

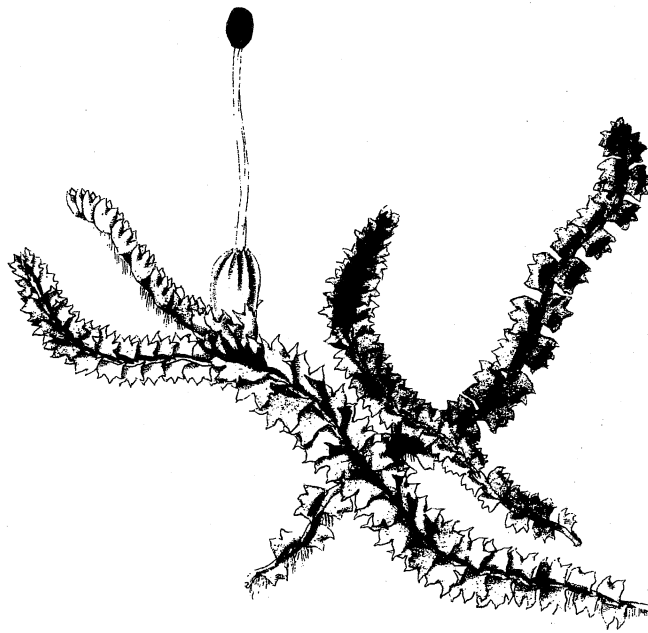


BULLETIN
OF THE
BRITISH
BRYOLOGICAL SOCIETY

NUMBER 68

AUGUST 1996

ISSN 0142-3169



Jungermannia barbata

Edited by A.R. Perry

PUBLISHED BY THE BRITISH BRYOLOGICAL SOCIETY
CARDIFF

BRITISH BRYOLOGICAL SOCIETY

The British Bryological Society exists to promote the study of mosses and liverworts. The Society was constituted in its present form in 1923, replacing the Moss Exchange Club founded in 1896.

Two Field Meetings, each usually of a week's duration are held every year in districts of bryological interest. In addition two weekend meetings are held in the autumn, one for the Annual General Meeting, the presentation of papers and fieldwork, and the other for practical instruction in the examination and identification of bryophytes.

Members of the Society are entitled to receive the Society's *Journal* and its *Bulletin* free of charge, to borrow books, periodicals and reprints from the Society's library, to consult or borrow specimens from the Society's herbarium, and to consult the Society's panel of referees for assistance in the identification of specimens.

The subscription, due in advance on 1 January each year, is £20.00 for Ordinary Members, £1.00 for Family Members (who do not receive the *Journal*) and £7.50 for Junior Members.

Applications for membership should be addressed to the Membership Secretary, from whom further particulars may be obtained.

Council for the year 1996

PRESIDENT: Mr A.R. PERRY, Department of Botany, National Museum & Galleries of Wales, Cardiff, CF1 3NP

PAST PRESIDENT: Dr R.E. LONGTON, Department of Botany, Plant Science Laboratories, University of Reading, Whiteknights, Reading, RG6 2AS

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TREASURER: Mr E.R. HURR, 6 The Woodlands, Chelsfield, Orpington, Kent, BR6 6HL

JOURNAL EDITOR: Dr J.W. BATES, Department of Biology, Imperial College at Silwood Park, Ascot, Berkshire, SL5 7PY

BULLETIN EDITOR: Mr A.R. PERRY, Department of Botany, National Museum and Galleries of Wales, Cardiff, CF1 3NP

BIBLIOGRAPHER: Mr L.T. ELLIS, Department of Botany, The Natural History Museum, Cromwell Road, London, SW7 5BD

CONSERVATION OFFICER: Mr R.C. STERN, Botany Bay, Main Road, Fishbourne, Chichester, West Sussex, PO18 8AX

CURATOR: Mr A.R. PERRY, Department of Botany, National Museum and Galleries of Wales, Cardiff, CF1 3NP

LIBRARIAN: Dr K.J. ADAMS, Department of Life Sciences, University of East London, Stratford Campus, Romford Road, London, E15 4LZ

MEETINGS SECRETARY: Mr N.G. HODGETTS, Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough, PE1 1JY

MEMBERSHIP SECRETARY: Mr A.V. SMITH, 1 Carr Meadow Cottages, Glossop Road, Little Hayfield, via Stockport, Cheshire, SK12 5NR

PUBLICITY OFFICER: Dr S.R. EDWARDS, The Herbarium, Manchester Museum, University of Manchester, Manchester, M13 9PL

READING CIRCLE SECRETARY: Mr R.J. FISK, 1 Paradise Row, Ringsfield, Beccles, Suffolk, NR34 8LQ

RECORDERS: Mr T.L. BLOCKEEL, 9 Ashfurlong Close, Dore, Sheffield, S17 3NN (Mosses); Mr D.G. LONG, Royal Botanic Garden, Inverleith Row, Edinburgh, EH3 5LR (Hepatics)

RECORDING SECRETARY: Mr R.D. PORLEY, English Nature, Foxhold House, Crookham Common, Newbury, Berkshire, RG15 8EL

ELECTED MEMBERS: Mr J. BLACKBURN, Prof. D.J. COVE, Miss J.I. HENDEY, Mr B.J. O'SHEA, Dr A. RUSSELL, Mr G. STARK.

The cover illustration is of *Jungermannia barbata* Schreb., from Tab. LXX in W.J. Hooker's *British Jungermanniae*, 1816. The width of the original is approximately 122 mm.



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PAYMENT OF SUBSCRIPTIONS 1996

Subscriptions were due on 1 January and confirm entitlement to two copies of the *Journal of Bryology* for the current year as well as the other services provided by the Society. If you have not already paid your subscription then an early remittance to the Honorary Membership Secretary* will help to prevent further postage costs. Current rates are as follows: Ordinary Member: £20.00, Junior Member: £7.50, Family Member: £1.00. Members are reminded that **if payment is made by Giro, a supplement of £2.50 must be added** to cover transfer charges.

* Mr A.V. Smith, 1 Carr Meadow Cottages, Glossop Road, Little Hayfield, Stockport, Cheshire, SK12 5NR, UK.

REPORTS OF OFFICERS FOR 1995

a) GENERAL SECRETARY'S REPORT

1995 has been a year of intensive work within the Society. Not only have plans for next year's centenary celebrations been significantly advanced, but a number of important business matters have required attention. In addition, it has been a year of some sadness, for we have lost valued members through death. Prof. P.W. Richards, an Honorary Member and former President, was our longest-serving member, having joined the Moss Exchange Club in 1920. He and Mr F.E. Branson, Mr J.H. Field, Miss J. Griffiths, Mr A.R. Milne and Prof. J. Poelt are all greatly missed.

Despite these setbacks, membership numbers are buoyant and, it is hoped, will remain so when the increased subscription comes into effect after having been held steady for five years. Good use continues to be made of the variety of services offered by the Society, and Council benefits in many ways from the help and support of other members. This, I think, may be taken as evidence of a flourishing Society, which has been ably presided over by Dr R.E. Longton. Interaction of this sort will, I hope, continue to be a feature of the B.B.S., thus enabling Council to ensure the relevance of its efforts to the membership as a whole.

Amplly supported by others, efforts of the Centenary Committee have laid the foundations for a truly fitting programme of events and publications next year. A symposium, a symposium volume, a new census catalogue, an African hepatic flora, and a coffee-table book are all envisaged. As a result, we can justifiably expect 1996 to be a memorable year, as well as one to stimulate further ambition.

Our own centenary coincides with an outstanding opportunity to introduce bryophytes to a wide audience of schoolchildren via their teachers. Council has responded enthusiastically to an invitation to provide a B.B.S. workshop at a teachers' conference, Lifescience 2000, and members are now planning the Society's contribution in detail. Organized by the British Ecological Society, Institute of Biology, Linnean Society of London, Field Studies Council, and Action for Biology in Schools, the conference will be held at Warwick University.

B.B.S. members have been delighted with the success of the Tropical Bryology Group in attracting a substantial grant from the Department of the Environment. However, it has

brought with it hitherto unresolved problems. The Group has set in place arrangements to operate it as its own private fund, but wishes it to be regarded as an asset of the B.B.S.

Other important business now in hand is that relating to stocks of the backissues of B.B.S. journals received from our former publisher. In pursuing the matter, both Mr A.C. Crundwell and Mr A.D. Banwell have been generous with advice. Council and I are extremely grateful to them as, indeed, we are to the many other members of the Society who help the wheels run smoothly.

M.E. Newton, January 1996

b) TREASURER'S REPORT

Notes on the Accounts for 1995 (see pp. 4-5 of this *Bulletin*)

(1) Council has decided that income from the Side Bequest should be accumulated separately from General Funds (see para. 5 below). In addition, the Society has received an anonymous donation of £5000 given for the specific purpose of assisting publication at an economic price of a new Liverwort Flora. For these reasons, the accounts will in future be presented in a different form, showing funds available for the general running of the Society separately from funds accumulated following bequests and donations. As a starting point, the balance of the Bequest and Donation Fund at 1 January 1995 is taken as £30,000 (see my notes to the 1994 Accounts). Interest will be shared between the two Funds on a pro-rata basis. I hope that Members find the new presentation clear.

(2) A number of Members paid their new subscriptions of £20 before the end of 1995 and this is reflected in an improved subscription income for the year. As expected, printing costs for *J.Bryol.* were again higher due to a larger page count and to Authors' correction costs.

(3) Worthy of note in Expenditure is 'Purchases for Resale' at the unusual level of £1,670. This was due to the need to restock lenses and forceps following increased sales.

(4) Officers' expenses have again risen and a breakdown is shown below. Despite these inevitable increases, Officers' expenses are in my view reasonable, with many of our Officers actually covering part of their costs out of their own pockets.

(5) Council has named the members of a Board or Committee to consider proposals for using the Side Bequest money. It has not yet been possible to get members of the Committee together and terms of reference are not yet agreed. Clearly this is not an acceptable situation and as an interim measure I am circulating Committee members with my proposals.

(6) A grant made by the Department of the Environment under the Darwin Initiative to the Tropical Bryology Group was not received by the Society's Treasurer and is not included in these Accounts. It is expected that separate accounts will be prepared by the TBG for this grant.

Officers' Expenses Breakdown

(MEN) General Secretary	£226.45	<i>NOTE: Expenses of meetings, Reading Circle and Bulletin are included in the appropriate item of the main Expenditure Account.</i>
(AVS) Membership Secretary	£302.99	
(JWB) Editor	£250.00	
(ERH) Treasurer	£50.66	
SE Group Secretary	£19.03	

Roy Hurr, April 1996

BRITISH BRYOLOGICAL SOCIETY

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1995

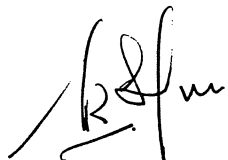
	1995	1994
INCOME	£	£
Interest	3,768	2,925
Bequests and Donations	5,289	10
Subscriptions	11,569	8,529
Sales of Publications, etc.		
Journal of Bryology	16,928	16,498
Other Publications	290	227
Lenses and Forceps	917	404
Sweatshirts and Ties	46	120
Postcards	485	1,139
Reading Circle	93	30
Postage and Sundries	106	129
AGM and other Meetings	1,713	2,102
	<u>41,204</u>	<u>32,113</u>
LESS EXPENDITURE		
Printing and Distribution		
Journal of Bryology	21,885	20,759
Bulletin	2,021	2,108
Atlas Copies	-	151
Purchases for Resale:		
Postcards	-	2,259
Pubs., Lenses, Forceps	1,670	95
Postage Balance on Sales	-	65
Library Purchase	209	-
Membership List	-	302
AGM and other Meetings	1770	2,103
Officers' Expenses	849	798
Reading Circle	32	90
Insurance	328	442
Bank Charges and Sundries	114	175
	<u>28,878</u>	<u>29,347</u>
EXCESS OF INCOME OVER EXPENDITURE FOR YEAR	<u>£12,326</u>	<u>£2,766</u>
Of Which General Income less		
Expenditure is	£3,269	
Total Interest Earned is	£3,768	
Bequest and Donation Income		
less Expenditure is	£5,289	

BRITISH BRYOLOGICAL SOCIETY

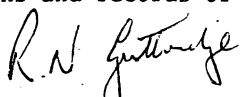
STATEMENT OF AFFAIRS AS AT 31 DECEMBER 1995

	1995 £	1994 £
GENERAL FUND		
Balance as at 1st January	29,485	56,719
General Income less Expenditure	3,269	}
Share of Interest	1,884	} 2,766
	<u>34,638</u>	
BEQUEST AND DONATION FUND		
Balance as at 1st January	30,000	See
Bequests and Donations during Year	5,289	Note (1)
Share of Interest	1,884	
Less: Expenditure during Year	-	
	<u>37,173</u>	
	<u>£71,811</u>	<u>£59,485</u>
REPRESENTED BY:		
Cash at National Westminster Bank		
(Current Account)	6,529	1,389
(Capital Reserve A/C)	27,031	20,765
Girobank	864	617
National Savings Bank	44,210	41,709
	78,634	64,480
LESS CURRENT LIABILITIES		
Publication cost of J.Bryol.(net)	6,823	4,995
NET ASSETS	<u>£71,811</u>	<u>£59,485</u>

E R HURR
Treasurer.



I report that the Balance Sheet as at 31st December 1995 and attached Income and Expenditure Account are in accordance with the books and records of the Society.


R. N. GUTTRIDGE, F.C.A.
Hon. Auditor.

30 Mar 1996.

c) BIBLIOGRAPHER'S REPORT

Recent Bryological Literature 83 and 84 have appeared in the *Journal of Bryology*, number 85 is in press and number 86 in preparation. I am grateful to all those who have sent me references or reprints for inclusion in these lists. Special thanks are owed to the staff of the Botany Library at the Natural History Museum, London, for their co-operation and assistance. As ever, I much appreciate receiving details of papers and books which I may have overlooked.

L.T. Ellis, March 1996

d) BULLETIN EDITOR'S REPORT

Bulletins 65 and 66 were prepared and published during the year and I am grateful to everyone who supplied me with their material on disk. Copy deadlines are 15 May for the July issue and 15 December for the February issue.

A.R. Perry, January 1996

e) CONSERVATION OFFICER'S REPORT

1. Under the EU Habitats Directive, the Government supplied a list of possible Special Areas of Conservation (SACs) in the UK to Non-Governmental Organizations (NGOs), including the BBS, for consultation. In the BBS responses (in respect of Great Britain and of Northern Ireland), certain serious omissions in the list were mentioned, particularly in lowland areas of England, such as the chalk of the South Downs and the Sussex sandrocks. The Government has subsequently, submitted over 200 candidate SACs to the European Commission, many of which include important bryophyte sites.

2. The BBS submitted, via *Plantlife*, an additional list of bryophytes for inclusion in Schedule 8 of the Wildlife and Countryside Act as part of the Third Quinquennial Review. The JNCC has agreed to submit four of these bryophytes for Government approval.

3. The JNCC published 'A UK Plant Conservation Strategy', which specifies a range of activities and targets for habitat and species conservation. A number of bryophytes are included.

4. Under the Species Recovery Programme in Scotland, *Bryum schleicheri* has been collected from its only known site and is under cultivation with Michael Fletcher and one or two other BBS members.

5. Mainly as a result of changes to the red list categories, the finalising of the *Red Data for Bryophytes in Great Britain and Ireland* has been delayed, but publication is expected in 1996. A *Red Data Book of European Bryophytes* has been published by the European Committee for the Conservation of Bryophytes.

6. RCS has retired from the board of *Plantlife* on completion of his term of office, but will maintain contact through representing BBS on PlantlifeLink.

7. A final version of the Guidance Note to Regional Recorders on Provision of Information was agreed by Council and was sent to Recorders at the end of the year.

8. The Conservation Committee met in Norwich in September. Among matters discussed were the needs for further surveys and species recoveries, and the cessation by the JNCC of work on the Lower Plant Biodiversity Register, which it is hoped will only be temporary.

9. RCS is grateful to Ron Porley for standing in for him while he was away for 3 months at the beginning of the year.

R.C. Stern, January 1996

f) CURATOR'S REPORT

Voucher specimens incorporated in BBSUK were 149 mosses. There were 5 loans totalling 9 mosses and 39 liverworts.

A.R. Perry, January 1996

g) JOURNAL EDITOR'S REPORT

Two parts of the *Journal* were published in 1995 completing volume **18**, the first in the new illustrated livery. These amounted to 465 + vi printed pages, the surplus over the normal limit of 400 pages per year being approved by Council to publish several long papers. For the first time, the last part of the volume contained a list of the referees consulted to acknowledge properly the gratitude of the Society for their often forgotten labours. The *Journal* continues to cover a wide range of topics of interest both to amateur and professional and to home and overseas readers. I wish to encourage more writers in the amateur category, and hope that the new *Bryophyte Profiles* series will tempt some new authors. The first paper in this series (on *Dichelyma capillaceum*) will appear in volume **19**, part 1 (1996).

Forty-nine papers (including bryological notes but excluding book reviews and obituaries) were submitted for publication in 1995, two less than received in 1994. Of these, 31(63%) were eventually accepted for publication, 11(22%) were rejected or withdrawn and 7(14%) are still under review or being revised. These figures are similar to those for 1994.

Complaints about the 'loose binding' made at the Norwich AGM were passed on to W.S. Maney who expressed concern and promised to take action. In the event, the publishers were badly hit by the 'flu epidemic' just before Christmas, which explains the lateness of part 4, and the binding appears no different in my personal copy. Members should let me know if they are still dissatisfied with this aspect.

The inaugural meeting of a new Publications Committee was held in December 1995. The committee will make recommendations to Council on publishing matters and is expected to be kept particularly busy monitoring various projects associated with the Centenary.

J.W. Bates, January 1996

h) LIBRARIAN'S REPORT

Sales:	<i>J. Bryology</i> (parts)	64
	<i>TBBS</i> (parts)	31
	<i>Distribution of Bryophytes</i>	4
	Census Catalogues (old)	4

	Hepatics of Europe and the Azores	4
	BBS Bulletins	58
	BBS Library Catalogues	5
	Moss Wall Charts	8
	Special Volume: Jubilee	1
	Special Volume: Chromosomes	7
	Special Volume: Tropical Bryophytes	3
	Special Volume: Mosses in English Lit.	5
	Bryology (Linn. Soc.)	1
	Mosses & Liverworts of Woodland	32
	German/English Glossary	1
	×20 lenses	68
	Stainless steel forceps (Patterson)	86
	Stainless steel forceps (Idealtek)	5
	Eyepiece graticules	2
	BBS ties	1
Loans:	35 mm slides	2
	Micrometer slide	1

All the remaining backnumbers of the *Transactions of the British Bryological Society* have now been transferred to the BBS library stock, and in most cases will become 'out of print' over the next three years.

The following books have been purchased during the year:

- Genera of the Pottiaceae*. By R.H. Zander. 378pp. Bulletin of the Buffalo Society of Natural Sciences. Vol. 32. 1993. Buffalo N.Y. ISSN 0096-4131.
- Flora of Middlesex*. By H. Trimen & W.T. Dyer. 428pp. Robert Hardwick, London. 1869. (with Appendix on Cryptogams).
- Grimmia* Hedw. (*Grimmiaceae*, Musci) in *Europe*. By H.C. Greven. 160pp. (with colour plates) Backhuys, Leiden. 1995. ISBN 90-73348-38-2.
- Mosses and liverworts of rainforest in Tasmania and south-eastern Australia*. By S.J. Jarman & B.A. Fuhrer. 134pp. (with colour plates). CSIRO Australia and Forestry Tasmania, East Melbourne. 1995. ISBN 0-643-05685-8.
- Mosses and Liverworts of Hong Kong*. By M.L. So. 162pp. (with colour plates) Heavenly People Depot, Hong Kong. 1995. ISBN 962-7350-78-8.

Ken Adams, March 1996

i) MEETINGS SECRETARY'S REPORT

The bryophytes of the Lake District were the collective target for the 1995 spring meeting, which was based at Ambleside. It might have been a bit of a risk venturing into Cumbria in early April. but the weather turned out to be no worse, on the whole, than at more southerly spring meetings. The only problem was snow at higher altitudes. Most of the time was spent exploring woodland sites, but limestone pavement and montane habitats were also examined. A good range of oceanic, calcicolous and upland species were seen during the week. Peter

Bullard, who organised the meeting, and Mark Pool, who wrote the account for the *Bulletin*, deserve our gratitude.

There were two summer meetings: one in Northumberland and the other in the Tatra mountains of Slovakia. Attendance at both was quite low, though perhaps for different reasons. However, both were thoroughly enjoyed by those who did manage to make it. The Northumberland meeting covered a number of classic and statutory protected sites, including The Cheviot and Widdybank Fell. Much of bryological interest was found, in spite of the hot, dry summer. My thanks to Stuart Hedley of English Nature for the organisation and to Cliff Townsend for writing up the meeting.

Dr Rudolf Šoltés was the Society's host for the Tatra meeting. A number of continental bryologists also joined the group. Members were delighted by the range of alpine species, including *Ochyraea tatrensis*, shown to the group by Prof. Jirí Váňa. The meeting was also notable for its hospitality. Thanks to all involved with the organisation and writing up of this meeting, especially Peter Martin, who took on the British end of the organisation at short notice. It is pleasing that there is enough interest in the Society to justify trips abroad: hopefully our horizons will continue to broaden!

The autumn meeting and AGM took place at the University of East Anglia, Norwich. A good range of contributions, excellent organisation and a pleasant environment ensured an enjoyable weekend. Sunday's field trip was to Flordon Common and Lower Wood, Ashwellthorpe. Thanks to Richard Fisk for doing all the work.

Lastly, the bryophyte workshop this year, hosted by Dr Sean Edwards at Manchester University, was on the knotty topic of the peristome. The weekend consisted of a mixture of field and laboratory work. My heartfelt thanks to Sean for agreeing to organise the meetings secretary's most difficult-to-arrange meeting of the year! Thanks also to John Lowell for the write-up.

The attendance figures for this year's meetings are as follows:

	1994	1995
Spring meeting	36	36
Summer meeting week 1	12	8 (Northumberland)
Summer meeting week 2	17	11 (Tatras)
AGM weekend	56	36
Workshop	12	8
TOTAL	133	99

Numbers attending meetings continue to bump along unevenly: not many at the summer meetings this year; perhaps the Tatras were too ambitious for most, while Northumberland may not have been a sufficiently attractive proposition to attract large numbers? Numbers at the AGM were also down on the normal level, and the combined total for the year was well down on the 1994 total. Still, considering the full diaries that everyone seems to have these days, it is encouraging that enough people remain enthusiastic enough to spend their time at BBS meetings. The situation can be expected to improve in 1996, with the full programme of centenary-related meetings.

The local groups seem to be doing well. I was particularly pleased (and entertained) to read Mark Lawley's account of the Welsh Border Bryologists' excursions in 1995.

Thanks once again to everyone who has contributed to making my job a little easier over the last year. Keep the suggestions and offers to organise meetings coming!

Nick Hodgetts, March 1 1996

j) MEMBERSHIP SECRETARY'S REPORT

Membership numbers are shown in the Table.

It is pleasing to note that the trend in total membership numbers is still upward but the gap between members lost and members gained has narrowed considerably since last year. None of the resignations can be attributed to the increase in subscription but with some 100 subscriptions still to be paid a complete analysis is not possible.

Membership Numbers - 1 January 1996

	1989	1990	1991	1992	1993	1994	1995
New members							
UK	20	20	19	26	24	27	27
Overseas	7	8	9	4	11	18	9
Total	27	28	36	30	35	45	36
Members lost by: by							
Death	8	5	3	4	2	2	4
Resignation	11	9	11	9	3	4	14
Other	10	15	9	13	19	11	14
Total overseas	207	199	190	186	187	202	209
Total UK	323	330	352	360	370	383	380
NET TOTAL	530	529	542	546	557	585	588
Comprising:							
Honorary	14	13	12	11	11	11	10
Ordinary & Junior	502	503	512	513	524	545	549
Family	14	13	18	22	22	29	29
Turnover ratio × 100	11	11	11	10	10	11	12

A.V. Smith, January 1996

k) PUBLICITY OFFICER'S REPORT

Sweatshirts: BBS sweatshirts have sold well, with 78 now sold. This leaves only 7 medium Ash, and 10 medium Burgundy. Order 2 (September 1993, 40 shirts, costing £371.30) is sold out, bringing in £480, or a profit of £108.70, whereas order 1 (September 1991, 56 shirts, costing £502.43, has 14 'medium' shirts yet to sell, bringing in £492.00, or a loss of £10.43). Total gross (not counting the loss of income from tie-up capital) profit of £98.27. Sales are slow, because of the small demand for the small size that remains.

Postcards: 604 sets of 16 cards have been sold so far (9,664 cards), bringing in £1,752.78 against the gross (not counting the loss of income from tie-up capital) cost of £2,407.168, leaving a current deficit of £654.388. The cards will continue to sell, though it would be rash to predict a break-even date.

Car stickers: I apologise for not having re-ordered the car-stickers, as agreed at Council last year. This is in part due to pressure of work, but possibly also influenced by the distinct lack of enthusiasm shown by Council on the matter.

Common names: BBS Council (Autumn 1992) agreed that a list of common names for bryophytes should be drawn up and published. The list has so far accumulated 2,738 published or submitted English names for British bryophytes (2,317 for mosses, 12 for hornworts, and 325 for liverworts), plus 84 names for non-British bryophytes. Of the British bryophytes, 85 species of moss, no hornworts, and 115 liverworts, still lack an English name. Most of the names have each been found in two or more sources, several times in eight or more sources although these include duplicate finds through secondary sources. A total of 70 sources have been examined and referenced, and many of these have themselves gathered from further sources which are subreferenced here when known. I have one major source that I know of yet to see (on order), and I should now like to complete the list, hopefully for production during the centenary year.

Travelling Exhibition: remains stored at The Manchester Museum, pending Council's decision as to its use during this Centenary Year.

Dawyck: Alan Bennell (Royal Botanic Garden, Edinburgh) has extended the deadline for the Dawyk Botanic Garden: Cryptogamic Sanctuary information panels to the end of April, because he will not be able to start looking at the input until then. This deadline will be met.

General: I regret a fairly low level of activity as BBS Publicity Officer for the last year. This is at least in part due to unusual pressures at work, which have however recently been eased by the appointment last month of a Curatorial Assistant.

Sean Edwards, 13 April 1996

l) READING CIRCLE SECRETARY'S REPORT

The Reading Circle currently lists 33 members; one of these is inactive and two more are on the 'black list' due to lack of funds, and have not been topped up despite reminders. These and one other will be deleted at the year end making the effective membership 29. Contents lists of 12 issues of 4 journals were circulated and copies of 47 articles were supplied to 11 members.

list of new records. For the Centenary year 1996 some appropriately distinguished finds are expected.

D.G. Long, March 1996

n) REPORT OF THE RECORDER FOR MOSSES

The number of records this year has been disappointing, but is due in part to the surprising dearth of records from the meetings in Cumbria and Durham/Northumberland. Among the year's most significant records have been *Dicranodontium asperulum* new to England and *Atrichum tenellum* new to Wales. There have been notable extensions of range for *Grimmia ovalis*, refound in south-east England, and for *Distichium capillaceum* and *D. inclinatum* in Cornwall. The new localities for *Scopelophila cataractae* and *Dicranum polysetum* are also welcome, but the year's most curious record has been *Hedwigia ciliata* growing as an epiphyte in Essex!

The figures which follow do not include specimens redetermined during the revisions of *Phascum cuspidatum* ssp. *papillosum*, riparian species of *Schistidium*, and *Hedwigia ciliata* agg.

	New records collected 1994-95	New records collected pre-1994	Deletions
England	59	5	2
Wales	3	2	0
Scotland	12	0	1
Ireland	0	1	0
Totals	74	8	3

I would like to thank Alan Orange and Alan Crundwell for sending me details of their revisions of riparian *Schistidia* and *Hedwigia ciliata* agg. respectively. I am also grateful to Roy Perry for the loan of herbarium material.

T.L. Blockeel, February 1996

o) RECORDING SECRETARY'S REPORT

The new A4-size record cards appear to have infiltrated the bryological establishment fairly thoroughly now and a policy of offering replacements for any completed cards sent in commenced in 1995. All cards received during my period of office were submitted to BRC during the year for updating the computer database of BBS records. BRC organized a new print run of cards at no expense to the BBS. Some concern was expressed during the year over the difficulty of obtaining computerized information from BRC and little or no progress was made there in sending out the records that had earlier been promised to Recorders. I hope that a new Recording Secretary will be able to ease this problem. I have not yet found time to analyse the epiphyte survey data but it will eventually be dealt with. I wish every success to Ron Porley who takes over as Recording Secretary from January 1996.

J.W. Bates, January 1996

PROCEEDINGS OF THE BRITISH BRYOLOGICAL SOCIETY

SUMMER FIELD MEETING, TATRA MOUNTAINS, 1995

The B.B.S. meeting in Slovakia was an opportunity to visit an area little known to most British bryologists. In the event just six members attended the meeting from the U.K.: John Blackburn, Tom Blockeel, Dick Gutteridge, Peter Martin, Ron Porley and Harold Whitehouse. Joan Gutteridge unfortunately had to pull out at the last moment, leaving her husband to cope with five bryologists. An overnight stop gave us the opportunity to look briefly around the beautiful city of Prague before flying on to Poprad next morning. Dr Rudolph Šoltés, of the Research Station of the Tatra National Park, was our local organiser and did an excellent job. A very informative field excursion booklet had been prepared for us, and each were presented with Dr Šoltés' book *Tatra flowers*. We were very pleased to be joined later by Prof. Jiri Váňa, Thomas Homm, Blanka Buryová and Ivan Novotný.

The Tatra Mountains, a 27km long granite massif covering some 260 sq km, forms the northernmost range of the Carpathian Mountains. It is one of the most compact high mountain ranges in the world. The maximum altitude is 2655m, with many peaks over 2500m. There are frequent outcrops of limestones, schists and base-rich Mylonite. The massif is protected by several National Parks which comprise spruce-pine-larch forest, dwarf pine belt, alpine grassland, peatland systems and chionophilous vegetation. However, some areas are popular for winter sports which can all too easily damage arctic-alpine communities, and the Winter Olympics are due to be held here in 2002. Although much of the Tatra Mountains is situated in Slovakia, the northern part of the High Tatra is in Poland. The Tatras are also at the watershed of Europe. The eastern part of the Slovakian Tatras drains south into the River Poprad, which then turns north to join the River Dunajec, the longest river canyon in Central Europe. This then meets the River Vistula in Poland and so reaches the Baltic. The western Tatras, however, drain south into the Danube, on eventually to the Black Sea.

Dr Šoltés had prepared a wide-ranging and varied programme for us, with our own transport in a sturdy Russian-made minibus. Although some of the excursions involved long drives, this did allow us to see a good cross-section of habitats, and we were fortunate to have access along otherwise closed roads to the heads of some of the valleys.

Day 1: 14 August. Monková dolina - Zadné Meďodoly Valley

As we gathered outside our hotel in early morning sunshine our party was joined by a young Czech bryologist, Blanka Buryová (a student of Prof. Váňa) and Thomas Homm from Germany. The excursion started in a glacial valley at 930m, proceeding up through spruce forest. This was our first opportunity to look at the bryophytes in the Tatra Mountains and so progress was inevitably slow. It also turned out to be one of our longest days. Under the shade of the forest we encountered plants such as *Tritomaria quinquedentata*, *Rhizomnium magnifolium*, *Eurhynchium angustirete* and *Rhytidiadelphus subpinnatus*. Rotten wood was a frequent feature, supporting *Tritomaria exsecta*, *Cephalozia lunulifolia*, *Scapania umbrosa*, *Blapharostoma trichophyllum*, *Riccardia palmata* and *Herzogiella seligeri*. Two especially nice finds were *Anastrophyllum michauxii* and *Lophozia ascendens*, the last species on the European Red List. Vascular plants were certainly not ignored, and Dr Šoltés pointed out the

beautiful Tatra endemic *Aconitum firmum*. A stream added diversity, with *Dichodontium pellucidum*, *Hygrohypnum luridum* and *H. ochraceum* on wet rocks. As we ascended, the forest opened up and exposed rocks outcropped. The calcareous nature of the rock was evident with *Scapania aequiloba*, *Distichium capillaceum*, *Gymnostomum aeruginosum*, *Didymodon ferrugineus*, *Platydictya jungermannioides*, *Orthothecium rufescens*, *O. intricatum*, *Campylium halleri*, and *Tortella tortuosa* with sporophytes. On damp rock ledges bordering the stream *Preissia quadrata*, *Pedinophyllum interruptum* and *Hymenostylium recurvirostrum* were characteristic. *Hypnum lindbergii* was seen on top of a limestone boulder, a curious habitat, and *Distichium inclinatum* was found by Harold on thin peaty soil overlying limestone. On drier, more exposed boulders *Paraleucobryum enerve*, *Pseudoleskea incurvata*, *Ptychodium plicatum*, *Pseudoleskeella catenulata*, *P. nervosa* and *Pterigynandrum filiforme* were noted. North-facing crags, above the *Pinus mugo* zone, yielded other interesting plants including *Sauteria alpina*, and Tom collected *Tritomaria scitula*. Time was seemingly against us and we had to press on if we were to complete the route which would take us into the next valley. Boulder scree near to the saddle at 1930m diverted our attention again, finding *Anastrepta orcadensis*, *Bazzania tricrenata*, *Timmia norvegica* and *T. austriaca*, and growing directly on siliceous rock, *Andreaea rupestris*, *Dicranoweisia crispula*, *Racomitrium sudeticum* and *Grimmia incurva* fo. *longifolia*. As we reached the saddle we paused to take in the splendid rugged mountain landscape of the Belianske Tatras, and from then on it was a rapid descent to rendezvous with the awaiting bus. A *Hygrohypnum* in the stream here has proved difficult to name: it has a strong single leaf nerve but is probably a stout form of *H. luridum* rather than *H. polare*.

Day 2: 15 August. Temnosmrečinová Valley

A number of other people joined us today, mostly from Bratislava, to look for vascular plants. Situated between the High Tatras and the West Tatras, the Temnosmrečinová Valley winds its way through spruce forest with relict stands of *Pinus cembra*. We soon found *Racomitrium microcarpon* on rocks by the forest path, and Ron turned up *Lophozia ascendens* on rotting wood.

A number of small flushes occur in the valley floor and support a variety of *Sphagnum* species that illustrate the complex nature of the groundwater influence, including *S. magellanicum*, *S. papillosum*, *S. teres*, *S. squarrosum*, *S. palustre* var. *centrale* (*S. palustre* var. *palustre* being very rare in this part of Europe), and a fine stand of *S. riparium* was seen under spruce. *Marsupella sprucei* was collected on a stone in a runnel, and amongst the other bryophytes of these flushes were *Scapania uliginosa*, *Philonotis seriata*, *Drepanocladus exannulatus* and on a peaty bank *Calypogeia azurea*. *Bryum pallescens* was collected by Blanka. A small mire at 1500m was more obviously base-rich with *Sphagnum subsecundum*, *S. russowii* and *Calliergon sarmentosum*. As we ascended, the ground became more open and rocky with runnels and flushes dispersed around *Pinus mugo*. On wet skeletal soils and on rocks were many interesting plants, particularly *Lophozia wenzelii* and *Tritomaria polita*, both spotted by Tom. Other species included *Jungermannia obovata*, *J. sphaerocarpa*, *Marsupella emarginata*, *M. sphacelata*, *Blindia acuta*, and a fertile colony of *Moerckia blyttii* was much admired on wet soil in the shelter of crags. Our destination was to be two montane lakes, and the surrounding boulder strewn landscape proved to be very interesting. Several *Grimmia* cushions were collected, and these turned out to be *G. sessitana*, *G. incurva* fo. *brevifolia* and *G. anomala*. The latter plant, collected by Tom, had distinctive gemmae on the leaf apices. Other plants of note include *Lophozia sudetica*, *Gymnomitrium concinatum*, *Diplophyllum taxifolium*, *Dicranoweisia crispula*, *Kiaeria falcata*, *K. starkei*,

Paraleucobryum longifolium, *Racomitrium sudeticum* and *R. lanuginosum* (surprisingly rare). By now we were shrouded in billowing mist and ghostly bryologists hovered about. A splinter group reached the second, further lake and were rewarded by finding *Oncophorus virens*, *Paraleucobryum enerve*, *Tortula norvegica*, *Pseudoleskea radicata* and *Hygrohypnum duriusculum*. Peter collected *Lescuraea saxicola*. Meanwhile, Dr Šoltés advised that the weather was not looking too good and that we should retreat. He was of course right, and soon the mist was augmented by heavy cold rain, and then hail the size of peas. Bryology was suspended as we concentrated on survival and negotiating the by now slippery boulders. One could tell that Dick's mind was more on a warming Carpathian brandy awaiting him back at the hotel.

Day 3: 16 August. Juráňova Valley

We were very pleased to be joined by Professor Váňa, and set out on a cool cloudy morning, but had at least dried out from yesterday's soaking. After a long detour around the southern boundary of the National Park we arrived at a rich fen near Oravice, one of many mire communities within this valley showing boreal phytogeographical elements. Almost immediately our spirits soared as we found the handsome *Paludella squarrosa* and abundant *Tomentypnum nitens*. Our excitement was further fuelled by finding the relict boreal *Meesia triquetra* amongst the rather dense sedge. Other associates included *Sphagnum warnstorffii*, *S. teres*, *Fissidens adianthoides*, *Plagiomnium elatum*, *P. ellipticum*, *Aulaacomnium palustre*, *Climacium dendroides*, *Campylium stellatum*, *Drepanocladus vernicosus*, *D. cossonii* and a small amount of *Moerckia hibernica*. *Philonotis calcarea* and *P. fontana* were both present, and Blanka, who is something of an expert on this genus, explained the subtle vegetative differences between them. Much discussion ensued when a robust *Hypnum*-type plant was found by Ron, and eventually the name of *Hypnum pratense* was unanimously agreed upon, a plant not known from this site and a rarity in Slovakia.

After some lunch we checked out a small isolated area of relict raised bog near Zuberec. Unfortunately succession had taken its toll; the mire was drying out and few species of interest, apart from *Sphagnum russowii*, remained. However an abundance of the continental *Ledum palustre* was good to see, and the willow gentian, *Gentiana asclepiadea*, was in fine form. Of considerably more interest though was an arable field, reclaimed no doubt from the former raised bog adjacent. Harold was in his element, and it turned out that, amongst the *Bryum* he collected, there was *Bryum demaretianum* in only its second European locality. Other notable finds were *Atrichum tenellum*, *Ditrichum pusillum*, *Pohlia lescuriana* and *Bryum tenuisetum*. Harold subsequently observed that the arable fields of Slovakia bore some remarkable similarities in their bryophytes to those of Quebec, where he has also found *Bryum demaretianum*.

On the way back to our hotel we made a brief stop to look at one or two roadside trees south of Zuberec and turned up *Pylaisia polyantha* and *Orthotrichum pumilum* (on *Populus tremula*).

Day 4: 17 August. Vajskovská Valley

Today's excursion started with another long drive to reach the Vajskovská Valley situated in the Low Tatras. Our primary objective was to re-find the European Red List plant *Ochryaea tatrensis*, discovered here by Prof. Váňa in 1985. To reach the locality at 1560m we had to proceed fairly rapidly through spruce forest and on through the *Pinus mugo* zone, giving

little time to look at bryophytes. It took much of the morning, in hot conditions, finally to come across the mountain stream. Prof. Váňa soon located the exact spot and showed *Ochryaea tatrensis* to an enthralled audience. Under the lens the opaque multistratose leaves are clearly discernible and we pondered its affinities to other disjunct genera in the world. It was seen in three separate places in the stream, but Prof. Váňa was convinced that it had declined since his last visit. However, he also told us that he had discovered the plant in another stream in a nearby valley; this gives some optimism for its survival. Equally interesting was that its main associate was *Hygrohypnum smithii*, with sporophytes. Many other species were present on the wet rocks including *Jungermannia pumila*, *J. obovata*, *Scapania undulata*, *Dicranella palustris* and *Rhynchostegium riparioides*. The flushed ground in the vicinity of the stream supported *Scapania uliginosa*, *Sphagnum teres*, *Polytrichum alpinum*, *Rhizomnium magnifolium*, *Philonotis seriata* and *Calliergon sarmentosum*. On rocks we found *Gymnomitrium concinnatum*, *Paraleucobryum longifolium*, *Racomitrium sudeticum*, *R. aciculare*, *R. aquaticum*, *Grimmia muehlenbeckii* (*G. trichophylla* var. *tenuis*) and *Pterigynandrum filiforme*. The long descent to rendezvous with the bus left little time for bryology although *Hypnum pallescens* was seen on the bark of *Sorbus aucuparia*. On the way back to the hotel our thirsts were slaked as we stopped off at a natural spring where some of us filled our bottles with effervescent mountain water!

Day 5: 18 August. Javorový Ž'lab, Červené vrchy

Before breakfast a small but keen party visited some cultivated ground towards the village of Stará Lesná to look for arable plants, led by Harold. The ground was very dry though and not very productive, but we did find *Dicranella staphylina*, *Pohlia melanodon* and *Bryum klinggraeffii*. Following breakfast we were joined by Prof. Váňa, who suggested we might try a different locality to the one given in our excursion guide. This proved to be an excellent move. The site was relatively close by, in the High Tatras. Soon after we set off, Harold and Tom collected *Plagiomnium medium* growing on rocks close to a stream. As we gained altitude our list rapidly grew with such plants as *Tortula norvegica*, *Tortella fragilis*, *Mnium stellare*, *M. spinosum*, *Ptychodium plicatum* and *Brachythecium geheebii*, a species on the European Red List. On limestone cliffs at and near a cave we found *Seligeria trifurata*, *Gymnostomum aeruginosum*, *Cirriphyllum cirrosum*, and *Orthothecium rufescens*. On the floor of the cave was abundant *Marchantia polymorpha* ssp. *montivagans*, and in a rock crevice *Bryum stirtonii*, found by Tom. *Desmatodon latifolius*, *Timmia austriaca* and *T. norvegica* were seen nearby on rocky ground.

After lunch, we headed for higher ground at about 1700m and eventually came upon a sheltered rocky gully with fine views of the High Tatras. The sheer variety of bryophytes that confronted us here was incredible. The list is a long one but includes *Peltolepis quadrata*, *Sauteria alpina*, *Asterella lindenbergiana*, *Leiocolea alpestris*, *L. heterocolpos*, *Barbilophozia lycopodioides*, *Jungermannia confertissima*, *Anthelia juratzkana*, *Distichium capillaceum*, *Oncophorus virens*, *Encalypta alpina*, *Tayloria froelichiana* with capsules, *Mnium thomsonii*, *M. ambiguum*, *Meesia uliginosa*, *Timmia norvegica*, *Heterocladium dimorphum*, *Hypnum recurvatum* and *Hylocomium pyrenaicum*. There was also a small *Scapania* of section *Curtae*, probably *S. helvetica*, but unfortunately sterile. We were reluctant to leave such a rich area but time was getting short. On the way down, as we passed through spruce forest, we saw some fine stands of *Rhytidiadelphus subpinnatus*. This was, we all agreed later, probably the most bryologically interesting day we had in the Tatras.

Day 6: 19 August. 'Lazy' Meadows near Pribylina.

After two days on the high ground, we had a short easy day in the field on day 6, and the name of our destination seemed curiously appropriate. The site at 'Lazy' Meadows is a wetland on gently sloping ground where calcareous springs emerge over granite bedrock, creating areas of flushed ground and fen. The habitat was therefore rather different from the mire at Oravice which we visited on day 3, and it was not quite so rich. However, there was a greater quantity of *Paludella squarrosa*, which grew in some very fine patches, and *Hypnum pratense* was again present. Other mire species included *Sphagnum teres*, *S. warnstorffii*, *S. angustifolium*, *Plagiomnium elatum*, *Drepanocladus cossonii*, *Tomentypnum nitens* and *Calliergon giganteum*.

We finished our exploration soon after lunch, and had a free afternoon. Most members decided to visit a nearby Museum, but Harold and Tom spent some time in the adjacent arable fields. These were very dry for the most part, but Harold found a damp corner and eventually turned up *Riccia sorocarpa*, *Ditrichum pusillum*, *D. cylindricum* and *Dicranella staphylina*, along with some immature *Anthoceros* and *Fossombronina* species. (The *Anthoceros* later matured in the laboratory and turned out to be *A. agrestis*.) On poplar trees by the road there were small amounts of *Orthotrichum pumilum* and *Pylaisia polyantha*.

Day 7: 20 August. Dunajec Canyon, Pieniny National Park.

The Pieniny National Park, to the east of the High Tatras, is an area of wooded calcareous hills in the Carpathian 'klippen' zone. The Dunajec river forms a fine canyon separating the greater part of the park in Poland from the smaller part in Slovakia. The river is popular with rafters, and as this was a Sunday a constant (but one-way) procession of rafts passed us by as we walked the river banks.

Our visit began, however, when we were conducted around the Red Monastery (Červený Kláštor) at the western entrance to the Canyon. This former Carthusian Monastery is now being redeveloped as a Museum. From here the riverside path leads north-eastwards through Spruce and Beech woods on craggy limestone. The bryophyte flora has much in common with that of our British limestone hills, but with a more continental flavour. *Anomodon attenuatus* was common on the rocks, and *Cirriphyllum tommasinii* was eventually located on some shaded crags. A straight-leaved *Hypnum* growing over the limestone rocks was at first thought to be *Callicladium haldanianum* but has now been identified as *H. cupressiforme* var. *subjulaceum*. It is a distinctive plant, with sharply pointed branches and excavated, brown leaf auricles. Other species noted on the shaded limestone included *Apometzgeria pubescens*, *Pedinophyllum interruptum*, *Lophocolea minor*, *Scapania calcicola*, *S. aequiloba*, *Cololejeunea calcarea*, *Didymodon ferrugineus*, *Seligeria donniana*, *Plagiobryum zieri*, *Mnium thomsonii*, *Plagiopus oederianus*, *Pseudoleskeella catenulata*, *Taxiphyllum wisgrillii* and *Homomallium incurvatum*. *Eurhynchium angustirete* was on the woodland floor, and *Jamesoniella autumnalis*, *Jungermannia leiantha*, *Nowellia curvifolia* and *Herzogiella seligeri* were noted on rotting wood. The epiphytes also had a continental flavour, and included *Pseudoleskeella nervosa* (on lime), *Platygyrium repens* (on sycamore) and *Amblystegium subtile* (on beech).

The path along the canyon was easy but the walk was fairly long and we had to be hurried along at times. Along the latter part of the route there were some steep bare cliffs which support a rare chrysanthemum *Dendranthema zawadskii*. The bryophytes here included

abundant *Pseudoleskeella catenulata*, along with *Thuidium abietinum*, *Hypnum vaucheri* and *Rhytidium rugosum*. A robust *Homalothecium* on the rocks was thought to be *H. philippeanum*, but appears in fact to be *H. lutescens*, in a form similar to that which occurs on the Pennine limestones in Britain.

We left the river just south of the Polish border, near the village of Lesnica. The path passed some sunny crags noted for various *Grimmias*, but we had little time to explore them, and in any case rain clouds were gathering. However a hurried collection was later found to include a few stems of *Grimmia tergestina*. We arrived back at our bus just in time to avoid a heavy rain shower. The intriguing mystery of the one-way rafts was also solved, when we saw them being loaded onto lorries to be driven back to the head of the canyon!

Day 8: 21 August. Suchá Belá Gorge, Slovak Paradise.

This day saw our second visit to the Low Tatra Mountains, in the wild wooded hills known as the Slovak Paradise (Slovenský Raj) south of Poprad. We drove to Podlesok and walked up the Suchá Belá gorge, a deep ravine negotiated only with the help of bridges and ladders (not for the faint of heart!). Although the base of the ravine is at an altitude of only 550m, the cool conditions allow the occurrence of some alpine species.

There was much wet limestone along the bottom of the gorge and it was not long before we were able to see *Barbula crocea* near the stream. We soon assembled a long list of species characteristic of wet shaded limestone, including *Pedinophyllum interruptum*, *Scapania aequiloba*, *Lejeunea cavifolia*, *Cololejeunea calcarea*, *Seligeria donniana*, *S. acutifolia*, *Campylium halleri*, *Orthothecium rufescens* and *O. intricatum*. A particularly interesting find was *Hypnum sauteri*, a tiny plant with strongly falcate leaves, growing in thin mats closely appressed to the wet rock. Among the many other species observed on wet ledges and shaded crags were *Moerckia hibernica*, *Barbilophozia barbata*, *Trichocolea tomentella*, *Didymodon ferrugineus*, *Plagiobryum zieri*, *Plagiopus oederianus*, *Amblyodon dealbatus*, *Timmia bavarica*, *T. austriaca*, *Pseudoleskeella catenulata* and *Thuidium recognitum*.

There were many logs and tree stumps in the bottom of the gorge and the wet conditions favoured a rich growth of bryophytes. In addition to the widespread *Ptilidium pulcherrimum*, *Riccardia palmata* and *Herzogiella seligeri*, we saw both *Jungermannia leiantha* and *Jamesoniella autumnalis* with perianths, and also *Tritomaria exsecta*, *Cephalozia catenulata*, *C. leucantha*, *Nowellia curvifolia* and *Calypogeia suecica*. For many of us, however, the highlight of the day was the discovery of *Buxbaumia viridis* in two places, at first a single capsule on a decayed log and later at least six more capsules on a single stump. Epiphytes on the living trees included *Leucodon sciuroides*, *Neckera pumila*, *Anomodon attenuatus* and *Platygyrium repens*.

The steep gorge sides made it difficult to examine the woodland ground flora in any detail, but *Plagiomnium medium*, *Eurhynchium angustirete* and *Ptilium crista-castrensis* were noted. In the upper part of the gorge there were pockets of acid ground on peaty humus, with increasing quantities of *Mylia taylorii* and small patches of *Bazzania trilobata*, *Sphagnum quinquefarium* and *Bartramia halleriana*. Also collected on ledges near the head of the gorge were *Brachythecium glareosum* and *Eurhynchium speciosum*. However our exploration of this area was curtailed by gathering storm clouds, and Dr Šoltés led us on a hasty retreat down a woodland path to the car park. Not all of us escaped the deluge!

Day 9: 22 August. Smutná Dolina.

This day, in the West Tatras, was to be our last on the high ground. Smutná Dolina is a cirque valley-head branching from the Roháčska Dolina valley. It has a fine series of north- to north-west-facing crags, partly formed of base-rich rock (Mylonite). The valley bottom is granite. Unfortunately its position to the north-west of the Banikov/Ostrý Rohác ridge necessitated a long drive round the West Tatras to the head of the Roháčska Dolina. Fortunately the road leads high into the valley and it was only a short walk into the bottom of Smutná Dolina.

The area below the saddle at the head of the valley was known to have a rich flora, including the interesting relict liverwort *Bucegia romanica* (Marchantiaceae), a species confined in Europe to the Carpathian chain. However as the saddle was still over a kilometre distant we decided that our time would be better spent on the nearer crags of Ostrý Rohác towering above the base of the valley. This decision was amply justified, as the crags (at 1700-1800m) proved to have a very exciting flora. It was particularly frustrating, therefore, that our exploration was hampered by a prolonged spell of heavy rain and a period of dense mist. Those of us who reached the high crags were duly rewarded with some fine patches of *Bucegia romanica* growing on thin soil on rock ledges and in crevices. The long list of other species noted on the main crags included *Peltolepis quadrata* c.fr., *Sauteria alpina*, *Barbilophozia hatcheri*, *Eremonotus myriocarpus*, *Tritomaria polita*, *Jungermannia subelliptica*, *Scapania cuspiduligera*, *Anthelia juratzkana*, *Cephalozia ambigua*, *Bazzania tricenata*, *Ditrichum zonatum*, *Saelania glaucescens*, *Encalypta alpina*, *E. ciliata*, *Geheebia gigantea*, *Grimmia funalis*, *Bryum elegans*, *Meesia uliginosa*, *Timmia austriaca*, *Amphidium lapponicum*, *Myurella julacea*, *Lescurea saxicola*, *Pseudoleskea patens*, *Ptychodium plicatum*, *Cratoneuron curvicaule*, *Campylium halleri*, *Brachythecium glaciale*, *Cirriphyllum cirrosum*, *Isopterygiopsis muelleriana*, *Orthothecium rufescens*, *Hypnum callichroum*, *H. bambergi* and *Hylocomium pyrenaicum*. Some of these were detected only in small quantity in material collected for examination, and undoubtedly we missed many other species because of the poor conditions.

The granite valley bottom with boulders and *Pinus mugo* thickets, and the adjacent scree slopes, produced some additional species collected *en route*. These included *Lophozia sudetica*, *Mylia taylorii*, *Gymnomitrium concinnatum*, *Diplophyllum taxifolium*, *Bazzania trilobata* (under the *Pinus mugo*), *B. tricenata*, *Polytrichum sexangulare*, *Kiaeria starkei*, *K. blyttii*, *Grimmia sessitana* and *G. incurva*.

This was a wonderful place, and had the conditions been better it would probably have outdone Javorovy Z'lab as the most memorable venue of the meeting.

Day 10: 23 August. Belianske Lúky Meadows.

Our final day began with a visit to the newly created botanical gardens at the Research Station in Tatranská Lomnica, entirely stocked with local native plants.

From there we moved to the Belianske Lúky meadows near Tatranská Kotlina, which form an extensive area of wetlands irrigated by underground calcareous water draining from the Belianske Tatry mountains. Unfortunately, with the cessation of grazing, we found them to be largely overgrown with tall herbs and encroaching scrub, and there were very few open areas of fen. It was not surprising that we failed to find many of the species which we had

seen at the two previous wetland sites. *Plagiomnium elatum*, *Campyllum elodes*, *Drepanocladus cossonii*, *Tomentypnum nitens* and *Calliergon giganteum* were among those noted.

We finished our visit by lunchtime, and this gave Harold and others a further opportunity to explore arable fields. They collected *Riccia glauca*, *Ditrichum cylindricum*, *Dicranella staphylina*, *Bryum klinggraeffii* and *B. violaceum*. *Orthotrichum speciosum* and *O. striatum* were collected on nearby trees.

This was the end of serious bryology for the day – and the meeting – and we spent the afternoon visiting the nearby Belianska Jaskyňa caves. Later we were treated to an excellent *al fresco* meal in the forest near Tatranská Lomnica – an excellent goulash of wild boar cooked in large cauldrons, and accompanied by rather more liquid refreshment than most of us could manage! We expressed our gratitude to Dr Šoltés, and also to the National Park authorities who had co-operated with our visit and helped to make it such a success. There was some lively discussion about conservation of the flora, and Ron could not resist stating his strong views about the need for positive management of the wetlands, which otherwise would soon be lost.

All of us who participated in the meeting saw new species, and no doubt each of us left with our different impressions of the flora. We were able to see some 30 species which are unknown (or extinct) in the British Isles. Striking for British bryologists were the plentiful occurrence of Leskeaceae, and the fine array of montane Marchantiales. It was particularly pleasing to have the opportunity to see taxa such as *Bucegia* which have a disjunct and fragmented range in the northern hemisphere. We were also able to make a significant contribution to the knowledge of the local flora, with localities for several species new to, or very rare in, Slovakia. We are very grateful to Dr Šoltés for his hard work and efficiency in organising the meeting.

T.L. BLOCKEEL & R.D. PORLEY

MINUTES OF THE ANNUAL GENERAL MEETING, NORWICH, 1995

Minutes of the Annual General Meeting held in the Arts Building of the University of East Anglia, Norwich, at 4.55 p.m. on Saturday, 9 September, 1995.

PRESENT: Mr A.R. Perry (Vice-President, Bulletin Editor and Curator, in the chair) and 32 other members.

The Vice-President, deputizing for Dr R.E. Longton (President), who was then in Australia, opened the meeting by recording the deaths during the year of Mr F.E. Branson, Mr J.H. Field, and Mr A.R. Milne of Sevenoaks, the last of whom had been a member for only a very short time. Dr M.E. Newton spoke briefly of Mr Branson's enthusiastic recording in Yorkshire for the *Atlas* during the 1960s and early 1970s, and also of his considerable generosity in supplying material for her cytological work. Mr Perry, in acknowledging Mr Field's deep interest in *Philonotis*, reported that his herbarium, devoted almost entirely to that genus, had been placed in the NMW herbarium.

Mr Perry then read a short extract from a letter in which Dr E.V. Watson thanked the B.B.S. for its tribute to him in *J. Bryol.* 18(3). He had deeply appreciated it, and asked that this be conveyed to all members.

(1) **APOLOGIES FOR ABSENCE:** Apologies had been received from Dr J.W. Bates, Mr T.H. Blackstock, Mr G. Bloom, Prof. D.J. Cove, Dr S.R. Edwards, Mr L.T. Ellis, Mr M.V. Fletcher, Dr M.O. Hill, Mr J.H. Holness, Mr P.L. King, Mr D.G. Long, Dr R.E. Longton, Mr J. Mort, Mrs J.A. Paton, Mr C.D. Preston, Prof. P.W. Richards, Mr R.F. Shoubridge, Mr A.C. Smith, Dr A.J.E. Smith, Mr D.F. Strauss and Dr E.V. Watson.

(2) **MINUTES OF THE LAST A.G.M., PRESTON MONTFORD FIELD CENTRE, 1994:** These were approved and signed as an accurate record of the meeting. Mr Perry thanked the Secretary for their preparation.

(3) **MATTERS ARISING:**

a) Item 3(b), Corresponding Foreign Member: Dr Newton reported that Council had discussed the idea of appointing an overseas member to act in this capacity, as requested by the A.G.M. It was generally agreed to be impractical and thus inappropriate. Instead, Council recommended that membership of the International Association of Bryologists should be encouraged.

b) Item 4(e), Wallace Memorial Reserve: Dr Newton read a report kindly drawn up by Mr A.C. Crundwell. In it, he summarized current management practices, which included regular hydrological monitoring. A little *Trichocolea tomentella* had been found, and *Ricciolepis natans* continued to flourish. At the end of December, 1994, the 'Ted Wallace Fund' stood at £4778. Mr Perry thanked Mr Crundwell for his work on behalf of the B.B.S.

(4) **REPORTS OF OFFICERS FOR 1994:** These had been published in *Bulletin* 66, and gave rise to the following comments and discussion:

a) **General Secretary:** Dr Newton said there were two errors in the printed version. The second sentence of paragraph 3 should have read 'benefits, but also places ...'. The last sentence of the report should be 'is also indebted this year to everyone ...'. These were quite understandable slips and were, as Mr Perry explained, simply problems of scanning.

d) **Bulletin Editor:** Mr Perry apologized for the late publication of the most recent issue. He reminded members of the copy deadlines, December 15th and May 15th, and said he must adhere to them strictly in future. Prof. M.R.D. Seaward said this was vitally important. He, himself, had received his copy only just before nominations for Council were due. In reply to a question from Dr P.E. Stanley, Mr Perry said preparation of the last issue had taken 45 hours, excluding scanning, and members thanked him for his efforts. In response to a question from Dr Stanley, it was agreed to publish the B.B.S. Rules, together with two amendments, in or with the *Bulletin*. The idea of Prof. Seaward that a centre-spread could be extracted to provide copies of the Rules for Mr A.V. Smith to circulate, would be examined.

e) **Conservation Officer:** Mr R.C. Stern reported that his note on the provision of information by Regional Recorders would be circulated in the next month or so.

f) **Curator:** Mr Perry reported that specimens, previously held in the order used by the *Census Catalogue*, were now in alphabetical order. In response to questions from Mr Crundwell and Mr R.J. Fisk, he confirmed that the nomenclature was that of the *Census*

Catalogue, that mosses and hepatics were filed separately, and that specimens of each taxon were placed in numerical order according to vice-county.

- g) **Journal Editor:** Mr Fisk enquired whether anything could be done to ensure that forthcoming issues of the *Journal* would not have the unnecessarily large spine of recent issues, a problem to which Mr Perry said many members had drawn attention. Prof. J.G. Duckett said it was a lamination problem, which could be resolved.
- h) **Librarian:** Dr K.J. Adams regretted that the price of the cheaper forceps available to members had now doubled to £4. The cost of eyepiece graticules was £25.
- i) **Meetings Secretary:** Mr N.G. Hodgetts expressed his thanks to Mr P. Martin for taking on, at short notice, the British end of organizing the meeting in the Tatra Mountains, thanks which others endorsed. In response to a question from Dr Stanley, Mr Hodgetts confirmed that the dates for start and finish of summer meetings in 1996 were Saturdays.
- j) **Membership Secretary:** Mr Perry said Mr Smith had examined in detail the possibility of setting up a system of direct debits for subscriptions, and had spent a lot of time on it. However, he (Mr Smith) had decided, with Council's agreement, that it would cost far too much to be viable. Mr Smith said he had also been looking at the possibility of covenanting subscriptions, which would bring back about £1 per member. If it seemed worth pursuing, details would be sent to members prior to January 1st, 1996, when subscriptions became due.
- n) **Recorder for Mosses:** Mr T.L. Blockeel observed that new records for the year had been generally good.

5) REPORT FROM COUNCIL:

a) Centenary Celebrations:

- i) **Coffee-table book:** Mr Perry reported very little progress, because of other commitments, and apologized for this. He hoped it would still be completed in time, particularly as he had received some offers of help.
- ii) **Census Catalogue:** Mr Blockeel said it was still intended to publish this in 1996. Work was continuing, using the *Atlas* database to identify records which were more than 50 years old. Mr Crundwell made an impassioned plea for the cover to be a bright colour, which would imply that the contents were of greater interest than the contents of brown envelopes, the colour, he said, of the current volume. Mr Perry reported that Council was looking into various ways of publishing the new volume, as initial indications were that costs would be high. For 500 copies, quotations received to date were certainly in excess of £5 per copy, which is what Dr Adams said had been the selling price of the current issue, throughout. There was some considerable discussion of format, a widely held view, expressed by Dr R.A. Finch, being that print-size and convenience in use should not be compromised. Dr Finch said he thought the typeface used in the *Bulletin* might be taken as a lower limit in terms of size. Dr J.D. Sleath recommended that legibility could be improved by the use of bold type, and Miss J.M. Ide suggested inserting a cheap, flat magnifier.
- iii) **Symposium:** Prof. Duckett reported a full list of speakers, to all of whom Dr Longton had written. It would be an impressive meeting, to which nearly all speakers would come at their own expense or for only token reimbursement of expenses. Miss Ide said that, judging from the meeting she had recently organized at Kew for the British Pteridological Society, available places would be filled without difficulty.
- iv) **Other Meetings:** Mr Hodgetts said these were well in hand and had all been advertized.

- v) **Poster:** Dr Newton reported that the Centenary Committee had abandoned the idea of a poster because high costs were disproportionate to the likely benefits. However, Council had authorized Dr Edwards to investigate small colour reproductions of the poster-design for distribution to institutions and for sale to members, within a total budget of £500. Prof. Seaward was of the opinion that the money could be better spent elsewhere.
- b) **Back Numbers of the Journal and Transactions:** Mr Perry reported that the Society was currently in correspondence with Blackwell's concerning an apparent shortage of stock received from them by Maney's. In response to a question from Mr H.W. Matcham, Dr Newton said Blackwell's were being asked, in particular, about an apparent loss of stock with a re-sale value of more than £10,500. Dr Stanley said it was common practice for publishers to pulp unsold stock after a certain period of time, but Dr Newton reminded members that Blackwell's were paid to store stock for the Society.
- c) **Rules in the Context of a Charity:** Dr Newton reported that Council had been in correspondence with the Charity Commissioners on three points:
- i) the suitability of the Rules, together with amendments, in the context of a charity. These were accepted without comment.
 - ii) the suitability of the Council Newsletter as the Society's annual report to the Commissioners. This was still being considered, as they themselves were still considering what was required.
 - iii) the question of advertizing bryophyte courses free of charge in the *Bulletin*. The Commissioners confirmed that current practice did not create a conflict of interest and was in order.
- Dr Stanley enquired whether all Council members were trustees and was told by Dr Newton that they were, with all that that entailed. All, with the exception of one, had confirmed in writing their acceptance of those obligations, and Dr Newton understood that the one exception had given a verbal undertaking to Mr E.R. Hurr.
- d) **Publications Committee:** Mr Perry reported the setting up of this committee, which had not yet met, and told Mr Crundwell that three of its six members were *ex officio* (*Bulletin* Editor, *Journal* Editor, Treasurer). The others were selected for their appropriate abilities (Dr G.C.S. Clarke, Prof. J.G. Duckett, Miss J.M. Ide).
- e) **Back-Numbers of the Bulletin:** Mr Perry told members that Council had decided to advertize all remaining back-numbers of the *Bulletin* for the cost of postage. Numbers 1 - 22 were mostly Gestetner copies, and numbers 23 onwards were printed in A5 format.
- (6) **ELECTION OF OFFICERS:** Dr Newton reported Council's nominations, who were Dr G.C.S. Clarke (Vice-President) and Mr R.D. Porley (Recording Secretary), together with their present incumbents for the following posts: Treasurer (Mr E.R. Hurr), Bibliographer (Mr L.T. Ellis), *Bulletin* Editor (Mr A.R. Perry), Conservation Officer (Mr R.C. Stern), Curator (Mr A.R. Perry), Librarian (Dr K.J. Adams), Membership Secretary (Mr A.V. Smith), Publicity Officer (Dr S.R. Edwards), Recorder for Hepaticae (Mr D.G. Long) and Recorder for Mosses (Mr T.L. Blockeel).

Mr Perry said that requests for nominations had as usual been made in the *Bulletin*, and Dr A.J.E. Smith had been nominated for Vice-President by Dr P.E. Stanley, seconded by Mr R.J. Fisk. There would therefore be an election for Vice-President. He said members would be asked to write 'Clarke' or 'Smith' on papers provided, and these would be collected and counted by Mr J. Blackburn and Mr R. Stevenson, who would report the result without disclosing figures. The papers would be placed in an envelope and kept by himself (Mr Perry) as long as the law required. Before asking members to vote, Mr Perry

invited Dr Stanley and Prof. Duckett to speak on behalf of, respectively, Dr Smith and Dr Clarke.

Dr Stanley said Dr Smith was an active academic bryologist with nearly 40 years membership of the Society, and had been on Council for more than 30 years. He had served as the Editor of *J. Bryol.*, and had initiated the mapping scheme which culminated in the publication of the *Atlas*. Dr Smith had also written two floras, one on mosses and the other on hepatics, and was currently preparing a second edition of the former. Dr Smith had agreed to this nomination, although he would be overseas at the time of the meeting, organizing an M.Sc. course. Dr Stanley said Dr Smith had done a tremendous amount for the Society, and he commended him as next Vice-President.

Prof. Duckett said that he, himself, was involved with the *New Phytologist* Trust, as a result of which he knew that what the B.B.S. does follows the recommendations of the Charity Commissioners. He said Council looks at distinguished members, and at those who are experienced. Council discusses them and, because elections are best avoided as being divisive, decides on a single name. Dr Smith, he said, would have been considered in this context. Of Dr Clarke, Prof. Duckett said he had been a member of the B.B.S. for 30 or so years. He studied for a Ph.D. with the late Dr S.W. Greene, and had worked in the Antarctic. He took up a post in the Cryptogamic Herbarium at Manchester Museum and then moved on to the Natural History Museum, initially involved in curation but now in charge of exhibitions. Dr Clarke had attended meetings regularly, as we had seen from Mr Stern's photographs. He had served successively as Meetings Secretary, Bibliographer and Treasurer, and had been on Council for more than 21 years. Prof. Duckett said Dr Clarke's considerable skills were wanted on Council.

Prior to the vote being taken, Mr Matcham raised the possibility of a postal vote being organized, but Dr Newton and Prof. Duckett said the Rules required officers to be elected at the A.G.M. Dr Sleath also wished to know what duties fell to the Vice-President, and these were briefly outlined by Dr Newton. They included serving on the Executive Committee. When the tellers returned, Mr Perry declared that Dr Clarke had been elected as Vice-President. All other nominations were passed *en bloc*.

- (7) **ELECTION OF ELECTED MEMBERS OF COUNCIL:** Mr Perry reported that Prof. D.J. Cove, Miss J.I. Hendey and Mr G. Stark had been pleased to accept Council's nomination. Being unopposed, they were declared elected.

In discussion which followed, Prof. Seaward said he felt that the ordinary membership was not encouraged to contribute to the running of the Society. Dr Newton said, however, that Council wanted comment and advice, and was receptive to it, actively seeking it on an annual basis in the Council Newsletter. In response to Prof. Seaward's repeated complaints about the late receipt of *Bulletin 66*, which he said had prevented nominations being put forward this time, Mr Perry said that, historically, nominations were not forthcoming. It was therefore agreed, at the suggestion of Mr Hurr and Miss Ide, that nominations would be invited earlier, in the February issue of the *Bulletin*, followed by a reminder and a list of Council's nominations in the July issue.

- 8) **MEMBERSHIP SUBSCRIPTIONS:** In speaking of the proposed increase from £15 to £20 for Ordinary Membership, which had been advertized in *Bulletin 66*, Mr Hurr said he very much regretted the need. However, the Society must remain solvent and must therefore make an increase at the right time, which he judged this to be. He proposed that subscriptions for Family Members and Junior Members should remain at £1.00 and £7.50, respectively.

Dr Clarke strongly supported this view, saying that it was essential that the Society lives within its means. Considerable reserves had been mentioned in the past, but these were for specific purposes and should not be frittered away by subsidizing cheap membership. The proposal was moved by Dr Clarke, seconded by Dr Stanley, and accepted. Voting was 32 in favour, with one abstention – that of an Honorary Member.

- 9) **PLACE AND DATE OF THE NEXT ANNUAL GENERAL MEETING:** It was announced that this would be held at Ness Botanic Garden, on the Wirral, on 21 September, 1996.
- 10) **OTHER FUTURE MEETINGS:** Mr Hodgetts had a programme of meetings which had been advertized in *Bulletin 66* up to and including the A.G.M. and paper-reading meeting of 1996, the Centenary year, when a celebratory dinner was intended. A volunteer was required for the workshop meeting that year, and Mr Perry offered to organize a workshop in Cardiff. Thereafter, there were initial plans for a spring meeting in Devon, and for a meeting in late summer, 1997, in the Italian Alps, to be arranged by Prof. R. Schumacker. There would be an alternative summer meeting in Britain. In response to a question from Dr Stanley, Mr Hodgetts said that as far as possible the sites chosen at Dolgellau, next year, would be those visited in 1922, but he agreed with Mr Perry and Prof. Duckett that it was difficult to know precisely which they were.
- 11) **ANY OTHER BUSINESS:**
- a) **Minute Book:** Prof. Seaward proposed that the minute book, which was now full, might be re-bound. It was agreed that Dr Newton would look into the possibility of having all the previous minute-books bound uniformly. Mr Crundwell offered to send details of a firm in Falkirk which might be approached. Costs would be put to the Executive Committee.

There being no other business, Mr Perry thanked Officers for their work, and the meeting adjourned at 6.30 p.m.

M.E. Newton, Hon. General Secretary, September 1995

FUTURE MEETINGS OF THE SOCIETY

Members are reminded to read the BBS Safety Code, which is published in *Bulletin 43* and is available from local secretaries for inspection during BBS meetings. Please inform local secretaries well in advance if you intend to join a meeting, even if you are not staying at the headquarters hotel.

ANNUAL GENERAL MEETING AND SYMPOSIUM MEETING 1996: Ness Botanic Gardens, Wirral, 20-22 September.

Local Secretary: Dr. Hugh McAllister, Ness Botanic Gardens, The University of Liverpool, Environmental & Horticultural Research Station, Ness, Neston, Wirral, Cheshire, L64 4AY. Tel.: 0151 3530123.

The unique setting of Ness Gardens has kindly been offered for the AGM in our centenary year. There will be a celebratory centenary dinner on Saturday night.

Speakers will be:

- ♦ Dr Denis Brown (University of Bristol) – The Wormery.
- ♦ Dr John Edmondson (Liverpool Museum) – The use of museum material for scientific studies.
- ♦ Mr Alan Hale (Countryside Council for Wales, Aberystwyth) – Bryophyte conservation in Wales.
- ♦ Dr Hugh McAllister & Dr Mike LeDuc (Ness Botanic Gardens) – (i) Ness Botanic Gardens & (ii) Bryophytes and bracken control.
- ♦ Dr Martha Newton (University of Manchester) – British mosses in the Antarctic?
- ♦ Mr Ron Porley (English Nature, Newbury) – Darwin Initiative Project on Ugandan bryophytes.
- ♦ Ms Michelle Price (University College of North Wales, Bangor) – Life-forms of epiphytic bryophytes in the Ecuadorian Andes.

Accommodation will be at Burton Manor, a conference centre close to Ness Gardens. Sunday's field excursion will be to sites in North Wales. Contact local secretary for details.

The ANNUAL GENERAL MEETING will be held at 4.30 p.m. on Saturday, 21 September, 1996, at Ness Botanic Garden, Wirral, Cheshire.

AGENDA

1. Apologies for absence.
2. Minutes of the last A.G.M., University of East Anglia, Norwich, 1995 (see pp. 21-26 of this *Bulletin*).
3. Matters arising.
4. Reports of Officers for 1995 (see pp. 2-13 of this *Bulletin*).
5. Report from Council.
6. Election of Officers (see p. 32 of this *Bulletin*).
 - a) General Secretary.
 - b) Journal Editor.
 - c) Meetings Secretary.
 - d) Reading Circle Secretary.
 - e) Recorder for Mosses.
7. Election of Elected Members of Council (see p. 32 of this *Bulletin*).
8. Proposed change of Rules: Membership (see p. 32 of this *Bulletin*).
9. Place and date of the next Annual General Meeting.
10. Other future meetings.
11. Any other business.

BRYOLOGICAL WORKSHOP 1996, National Museum and Galleries of Wales, Cardiff, 26-27 October.

Local Secretary: Roy Perry, Department of Botany, National Museum and Galleries of Wales, Cardiff, CF1 3NP. Tel: 01222 573267. Fax: 01222 239829.

The lab session on Saturday will take place in the School of Pure and Applied Biology, University of Wales, Cardiff (which is next to the Museum), will be led by Tom Blockeel and will be on the theme of 'Using stem and leaf sections to identify mosses'. This promises to be a very exciting meeting. A field excursion will be arranged for the Sunday.

However, as befits the final meeting of the centenary year, this will be rather more than a workshop meeting. On the Saturday evening our President has arranged a wine and buffet reception in the National Museum and Galleries of Wales, Cardiff, when the Department of Botany will be open for members to inspect the bryophyte herbaria of NMW (230,000 specimens) and BBSUK (25,000) and its bryological library. There will also be an exhibition of bound volumes of bryological exsiccatae and private collections specially staged for the Society's visit to Cardiff.

Please contact the Local Secretary for details of accommodation, etc. Unfortunately, because this meeting is being held during University term-time, it will be impossible to use University accommodation; but it is hoped that reasonably cheap arrangements can be made centrally in the city and details of these will be available on request. It is hoped that free car-parking facilities will be available at the Museum and University.

SPRING FIELD MEETING 1997, Torquay, Devon, 2-9 April.

Local Secretary: Mark Pool, 'Camelot', 91 Warbro Road, Torquay, Devon, TQ1 3PS. Tel.: 01803 316154.

This meeting will be based on the 'British Riviera' in Torquay, which should be pleasant at this time of year. Devon is an unfamiliar county to many bryologists and there should be plenty of interest to attract members. Further details in the next *Bulletin*.

SUMMER FIELD MEETING 1997 (I).

A week-long meeting, to be arranged, probably somewhere in the Pennines or northern England. See next *Bulletin*.

SUMMER FIELD MEETING 1997 (II), North Italian Alps, early September.

Local Secretary: Prof. René Schumacker, Station Scientifique des Hautes-Fagnes, Mont-Rigi, Robertville, Belgium. Tel.: 00 3280 446182. Fax: 00 3281 738200.

Professor Schumacker has kindly offered to host the Society for this exciting trip. As well as being a leading hepaticologist, he has many years of experience bryologizing in the Alps. However, many areas remain poorly known, not having been visited in recent years. Full details and dates will appear in the next *Bulletin*.

ANNUAL GENERAL MEETING AND SYMPOSIUM MEETING 1997, Chichester, 26-28 September.

Local Secretary: Mr Rod Stern, Botany Bay, Main Road, Fishbourne, Chichester, West Sussex, PO18 8AX. Tel.: 01243 574318.

Please note that the venue and dates for this meeting are provisional. They will be confirmed in the next *Bulletin*.

LOCAL MEETINGS PROGRAMME, 1996

BRITISH BRYOLOGICAL SOCIETY AND NORTH WESTERN NATURALISTS' UNION (North West Group)

Please advise one of the contacts given below (well before the meeting date!) to ensure that there have been no changes in time or venue. On some meetings there may be limitations on numbers. Adequate clothing and refreshments must be taken.

All meetings are on a Saturday and the meeting time is 11.00 am unless otherwise indicated.

September 28: BLACK CLOUGH. Car park: SK 114998. Leader Dr Martha Newton.

October 19: RUDHEATH WOOD. Car park: SJ 733708. Leader Mr Len Johnson.

November 16: ROWARTH. Car park: SK 013892. Leaders Messrs Alan & Norman Bamforth.

December 7: DELAMERE FOREST. Visitor centre: SJ 546704. Leader Mr John Holness.

CONTACTS: British Bryological Society: Mr A.V. Smith. Tel.: 01663 744499

North Western Naturalists' Union: Mr E.P. McCann. Tel.: 0161 962 1226

SOUTHERN GROUP

All meetings begin at 10.30 am.

Saturday 28 September 1996: Furzley Common (National Trust). V.C. 8. Park on edge of Common at Furzley, SU 286163. Leader R.C. Stern.

Saturday 16 November 1996: Havant Thicket. V.C.11. Forest Enterprise carpark, SU 722104. Leader R.C. Stern.

Sunday 16 February 1997: Old Burghclere Lime Quarry (Hants. Wildlife Trust Reserve) and Sydmonton Common. V.C.12. Meet at Old Burghclere Station, SU 470579. Leader A.C. Crundwell.

Saturday 29 March 1997: Iping and Stedham Commons (Local Nature Reserve). County Council carpark, SU 859220. Leader H.W. Matcham.

OTHER BRYOLOGICAL MEETINGS, 1996

September 1-6, 1996: WOODLAND BRYOPHYTES. Tutor: Dr Martha Newton, Rhyd-y-creuau, Drapers' Field Centre, Betws-y-coed, Gwynedd, LL24 0HB. Offering individual guidance at all levels. Details from the Warden, Mr J. Ellis.

September 7-14, 1996: MOSSES AND LIVERWORTS. Tutor: Dr Martha Newton, Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire, PH10 7PG. Offering individual guidance at all levels. Details from the Warden, Dr A. Gimingham.

REPORTS OF LOCAL MEETINGS

Cotswolds and Chilterns group

TRING AREA, 26 November 1995

Six BBS members met on a bright day at the quagmire which passes as a car park at Wilstone Reservoir near Tring, Herts. The main object of the meeting was to find *Ephemerum cohaerens* and *Physcomitrium eurystomum*, both last seen in the sixties. However, despite previous ideal conditions (drought), the water levels were too high, leaving insufficient exposures of mud. We walked along the concrete sides of the reservoir noting *Orthotrichum cupulatum*, *Tortula virescens*, *Barbula nicholsonii*, *Phascum cuspidatum* var. *schreberianum* and lots of *Ceratodon purpureus*. Extensive carr provides sheltered conditions for the liverworts *Metzgeria fruticulosa* and *Frullania dilatata* and the mosses *Zygodon conoideus* and *Bryum flaccidum*.

Later we moved to Oddy hill, an old chalk pit, somewhat neglected, but now undergoing conservation work. We found *Thuidium philibertii*, *Neckera complanata*, *Entodon concinnus* and *Ditrichum crispatisimum* along with increasing amounts of *Hylocomium splendens*. We then went in search of *Scapania aspera*, previously recorded from nearby. However, the site of the grid reference proved unsuitable, but we were partly consoled with *Cirriphyllum crassinervium* and *Eurhynchium pumilum* by the road.

GRAEME SMITH

CHENIES (TQ0298) & PENN WOOD (SU9296), 25 February 1996

Only three battle-hardened troops joined Seán O'Leary and Jeff Bates on this dreadfully miserable day, to look for *Sphaerocarpos texanus* in the fields near Chenies, in the pouring rain. This liverwort was last recorded in fields here by Edward Little in 1968, and it was hoped to re-find the plant to update the record for the Lower Plant Biodiversity Register. The stony arable fields looked like a possible habitat, but searches proved fruitless, apart from a little *Riccia sorocarpa*, and it was decided to move on to the woodland at the far end of the fields. On some elders here, Graeme Smith found a small patch of *Frullania tamarisci*, a very rare plant for Bucks., with only one or two other known localities in the county. *Cryphaea heteromalla* was added to the list by Jeff. Packed lunches were eaten at Penn Street Church, inside cars as the rain continued. The church itself was checked out, producing *Rhynchosgiella tenella* and *Bryum ruderale*, then the party went into Penn Wood, which is soon to be turned into a golf course, according to a local resident. *Dicranum tauricum*, *Barbula tophacea* and *Dicranella staphylina* were of interest here.

Some worthwhile recording for Bucks. (in particular the *Frullania*), despite the best efforts of the weather.

SEÁN O'LEARY

IVINGHOE HILLS SSSI (v.-c. 24), 17 March 1996

The last excursion of the season was held on 17 March 1996. The venue was Ivinghoe Hills SSSI, one of the largest remaining fragments of chalk grassland in Buckinghamshire and indeed the Chilterns, and was led by Ron Porley.

On such a large and diverse site we targeted our searches and were soon rewarded by finding *Thuidium abietinum* ssp. *hystricosum*, *Entodon concinnus* and a little *Ditrichum crispatisimum*. We moved on to an east-facing slope with *Neckera crispa* and *Hypnum cupressiforme* var. *lacunosum*, both frequent in the turf. Ivinghoe is a known locality for *Tortella tortuosa*, and much excitement ensued when Jeff Bates refound a living cushion in turf on an east-facing roadside bank. Another cushion soon followed. The richest area, however, was provided by ancient earthworks between two barrows (ancient burial mounds). On the thin soil were some of the previous species mentioned together with other typical chalk grassland species such as *Leiocolea turbinata*, *Campylium chrysophyllum*, *Ctenidium molluscum*, *Homalothecium lutescens*, *Neckera complanata*, *Weissia longifolia* and *W. microstoma*.

After lunch we moved into a fine chalk valley known as Incombe Hole, but probably as a result of recent lack of grazing very little of interest was found. Sheep grazing has been reinstated so the situation should improve. (Such a large site precluded visiting all parts, so later in the week I returned and found large quantities of *Tortella tortuosa* in the area of the barrows. Also a fine north-east-facing slope with abundant anthills was discovered; this supports much *Rhodobryum roseum* and *Dicranum scoparium* and small amounts of *Dicranum bonjeanii*.)

This is certainly one of the better sites in the Chilterns for chalk grassland bryophytes. Some of the species have not been recorded here since the late 1950s so it is gratifying that they are still tenaciously holding on despite periods of inappropriate management. Furthermore, this is one of the two known extant sites for *Tortella tortuosa* in the Chilterns. All ten participants agreed that this had been an excellent day to round off the first season's activities of the Cotswolds & Chilterns Group.

RON PORLEY

(Sean O'Leary reports that a small amount of the nationally rare *Pottia caespitosa* was also found, later identified by Ron Porley, after submission of the above report.)

Southern group

The first meeting of the winter took place at Hamptworth Common at the edge of the New Forest in V.C.8. Ninety-six species were recorded, twenty-six of which were hepatics, a good total for a lowland county. *Tritomaria exsectiformis* found on a sandy bank is a new V.C. record. Convincing material of *Campylopus pyriformis* var. *azoricus* was another notable find.

Our second meeting was held at Blackdown in V.C. 13. Low cloud and heavy rain meant that recording bryophytes became extremely difficult for the seven hardy members who attended. The only find of note, by Jeff Bates, was *Brachydontium trichodes* at the site where it was originally found in West Sussex by William Borrer at the beginning of the 19th century.

A joint meeting with the southeast group was at Wakehurst Place SSSI, V.C. 13, by kind permission of the Royal Botanic Gardens, Kew. Tilgate Wood was the venue, well-known for its assemblage of oceanic species at the eastern edge of their distribution in Britain. Among the species recorded here were *Harpanthus scutatus*, *Bazzania trilobata*, *Blepharostoma trichophyllum*, *Scapania umbrosa*, *S. gracilis*, *Hookeria lucens* and *Tetrodontium brownianum*. A recent workshop was held at Wakehurst Place to formulate a

management prescription for the rare sandrock communities which are found throughout the SSSI. The moss *Orthodontium gracile* long recorded from here is under dire threat of extinction, due in part to colonization by the introduced *O. lineare*.

The final meeting was held at Malshanger, west of Basingstoke in V.C.12. Members were shown *Tortula virescens* and *Barbula nicholsonii* by Alan Crundwell, growing on damp asphalt, which he had spotted on an earlier visit. Moving on to both broad-leaved and conifer woodland a notable find was *Polytrichum longisetum* growing on soil in a recently cleared plantation. The find of the day however, was a fine colony of *Mnium stellare*, an uncommon plant in southern England.

HOWARD MATCHAM

ELECTION OF OFFICERS AND ELECTED MEMBERS OF COUNCIL

Mr T.L. Blockeel has expressed his wish to retire from office as Recorder for Mosses at the end of 1996. In addition, the terms of four Officers, the General Secretary (Dr M.E. Newton), Journal Editor (Dr J.W. Bates), Meetings Secretary (Mr N.G. Hodgetts) and Reading Circle Secretary (Mr R.J. Fisk), expire at the end of 1996, and their present incumbents are eligible for re-election. The three Elected Members of Council who retire at the end of 1996, Mr J. Blackburn, Mr B.J. O'Shea and Dr A. Russell, are not eligible for re-election in this capacity until two years have elapsed. Members are invited to submit nominations for Officers and Elected Members, sending them, in an envelope marked PRIVATE, to the General Secretary of the B.B.S., Dr M.E. Newton, c/o Botany Department, Liverpool Museum, William Brown Street, Liverpool, L3 8EN, to arrive no later than 24 August, 1996. A nomination must not be made without the consent of the person it is wished to nominate. If elections are needed, they will be held at the A.G.M. at Ness Botanic Garden, Wirral, on 21 September, 1996.

PROPOSED CHANGE OF RULES: MEMBERSHIP

Council has considered the various categories of membership, which are currently Honorary, Ordinary, Junior and Family, and wishes to propose alterations affecting the second and third of these. The effect would be to introduce a further category, that of Senior membership, which would be open to those Ordinary members of 40 or more years' standing who opted to pay a reduced subscription. Council proposes that this should be currently set at £10. It is also proposed that the category of Junior membership be replaced by that of Student membership, and be open to everyone in full-time study, irrespective of age.

Proposed amendments of the Rules dated January 1996 and circulated with *Bulletin 67* are:

a) To introduce an additional category of membership, as follows: Senior membership shall be open to Ordinary members who have been members of the Society for forty or more years and who opt to pay a reduced annual subscription. They shall enjoy the same privileges as Ordinary members. If the category of Senior Membership is approved at the A.G.M., then it is further proposed that the subscription be initially set at £10.

b) To replace the existing category of Junior membership, as follows: Student members shall be full-time students. They shall pay a reduced annual subscription and enjoy the same privileges as Ordinary members.

WARBURG MEMORIAL FUND

The Botanical Society of the British Isles and the British Bryological Society have a joint fund from which an occasional small grant (*c.* £75-150) for travel for field work is made to a botanist under the age of 25. Young botanists wishing to be considered for this award should send:

1. full name and address;
2. date of birth;
3. short details of project involving travel, including an estimate of expenses, and information relating to the candidate's experience and other qualifications for carrying out the proposed work;
4. names and addresses of two referees to whom the Trustees may refer, if necessary;

to: B.B.S. Secretary, Dr M.E. Newton, *c/o* Botany Department, Liverpool Museum, William Brown Street, Liverpool, L3 8EN (marking the envelope 'PRIVATE').

A short report for publication in the *B.B.S. Bulletin* and *B.S.B.I. News* will be requested.

RECORDING MATTERS 12

To begin, I would like to say a big thanks to my predecessor, Jeff Bates, for all the work he has done over the last five years as Recording Secretary, and for ensuring a smooth handover to me. Since the Regional Recorder network was set up in 1990/91, bryological recording has undergone a renewed momentum with the formation of several local groups and a recording ethos that brings together amateur and professional, beginner and expert, and all things in between.

Recording has for many years been on a 10 km square basis, but with the publication of the Atlases now behind us, the opportunity has arisen to take a look at where we are going in the future. We continue to work within the vice-county system for the publication of new records, and this is always a strong incentive to come up with unexpected finds. Indeed this is the framework for Regional Recorders. However, even though we now have a good understanding of the distribution of bryophytes in Britain, the situation is dynamic and change needs to be monitored. For this reason 10 km, 5 km and even 2 km grids will continue to be important recording units and are most usefully applied by those engaged on producing local floras. We are more aware today of the numerous threats to biodiversity globally and locally. Conservation is an important activity of the Society, and all members can contribute by going out there and recording on a site basis. It is often at the site level that we have any chance at all of defending our bryological heritage. Recording on a site basis is not new, but it has taken on a new imperative. Conservation bodies and individuals need to have access to information that enables them to make informed decisions on the impacts of land-use changes. One of the most serious impediments to effective conservation is ignorance of the value of a particular site for most groups of plants and animals, and that includes the bryological interest. The Bryophyte Site Register, which was begun in the early 1980s, floundered a bit, but was then resurrected in 1994/5 with Gavin Stark working for JNCC. Competing priorities for resources have unfortunately put this project on hold yet again, but as a Society we can continue to contribute by building up a databank on a site by site basis.

What is the procedure once you have recorded your site? Several members have already asked me this question. Send your record cards (you should be using the new RP22s and 23s now) to the relevant Regional Recorder for the particular patch in which the site occurs, or, if there is no appointed Regional Recorder as yet, send them direct to me at the address below. All Regional Recorders should send completed and checked cards to me; annually will do or when you see me at a BBS meeting. The Regional Recorder should check the cards to see they are satisfactorily filled in and that there are not any suspect species for the area, and if appropriate any critical or very rare plants checked. Guidance for filling in the cards was given by Chris Preston in *Bulletin 59*, and for the time being I would just emphasise that when scoring off a species, please *do not* put a line through the species code as this causes much grief for the hapless inputter! The Regional Recorder should also keep an archive copy of the card which can be passed onto a successor. Thank you to those that have already passed cards on to me, but there must be many more cards out there that are not finding their way to me. Also, it is the responsibility of field meeting organisers to send in a completed set of cards. I can, at least for the time being, supply replacement cards on request.

Regional Recorders, June 1996

There have been several changes in BBS recorders for vice-counties since the last list in *Bulletin 66* so an up-to-date one is given below.

- 1,2:** Miss R.J. Murphy, Shang-ri-la, Reskadinnick, Camborne, Cornwall, TR14 0BH
- 3,4:** Mr M. Pool, 91 Warbro Road, Babbacombe, Torquay, Devon, TQ1 3PS
- 5:** Mr B. Gale, 6 Roker Way, Fair Oak, Eastleigh, Hampshire, SO50 7LD
- 6,33,34:** Mr P. Martin, The Archway, The Green, Frampton-on-Severn, Gloucester, GL2 7DY
- 7:** Mr R.D. Porley, English Nature, Foxhold House, Crookham Common, Thatcham, Berkshire, RG19 8EL
- 8,11:** Mr R.C. Stern, Botany Bay, Main Road, Fishbourne, Chichester, West Sussex, PO18 8AX
- 9:** Dr M.O. Hill, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS
- 10:** Mrs L. Snow, Ein Shemer, Upper Hyde Farm Road, Shanklin, Isle of Wight, PO37 7PS
- 12:** Mr A.C. Crundwell, Acorn Cottage, 12 Kay Crescent, Headley Down, Hampshire, GU35 8AH
- 13,14:** Mr H.W. Matcham, 111 Winterbourne Road, Summerdale, Chichester, West Sussex, PO19 4PB
- 15:** Mr M.C. Watling, 13 Addington Street, Margate, Kent, CT9 1PN
- 16:** Mr E.R. Hurr, 6 The Woodlands, Chelsfield, Orpington, Kent, BR6 6HL
- 17:** Mr P.G. Adams, 5 Elm Cottages, Bytton Hill, Mickleham, Dorking, Surrey, RH5 6EL
- 18,19,21:** Dr K.J. Adams, 63 Wroths Path, Baldwins Hill, Loughton, Essex, IG10 1SH
- 20:** Mr G. Smith, 59 Tippett Court, Stevenage, Herts, SG1 1XR
- 22:** Dr J.W. Bates, Imperial College at Silwood Park, Ascot, Berkshire, SL5 7PY
- 23:** Mr G. Bloom, 15 Tatham Road, Abingdon, Oxon., OX14 1QB
- 24:** Dr S.V. O'Leary, J.J. Thomson Physical Laboratory, P.O. Box 220, Whiteknights, Reading, RG6 2AF
- 25,26:** Mr R.J. Fisk, 1 Paradise Row, Ringsfield, Beccles, Suffolk, NR34 8LQ
- 27,28:** Mr R. Stevenson, 111 Wootton Road, Kings Lynn, Norfolk, PE30 4DJ
- 29:** Dr H.L.K. Whitehouse, Botany School, Downing Street, Cambridge, CB2 3EA
- 30:** Mr A.R. Outen, 15 Manor Close, Clifton, Shefford, Beds., SG17 5EJ

- 31,76,86-88,99:** Mr N.G. Hodgetts, Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough, PE1 1JY
- 32,60:** Mr M.J. Wigginton, 36 Big Green, Warmington, Oundle, PE8 6TU
- 35,41,44:** Mr A.R. Perry, Department of Botany, National Museum and Galleries of Wales, Cardiff, CF1 3NP
- 36:** Mr P.J. Port, Hollybush Cottage, Newton Lane, Kington, Hereford, HR5 3NG
- 40:** Mr R. Shoubridge, 8 Mary Elizabeth Road, Ludlow, Shropshire, SY8 1LW
- 42,43,47:** Mr R.G. Woods, Countryside Council for Wales, 3rd Floor, The Gwalia, Ithon Road, Llandrindod Wells, Powys, LD1 6AA
- 45:** Dr P.M. Rhind, Countryside Council for Wales, Directorate of Science & Policy Development, Plas Penrhos, Bangor, Gwynedd, LL57 2LQ
- 46:** Mr A. Hale, 26 Garth Dinas, Penparcau, Aberystwyth, Dyfed, SY23 3RZ.
- 48-52:** Mr T.H. Blackstock, Countryside Council for Wales, Directorate of Science & Policy Development, Plas Penrhos, Bangor, Gwynedd, LL57 2LQ
- 53-54:** Prof. M.R.D. Seaward, School of Environmental Science, University of Bradford, Bradford, BD7 1DP
- 55:** Mr D.W. Ballard, 84 Leicester Road, Groby, Leicester, LE6 0DN
- 57,61,63-65:** Mr T.L. Blockeel, 9 Ashfurlong Close, Dore, Sheffield, S17 3NN
- 58:** Mr A.V. Smith, 1 Carr Meadow Cottages, Glossop Road, Little Hayfield, via Stockport, Cheshire, SK12 5NR
- 59:** Dr J. Lowell, 37 Henley Avenue, Cheadle Hulme, Cheshire, SK8 6DE
- 62:** Mr J.M. Blackburn, 6 Bylands Grove, Fairfield, Stockton on Tees, Cleveland, TS19 7BG
- 66:** Revd G.G. Graham, 3 The Willows, Bishop Auckland, Co. Durham, DL14 7HH
- 67-68:** Mr T.S. Wharton, Low Barns, Witton-le-Wear, Bishop Auckland, Co. Durham, DL14 0AG
- 69,92:** Mr. K. Raistrick, 1 Drewton Avenue, Heysham, Lancashire, LA3 1NU
- 70:** Mr F.J. Roberts, Eden Croft, Wetheral Pasture, Carlisle, Cumbria, CA4 8HU
- 72-74:** Dr C.J. Miles, Braeside, Boreland, Lockerbie, Dumfries, DG11 2LL
- 79-80:** Dr R.W.M. Corner, Hawthorn Hill, 36 Wordsworth Street, Penrith, Cumbria, CA11 7QZ
- 81:** Mr D.G. Long, Royal Botanic Garden, Edinburgh, EH3 5LR
- 82-84:** Dr D.F. Chamberlain, Royal Botanic Garden, Edinburgh, EH3 5LR
- 89,96:** Mr J.A. McMullen, 5 Alder Road, Mansewood, Glasgow, G43 2UY
- 97,98,105:** Mr G.P. Rothero, Stronlonag, Glenmassan, By Dunoon, Argyll, PA23 8RA
- 100:** Mrs K.M. Cocking, 4 Ashwood Crescent, Marple, Stockport, Cheshire, SK6 6LS
- 101-104,110:** Mr M.F.V. Corley, Pucketty Farm Cottage, Faringdon, Oxfordshire, SN7 8JP
- H8:** Elinor Wiltshire, 62 Carroll House, Craven Terrace, Lancaster Gate, London, W2 3PR
- H36-40:** Mr P. Hackney, Ulster Museum, Botanic Gardens Belfast, Belfast, BT9 5AB
- Channel Islands:** Mr C.D. Preston, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS

If my assessment of the situation is correct, the following vice-counties are vacant: 37-39, 56, 71, 75, 77, 78, 85, 90, 91, 93-95, 106-109, 111 and 112. Ireland is still in the unfortunate position where most vice-counties remain unadopted. Any takers for vacant vice-counties will be much appreciated so let me know if you are interested.

Ron Porley, English Nature, Foxhold House, Crookham Common, Thatcham, Berkshire, RG19 8EL

B.B.S. LIBRARY SALES AND SERVICE 1996

FOR LOAN (U.K. Members only):

Members wishing to borrow books or papers are advised to consider whether a Xerox copy of the appropriate pages would suffice instead of the original in those cases where copyright has expired. Charge 10p per exposure. Limit 50.

(a) Approximately 250 bryological books and journals and several thousand offprints of individual papers. A catalogue of the books and journals is available, price £1.00.

(b) Transparency collection, list available (s.a.e.). 630 slides in the collection. Loan charge (to cover breakage of mounts) 50p plus return postage. Only 50 slides may be borrowed at a time to minimize possible loss or damage.

(c) Microscope stage-micrometer slide for calibration of eyepiece graticules. 10µm divisions. Loan deposit £45.00.

FOR SALE:

British Bryological Society Bulletins: back numbers from no. 23 @ £1.00 each.

Transactions of the British Bryological Society/Journal of Bryology:

Vol. 1	parts 1-4	(£2.40 each) part 5 out of print
Vol. 2	part 1-4	(£3.00 each) part 5 out of print
Vol. 3	parts 1-5	(£2.40 each) £12.00 per volume
Vol. 4	parts 1, 3-5	(£2.40 each) part 2 out of print
Vol. 5	parts 1,3,5	(£3.00 each) parts 2 & 4 out of print
Vol. 6	parts 1-2	(£6.00 each) £12.00 per volume – ends series of <i>Transactions</i>
Vol. 7	parts 1-4	(£5.00 each) £20.00 per volume – renamed <i>Journal of Bryology</i>
Vol. 8	parts 2,3	(£5.00 each) parts 1 & 4 out of print
Vol. 9	parts 1-3	(£5.00 each) part 4 out of print
Vol. 10	parts 1,3,4	(£8.00 each) part 2 out of print
Vol. 11	parts 1-3	(£10.00 each) part 4 out of print
Vol. 12	parts 1-3	(£11.50 each) part 4 out of print
Vol. 13	parts 1-4	(£15.50 each) £62.00 per volume
Vol. 14	parts 2-4	(£18.00 each) part 1 out of print
Vol. 15	parts 1-4	(£22.50 each) £90.00 per volume
Vol. 16	parts 1-4	(£29.75 each) £119.00 per volume
Vol. 17	parts 1-4	(£39.50 each) £158.00 per volume
Vol. 18	parts 1-4	(£42.25 each) £169.00 per volume

B.B.S. Special Volumes:

1. Longton, R.E. & A.R. Perry, 1985. Proceedings of Jubilee Meeting 1983, 89 pp. (£6.00)
2. Newton, M.E., 1989. A Practical Guide to Bryophyte Chromosomes, 19 pp. (£2.50)
3. O'Shea, B.J., 1989. A Guide to Collecting Bryophytes in the Tropics, 28 pp. (£3.50)
4. Edwards, S.R., 1992. Mosses in English Literature, 44 pp. (£2.50)

Census Catalogues:

Duncan, J.B., 1926. Census Catalogue of British Mosses, 2nd edition	(20p)
Sherrin, W.R., 1946. Census Catalogue of British Sphagna	(20p)
Warburg, E.F., 1963. Census Catalogue of British Mosses, 3rd edition	(20p)
Paton, J.A., 1966. Census Catalogue of British Hepatics, 4th edition	(20p)
Corley, M.F.V. & M.O. Hill, 1981. Distribution of Bryophytes in the British Isles:	

a census catalogue of their occurrence in vice-counties

Price incl. p.& p.: members (£5.00), non-members (£6.00), trade (£4.00)

Other items:

Evans, D.E. & A.R. Perry, 1987. Moss Wall Chart	Price incl. packing	(£2.80)
Grolle, R., 1983. Hepatics of Europe and the Azores: an annotated list of species with synonyms	Price incl. p.& p.	(£2.50)
Newton, M.E. <i>et al.</i> , (eds), 1988. Bryology: modern research and the ways forward		(£5.50)
Pearman, M.A., 1979. A short German-English bryological glossary		(£0.50)
Perry, A.R., 1992. Mosses and liverworts of woodland, 41 pp.		(£2.95)
BBS Tie, claret with single BBS logo		(£4.95)
Swift ×20 handlens and case		(£18.75)
Patterson no. 2 stainless steel forceps		(£4.00)
Idealtek no 3 stainless steel forceps		(£9.30)
Eyepiece graticule 1 cm × 10 micrometer, 16 mm diam.		(£25.00)

PLEASE DO NOT INCLUDE CASH WITH ORDERS. Customers will be invoiced for the correct amount including p.& p. (postage and packing is extra unless stated). Address label legibly printed would be appreciated. All the above are available from the BBS Librarian:

Kenneth J. Adams, 63 Wroths Path, Baldwins Hill, Loughton, Essex, IG10 1SH, U.K.

Ken Adams, BBS Library & Sales

BACK NUMBERS OF THE *BULLETIN*

It has been decided to have a clear-out of stock of the *Bulletins*, so this may be the last chance of completing gaps in *Bulletin* runs. If members require back-numbers, either for themselves or for their institutional libraries, they should contact the address below. Members in Universities or Institutions whose libraries take the *Bulletin* are especially urged to ensure that their library's run is complete. This offer is being made for the cost of postage and packing and pro-forma invoices may be supplied. Requests will be dealt with on a first-come-first-served basis until stocks run out, but it should be noted that a few numbers are already out of stock. Numbers 1 to 22 are mostly foolscap Gestetner copies, and numbers 23 onwards are A5.

The large majority of the Gestetner issues were produced by Mr E.C. Wallace when he was Secretary and are one to four page details of accommodations for meetings of the Society and agendas for Annual General Meetings (1963-69) with occasional library lists, notes on preparation of voucher material, membership lists, the annual exchange, the slide collections and the BBS mapping scheme, etc. Later (1970-73), Dr D.H. Dalby, as the new Secretary, expanded the *Bulletin* to up to 10 photocopied pages to include notes on conservation, proposed bryophyte floras, notices of non-BBS symposia and publications, BBS referee system, and recent bryological publications, etc. From 1973 to the present Mr A.R. Perry has produced the *Bulletin*, the first issue (22, 1973) a 5-page issue, then afterwards, an A5 booklet, now bound in a separate cover.

A.R. Perry, Department of Botany, National Museum & Galleries of Wales, Cardiff, CF1 3NP, UK.

BBS COLOUR POSTCARDS OF BRITISH BRYOPHYTES

BBS postcards are selling well, with 634 sets of 16 cards sold so far. That is past the ten-thousand mark at 10,144 cards, which are now publicising the BBS. Still, we need to sell a further 191 sets to break even. The A6 postcards are printed by Judges, and are laminated with semi-gloss anti-UV film. The photographs are the best 16 selected from 186 entries to the BBS photographic competition.

If you haven't bought your sets yet, but also if you have, each selection of 16 colour postcards costs only £2.95, which is 18½p a card. They have been bought by several major retail outlets, who are selling them for up to 30p per card. Order several sets and:

- ♦ publicise mosses and liverworts;
- ♦ help the BBS (we must sell more than one set per member to break even!);
- ♦ impress your friends;
- ♦ save money by not buying other more expensive cards.

Post them off to somebody (preferably not BBS members, who will already have some), and buy more!

Available from: Sean Edwards, Manchester Museum, Manchester University, Oxford Road, Manchester M13 9PL, U.K. Postage and packing 50p extra for one set, 60p for two, 70p for 3, and £1.00 for 4 sets (because of the bigger envelope). Also available at BBS meetings. Cheques payable to the British Bryological Society. 'Phone for more information:- work 0161-275-2671, home 0161-442-9346.

BBS CAR STICKERS

The BBS car-stickers have been ordered at last, but have not arrived in time for inclusion in this *Bulletin*. They are 3" roundels, three-colour (one being the white background), self-cling, based on the BBS logo (they are not like the accompanying cartoon!). The other two colours are a tasteful moss-green, and a golden-brown (Pantone 364 and 138).

As decided by Council, one sticker will be enclosed free with every copy of the next (Spring 1997) *Bulletin*, but there will be some spare for: 1) anybody who wishes to have more than one, 2) anybody who can't wait until Spring and is prepared to fork out £1.00 and an S.A.E. in the meantime, and 3) anybody who would like to donate £1.00 to the BBS, and get a sticker to do what you like with.



The stickers should certainly be available by the Autumn 1996 meeting at Ness; wait till then and save on the S.A.E.. For those who wish to buy in the meantime, please send the S.A.E. and £1.00 for each sticker ordered (payable to the British Bryological Society), to: Sean Edwards, The Manchester Museum, Manchester University, Oxford Road, Manchester M13 9PL, UK.

READING CIRCLE

The Reading Circle is open to all members of the BBS, and provides a service enabling them to be aware of recent publications in some of the major bryological journals. A photocopy of the contents page is sent to members for each of the journals (listed below) for which they choose to subscribe. Members may then order a photocopy of any article of interest, within the provisions of the Copyright Act. Members may also, at the discretion of the Reading Circle Secretary, borrow a journal for a limited period for the cost of return postage. The following journals are available.

Annales Botanici Fennici: 4 issues per year by the Finnish Botanical Publishing Board.

The Bryologist: 4 issues per year, Journal of the American Bryological and Lichenological Society.

Cryptogamie Bryologie-Lichénologie: 4 issues per year by the Laboratoire de Cryptogamie in Paris.

Journal of the Hattori Botanical Laboratory: 2 issues per year by the Hattori Botanical Laboratory, Japan.

Lindbergia: 3 issues per year by the Nordic Bryological and Dutch Bryological and Lichenological Societies.

New members should choose an initial subscription appropriate for the number of journals for which they wish to receive contents, to cover the cost of photocopying and second class postage. Current photocopying costs are 5p per A4 sheet (6p if two pages back to back). The Reading Circle Secretary will try to make photocopies in the most economical manner. Each member has an account in his/her name and this **must be kept in credit**. A reminder is sent out when the balance is getting low and distribution of contents lists **will cease when the balance is exhausted**. Payment should be sent to the Reading Circle Secretary and cheques made out to the British Bryological Society.

Further details and sample contents pages of the above journals can be obtained from the Reading Circle Secretary, Mr R.J. Fisk, 1 Paradise Row, Ringsfield, Beccles, Suffolk, NR34 8LQ.

TROPICAL BRYOLOGY GROUP VISIT TO UGANDA

The BBS Centenary year began with a visit by six members of the Tropical Bryology Group to south-west Uganda. The six participating members were Jeff Bates, Nick Hodgetts, Howard Matcham, Ron Porley, Robin Stevenson and Martin Wigginton, all but one having recently collected bryophytes in Africa. This and subsequent visits are being funded by a British Government 'Darwin Initiative' Grant.

The two main aims of this first visit were to investigate variations in bryophyte diversity in relation to altitude within the forest and to delimit epiphyte communities to environmental factors such as aspect, height above ground level, slope of bark, etc. On arrival at Entebbe airport we were met by Stephen Byarujali (who remained with us up to the final week) and Bob Lyazi who then drove us the 35km to Makerere University at Kampala where we were to stay at the campus guest house. Following our arrival there was a quick briefing by Professor Pomeroy, Deputy Director of Makerere University Institute of Environment and

Natural Resources. He is an expert ornithologist who has worked at the University for many years and who was able to name the unfamiliar birds flying around us including the Black and White Casqued Hornbill, a bird that even impressed the sole non bird-watcher with us! After settling in we were able to explore our surroundings and an abundant Pottiaceous moss turned out to be *Hyophila involuta*, new to Uganda!

The morning of the second day was spent in Kampala changing our money for the duration of the trip and generally becoming acclimatised to the very hot (89°F) temperature. During the afternoon we all visited the Botanic Gardens at Entebbe. Situated on the shore of Lake Victoria it is a spectacular site for botanist and ornithologist alike.

The following two days Martin and Nick spent sorting out administrative hitches; paper bags for storing specimens that had been sent previously from England proved to be a particular 'red tape' problem and took a lot longer to be released by Entebbe airport officials than we had anticipated, and a certain amount of unofficial money changed hands! Meanwhile at the university the remainder of us perused the herbarium where many bryophytes are housed, including packets in Francis Rose's handwriting (rather like the infamous Kilroy, Rose was here!) At the herbarium we were introduced to the delightful Nakityo Berna, the young lady herbarium assistant who was to accompany us for the duration of the trip. Brave girl, sharing sleeping accommodation with six hairy-chested snoring males would have been a daunting prospect for most young girls but Berna took it all in her stride and, given the sparse conditions, always managed to look elegant.

On the fifth day we set off for Bwindi (Impenetrable Forest) in two four-wheel drive vehicles (one of which turned out to be an absolute nightmare) hired to us by the University, and after an overnight stay in the town of Mbarara we set off to Kabale where provisions were bought to last us throughout the upland collecting trip. On leaving Kabale the Landrover had the first of its many unscheduled stops, due to very unreliable battery terminals with the positive terminal shorting out through the bonnet. Fortunately our journey continued thanks to the ingenious Dr Bates (hereafter known as 'the mechanic') who kept us rolling for the remainder of the trip. Our first sight of the Impenetrable Forest made us realise what a tremendous task lay before us: densely covered precipitous slopes with no easy access.

Travelling to Ruhiji base camp (2250m) proved to be quite tricky. Torrential rain had turned the narrow forest track into a quagmire, but thankfully we arrived in one piece. We were to stay at the Institute of Tropical Forest Conservation guest house for the next seven to ten days (four members of the team staying on while the other four left for the next stage at Buhoma to the north). Collecting began in earnest on January 25th— six days after arriving at Entebbe!

The following day the team recorded everything within 5 30m square plots whilst Jeff selected five trees within each, recording 5 mini-quadrats on each tree. Representative collections of all species found in these plots were then to be returned to the U.K. for identification. Stephen and Berna made collections to be named at a later date in the Makerere University herbarium. Brief descriptions of the five plots are:

Plot 1 consisted of moderately dense bamboo forest with about seven mature trees, few lianas and a ground cover of herbaceous plants. Altitude 2415m.

Plot 2. Twelve large trees and a dense understorey of shrubs and very dense patches of lianas, ground flora dominated by ferns. Altitude 2270m.

Plot 3. Around a dozen tall trees, dense understorey of shrubs and a sparse ground flora of mainly small ferns. Altitude 2005m.

Plot 4. Eight large trees with a dense understorey of shrubs, tree seedlings and saplings. Many lianas ascending tree trunks with a sparse herbaceous layer. Altitude 1500m.

Plot 5. Recorded in forest about 1 km east of the Zaire border near Rukubira after the team had moved on from Ruhija. High forest with about 80% canopy cover at perhaps 40m height. Understorey sparse as was the ground flora which was composed mainly of ferns. Altitude 1680m.

Whilst at Ruhija, Nick and Ron, accompanied by native trackers spent two full days recording in the interior and camping under canvas, apparently pitching the tents on a well used elephant track. Ron has told me that he lay awake waiting for the inevitable trunk call! Two interesting bryophytes recorded from here were the epiphyllous hepatic *Odontolejeunea lunulata* and the moss *Rhizofabronia personii*.

On 30 January four of us left for the next venue at Buhoma, the remainder staying to record plot 4 and arriving on 1 February. We were all looking forward to seeing Mountain Gorillas, and we were not disappointed as one of the habituated groups had taken up residence next to the camp site. Robin and I had close views (no more than 3m) when we trekked 6km over very difficult terrain with three tourists from Truro (who knew Jean Paton, small world). It was worth it; to be so close to these magnificent animals was a great thrill. The mist-filled valleys of the lower slopes at Ruhija and at Buhoma were very rich in bryophytes compared to the bamboo forest at the higher altitudes. Many taxa were collected and the experience gained by members from previous visits to Malawi, Lesotho and South Africa enabled us not only to place plants into a family and genus but also to name several to species level.

On 4 February we left Buhoma for a few days relaxation at the Queen Elizabeth National Park to the north, on the shore of Lake Edward. The descent from the tropical rain forest to dry savannah of the Rift Valley was dramatic. Bryophytes were virtually non-existent, the only frequent species seen being *Pseudocrossidium porphyreoneura*. This was compensated for by the abundant birds and animals seen. A memorable boat trip on the Kazinga Channel (separating Lake Edward from Lake George) enabled close views and photographs to be taken of hippopotamus. These animals apparently kill more people in Africa than any other, so it was somewhat disconcerting to find them grazing at night a few feet away from our accommodation. It was a relief to find that they took no notice of us at all as we staggered (perhaps I should say I staggered) back from having a pint or two at the local bar. The birds seen on the lake included the Goliath Heron and the spectacular Saddle-billed Stork. Warthogs roamed the lawns and a tame? Spotted Hyena visited the guests at meal-time during the late evening. In all, a truly memorable experience.

A long drive back to Kampala and a couple of days spent sorting specimens, all of which we were able to bring back with us on the aircraft. Martin and Nick are to be warmly commended for all the hard work put into organising this trip and sorting bureaucratic blips while in Uganda.

Sadly, Stephen Byarujali had to return to Kampala before the final week because of family illness. I understand his niece died shortly afterwards. We all extend our sincere sympathy and wish to thank him for all his help, both before and during our stay in Uganda.

HOWARD MATCHAM

NEW VICE-COUNTY RECORDS AND AMENDMENTS TO THE CENSUS CATALOGUES

All undated records are based on specimens collected in 1995; for specimens collected in earlier years the year of collection is given before the collector's name. Where the specimen bears a collector's number, this is given after the collector's name. All specimens are deposited in BBSUK, except where otherwise indicated. Numbers and nomenclature follow Corley & Hill (1981), *Distribution of bryophytes in the British Isles: a census catalogue of their occurrence in vice-counties*.

HEPATICAE

D.G. LONG

- 1.1 *Anthoceros agrestis*, on soil in set-aside field, 150m alt., near Horseshoe Plantation, Mellerstain Estate 36/64 (81), Long 26008 (E).
- 9.1 *Marchantia polymorpha*, distributions of British *Marchantia* taxa have been revised by Long (1995) who recognises one species comprising three subspecies, with the following distributions:
a subsp. *polymorpha*: 2-6, 11-14, 17, 19, 20, 22-24, 26-29, 31, 32, 34-36, 38, 39-43, 49, 51, 52, 57-62, 64-70, 72-78, 80-83, 85-90, 92, 94-96, 98, 99, 101, 104, 106, 108-112. H1, 2, 6, 7, 10, 11, 13, 15, 16, 18, 20-22, 25, 27-30, 32-40. Additional record: in stoney flush on bank by moorland stream, 300m alt., Upper Derwent Valley, near Broadhead Clough 43/19 (63), 1994, Blockeel 23/243.
b subsp. *ruderalis* Bischl. & Boisselier-Dubayle: 1-3, 5, 6, 8-25, 27, 29-37, 39-42, 44, 46, 48, 49, 55-66, 68-70, 73, 77, 78, 80-83, 85, 86, 88-97, 103, 107, 108, 111. H1, 7, 9, 16, 17, 21-23, 25, 29, 30, 33, 37-39. C.
c subsp. *montivagans* Bischl. & Boisselier-Dubayle: 52, 64, 68, 70, 72, 77, 80-83, 85, 88-93, 95-98, 105, 106, 108, 112. H28. Additional record: bank of River Usk above Llangynidr Bridge SE of Brecon 32/12 (42), 1969, Paton 3120.
- 9.2 *M. alpestris*, delete entire entry (Long, 1995).
- 11.1 *Ricciocarpos natans*, delete 56, the record (surface of a pond in north Nottinghamshire, N. Lewis, Bull. B.B.S., 34: 22, 1979) is insufficiently localized.
- 13.2 *Metzgeria temperata*, on lower side of horizontal branch of Ash in wood, 45m alt., Stapleford Tawney, Shales More 51/49 (18), Pyner.
- 16.1 *Cryptothallus mirabilis*, under *Sphagnum palustre* and *S. recurvum* in damp birch carr, Pixie Garden Common, SW of Rockside, South Zeal 20/69 (4), Stewart.
- 17.4 *Riccardia palmata*, on log in boggy *Betula* woodland, 180m alt., valley NE of Danskine Loch near Gifford 36/56 (82), Long 25831.
- 22.1 *Fossombronina foveolata*, wet peaty ground, 50m alt., Furzley, NE of Bramshaw 41/21 (8), Stern.
- 26.6 *Barbilophozia hatcheri*, with *Racomitrium lanuginosum* in *Vaccinium-Deschampsia* heath, 830m alt., S slopes of Carnedd Dafydd above Ffynnon Lloed 23/66 (49), 1993, Turner.
- 28.1 *Lophozia ventricosa* a var. *ventricosa*, on west-facing sandstone, Muckle Samuels Crag, Kielder Forest 35/67 (67), Rieser.
- 28.2 *L. guttulata*, delete all records except 96 (Paton, *in litt.*); rotting wood near Loch Morlich (96), viii 1948, E.F. Warburg (OXF, NMW conf. Paton); on rotting wood, Glenmore Lodge, viii 1956 (96), J.W. Fitzgerald (BBSUK, conf. Paton). This taxon, now known as *Lophozia longiflora* (Nees) Schiffn., has been critically revised by J.A. Paton. Records for 1, 2, 35, 36, 58, 62, 72, 73, 89, 92, 97, 100, 101, 110, H27, H32, H33 and H36 are based on material of *L. ventricosa*. Vouchers for other records have

not been traced. The species is confined to rotten wood and only specimens bearing perianths can be reliably identified. In the absence of vouchers all other records should be deleted.

- 29.4A *Leiocolea fitzgeraldiae* Paton & A.R. Perry. 49, 88, 96, 97, 98, 103, 104, 105, 111, H28, 29, 33; new to the British Isles (Paton & Perry, 1995). Additional record: on irrigated ledges of \pm basic sea cliffs, 300m alt., Clare Island L/68 (H27), 1994, Rothero 94/078.
- 29.7 *L. rutheana*. This species has been critically studied by Paton (1995) who concludes that it comprises two infraspecific taxa in the British Isles, as follows:
a var. *rutheana*: Buxton Heath (27), 1951, Rose (NMW); base-rich flush, 260m alt., Tarn Moor E of Orton 35/60 (69), 1982, Paton 6521 (BBSUK); *Schoenus*-dominated flush, c 200 ft. alt., 1/2 mile SW of Brackloon Lough (H27), 1987, Lockhart (BBSUK); det. & comm. Paton.
b var *laxa* (Schiffn. ex Burrell) Paton: in short vegetation of calcareous marsh, Frilford Golf Course 41/49 (22), 1983, Rose et al. (BBSUK); in mosses in swamp, Buxton Heath (27), 1953, Wallace (NMW); Swangey Fen, Attleborough (28), 1952, Wallace (NMW); det. & comm. Paton.
- 35.1 *Tritomaria exsectiformis*, peaty bank, 55m alt., Hamptworth Commons, Landford 41/21 (8), Stern.
- 38.14 *Jungermannia subelliptica*, on moist sandstone in gully, 180m alt., Dundale Griff, Levisham Moor 44/89 (62), Blockeel 24/305.
- 39.3A *Nardia insecta* Lindb. 67, new to the British Isles (Blackstock, 1995).
- 55.13 *Scapania paludicola*, in damp *Molinia* pasture, Heol-y-cawl, near Pontypridd 31/08 (41), 1994, Mockridge & Woodman, comm. Blackstock; in clump of *Sphagnum palustre* on level, rocky, sheep-grazed grassland, 310m alt., Gwern Gof Uchaf farm near Llyn Ogwen 23/66 (49), Watling.
- 58.4 *Cephaloziella hampeana*, growing through *Sphagnum subnitens* on edge of blanket bog, 400m alt., near Waun Ddu, Dinefwr 22/83 (44), Motley.
- 59.2 *Cephalozia connivens*, on moist grit rock face in rocky oak woodland, 210m alt., Padley Gorge, near Grindleford 43/27 (57), Blockeel 24/005.
- 59.4 *C. loitlesbergeri*, creeping over *Sphagna* in acidic mire, Ffridd y Fawnog, W of Mynydd Nodol 23/83 (48), 1982, Blackstock & Hill; delete 69, the voucher (between Hawes Water and Blea Water, 1957, Swinscow (BBSUK)) is *C. bicuspidata*; delete H25 and H37, the vouchers (see below) are *C. macrostachya* var. *macrostachya*; all det. & comm. Blackstock.
- 59.5 *C. pleniceps*, with *Aulacomnium palustre* and other bryophytes in *Molinia-Trichophorum cespitosum* wet heath with slight base flushing, 330m alt., Caeau Troed-rhiw-grain S.S.S.I. 22/86 (43), Motley; with *Cephaloziella hampeana* and *Calyptogeia muellerana* in hummock of *Sphagnum subnitens* on edge of blanket bog, c 400m alt., near Waun-Ddu, Dinefwr 22/83 (44), Motley.
- 57.7 *C. macrostachya*. This species is under revision in Britain and Ireland by J.A. Paton and T.H. Blackstock and full vc distributions will be published in *Journal of Bryology*. However, several corrections to the distribution can be made now:
a var. *macrostachya*, delete 3, the voucher (Bovey Heathfield, 1959, Rose (BBSUK)) is indeterminate; delete 8, the voucher (Hamptworth Common, 1955, Paton & Wallace (BBSUK)) is indeterminate; delete 22, the voucher (below Caesar's Camp, Wokingham, 1936, Jones (BBSUK)) is *C. connivens*; delete 48, the voucher (see above) is *C. loitlesbergeri*; delete 60, the voucher (Burn Moor, 1936, Milsom (BBSUK)) is *C. loitlesbergeri*; delete 64, no determinable voucher traced; delete 69, no correctly identified voucher traced; delete 70, the voucher (Butterburn Flow, 1968, Birks et al. (BBSUK)) is *C. loitlesbergeri*; with *Lepidozia setacea* in *Sphagnum subsecundum* var. *auriculatum*, Derreenargan Bog (H25), 1967, King (BBSUK); on

- Leucobryum* in bog, Derrylee, E of Verners Bridge (H37), 1964, Fitzgerald & Kertland (BBSUK); all det. & comm. Blackstock.
- 66.3 *Kurzia sylvatica*, steeply sloping humic sand, shaded by *Pteridium*, 30m alt., Roydon Common, King's Lynn 53/62 (28), Stevenson.
- 71.1 *Trichocolea tomentella*, dripping mossy rock face in ancient woodland, 135m alt., bend of Whitadder Water below Edin's Hall Broch 36/76 (81), Long 25914.
- 77.2 *Porella obtusata*, on dry SW-facing rocks with *Pterogonium gracile*, by Afon Teifi at Cenarth, c. 12-13km SE of the mouth of the Teifi at Cardigan, 22/24 (46), Hale
- 85.2 *Cololejeunea rosettiana*, shaded limestone rocks, 120m alt., Cleeve Rocks, Limpley Stoke 31/76 (8), Stern.
- 85.3 *C. minutissima*, on bark of elder in area of sheltered elder scrub, mixed with *Orthotrichum diaphanum*, 150m alt., Pyrton Hill, Chilterns 41/79 (23), Porley.

Contributors of hepatic records, 1995

T.H. Blackstock, T.L. Blockeel, A.D. Hale, D.G. Long, C. Mockridge, G.S. Motley, J.A. Paton, R.D. Porley, T. Pyner, C. Rieser, G.P. Rothero, R.C. Stern, C.R. Stevenson, N.F. Stewart, A.J. Turner, M.C. Watling, J. Woodman.

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MUSCI

T.L. BLOCKEEL

- 1.19 *Sphagnum auriculatum* a var. *inundatum*, ditch in open moorland, 220m alt., Greenside Hill, near Andrew's Cairn, Penmanshiel 36/86 (81), Long 25888.
- 1.20 *S. subsecundum*, hummocky valley mire, in wet hollow, 275m alt., S. end of Longmuir Moss 36/45 (81), Long 25935.
- 1.27 *S. recurvum* a var. *amblyphyllum*, stream bank under bracken, edge of woodland, Stanmore Common 51/19 (21), Rieser; swampy woodland, in damp hollows, 179m alt., SE end of Redpath Moss, Earlston 36/63 (81), Long 25893.
- 6.2 *Pogonatum aloides* b var. *minimum*, on stony soil of steep NE-facing slope in old mine-spoil, Wheal Busy, E. of Scorrier 10/74 (1), Holyoak 95-385.
- 7.1 *Oligotrichum hercynicum*, forestry track, nr Rock of Woolbury 32/37 (40), Walker, first found by D. Wrench.
- 8.2 *Atrichum tenellum*, on peaty bank of river, associated with *Dicranella rufescens*, Afon Teifi, Tregaron Bog 22/66 (46), 1989, Porley, new to Wales; exposed mud, 360m alt., NW end of Loch Turret Reservoir, NW of Crieff 27/72 (88), Long & Rothero 25966.
- 14.2 *Ditrichum flexicaule* s. str., delete 1, the specimen (Sand dunes, Perranporth, leg. F.E. Milsom, Aug. 1932, BBSUK) is *D. crispatisimum*, comm. Holyoak.

- 15.1 *Distichium capillaceum*, on vertical mortared stone wall above edge of road, shaded by bush of *Prunus laurocerasus* and edge of woodland, Trevarno 10/63 (1), Holyoak 95-66.
- 15.2 *D. inclinatum*, on small rather bare sandy patches in very short turf of dune grassland, Gear Sands 10/75 (1), Holyoak 95-86.
- 18.6 *Seligeria calcarea*, shaded limestone scar in woodland, Eastern Hornstocks, Duddington 53/00 (32), 1991, Wigginton.
- 23.1 *Rhabdoweisia fugax*, on thin soil inside cracks of granitic rock in old quarry, partly shaded, Carfury 10/43 (1), 1994, Holyoak 94-381.
- 32.2 *Dicranum polysetum*, on ground in Birch/Scots Pine woodland, Minsmere 62/46 (25), Strauss.
- 32.12 *D. montanum*, on horizontal willow trunk in carr near R. Waveney, Lopham (Middle Fen) 62/07 (27), Strauss.
- 32.14 *D. tauricum*, on *Betula* trunk, boggy woodland, 160m alt., Petersmuir Wood, near East Saltoun 36/46 (82), Long 25829.
- 33.2 *Dicranodontium asperulum*, in wide crevices between boulders, Gill Pike, Kielder Forest 35/68 (67), Blackburn & Townsend, new to England.
- 33.4 *D. denudatum* a var. *denudatum*, amongst grass and bracken at the top of woodland slope, Tiger's Clough, Rivington 34/61 (59), Gregory.
- 36.2 *Leucobryum juniperoideum*, on ground in woodland of *Quercus petraea* on S-facing hillslope, S. of Gweek 10/72 (1), Holyoak 95-52; old stump, 85m alt., Tinney's Firs, Redlynch 41/22 (8), Stern.
- 37.2A *Fissidens pusillus* a var. *pusillus*, shaded calcareous sandstone in woods, 40m alt., The Grove, Easthaugh Hill, E. of Lyng 63/01 (27), 1994, Stevenson.
- 37.11 *F. exilis*, calcareous? clay soil on side of ditch, 50m alt., Foxley Wood, Foxley, East Dereham 63/02 (27), Stevenson.
- 38.1 *Octodiceras fontanum*, on masonry of small lock in the Wey Navigation Canal on the W. side of the road between Send and Old Woking (17), Townsend 95/143, and on the concrete apron of a lock in the Wey Navigation Canal, New Haw, between Addlestone and Byfleet 51/06 (17), Townsend 95/147, and in other places on this canal system.
- 39.2 *Encalypta vulgaris*, on calcrete boulder in former sand pit, 150m alt., Saddle Plantation near Great Offley 52/12 (20), G. Smith.
- 40.1 *Tortula ruralis* b ssp. *ruraliformis*, on stabilised sand/shell beach, 2m alt., south of Sales Point, Bradwell-on-Sea 62/00 (18), Pyner.
- 40.5 *T. virescens*, on large sloping willow bough at edge of carr near R. Waveney, Lopham (Middle Fen) 62/07 (27), Strauss.
- 40.9 *T. marginata*, on vertical bricks of moist old walls at edge of ornamental garden, Trengwainton Gardens 10/43 (1), Holyoak 95-286.
- 40.11 *T. papillosa*, on old Elder bush, 85m alt., Garnetts Wood, Great Dunmow 52/61 (19), Pyner.
- 46.1 *Phascum cuspidatum* d ssp. *papillosum* (Lindb.) Guerra & Ros, 39, (48), 56, (H39) (Blockeel, 1995), and add: on unshaded soil of low soil-heap, at edge of old mine-spoil, Wheal Busy, E. of Scorrier 10/74 (1), Holyoak 95-391.
- 48A.1 *Scopelophila cataractae*, on vertical silty soil of side of ditch in old mine-waste, shaded by overhanging grasses and by bank, Tuckingmill 10/64 (1), 1994, Holyoak 94-463.
- 49.15 *Barbula nicholsonii*, on thin soil in crevice on top of footbridge of granitic rock, low above water of stream, unshaded, Burras 10/63 (1), 1994, Holyoak 94-438.
- 50.1A *Gymnostomum viridulum*, on sloping soil bank below cliffs, 130m alt., The Wyndcliff, St. Arvans, Wye Valley 31/59 (35), Martin.

- 56.1 *Trichostomum crispulum*, chalk grassland, 15m alt., Lakenheath Warren 52/78 (26), 1994, Strauss.
- 56.2 *T. brachydontium*, on soil among rocks, 120m alt., Cleeve Rocks, Limpley Stoke 31/76 (8), Stern.
- 57.2 *Tortella tortuosa*, limestone rocks, 120m alt., Cleeve Rocks, Limpley Stoke 31/76 (8), Stern.
- 63.2 *Schistidium rivulare* (Brid.) Podp. (*S. alpicola* auct.). The infraspecific taxa have been revised by Orange (1995). Transfer the entry for **b** var. *rivulare* to **a** ssp. *rivulare*, and amend as follows: delete 107, the voucher (Falls of Shin, D.G. Long & D. Chamberlain, 1974, *Bull. Brit. Bryol. Soc.* **28**: 26) is *S. agassizii*; delete H2, the voucher (Torc Cascade, M.F.V. Corley & J.S. Parker, 1966, *Trans. Brit. Bryol. Soc.* **5**: 414) is *S. apocarpum*; delete H3, the voucher (W. of Macroom, R.D. Fitzgerald, 1967, *Trans. Brit. Bryol. Soc.* **5**: 637) is *S. apocarpum*; delete H8, the voucher (Glencorbry River, E. Wiltshire, 1992, *Bull. Brit. Bryol. Soc.* **64**: 38) is ssp. *latifolium*; delete H28, the voucher (Dromore West, R.D. Fitzgerald & E.M. Loblely, 1965, *Trans. Brit. Bryol. Soc.* **5**: 195) is ssp. *latifolium*; add: rocks in stream, Glen River, below Carrick (H35), 1969, J.A. Paton (NMW). Transfer the entry for **a** var. *alpicola* to **b** ssp. *latifolium* (Zett.) B. Bremer, and replace with: (36), 41, (42), 54, 56, (62), 63-65, (66), 67, (68), 70, 72, (81), 84, 89, 90, 104, 112, H1, 8, 19, 28, (40) (for citation of specimens see Orange, 1995), and add: on unshaded mudstone rocks by river, 95m alt., R. Wye upstream of Bach Howey, Llandeilo Graban 32/14 (43), Orange 10221.
- 63.3 *S. agassizii*, R. Llugwy, Capel Curig 23/75 (49), 1950, I.G. Hall (NMW); stream, Langstrath (70 in ()), 1944, L.B.C. Trotter (NMW); on rocks by river, River Nant, at Tailor's Leap 27/02 (98), 1976, M.F.V. Corley (BBSUK); rocks by Loch Maree (105 in ()), 1896, E.S. Salmon (NMW); boulders in river bed, Falls of Shin, south of Lairg 28/59 (107), 1974, D.G. Long & D.F. Chamberlain (BBSUK). All specimens det. A. Orange (see also Orange, 1995).
- 64.1 *Grimmia anodon*, delete 70 (Blockeel, 1996).
- 64.5 Transfer this entry to *Grimmia sessitana* De Not. (Greven, 1995).
- 64.8 *G. affinis*, delete 101, the specimen (slab rock, Achahoish , near a'Mhaol Odhar, leg. A.G. Kenneth, 1970, BBSUK) is *G. britannica* c.fr.
- 64.19 *G. ovalis*, tiled roof of farm building, 60m alt., near Funtington 41/70 (13), Stern.
- 66.5 *Racomitrium heterostichum* s. *str.*, exposed rock, in open sheep-grazed moorland, 320m alt., 2.5 km NNW of Ponterwyd 22/78 (46), Hale.
- 66.5A *R. affine sensu* Frisvoll, on slate scree, 100m alt., Coed Simdde Lwyd, Coed Rheidol N.N.R. 22/77 (46), 1990, Hale.
- 66.6 *R. sudeticum*, horizontal surface of projecting stone of drystone wall, with *R. fasciculare*, between Anglezark Reservoir and White Coppice 34/61 (59), Lowell.
- 66.10 *R. ericoides*, compacted ground at side of forestry track, 50m alt., Balmearnach, Fishnish, Mull 17/64 (103), Hodgetts 3098.
- 66.11 *R. elongatum*, around old lead rake on roadside verge, 330m alt., west of Earl Rake, Bradwell 43/18 (57), Thomas.
- 85.15 *Pohlia lescuriana*, on bare patch of moist soil at base of *Juncus effusus* in small wet pasture, just N.E. of St. Enoder 10/85 (1), Holyoak 95-240.
- 89.27 *Bryum pallescens*, on old lead workings on roadside verge, 330m alt., upper end of Earl Rake, Bradwell 43/18 (57), Blockeel 24/329.
- 89.39 *B. gemmilucens*, stubble field on light sandy soil, 56m alt., Bircham Tofts, near Great Bircham 53/73 (28), 1989, Stevenson.
- 89.40 *B. dunense*, on soil by path with *B. caespiticium* and *Barbula fallax*, 180m alt., Breakheart Quarry, Dursley 31/79 (34), Martin; neglected arable land and tracks, Condover 33/40 (40), 1993, Walker.

- 91.4 *Mnium marginatum* a var. *marginatum*, shaded wall by stream, 70m alt., Nadder Valley, Baverstock, E. of Dinton 41/03 (8), Veall & Stern.
- 95.1 *Pseudobryum cinclidioides*, hummocky valley mire, 275m alt., middle part of Longmuir Moss 36/45 (83), Long 25932.
- 109.2 *Zygodon baumgartneri*, tree trunk near stream, 100m alt., Ozelnorth Bottom, 3 miles E. of Wotton-under-Edge 31/89 (34), Martin & Brown.
- 109.3 *Z. conoideus*, on branch of elder in rather scrubby woodland, 140m alt., just south of Warden Grange, 12 km S.S.W. of Daventry 42/55 (32), Bates & O'Leary, Bates 3359.
- 110.3 *Orthotrichum striatum*, on fallen (living) *Salix fragilis* branch, 35m alt., meadow by R. Chelmer, Little Waltham 52/71 (19), Pyner; on apple tree, 21 Luard Road, Cambridge 52/45 (29), Finch.
- 110.11 *O. cupulatum* a var. *cupulatum*, on mortar between blocks of horizontal slaty rock of grave in churchyard, unshaded, churchyard at Kea 10/84 (1), 1994, Holyoak 94-212.
- 110.14 *O. stramineum*, on fallen (living) *Salix fragilis*, 35m alt., meadow by R. Chelmer, Little Waltham 52/71 (19), Pyner.
- 110.16 *O. tenellum*, on branch of fallen (living) Field Maple by stream, 35m alt., Shales Moor, Stapleford Tawney 51/59 (18), Pyner; on old *Salix* on river bank, 24m alt., River Tyne opposite Brae Heads, SW of East Linton 36/57 (82), Long 25849.
- 110.18 *O. pulchellum*, on leaning trunk of young Ash, 40m alt., Shales Moor, Stapleford Tawney 51/49 (18), Pyner.
- 111.3 *Ulota crispa* b var. *norvegica*, on branch of tree, Tugley Bushes, Tugley & Keythorpe 43/70 (55), Ballard.
- 111.6 *U. phyllantha*, on branch of fallen (living) Field Maple by stream, 35m alt., Shales Moor, Stapleford Tawney 51/59 (18), Pyner; on elder in plantation woodland, 100m alt., Twyford Wood 43/92 (53), Hodgetts 3103.
- 112.1 *Hedwigia ciliata* a var. *ciliata*, replace the existing entry with: 13, (14), 35, (36, 48, 49), 69, (73, 98, 108), H6 (Crundwell, 1995), and add: on top of sarsen stones with *Grimmia trichophylla*, Fyfield Down 41/17 (7), Porley; on large *Salix fragilis* by small pond next to R. Chelmer, 25m alt., Springfield Hall Park, Chelmsford 52/70 (19), Pyner: b var. *leucophaea* Bruch *et al.*, (73, 108) (Crundwell, 1995).
- 112.1A *H. stellata* Hedenäs, 1, (2), 3-9, 15, 22, 28, (34-35), 36, (37, 40), 42, 43, (44), 45, (46), 47, (48), 49, 52, (55, 64, 66, 68), 69, (70), 73, (75, 76), 78, 80-83, (84, 85), 86, (87), 88, 89, (90), 91-93, 95-101, 104-106, (107-109), 110, 112, H1-4, 6, 8, 12, 15, 19-22, 24, (25), 26-33, 35-37, (38), 39, 40, C. These records are based on a revision of British material of *H. ciliata* sensu lato (Crundwell, 1995); brackets are used where the most recent specimen seen was collected before 1946. The record for H32, which is a new county record for the aggregate species, is: hill SE of Creeve L. (H32), 1986, Synnott (DBN). Add also: rock outcrop in rough pasture, 270m alt., Howemill, Strathglass E of Dufftown 38/43 (94), 1994, Long 25806, conf. Crundwell.
- 113.1 *Fontinalis antipyretica* b var. *gracilis*, in shallow quick-flowing water on lip of small weir, slightly shaded by trees and *Prunus laurocerasus* scrub, Clowance 10/63 (1), 1994, Holyoak 94-359.
- 115.1 *Cryphaea heteromalla*, large patch on Elder, small marshy copse, 35m alt., Shonks Mill Road, Stanford Rivers 51/59 (18), Pyner.
- 116.1 *Leucodon sciuroides* b var. *morensis*, on old near-vertical concrete wall of ruins, unshaded and south-facing, E. of St. Just 10/33 (1), 1994, Holyoak 94-434.
- 122.1 *Homalia trichomanoides*, on sheltered faces of gneiss boulders on shore of loch, 40m alt., S. shore of Loch Druim Suardalain, Assynt 29/12 (108), Rothero 95/005.
- 137.1 *Thuidium abietinum* b ssp. *hystricosum*, unimproved limestone grassland, Westbury-sub-Mendip 31/55 (6), T. Smith.
- 137.3 *T. delicatulum*, calcareous grassland by ruin, 90m alt., Billie Castle near Chirside 36/85 (81), Long 25871.

- 141.3 *Amblystegium tenax*, on wood of log lying in stream, just above water-level, shaded by deciduous woodland, NW of St. Martin 10/72 (1), 1994, Holyoak 94-133.
- 143.4 *Drepanocladus fluitans* a var. *fluitans*, on damp detritus of relict pond overlying sand and gravels under a *Salix* canopy, Littleworth Common, Slough 41/98 (24), Porley.
- 144.3 *Hypoglyptum luridum* b var. *subsphaericarpon*, on slate rocks by tributary of R. Hindburn, near Wray 34/66 (60), 1986, Wigginton.
- 147.4 *Isoetecium striatulum*, in small quantity on shaded south-facing Magnesian limestone rocks, 105m alt., Southard's Plantation, Thorpe Salvin 43/57 (63), Blockeel 24/584.
- 150.13 *Brachythecium plumosum*, tree root by stream, with *Homalia trichomanoides*, 30m alt., Landfordwood, NE of Landford 41/22 (8), Stern.
- 155.5 *Eurhynchium praelongum* var. *stokesii*, on grassy slope amongst tree roots, Borsdane Wood, Wigan 34/60 (59), Gregory.
- 156.3 *Rhynchostegiella teesdalei*, on vertical plastered brick wall of dark tunnel, 0-10 cm above mean level of R. Cam, 5m alt., 3-6m from N end of tunnel, Newnham Mill, Cambridge 52/45 (29), Whitehouse & Finch.
- 159.5 *Plagiothecium curvifolium*, rotting wood in damp woodland, Fishlake 44/61 (63), 1981, Blockeel 10/008 - replaces the previous record (Burbage Moor, leg. D.G. Long, 1971, *J. Bryol.* 8: 176) which is in VC 57.
- 159.6 *P. laetum*, coppice stool of old sycamore in rather dull and open derelict copse, 150m alt., Redhill Wood, 12 km S.S.W. of Daventry 42/55 (32), Bates & O'Leary, Bates 3362.
- 161.1 *Isoterygium pulchellum*, shady rock face in ancient woodland, 135m alt., bend of Whitadder Water below Edin's Hall Broch 36/76 (81), Long 25913.
- 166.1 *Platygyrium repens*, on inclined trunk of *Alnus glutinosa* in Alder carr, 50m alt., Bassett's Wood near Cowden 51/44 (16), Matcham & Duckett.
- 173.4 *Rhytidiadelphus loreus*, on willow bough at margin of reservoir, 60m alt., Denton Reservoir 43/83 (53), Hodgetts 3099.

Contributors of moss records, 1995

D.W. Ballard, J.W. Bates, J.M. Blackburn, T.L. Blockeel, G. Brown, J.G. Duckett, R.A. Finch, A. Gregory, A.D. Hale, N.G. Hodgetts, D.T. Holyoak, D.G. Long, J. Lowell, P. Martin, H.W. Matcham, S.V. O'Leary, A. Orange, R.D. Porley, T. Pyner, Mrs. C. Rieser, G.P. Rothero, G.P. Smith, T. Smith, R.C. Stern, C.R. Stevenson, D. Strauss, D.M. Synnott, R. Thomas, C.C. Townsend, R. Veall, C. Walker, H.L.K. Whitehouse, M.J. Wigginton.

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