

ASSOCIATION OF

S. G. A. P. Fern Study Group

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Vale Peter Althofer

Peter McDowell Althofer died aged 73 years on 4 October 1991.
We extend sincere sympathy to Hazel and their family.
The following tribute was prepared by Janice Hughes.

PETER ALTHOFER

It is with great regret that we note the passing last month of Peter Althofer, a native plant lover remembered by all who met him. So many people will feel this as the loss of personal friend.

Peter and his wife Hazel made a formidable team who worked tirelessly helping to build up the Burrendong Arboretum to the collection it is today. They had lately continued working to maintain that standard despite the unsure future of the funding of the Arboretum.

Founded in 1964, largely through the initiative of the Althofer brothers Peter and George, Burrendong Arboretum was "conceived with the idea of providing a sanctuary and living museum for the preservation of much of the unique flora of Australia - a flora facing extinction in many places". Supported by the Burrendong Arboretum Association and the N.S.W. State Government, the 162 ha contains thousands of different species. Many of these plants have been collected and propagated over the years by the Althofers. They represent a collection of native plants, built up with minimum resources, which was almost unique in N.S.W. until the State Government, taking a lead from the effort at Burrendong, established the Mt. Annan Botanical Garden. Burrendong remains a valuable scientific and horticultural resource due in large part to Peter and Hazel's dedication. Most of us only knew Peter during his last years at Burrendong. We were fortunate to be able to share his enormous knowledge of native plants and will be saddened now that that encyclopaedic personality is lost.

The fern shade area is tangible proof of Peter's vision and his ability to enthuse others with an appreciation of native plants. Planting out the ferns, establishing and weeding beds, and especially the thatching of the enormous roof area, all required special planning and organisation. Working bees, sometimes in heatwave conditions and sometimes in cold, wet and windy conditions, were invariably enjoyed by those who made the trek to the Western Slopes. Always we were greeted by those smiles of welcome from Peter and Hazel and the feeling that even with so much to do they both had all the time needed to speak to you personally. No wonder that you felt compelled to return time and time again, bringing others to whom you had passed on that enthusiasm. Lasting friendships were formed during the back-breaking work during the day and the noisy meals at night.

Our deepest sympathy goes to Hazel and Peter's brother in the hope that they can gain strength from the thoughts of the many that share their loss.

PHOTOGRAPHING FERNS

The following is an extract taken from "Pteridologist", the journal of the British Pteridological Society.

Part 1 (cont.). A picture is better than a thousand words

C N PAGE, Royal Botanic Garden, Edinburgh EH3 5LR

The hunter and the hunted

No fern or fern-ally ever grows where it does to suit the whims of a photographer. Indeed, it often seems that they grow where they do - in dark places, under cliff overhangs, on the roof of a cave, or half-way up a tree, especially to avoid undue media attention (I'm sure many of us know the feeling). Finding a reclusive species can be an exercise in itself which has long been an important part of pteridological tradition. But don't get carried away in the excitement.

Survival (of both the photographer and the plant) is the most important point here. I once slipped and took an unplanned tumble down 15 feet of rough cliff, cracking my camera against a boulder on the descent and landing on it at the bottom - needless to say, the camera was in better shape afterwards than I was, and turned out to be rather better insured. Thereafter, I decided on a new principle: It is always better to return with no photographs, than not to return at all.

So if a plant is really inaccessible, look for another one. And if you really have to risk life and limb, do try to make a regular point of not trampling most of the other vegetation to death in the process of reaching the plant with your camera or, worse still, taking it with you as you fall.

Telephoto lenses with a macro-zoom capacity can be especially useful in situations of difficult access, but more about these later.

Controlling (!) the environment

Having found your quarry, tried about 25 different poses and finally, probably returned to the first one, the next thing to do is think. Light and wind are usually the two next considerations. The former is usually easier to control than the latter.

The chief problem with light, it seems to me, is that there is usually either too much or too little of it. My best advice is to wait for a day when the light is good and bright but lightly overcast by high cirrus clouds, and thus diffused. Light thus coming from all directions is excellent for ferns, right down to quite misty conditions and exposures

of half a minute or more, and it would be difficult to stress too much the importance of getting this right. Using a tripod and, providing that there is no wind (a soft, bright, early morning is often best), you can stop down well (to increase depth of field), and compensate for this with a slow shutter speed. I usually stop-down as far as possible, and then make my exposure as long as practical. If using colour film, photographs taken under such conditions also have the advantage of better colour saturation, which I prefer and which can be particularly useful if the result is to be reproduced.

If you cannot wait for better natural conditions (and some people can't), then I recommend diffusing hard light with a very technical piece of equipment called a ladies' umbrella ('ladies' because they come in a range of pale colours [the umbrellas, not the ladies], while gents ones, for reasons I've never thoroughly understood, seem to come only in exciting shades of black). But this also will work only when there is no wind. If light is mostly from the wrong direction, then reflectors, carefully positioned, can be additionally useful.

Bright, undiffused light can sometimes be effective though. But to use it well, I recommend breaking all the rules and shooting three-quarters into it, as I find that a wholly backlit fern frond, set against a dark ground, can show details such as sori beneath a frond particularly well, although exposures here can be tricky. Bracketing the exposure helps, and filters can also be valuable. Filters will, of course, themselves further modify the exposure (usually with a loss of 1 or 2 stops), but I will deal with them later.

I usually prefer to use natural light, however modified, for fern photography, rather than to use a flash gun as a light source in the field. For the use of flash raises problems of differential exposure of nearer and more distant parts of the same specimen, as well as tending to flatten the form of a fern even in a successfully exposed photograph (especially if the flash gun is mounted on the camera). My main use of flash has been as a fill-in light source in whole-tree conifer photography - but that is a subject which has an order of magnitude of difference from photographing ferns.

Wind, as you will gather, is the fern photographer's particular delight. Even the gentlest of breezes makes the tips of many fronds quiver in most undisciplined fashion, and if you wait long enough, it can have much the same effect on the photographer too. Wind is less easy to control than light. If the day is even moderately windy (ie. above about wind force 0.001), it is usually better to come back on another day. If the wind is already gentle, but needs that extra bit of stilling to dampen it a little further, I usually fall back on my umbrella again (which is why it looks so tatty).

The personal touch

At this stage, some people have uncontrollable urges to 'garden' their subjects (ie. tidy them up a bit, as if preparing a display of cauliflowers for the county show). Others say that this is cheating, and that the debris surrounding the plant is all part of the natural scene and should be left. Personally, I steer a course of moderation here, usually preferring to remove the odd decaying bicycle wheel and cola can from the picture (the latter usually to be found in the most remote corners of tropical forests) and anything else that looks offensive or intrusive.

Amongst the latter, I number especially grasses (I hope there are no grass-lovers reading this). Grass blades are wearisome things. They turn-up everywhere. They turn annoyingly pale out-of-season, last forever, and usually cut diagonally across the frame you have carefully lined up (which the eye will then follow). They can become especially conspicuous in black and white work, when they appear nearly white against darker backgrounds. I carry a special pair of anti-grass scissors for trimming them away (never pull them, as half the landscape will usually follow). By comparison, fallen leaves do not usually matter (providing you can see the plant for them), for they are usually part of the scene.

At this stage I usually add a scale of some sort into the picture - a reflex action probably resulting from my scientific training. I personally dislike seeing endless shots of lens caps or coins (all of which vary in size anyway). I am, however, happy with a well-placed hand lens, a pencil or penknife (more standard sizes). Some people think it is sacrilege to use any scale at all, but scientifically, it provides a valuable comparison, particularly for unexpectedly small or large subjects. And when you are finished, try not to forget, as I do, to pick it up again. For, to me, this has not become a reflex reaction, and in many places, from Britain to the tropics, there are ferns growing with hand lenses carefully posed beside them still.

Travelling solo

Some things are best done in teams (though I've personally yet to find one). Photography, however, I find is a very personal business. Every photograph takes time - time in setting up or dismantling your tripod, adding or taking-off filters, setting up reflectors and umbrella, choosing the perfect angle, setting focus and exposure, and waiting for that moment when a passing breeze momentarily stops. Then, of course, there is the repeat performance because, at that perfect moment when you pressed the shutter, you realise that you had forgotten to wind on after the last shot, and so the whole process begins again. So allow yourself plenty of time. Have patience (quite a lot of it). Don't try to hurry. And finally, if you have a good friend to go walking and exploring with, my advice is to go alone, for unless your friend is also very patient, you will one day look round and find that he or she has also taken to working solo instead.

That Book of Ours

Our Group's Fern Book which has been in the process of preparation for several years, will not be available this year, Nevertheless, good progress has been made during the past twelve months. Work has included completion of the information and the gathering in of the photos required for the half dozen or so Blechnums which originally had not been proposed for inclusion, together with an up date (just to hand) of the Cheilanthes material prepared by Professor Chambers and Ms P. Farrant of the Royal Botanic Gardens.

Bill Payne who was responsible for putting most of the articles together when the book was first conceived and who also arranged the typing and the retyping of the various drafts of the book, has indicated his readiness to ~~proceed with what is expected to~~ be the final draft. Hopefully, our book will solve next year's Christmas gift giving problems!

Subscriptions for 1992

The current rate of subscription to the Fern Study Group is \$4 for each calendar year and the 1992 subscription falls due in January 1992. If you are a financial member of SGAP, the \$4 payment gives you free access to meetings and excursions, advice from the Leader and for the cost of a stamped addressed envelope, free fern spore. For non SGAP members, the \$4 gives an entitlement to receive copies of the quarterly Newsletter only. Subscriptions should be forwarded to the Treasurer, Joan Moore, 2 Gannet Street, Gladesville, 2110.

When Do Ferns Spore?

Our Newsletters for March and June this year included requests that members keep a record of the times when ferns are shedding their spore. The essential information is name of fern, month when fern spore was noticed as being ripe for shedding, whether fern was cultivated in a pot or ground, or growing in natural habitat, and the district or town where grown.

In response, Irene Cullen of Brisbane, has written as follows:

"Members of the South-East Queensland Fern Study Group discussed this project at our August meeting. Although no one has made a study of this in the past, the general feeling of the meeting was that in our area, ferns are subject to both very irregular rain-falls and winters that can be mild or in another year down right severe. For instance our summer rainfall can start in January, or wait until April - May. Then again it can be non-existent.

It is our belief, from casual observations in the past, that sporing takes place at a certain development of the frond, not by the calendar month. Thus in our case, where climatic conditions are so variable, (very few of us grow ferns in controlled fern house conditions) we feel that information we gather will be of little help to your project. I am sorry we sound so negative. However a few of us will give it our best, but I am afraid it will have to be a very long term project. Maybe, it may be helpful if you suggest a few species you would like us to concentrate on."

Perhaps our Queensland Groupers are right in believing that sporing times are determined at a particular stage of the fronds development. But perhaps they are not right and it is pleasing to know that Group members are to co-operate in the project and are planning to record sporing times. That's the stuff of science, let's put together some factual records! It is agreed that the project is essentially long term although we expect to publish data progressively when ever a reasonable amount of information on particular species is available. It is not proposed to nominate species which particular members should select for observation. However, it is hoped that each member will make a contribution to the overall project. Success depends on having a large number of contributors, this is a study group. You could play a part in advancing our collective knowledge by participating, even if only to the extent of observing and recording ferns which are sporing during one or two months, or by selecting just one or two species, watching for spore and recording the months when spore was being shed. The choice of which species to study is entirely for your convenience. Much later if the project is successful and we build up loads of data about certain ferns, then we may be more selective and ask that you direct observations to particular ferns about which we may have little or no information. For the present, please feel free to record sporing times of any ferns of your choice - we don't have enough information about any fern as yet.

Have You Had this your Problem

A member recently reported seeing yellow spots on her Asplenium australasicum and wanted to know the cause. It proved to have

resulted from an infestation of Coconut Scale. If your ferns are showing yellow blotches on the upper surface of the fronds, examine the underside for small white scale insects. The Encyclopaedia of Ferns" by David L. Jones has this to say about Coconut Scale.

"This tiny scale is a severe and persistent pest of ferns and once established in a collection is difficult to eliminate. The adult female scales have a slender covering 1 to 1.5 mm long. This is white and an infestation has the appearance of desiccated coconut scattered on the fronds. The pest mainly feeds on the underside of fronds and is frequently to be found among the sori of the fertile fronds. It mainly occurs in tropical and subtropical regions, but in temperate areas is a common greenhouse pest.

Despite its tiny size this pest is particularly destructive and an infestation severely debilitates a fern and may even cause its death. The tissue around where the scale feeds yellows, and scattered feeding on a frond results in a mottled appearance. Fronds usually die back.

Control: Because of its destructive capability this pest must be controlled as soon as it is noticed. Badly infected plants are best destroyed by burning, and all neighbouring plants should be sprayed with dimethoate or a mixture of white oil and maldison. Spraying should be repeated at intervals of about ten days, until all scales are eliminated. Any outbreaks that follow should be treated immediately they are noticed. The scale covering of this pest remains attached to the frond long after it has been killed, making it difficult to determine the efficacy of the spraying."

Asplenium sp. & Clathrate Scales

Ferns in the family ASPLENIACEAE have distinctive clathrate scales covering the rhizome. At a recent meeting there was a suggestion that this might be better explained, so some definitions.

CLATHRATE: With the cell walls thickened in the form of a lattice SCALE: A flat appendage more than one cell wide and usually only one cell thick. RHIZOME: The underground (usually) stem from which the fronds grow, in some ferns the rhizome is above ground. The following sketch taken from "Ferns Fern Allies & Conifers of Australia" by Clifford & Constantine, will serve to explain it better.

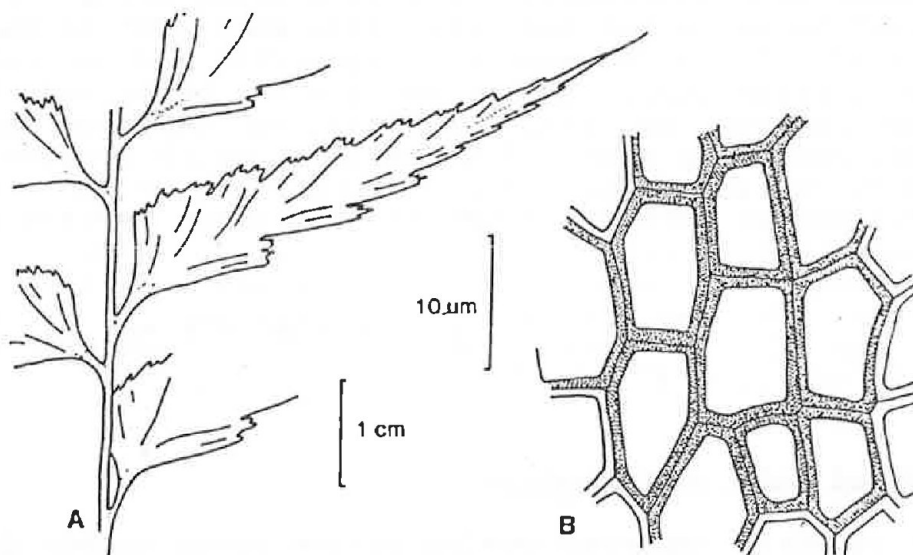


Fig. 12. A. Portion of frond of *Asplenium polyodon*; B. Portion of clathrate scale from rhizome of *A. polyodon*.

Report on Meeting at Engadine, 17 November 1991

Thirteen members attended at the home of Martha and Tony Henderson (& Guy). Tony, noted propagator and renowned cultivator of the difficult and frequently unusual, has enough interesting plants to fill several newsletters. Orchids, Drum Sticks and prostrate plants are among Tony's specialties, but the "talkfest" kept most of us out of the garden. The covered entrance way to the Henderson home included a running stream and featured brilliantly displayed ferns including two *Aspleniums* subject of the day's study, a local *Asplenium australasicum* attached to a tree stump, and a fine *Asplenium polyodon* which Tony said was growing in a heavy potting mixture, quite contrary to the open mix traditionally used for these ferns.

In introducing the study session, Peter said he would deal with the *Aspleniums* found in N.S.W. and southwards, these are not necessarily confined to this area. Three have simple fronds, *A. australasicum*, *A. harmanii* and *A. attenuatum*. All at the meeting were growing at least one *A. australasicum*, without apparent difficulty its requirements being part shade and a very well drained position to suit its epiphytic nature. Superficially *A. harmanii* is similar to an untidy looking *A. australasicum*, but it is a much rarer fern being confined to the Queensland border ranges. Its fronds are less than 13 cm wide and the lamina is long tapering at the base, whereas those of *A. australasicum* narrow abruptly at the base. Most members at the meeting had never seen *A. harmanii*, but Peter said that the Royal Botanic Gardens in Sydney have one in cultivation. The third of this group with simple fronds, *A. attenuatum*, frequently has irregularly lobed lamina towards the base and it is a much smaller fern with fronds only from 1 to 5 cm wide. The development of a proliferous bud at the apex of the frond, is a distinctive feature. A number of members reported having *A. attenuatum*, Peter stressed that it does best in a dark situation.

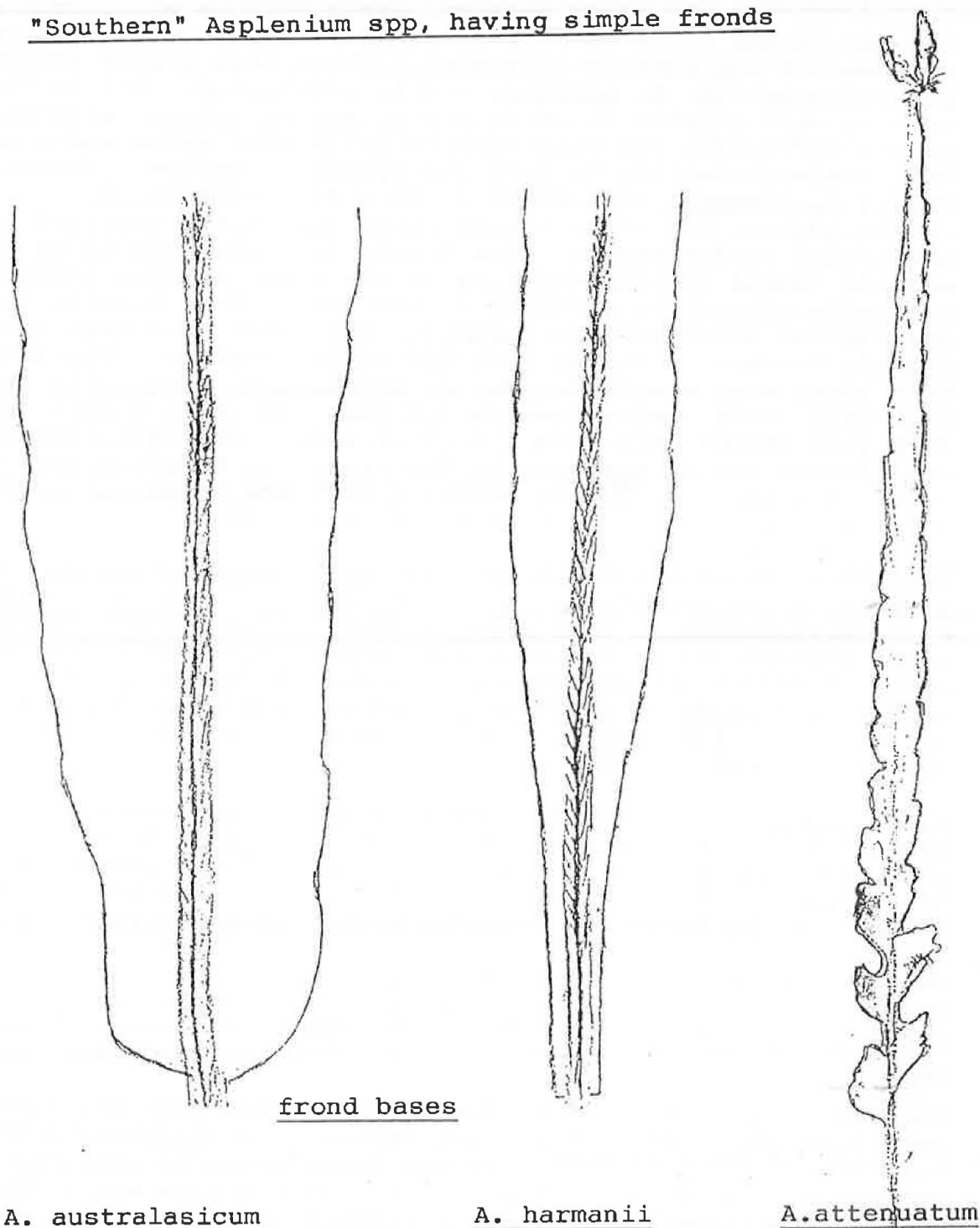
The other *Aspleniums* discussed, all have compound fronds. Four of these ferns have fronds which are divided once, i.e., pinnate. *A. flabellifolium*, a tiny fern is distinctive because its rachis often extends beyond the apex and forms roots. This feature makes it easy to propagate and most members had it growing; some said it was fussy in cultivation and favours damp, protected positions and the opportunity for its weak rachis to flop on to suitable places on which to grow.

A. trichomanes is found in limestone areas and higher altitudes. Another tiny fern its erect fronds reach only to 20 cm long with pinnules usually no more than 1 cm long. No one present had *A. trichomanes* growing. The other two ferns in this group are larger. *A. polyodon* has pinnules with long acute apices on 1m long fronds, its lamina is relatively thin. Most members reported having it growing often as a basket fern. The next fern *A. obtusatum* has 40cm long, tough fleshy fronds with apices varying from acute to obtuse. A rather remarkable fern it favours coastal areas. Several members said they had grown and lost it.

The remaining five ferns reviewed have fronds that are divided more than once. Easiest to distinguish is *A. bulbiferum* because bulbils are often present. It was being grown by everyone present at the meeting. Some claim that the form which develops bulbils prolifically is of New Zealand origin, but Peter explained that such feature is not a sound basis for identifica-

tion. It has at least two sori to each secondary pinnule and the sori appear to be marginal, a characteristic it shares with only A. flaccidum in this group. However, A. flaccidum has only one sorus on each pinnule which are widely spaced along its pendant fronds. A. terrestre superficially resembles a small Todea barbara, it has leathery, erect fronds up to 45 cm long and in Australia is confined to Tasmania and islands in Bass Strait. No one at the meeting had either A. terrestre or A. hookerianum in cultivation; both are more common in New Zealand. A. hookerianum is from sub-alpine regions and is very rare in Australia, its pale green, thin, erect fronds grow to 20 cm long. The stipe and rachis are slender as is the stalks of the pinnules. Finally, A. aethiopicum which most members were growing apparently easily, except that some said it was often subject to scale insect attack. It is an attractive fern with dark green fronds to 45 cm long and has conspicuous narrowly wedge shaped pinnules.

"Southern" Asplenium spp, having simple fronds



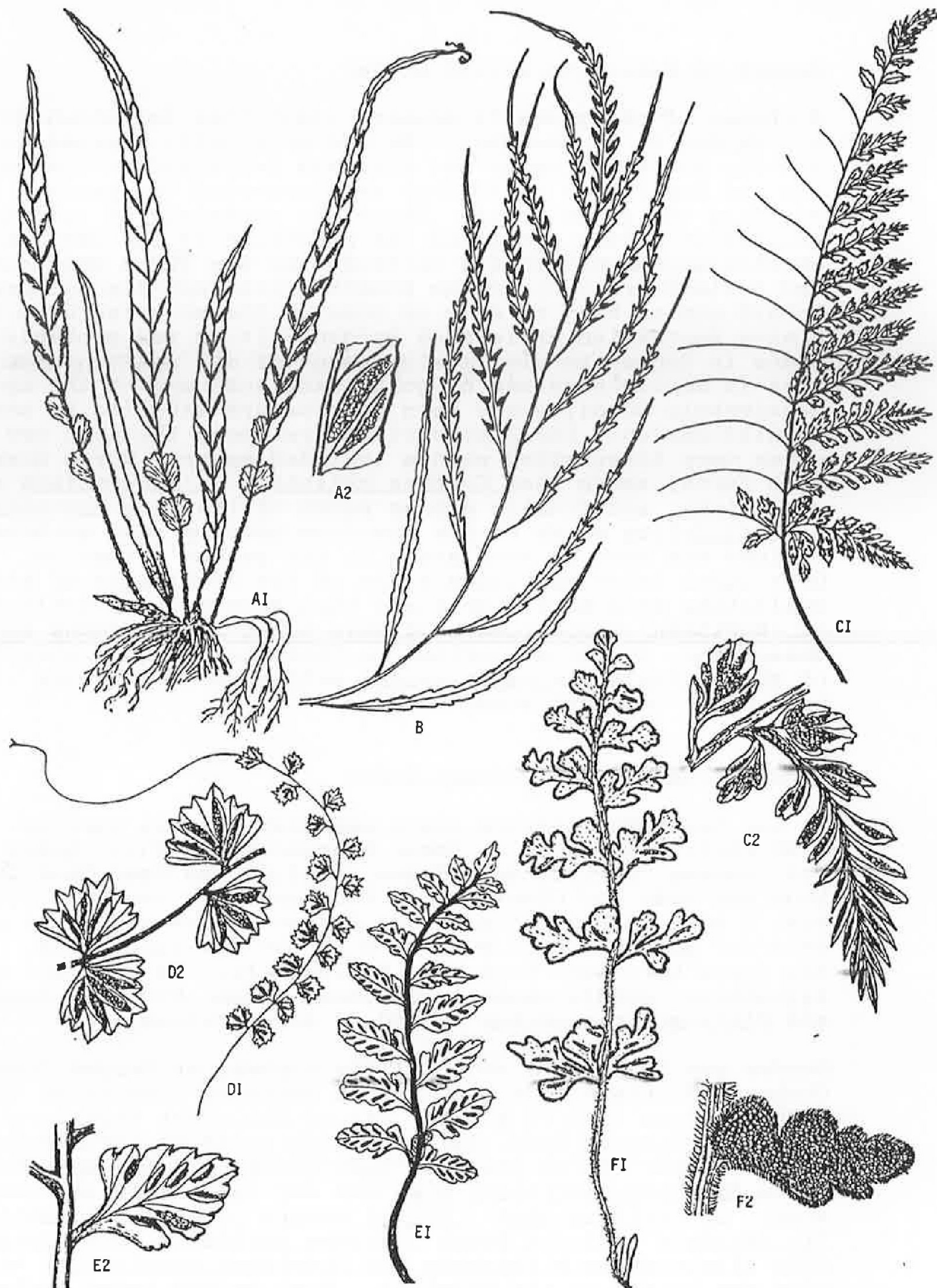


Fig. 26. ASPLENIACEAE: A1, plant of *Asplenium attenuatum* ($\times \frac{1}{2}$). A2, sori of same ($\times 1$). B, leaf of *A. flaccidum*, some pinnae with sori ($\times \frac{1}{2}$). C1, leaf of *A. obtusatum* var. *difforme* (only half of pinnae shown) ($\times \frac{1}{2}$). C2, pinnae of same showing sori ($\times \frac{2}{3}$). D1 leaf of *A. flabellifolium* ($\times \frac{1}{2}$). D2, pinnae of same with sori ($\times 1$). E1, leaf of *A. obtusatum* var. *obtusatum* ($\times \frac{2}{3}$). E2, pinna of same ($\times \frac{1}{2}$). F1, leaf of *Pleurosorus rutifolius* ($\times \frac{2}{3}$). F2, pinna of same with confluent sori ($\times \frac{1}{2}$).

(The above taken from "Students Flora of North Eastern New South Wales", published by University of New England),

Report on Outing to Sylvan Grove

A change of plans saw 19 members visit this Bankstown City Council Garden on 17 November. We had originally planned to spend the day at the Watagans but that was cancelled on the advice of Bea and Roy Duncan after they had inspected the parched bush surrounding the ferny areas. There was certainly no evidence of drought at Sylvan Grove and the condition of the Gardens and in particular the rainforest sections and the ferns were outstanding and reflect great credit on Robert Miller and his helpers. Robert was on hand to show us some of the many features of this 5 acre Australian style bush garden. It is now probably the best place in Sydney to view a wide range of our native ferns. The area is easily accessed by good paths and many of the approximately 80 different fern species are labelled to assist identification. The Platyceriums are among the most eye catching other very interesting plants included several North Queensland tree ferns, among them Cyathea celibica, C. robertsiana and C. woollsiana, and finally a huge patch of the tiny Asplenium flabellifolium which at our previous meeting some members had claimed was hard to keep going in the garden situation. Over lunch Peter mentioned a few of the highlights of his recent collecting trip to Victoria and then gave a brief outline of the 32 "Northern" Aspleniums. Of this total 28 are found in Queensland, 20 being confined to that State. Peter showed us one of these Asplenium capitivork, seldom seen in Sydney - a good prelude to our next study session.

Report from Mid North Coast Group

At our September meeting there was only a small turn up, what with Phyllis and John on their honeymoon and Phill Avery doing a Uni. course, it left only Steve, Pauline and Jean from Coffs Harbour and Judy and Charlie from Wauchope. As the folk from Coffs hadn't been to Boorganna Nature Reserve we headed there on the Saturday and were very surprised at the dry conditions. Some of the ferns burnt dry were hard to identify, but we found Adiantum silvaticum Doodia caudata Blechnum nudum Pyrrosia confluens and Platycerium superbum to add to our previous list.

Sunday saw us heading west off the highway at Herons Creek to Comboyne Mountain 650m high with a forestry lookout on top giving a 360 degrees view on a clear day of the coast from Port Macquarie to Diamond Head, inland as far south to the Manning - but unfortunately all we saw were bush fires. On the way down we found Blechnum camfieldii high and dry instead of the usual wet area. B. cartilagineum Doodia aspera Dictymia brownii Davallia pyxidata Culcita dubia Cyathea australis Histiopteris incisa Platycerium bifurcatum and Pteridium esculentum, were found near the bottom of the Mountain. Also we saw large rocks covered with Elkhorns and orchids. From here a short trip across country found us at Swans Crossing.

Although the track at Swans Crossing followed the creek, once again the ferns were showing the effects of the dry weather. The walk in and out took approximately 2 hours, the following ferns being identified: Adiantum silvaticum Blechnum nudum B. cartilagineum B. wattsi Arthropteris tenella Doodia aspera Culcita dubia Asplenium australasicum Lastreopsis microsora Lindsaea microphylla Cyathea australis C. leichhardtiana Gram-

mitis sp. Pellaea falcata nana Platyterium bifurcatum and Sticherus flabellatus. After lunch and a quick run to North Brother Mountain everybody headed for home.

Our next outing will be on 23 and 24 November, and so it will end another pleasant year of meetings and outings with our friends. We shall all be looking forward to next year and we wish our Sydney and Queensland friends a Merry Christmas and a wet and green New Year.

Charlie Charters

Report from South Eastern Group

The fern display at the S.G.A.P. Queensland Region Flower Show in September was outstanding. Nearly all of the ferns were supplied by Cliff Ritchie whose prowess as a grower is undisputed. When we met at his home for our November meeting, the Flower Show Convenor, Geoff Goadby, thanked Cliff for his tremendous effort. He also thanked Peter Bostock for helping Cliff bring his collection to and from the Show in a hired van.

November study was Christella and related genera. Peter told us of the work done on Christellas by botanist E. Holttum, then proceeded to identify ferns brought along by members, pointing out the relevant differences. This information is an essential part of our study and of tremendous benefit to those members who are still making heavy weather of identification. Everyone had a try at Peter's "nose test", an interesting extra when identifying C. parasitica. When a frond is lightly pulled through the hand, its glands leave a not unpleasant odour on the fingers. No other Christella tried had an aroma.

Plans were made for our "Christmas" meeting to be held at Joyce Ward's home at 9.30 am Sunday 1 December. The South Eastern Queensland Group members of the Fern Study send their SEASONS GREETINGS to their many friends in the Study Group throughout Australia and look forward to much shared information and enjoyment through the study of ferns in '92 and onwards.

Irene Cullen

Ferns & Allied Plants of New Zealand

A book titled as above, by authors P.J. Brownsey and J.C. Smith-Dodsworth, has recently been published in New Zealand. The outstanding illustrations were prepared by T.N.H. Galloway. The many colour plates include a number of ferns that are also native of Australia which may be of particular interest to Study Group members. Geoff Long has offered to order a quantity of the book. Anyone interested in acquiring a copy should contact Geoff phone (02) 519 5546, as soon as possible.

Spore Bank

The success of the Spore Bank depends upon the generosity of members who take the time and make the effort to gather ripe spore and forward them to our quiet achiever, Spore Bank Curator, Jenny Thompson. It is important for successful propagation of some species that the spore is fresh, so donations of spore of even the more common ferns are always welcomed. In sending spore,

FORTHCOMING EVENTSIn the Mid North Coast of N.S.W.

For information regarding meetings and outings, please contact Charlie Charters (065) 85 6296.

In the Sydney RegionSaturday 30 November 1991, Function at Camperdown

Our last get together for the year is to be at the home of Anne and Geoff Long, 23 Fowler Street, Camperdown. Plan to arrive from 11 am. As usual on these occasions it is planned to pool lunches. Please contact Anne 519 5536 to advise whether bringing meat, salad, sweets, etc. Tea and coffee will be provided. In keeping with the tradition of these functions, bring a small gift (or several according to the number in your party).

Sunday 23 February 1992, Meeting at Gladesville

Meet at the home of Joan Moore, 2 Gannet Street Gladesville from 11 o'clock with business to commence 11.30 sharp. Study session "Northern Aspleniums". Bring lunch and a plate for afternoon tea, hot water provided. Enquiries to Joan, phone 817 5487.

Saturday 21st March 1992, Outing to Pierces Pass

Meet at the Fruit Bowl, Bilpin at 9.15 to leave at 9.45 sharp by car convoy to the beginning of the walk to the ferny area. Lunch at cars, enquiries to Peter 625 8705.

Weekend 4-5 April 1992, Working Bee at Burrendong

It is proposed to have a working bee in the Shade Area at the Arboretum on Saturday and for part of Sunday. Bring hand-tools for weeding, secateurs, etc. Van accommodation may be booked or if preferred you maybe able to join Coach Camping Catering package being considered by Sutherland-SGAP. For further information phone Moreen 528 4881.

In South Eastern QueenslandSunday 1 December 1991, Christmas Breakup at Mt Glorious

To be held at Joyce Ward's home, Fahey Road, Mt Glorious. Meet at 9.30 am. Excursion to be arranged after lunch. Bring Christmas fare and a fern for a Fern Exchange.

Sunday 2 February 1992, Meeting at Ipswich

Meet at the home of Jim and Robyn Collins, 6 Lingard Street, Woodend, Ipswich. The study will be Nephrolepis. After lunch members can take the advantage of a conducted tour through nearby Smith's Park and Gooogorewon, an Aboriginal Food Trail Plot. If time permits we can go on to see T.A.F.E. College Grounds. Remember subs. are due and those who wish may pay them at the meeting and we will forward them in one cheque to the Treasurer.

Deadline for Next Newsletter

Articles and information for the Newsletter are always needed and very much appreciated. Please forward any copy direct to the Secretary. Closing date for next edition is 15 February 1992.