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BULLETIN  
OF THE  
BRITISH BRYOLOGICAL  
SOCIETY

*Edited by A. R. Perry*



PUBLISHED BY THE BRITISH BRYOLOGICAL SOCIETY  
CARDIFF

# BRITISH BRYOLOGICAL SOCIETY

PRESIDENT: Dr M.O. HILL



## BULLETIN

No. 58. July 1991

*Edited and produced by*  
*A.R. Perry*  
*National Museum of Wales, CARDIFF*

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### SUBSCRIPTIONS 1991

Members are reminded that subscriptions, which are now £15.00 for full members, £7.50 for junior members and £1.00 for family members, were due on 1 January, 1991. All members were circulated with a notification and reminder last November. However, some Standing Order Mandates have still not been amended and a number of subscriptions are still outstanding. Members are requested to send any outstanding amounts to the Membership Secretary as soon possible.

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

British Bryological Society

STATEMENT OF AFFAIRS AS AT 31st DECEMBER 1988

<u>Liabilities</u>		<u>Assets</u>	
	£		£
Blackwell's 1988 a/c	8,361.41	NatWest-current a/c	1,004.97
outstanding		-deposit a/c	781.86
Subs. in advance	444.26	National Savings Bank	
Unpaid cheque	34.38	investments a/c	35,196.08
Member's credit	54.00	Girobank	109.00
Capital a/c b/fwd	33,165.15		
	-----		
	42,059.20		
<u>less</u> excess of exp-	4,967.29		
enditure over inc.			
	-----		-----
	37,091.91		37,091.91
	=====		=====

INCOME AND EXPENDITURE ACCOUNT, YEAR ENDED 31st DECEMBER 1988

Income

(1987)		1988
£		£
	<u>Publications</u>	
9,720	Blackwell's - subs. to <u>J. Bryol</u> (217)	9,764.09
1,722	- sales of <u>J. Bryol</u> back issues	219.60
848	- sales of <u>J. Bryol</u> offprints	369.10
-----		-----
11,290		10,352.79
145	<u>TBBS/J. Bryol</u> back issues	467.80
139	Census Catalogues	155.00
14	Bulletins	75.60
222	Other	76.60
131	Special Volume 1 : Jubilee meeting	12.00
-----		-----
11,941		11,139.79
	<u>General</u>	
5,418	Subscriptions from members	4,948.61
20	Reading Circle subscriptions	83.00
47	Postage	41.80
5	Legacies/donations	10.00
-	Miscellaneous	-
305	Lenses and forceps	335.00
24	BBS Ties	24.75
1,000	New Phyt. Trust grant - Linn. Soc. mtg.	-
3,067	Interest from National Savings Bank a/c	3,010.75
76	Interest from Nat West deposit a/c	48.09
-----		-----
9,962 (ST)		8,502.00 (ST)
-----		-----
21,903		19,641.79

Expenditure

(1987)		1988
f		f
<u>Publications</u>		
9,794	Blackwell's - <u>J. Bryol</u> production costs	14,528.57
344	- general costs (reprints etc)	563.03
2,430	- 25% of subscription income	2,441.02
253	- 25% of sales of back issues	54.90
212	- 35% of sales of offprints	129.18
432	- servicing (525 members)	997.50
-----		-----
13,465		18,714.20
874	Production of <u>Bulletin</u> (? issues)	764.00
-----		-----
14,339		19,478.20
<u>General</u>		
2,086	Expenses - Field meetings/AGM	1,315.60
51	Stationery, typing and telephone costs	43.22
237	Postage	150.67
2	Photocopying	92.27
78	Library purchases - books and journals	68.72
624	- for resale (lenses etc)	-
34	Reading Circle	-
100	Insurance	150.00
294	Bryohistorical project	1,381.79
151	BBS Ties	-
-	Mapping scheme	383.00
-	Travelling exhibition	1,500.00
37	Miscellaneous	45.61
-----		-----
3,694 (ST)		5,130.88 (ST)
-----		-----
18,033		24,609.08
3,870	Balance of expenditure over income	(4,967.29)
-----		-----
21,903		19,641.79
-----		-----

CERTIFICATE

I hereby certify that the Income and Expenditure Account and Statement of Affairs have been prepared from the books and statements presented to me by B.J. O'Shea, Hon. Treasurer, and to the best of my knowledge and belief show a true statement of the affairs of the Society as at 31st December 1988.

Date: 31/07/1989

Signed:

H.R. Feather BA

BRITISH BRYOLOGICAL SOCIETY

STATEMENT OF AFFAIRS AS AT 31st DECEMBER 1989

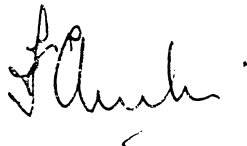
<u>Current Assets</u>	<u>£</u>	<u>£</u>
Nat. West - current a/c		2,208.11
- deposit a/c		829.48
National Savings Bank		
investment a/c		30,695.10
Wallace Memorial fund		1,372.07
Girobank		362.60
		-----
		35,467.36

Current Liabilities

Blackwell's 1989 a/c outstanding	5,602.60	
Subscriptions in advance	444.26	
Members' credit	54.00	
	-----	
		6,100.86
		-----
		29,366.50
		=====

Represented By:

Capital account b/fwd	28,197.86
Adjustment - Wallace Memorial Fund	1,372.07
	-----
	29,569.93
Less excess of expenditure over Income	203.43
	-----
	£ 29,366.50
	=====



G C S CLARKE  
Acting Treasurer

BRITISH BRYOLOGICAL SOCIETY

INCOME AND EXPENDITURE ACCOUNT, YEAR ENDED 31st DECEMBER 1989

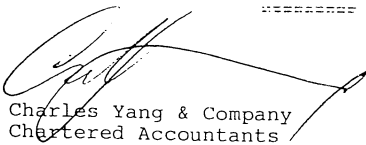
Income

(1988)		(1989)
£		£
	<u>Publications</u>	
9,764.09	Blackwell's - subs to <u>J Bryol.</u>	10,648.71
219.60	- sales of <u>J Bryol.</u> back issues	747.05
369.10	- sales of <u>J Bryol.</u> offprints	999.55
-----		-----
10,352.79		12,395.31
467.80	<u>TBBS/J Bryol</u> back issues	170.80
155.00	Census catalogues	11.55
75.60	Bulletins	18.00
76.60	Other	313.45
12.00	Special Volume: Jubilee Meeting	-
-----		-----
11,139.79		12,909.11
	<u>General</u>	
4,948.61	Subscriptions from members	5,214.15
83.00	Reading circle subscriptions	43.00
41.80	Postage	41.77
10.00	Legacies and donations	30.00
-	Miscellaneous	75.80
359.75	Lenses, forceps, ties	280.00
-	Microscopes	581.00
3,010.75	Interest from National Savings Bank	3,499.00
48.09	Interest from Nat. West deposit a/c	47.62
-----		-----
8,502.00 (st)		9,812.34 (st)
-----		-----
19,641.79		22,721.45
=====		=====

Expenditure

(1988)		(1989)
£		£
	<u>Publications</u>	
14,528.57	Blackwell's - <u>J Bryol.</u> production costs	11,095.95
563.03	- general costs (reprints etc.)	470.88
2,441.02	- 40% (25%) of subscription income	4,259.48
54.90	- 25% of sales of back issues	186.76
129.18	- 35% of sales of offprints	349.84
997.50	- servicing membership	1,635.00
-----		-----
18,714.20		17,997.91
764.00	Production of <u>Bulletin</u> (2 issues)	580.44
-	Production of special volume 1	750.00
-	Production of special volume 2	488.00
-----		-----
19,478.20		19,816.35
	<u>General</u>	
1,315.60	Expenses (meetings)	125.00
286.16	Administrative expenses	603.78
68.72	Library purchases - books etc	-
-	- lenses, forceps etc	232.00
-	Reading Circle	48.30
150.00	Insurance	150.00
1,381.79	Bryohistorical project	-
383.00	Mapping scheme	352.00
1,500.00	Travelling exhibition	-
-	CABS Conservation Officer's salary	1,000.00
-	Steere Memorial Fund donation	318.00
45.61	Miscellaneous	279.45
-----		-----
5,130.88 (st)		3,108.53 (st)
-----		-----
24,609.08		22,924.88
(4,967.29)	Excess of expenditure over income	(203.43)
-----		-----
19,641.79		22,721.45
=====		=====

63 Aberdare Gardens  
London NW6 3AN

  
Charles Yang & Company  
Chartered Accountants

Date: 24<sup>th</sup> Aug. 1990.

## REPORTS OF OFFICERS FOR 1990

### a) GENERAL SECRETARY'S REPORT

The year has been one of continued hard work on the part of many members, work which has been rewarded by a number of significant successes in advancing the objectives of the Society. Not only the BBS viewed the approaching publication of the first volume of the Bryophyte Distribution Atlas with enthusiasm, for both the Natural Environment Research Council, through the Linnean Society, and the Royal Society provided generous sponsorship. As a result, the Atlas will be more modestly priced than it would have been, and can therefore be expected to reach a wider public.

This is opportune in that biological recording is likely to assume even greater importance in the future, stimulated in part by the publication of the Atlas. Council has therefore established a new office of Recording Secretary. It should also be reported in this context that the interests of the BBS are soon to be represented to the Coordinating Commission for Biological Recording chaired by Sir John Burnett, and set up under the auspices of the Natural Environment Research Council following extensive discussion.

Another venture of a sort not previously made by the Society is also about to be finalized. Plans have been going ahead for some time in the hope of establishing a fitting memorial to Mr E.C. Wallace, and are now at a stage where a firm agreement with the Hampshire and Isle of Wight Naturalists' Trust will soon be made for the management of the Greywell Moors Nature Reserve.

These, and other efforts, are hopefully the kind of initiatives the membership wishes Council to take on its behalf. However, in an attempt to gear activities as closely as possible to what members want of the Society, Council has decided to publish a list of all its committees. Everyone will be urged to contribute ideas to the conveners and, equally important, to volunteer advice and assistance. This is thought to be particularly important in certain areas where Council knows its efforts are inadequate for lack of the necessary skills. There is concern, for instance, that our salesmanship does not match the ability of the Publications Committee to respond to members' requests for special publications.

Meetings continue to be varied and popular; an excellent sign of a vigorous and active Society. It is to be hoped that it will long continue to be so, for the threats to bryophytes and the recognized importance of this group of plants to so many disciplines are, ironically, both steadily increasing.

M.E. Newton  
January 1991

### b) TREASURER'S REPORT

The final figure shown in the preliminary statement below is £1179 more than last year's sum (£29,366), and for the first time in three years we have an excess of income over expenditure rather than a deficit. This may sound like good news, but one must remember that at a time of high inflation, we would need an excess of more than twice this figure in order to maintain our level of affluence. I hope that the increase in subscriptions levels that was accepted by the 1990 AGM will rectify this; a £5 increase should bring in rather more



than £2,000 per year. I am most grateful to the Membership Secretary, Tony Smith, for all his efforts in dealing with subscriptions.

Despite these reservations, for a small society we are fortunate in our level of assets. During 1991 we will receive an astonishingly generous bequest from Trudy Side's estate which will amount to more than £20,000. This means that, should we so wish, we will be able to support a substantial project to forward the interests of bryology.

---

Preliminary statement of affairs as at 31 December, 1990

<u>Current assets</u>	£
Nat. West Current a/c	4,021.48
Nat. West Deposit a/c	878.09
Giro	729.60
National Savings	30,685.09
Wallace Memorial Fund	
	1,611.25
	-----
	37,925.51
 <u>Current Liabilities</u>	
Includes estimated figure for Blackwell's invoice	7,379.76
	-----
	30,545.75
	=====
 <u>Represented by:</u>	
Capital account brought forward	27,994.43
Adjustment: Wallace Memorial Fund	1,611.25
	-----
	29,605.68
Plus excess of income over expenditure	940.07
	-----
	30,545.75
	=====

---

Two major bequests have been received by the Society this year. Jack Gardiner left us £500 in his will and Trudy Side's books, with a value of £550, were delivered to us.

Major items of expenditure during the year have been the *Atlas* (£4,400 on preparation and printing), the AGM (£500 towards the expenses of invited guests) and the *Journal*. The estimated cost to the Society of the *Journal* in 1990 is about £7,000, but at the time of writing I cannot be precise as I do not have Blackwell's invoice.

We have had mixed success this year in some of our marketing enterprises, especially in publications. Some items have sold well thanks to the activities of Ken Adams and Roy Perry, but we are still far too easily persuaded to put money into items for sale without having thought out whether there is a market for them or how we are going to sell them. Sales of our Special Volume series have been very disappointing.

Now we have decided what form the memorial to Ted Wallace should take, there have been some additional donations. A final call for donations has been made, especially to BSBI members, before the Wallace Memorial Fund is closed in early 1991.

Last but not least I would like to acknowledge the help and advice I have received from Charles Yang who has acted as our Honorary Auditor.

Giles Clarke  
March 1991

#### c) BIBLIOGRAPHER'S REPORT

A list of current bryological literature has continued to be produced for each part of the *Journal*. 'Recent Bryological Literature, 74' has appeared in *J. Bryol.* 16(2), number 75 is in press and number 76 is in preparation.

I am grateful to my predecessor, Dr Giles Clarke, for introducing me to the procedures and sources of information to compile these lists. I also wish to thank Mr Malcolm Beasley (Botany Library, BM) for regularly providing many references which would otherwise be difficult to obtain.

As the rate at which new bryological literature is produced increases it becomes ever easier to overlook the occasional reference. Therefore, I would be very grateful to receive details of papers and books that I may have missed.

L.T. Ellis  
March 1991

#### d) BULLETIN EDITOR'S REPORT

Two *Bulletins*, 55 and 56, were prepared and published during the year. Deadlines for receiving copy for the *Bulletins* are 15 May and 15 December.

I hope that members have noticed an expansion in the content and coverage of the *Bulletin* about which I now occasionally receive comments from foreign bryologists. It is to be hoped that this increased interest will result in new members.

As requested, I have been publishing for the Society the two new Special volumes and the *Bot.J.Linn.Soc.* vol.104 Symposium issue ('Bryophyte Ecology').

A.R. Perry  
March 1991

#### e) CONSERVATION OFFICER'S REPORT

1. The Conservation Association of Botanical Societies was formally dissolved on 21 May. Arrangements were made to transfer most of CABS' work and ongoing projects to Plantlife. RCS was appointed to serve on the Plantlife Conservation Committee and attended its three meetings in 1990. The BBS is entitled to appoint a (non-voting) representative to that Committee and Giles Clarke has agreed to serve in that capacity.

2. The project on Conservation Requirements for Threatened Lower Plants continued

under the auspices of Plantlife and was almost completed at the end of the year. RCS reported to the AGM on the excellent work done by the Project Officer, Nick Stewart, and exhibited examples of the data sheets and site information for bryophytes. RCS and Nick Stewart attended a symposium in Sweden on Endangered Bryophytes in Europe, where they presented a paper on the project. A short account of this symposium is to be published in the *Bulletin*.

3. As a result of a working party meeting chaired by RCS, a Recording Secretary was appointed together with a Recording Committee, on which a member of the Conservation Committee is to serve. RCS attended two meetings of the Recording Committee.

4. The Conservation Committee met twice in London, and the two Scottish members, Peter Pitkin and David Long, met Nick Stewart in Edinburgh to discuss in detail upland mosses for the Threatened Lower Plants Project.

5. A list of 34 bryophytes for inclusion in Schedule 8 of the Wildlife and Countryside Act was submitted to the Nature Conservancy Council for the Quinquennial Review in 1991.

6. The Committee commented on Nick Hodgetts' proposals for SSSI criteria for bryophytes and dealt with a number of other matters, including the skiing proposals in Lurcher's Gully in the Cairngorms. A formal letter objecting strongly to these proposals was sent to the Scottish Development Department.

R.C. Stern  
March 1991

#### **f) CURATOR'S REPORT**

Voucher specimens incorporated during the year were 135 mosses and 53 hepatics. There were 14 loans from BBSUK, totalling 223 packets.

A.R. Perry  
March 1991

#### **g) JOURNAL EDITOR'S REPORT**

There was a drop in the number of papers submitted to *J. Bryol.* during 1990 compared with previous years but the relative proportion accepted was much the same. Attempts to ensure that the December issue appeared in 1990 and not the following year just succeeded with the publication date being 19 December although the *Journal* was not distributed until January. I would like once again to thank those members who kindly refereed papers or assisted with proof reading.

A.J.E. Smith  
March 1991

#### **h) LIBRARIAN'S REPORT**

Sales:	J. Bryology (parts)	29
	TBBS (parts)	39
	Distribution of Bryophytes	21
	Census Catalogues (old)	3

Hepatics of Europe & Azores	4
BBS Bulletins	24
Library Catalogues	7
Moss Wall Charts	5
Special Volume: Jubilee	1
Special Volume: Chromosomes	12
Special Volume: Tropical Bryos.	4
Bryology (Linn.Soc.)	1
German/English Glossary	4
x20 lenses	13
Stainless steel forceps	11
BBS ties	4
Microscopes	2
Loans: 35 mm slide sets	2

The librarian apologises to members for an erratic service in 1990 due to extra pressures. The Library Catalogue to books and reprints is in urgent need of an update. If any retired BBS member(s) would like to volunteer to take on this task, a word-processor plus instruction and cups of tea are available at the Polytechnic of East London (daytime/evening).

Ken Adams  
March 1991

#### i) MAPPING SECRETARY'S REPORT

This is my last report after 30 years as mapping secretary, the mapping scheme having come to an end with the preparation of a bryophyte atlas edited by M.O. Hill, C.D. Preston and A.J.E. Smith. The bulk of the records that will appear in the atlas are the result of field recording and I would like to thank all those BBS members who have submitted records, some having participated since the inception of the mapping scheme in 1960. Without their herculean efforts the scheme would not have succeeded. I would also like to thank Dr Royce Longton who, during his tenure of the post of General Secretary, initiated negotiations with ITE which led to their involvement in the publication of the Atlas; also Mr C.D. Preston and Dr M.O. Hill who oversaw the data-processing and editing of manuscripts and upon whose shoulders the work of supervising the production of the atlas fell.

A.J.E. Smith  
March 1991

#### j) MEETINGS SECRETARY'S REPORT

The strenuous efforts of our local secretaries made a success of what was an adventurous programme of meetings. The spring meeting, organized by Martin Wigginton in Morecambe, was perhaps a departure from normal practice, being quite far north for a meeting at that time of the year. But the weather was no more than usually mixed, and we enjoyed some remarkably pleasant days in the field. Martin was also able to demonstrate his excellent knowledge of the area and its bryophytes.

There were no complaints about travelling distance to Morecambe - perhaps the good road

network will allow us to be equally adventurous in our future choice of spring venues. Although usually held further south, occasional spring meetings in more northerly areas would enable us to revisit somewhat neglected places. Such sites were once thought rather far-flung for spring meetings and were not quite bryologically exciting enough to attract a good crowd in the summer months. The Lake District and Scotland have been suggested as possible future spring venues.

The first week of the summer field meeting was based at two places in Northern Ireland, while the second was across the border in Donegal. This was the first time that the Society had visited the province of Northern Ireland for many years, but it was an idea which had received strong support when the enthusiasm generated by the last Irish meeting was still fresh in members' minds. Unfortunately this year, despite an excellent programme compiled by Keith Lewis, the meeting attracted very few participants from the rest of the UK. It was regrettable that more did not attend, especially during the first week, when a considerable number of local naturalists appeared who might have benefited from the Society's expertise and encouragement.

But this by no means dampened the spirit of the group, which included a strong contingent from the Republic. There were enough fine bryophyte sites explored to satisfy all, though the weather could have been kinder, especially on the days set aside for the Donegal mountains. Keith's flexible planning and wry humour, however, ensured that we made the best of the situation.

The autumn AGM weekend was a special and memorable event organized by Philip Stanley in honour of two of our most longstanding and eminent members, Prof. Paul Richards and Dr Eustace Jones. Though beset with difficulties - including the costs of staging a meeting in a city like Cambridge - all went very smoothly. Philip is to be congratulated for the professional job he made of the arrangements, which was much appreciated.

Sean Edwards organized the Workshop meeting on the subject of bryophyte photography. Held in Manchester, the workshop was well-attended, showing that there is a considerable and growing interest in this area of bryology.

The year also saw the start of a programme of more local meetings, which, at the time of writing, had got off to a good start. It transpired that there were more local meetings going on than anyone expected, and although we hope to add to that number, there is a significant role for the society to play in publicizing meetings already organized by others.

Once again I would like to encourage all members with ideas and comments about meetings to get in touch. Feedback is an essential part of the process of ensuring that we get the kind of meetings we want.

Philip Lightowlers  
March 1991

#### **k) MEMBERSHIP SECRETARY'S REPORT**

MEMBERSHIP RECORDS. The Table below shows the membership at the end of the year. The full effect of the increase in subscription is probably not yet apparent. There is a small but always negative trend in numbers over the past five years.

SUBSCRIPTIONS. Twenty-one members were still in arrears at the end of the year but from past experience some of these will still pay up! I am very grateful for the efforts of Prof. Pursell who very kindly collects the subscriptions of North American members and thereby saves the Society a considerable sum of money and much correspondence. I am pleased to record that he has agreed to perform this service again next year.

<u>Membership numbers</u>					
Year	1986	1987	1988	1989	1990
New members	31	33	26	27	28*
Members lost by					
death	§	§	3	8	5
resignation	5	9	8	11	9*
other	§	(33)	(18)	10	15
Total losses	(16)	42	29	29	29
NET TOTAL	544	535	532	530	529
Comprising:					
Ordinary &					
Junior	514	503	506	502	503
Family	18	18	13	14	13
Honorary	12	14	13	14	13

Notes:

\* : an additional 5 joined and 5 resigned in November and December but their subscriptions relate to 1991

§ : not known with sufficient certainty to estimate

() : best estimate

There are 567 members currently on file (3.iii.1991) of whom 21 have not yet paid their subscription for 1990 (they are not receiving the *Journal*), 3 are in limbo (apparent un-notified address changes) and there have been 19 new members and 5 resignations.

MEMBERSHIP LIST. At the AGM it was agreed that a new membership list should be produced and circulated to all members and that it would be updated in each *Bulletin*. Philip Stanley agreed to help with this in translating my own computer records into a form in which they could be processed by his own more modern and sophisticated equipment. Whilst most of the work has been done by Philip, the final product is very much a joint effort. Martha Newton contributed a number of amendments before I sent my disk to Philip. The amount of time and effort which he subsequently put into several stages of the production and correction has been considerable. In the final stages Roy Perry contributed his knowledge of the membership and impressive expertise in editing. The result is a handsome document and Philip - and Roy - are to be congratulated on its excellence.

A.V. Smith,  
February 1991

## l) PUBLICITY OFFICER'S REPORT

TRAVELLING EXHIBITION. Since it first opened on 5 December 1987 at Cliffe Castle, Keighley, it has travelled constantly without a break; it has just left its twelfth booking (at Bracken Hall Countryside Centre, Shipley). Margaret Hartley reports that it has been well-received not only at the smaller centres but also at Edinburgh Royal Botanic Garden and Liverpool Museum (not to mention Manchester Museum), where education work has complemented the exhibition. It visits Cardiff in August.

LOGO. The redrawn logo has now been scanned by Phil Stanley and is available in WordPerfect (\*.WPG files) format, etc. I can convert this if requested to WordStar (\*.PIX files) format.

PAMPHLET. I have sent a copy of the illustrated pamphlet *Mosses and Liverworts of Town and Garden* to the Secretary. Many hundreds have already been distributed via the Travelling Exhibition, public and extra-mural lecturing, etc., but the Membership Secretary doubts that any applications for membership have resulted. The current edition includes 50 species on two sheets of A4 (8 sides of A5), and there was some indication that it might be incorporated with a "welcome pack" for new members. A set of A4 sub-masters (needing reduction to 71 %) is available for any purpose if Council wishes.

COMMON NAMES. It has several times been suggested (rightly or wrongly) that the lack of common names has been an impediment to a wider interest in bryophytes; membership will be asked via the *Bulletin* for its response to this controversial issue, with a view to compiling such a list.

POSTCARDS. A photographic competition will be announced in the *Bulletin*. The competition closes Spring 1992 and the winning entries will be chosen by a panel of NON-photographers, for production as a set of BBS postcards. It is also hoped that the competition will stimulate another aspect of interest in bryophytes - photography.

S.R. Edwards  
March 1991

## m) READING CIRCLE SECRETARY'S REPORT

The number of subscribers now stands at 28: three members resigned and two joined the reading circle. Contents lists for eleven issues of three of the five journals were circulated to members, but no issues of the other two journals were available during the year. Copies of twenty-four articles were supplied to eight members.

## FINANCIAL STATEMENT

### INCOME

Members' credit at 1.i.1990	£104.44
Income (cheques and cash)	£ 42.00
TOTAL	£146.44

### EXPENDITURE

Photocopies supplied	£ 20.02
----------------------	---------

Postage	£ 10.60
Administration (copies)	£ 3.30
TOTAL	£ 33.92
Excess of income over expenditure	£112.52
Members' credit at 31.xii.1990	£115.17
Excess of expenditure	£ 3.05

M.A.S. Burton  
March 1991

#### n) REPORT OF RECORDER FOR HEPATICAE

During 1990 the total number of new county records was similar to that for 1989, 68 in all; these may be broken down as follows:

	New records collected 1989-90	New records collected pre-1989	Deletions
England	13	2	0
Wales	7	2	1
Scotland	26	3	0
Ireland	11	4	0
TOTALS	57	11	1

The most exciting discovery of the year is that of *Adelanthus lindenbergianus* in the Inner Hebrides of Scotland, new to Britain. This very rare disjunct tropical species is known from isolated localities in South America and Africa and in the Northern Hemisphere from only five sites in western Ireland. It is a particularly welcome addition to the Oceanic Liverwort flora of Scotland. Other noteworthy finds are *Pedinophyllum interruptum* in West Lancashire, *Plagiochila atlantica* in a new northern extension to its range in West Sutherland, *Marsupella sparsifolia* in West Inverness, *Scapania lingulata* new to England and *Cololejeunea minutissima* new to East Anglia.

Thanks are again due to Jean Paton for kindly checking several critical specimens and drawing attention to errors and omissions from previous lists, and to Tim Blackstock who checked critical specimens of *Barbilophozia*.

D.G. Long  
January 1991

#### o) REPORT OF THE RECORDER FOR MOSSES

The level of recording is similar to last year. The most notable record is that of *Grimmia atrata* new to Ireland. Other interesting finds have been a third station for *Scopelophila cataractae* in Wales, and new localities for *Paraleucobryum longifolium*, *Orthotrichum obtusifolium*, *Hygrohypnum molle* and *Rhynchostegium megapolitanum* in Scotland. In England *Breuelia chrysocoma* has been refound in the New Forest, the range of *Octodiceras*



*fontanum* has been extended to Devon, and *Ulota phyllantha* has turned up in several places in East Anglia and London. Re-examination of herbarium material has resulted in the confirmation of the Sussex record of *Tetradontium repandum* and the only Scottish record of *Weissia tortilis*, and an old record of *Blindia caespiticia* from Ben Lomond has been confirmed.

An analysis of the year's records follows:

	New records collected 1989-90	New records collected pre-1989	Deletions
England	68	3	1
Wales	5	4	0
Scotland	31	18	6
Ireland	21	0	0
TOTALS	125	25	7

As in previous years, collectors are reminded of the need to include details of habitat and altitude on packets, and to ensure that names of localities are written clearly or typed.

Finally, I wish to thank Nick Hodgetts and Chris Preston for supplying a number of amendments to the records, and Mark Hill and David Long for their assistance with specimens and for information on various points.

T.L. Blockeel  
February 1991

#### p) ACTING RECORDING SECRETARY'S REPORT

The post of Recording Secretary was newly created in 1990 to coordinate the Society's future recording activities. The major task in 1990 was to organize a network of Regional Recorders, the aim being to stimulate recording both within 10 km squares and at individual sites. New recording cards, one for SE England and one for the whole of Britain and Ireland, are presently being designed by C.D. Preston at the Biological Records Centre and will shortly become available. Some 38 Regional Recorders covering 77 vice-counties (plus a recorder for all of Ireland) have been appointed and the new recording scheme will be launched in 1991 with the publication of their names and addresses in *Bulletin 57*.

At present the flow of completed record cards has virtually ceased. It is hoped that the new scheme will stimulate members to commence recording (and re-recording of previously recorded sites) so that gaps in the forthcoming *Atlas* can be filled and changes in status of species effectively monitored. The Society will wish to join me in warmly thanking Dr Tony Smith for his many years of service as Mapping Secretary and for his involvement, together with the hard work of Mark Hill and Chris Preston, in the production of *Atlas of the Bryophytes of Britain and Ireland*.

J.W. Bates  
March 1991

## MINUTES OF THE ANNUAL GENERAL MEETING, CAMBRIDGE, 1990

Minutes of the Annual General Meeting held in the Pathology Department of the University of Cambridge at 4.30 p.m. on Saturday, 22 September, 1990.

PRESENT: Dr M.O. Hill (President, in the chair) and 41 other members.

The Society's gavel was handed to the President by Mr P.J. Wanstall (Ex-President), who had arranged for a silver plate to be attached to it, bearing details of the gavel's presentation by Mr R.D. Fitzgerald.

The President opened the meeting by recording the deaths in the past year of Mr R.D. Fitzgerald, Dr H. Inoue and Mr A.H. Norkett.

(1) APOLOGIES FOR ABSENCE: Apologies were received from Mr D.G. Long, Mr F.R. Lammiman, Mrs J.A. Paton, Prof. M.R.D. Seaward and Mr M.M. Yeo.

(2) MINUTES OF THE LAST AGM, LINCOLN, 1989: The Minutes were approved and signed as a correct record.

(3) MATTERS ARISING:

- a) Item 5(a), Wallace Memorial Reserve: Mr R.C. Stern reported that Council had approved the setting up of a reserve at Greywell Fen in Hampshire and would make a sum available to the Hampshire and Isle of Wight Naturalists' Trust for the reserve's management. Two appeals had been made to BBS members, and one to BSBI members was due shortly. The site would be marked by a memorial stone with a metal plaque and, although access is normally closed, it would be stipulated that permits would be available to BBS members. The BBS would also be represented on the management committee. Dr Hill drew attention to a flier which had been sent out with *Bulletin 56* to launch the renewed appeal. Prof. P.W. Richards observed that, in view of its charitable status, the BBS could benefit from tax concessions if arrangements were made in advance. Dr G.C.S. Clarke thought it more appropriate for the Trust to make those arrangements, since the money would be held by the BBS for only a limited period of time.
- b) Item 5(c), Atlas: Dr Hill reported that the first volume, on liverworts, was expected to go to the printer coincidentally with the AGM. It had undergone detailed editing by the publisher, Harley Books, and a good house style had been established and agreed. The terms on which subsidies had been provided by the Royal Society (£1,000), the Natural Environment Research Council through the Linnean Society (£1,500) and the BBS itself (£1,000) meant the selling price would be kept initially to £19.95, with a discount to members. The two later volumes would each cost about £25. Their preparation was making steady progress, and Dr Hill thanked all authors for having produced their contributions on time. He confirmed, in reply to a question from Mr G.P. Rothero, that it was now too late for the submission of further moss records, and to another from Mr A.C. Crundwell, that the book covers would carry photographs supplied by Dr H.L.K. Whitehouse.
- c) Item 5(f), Archives: Mr A.R. Perry reported that, with the exception of the photographic archives, which were now being cared for by Prof. Seaward, an attempt

would be made to gather everything together for initial sorting. Space for the purpose had been offered at the National Museum of Wales (NMW). In reply to a question from Dr E.V. Watson, Dr M.E. Newton said that the sort of material involved was official correspondence, old minute books and business papers, as well as notebooks and members' letters of historical or botanical interest. The present location of a lot of it was known but scattered, and thus insecure, but it was thought that more existed of which the Society was unaware. Prof. P.W. Richards drew attention to letters from Hooker and Richard Spruce that he possessed.

A proposal (Dr Hill, seconded Prof. Richards) that a temporary archive be established at the NMW under the curation of Mr Perry was carried.

(4) OFFICERS' REPORTS FOR 1989: These had been circulated in advance in *Bulletin* 56, and gave rise to the following comments:

- a) General Secretary: Dr Newton wished to correct the first paragraph; the name of Mrs F.D.J. Smith had been omitted, as had the first part of the penultimate sentence, which should read, "Joan Appleyard and Stanley Greene had been President, and".... These omissions were unfortunate, but completely understandable, and Mr Perry asked for all material for the *Bulletin* to be submitted, as far as possible, on disk, to avoid the need for re-typing.
- b) Treasurer: Dr Clarke reported that the audited accounts showed things to be substantially as published, although more optimistic in that the excess of expenditure over income of £203.43 for the year had been much less than expected.
- d) Bulletin Editor: Mr Perry said he would welcome items such as keys and diagrams for inclusion in the *Bulletin*; and, in reply to a question from Dr P.J. Lightowlers, black and white photographs as well. Dr E.W. Jones asked whether it would be possible to reinstate the practice of reporting names and addresses of new members and the departure of old ones. This was readily acceded to by Mr Perry and Mr A.V. Smith. Discussing the possibility raised by Mr Perry of having a new list of members, Mr Smith reported that, following established practice, one was already available to members at a cost of £2. Mr A.C. Crundwell expressed the view that it should be supplied free to all members. The cost of publishing a 22-page list in the style of the *Bulletin* would be approximately £200. The meeting was in favour of this being done. Mr Smith said he would appreciate help in converting his computerized list to a format which Mr Perry could use, and this was offered by Dr P.E. Stanley.
- g) Journal Editor: Dr A.J.E. Smith announced that Mr Crundwell, who had prepared excellent indices for ten volumes, now wished to resign. Members expressed their deep gratitude for his invaluable contribution.
- i) Mapping Secretary: Dr Smith confirmed his intention of retiring from this post at the end of 1990.
- j) Meetings Secretary: Dr Lightowlers reported recent efforts to establish centres for local meetings. Organizers had been found in the south-east (Mr E.R. Hurr) and the east Midlands (Mr S. Woodward). Bryophyte meetings in the vicinity of Cambridge (Dr H.L.K. Whitehouse) had long been well established, and Mr Smith explained the way in which he, as local organizer in the Manchester area, was facilitating the participation of BBS members in bryological excursions of the North Western Naturalists' Union (NWNNU). He proposed that the BBS might join the NWNNU, the subscription being £4, and this was approved.
- k) Membership Secretary: Mr Smith apologized for the imprecise membership figures.

This was due to the receipt of some subscriptions up to three years late, and he appealed for greater promptness in paying.

- l) Publicity Officer: Dr S.R. Edwards reported that plans for T-shirts had now been altered. Instead, sweatshirts, costing not more than £12, would be advertized in the *Bulletin* and would be available to advance order. A competition for postcard designs was also to be announced in the *Bulletin*.

- o) Recorder for Mosses: Mr T.L. Blockeel emphasized the need for place names to be written legibly.

The reports were approved, and Dr Hill thanked officers for their continued steady work.

(5) REPORT FROM COUNCIL:

- a) Future Recording Activities: Dr J.W. Bates drew attention to a notice in *Bulletin* 56. Since its publication, a number of Regional Recorders had been appointed, between them covering much of the country. Help in filling the gaps, which would be apparent from a map to be displayed, would be appreciated. Two new recording cards would be ready in time for the spring meeting. Of a similar design to the BSBI Higher Plant card, they would carry further information on the back. One would be a national card, and the other south-eastern, including all species found in ten or more 10km squares S. and E. of the Exe and Humber. Dr Bates also reported that the return of completed cards of the current design had almost stopped; they should be sent to the acting Recording Secretary. Mr Crundwell asked whether the current cards could be kept in print for the benefit of people filing their own records on them, and Mr C.D. Preston said this would continue for a limited period of, perhaps, two years.

- (6) ELECTION OF OFFICERS: Council wished to nominate Dr M.E. Newton, Dr G.C.S. Clarke, Dr P.J. Lightowlers and Dr J.W. Bates, respectively, as General Secretary, Treasurer, Meetings Secretary and Recording Secretary. No other nominations had been received. They were proposed (Mr Blockeel, seconded Dr Stanley), and declared elected.

- (7) ELECTION OF ELECTED MEMBERS OF COUNCIL: Council had nominated Mr P. Martin, Mr H.W. Matcham and Mr F.J. Rumsey to serve for a period of two years, and other nominations had not been received. They were proposed (Mr P.J. Wanstall, seconded Mr G. Bloom) and declared elected.

- (8) MEMBERSHIP SUBSCRIPTIONS: Dr Clarke considered the Society to be well-endowed, with capital assets of about £35,000, which attracted interest of about £4,500 per annum. However, expenditure in the last two years had exceeded income from all sources. He strongly advocated a need to run the Society on its earned income, reserving capital expenditure for promoting bryological projects. The subscription had not been raised since 1981, inflation continued, and officers' expenses were greater than before. Dr Clarke therefore recommended subscription increases to £15 (ordinary) and £7.50 (junior); the subscription for family members to remain at £1.

Dr Edwards commented on the continued capital depreciation as a result of inflation and Dr Clarke observed that he regarded the capital as a hedge against inflation as well as a tool to use for the Society's objectives. Mr Crundwell suggested that 3% gilt edge investments, on professional advice, might be the best way to protect the Society against inflation. Mr B.J. O'Shea said that such investments were made in the past but, since they required considerable time to administer, they were discontinued prior to his own period as

Treasurer.

It was proposed (Dr Clarke, seconded Dr Stanley) that subscription rates should become £15 (ordinary), £7.50 (junior) and £1 (family) on 1 January, 1991, and was approved unanimously.

Dr Hill said Council was sympathetic to overseas members who may be experiencing currency difficulties in regard to BBS subscriptions. If anyone knew of any such situations, they were asked to write to the Membership Secretary so that an attempt could be made to find sponsors.

(9) PLACE AND DATE OF NEXT ANNUAL GENERAL MEETING: Dr Lightowlers announced that this would be in Sheffield, at 4.30 p.m. on Saturday, 14 September, 1991.

(10) OTHER FUTURE MEETINGS: Dr Lightowlers said these, up to and including the Bryophyte Workshop of 1991, had all been advertized in *Bulletin* 56. He would like to hear of members' ideas, especially for spring and workshop meetings. Mr R.J. Fisk thought the time was ripe for an "old-fashioned" taxonomic workshop, perhaps linked to keys published in the *Bulletin*. Dr Edwards announced that it was still possible to book for the photographic workshop, which was soon to be held in Manchester.

(11) ANY OTHER BUSINESS:

- a) Natural History Museum Proposals: Mr Wanstall said it was still not too late to send letters of protest and urged members to do so. Dr Hill reported that following news of financial constraints at the Natural History Museum and of proposed elimination of bryological research there, he had been urged by some members to protest to the Director or Chairman of the Trustees. In his letter to Sir Walter Bodmer, Chairman, he had emphasized the particularly serious consequences for tropical bryology. Copies of Sir Walter's reply, as published in *Nature*, were made available. Mr Wanstall considered that weight of numbers protesting was important, in which context Dr Hill said it was advisable to ensure clarity of presentation; i.e. was the protest about level of funding or about the balance of priorities being right or wrong?
- b) Lurcher's Gully Ski Proposal: Mr Stern had written a letter on this subject, and the protesting lobby had now proved successful.
- c) Bryophyte Ecology Symposium Volume: Dr Lightowlers announced that this contained the 16 invited papers of a joint BBS/British Ecological Society symposium held in Edinburgh in 1988. Amounting to some 300 pages, it was to be published in *Bot. J. Linn. Soc.*, and some copies would be available at a cost of £18. He asked members to place orders with him as soon as possible.
- d) Endangered Lower Plants: Mr Stern wished to thank members for helping Mr N. Stewart in his excellent work with the Conservation Association of Botanical Societies, now taken over by Plantlife, in compiling data. Sheets relating to hepatics were to be made available for inspection later in the evening.
- e) Korup National Park, Cameroun: Dr Hill drew attention to the Paul Richards Korup Fund to which members had been invited to subscribe. Details had been sent out with the last *Bulletin*. It had been proposed that an educational centre would be named after Prof. Richards.

There being no other business, the meeting adjourned at 5.49 p.m..

M.E. Newton, Hon. General Secretary  
October 1990

## **FUTURE MEETINGS OF THE SOCIETY**

Members are reminded to read the BBS Safety Code, published in *Bulletin* 43 and available from local secretaries for inspection during BBS meetings.

### **SUMMER FIELD MEETING, 1991, Massif Central, France.**

Unfortunately it has been necessary to cancel this meeting owing to organisational problems. However, we hope to be able to hold the meeting another year. All those who would be interested in attending should keep in touch with Roy Perry at the National Museum of Wales, Cathays Park, Cardiff CF1 3NP. Tel. 0222 397951, ext 267.

### **ANNUAL GENERAL MEETING AND SYMPOSIUM MEETING, 1991, Sheffield, 14-15 September.**

Local Secretary: Mr Tom Blockeel, 9 Ashfurlong Close, Dore, Sheffield, S17 3NN. Tel. 0742 366861.

Both lectures and accommodation are being arranged in the University of Sheffield's Tupton Hall, adjacent to the Department of Animal and Plant Sciences' Experimental Garden. The Hall's prices are as follows: Bed & Breakfast £15.10, Lunch £6.00 and Dinner £6.50.

The meeting will follow the conventional pattern of a symposium on the Saturday (starting at around 9.00 a.m.) followed by the AGM, and a field meeting on the Sunday. As usual, there will be a Council Meeting on the Friday evening, while on Saturday there will be a conversazione in the evening. Members are invited to bring posters or other items for discussion.

All those wishing to attend are asked to contact the local secretary as soon as possible and before 1 September.

There will be a varied programme of talks on the Saturday to cater for all tastes. The following have already been finalized:

Mr Terry Hedderson (University of Reading): Phylogenetic and ecological influences on life history evolution in three orders of mosses.

Mr Gordon Rothero (Benmore Centre, Argyll): Snow patch bryophytes of the Scottish Highlands.

Mr Jamie Goode (Royal Holloway and Bedford New College, London): Provisional title - Ultrastructure of bryophyte rhizoids and protonema.

Mr Nick Hodgetts (Joint Nature Conservancy Council): Bryophytes and the new government conservation organizations.

The ANNUAL GENERAL MEETING will be held at 4.30 p.m. on Saturday 14 September, 1991, at Tipton Hall, Crookes Road, Sheffield following the talks.

#### ANNUAL GENERAL MEETING, SHEFFIELD, 1991

##### A G E N D A

1. Apologies for absence
2. Minutes of the last AGM, Cambridge, 1990 (see pp. 17-20 of this *Bulletin*)
3. Matters arising
4. Reports of Officers for 1990 (see pp. 7-16 of this *Bulletin*)
5. Report from Council
6. Election of Officers (see p. 24 of this *Bulletin*)
  - a) Vice-President
  - b) Bibliographer
  - c) Bulletin Editor
  - d) Conservation Officer
  - e) Curator
  - f) Journal Editor
  - g) Librarian
  - h) Membership Secretary
  - i) Publicity Officer
  - j) Reading Circle Secretary
  - k) Recorder for Hepatics
  - l) Recorder for Mosses
7. Election of Elected Members of Council (see p. 24 of this *Bulletin*)
8. Place and date of next Annual General Meeting
9. Other future meetings
10. Any other business

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#### **BRYOPHYTE WORKSHOP, 1991, Rogate, West Sussex, 11-13 October.**

Local Secretary: Dr June Chatfield, 44 Ashdell Road, Alton, Hampshire GU34 2TA. Tel. 0420 82214. Tutors: Alan Crundwell, Francis Rose and Rod Stern.

This weekend workshop, which is designed for beginners and intermediates, will be held at Rogate Field Centre, near Petersfield. The centre belongs to King's College, University of London, and is set in good downland countryside. Full microscope facilities, a well equipped laboratory and comfortable accommodation will all be laid on at a very reasonable cost.

#### **SPRING FIELD MEETING, 1992, Oswestry, 8-15 April.**

Local Secretary: Mr Ron Shoubridge, 8 Mary Elizabeth Road, Ludlow, Shropshire SY8 1LW. Tel. 0584 872480

Headquarters: Ellesmere College, Ellesmere, Shropshire.

The Oswestry area offers a range of habitats including the Berwyn Mountains to the west, the Shropshire mosses and kettle holes, and a variety of woodland and quarries on sandstone and Carboniferous Limestone. Accommodation and laboratory facilities will be provided at Ellesmere College, some 8 miles north-east of Oswestry. Bed, breakfast and evening meal will cost around £25 per day, plus VAT.

**SUMMER FIELD MEETING, 1992, Ullapool and the Uists, 29 July - 12 August.**

Local Secretaries: Gordon Rothero, Stronlonag, Glenmassan, by Dunoon, Argyll PA23 8RA. Tel. 0369 6281: Peter Pitkin, Nature Conservancy Council Scotland, 2/5 Anderson Place, Edinburgh EH6 5NP. Tel. 031 554 9797.

The first week of the meeting will be based in Ullapool, being one of the few practical centres for a meeting in the North Western Highlands. There are many new sites to be visited in the area, and it is convenient for the ferry to North and South Uist - the venue for the second week. Further details in the next *Bulletin*.

**ANNUAL GENERAL MEETING AND SYMPOSIUM MEETING, 1992, EAST SUSSEX, 26-27 September.**

Local Secretary: Dr David Streeter, Sussex House, Falmer, Brighton, Sussex BN1 9RH. Tel. 0273 678212

Venue: Isle of Thorns Training Centre, Chelwood Gate, nr Haywards Heath.

The Isle of Thorns Centre is a purpose-built conference centre in a quiet rural setting, managed by the University of Sussex. It will provide all facilities for our autumn meeting and is conveniently close to Ashdown forest and other sites of bryological interest. Prices for a day's full board will be about £44.

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## **FURTHER MEETINGS**

Your suggestions on our future programme are greatly welcomed, and will help provide the society with the kind of varied and successful meetings we have enjoyed in the past. Organizing a variety of workshop meetings is currently proving difficult - the traditional taxonomic kind is particularly difficult as the number of bryologists with sufficient expertise appears to be quite limited. At the time of writing I have been unable to finalize a meeting for 1992.

For 1993, there are suggestions for a spring meeting in the north-west, perhaps the Lake District or Galloway. New ideas for the spring, AGM and Workshop meetings are particularly welcome, and remember there is always room in the programme for local field meetings.

*Philip Lightowlers, 8 Almack Road, London E5 0RL (Tel. 081 533 0052).*





## ELECTION OF OFFICERS AND ELECTED MEMBERS OF COUNCIL

Professor J.G. Duckett, currently Vice-President, will succeed Dr M.O. Hill as President of the BBS on 1 January, 1992 for a term of two years. The terms of all other Officers except the General Secretary, Treasurer, Meetings Secretary and Recording Secretary, expire at the end of 1991. The present incumbents are all eligible for re-election. The three Elected Members of Council who retire at the end of 1991, Mrs K.M. Cocking, Mr C.C. Townsend and Mr M.M. Yeo, are not eligible for re-election 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, Dr M.E. Newton, Botany Department, Liverpool Museum, William Brown Street, Liverpool, L3 8EN, to arrive no later than 17 August, 1991. 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 AGM in Tapton Hall, University of Sheffield, on 14 September, 1991.

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## HONORARY MEMBERSHIP COMMITTEE

This committee was set up by Council in 1983 for the purpose of reviewing proposals for the election of Honorary Members and advising Council on nominations. Anyone wishing to put forward suggestions is invited to write to the convenor, Dr M.E. Newton (Hon. General Secretary, Botany Department, Liverpool Museum, William Brown Street, Liverpool, L3 8EN) with names and supporting biographical data. Recommendations are made to Council at irregular intervals but, for any proposal to be considered during 1992, details must be received by the General Secretary no later than 31 December, 1991.

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## BRYOPHYTES IN THE NEW CONSERVATION AGENCIES

As most BBS members will be aware, on 1 April the Nature Conservancy Council was reorganized into three separate bodies for England, Scotland and Wales (English Nature, Scottish Natural Heritage and the Countryside Council for Wales, respectively), and the Joint Nature Conservation Committee (JNCC). The role of the JNCC is essentially one of overseeing the work of the three country agencies, setting common standards for survey, monitoring, research, etc. and to deal with general matters such as legislation, cross-border issues and international issues. The Lower Plant specialist post has been assigned to the JNCC, and my contract with the organization has been extended for a further two years, until October 1993. The details of cooperation between the new agencies are still being worked out, but I hope that the continuation of the Lower Plant specialist post will ensure that bryophyte conservation is given adequate, or even enhanced, attention in the reorganized NCC. As the dust settles, it will probably become apparent that the BBS and the new agencies will have to work together even more closely to further the cause through, for example, the new BBS Recorders' network.

*Nick Hodgetts, Lower Plant Specialist, Joint Nature Conservation Committee, Monkstone House, Peterborough, PE1 1UA.*



## RECORDING MATTERS 2

### New Regional Recorders

The following recorders are additional to, or replace (vice-counties 15 & 16), those listed in *Bulletin 57*.

- 15: Mr M.C. Watling, Top Flat, 30 Cliffe Avenue, Margate, Kent, CT9 5DU (replaces Francis Rose)
- 16: Mr E.R. Hurr, 6 The Woodlands, Chelsfield, Orpington, Kent, BR6 6HL (replaces Francis Rose)
- 38: Mr J.H. Field, 34 Wells Green Road, Solihull, West Midlands, B92 7PG.
- 76, 86-88: Mr Nick Hodgetts, Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough, PE1 1UA.
- 107-109: Mr N.D. Redgate, The Northern Highlands Environment Records Centre, Burnside, Murkle, Caithness, KW14 8YT.

Vice-counties which remain vacant include: 7, 17, 39, 56, 59, 67, 68, 71-75, 77, 78, 85, 90-95, 106-109, 111, 112. Prospective regional recorders for these and individual vice-counties in Ireland should write to Dr J.W. Bates, Imperial College at Silwood Park, Ascot, Berkshire, SL5 7PY.

### New Recording Cards

At the time of writing (June 1991) the new cards have still not appeared but they are expected shortly. Copies of the old cards are obtainable from Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS. The new cards will be of A4 size and there will be separate 'National' and South-East England versions. Batches of 20 new cards (state which type) will be issued from the above address or from the recording secretary (address above) on receipt of a self-addressed envelope (32 x 23 cm or larger) with postage stamps for the 250 g weight band (currently 59p first class or 46p second class mail). We hope to include a copy of the 'national' card with the *Bulletin* mailing when it becomes available.

### Local Recording Ventures

To increase members' awareness of local flora projects it is intended that one or two projects will be spot-lighted in each edition of this column. In comparison with vascular plant floras, bryophyte floras tend to be much more the efforts of a single enthusiast who will invariably appreciate receiving records from visitors to the county. The first two accounts are from bryologists working in eastern England.

### Recording in Kent

Kent bryology suffered doubly with the death of Trudy Side and by Francis Rose's move to Hampshire. There is nevertheless a good deal of enthusiasm and new records are accumulating. Malcolm Watling and I intend to work jointly as Recorders for Kent, he taking the lead in v.c. 15 East Kent, leaving me to tackle v.c 16 and any overall coordination needed. Existing records seem to be in several hands and probably formats. An ongoing task is to locate, list and classify these old records. One invaluable reference is the 10 km-square Atlas compiled by A.G. Side and published as parts of the *Trans. Kent Field Club* (vol. 4, 1970). My copy is annotated with many later records by Mrs Side and other workers.

It is now proposed to compile a Tetrad Atlas and preliminary discussions have been

held on the possibility that this might be published by the Kent Field Club. I believe that a tetrad atlas was one of Trudy Side's ambitions and certainly its publication would be an appropriate memorial to her. We are well aware of the immensity of the recording and data extraction task - Kent has over 1000 tetrads and about 400 bryophyte taxa. Clearly this finer-grain picture is likely to reveal many gaps in recording of common species, and a good deal of *ad hoc* recording may be necessary to fill in the squares. The timescale is uncertain but at this stage I would anticipate 2-3 years as a minimum.

E.R. Hurr (address above)

#### Norfolk Bryophyte Flora

I am working on two projects but they may become one! I originally started to record West Norfolk (v.c. 28) alone, mapping in 10 km squares (there are 42, half are 'edge' squares). This was going to tie up with Gillian Beckett's tetrad vascular Flora of v.c. 28. Later, the botanists in v.c. 27 started to record on a tetrad basis, and now everyone is aiming for a completely new tetrad vascular Flora for the whole county.

I am not sure, at this stage, whether it will be possible to cover all 77 10 km squares to produce an accompanying moss flora of Norfolk which will be of good enough quality. Currently I am trying to get good coverage of v.c. 28 whilst also accumulating sufficient data from v.c. 27 to enable me to write a general account for the whole county. This will be based on habitats rather than strictly on recording units. At first I was the only bryologist working the area but the scene has recently brightened considerably. Harold Whitehouse and Chris Preston have started bringing more of their Cambridge-based excursions into Norfolk and Peter Wanstall has started organizing excursions in both Suffolk and Norfolk. The most interesting habitats we have in Norfolk are the bogs and fens. These formerly contained interesting species such as *Homalothecium nitens* and *Cinclidium stygium* but I suspect that most of the rarer species have disappeared. There are still many places to be looked at carefully. Some taxa are under-recorded and others are not yet recorded but ought to be present. Hopefully both vice-counties will be recorded well enough to publish jointly with the vascular plant botanists at the end of the century.

Robin Stevenson, 111 Wootton Road, King's Lynn, Norfolk, PE30 4DJ

Information about other recording enterprises and discussion of related issues will be gratefully received.

*Jeff Bates, Imperial College at Silwood Park, Ascot, Berkshire SL5 7PY*

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## MEMBERSHIP RECORDS

Society membership records are kept both manually on cards and on a microcomputer. Each includes a name with title, post (if given as part of the address data), address, date of joining and grade of membership. The computer database is used for printing address labels and also for the production of a membership list and for no other purpose. The membership list is normally issued to all members and updates are published in the *Bulletin*. Anyone who objects to his or her membership records being held on computer should write to the Membership Secretary (address on page 1).

## ENDANGERED BRYOPHYTES IN EUROPE - CAUSES AND CONSERVATION

SYMPOSIUM IN UPPSALA, SWEDEN. 24-28 SEPTEMBER, 1990.

The Symposium comprised three days indoors at the Swedish University of Agricultural Sciences, Uppsala and 1½ days on excursions. It was attended by 70 participants from 17 European Countries and also from U.S.A. and China. Particularly noteworthy was the presence of 18 bryologists from seven former "Eastern Block" countries. From Britain were Royce Longton, Nick Hodgetts, Nick Stewart and myself.

In all, 33 papers were presented and there was also an exhibition of posters, some of which were illustrative of the talks. The papers were grouped together for the various sessions. The first was the "Status and distribution of endangered bryophytes", covering the EEC position as well as the national picture in Finland, Czechoslovakia and East Germany; for Great Britain Nick Stewart and I presented a joint paper on "A British Red Data Book for Bryophytes".

The second session was "Population biology of rare and decreasing bryophytes" which included Royce Longton's paper on "The role of reproduction in rare and common species" - an interesting analysis of the position in British mosses. This was followed by a short session of "Population genetics of rare and decreasing bryophytes" which was clearly of interest to those who have a good knowledge of the subject.

Of more general interest was the next session on "Bryophytes in a changing environment - invasion and extinction", with examples from Sweden, Poland, Netherlands, Norway and U.S.S.R. Acidification was frequently mentioned as a change, usually for the worse, for bryophytes. It was pointed out that care is needed in using the term extinct; in some cases "extinct" species have been refound and the term "vanished" is considered more appropriate.

The final session was on "Conservation measures for the future". This included Nick Hodgett's paper "Measures to protect bryophytes in Britain" in which he outlined proposals for a numerical assessment of important bryological sites. There was also information given on what is being done in parts of the U.S.S.R., in Czechoslovakia, Sweden and U.S.A. Timo Koponen completed this final session with a look at the situation in the world as a whole, and emphasised the generally serious position in temperate and meridional regions (worse in Eastern Asia than in Europe or North America) and particularly in tropical regions.

It was clear from the papers and discussions that the same problems face most European countries - agricultural and forestry practice, industrial development and the indirect effects such as drainage and air or water pollution. Lack of knowledge of bryophyte distribution is a problem in some countries where there are perhaps only a few professional bryologists and few or no amateurs, and the relatively healthy position in Britain in this respect is clearly envied by other countries.

The first excursion was to the old coniferous forest at Fiby Urskog, an area virtually untouched for 200 years at least. A visit was then made to a mixed forest at Lower Dalälven with some more or less virgin broad-leaved areas of *Quercus robur*, *Tilia cordata* and *Fraxinus excelsior* which are subject to annual inundation. Here two non-British mosses on the EEC list of endangered bryophytes were seen: *Callicladium haldanianum* and *Dichelyma capillaceum*. The final visit was to a classic bog site at Ryggmossen, belonging to Uppsala University, which has been studied in great detail for many years. Here Prof. Hugo Sjörs explained the ecology of the bog on which over twenty species of *Sphagnum* occur including *balticum* and *majus* which are very rare in Britain. Here Nick Stewart distinguished himself by finding *Cryptothallus mirabilis* not previously known here, under *Sphagnum* among birches.

The Symposium was extremely well-organized by the Swedish Committee for Conservation of Endangered Bryophytes and comprised Lena Guftafsson and Thomas Hallingbäck (Swedish University of Agricultural Sciences, Uppsala), Lars Söderström (University of Umeå), Lars Hedenäs (University of Stockholm) and Nils Cronberg (University of Lund). Two receptions were held, one at Hammarby, Linnaeus' summer house a few mile from Uppsala, and one, with a dinner, in one of the old 'Nations' (students' meeting houses) in Uppsala University.

The large attendance (for a bryological meeting) indicated the considerable concern felt for bryophyte conservation. During the conference a Standing Committee of Endangered Bryophytes of the International Association of Bryologists was established. A European Working Group on Conservation of Bryophytes was also set up, for which Nick Hodgetts was appointed Secretary. There is no doubt that the Symposium was of great importance for bryology in Europe, and probably elsewhere in the world. It is intended that the papers will be published in a special issue of *Biological Conservation*.

R.C. Stern  
December 1990

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## AREA GROUP NEWS

### SOUTH AREA GROUP:

MEETING AT CANTERBURY FIELD STUDY CENTRE, 16 MARCH, 1991

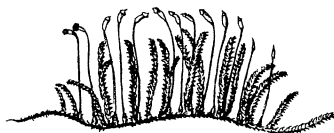
The Field Study Centre is a Kent County Council teaching facility next to the River Stour, east of Canterbury. Half the grounds consist of Vauxhall Lake, formed by gravel excavation and surrounded by a wooded nature trail; the other half is a banked landscape area surrounding an electricity sub-station built in 1966 with trees planted on the banks in the mid 70s. It is a semi-natural, actively colonizing, habitat in which we found 41 bryophyte species.

On most of the area round the sub-station the grass has a *Brachythecium rutabulum*/*Pseudoscleropodium purum* type of moss-base with some *Rhytidiadelphus squarrosus*, *Eurhynchium praelongum*, *E. swartzii* and, rarely, *E. striatum*. Of particular note were luxuriant cushions of *Pohlia nutans* on and around the tarmac/concrete bases of two pylons. The banks are made of various soils. On sandy ones we found *Polytrichum formosum*, *P. juniperinum*, *Aulacomnium androgynum*, *Dicranum scoparium* and *Campylopus introflexus*. One particular patch of the *Campylopus* showed a series of smaller, regularly-spaced and diminishing colonies running away from the main area in an obvious footprint pattern. We thought this had something to do with its spread. In damp ground between banks *Amblystegium riparium* occurred in one place.

The wooded strip around the much-indented shore of the lake produced the usual common terricolous bryophytes together with *Fissidens viridulus* and *Tortula subulata* and, at the water's edge, *Barbula tophacea*. Epiphytes were sparse, the main water-edge species being *Amblystegium riparium*.

The species found were typical of non-wooded areas of north-east Kent but the dampness of the site makes them more abundant than usual. More work needs to be done at the Centre and the rapidly developing nature of the vegetation would make a return visit worthwhile. We are very grateful to the Centre's warden, Mr Tony Harman, for the opportunity of the day's study.

Malcolm Watling



## THE *RACOMITRIUM HETEROSTICHUM* GROUP IN THE BRITISH ISLES

by T.L. Blockeel

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The *Racomitrium heterostichum* group has long been a source of difficulty for British bryologists, and treatments in the Floras have varied greatly. In the *Students' Handbook* (Dixon & Jameson, 1924), Dixon recognized two varieties (*alopecurum* Huebn. and *gracilescens* B. & S.) and two subspecies (*sudeticum* B. & S. and *ramulosum* Lindb.), in addition to the type of *R. heterostichum*. Richards & Wallace (1950) united ssp. *sudeticum* with var. *gracilescens* at varietal level, and used the name *R. microcarpon* (Hedw.) Brid. for Dixon's ssp. *ramulosum*. Smith (1978) reduced the number of taxa to three by uniting var. *alopecurum* and var. *gracilescens* under the name of *R. affine* (Web. & Mohr) Lindb.

In a recent revision of the group in the northern hemisphere, Frisvoll (1988) has recognized six species which occur in the British Isles. In the light of this paper, I have examined the substantial amount of British material of the group held in BBSUK and NMW, and the purpose of this note is to give an outline of the taxonomy and distribution of the species.

### Taxonomy

Frisvoll's revision lays great importance on the structure of the nerve in differentiating the species. Some species have a 'canaliculate' type (fig. 1), in which the nerve is broad (4-8 cells wide across the ventral surface at mid-leaf) and thin (2 cells high at mid-leaf). In its 'purest' form, this type of nerve, viewed in section, is  $\pm$  flat ventrally and evenly thickened, forming a broad channel down the centre of the leaf. Sometimes it is rather less regular and occasionally strongly concave ventrally, so that in surface view it appears narrower than it really is. In contrast, other species have the nerve narrower (2-4 cells wide at mid-leaf, and 2-4 cells high), flat to concave ventrally, and forming a narrow furrow down the centre of the leaf (figs. 2-3).

By clarifying the nomenclature and refining the definition of the species, Frisvoll's work has resolved many of the problems which we have had with this group in Britain. Four of the species which he recognizes are equivalent to the taxa of Richards & Wallace (albeit with changes in status and nomenclature). In addition, he maintains *R. affine* and *R. obtusum* as distinct segregates from *R. heterostichum* sens. str. Some of the difficulties experienced in the past by British bryologists are explained by the confusion caused by the misapplication of the names *ramulosum* and *microcarpon*, and by the fact that some of the taxa have not been precisely and accurately circumscribed in the literature. Consequently, many herbarium specimens under the names used by Dixon do not belong to the equivalent taxa in Frisvoll's paper.

The plants previously called *R. microcarpon* and *R. ramulosum* belong in part to a disjunct Himalayan species, *R. himalayanum*. After the removal of this species, British material falls naturally into two subgroups, largely corresponding with the *R. heterostichum* and *R. affine* of Smith's *Flora*, although the latter name is wrongly applied by Smith. These are the *heterostichum* and *sudeticum* subgroups respectively.

## 1. The *himalayanum* subgroup (*R. himalayanum* (Mitt.) Jaeg.)

Stems much branched, usually with numerous short lateral branches; hair-point typically well-developed, entire to obscurely toothed, and strongly and irregularly flexuose when dry; leaf margins broadly recurved for 3/4 of the leaf or more, nearly always unistratose; nerve canaliculate, 2(-3)-stratose at mid-leaf; upper lamina cells markedly elongate; basal marginal border usually present, of 4-12 thin-walled and pellucid but scarcely hyaline cells; perichaetial leaves differentiated, the outer squarrose when moist; capsule oblong-cylindric (1.5-2.2 mm long).

The much branched habit of the plants (rather like *R. fasciculare*) and the flexuose hair-points are useful field characters for the separation from *R. sudeticum*, the only other species likely to be found in the same habitat. Microscopically, it is easily separated from that species by the canaliculate nerve. The elongate upper leaf cells are also distinctive, but in some specimens shortly rectangular cells are intermixed. Since other species of the group may also have shortly elongate cells, this character must be used with caution. *R. himalayanum* is a disjunct, montane species, known only from the mica-schists of central Scotland, and not occurring elsewhere in Europe.

The occurrence of the true *R. microcarpon* in Britain has not been substantiated. It has a more continental distribution than the other species, and apparently does not occur with us.

## 2. The *sudeticum* subgroup (*R. sudeticum* (Funck) B. & S., *R. macounii* Kindb.)

Stems usually weakly and dichotomously branched, densely tufted or in lax patches; leaves with the apex attenuate, sometimes falcate (fig. 4); hair-point often absent, if present then short (rarely longer, to about 1/4 leaf length) and rigid, not much expanded or flattened at the base, often reflexed when dry; leaf margins frequently thickened, often not or only weakly recurved on one or both sides of the leaf; nerve not canaliculate, 2-4-stratose at mid-leaf, typically concave ventrally and  $\pm$  flat dorsally in the lower part of the leaf; basal marginal cells weakly differentiated, 5-20 in number,  $\pm$  pellucid; perichaetial leaves slightly differentiated; capsule short, sub-globose to shortly ellipsoid (to ca. 1.5 mm long in *R. sudeticum* and 1.75 mm in *R. macounii*).

This group is common in upland parts of the British Isles, and broadly corresponds with *R. sudeticum* and *R. heterostichum* vars. *gracilescens* and *alopecurum* in Dixon's *Handbook*, and *R. affine* sensu A.J.E. Smith.

*R. sudeticum* is very variable in habit, but often forms dense compact tufts like a *Grimmia* or *Andreaea*. The stems are only sparsely branched. More rarely the plants are laxer and elongate, and these forms may be mistaken for *R. affine*. The leaf margins are commonly bistratose, but in only one row of cells. The nerve is 2(-3)-stratose at mid-leaf (and normally 2-stratose in the upper part) and in section is characteristically sub-rectangular with the dorsal surface  $\pm$  flat (fig. 2). It is however subject to considerable variation.

*R. macounii* (the var. *alopecurum* of Dixon's *Handbook*) differs from *R. sudeticum* in the broadly thickened leaf margins (bistratose in 2 or more rows) and stouter nerve (3(-4)-stratose at mid-leaf and normally 3-stratose in the upper part). It is a robust plant, about the size of *R. aquaticum*, often reddish-brown, and it occurs on rocks by streams and on

irrigated surfaces. There is some overlap of size, however, with *R. sudeticum*, and in such cases leaf sections may be required to separate the two. *R. macounii* occurs in Britain as ssp. *alpinum*, which differs from the type in being generally less robust and in having the leaves weakly curled when dry rather than contorted.

The group rarely presents difficulties in identification, confusion being likely only with *R. affine* (see below). I have not encountered any problems separating *R. macounii* from *R. sudeticum*, and am satisfied that they are good species.

3. The *heterostichum* subgroup (*R. heterostichum* (Hedw.) Brid., *R. obtusum* (Brid.) Brid., *R. affine* (Schleich.) Lindb.)

Stems slightly to moderately branched in loose to dense mats or cushions; leaves with the apex broad, not attenuate (fig. 5); hair-point sometimes absent, if present then usually long, not rigid,  $\pm$  flexuose, expanded and flattened at the base (when well developed), denticulate (rarely  $\pm$  entire), not reflexed; leaf margins unistratose or with bistratose spots (in one row of cells only), recurved, often broadly so; nerve canaliculate or not, ventrally  $\pm$  flat, at least in the lower part of the leaf; basal marginal cells scarcely differentiated; perichaetial leaves clearly differentiated, not squarrose when moist, the innermost hyaline and epilose; capsule long, ellipsoid to cylindric (1.3-3 mm long).

Differentiation of species within the group is difficult. *R. affine* differs from *R. heterostichum* and *R. obtusum* in having a narrow nerve, 3-stratose at mid-leaf and convex dorsally (as opposed to canaliculate and 2-stratose at mid-leaf - figs. 1 and 3). The plants are usually lax and yellow-green in colour. However, some specimens are difficult to name, having the nerve narrow but 2-stratose on the one hand, and broad and irregularly 3-stratose on the other. The former are best referred to *R. heterostichum* but the latter are more problematical. Frisvoll also indicates that *R. affine* differs in habitat, occurring in moist situations. However, many of my collections from the South Pennines which have typical *affine* nerve sections are from dry, exposed habitats (and are dark green in colour). Although not fully satisfied with the status of *R. affine*, I have retained it as a species. Its status may need to be reviewed if intermediates prove to be frequent. The narrow nerve may lead to confusion with *R. sudeticum*, though in practice the leaf shape and nature of the hair-point give the two species a very different facies. Very few specimens have given problems in this respect.

Frisvoll separates *R. obtusum* from *R. heterostichum* by the often muticous leaves (never so in *heterostichum*), the margins broadly recurved and often thickened (narrowly recurved and less thickened in *heterostichum*) and the nerve more frequently 4-stratose at the base. Muticous forms are distinctive and easily recognized in the field; however, forms with hair-points are not separated by any hard characters from *R. heterostichum*, and I have encountered many specimens whose placement seems to me to be arbitrary. Reluctantly, therefore, I have abandoned attempts to record *R. obtusum* separately. Frisvoll gives additional characters for the separation of capsule-bearing plants. *R. obtusum* has the peristome teeth cribose with a high basal membrane (to 75  $\mu$ m), while *R. heterostichum* has the teeth not cribose, with a shorter basal membrane (to 50  $\mu$ m). Plants with mature intact peristomes are not encountered frequently, and I have seen very little such material. At least one specimen of *R. heterostichum* examined had teeth which seemed to me to be cribose.



## Key to British and Irish species

The species most likely to be confused with the *R. heterostichum* group are *R. fasciculare* and *R. aquaticum*. Both these species have papillose leaf cells, but the papillae are low and rounded and difficult to observe in surface view. They are quite distinct in section, however (fig. 6). *R. fasciculare* has attenuate leaf apices, never with hair-points. The nerve is weak and ill-defined above, thin and often biconvex in section. *R. aquaticum* has a very stout nerve, broad and 3-4-stratose at mid-leaf. This is a useful confirmatory character for the separation from *R. heterostichum* f. *obtusum*, which occasionally attains the size and stature of *R. aquaticum*.

Until some familiarity has been gained with the individual species (and sometimes even then) leaf sections should be cut to determine accurately the structure of the leaf margins and nerve.

1. Leaf margins thickened in 2 or more rows for most of the leaf length (beware *R. ellipticum* with the upper lamina entirely bistratose) **R. macounii**  
 Leaf margins unistratose, or bistratose in one row only 2
2. Basal leaf cells thick-walled and porose but not sinuose; group of 10-20  $\pm$  hyaline cells forming a conspicuous hyaline border at base of leaf (not British) [**R. microcarpon**]  
 Basal leaf cells, except a few at extreme base, sinuose; basal marginal cells distinct or not, but scarcely hyaline 3
3. Nerve narrow, at mid-leaf 2-4 cells wide ventrally and frequently 3-stratose 4  
 Nerve broad, canaliculate, at mid-leaf 4-8 cells wide ventrally and 2-stratose 5
4. Leaf apex attenuate (fig. 4); hair-point when present short (rarely to ca. 1/4 leaf length), rigid and often reflexed, not much expanded or flattened at the base; nerve concave ventrally near base; perichaetial leaves not differentiated; capsule short, to 1.5 mm long **R. sudeticum**  
 Leaf apex not attenuate (fig. 5); hair-point usually present and well-developed, often flexuose, expanded and flattened at the base; nerve  $\pm$  flat ventrally near base; perichaetial leaves differentiated; capsule 1.5-3 mm long **R. affine**
5. Stems with many short lateral branches; upper leaf cells markedly elongate, rarely shortly so; hair-point strongly and irregularly flexuose when dry, entire or with obscure denticulations; perichaetial leaves squarrose **R. himalayanum**  
 Stems with elongate branches; upper leaf cells not much longer than wide, sometimes shortly elongate; hair-point when present weakly to moderately flexuose, denticulate; perichaetial leaves not squarrose (*R. heterostichum*) 6
6. Hair-point often absent; leaf margins usually broadly recurved and often partly bistratose; nerve often 4-stratose at base **R. heterostichum** f. *obtusum*  
 Hair-point always present; leaf margins usually narrowly recurved and more commonly unistratose; nerve rarely 4-stratose at base **R. heterostichum** f. *heterostichum*

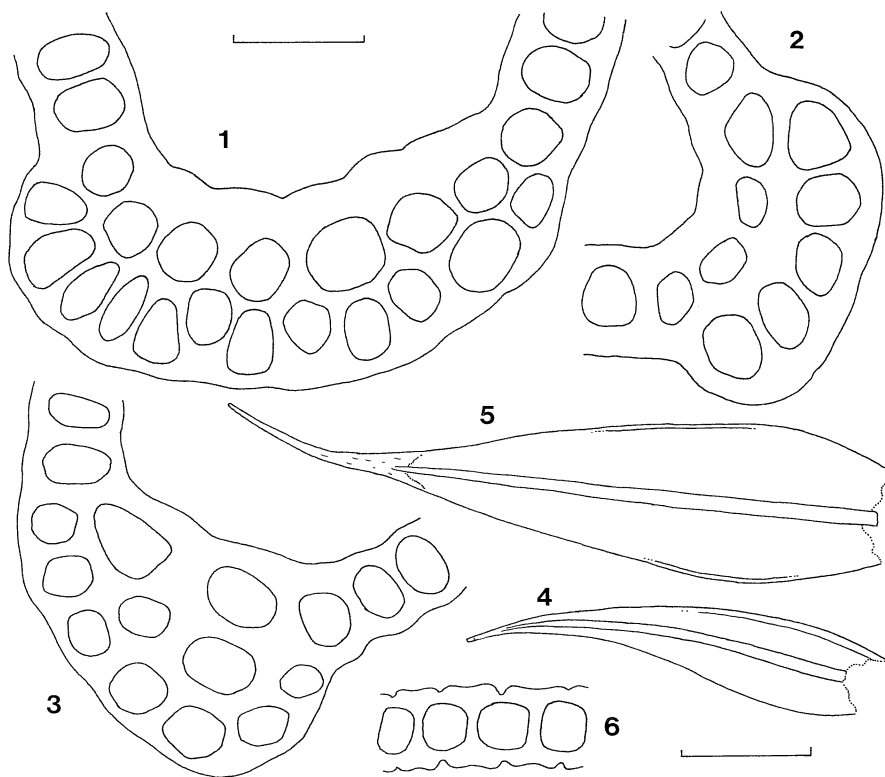


Fig. 1. Cross section of nerve of *Racomitrium obtusum* at just above mid-leaf ('canaliculate' type). Fig. 2. Cross section of nerve of *Racomitrium sudeticum* at just above mid-leaf. Fig. 3. Cross section of nerve of *Racomitrium affine* at just above mid-leaf. Fig. 4. Leaf of *Racomitrium sudeticum*. Fig. 5. Leaf of *Racomitrium affine*. Fig. 6. Cross section of leaf lamina of *Racomitrium fasciculare*, showing papillose leaf cells. The scale bars represent 20  $\mu$ m for cells and 0.6 mm for leaves.

### Distribution

The vice-county distribution given here is based on my revision of material at BBSUK and NMW, supplemented with records from several private herbaria and from Frisvoll's paper. For each vice-county, I have given brief details of the earliest confirmed record. Fuller details of all confirmed records will be held by the Recorder for Mosses. Additional vice-county records will be welcomed.

**R. himalayanum:** Craig Mohr, W. Young, 1898 (88); Ben Douran, H.H. Knight, 1908 (98)

**R. sudeticum:** Yes Tor, F. Savery, 1902 (4); Brown Cleve Hill, A.W. Weyman, 1893 (40); Craig-y-Llyn, A.J.E. Smith, 1962 (41); Brecknock Beacons, P.W. Richards, 1927 (42); Craig-y-Rhaiaadr, H.H. Knight, 1907 (44); Plynlimmon, W.R. Sherrin, 1910 (46); Bryn y Fedwen, M.O. Hill, 1974 (47); Cader Idris, J. Whitehead, 1877 (48); Snowdon, anon., 1865 (49); below Cadair Berwyn, M.O. Hill, 1972 (50); Holyhead Mountain, H. Davies, n.d. (52); Greygarth Fell, J.A. Wheldon, 1898 (60); Saddleworth, T.L. Blockeel, 1980 (63); Ingleborough, J.A. Wheldon, 1890 (64); Cronkley Fell, E.C. Horrell, 1898 (65); White Force, W. Ingham, 1897 (66); Cheviot, J.B. Duncan & W.C. Millar, 1925 (68); Grasmere, C.H. Binstead, 1886 (69); Allen Crag, H.N. Dixon, 1895 (70); Whitecoomb, Moffat, J.B. Duncan, 1901 (72); Loch Dungeon, E.C. Wallace, 1949 (73); Ettrick Pen, R.W.M. Corner, 1974 (79); Windburgh Hill, R.W.M. Corner, 1972 (80); Greenwood, R. Hall, 1949 (81); Ben Lomond, R. Mackechnie, 1928 (86); Ben Cleuch, R. Mackechnie, 1928 (87); Ben Lawers, H.N. Dixon, 1893 (88); Glen Shee, W. Smith, 1886 (89); Clova, anon., 1840 (90); Glen Callater, W. Gardiner, 1844 (92); Scad Hill, A.C. Crundwell, 1962 (93); Ben MacDhui, A. Wilson & J.A. Wheldon, 1905 (94); Braeriach, A. Wilson & J.A. Wheldon, 1908 (96); Lochaber, W.A. Shoolbred, 1891 (97); Ben Douran, D.A. Jones & B.M. Sutton, 1929 (98); Ben Vorlich, R. Mackechnie, 1932 (99); Goatfell, R. Mackechnie, 1929 (100); Dubh Chreag, Jura, M.F.V. Corley, 1986 (102); Ben More, Mull, W. Young, 1932 (103); Glamaig, Skye, L.B.C. Trotter, 1949 (104); Inver Alligin, E.C. Wallace, 1947 (105); Ben Wyvis, E. George, n.d. (106); Garbh Allt, A.C. Crundwell, 1951 (107); Ben More, W.E. Nicholson & H.N. Dixon, 1899 (108); Morven, D. Lillie, 1909 (109); Obbe, S. Harris, F.C. King, 1887 (110); Mullaghanattin, J.A. Paton, 1983 (H1); Shehy Mts, J.A. Paton, 1979 (H3); Blackstair Mtns., R.D. Fitzgerald, 1969 (H12); Lissoughter, A.C. Bouman, 1985 (H16); Lough Ouler, R.D. Fitzgerald, 1969 (H20); Achill, W.R. Tetley, 1917 (H27); Knockachree, A.R. Perry & R.D. Fitzgerald, 1963 (H28); Cuilcagh, W.R. Tetley, 1909 (H30); Quilcagh, R.D. Fitzgerald, 1959 (H33); Errigal, H.N. Dixon, 1890 (H35); Thomas Mt., J. Glover, 1917 (H38); Slemish, J. Templeton, 1809 (H39)

**R. macounii ssp. alpinum:** Y-Stad-ffin, J.B. Duncan, 1929 (44); Ceunant Llanrych, J.H. Albrecht, 1931 (48); Aberglaslyn Pass, H.N. Dixon, 1888 (49); Ben Lawers, W. Wilson, 1858 (88); Clova, Herb. Walker-Arnott, 1846 (90); Ben Macdhu, W. Young, 1913 (92); Ben MacDhui, A. Wilson & J.A. Wheldon, n.d. (94); Glen Eunach, A. Wilson & J.A. Wheldon (96); Ben Nevis, H.H. Knight, 1909 (97); Ben Dourain, E.C. Wallace, 1933 (98); Seana Bhraigh, E.C. Wallace, 1957 (105); Loch Li, E.C. Wallace, 1952 (106)

**R. affine:** Fingle Bridge, E.W. Jones & A.C. Crundwell, 1950 (3); Little Dart River, J. Appleyard, 1980 (4); Pickhurst, E.C. Wallace, 1975 (13); Balcombe, E.C. Wallace, 1986 (14); Denge Beach, F. Rose, 1959 (15); Rusthall Churchyard, A.G. Side, 1973 (16); Broadmoor, E.C. Wallace, 1932 (17); Skirrid, E. Ley, 1882 (35); Church Stretton, R. de G. Benson, 1891 (40); Taf Fechan, A.R. Perry, 1976 (41); Abergwesyn, A.E. Wade, 1923 (42); Aberedw, A.E. Wade, 1927 (43); Llandovery, H.H. Knight, 1907 (44); Bwlch Tyddiad, E.C. Wallace, 1931 (48); Nant Ffrancon, N. Woodhead, 1936 (49); Pistyll Rhayader, J.B. Duncan, 1938 (50); Cressbrook Dale, T.L. Blockeel, 1986 (57); Ease Gill, A. Wilson, 1898 (60); Rivelin Valley, T.L. Blockeel, 1980 (63); Ingleton, J.A. Wheldon, 1895 (64); Deepdale (Patterdale), W.R. Tetley, 1912 (69); Lodore, C.H. Binstead, 1930 (70); Dumfries, Jas Cruickshanks, 1840 (72); Milldown, H. Milne-Redhead, 1951 (73); Girvan, E.C. Wallace, 1965 (75); Selkirk, J.R. Simpson, 1922 (79); Traprain Law, J.B. Duncan et al., 1928 (80); Stirling, E.C. Wallace, 1954 (86); Trossachs, L.B. Hall, 1913 (87); Whitehill of Auchterhouse, D.R. Robertson, 1920 (90); Inchroly, E.C. Wallace, 1958 (94); Glen Affric, E.C. Wallace, 1949 (96); Kinloch Hourn, E.C. Wallace, 1971 (97); Argylesh, R.M. Stark, 1845 (98); Fishnish Bay, Mull, M.F.V. Corley, 1966 (103); Loch Li, E.C. Wallace, 1952 (106); Mallaramy, P.W. Richards, 1933 (H27); Red Castle, R.D. Fitzgerald, 1967 (H34); Commedagh, A.W. Stelfox, 1960 (H38); Crow Glen, R.D. Fitzgerald, 1950 (H39)

**R. heterostichum** (incl. **R. obtusum**): Zennor, P.W. Richards, 1924 (1); Brown Willie, A. Sutton, 1922 (2); Shaugh, E.M. Holmes, 1868 (3); Manaton, E.M. Holmes, n.d. (4); Triscombe, J. Appleyard, 1973 (5); Downhead Common, F. Rose, 1959 (6); Overton Down,

R.C. Stern, 1984 (7); Gutch Common, H.W. Matcham, 1989 (8); Buriton, E.C. Wallace & A.C. Crundwell, 1957 (11); Chilbolton, E.C. Wallace, 1969 (12); Cowdray Park, anon., 1901 (13); Balcombe, E.C. Wallace, 1929 (14); Goudhurst, anon, 1881 (16); Highdown Heath, E.C. Wallace, 1932 (17); Paley Green, F.E. Milsom, 1939 (22); Kidmore End, N.G. Hodgetts, 1984 (23); Bulstrode Park, C.C. Townsend, 1972 (24); Madingley, S.J.P. Waters, 1961 (29); Cherwellton, T. Laflin, 1966 (32); St. Briavels, H.H. Knight, 1913 (34); Trelleck, E. Armitage, 1903 (35); Kington, C.H. Binstead, 1896 (36); Malvern Hills, E.C. Wallace, 1927 (37); Stapeley Hill, R. de G. Benson, 1892 (40); Aberdare, T.E. Evans, 1910 (41); Pant-y-llyn, A.E. Wade, 1921 (42); Stanner Rocks, S.G. Harrison, 1965 (43); Llandovery, H.H. Knight, 1907 (44); Crymmych, anon., 1906 (45); Pennant Melangell, J.H.G. Peterken, 1960 (47); Llanbedr, W. Wilson, 1850 (48); Pass of Llanberis, anon., 1838 (49); Berwyn Mts., A.J.E. Smith, 1957 (50); Llandegfan Common, A.E. Wade, 1949 (52); Mavis Enderby, N.G. Hodgetts, 1987 (54); Baslow, T.L. Blockeel, 1988 (57); between Caton and Borwick, A. Wilson, 1898 (60); Hebden Bridge, T.L. Blockeel, 1977 (63); Ingleton, J.A. Wheldon, 1890 (64); Cronkley Fell, H.N. Dixon, 1896 (65); High Force, herb J.A. Wheldon, 1894 (66); Linbrig, A.R. Perry & R.D. Fitzgerald, 1962 (67); Cheviot, J.B. Duncan & W.C. Millar, 1925 (68); Ambleside, E.E. Gore, 1879 (69); Ennerdale, A.R. Perry, 1973 (70); Glendyne Burn, H. Milne-Redhead, 1971 (72); Kenmure Holms, E.C. Wallace, 1945 (73); Peebles, I.G. Hall, 1950 (78); between Polwarth and Greenlaw, J.B. Duncan & W.C. Millar, 1928 (81); Ben Cleuch, R. Mackechnie, 1928 (87); Killin, J. Stirton, 1902 (88); Glen Doll, F. Rose, 1951 (90); Burvie, D.J. Peterken, 1945 (91); Glen Quoich, E.C. Wallace, 1964 (92); Huntly, W.R. Sherrin, 1932 (93); Knockanda, A.G. Side, 1953 (95); Rothiemurchus, herb J.A. Wheldon, 1909 (96); Lochaber, herb W.A. Shoolbred, 1891 (97); Dunstaffnape Castle, W.A. Shoolbred, 1891 (98); Allander, A.C. Crundwell, 1951 (99); Clauchlands Point, Arran, R. Mackechnie, 1928 (100); Beinn nam Fitheach, Colonsay, E.C. Wallace, 1978 (102); Ben Chrasaig, E.C. Wallace, 1971 (104); Balgy, E.C. Wallace, 1948 (105); Inchnadamph, E.C. Wallace, 1939 (108); Borgue Hill, D. Lillie, 1899 (109); Lewis, R. Braithwaite & J. Stirton, 1901 (110); Lerwick, E.M. Lobley, 1959 (112); Brandon Mt., H.N. Dixon, 1935 (H1); Torc, E.C. Wallace, 1979 (H2); Blarney, R.D. Fitzgerald, 1967 (H4); Clonmel, R.D. Fitzgerald, 1966 (H6); Knockastakeen, R.D. Fitzgerald, 1966 (H7); Mt. Brandon, A.L.K. Knight, 1954 (H11); Slieve Bloom, A. Cridland, 1956 (H14); Gort, R.E. Parker, 1957 (H15); Cupidstown Hill, A.L.K. Knight, 1953 (H19); Lough Bray, Lindberg, 1873 (H20); Dublin Mtns, Orr, 1855 (?H21); Teevurcher, D.M. Synnott, 1978 (H22); Drumlish, R.D. Fitzgerald & E.M. Lobley, 1965 (H24); Sheegorey, W.R. Tetley, 1910 (H25); Knappagh, M. Barnes, 1966 (H27); L. Gill, W.R. Tetley, 1903 (H28); Flunty Bridge, R.D. Fitzgerald, 1951 (H31); Poisoned Glen, R.D. Fitzgerald, 1950 (H35); Slieve Gullion, R.D. Fitzgerald, 1964 (H37); Ards, R.D. Fitzgerald, 1950 (H38); Fair Head, A.R. Perry, 1963 (H39)

### Acknowledgments

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## REFEREES (July 1991)

Specimens sent to the referees should have a 4- or 6-figure grid reference in addition to the locality description. THEY SHOULD ALWAYS BE ACCOMPANIED BY A STAMPED, ADDRESSED ENVELOPE, EVEN IF MATERIAL IS SENT FROM UNIVERSITIES OR INSTITUTIONS. If anyone has difficulty in getting a specimen named they should send it to the appropriate Recorder - Mr David Long for hepatics (Herbarium, Royal Botanic Garden, Edinburgh, EH3 5LR) or Mr Tom Blockeel for mosses (9 Ashfurlong Close, Dore, Sheffield, S17 3NN).

The General Referee will help beginners who are having difficulty in placing their material in a genus. The numbers below refer to genera in *Distribution of Bryophytes in the British Isles* by M.F.V. Corley & M.O. Hill (1981).

**GENERAL REFEREE:** H.W. Matcham, 21 Temple Bar, Strettington, nr. Chichester, W. Sussex, PO18 0LB

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## NEW VICE-COUNTY RECORDS AND AMENDMENTS TO THE CENSUS CATALOGUE

All undated records are based on specimens collected in 1990; 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. The 10 km grid square is given with each locality, when known. All specimens are deposited in BBSUK, except where otherwise indicated. Numbers and nomenclature follow Corley & Hill, *Distribution of bryophytes in the British Isles: a census catalogue of their occurrence in vice-counties* (1981).

### HEPATICAE

D.G.LONG

- 8.1 *Preissia quadrata*, on vertical face of shallow limestone cutting at bottom of disused Magnesian Limestone quarry, Spring Lodge Quarry Nature Reserve, Cridling Stubbs, E of Pontefract 44/52 (63), Wall.
- 9.2 *Marchantia alpestris*, between paving stones, Senghenydd Road, Cathays, Cardiff 31/17 (41), 1988, Perry 5545 (NMW); in gaps between paving slabs on compacted soil, 40 m alt., Prebends Bridge, Durham 45/24 (66), Porley & Woodall; on bare soil in grounds of village hall, 180 m alt., Kirkhill of Kennethmont 38/52 (93), Long 18280.
- 12.1 *Riccia cavernosa*, bare muddy sand at edge of artificial pool in dune slack, 3 m alt., Ynys-Las dunes NNR 22/69 (46), 1989, Chater; on seasonally exposed mud enriched with bird droppings, 150 m alt., Loch of Kinnordy, Kirriemuir 37/35 (90), Wood & Robinson.
- 12.8 *R. subbifurca*, on moist sandy soil on exposed bank of reservoir, 240 m alt., Fernilee Reservoir, Goyt Valley 43/07 (57), Blockeel 19/595.
- 12.12 *R. sorocarpa*, on bare soil in grounds of village hall, 180 m alt., Kirkhill of Kennethmont 38/52 (93), Long 18279.
- 13.2 *Metzgeria temperata*, on *Betula* trunk on wooded river bank, 130 m alt., Leader Water below Chapel on Leader 36/54 (81), Long 17860; on bole of ornamental evergreen, ca. 60 m alt., Glenveagh Castle, Glenveagh C/02 (H35), Blockeel 19/423; on *Salix caprea* trunk, Breen Wood D/13 (H39), Synnott.
- 17.4 *Riccardia palmata*, on decaying log in damp oakwood, 260 m alt., Cwm Coel, Elan Valley 22/96 (43), Woods; on rotten log in stream, with *Nowellia curvifolia*, Step Gill, W of Buckden, Upper Wharfedale 34/97 (64), Wall.
- 22.1 *Fossombronina foveolata*, on flushed track on hillside, above Berthgoed, E of Strata Florida Abbey, Pontrhydfendigad 22/76 (46), Paton 7224.
- 26.4 *Barbilophozia atlantica*, the distribution has been revised by T.H. Blackstock (1990); the following are new records: sheltered bank in moorland, Moel Dywyll, SW of Cilcain 33/16 (51), 1984, Blackstock, Hill & Yeo; rocky bank, East Arncliffe Wood 45/70 (62), 1967, Paton 4246 (herb. Paton); Clubbiedean 36/26 (83), 1902, J. McAndrew (E); in S-facing block scree, 750 m alt., above E end of Loch Avon, Cairngorms 38/00 (94), Rothero 89/505; among granite rocks, Beorgs of Skelberry, 411/38 (112), 1974, Hill (herb. Hill).

- 26.6 *B. hatcheri*, in mossy hollow amongst *Calluna*, 400 m alt., Maiden Causeway, Bennachie 38/62 (93), Long 18308.
- 26.8 *B. barbata*, on damp fallen-down wall, 270 m alt., Longmuir Moss above Threburnford 36/45 (81), Long 17938.
- 27.1 *Anastrepta orcadensis*, mossy hollow in block scree, 460 m alt., N side of Mither Tap, Bennachie 38/62 (93), Long 18311.
- 28.1 *Lophozia ventricosa* a. var. *ventricosa*, on stump on wooded stream-side, 180 m alt., Foxdale Beck above Littledale Hall 34/56 (60), Long 17788; on boulders in scree in gully, 550 m alt., Ben Vrackie above Loch a'Choire 27/96 (89), Long 18353; on peat amongst block scree, 450 m alt., N side of Mither Tap, Bennachie, 38/62 (93), Long 18310; peaty soil at base of tree, ca. 60 m alt., head of L. Beagh, Glenveagh B91 (H35), Blockeel 19/409. b. var. *silvicola*, exposed peaty slope, 500 m alt., N side of Mither Tap, Bennachie 38/62 (93), Long 18313; on peaty bank, ca. 300 m alt., bank of stream running NW from L. Feeane, Aghla More B/92 (H35), Blockeel 19/460.
- 32.1 *Sphenolobus minutus*, amongst *Andreaea rupestris* on dry rock outcrop in ravine, 290 m alt., Linn Dean Water, Soutra 36/45 (82), Long 18105; on peat amongst block scree, 460 m alt., N side of Mither Tap, Bennachie 38/62 (93), Long 18312.
- 33.1 *Eremonotus myriocarpus*, on damp, N-facing rock in Big Cleft, Binevenagh (H40), Synnott.
- 35.1 *Trutomaria exsectiformis*, on decaying log in damp oakwood, 260 m alt., Cwm Coel, Elan Valley 22/96 (43), Woods.
- 36.1 *Jamesoniella autumnalis*, with *Lepidozia cupressina* and *Nowellia curvifolia*, on rotting wood on sessile oak woodland floor, 300 m alt., Ashway Hat Wood, Barle Valley, Exmoor, 21/83 (5), Porley.
- 36.2 *J. undulifolia*, place 69 in ( ), locality (Barrowfield near Kendal) is now destroyed by conifer afforestation, comm. Hodgetts.
- 38.6 *Jungermannia exsertifolia* subsp. *cordifolia*, on stones by burn, 250 m alt., Blythe Water below Wheel Burn 36/55 (81), Long 18043.
- 38.9 *J. gracillima*, on ground at edge of flooded gravel pit, Swanholme Lakes, North Hykeham 43/96 (53), Lammiman; damp sandy ground at edge of track, 40 m alt., Clumber Park SE of Worksop 43/67 (56), Blockeel 19/343.
- 38.13 *J. obovata*, damp basic rocks by burn in gully, 295 m alt., NW slope of Clints Hill, Channelkirk 36/45 (81), Long 18273.
- 39.3 *Nardia geoscyphus*, on rotting wood under *Quercus* and *Ilex*, Lady's View, Killarney V/98 (H2), 1973, D.L. Kelly (Hackney, 1980).
- 40.1A *Marsupella arctica* (Berggr.) Bryhn & Kaal., 92, 94 (Long, Paton & Rothero, 1990). New to British Isles.
- 40.4A *M. profunda* Lindb., 1 (Paton, 1990). New to British Isles.
- 40.5 *M. sparsifolia*, on soil near burn in area of late snow lie, 1000 m alt., above Loch an Sgoir, Geal Charn, Alder Forest 27/47 (97), Rothero 90/151.
- 45.1 *Pedinophyllum interruptum*, on Carboniferous Limestone ledge by Ease Gill 34/68 (60), Wigginton.
- 46.4 *Plagiochila britannica*, wet serpentine rocks on steep NE-facing slope, Lime Hill, Loch Ard Forest 26/49 (86), Hodgetts 2047; base of limestone wall, Ballinphuill Castle, near Lissadell (H28), 1963, Perry; on stone steps set in concrete, Glenveagh Garden (H35), Synnott, and on basic rocks on N-facing slope, 1 km NW of Dunfanaghy, Horn Head (H35), Synnott; base of W-facing cliff, Binevenagh (H40), Synnott.

- 46.5 *P. atlantica*, on trunk of *Betula pubescens* in rocky, NE-facing birchwood, Cnoc nam Cro 29/24 (108), 1989, Averis (E).
- 46.8 *P. punctata*, delete 41, voucher specimen (Cwm Dimbath, 1974, Perry 1990 (BBSUK, NMW)) is *P. spinulosa*, conf. Paton.
- 49.2 *Chiloscyphus pallescens*, on bank of flooded pit on site of disused brickworks, Frostenden 62/48 (25), Fisk; on bank of river in gorge, Water of Ailnack, Tomintoul 38/11 (94), 1986, Paton & Long, Paton 7205; *Salix* carr, Lough Burke, W of Ennis R/27 (H9), 1979, Paton 6173.
- 54.3 *Diplophyllum obtusifolium*, on bank by forestry track, 390 m alt., N side of Rushy Rig, Wauchope Forest 36/50 (80), Corner; on red sandy soil of bank in wood, 70 m alt., Balmaha Plantation, Loch Lomond 26/49 (86), J.A.B. Smith.
- 55.4 *Scapania scandica*, on soil on grassy slope on E-facing Pennant sandstone outcrop, ca. 370 m alt., Mynydd Cilfach-yr-encil, Troedyrhiw 32/00 (41), 1986, Perry 3818 (NMW).
- 55.6 *S. lingulata*, on side of grit rock on grassy bank with slight basic seepage, 240 m alt., Bar Brook, Baslow 43/27 (57), Blockeel 19/613. New to England.
- 56.1 *Adelanthus lindenbergianus*, on steep north-facing slope among boulders and *Calluna vulgaris* with *Herbertus aduncus*, *Bazzania tricrenata* and *Pleurozia purpurea*, 450 m alt., locality withheld (102), Hobbs (E). New to Scotland.
- 58.4 *Cephalozia rubella*, on peat at base of pine tree, 180 m alt., grounds of Leith Hall, Kennethmont 38/52 (93), Long 18303.
- 60.1 *Nowellia curvifolia*, on rotten log in deciduous woodland, Scottshall Covert, Westleton 62/46 (25), Fisk; on stump at edge of plantation, 180 m alt., grounds of Leith Hall, Kennethmont 38/52 (93), Long 18294.
- 66.3 *Kurzia sylvatica*, on vertical rock face in oak woodland, 60 m alt., Ballyarr Wood, ca. 5 km east of Kilmacrenan C/12 (H35), Blockeel 19/515.
- 67.3 *Lepidozia cupressina*, Glenbower Wood (H5), 1908, S.C. Bennis (DBN).
- 77.2 *Porella obtusata*, on S-facing Old Red Sandstone outcrop, ca. 350 m alt., near Llanfihangel Nant Bran 22/93 (42), Blackstock & Gray.
- 77.3 *P. platyphylla*, on old *Acer* trunk, 180 m alt., grounds of Leith Hall, Kennethmont 38/52 (93), Long 18301.
- 78.3 *Frullania microphylla*, on vertical rock-face, at base of W-facing cliffs, Binevenagh (H40), Synnott.
- 81.1 *Harpalejeunea ovata*, rock face in Big Cleft, Binevenagh (H40), Synnott.
- 82.1 *Drepanolejeunea hamatifolia*, Big Cleft, Binevenagh (H40), Synnott.
- 85.3 *Cololejeunea minutissima*, near base of trunk of Willow in 'fen', Norman Gwatkin N.R., Wangford 62/47 (25), Fisk; on trunk of *Salix cinerea* on edge of basin mire, The Bog, Aberithon, Newbridge on Wye 32/05 (43), Woods.

#### Contributors of records, 1990

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- Paton, J.A. (1990).** *Marsupella profunda* Lindb. in Cornwall, new to the British Isles. *J. Bryol.* **16**: 1-4.

## MUSCI

### T.L. BLOCKEEL

- 1.1 *Sphagnum imbricatum* b ssp. *affine*, Loch Achanalt 28/26 (106), 1974, D.A. Ratcliffe (E), comm. Hill.
- 1.6 *S. teres*, in *Sphagnum* lawn by burn, 280 m alt., Wheel Burn, upper Blythe Water valley 36/55 (81), Long 18050.
- 1.8 *S. girgensohnii* in damp hollow in Oak/Birch woodland, 60 m alt., Ballyarr Wood, ca. 5 km east of Kilmacrenan C/12 (H35), Blockeel 19/511.
- 1.10 *S. quinquefarium*, on steep bank of gully, 280 m alt., NW slope of Clints Hill, Channelkirk 36/45 (81), Long 18261; on steep slope of open ravine, 300 m alt., Linn Dean Water, Soutra 36/45 (82), Long 18093.
- 1.11 *S. warnstorffii*, in wet flush with *S. teres* and *S. auriculatum* in oak wood, Cwm Coel, Elan Valley 22/96 (43), Woods; flushes on N. side of Burnhope Seat, 690 m alt., 35/73 (66), Corner; in base-rich flush by burn, 285 m alt., Wheel Burn, upper Blythe Water valley 36/55 (81), Long 18057.
- 1.14 *S. subnitens* b ssp. *ferrugineum*, flat fen/bog complex, Garron Plateau above Carnlough (H39), Synnott, conf. Hill.
- 1.21 *S. contortum*, on fen peat in mire, 20 m alt., by side of N84 road, north of Galway M/33 (H17), Blockeel 19/563.
- 1.27 *S. recurvum* b var. *tenue*, flush on N-facing slope, 320 m alt., Mynydd Eglwysilan 31/19 (41), 1973, Perry (NMW).
- 2.2 *Andreaea rupestris* a var. *rupestris*, on large boulders in block scree, Corndon Hill 32/39 (47), 1984, Hodgetts 354.
- 2.4 *A. rothii* a ssp. *rothii*, exposed granite rocks, 500 m alt., nr summit of Mither Tap, Bennachie 38/62 (93), Long 18317.
- 4.2 *Tetradontium repandum*, underhang of damp sandstone rocks, Lower rocks, west of Uckfield (14), 1958, Rose & T.D.V. Swinscow (NMW), record re-instated, voucher in NMW is correct.
- 6.1 *Pogonatum nanum*, place 81 in ( ) (Long, 1990).
- 8.1 *Atrichum crispum*, on soil of worn footpath at 30 m above spring line of Spittal Brook, Triffleton 12/92 (45), 1983, Burgoine 485/83.
- 14.6 *Ditrichum pusillum*, on clay ditch bank, 25 m alt., Ludborough 53/39 (54), Lammiman.
- 15.2 *Distichium inclinatum*, on soil between boulders, Carreg-Lwyd, nr Penwyllt 22/81 (42), Martin & Woods; soil between shrubs, Plumley Lime Pit, near Knutsford 33/77 (58), Matcham; on old asphalt being re-vegetated by short turf at back of sand dunes, S. of Knockangle Pt., Glenegedale, Islay 16/35 (102), 1989, Radley, comm. Hodgetts.

- 18.1 *Seligeria donniana*, on sheltered damp limestone exposures with a conifer plantation, Stockhill Plantation, nr Priddy, Mendips 31/55 (6), Porley.
- 19.2 *Blindia caespiticia*, Ben Lomond, c.fr. (86 in ( )), 1862, J. Stirton (BM), comm. Hodgetts, confirmation of record in Stirton (1870).
- 21.1 *Ceratodon purpureus* b ssp. *conicus*, delete 87, specimen on which record is probably based (Ben Ledi, leg. R.H. Meldrum, 1899 (E)) is sterile and is ssp. *purpureus*, det. J.S. Burley 1985, comm. Long.
- 24.3 *Cynodontium jenneri*, exposed granite rocks, 500 m alt., nr summit of Mither Tap, Bennachie 38/62 (93), Long 18316.
- 25.2 *Oncophorus wahlenbergii*, Sow of Athole (89 in ( )), 1888, R.H. Meldrum (E), comm. Long; summit flush, 700 m alt., The Storr, Trotternish, Skye 18/45 (104), 1989, Hodgetts 1611.
- 28.4 *Dicranella crispa*, steep bank of stream through coniferous woodland on acid sand, 35 m alt., Willingham Forest, North Willingham, Market Rasen 53/18 (54), Lammiman.
- 28.8 *D. staphylina*, bare soil under trees in hotel grounds, 5 m alt., Dunfanaghy C/03 (H35), Blockeel 19/457.
- 31.2 *Kiaeria blyttii*, tops of boulders in scree, 503 m alt., summit of Windburgh Hill, Shankend 36/50 (80), 1985, Corner.
- 32.4 *Dicranum leioneuron*, delete 98, the specimen (Ardifuir, N side of L. Crinan, leg. Corley, 1976, Hb. Corley) is *D. bonjeanii*, det. & comm. Corley.
- 32.12 *D. montanum*, place 81 in ( ) (Long, 1990).
- 32.13 *D. flagellare*, delete 88, the specimen (Tyndrum, leg J.B. Duncan, 1913 (E)) is *D. fuscescens*, comm. Long.
- 32.14 *D. tauricum*, rotten log in deciduous woodland, Scottshall Covert, Westleton 62/46 (25), Fisk.
- 34.9 *Campylopus atrovirens* c var. *gracilis*, Ben Tangaval, Isle of Barra (110), 1947, C.W. Muirhead (NMW), comm. Perry.
- 35.1 *Paraleucobryum longifolium*, on vertical sides of boulder on block scree, 910 m alt., in gully at foot of SW Cliffs, Ben Lawers 27/64 (88), Long & Rothero 18329; on large boulders near shore of lochan, 1000 m alt., Coire an Lochain, Braeriach 28/90 (96), 1989, Rothero 89/491.
- 37.2 *Fissidens viridulus*, ditch bank, 70 m alt., Lower Pitham Copse, Stratfield Saye 41/76 (12), Stern.
- 37.2A *F. pusillus* a var. *pusillus*, bare chalky banks in old quarry, Red Hill 53/28 (54), Hodgetts 1969; rock in stream, Rosbeg Peninsula G/69 (H35), Martin, and basic stones in shaded gully, ca. 20 m alt., north side of Sheskinmore lough, NW of Ardara G/69 (H35), Blockeel 19/356.
- 37.2B *F. limbatus*, on earth overlying stone (Bargate Stone) in lane bank, Hammer Lane, east of Headley 41/83 (12), Crundwell, det. Corley.
- 37.12 *F. celticus*, on steep bank above stream, Ness Wood L/51 (H40), Martin.
- 37.14 *F. taxifolius* b ssp. *pallidicaulis*, crevices of wet rocks by waterfall, 350 m alt., Gateside Clough, Woodlands Valley 43/18 (57), Blockeel 19/587; on wet rock ledge in Big Cleft, Binevenagh (H40), Synnott.
- 38.1 *Octodiceras fontanum*, submerged in R. Taw, ca. 150 m upstream of Heywood Bridge 21/61 (4), Rumsey.
- 39.5 *Encalypta streptocarpa*, on wall by roadside, 180 m alt., Kirkhill of Kennethmont 38/52 (93), Long 18283.
- 40.5 *Tortula virescens*, on tarmac path with *T. intermedia*, 55 m alt., churchyard, High

- Ongar 52/50 (18), Pyner.
- 40.10 *T. subulata* c var. *subinermis*, on bank of roadside ditch, 180 m alt., near Mill of Syde, Kennethmont 38/52 (93), Long 18302; d var. *graeffii*, in a cavity below limestone cliffs, Leck Beck, below Bull Pot Farm 34/68 (60), Townsend 90/45.
- 40.11 *T. papillosa*, on old *Acer* by drive, 180 m alt., grounds of Leith Hall, Kennethmont 38/52 (93), Long 18305; on old apple tree, 55 m alt., grounds of Birr Castle N/00 (H18), Long 18140.
- 41.1 *Aloina brevirostris*, base-rich mud on limestone, on path to disused quarry, Sproxtton Gullet 43/82 (55), Hodgetts 1990.
- 41.2 *A. rigida*, compacted calcareous soil in disused limestone quarry, 30 m alt., S. of Helpston 53/10 (32), Hodgetts 2257.
- 45.2 *Pottia starkeana* b ssp. *starkeana* var. *brachyodus*, delete 16, the locality given in *Bull. Br. bryol. Soc.* 35: 9 (E. of Hastings, leg. W. Borrer, 1836 (BM)) belongs to v.c. 14, comm. Preston; replace 67 with 68, the record given in *Bull. Br. bryol. Soc.* 35: 9 should read "Nessend, Holy Island (68), H. Milne-Redhead, 1963", comm. Preston; delete 90, the records for var. *starkeana* and var. *brachyodus* are apparently based on the same specimen (Ethie Haven, 1885, Hb. W. Smith (E)), which has distinct peristome teeth.
- 45.7 *P. intermedia*, on clayey soil with *Phascum cuspidatum* and *Bryum rubens*, 60 m alt., churchyard, Laindon 51/68 (18), Pyner.
- 48A.1 *Scopelophila cataractae*, on soil on wall top on old mine building, north side of Afon Ystwyth, nr. Pontrhydygroes 22/77 (46), Martin & Paton.
- 49.15 *Barbula nicholsonii*, on retaining wall by R. Severn, Ironbridge 33/60 (40), Blockeel 19/607.
- 49.22 *B. ferruginascens*, on damp basic rocks by burn in gully, 290 m alt., NW slope of Clints Hill, Channelkirk 36/45 (81), Long 18270.
- 50.3 *Gymnostomum recurvirostrum*, on damp rock face, old quarry, Walton-in-Gordano, nr Clevedon 31/47 (6), Martin.
- 51A.1 *Leptobarbula berica*, shaded rock, Shanklin Chine, 40 m alt., Isle of Wight 40/58 (10), Stern; on north-facing red-brick tomb growing with *Tortula marginata*, 65 m alt., churchyard, Mountnessing 51/69 (18), Pyner; on red bricks in drainage gully at base of church wall and nearby shaded limestone gravestones, north-facing, 35 m alt., churchyard, Springfield 52/70 (19), Pyner.
- 54.5 *Weissia tortilis*, loose chalky soil on bank slope, Langdon Bay, nr. Dover 61/34 (15), Watling; earthy places, cliffs at Burnmouth 36/96 (81 in ( )), 1925, J.B. Duncan (E), comm. Long, confirmation of only Scottish record.
- 54.12 *Weissia longifolia* a var. *longifolia*, thin turf on 'round' of grass in churchyard, Stoven 62/48 (25), Fisk.
- 57.3 *Tortella flavovirens* a var. *flavovirens*, on soil bank on low cliffs by sea, 10 m alt., Ardmore Point near Blainroe T/38 (H20), Long 18129.
- 57.6 *T. densa*, on limestone pavement, Dalton Crag 34/57 (60), Martin, and on thin layer of soil on limestone slab in limestone pavement, 40 m alt., Gait Barrows 34/47 (60), Hodgetts 2043.
- 57.7 *T. inflexa*, on detached stone in limestone grassland, Barnack Hills and Holes 53/00 (32), Whitehouse.
- 60.1 *Leptodontium flexifolium*, on exposed bare peat, 510 m alt., near summit of Mither Tap, Bennachie 38/62 (93), Long 18319.
- 61.3 *Cinclidotus mucronatus*, on concrete base of bridge over stream, Willingham 62/48 (25), 1989, Fisk.

- 64.8 *Grimmia affinis*, Kirktown of Clova (90 in ( )), 1869, J. Sadler (E).
- 64.11 *G. atrata*, on boulder at edge of lough, 460 m alt., L. Feeane, Aghla More B/92 (H35), Blockeel 19/466 (Hb. Blockeel), and in dense robust tufts on crumbling flaky rock on the S.W. of the saddle between Aghla More and Aghla Beg B/92 (H35), Synnott. New to Ireland.
- 64.14 *G. orbicularis*, mortar of flint wall, south of Redvin's Copse, Halnaker, nr Chichester 41/80 (13), Matcham.
- 64.20 *G. decipiens*, on a wall, near Weterham (16), 1982, E.C. Wallace (BBSUK).
- 66.8 *Racomitrium lanuginosum*, amongst *Calluna* on raised bog, 60 m alt., Woodfield Bog near Clara N/23 (H18), Long 18137.
- 66.10 *R. ericoides*, on sandy ground, bottom of old sand pit, Sleaford, near Kingsley 41/83 (12), Crundwell.
- 71.6 *Funaria obtusa*, place 81 in ( ) (Long, 1990).
- 72.1 *Physcomitrium pyriforme*, on damp soil on river bank, 55 m alt., Brick Bridge, grounds of Birr Castle N/00 (H10), Long 18145.
- 77.1 *Tayloria lingulata*, Glenshee (89 in ( )), 1868, J. Ferguson (E), comm. Long.
- 80.2 *Splachnum ampullaceum*, place 81 in ( ) (Long, 1990).
- 83.1 *Orthodontium lineare*, peaty bank on open wooded slope, 230 m alt., near Maiden Castle, below Bennachie 38/62 (93), Long 18306.
- 84.1 *Leptobryum pyriforme*, peaty flush by burn, 195 m alt., Heriot's Dyke, near Fangrist Burn, Greenlaw Moor 36/74 (81), Long 17979.
- 85.1 *Pohlia elongata* a ssp. *elongata* var. *elongata*, at edge of base-rich grit rock in rocky hollow on moorland, Seal Bark Rocks, Saddleworth 44/00 (63), Blockeel 19/334: b ssp. *elongata* var. *acuminata*, crevices of low rock face in gully, 640 m alt., E coire of Luinne Bheinn, Knoydart 18/80 (97), Long 18232.
- 85.6 *P. drummondii*, roadside by R. Dye, Longformacus 36/65 (81), 1927, J.B. Duncan (E), comm. Long.
- 85.11 *P. camptotrachela*, Stobo churchyard (78), 1926, J.B. Duncan (E), comm. Long.
- 85.14 *P. lutescens*, on soil on roots of fallen tree, 150 m alt., Sturdon Burn, near Chapel on Leader 36/54 (81), Long 17856.
- 87.2 *Plagiobryum demissum*, Ben Vrackie (89 in ( )), 1918, per James Fulton (E), comm. Long.
- 88.1 *Anomobryum filiforme* b var. *concinnum*, on damp basic rock outcrop in ravine, 295 m alt., Linn Dean Water, Soutra 36/45 (82), Long 18113.
- 89.8 *Bryum uliginosum*, Dirleton Common (82 in ( )), 1897, W. Evans (E), comm. Long.
- 89.14 *B. algovicum* var. *rutheanum*, rather acidic loamy clay, Titchmarsh Nature Reserve, Thrapston 52/08 (32), Wigginton.
- 89.16 *B. inclinatum*, on rocks by burn in ravine, 140 m alt., mouth of Mains Burn, Lumsdaine Dean 36/86 (81), Long 17899; basalt outcrop at Denny's Lough, Garron Plateau above Carnlough (H39), Synnott.
- 89.20 *B. capillare* b var. *rufifolium*, calcareous rocks, Taren yr Esgob (42), 1954, E.C. Wallace (NMW), comm. Perry; on rock ledge by the stream, Winder Wood, Roeburndale, ca. 5 km. S. of Wray (60), Townsend.
- 89.21 *B. elegans*, delete 88, specimen (Ben Lawers, 1913, leg. J.B. Duncan (E)), is *B. stirtonii*, det. Syed, wrongly ascribed to *B. elegans* in *J. Bryol.* 7: 279, comm. Long.
- 89.27 *B. pallescens*, on waste ground on derelict industrial site, East Moors, Cardiff 31/27 (41), Orange 7919.
- 89.31 *B. alpinum*, place 81 in ( ) (Long, 1990).

- 89.34 *B. riparium*, on flat rock in seepage area on bank of stream, 350 m alt., Whitendale River, near Shooters Clough, Bowland Forest 34/65 (64), Long 17810.
- 89.40 *B. dunense*, waste ground by track, west of Wivelrod House, 2 miles west of Alton 41/63 (12), Crundwell; dry bank on cliff top by sea, 30 m alt., Fast Castle 36/87 (81), Long 17872.
- 89.44 *B. violaceum*, rather peaty soil, stubble field, 4 m alt., Ouse Bridge Farm, Great West Fen, Hilgay, 5 km S of Downham 52/59 (28), 1989, Stevenson.
- 89.45 *B. klinggraeffii*, open clay soil on margin of lake, Titchmarsh Nature Reserve, Thrapston 52/08 (32), Wigginton; on soil on roadside verge, 60 m alt., near Ballyarr Wood, ca. 5 km east of Kilmacrenan C/12 (H35), Blockeel 19/501.
- 89.48 *B. microerythrocarpum*, clay soil on ditch bank, Titchmarsh 52/08 (32), Wigginton.
- 91.2 *Mnium thomsonii*, limestone scar, Ease Gill 34/68 (60), Wigginton.
- 91.4 *M. marginatum* b var. *dioicum*, Milton Den, Aberdalgie (88 in ( )), 1886, R.H. Meldrum (E), comm. Long.
- 94.3 *Plagiomnium elatum*, flushed slope, Loughnatrose, Garron plateau above Carnlough (H39), Synnott.
- 95.1 *Pseudobryum cinclidioides*, boggy ground amongst *Salix* in valley mire, 270 m alt., Longmuir Moss above Threeburnford 36/45 (81), Long 17932.
- 96.3 *Aulacomnium androgynum*, on old *Salix* in valley mire, 270 m alt., Longmuir Moss above Threeburnford 36/45 (81), Long 17934.
- 105.3 *Philonotis arnellii*, roadside, near Drakemire 36/86 (81), 1926, J.B. Duncan (E), comm. Long.
- 105.4 *P. caespitosa*, in an open flush, acidic but with some mineral enrichment, Okehampton Park, Dartmoor 20/59 (3), Porley.
- 106.1 *Breutelia chrysocoma*, on hummock in sedge-rich lawn, open forest grazing, west of Rufus Stone, New Forest 41/21 (11), 1989, Sanderson & Smithers, comm. Rose.
- 109.2 *Zygodon baumgartneri*, face of small slightly base-rich Millstone Grit boulder, 400 m alt., Jagers Clough, Edale 43/18 (57), Blockeel 19/319; swollen base of ash growing out of limestone rock outcrop, S. side of Ease Gill 34/68 (60), Preston.
- 109.3 *Z. conoideus*, on Elder bark, woodland on chalk downs, 'Bushy Ruff' Woods, Kearsney, nr. Dover 61/24 (15), Watling; branch of old elder in scrub on chalk downland, 150 m alt., Velvet Lawn, Ellesborough & Kimble Warrens 42/80 (24), Hodgetts 2253.
- 110.2 *Orthotrichum obtusifolium*, on old *Acer* trunk, 180 m alt., grounds of Leith Hall, Kennethmont 38/52 (93), Long 18300.
- 110.3 *O. striatum*, on branch of Ash tree, 15 m alt., shore of L. Corrib, SW of Headford M/24 (H17), Blockeel 19/560.
- 110.5 *O. lyellii*, place 31 in ( ), last recorded in 1905 (on willow, The Thicket, St. Ives, leg. L.J. Sedgwick & P.G.M. Rhodes (BM)), comm. Hodgetts.
- 110.11 *O. cupulatum* a var. *cupulatum*, on calcareous chest-tomb top shaded by row of sycamore trees in churchyard, Littleborne Church 61/25 (15), Newman: b var. *riparium*, lock walls near water level, 35 m alt., Parndon Mill Lock, Lt. Parndon 52/41 (19), 1989, Pyner; on limestone walls of ancient abbey, 3 m alt., Crowland Abbey 53/21 (53), 1989, Hodgetts 1527.
- 110.14 *O. stramineum*, trunk of sycamore in old chalk pit, 165 m alt., Savernake Forest 41/26 (7), Stern; in small quantity on *Salix* bole in wet ground at edge of pond, 30 m alt., Stanley Marsh, Stanley, nr. Wakefield 44/32 (63), Blockeel 19/306.
- 110.16 *O. tenellum*, on ash trunk in semi-natural woodland, Elsea and Math Woods, Bourne 53/01 (53), Hodgetts 1966.

- 110.17 *O. diaphanum*, on wall top, 5 m alt., Dunfanaghy C/03 (H35), Blockeel 19/454.
- 110.18 *O. pulchellum*, on old elder in shady deciduous woodland, Gravel Pits Wood Copford, nr. Colchester 52/92 (19), Chisholm & Haslam; on elder bark, NW end of Malcarse Dyke, Wicken Fen 52/57 (29), Lock (CGE).
- 111.2 *Ulotia drummondii*, on trees, Cowie's Linn Ravine (78 in ( )), 1902, W. Evans (E), comm. Long.
- 111.3 *U. crispa* a var. *crispa*, scattered tufts on branches of *Salix* spp., 35 m alt., old gravel pits, Liston 52/84 (19), Pyner: b var. *norvegica*, trunk of willow in 'fen', Norman Gwatkin N.R., Wangford 62/47 (25), Fisk.
- 111.6 *U. phyllantha*, on horizontal branch of *Salix cinerea* L. with *Dicranowisia cirrata*, 50 m alt., small copse by R. Can, Good Easter 52/61 (19), Pyner; luxuriant tuft ca. 7 cm across on horizontal bough of Crack Willow, Highgate Ponds, Hampstead Heath, London Borough of Camden 51/28 (21), Adams; trunk of willow in swampy woodland, Norman Gwatkin N.R., Henham 62/47 (25), Fisk.
- 113.1 *Fontinalis antipyretica* c var. *gigantea*, submerged at edge of river, 8 m alt., S bank of Whiteadder below Cawderstones 36/95 (81), Long 17757.
- 115.1 *Cryphaea heteromalla*, on mature elder by stream running into Leck Beck, SW of Leck Mill, Leck 34/67 (60), Preston.
- 116.1 *Leucodon sciuroides* a var. *sciuroides*, place 31 in ( ), last recorded in 1906 (on tree, St. Ives, leg. P.G.M. Rhodes (NMW)), comm. Hodgetts.
- 133.2 *Lescuraea incurvata*, on a wall, Cherrytrees, Roxburgh (80 in ( )), 1868, J.B. Boyd (E), comm. Long.
- 143.4 *Drepanocladus fluitans* b var. *falcatus*, in wet patch on waste ground, near Easter Inch Moss, Bathgate 36/06 (84), 1971, Long & D.F. Chamberlain, Long 1686 (E).
- 143.5 *D. exannulatus* b var. *rotae*, in an open flush with some mineral enrichment, 200 m alt., Okehampton Park, Dartmoor 20/59 (3), Porley.
- 144.3 *Hygrohypnum luridum* a var. *luridum*, on flat limestone gravestone, 55 m alt., churchyard, Chipping Ongar 52/50 (18), Pyner.
- 144.6 *H. molle*, irrigated rocks above area of late snow lie, 1260 m alt., above Garbh Uisge Mor, Ben MacDui 27/99 (94), 1989, Rothero 89/501.
- 147.2 *Isoetecium myosuroides* b var. *brachythecioides*, steep rocky bank of gully on sea cliffs, 40 m alt., Heathery Carr W of St. Abbs Head 36/86 (81), Long 18074.
- 149.3 *Homalothecium nitens*, in wet ditch, Wardlaw Hill, Muirkirk 26/62 (75), 1989, Kynnes (E), comm. Long.
- 150.4 *Brachythecium salebrosum*, base of ash tree in swampy woodland, 20 m alt., copse by R. Great Ouse, Eynesbury 52/15 (31), Hodgetts 2256.
- 150.5 *B. mildeanum*, damp turf at edge of pool in gravel pit, Danehill Pits 43/68 (56), Jones.
- 150.11B *B. trachypodium* (Brid.) B., S. & G., 88 in ( ), 97, new to the British Isles (Corley, 1990).
- 153.3 *Cirriphyllum crassinervium*, Kimbolton 52/16 (31), 1928, J. Harrison Smith (PBH), comm. Hodgetts.
- 154.5 *Rhynchostegium megapolitanum*, open soil bank by sea, 10 m alt., Partanhall near Burnmouth 36/96 (81), Long & R.J.D. McBeath, Long 17722.
- 155.5 *Eurhynchium praelongum* b var. *stokesii*, stream-side in oak woodland, Glenlack, Glenbheagh (H35), Synnott.
- 155.6 *E. swartzii* b var. *rigidum*, limestone bank in disused quarry, Colsterworth Quarry 43/92 (53), Hodgetts 1996; limestone grassland in disused quarry, Sproxtton Gullet

- 43/82 (55), Hodgetts 1992; bank in stream channel, Treswell Wood 43/77 (56), Jones; on shady basic rocks in ravine, 265 m alt., Kate's Cauldron, Linn Dean 36/45 (82), Long 18256.
- 156.2 *Rhynchostegiella curviseta*, brick wall bordering stream at outfall from ornamental lake, Sotterley Park 62/48 (25), Fisk.
- 156.3 *R. teesdalei*, on wet rock at edge of stream in Oak/Birch wood, 50 m alt., L. Eske G/98 (H35), Blockeel 19/550.
- 157.2 *Orthothecium intricatum*, on shaded rock in Big Cleft, Binevenagh (H40), Synnott.
- 159.5 *Plagiothecium curvifolium*, on rotten tree stump, 210 m alt., Middler Wood, Evenjobb 32/26 (43), Port.
- 161.1 *Isopterygium pulchellum*, place 81 in ( ) (Long, 1990).
- 166.1 *Platygyrium repens*, trunk of Field Maple, 110 m alt., Northdown Plantation, Steventon, near Overton 41/54 (12), Stern; on ash trunk in semi-natural woodland, Elsea and Math Woods, Bourne 53/01 (53), Hodgetts 1968.
- 168.4 *Hypnum mammillatum*, on bole of Oak tree in deciduous woodland, 60 m alt., Ballyarr Wood, ca. 5 km east of Kilmacrenan C/12 (H35), Blockeel 19/508.
- 170.1 *Ctenidium molluscum* b var. *fastigiatum*, calcareous rocks, near Hallaig, Raasay (104), 1940, Ursula Duncan (NMW), comm. Perry: c var. *condensatum*, delete 81, specimen (moor near Lumsclaine, Coldingham Moor, 1927, leg. J.B. Duncan (E)) is var. *molluscum*, comm. Long.
- 173.4 *Rhytidiadelphus loreus*, in grass at bottom of dunes, Gibraltar Point NR 54/55 (54), Lammiman.

#### Contributors of records, 1990

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#### References

- Corley, M.F.V. (1990). *Brachythecium trachypodium* (Brid.) B., S. & G. in Scotland. *J. Bryol.* 16: 173-177.
- Long, D.G. (1990). Bryophytes of Berwickshire VC81. In: Braithwaite, M.E. & D.G. Long, *The Botanist in Berwickshire*, 69-98, Berwickshire Naturalists' Club.
- Stirton, J. (1870). New and rare mosses from Ben Lawers. *Trans. Bot. Soc. Edinburgh* 10: 426-432.

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### BBS PHOTOGRAPHIC COMPETITION

The closing date for submitting mossy pictures, for the Society to use to produce our own postcards, is the Spring Field Meeting, 1992. For details see *Bulletin* 57, page 31 (1991).

## COMMON NAMES FOR MOSSES: 2

Many thanks to those who have responded to my request (*Bulletin 57*: 63-64) for common names. I now have a running list of common names already published for British bryophytes of well over one thousand names, plus quite a few for non-British plants. However, a great many of these are unlikely to "catch on". Those who groaned when *Barbula recurvirostra* became *Bryoerythrophyllum recurvirostrum*, are unlikely to find relief in "The Red Twin-toothed Moss", or any less confusion in "The Reddish Didymodon". Other species have common names with more field appeal, such as the "Lurking Leskea", "Silkwood", or "Little Goldilocks". Therefore I am particularly interested in learning those unpublished names by which field workers and teachers (at any level) know some of our more characteristic plants. These are the unofficial names which many members may find familiar, either to use between themselves, or to describe a plant to (young) students, or even just as a "pet name" (correspondents may remain anonymous!).

The need for common names is not by working bryologists, who are mostly happy with scientific names. But it is clear that museum displays and popular literature (both of which provide much needed publicity for bryophytes), do require common names, and have often coined new names because there was no existing list. Several British species have already accumulated five or six common names, and some common names apply to more than one (often unrelated) species. The present list at least provides a basis for considering such confusion, and whether any action or even attitude should be taken by the Society which has heretofore remained aloof from such common matters.

Please send any comments or contributions to: Dr S.R. Edwards, Manchester Museum, Manchester University, Oxford Road, Manchester, M13 9PL.

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## ADDITIONS AND AMENDMENTS TO THE MEMBERSHIP LIST

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#### RESIGNATIONS

Odgaard, Dr B., Denmark  
Watkinson, Mr M.R., c/o Dept of Plant Sciences, Oxford University

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### ADDENDUM

A short addendum is available for the paper "Photographing mosses and similar plants" in *J. Bryol.* **16**, 443-477 (1991). For a copy please send a SAE to Dr S.R. Edwards, Manchester Museum, Manchester University, Oxford Road, Manchester, M13 9PL.

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### COPY

Deadlines for receiving copy for the February and July *Bulletins* are 15 December and 15 May, respectively. Articles should be typed and those of more than one page in length should, in addition, be submitted on disk, as two files: a) a word processed file, and b) an ASCII file without underlining, boldface or italics.



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*Edited and produced by*  
*A.R. Perry, Department of Botany, National Museum of Wales, Cardiff, CF1 3NP, U.K.*

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