

AUSTRALASIAN BRYOLOGICAL NEWSLETTER

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Cover Page

Participants gathered outside Formerly The Blackball Hilton, Blackball, an original old West Coast Pub, which was home for the 16th John Child Workshop. A report on the activities of the workshop is contained in the following account.

16th John Child Workshop Blackball, Westland, New Zealand. 26th-31st October 2000

The 16th John Child Workshop was based at Blackball, an old coal-mining town, up the valley from Greymouth on the West Coast of the South Island of New Zealand.

On a mild Spring Thursday evening, 28 New Zealanders were joined by a further six from Australia at the old original west coast pub (Formerly The Blackball Hilton) which was to become our base for accommodation and meals over the next 5 days. Here we renewed and made acquaintances over a glass or two of the famous local brew – Miners Dark Ale. It must be said that this wasn't the last taste that some of us would enjoy at the workshop! Across the road from the old pub was the Workingmen's Club that was turned into a bryological laboratory for the duration of the workshop and provided very adequate facilities.

The first day began with early showers but cleared to fine weather, which allowed for a leisurely exploration of Croesus Track. It certainly lived up to its name and a rich and diverse array of bryophytes was found in forests made up mostly of kamahi, rata and rimu with other podocarps and broadleaf species. Many of the bryophytes were in fertile stages such as the excellent fruiting material of *Tylimanthus saccatus*. However the most notable species was the hepatic, *Brevianthus flavus*, growing on the trunk of a rimu, and until recently had been treated as a monotypic endemic taxon from the West Coast of Tasmania. Other interesting species were the mosses; *Dicranoloma plurisetum*, *Rhizogonium pennatum*, *Tayloria calophylla* and the hepatic *Dendromastigophora flagellifera*. This liverwort has been reported in the literature from Tasmania, but its record must be doubtful without a supporting herbarium collection.

Fine weather greeted us on Saturday for our trip to Sewell Peak, which, at an elevation of 800m, is the highest point at the southern end of the Paparoa Range. Its use as a communications transmitter provided a steep but accessible road to the top and with the disappearing mist allowed views across to the Tasman Sea. Many typical alpine species were located; *Racomitrium pruinosum*, *Rhacocarpus purpurascens*, *Psilopum australe*. The subalpine forest of podocarps, beech, leatherwood and *Dracophyllum* contained abundant epiphytes; for example the moss *Holomitrium perichaetiale* and hepatics *Jamesoniella kirkii*, *Paraschistochila tuloides* and *Herbertus alpina*. This last species is very similar and may be conspecific with *Herbertus oldfieldianus*, which is found in subalpine vegetation from Tasmania. It was in the fellfield vegetation where some interesting species were observed – the moss *Pleurophascum grandiglobum*, unfortunately was only sterile, and the hepatic *Herzogianthus vaginatus*.

There was a continuation of the fine and warm weather into the weekend and on Sunday we enjoyed the sights along the coastline as we drove to Punakaiki. Our bryological activities centred on Bullock Creek and the dry riverbed allowed study of the limestone bluffs. Here we encountered large populations of the fertile *Marchantia pileata*. Along the creek there was abundant *Tridontium tasmanicum* and *Fissidens asplenoides*, while on the branches of the lowland ribbonwood (*Plagianthus betulinus*) there was *Cryphaea dilatata*, *Tetraphidopsis pusilla* and *Daltonia splachnoides*.

In the evening there was good cause for dressing up for dinner. The occasion was Barbara Polly's birthday and we celebrated in style with the traditional cake and the odd glass of fine wine.

Showers had returned on Monday but they were no deterrent for our trip to Moonlight Ridge. Mind you, one of us nearly didn't make it having been locked in the Workingmen's Club – thank goodness for the headcount! There was some lush beech forest on the Moonlight Track and plentiful epiphytes were observed. *Mesotus celatus* was seen for the first time on this foray and Allan Fife pointed out its distinctive “catherine wheel” like shoots. Fruiting material of *Hypnodendron comatum* and *Dicranoloma dicarpum* were seen along the track and amongst the stones from old mine diggings there was abundant fertile material of *Treubia ?pygmaea*. The afternoon at Craigieburn Pakihi was cut short by the increasing rain which made bryophyte collecting more of a challenge than it should be.

We certainly had enjoyed the best of conditions. Overnight thunder storms and heavy rain greeted us on Tuesday as we made our departure. Our hosts, Linda Osborn and Jane Wells, made our stay very comfortable. The local community, who took an active interest in our activities, made us feel very welcome. We were delighted to have representatives from DOC at our workshop. They provided a stimulating forum one evening which led to an interesting discussion on strategies for conservation and reservation of bryophytes and cryptogamic sensitive areas. Finally we must thank our foray stalwarts, David Glenny and Geoff Spearpoint, for their organisation and especially their consideration to base the workshop within the township of Blackball.

As I returned home across the Tasman, I began to feel the withdrawal symptoms and then realised I was missing the aroma of coal fumes and the taste of Miners Dark!

Paddy Dalton, School of Plant Science, University of Tasmania.

Book Review

Mosses and other bryophytes – an illustrated glossary

Bill and Nancy Malcolm

Micro-Optics Press, Box 320 Nelson, N.Z., 2000

There is little need to provide another review of this superb publication as several excellent reviews have already been published. I refer you to reviews given by Dan Norris, *Taxon*, 2001, **50**: 308-309 or that by Jessica Beever, *New Zealand Journal of Botany*, 2001, **39**: 365-371.

This hardbound A5 book is an illustrated glossary of the terms that have been associated to describe mosses, liverworts and hornworts. This excellent compendium of terms sets a new standard in presentation for bryological literature. There are 213 pages, which contain 1550 cross-referenced terms. Approximately 1000 of these are lavishly illustrated in excellent colour photographs and 22 black and white drawings are added wherever photos are not provided. The photomicrographic skills of Bill and Nancy Malcolm not only provide an insight to the features of bryophytes but also give the reader a fascinating view of the tremendous diversity of these non-vascular plants. There are 400 species illustrated and all are antipodean taxa. It not only will be a valuable reference for professional bryologists and botanists but also will have great appeal for those who wish to commence their recognition of the major bryophytes in our Southern Hemisphere floras.

The book is readily available through a number of publishers and at a reasonable price in today's market. It covers a gap in our bryological literature so make sure you add it to your reference shelf.

Paddy Dalton, Editor.

NEWS AND NOTES

The recent death of **Heinar Streimann** on 29 August 2001 came as a shock to the Australian bryological community. He had retired from the Australian National Herbarium in Canberra (CANB) only 18 months beforehand. Whilst at CANB Heinar added enormously to the range of specimens of mosses, hepatics, lichens and fungi from Australia and Papua New Guinea and built up an outstanding collection. From this he distributed duplicates worldwide to large Herbaria. His studies have added a number of new bryophyte records for Australia and Papua New Guinea. He revised and published the families Meteoriaceae and Hookeriaceae as a contribution towards the Flora of Australia. An outstanding contribution to our knowledge of Australian mosses has been the Catalogue of Mosses for Australia and its External Territories (Streimann & Curnow 1989) published at a time when revisions were being undertaken for the Flora. This publication has been of immeasurable value to researchers trying to chase up early literature and records of Australian mosses. Heinar's loss is tragic as he still had many projects that he had hoped to pursue in the future. However, two of these namely his book on Norfolk Island mosses, and his revision of the Catalogue of Australian Mosses will be published by ABRS in the next couple of years.

A more detailed outline of his life and contributions including a complete list of publications will appear in the next newsletter.

Congratulations to **Elizabeth Brown** on her appointment as Systematic Bryologist at the National Herbarium of New South Wales. Elizabeth was appointed to the position late last year as part of a change in the Plant Sciences program to increase work on the non-vascular cryptogams. She retains an interest in vascular groups but the bryophyte research component of her work will increase considerably. Initially, in 1989, Elizabeth came to Sydney from Auckland, New Zealand on a Research Fellowship studying the hepatic genus *Acromastigum*. She subsequently obtained funding from ABRS to work on the Lepidoziaceae. Time for bryophyte studies have been greatly curtailed in recent years whilst she has been working on a revision of the Epacridaceae. The National Herbarium of New South Wales reached its Centenary on 8 March 2001. Australia also reached its centenary as a nation in January 2001. Elizabeth has obtained a Centenary of Federation Grant to catalogue and database some of the W.W. Watts collections. Representation on the database is slowly being improved and information is expected to be available through the Virtual Herbarium in the not too distant future. Other work being carried out at NSW includes the description of a number of new records based on collections made during fieldwork in northern New South Wales. Additions to the collections at NSW include the specimens of W.B. Schofield from his field studies in Northern Queensland and New South Wales, which have been transferred from the J.T. Waterhouse Herbarium, University of New South Wales. Collections made by J.R. Spence whilst in Australia for Flora studies of the Bryaceae are also being added. These will be catalogued, databased and incorporated into the collections.

A well-known bryologist **Christine Cargill** has been appointed to the Australian National Herbarium as Curator of Cryptogams to replace Heinar Streimann. Christine began her career in bryology with an Honours degree working with George Scott on the genus *Hypnodendron*. She later returned to Monash University to work with George firstly as a technician then later as his research assistant. During this time she worked on the genus *Fossombronia*. After George left Monash she continued with research in her own time briefly on *Asterella* until she was awarded an ABRS grant, which had been passed up by Karen Beckmann because of family commitments, to work on hornworts. In 1997 she took up a Research Assistant position in USA with Dr Ray Stotler and Dr Barbara Crandall-Stotler at Southern Illinois University, Carbondale to work with them on a world revision of the liverwort sub-order Fossombroniineae. This study led to a Ph.D., which she completed in early 2001. In her part of the study she covered the group in the geographical regions of Africa, southwest Asia, and the sub-continent of India concentrating mostly on the genus *Fossombronia* but also examining *Sewardiella*, an Indian taxon. In January 2001 she returned to Australia and accepted the position at CANB in mid year. We are delighted that such a competent cryptogam specialist will occupy the position and oversee the excellent collections there.

Helen Ramsay, Sydney.