretary from members unable to attend the meeting will, of course, be very welcome. The meeting will conclude as usual with our special Christmas supper of goodies brought along by those present.

Best regards
Bob Lee

NEXT MEETING

at 7.30 p.m., Thursday, 9th November
at the Herbarium, Botanic Gardens
Birdwood Ave, South Yarra

BRYOPHYTES
by
DR GEORGE SCOTT



Program:

7.30 p.m.	- Fern and Book Sales, Spore Bank, Library Loans, Special Effort Ticket Sales
8.00 p.m.	- November General Meeting
8.30 p.m.	- XXXXXXXXXXXXX??????????
9.30 p.m.	- Fern Pathology and Identification Table. Special Effort.
9.45 p.m.	- Supper.
10.00 p.m.	- Close

THE STRINGYBARK FESTIVAL:

Over the weekend of 14th and 15th of October the Society took part in a display to encourage people to have a better interest in ferns and to promote the Fern Society and gain new members to the Society. Iam sure this was achieved.

Members to help setup the display and who attended to the needs of the people were, Nancy and Eric Perry, Ivy Harris, Moira Gascard, Jack Barrett, John Hodges, Joan Taylor and Allan Bone, many thanks to these members, who have helped to promote the Society by giving of their time and effort, talking to thousands of people and and of course by selling a few plants.

On summing up this years festival I believe we saw many more people interested in the Society and ferns genuinely, from this Iam confident we will receive some new members, our overall aim at the weekend.

Thanks again helpers
Bill Taylor

SPEAKER REPORT - October General Meeting

Topic - BLECHNUMS by Chris Goudey.

Blechnums occur worldwide but mostly in the Southern Hemisphere with 150 - 200 species. One third of these occur in South America with only one species in England (B. Spicant). Twenty one in Australia and a large number in New Zealand.

They are mostly found in wet places - rain forests, swamps and along streams, the exceptions being B. cartilagineum & B. orientale. Many produce stolons and develop into large clumps whilst others produce large trunks, B.nudum. and B.gibbum can be found with trunks up to two metres high.

The sori of most Blechnums is linear running along the side of the midrib, dimorphic in some species with the exception of one South African species which has a broken line sori.

Genus related to the Blechnums are Doodia, Woodwardia, Sadleria, Stenochlaena and Plagiogyra.

Two New Zealand species of Blechnum are maritime ferns. B. banksii grows in full sun on coastal banks and B. durans grows within reach of salt spray but on the edge of the forest occurring only at the base of the South Island and the small southern islands. A very attractive fern B.penna Marina grows almost right around the world, in the southern hemisphere usually occurring in the high mountains but in the south grows at sea level.

B. vulcanicum is quite common in New Zealand and South West Tasmania and has also been discovered in Victoria. This fern must have plenty of water and will rarely recover if it dries out.

B. colensii grows only in rainforests in very dark situations usually under waterfalls (called B. pattersoni in parts of New Zealand).

B. filiforme a small creeping fern with spore germinating on the forest floor. It forms large carpets of small, almost round, pinnae and when it reaches the base of a tree, treefern, rock or stump will climb. As it climbs the pinnae become large and elongate, when out of reach they become filiform and produce fertile spore. A lovely fern which will only grow in moist rainforest positions.

B. spicant is said to be only fern which will grow in peat bogs. It will tolerate very acid soil conditions. B. gibbum on attractive species from New Caledonia and Vanuatu prefer subtropics as it dislikes our cold Winters.

B. nudum with fimbriated fronds will often retain the fimbriations if planted in a moist protected position. Spore from this form sometimes produce reliable sorelings which keep their attractive fimbriations.

Our President Bob Lees thanked Chris for his excellent presentation and fern display.

by Keith Hutchinson.

PROPAGATION OF FERNS - Part 2

by Ray Edwards

I am writing this article on my experience in the propagation of ferns. I started propagating ferns several years ago. At that time I knew very little about ferns and I have had to go through the stage of trial and error. Now I have learnt a few things, but I realize there is so much more to learn.

One of the biggest obstacles in the propagation of ferns is having the correct medium. In asking other fern propagator what they use, it seems that every one uses a different medium. Some would use river sand, others West Australian Com-Peat. I have heard of others using crushed house brick, various kinds of peat-moss, pulverized tree fern fibre and many other ingredients.

I started propagating using Smiths Kiwi Peat on its own. I boiled it in a big tub to sterilize it and I had good success with the germination. I tried other peat-moss -German, Finland, Canadian, other New Zealand Peat, but I found these were not very successful; maybe because of the salt content in them. I found then, that the original peat that I was using started to vary, even differ from the bottom of the bale to the top. So I started experimenting with other medium. I tried putting a layer of Lignum Peat (brown coal) over the top of the peat-moss. With this I had an excellent germination with some varieties of ferns that I had had trouble germinating on the peat-moss; but I still had problems getting a regular germination. The other problem with Lignum Peat is that it is very messy to handle when it is wet. It was suggested to me to use sand in the mix to help absorb the water. This I found helpful, although the sand must be sterilized or algae will be a problem. Recently I have found good success in mixing peat-moss, sand and bust soil.
It is important that the mix is sterile as fungi and disease could otherwise take over. I have tried a few methods of sterilization. Firstly, boiling the medium in a large tub or copper. Those gave some success but there were times that it did not sterilize properly. Next I tried using a micro-wave oven, but had difficulty establishing just how long to leave the medium in the micro-wave and with the medium drying in places. I think there is hope in this method, but it needs to be perfected.

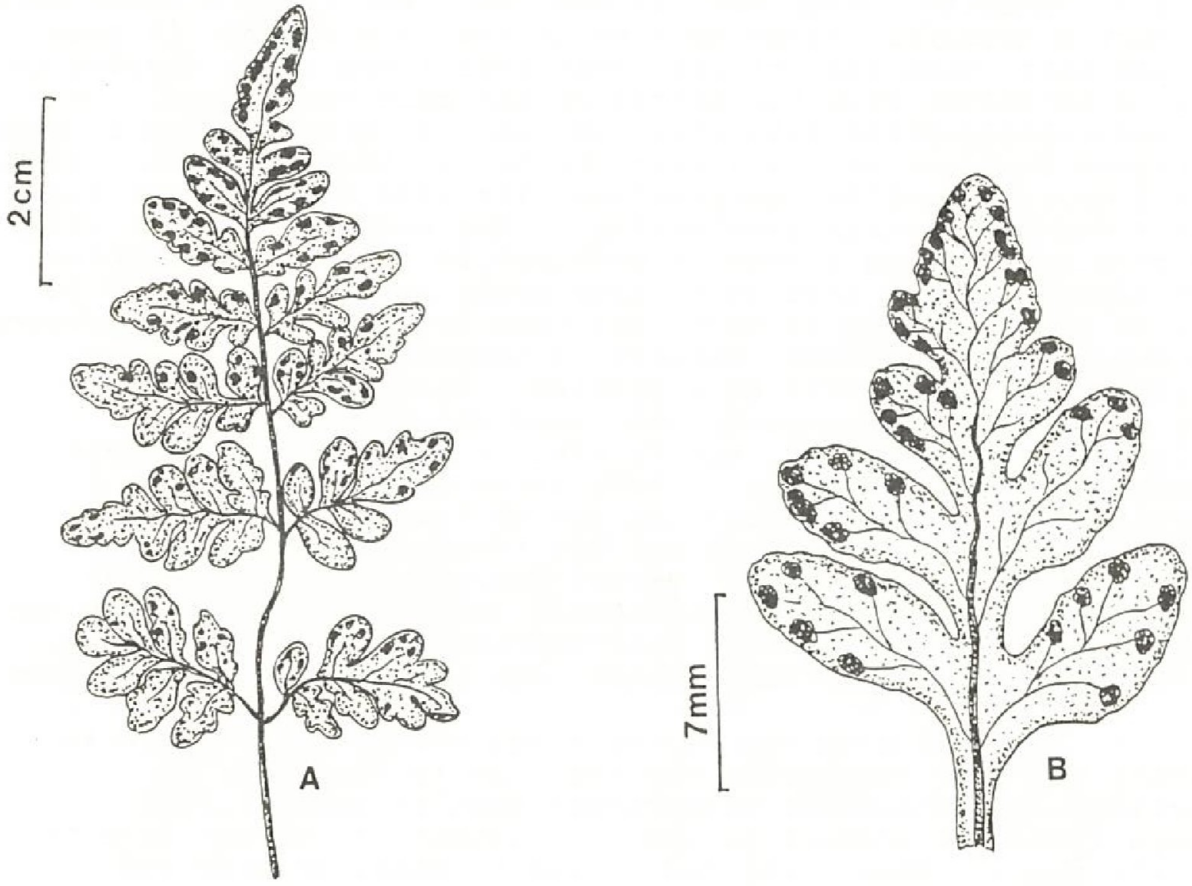
My next step was to buy a small steam sterilizer in which I now have reasonable results. It is important to sterilize at the correct temperature that is around 180oF. Having found the correct medium, sterilized it, we now have to sow the spore. When I started I used to shake or blow the spore on to the medium. I found that many times I had a very uneven coverage, so I tried mixing the spore in some water and spraying it on with a mister. This has been most successful, but I did have to learn just how much spore to mix with the water e.g. tree ferns need to be sown much thinner than other varieties. Having sown the spore, 3-6 weeks later we will see the germination. I find there is always the challenge of growing some fern that is different or some fern that is rare, and I will continue to learn more about the propagation of ferns.

New Fern Species from Australia - Part 6

Cheilanthes praetermissa (D.Jones):

This species is a medium-sized, terrestrial fern forming dense spreading clumps. Its leathery (coriaceous) fronds, up to 26 cm long, are dark green above and paler beneath. In general form, it is similar to C. nudiuscula, but is distinguished by its thicker-textured fronds, which are smooth and without any hairs (i.e., glabrous) and has a somewhat different pinnae shape. Its spreading growth habit more resembles C. austrotenuifolia than C. nudiuscula, which forms small separate clumps.

This plant is widely distributed in Arnhem Land and is quite common in Kakadu National Park. It is generally found growing on the ledges of sandstone escarpments and in rocky outcrops in open forest in sandy soil. The name comes from the Latin - "praeterire - to pass over", because it is surprising that such a common species had been so long overlooked.



A. Cheilanthes praetermissa frond B. pinna

Thanks are extended to David Jones for permission to reproduce details from his publication in Austrobaileya, 2(5), 469-480 (1988).

A FERNING HOLIDAY

I late April, early May I took off for a ten day break to Hokitika, on the West Coast of the South Island. Most days my daughter and self took the car on "wandering" trips, exploring the bush whenever it looked interesting, following old disused mining tracks which all seemed to lead nowhere, gathering ferns mostly, but sometimes small native trees. In many places the orange-coloured climbing rata was in bloom, a beautiful sight with the sun striking through the upper branches of the host trees.

After a few days, Betty and Ivan Welch came over from Rangiora to join us in our fern foroys, as did Joyce and Lyall Barry whose home overlooks Lake Kaniere, just a few miles from Hokitika. Their home is surrounded by bush, but they can always find room for a few more ferns.

So, on rather a dull day, which certainly didn't dampen our enthusiasm, we decided to explore up an old forestry road where the native bush had been felled years ago, but there were still massive giant trees lying on the ground, obviously no good for milling. But oh, what a treasure trove they proved to be for us, smothered in various tree orchids, filmy ferns and Trichomanes reniforme (kidney fern). We peeled these off so easily, just like rolling up a carpet. At least they will be given TLC in their new homes, and no be left exposed to the elements to eventually die.

We carefully dug several clumps each of the tall umbrella fern Sticherus cunninghamii, always a very difficult fern to transplant, and this time I have been fortunate, new fronds are already appearing. Of course there was plenty of Blechnum discolor and B. capense around, plus Polystichum richardii, but we were not interested in those.

Next we decided to investigate some of the native bush on the other side of the Lake (not in a Reserve), but by this time a gently West Coast rain had set in, the kind that trickles down inside one's collar, but that didn't deter us one bit. We just put on our rain jackets, collected our bags and towels, and off into the bush. Blechnum nigrum everywhere, just what we were looking for, filmy ferns in all directions, and the most glorious Asplenium bulbiferum I've seen anywhere. We scrambled up steep small gullies, every one of which displayed such an abundance of ferns, including Leptopteris superba. L. hymenophylloides and Lindsaea trichomanoides to mention only a few, also Trichomanes polyodon and Polystichum richardii and P. vestitum.

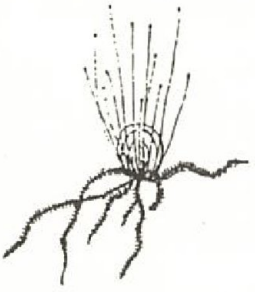
The forest floor was deep in composted litter which we gathered up by the sacks full, so as to give our ferns the feeding they enjoy.

After this expedition we spent the remainder of the afternoon at the Barry's home, where a hot cuppa was most welcome, and then wandered through their large patch of native forest, just outside the house.

Next day Betty and Ivan Welch took me out along the coast road to explore the Monanui Bush Walk, the most delightful area of bush yet encountered and close to the sea. It was a fascinating place, a small remnant of the original forest that once covered most of the Coast. The floor of the bush was covered with beautiful mosses, amongst which were growing gorgeous specimens of Lastreopsis glabella, Asplenium bulbiferum, Belchnum minus, Leptopteris hymenophylloides and many varieties of filmy ferns. The trunks of many of the trees were festooned with Trichomanes reniforme, their shade of green where the sunlight penetrated the overhead canopy, a spell-binding sight.

Asplenium polyodon a A. flaccidum decorated many of the tree ferns, their extra long fronds a lovely sight, but this is a native reserve, so we could only admired, though I must admit, we did covet. Tree ferns abounded, mostly Cyathea smithii and Dicksonia firbrosa, but the nearer we got to the sea the more stunted they became, growing in impenetrable groves. Apart from their own litter they were growing in pure sand, and of course, had to contend with the prevailing westerly winds. A well trodden path winds through the bush, a path we could recommend to anyone visiting this West Coast area.

Many thanks to Joy Bonnington for permission to print this article.



Dicksonia youngiae and D. herbertii are Different

David Jones
National Botanic Gardens, Canberra, ACT

In the Australian Systematic Botany Society Newsletter No.6 1982, Gordon Guymer established that the name Disksonia herberii W. Hill was published just prior to D. youngiae C.Moore. This means that D. herbertii W. Hill must take precedence as the correct name for this tree fern if there is only one species involved.

I have studied these tree ferns in various localities from north-eastern NSW to north- eastern QLD and there is on doubt that two distinct species are in fact involved, one in the north and the other in the south. This means that both names mentioned above are applicable since D. herbertii was described from north-eastern QLD and D. youngiae from the CLarence River area of north-eastern NSW. The two species are separated by a gap of some 2000 Km. They can be readily distinguished by the hairs and sheen of the frond surface (summarised in Table) and also have remarkably different growth habits.

Dicksonia youngiae and D. herbertii are Different (con't)

DICKSONIA HERBERTII W.HILL

This species is restricted to highland rainforests of north-eastern Queensland where it grows as scattered individuals or loose colonies, usually in wet, shady situations. It is apparently confined to the ranges and the tablelands between the Johnstone and McLeod rivers within the altitudes of 760 m (in the Lamb Range) to 1600 m near the summit of Mt. Bellender Ker.

Distinguishing Features
The mature fronds of this species are light green but most significantly they are dull with no tendency to shine. The basal pair of pinnaae project stiffly into the crown of the fern. The stipe hairs are 2-2.5 cm long and spread stiffly from the surface. They show no tendency to tangle and are very sharp and brittle, readily penetrating the skin and creating irritation. In colour they range from a dull red-brown to a very bright reddish brown.

Growth Habits
Plants develop a fairly stout, solidly anchored trunk which shows no propensity to form lateral growths. Even plants knocked over during roadwork or logging operations will not develop lateral growths although they may continue development from the trunk apex. In colonies of D. herbertii sporelings may develop on the fibrous base of the trunk, on rotting logs and rocks or on the bases of other tree ferns such as Cyathea rebeccae and C. woollsiana.

DICKSONIA YOUNGIAE C. MOORE

This species is widely distributed in the moister parts of north-eastern NSW and south- eastern Qld. Its range is from the Mary River in the north to the Richmond River in the south. It occurs from lowland situations near sea-level to mountainous areas above 1400 m (Springbrook and Lamington).

Distinguishing Features
The mature fronds of the this species are dark green and with a shiny surface. The basal pair of pinnae spread in the same manner as the others. The stipe hairs are commonly about 1.5 cm long, and are a rich reddish-brown. They are soft and tangled and do not penetrate the skin when handled.

Growth Habit
Plants have an interesting growth habit which is different to D. herbertii. Accessary buds develop on the trunk and emerge as short which form two or three small fronds and retain quiescent. The trunk is fairly poorly anchored in the soil and when it falls the accessory growths (as well as the trunk apex) being to develop, take root and creep over the ground forming a series of prostrate trunks. Eventually each will grow upwards at the apex and the interconnecting tissue decays. Thus the species can form localised colonies by an interesting vegetative technique. By carefully backtracking the weathered remains of trunks, the interconnecting system can be exposed. Sporelings are uncommon in colonies of D. youngiae.

Dicksonia youngiae and D. herbertii are Different (con't)

Comparison Table

Dicksonia herbertii	Dicksonia youngiae
trunk suckers absent	trunk suckers present
stipe hairs 2-2.5 cm long stiff, brittle, sharp and irritant	stipe hairs 1.5 cm long soft, tangled and non irritant
frond surface dull	frond surface shiny
basal pinnae project into crown.	basal pinnae spreading

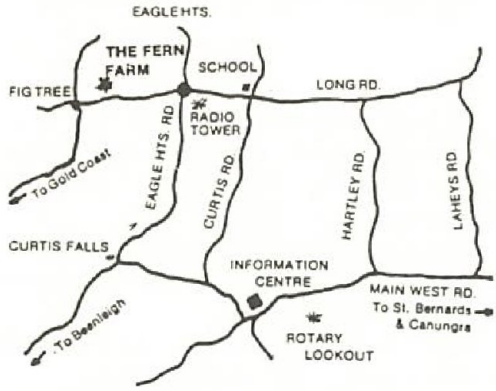
- FERN FARM -

While on holidays on the Gold Coast recently my wife and I decided to drive to Mt Tamborine National Park to view the ferns in the Curtis Falls area. As we passed through Eagle Heights (a short distance from Mt Tamborine) we noticed The Fern Farm. In a delightful setting the nursery managed by Denise Drysdale and her husband Dennis. They are specialising in Tassel ferns and have recently built a new house specifically for them. I was surprised how well they were growing as the weather in the mountains had been very cold during this winter but Dennis assured me they were not hard to grow, the correct watering being the secret.

Amongst the display gardens of magnificent ferns from all parts of the world is a lovely devonshire tea room and a well stocked crafts and pottery shop.

Denise is a member of our Society and I'm sure if any members are holidaying in South Queensland a visit to the Fern Farm would be most enjoyable and well worth the effort, but try to make it during a week day as weekends are very busy(also they are closed Mondays).

Keith Hutchinson.



From Gold Coast
Drive up Oxenford Tamborine Rd. Turn Right at Fig Tree in Middle of Road 100 Mtrs on Left.

From Brisbane
Drive up through Beenleigh or Waterford to Tamborine Mt. Turn Left at Curtis Falls and Left at Roundabout 600 Mtrs on Right.
Bus Contact Howzat Tours Ph. 341 3093

SOCIETY NEWS:

From the October Meeting:

Highlights of the ferns offered for sale at the October meeting were:

Athyrium niponicum var. Pictum, Asplenium Scolopendrium, A. protensum, A. Rutifolium, A. Oblongiblium, A. Bulbiferum Tripinnatum, A. Trichomoes Incisum, Blechnum Filiforme, B. Spicant, B. Spicant cv. Cristatum, Polystchum Onolobatum, P. Vestitum, Paesia Scaberula Pteris Umbrosa, Osmunda Regalis cv. cristata, Polypodium Scouleri, Dryopteris Atrata, Pyrosia Liagua, Selaginella " Snowdust", Adiartum raddiarum cv. Lady Supreme,
cv. Fritz Luthii,
cv, Triumph.

New Members:

A warm welcome is extended to the following new members to the Society: Mr Gregory Guise, Parkes NSW,

Mrs Evelyn Crupi, Seville VIC.

OUR SYMPATHY:

The Ferns Society extend our deepest sympathy to Beulla Powers whose husband Mervyn past away last month.

Special Effort Winners:

1. Baxter Verhagan
2. Jean Rohde
3. Janet McLennan
4. Dawn Jackson
5. Moira Gascard
6. Carol Nicholson
7. Bernadette Thomson
8. Terry Furmeister

BUYERS' GUIDE TO NURSERIES

Victoria:

* Allans Flat Plant Farm - Retail.
  Tomkins Lane, Allans Flat, 3691, Ph:(060) 27 1375.
  (25Km south of Wodonga on the Yackandandah Road)
  Specializing in ferns and indoor plants. Open daily, except Wednesdays, and all public holidays.

* Andrew's Fern Nursery - Retail
  Cosgrove Road, Invergordon, 3636, Ph:(058) 65 5369.
  Large range of ferns for beginners and collectors. Open daily, inculding public holidays, except Saturdays.

* Austral Ferns - Wholesale Propagators. Ph:(052) 82 3084.
  Specializing in supplying retail nurseries with a wide range of hardy ferns - no tubes.

* Beasley's Nursery - Retail.
  195 Warrandyte Road, Doncaster East, 3109.
  Ph:(03) 844 3355.

* Cool Waters Fern Nursery - Wholesale Fern Propagators.
  Beech Forest, 3237, Ph:(052) 37 3283.
  Specializing in cool climate native ferns.

* Fern Acres Nursery - Retail.
  Kinglake West, 3757, Ph:(057) 86 5481.
  (On main road, opposite Kinglake West Primary School).
  Specializing in stags, elks and birdsnest ferns.

* "Fern Glen" - Wholesale and Retail. Visitors welcome.
  Garfield North, 3814, Ph:(056) 29 2375.

* R. & M. Fletcher's Fern Nursery - Retail.
  62 Walker Road, Seville, 3139, Ph:(059) 64 4680.
  (Look for sign on Warburton Highway, 300m east of Seville Shopping Centre. Closed Tues. except on public holidays).

* Mt Evelyn Fern Centre - Retail.
  63 York Road, Mt. Evelyn, 3796, Ph:(03) 736 1729.
  Mail orders welcome.

* Ridge Road Fernery - Wholesale and Retail.
  Weeaproinah, 3237, Ph:(052) 35 9383.
  Specializing in Otway native ferns.

New South Wales:

* Jim & Beryl Geekie Fern Nursery - Retail.
  6 Nelson Street, Thornleigh, 2120, Ph:(02) 484 2684.
  By appointment.

* Marley's Ferns - Retail.
  5 Seaview Street, Mt. Kuring-gai, 2080, Ph:(02) 457 9168.

Queensland:

* Moran's Highway Nursery - Wholesale and Retail.
  P.O. Box 467, Woombye, 4559, Ph:(071) 42 1613.
  (1Km north of Big Pinapple. Turn right into Kell Road).