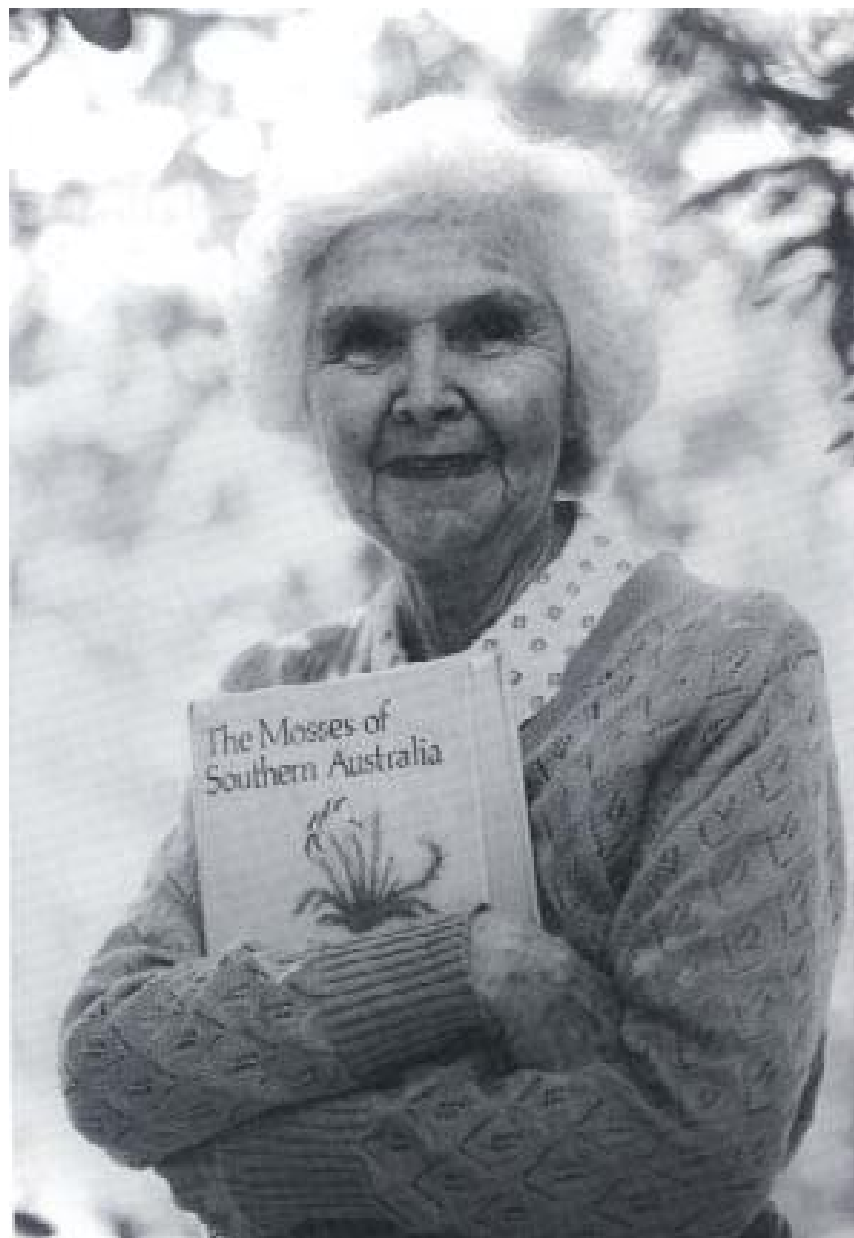


AUSTRALASIAN BRYOLOGICAL NEWSLETTER

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Front Cover

It has been a sad start to the new Millennium, when on the 4th January 2001, Ilma Stone passed away at the age of 87. In her retirement years Ilma had become a bryological colleague, mentor and friend to many of us in the Australasian community and also further afield. The following are tributes from one such colleague and another that received their early bryological training from Ilma.

I acknowledge The Age Newspaper for the reproduction of the front cover photograph, which was taken on the occasion that Ilma was conferred with a D.Sc. from the University of Melbourne. **Editor**

A Tribute Ilma G Stone 1913–2001

George Scott, in an 80th birthday tribute to Ilma Stone in this Newsletter (Scott 1993), wished that she might have many more years of fruitful research ‘before she decided to hang up her hand-lens’. Alas the hand-lenses of both these great Australian bryologists have now been laid down. Together with David Catcheside, Ilma Stone and George Scott formed a triumvirate of first class research that put Australian bryology firmly on the world map. That 80th birthday celebratory issue of the Newsletter also contained tributes from Rod Seppelt, her only postgraduate student, Helen Ramsay, long-time colleague, and Paul Richards, who wrote on behalf of the British Bryological Society, of which Ilma was an honorary member – a rare honour, not lightly given to ‘foreign’ bryologists. My own contribution to that Newsletter was the relatively easy one of preparing the cover. I say ‘relatively’ because obtaining the photograph involved the clandestine connivance of her daughter Ruth in Melbourne. The official photo provided to me by the Botany Department of the University of Melbourne, where Ilma was an Honorary Research Fellow, we had laughed over as depicting ‘neanderthal woman’ – I knew I might never be forgiven if I used that one.

One might expect an obituary that follows a well-researched 80th birthday tribute to contain little ‘new material’. Ilma, however, whose first bryological paper was published at the age of 48, continued her prodigious contribution to bryology until her death at age 87. To Ilma’s list of publications prepared by George for her 80th birthday a further 11 can be added, none of them insubstantial (see below). Ilma is sole author of five of these, and first author of another three, written in collaboration with Bill Reese, David Catcheside and myself. Our work together on the *Fissidens* that occur in New Zealand resulted in 3 joint papers after her 80th birthday.

Like many bryologists I was first aware of Ilma Stone through her very fine book “The Mosses of Southern Australia”, more usually known as “Scott & Stone”, written with George Scott, and illustrated with superb pencil drawings by Celia Rosser. For us also, 2000 km away in New Zealand, this book is extremely useful. It was this fact which really first brought home to me how much more similar are our cryptogamic floras than are our vascular plant floras, on either side of the Tasman Sea. My collaboration with Ilma began in 1988 when I wrote asking for her help with the correct names for *Eccremidium* species occurring in New Zealand, for the revision of Allison and Child’s ‘Mosses of New Zealand’, knowing that she was the expert on ‘anything cleistocarpic or minute or ephemeral’ as George so nicely phrases it. I was already aware of her recording of *Fissidens taxifolius* in New Zealand, having been told by David Catcheside of Ilma’s identification of specimens collected by him in the Auckland Domain, in my own ‘back-yard’. The species has not been recorded in Australia, but it took Ilma to give us the correct name. Thus began a 12-year collaboration and a friendship with Ilma and her husband Alan that will be one of the highlights of my life. It was my regret that she never came to New Zealand, but since she intensely disliked the cold, perhaps it was just as well I never persuaded her to do so. We had several short periods together in Australia, most of them in Queensland, but our very effective collaboration was mainly by letters, fax, occasional telephone, and in later years, by email via her son and daughter-in-law, Matt and Marg Stone. In Queensland Ilma and Alan introduced me to tropical rainforest, with its massive fig trees, and the huge sunny boulders of its rushing

rivers. I received instruction in where it was safe to sit for lunch, and how to check each other for ticks – very important information for a naturalist used to the benign forests of New Zealand. They introduced me also to the markets – fresh, good food being very important to Ilma, and to the very civilised habit of whisky accompanied by crackers and blue-vein cheese before dinner, regardless of the circumstances in which we found ourselves. This habit, they told me, they had learnt from David Catcheside – so it seems a good piece of bryological tradition to pass on. In November 1993, when she was now 80, she wrote to me “we had a wonderful interlude with our son Richard who took us for a trip to Cape York (over 6000km from home and back). Motels to Cairns then camping out from there to the top and back. I did not dream I should wash in a river again!” Ilma was indeed a lover of the Australian wilderness, and in it a highly skilled collector. She was also a true conservationist. I was firmly put straight when I admired palms in the streets of Cairns – they were exotics, and her pain at the extent of sugar plantations on the rich coastal flats of Queensland was obvious. Her specimens are notoriously small and her disdain of profligate collecting was often expressed.

Ilma belonged to a generation in which it was the norm for women, no matter how gifted, to give up their scientific careers when they married and had children – usually for ever. For 20 years after she married, Ilma told me, she did no botany. How she happened to come back to it is a nice story. One day she was listening to the radio as she ironed the shirts and blouses (with 3 children and a husband that was 20 shirts a week). She heard an appeal from the Chemistry Department of the University of Melbourne for demonstrators for their lab classes. When Alan came home from work she mused how wonderful it would be if it were the Botany Department that wanted demonstrators. Alan encouraged her to telephone them and ask. Miraculously Botany could use more demonstrators, and had the sense to invite her in – a wonderful career was resumed – as a teacher and researcher, first with ferns, and subsequently with mosses.

In the 80th birthday tribute Ilma’s special talents are perceptively described by her colleagues. George Scott commented ‘I have sometimes differed from her in matters of wording, occasionally even in matters of interpretation, but never in matters of observation and understanding; in these she is unsurpassed. Her observation is meticulously accurate and thorough, as a glimpse at any of her papers will show’. These skills meant that Ilma had an unusually clear understanding of three-dimensional structure. Focussing up and down on a leaf, for example, she could visualise the surface architecture with clarity, invaluable in the study of a genus like *Fissidens* where leaf surface features are critical taxonomic characters. I would add to this that Ilma also had a prodigious memory for observations – hence she would recall with apparent ease that a certain specimen was the same or different from others that she had earlier examined. If I am honest, the fact that Ilma was more of a species splitter than I am is quite possibly due to her far superior skills in discerning and remembering difference.

In 1988 Ilma and Alan attended the first Australasian Bryophyte Workshop, organised by Paddy Dalton in Hobart. A New Zealand colleague confided to me the first evening how surprised she was to discover that “Scott & Stone” were a somewhat eccentric kilt-wearing Scotsman and a delightful little white-headed lady. In a thank-you speech to Paddy at the end of the workshop, on behalf of the participants, Rodney Lewington decreed that the book we all knew as “Scott & Stone” would henceforth be known as “George & Ilma”, an indication of the personal affection with which we now held them both.

The Australasian bryological community extends its warm sympathy to Alan, and to their three children and their spouses, six grand-children and one great-grandchild.

A full obituary for Ilma is being prepared for the Journal of Bryology.



Fig. George Scott and Ilma ("Scott & Stone") deep in discussion in the field

Recent Publications by Ilma G. Stone

This list is in addition to the 59 listed in her 80th Birthday tribute (Australasian Bryological Newsletter No. 29).

Stone, IG & Catcheside DG (1993) Two new species, *Fissidens oblatus* and *F. badyinbarus*, from Queensland, Australia. *Journal of Bryology* 17: 621-626.

Stone, IG (1994) Miscellaneous studies on Australian *Fissidens*. *Journal of Bryology* 18: 159-167.

Stone, IG (1994) *Fissidens* Section *Crenularia* C. Muell. in Australia. *Journal of Bryology* 18: 169-180.

Stone, IG & Reese WD (1995) The Calymperaceae of Australia. *Journal of the Hattori Botanical Laboratory* 78: 1-40.

Kiguchi, H, Stone, IG & Iwatsuki, Z (1996) *Uleobryum nagonoi* sp. nov. (Pottiaceae) found in Japan. *Hikobia* 12: 157-160.

Stone, IG & Beaver JE (1996) Studies of the Australasian moss *Fissidens taylorii* C. Muell. *Journal of Bryology* 19: 49-64.

Stone, IG (1996) A revision of Ephemeraceae in Australia. *Journal of Bryology* 19: 279-295.

- Stone, IG (1997) A revision of Erpodiaceae with particular reference to Australian taxa. *Journal of Bryology* 19: 485-502.
- Stone, IG (1997) *Archidium clarksonianum*, a new moss species from Australia. *Journal of the Hattori Botanical Laboratory* 82: 271-279.
- Beever JE & Stone IG (1998) Studies of *Fissidens* (Bryophyta: Musci) in New Zealand: Section *Amblyothallia*. *New Zealand Journal of Botany* 36: 71-90.
- Beever JE & Stone IG (1999) Studies of *Fissidens* (Bryophyta: Musci): new taxa and new records for New Zealand. *New Zealand Journal of Botany* 37: 643-657.

Bryophytes named for Ilma Stone:

- Stonea oleaginosa* (I.G. Stone) R.H. Zander *Phytologia* 65:432.
- Stoneobryum bunyaense* D.H. Norris & H. Robinson *Bryologist* 84: 96.
- Stoneobryum mirum* (Lewinsky) D.H. Norris & H. Robinson *Bryologist* 84: 98.
- Macromitrium stoneae* Vitt & H.P. Ramsay *J. Hattori Bot. Lab.* 59: 400.
- Syrrophodon stoneae* W. Reese *Bryologist* 92: 302.

References:

- Scott, G.A.M. (1993) Ilma G. Stone, *Bryologist*. *Australasian Bryological Newsletter* 29: 2-3.
- Scott, G.A.M. & Stone IG (1976) *The Mosses of Southern Australia* Academic Press, London.

Acknowledgements:

I thank Bruce Allen, Bob Coveny, Judith Curnow, and Bob Magill for assistance with the above lists.

Jessica E. Beever, Landcare Research, Auckland, New Zealand

When I moved from Adelaide to Melbourne University in 1974, Carrick Chambers (Prof. of Botany), told me on no account to work on anything that had an archegonium for my PhD. Ilma, as a Senior Tutor, also fobbed me off saying, perhaps quite justifiably, that she did not think it was her role to supervise graduate students. There went the continuation of a career in bryophytes. After working on the native *Viola* species for 2.5 years I was taken aside by my supervisor, Malcolm Calder, in the glass house one day. After a long chat, the next day I started work on a project that Ilma had only begun to get her teeth into - a revision of Australian *Ditrichum*, thereby becoming her first and only PhD student. It was perhaps quite appropriate that Ilma gave me this project, as *Ditrichum*, in terms of plant size, was a bit out of her league! She made a career of working with things much smaller.

Ilma was very much a "show once and then do it yourself" supervisor. And what better way to learn. She had a wonderful knowledge of the Australian bryoflora, was an astute observer, had a keen memory, and believed very much in a detailed comparative morphological approach to taxonomic investigation. My big regret is that I failed to make the most of her undoubted skills and wisdom.

Australia, and the wider bryological community, has lost a great bryologist and a wonderful person. But, her legacy remains with her many publications and extensive collections which will remain accessible to the community, being transferred to the herbarium at MEL.

Rod Seppelt, Antarctic Division, Hobart, Tasmania.

NEWS and NOTES

Arctic rambling's – or, travels in the wilderness.

July 2000 once again saw me in the Arctic, linking up with a field program in the wilds of Alaska, prior to moving on to England to take up a twelve month posting as Australian Botanical Liaison Officer. Ah, the Arctic in summer. Twenty-four hours of daylight, it's warm, rains sometimes, it's full of bryophytes and lichens, and bears, moose, wolves, voles, frogs (yes, believe it or not, there is one north of the Arctic Circle). And let us not forget the mosquitos – big as a 747 with a fuel tank to match and a pointy bit long enough to reach the deepest of arteries, and in their zillions. Let us also not forget the biting gnats and black flies, both of which compete with the Alaskan air force for blood. But, hey, the air is clean and the scenery wonderful.

This year I again worked with a University of Alaska Fairbanks program, based in an elaborate portable (everything has to fit inside a Cessna 206 float plane) field camp, an hour and a bit flight time from anywhere, on the Kobuk River at 67 N, 159 W. Four weeks, when we actually got rained on quite a lot, carrying out a biodiversity survey of the Greater Kobuk Dunes Wilderness (an amazing area of sand dunes up to 40m height, nearly 20km in length) in the middle of subarctic wilderness, surrounded by boreal spruce forest, boggy fens, and shrub tundra. Our group, this year, included scientists from Russia, Germany, Australia and the USA.

Because it had been a wet and overcast summer the fungi were fantastic this year. Our Russian slime mould specialist found a heap of additional taxa, while our other Russian examining fungi parasitic on lichens was also very successfully kept busy scouring the lichens for these oddities. The bryophytes revelled in the cool, moist, overcast conditions. We now have an incomplete list of around 90 moss and 25 hepatic taxa for the area.

Despite the environmental inhospitability of the dunes, there are remnant vegetation pockets which, with a stabilised sand surface, support numerous lichens and a number of bryophyte species (particularly Pottiaceae, Ditrichaceae, Thuidiaceae, *Encalypta*, *Rhytidium*, and also a couple of hepatics). A permanent supply of water, from the odd seepage stream draining the dunes, brings with it a completely different suite of bryophytes (*Meesia*, *Catoscopium*, *Brachythecium*, *Sanionia*, *Aulacomnium*, *Paludella*, etc.). The surrounding forested and fen areas also produce a very different, and much more diverse and abundant suite of taxa. There are no rock outcrops in the immediate area, and so many saxicolous species just aren't found. Not for the faint hearted is the, at times (often most of the time) bewildering array of *Sphagnum* species. This year I found at least nine. In all, this year I added another 11 moss and 6 hepatic records from the area. The hepatic genus *Lophozia* is certainly a challenge, like *Sphagnum*, in the Arctic. *Riccia cavernosa*, found in 1999 in reasonable abundance along the river margins, was still present but rarely seen in 2000, due to a completely different configuration of the river's edge – it must have been a good year for ice erosion and spring thaw flooding. At this latitude, finding such ephemeral river bank species is really hit and miss, as the river can under silt anything that grows along the edge, and the time from spore germination to mature sporophytes may be less than three weeks. All this means that there will be a lot of lab work to complete on my return to Australia.

A delay in Alaska while UK visas were sorted out meant that we were able to experience the short fall (autumn) season in Alaska. The leaves on birch and aspen change from green to yellow to gold and fall off all within the space of 2-3 weeks, smothering the forest floor flora. The University campus in Fairbanks is built on a south-facing rise. To look out across the city of Fairbanks and many kilometres of an incredible mosaic of dark green (spruce) and gold (birch, aspen), with the snow clad Alaskan Range (a jagged range with many peaks in the 6000 – 7000m range) in the background, is quite an experience.

And so to England. The delay in Alaska meant I missed the British Bryological Society AGM. Although I am based at Kew in my role as ABLO, the bryophyte collections are housed at the British Museum (Natural History), necessitating a train ride to central London each time I wish to look at specimens. Fortunately, Kew (and the BM) has an amazing library, and so I have been busy accumulating Type descriptions of the Australian bryoflora. This will, eventually, be put onto a WWW site on my return to Australia. In doing this I have also discovered many errors in Streimann and Curnow's Catalogue. Some of these are typographical, some originate from errors in Index Muscorum. It does reinforce the need to check originals, not only for

taxonomic purposes (Type specimens) but also for validation of literature citations. And believe me. All of this takes time!!

And so, with just over half a year to go, I wish everyone well from a noisy, smelly, filthy (you would only find more litter in a rubbish tip), over-crowded (vehicles as well as people), busy, hideously expensive city with one of the most comprehensively chaotic and broken down transport systems you could ever imagine. But, hey, I do have access to all the literature you could ever want, major herbaria collections, and nothing is very far from here (except home!).

Rod Seppelt, ABLO, Herbarium, Royal Botanic Gardens, Kew.

Angela Newton and Neil Bell from the Department of Botany, The Natural History Museum, London, were visiting bryologists from September to November in 2000. Their journey began in New Caledonia before touching Australian shores in North Queensland making their way down the east coast to finish their fieldwork in Tasmania. What a contrast to the warm tropics when a bleak day was spent collecting on Mt. Sprent in southwest Tasmania. Angela and Neil were looking primarily for Pterobryaceae and austral basal pleurocarps and protopleurocarps. Neil was researching the family Rhizogoniaceae for his PhD studies.

Dries Touw was another visitor to Australia at the end of 2000. He spent most of his time (approx 6 weeks) travelling in South Australia and Victoria. Although now retired Dries remains interested in Australian bryology, albeit in a more general way than before and was taking the opportunity to make a “naturalist’s trip rather than a professional bryological trip”... and “am looking forward to see my Hypnodendrons and Thuidia in the flesh “

Chris Cargill has returned to Australia after successfully completing her PhD at Southern Carbondale University, Illinois where she researched the genus *Fossombronia*. Chris has just been appointed as Cryptogamic taxonomist at Australian National Herbarium, Centre for Plant Biodiversity Research, Canberra, where she will be responsible for research and management of the cryptogamic collections.

17th John Child Bryophyte Workshop

22 – 27 November 2001

This year’s workshop will be held in the Wairarapa at the Tauherenikau Race Track Ranch. This is just outside Featherston on the road to Greytown. It is approximately an hour’s drive from Wellington, and one hour and thirty-five minutes from Palmerston North. We will be able to provide some transport from Wellington. There is also a good train service from Wellington.

Accommodation will be in two blocks with multiple twin rooms. There are communal facilities and a lounge in each block. There is a large kitchen and dining block next door. We will have the use of a large hall in which to set up our lab. Plan to bring a microscope and literature if you can.

The Wairarapa has a variety of places for field trips including a lovely bush area on the race track grounds itself.

The accommodation cost is \$15 per night per person if you bring your own bedding. Pillows and blankets are available. There is also motel accommodation in Featherston and Greytown.

The evening meal will be catered at \$15 per evening. Vegetarian meals will be available. There will be additional costs for the food that will be provided for self-service breakfasts and lunches. The total cost for the workshop will be about \$190, not including transportation.

The workshop will begin late afternoon Thursday Nov 22, and end after breakfast Tuesday Nov 27. An evening meal will be provided on Thursday.

All bryologists are welcome: novice or expert. As always there is a limit on numbers. A second circular asking for a commitment with deposit will be sent towards the end of May.

If you are interested in receiving the second circular please reply to:

Email—barbarap@tepapa.govt.nz

VI Australasian Bryophyte Workshop

Blue Mountains, New South Wales

Australia

20th – 26th September, 2001

Introduction

This will be the 6th in a series of informal bryological workshops to be held in Australia. The first of these was held in Tasmania in 1988, later workshops were held in Canberra (1991), Kuranda (North Queensland 1994), Brisbane (1996) and The Grampians (Western Victoria 1998). The purpose of the workshops is to provide a forum at which Australian, New Zealand and overseas bryologists can get together for an interchange of ideas, to compare and contrast the bryoflora of different areas of Australia and to develop skills in recognising taxa in the field. We welcome all, amateur and professional, who have an interest in bryology, for the entire workshop or any part thereof.

Location

The workshop will be based at the Berringa Environmental and Conference Centre at Grose Vale in the lower Blue Mountains, approximately 70km north west of Sydney. The Centre is about 15 km from Richmond Railway Station, part of the Sydney suburban rail network, with connections to and from Sydney Airport. Arrangements will be made to collect participants from Richmond Railway Station or Sydney airport (depending on arrival date).

The workshop will commence late on Thursday afternoon, and will conclude on the following Wednesday morning. Accommodation consists of 2 double bunks per room (ie 4 people per room). Depending on numbers, it may be possible to keep this to a maximum of two per room.

Cost

This is still to be determined, but it is expected that accommodation at Berringa (including three meals plus morning and afternoon tea each day) will be in the vicinity of \$45 Australian per person per day. (6 days @ \$45 = \$270). There will be an additional fee to cover bus hire and administrative costs. It is hoped that these extras will be less than \$100 per person (for the entire workshop).

A deposit of \$Aus100 is required by 01 August. Balance to be paid at the workshop. The cost of bank drafts means that we require only a firm commitment by overseas participants.

Insurance

Please make your own arrangements for insurance cover for the duration of the workshop and ensure that you have adequate personal insurance to cover accident or illness.

Alcohol

The conference centre does not allow alcohol to be consumed on the premises.

Paper and Poster Presentations

If you would like to present a talk or display a poster, please advise us as soon as possible so that the program can be timetabled. We will have an overhead projector and a slide projector available. Fifteen minutes will be allocated for each presentation, with 5 minutes for questions.

Identification Workshops

Time will be allocated for identification sessions. We will be able to provide some stereo and compound microscopes, however, if you can bring your own it would be a great help. Glass microscope slides, cover slips, razor blades, toluidine blue and wash bottles will be provided. Please bring your own dissecting kits.

Field Trips and Collecting

A number of field trips have been planned. A coach will be hired for full day trips to distant locations, such as Jenolan Caves and Megalong Valley. For local, half-day trips, it is hoped that we will have sufficient vehicles to ferry people from Berringa to the site. Notes and species lists will be provided for most field trip sites.

Collecting permits will be arranged through the National Parks and Wildlife Service of New South Wales. However, we ask you to be modest with your collections and preferably collect where removal will not be conspicuous. If you are collecting before or after the workshop you will need to apply for a separate collecting permit. Australian law requires the lodgement of holotypes in an Australian herbarium

On completion of the workshop, we will be producing a report for National Parks, so we are particularly interested in new and exciting discoveries. Wherever possible, we will have species lists prepared in advance. If your collections include species not on our lists, we ask you to add the name to the species list for that location and provide a duplicate voucher to be lodged at NSW.

For further information, offers of posters, paper presentations etc, contact:

Elizabeth Brown
National Herbarium of NSW
Mrs Macquarie's Road
Sydney NSW 2000
Australia

Telephone: (612) 02 9231 8139
Facsimile: 02 9241 2797

Elizabeth.Brown@rbgsyd.nsw.gov.au

Alison Downing
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Telephone: (612) 02 9850 8197
Facsimile: 02 9850 8245

adowning@rna.bio.mq.edu.au

VI Australasian Bryological Workshop
Grose Vale, Blue Mountains, New South Wales
20th – 26th September, 2001

Preferred title (Mr, Mrs, Ms, Dr, other) Please circle.

Surname

Preferred first name

Postal address

Postcode

Country

Email

Fax

Phone (day)

Phone (night)

Please indicate the options where appropriate

I **will** be attending the entire workshop/part of the workshop (please give dates).

I **may** attend and would like to receive the 2nd circular

I **will not** be attending.

I would like to present a talk/poster (please indicate which).

I will be bringing a vehicle and am able to assist with transport during the workshop.

Please return this form to:

Dr. Elizabeth Brown
National Herbarium of NSW
Mrs Macquaries Road
Sydney NSW 2000
Telephone: +61-2-9231 8139
Facsimile: +61-2-9241 2797
Email: elizabeth.brown@rbgsyd.nsw.gov.au

Or respond by email with the heading **Send workshop circular** to receive it as an attachment for electronic transfer.

A deposit of \$Aus100 may be sent with this form or with the response to the 2nd circular which will provide details on accommodation, transport etc.