FERN STUDY GROUP - THE SOCIETY FOR GROWING AUSTRALIAN PLANTS

NEWSLETTER NO: 4.

(June, 1977)

As yet the newsletter has not appeared quarterly as intended - but I hope it will from here on.

<u>SUBSCRIPTIONS</u>: "Australian Plants" in their note on the Group stated that membership is \$2.00. This is NOT correct. It is \$1.00. I have kept a record of all who have sent \$2.00 and you will not be called upon to pay when renewals are needed. (When they are you will be notified in a newsletter).

Two members responded to articles in the last newsletter and sent along the following interesting notes:

MRS. M. STUTCHBURY - on <u>Angiopteris evecta</u> - "In a paper urging conservation of Fraser Island - fortunately this campaign has been successful - <u>Angiopteris evecta</u> grows along a creek through the rainforest area of the island. Possibly it is the southernmost living wild colony of it in the world"... Thank you Mrs. Stutchbury for sending it along.

Dr. Carolyn mentioned to Gerry Parker recently that these <u>Angiopteris</u> from Fraser Island were the largest he had ever seen.

MRS. F.M. OFFICER - sent along an interesting and useful note on ferns as pests which is printed below. It shows that certain ferns can become pests in certain climatic areas. <u>Histiopteris</u> <u>incisa</u> will only thrive in wet places so is unlikely to be a pest in a dry place. Mrs. Officer's note follows:

"I havenot been successful in growing Histiopteris incisa. It has always died. One pest is <u>Adiantium aetheopicum</u>. It comes up all over the place and smothered my mint! <u>Nephrolepsis cordifolia</u> I also have to keep pulling out. It may be of interest to members that for some years clumps were growing in the brickwork of the "flyover" at Central Station, Sydney. They disappeared during the dry spell earlier this year (1976). I do not know if they died or were pulled out, though there seemed to be some dead stalks still. <u>Doodia aspera</u>, rasp fern, also increases rapidly, but not so as to be a nuisance. It is not easy to get rid of all the stipes of <u>Stitcherus flabellatus</u> or <u>Culcita dubia</u>, but where I have them surrounded by a wall or cement path on three sides they are under control."

I hope other members will follow this example and send along notes.

A note on Cycads by Len Butt follows. These are not ferns but a relatively primitive group of palm like plants.

CYCADALES & CYCADACEAE:

In the Devonian age, 300 million years ago Pteridosperms (seed ferns) made an appearance. They became extinct but in the Jurassic age relative species, the <u>Cycadales</u> appeared. They lasted till the Cretaceous age and then disappeared leaving only one branch, the Cycadaceae, which has about eighty species.

The family which I claim have an affinity to ferns because of their ancestry, comprises woody palm-like trees of various heights up to about 3.5 metres. Exceptions are the Australian <u>Lepidozamia hopei</u>, 30 metres; <u>Encephalartos laurentianus</u>, 11 metres and <u>Dioon</u> spinulosum, 17 metres. Cycads are dioceous (that is producing separate male and female plants) and very slow in growth if grown from seed... Len P. Butt.

The following excellent report was sent by RAY BEST. Please remember when sending for spores or asking about them to INCLUDE A STAMPED ENVELOFE.

REPORTS ON FIELD TRIPS:

On Sunday 25th July Sydney members visited Lawson in the Blue Mountains to study ferns in their natural habitat. We were fortunate to have Bob Covney from the Sydney Herbarium to assist with identification. (It may be of interest to Interstate members that Lawson was called after one of the three explorers who first crossed the Mountains. Blaxland, Wentworth and Lawson all have mountain towns named after them.)

The sunken valleys of these sandstone mountains are rich in fern material and fascinating forms of eroded sandstone abound. Also many waterfalls and cascades are common to this area. We traversed the Adelina Falls - Junction Falls - Federal Falls Track.

On the ridge top where the creek formed the first cascade was a mass of several square yards of <u>Gleichenia dicarpa</u> (the wiry Coral Fern distinguished by pouched pinules). This had completely taken over the area excluding all other growth. As we descended plants of <u>Gleichenia microphylla</u> were observed, (which is finer than <u>G. dicarpa - pinnae not pouched</u>) also <u>Gleichenia rapestris</u> (meaning rock dwelling) mostly seen on rock faces. Thisfern can be identified by the lower surface of the pinnules which are glaucous (dull green with whitish-blue lustre). We also saw several specimens of <u>Lindsaea microphylla</u> and <u>Lindsaea linearis</u> amongst the moist rock outcrops. <u>Hymenophyllum cupressiforme</u> (a filmy fern) was found in association with large moss covered snadstone boulders about midway between the valley floor and the ridge.

Outstanding was a whole wall of <u>Leptopteris fraseri</u>, aptly named "Waterfall Fern" as it was actually growing in the spray from the waterfall and was truly beautiful. Other ferns seen were <u>Schizea</u> <u>rupestris</u>, <u>Culcita dubia</u>, numerous plants of <u>Blechnum cartilagenium</u> (new growth red - black scales), <u>B. gregsonii</u> (fertile pinnae almost as broad as sterile ones); <u>B. nudum</u> (Fishbone Water Fern); <u>B. ambiguum</u> (light green fronds, fertile pinnae $\frac{1}{3}$ to $\frac{1}{2}$ width of sterile pinnae); <u>B. minus</u>; <u>Sticherus flabellatus</u>; <u>S. lobatus</u> and <u>S. tener</u>; <u>Grammitis billardieri</u> (Finger Fern); <u>Histiopteris</u> <u>incisa</u>. <u>Todea barbara</u> (of the taller ferns) dominated the valley floor in this area with <u>Cyathea australis</u> more towards the ridges.

Our next trip on Sunday 28th November was to Mt. Wilson also in the Blue Mountains. Mr. Keith Ingram, who lives at Mt. Tomah nearby, invited us to visit his garden and glass house. Keith is an authority on the ferns of this area and the number and variety of ferns he was able to grow in his glasshouse was quite remarkable in view of the severity of the climate. On his beautiful property among many other fine trees and ferns are huge specimens of <u>Cyathea</u> <u>australis</u>, some 30 ft. high and of great age; also some beautiful specimens of <u>Dicksonia antartica</u>. Keith was able to continue with us for part of our excursion. As we again had Bob Covney this made it a most interesting walk. From Mt. Tomah we travelled to Mt. Wilson. On the plateau itself some of the early pioneers planted both sides of the main road with English decidious trees and in this lush area they have spread to create an avenue that is unbelievebly beautiful in both summer and autumn. The side of this ridge is one of the richest fern areas on the mountains with masses of tree ferns and most other species. We walked in the Waterfall Gully area of Mt. Wilson. It is interesting how quickly the vegetation changes from almost dry sclerophyll on the ridges to the lushness of the creek beds and gorges. This accounts for a wide range of ferns in this area from <u>Pteridium esculentum</u> (Bracken) to the finest of filmy ferns. Bob Covney found a fine plant of <u>Imesipteris billardieri</u> on a tree fern trunk. Many beautiful plants of <u>Asplenium flaccidum</u> were seen growing on aged coachwoods along with several mosses. Other ferns seen were <u>Adiantum aethiopicum</u>, <u>Polystichum proliferum</u>, <u>Cyathea australis</u>, <u>Dicksonia antartica</u>, <u>Pyrrosia rupestris</u>, <u>Pellaea falcata and P. falcata var. nana</u>, <u>Microsorium diversifolium</u>, <u>M. scandens</u>, <u>Asplenium flabellifolium</u>, <u>Lastreopsis acuminata</u>, <u>Blechnum nudum</u>, <u>B. patersonii</u> and <u>B. cartilagenium</u>; <u>Asplenium</u> <u>bulbiferum</u>, <u>Sticherus lobatus</u>, <u>Grammitis billardieri</u>, <u>Doodia</u> <u>aspera</u>, <u>Athyrium australe</u>, <u>Dennstaeātia davallioides</u> and the filmy ferns <u>Hymenophyllum cupressiforme</u>, <u>H. flabellatum</u> and <u>Polyphlebium</u> <u>venosum</u>.

On our return journey we stopped at Pearce's Pass and an easy climb downto the waterfall rewarded us with several new filmy ferns as well as many ferns we had seen during the day. The filmy ferns were growing on dripping rock walls, decaying and mossy tree trunks and tree fern trunks, all very sheltered and moist in the vicinity of the waterfall spray - a beautiful and interesting climax to an enjoyable day. The filmy ferns were Hymenophyllum australe, H. flabellatum, Spaerocionium lyalli and <u>Imestripteris truncata</u> and again we saw here the beautiful Leptopteris fraseri.

It is suggested that members from other areas who can bet together, even in small groups, would be rewarded by similar excursions. Any member who wishes tojoin with the Sydney Group in their activities should watch for notices in "Native Plants" - or contact Gerry Parker (451 6558), John Lee (95 1961) or Ray Best for further information. The local group does not send out notices so please enquire through group meetings orfriends - one of your group members should know what is going on.

NAME CHANGE (Worth repeating from Queensland Region's "Bulletin") "In the previous issue I noted that <u>Asplenium nidus</u> (the well-known "Birds Nest Fern") had been changed to <u>A. australasicum</u>. This is not strictly correct. Plants in S.E. 2'land and NSW which we knew as <u>A. nidus</u> are <u>A. australasicum</u>. However, <u>A. nidus</u> still does occur in the far north. We should know them as two species. Both are widespread in the far north extending into New Guinea and Indonesia. The fronds of <u>A. nidus</u> are relatively straight and radiate out from the centre at a slight angle, giving the whole plant a saucer shape. The fronds of <u>A. australasicum</u> tend to extend vertically for a short distance say 10% to 15% of the entire length then bend outwards giving the plant more of a funnel shape. Close inspection will dispel any doubts. There is a distinct keel along the mid-rib of <u>A. australasicum</u> (which is illustrated Bulletin Feb. 1977, Vol 15, No. 4). Another species which might cause confusion is <u>A. simplicifrons</u> but it has a much narrower leaf than the other two.. also restricted to the n.e. of the State(Qld.)."

> STEVE CLEMESHA (Study Group Leader)

AN APPEAL IS MADE TO ALL MEMBERS TO LET STEVE KNOW WHAT YOU ARE DOING - WHAT YOU ARE GROWING AND HOW - THE SUCCESS OF OUR GROUP DEPENDS ON THE ACTIVITIES OF ITS MEMBERS. IF YOU HAVE BETTER IDEAS LET STEVE KNOW.

(Sydney Group will report on their excursions to Minamurra Falls and Shaw's Creek in the next Newsletter)