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Edited by A. R. Pardy

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BRITISH BRYOLOGICAL SOCIETY

The British Bryological Society exists to promote the study of mosses and liverworts. The Society was constituted in its present form in 1923, replacing the former Exchange Club founded in 1891.

Five field meetings, each usually of a week's duration, are held throughout the districts of bryological interest. In addition two weekend meetings are held in the autumn, one for the Atlantic Central district, the presentation of papers and fieldwork, and the other for practical instruction in the recognition and identification of bryophytes.

Members of the Society are entitled to receive the Society's *Journal* and its *Bulletin* free of charge, to borrow books, participate and receive from the Society's library, to consult its herbarium specimens from the Society's herbarium, and to receive the Society's printed program for assistance in the identification of specimens.

The subscription due in reference to a January each year is £1.50 for Ordinary Members, £1.00 for Family Members, and £0.75 for Associate Members, and £1.50 for Junior Members.

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

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SUBSCRIPTIONS 1993

Subscriptions are due on 1 January each year. Members are reminded that subscriptions were increased in January 1991 to £15.00 for full members, £7.50 for junior members, £1.00 for family members and £7.50 for student members. Members are requested to check their records and to pay promptly in order to save the cost of sending out reminders.

Subscriptions may now be paid by credit card. The following cards are acceptable: Access, Barclaycard, Eurocard, Mastercard and Visa. Forms are available from the Membership Secretary:

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

REPORTS OF OFFICERS FOR 1992

a) GENERAL SECRETARY'S REPORT

From baseball caps and ballpoint pens to sumptuous conference facilities in the Bahamas, the B.B.S. is bombarded with mail advertizing them all. Its bulk offends instincts of economy but is, I suppose, an inevitable consequence of a plethora of computer-generated directories. Only a fraction of incoming mail is of interest to the Society, but some, particularly requests from students and their teachers for information about bryophytes, is very gratifying indeed.

An interest generated in the young is perhaps the best way of carrying forward the ideals of the B.B.S., and this has been amply demonstrated by Dr M.C.F. Proctor, on whom the Society has been pleased to confer Honorary Membership this year. Dr Proctor is not only an acknowledged authority on bryophyte photosynthesis and water-relations. His university teaching and courses for the Field Studies Council have inspired many students, and his photographs of bryophytes continue to act as an ambassador for bryology,

We have been saddened to hear of the death this year of six members: Dr Alison Furbank (née Christie), Dr Sinske Hattori, Miss Phyllis Henley, Dr Eustace Jones, Dr Geneva Sayre and Dr T.D.V. Swinscow. All, in different ways, made valuable contributions to bryology in this country and abroad, and both Dr Jones and Dr Swinscow bequeathed books to the Society for the specific purpose of fostering future study.

Among the most important business of Council this year has been the negotiation of a contract to ensure publication of the *Journal of Bryology* beyond 1992, thereby facilitating continuation of the *Journal* as a cornerstone of international bryology. Volume 2 of the *Atlas*, which became available this year, is also a significant bryological publication, of which every contributor to the mapping scheme can be proud. The new recording scheme will benefit from it and, I hope, enjoy similar success, not only in accumulating valuable data, but also in unifying members' many and diverse interests. The work will continue to be bolstered by the parallel vice-county recording scheme which, through its two recorders, serves to monitor standards and keep us all abreast of developments in taxonomic thought.

Council has also initiated moves to safeguard the Society against hasty financial decisions in Council or at an A.G.M.. A proposal was passed by the A.G.M., as a result of which all items

with financial implications of £500 or more must now be agenda items, with full details circulated in advance. It follows the policy which Council is itself practising of circulating details of every item its members wish to have discussed.

Thus, commendable work continues to be done by many people on behalf of the B.B.S., and news travels far. I understand that, through the courtesy of its editor, Dr Z. Mirek, the Society was featured in *Wiadomosci Botaniczne* (*Botanical News* 36 (3/4)), which is an official journal of the Polish Botanical Society. However, none of us can afford to be complacent, for some absurd notions of bryophytes and the B.B.S. have appeared in the British press and on radio this year.

M.E. Newton, January 1993

b) TREASURER'S REPORT

Preliminary statement of affairs as at 31 December 1992.

<u>Current assets</u>	£
Nat. West Current a/c	2,305.27
Business Reserve a/c	20,521.97
Giro	363.00
National Savings Investment a/c	34,115.08
	<hr/>
	57,305.32
Plus National Savings interest (estimate)	2,400.00
	<hr/>
	59,705.32
	<hr/>
<u>Current Liabilities</u>	
Blackwell's invoice (estimate)	11,363.00
	<hr/>
	£ 48,342.32
	<hr/>

Two figures are estimated in this statement – the interest due to the Society from National Savings and Blackwell's invoice for publishing the *Journal* in 1992. The latter is based on our publishing 400 pages which is more or less exactly the number which did, in the event, appear.

Assuming these estimates are correct, we end the year with assets slightly up on last year (£47,689.57). We thus had an excess of income over expenditure of some £652. This is in one sense satisfactory except that the value of our capital has depreciated over the year and we have by no means compensated for that loss.

As usual, publishing is our major item of expenditure. The cost of the *Journal* in 1992 is likely to be well up on 1991 (£11,363 rather than £7,932) partly because we have published more pages but also because Blackwell's charges for administration are up. This problem has been addressed by changing our publishers to W.S. Maney who will, we believe, give us a better and more individual service at a more reasonable price. The cost of publishing the

Bulletin has also risen (£1894 rather than £1158). This is to a large extent because of distribution costs.

Apart from normal publishing and regular administration costs we made no substantial payments during 1992. We made no donations or grants towards projects. It was a cheap year. Nevertheless, we have only just kept our heads above water despite substantial capital assets. I feel we have taken sensible action to reduce our major outlay on our publication, but we need to monitor the situation closely.

Giles Clarke, March 1993

c) BIBLIOGRAPHER'S REPORT

In the last year, two lists of 'Recent Bryological Literature' (numbers 77 and 78) have appeared in *J. Bryol.*, number 79 is in press and number 80 is in preparation. I am grateful to all those who have sent references or reprints for inclusion in these lists. Particular thanks are owed to Mr Malcolm Beasley (Botany Library, BM), who has provided many references which otherwise would have been difficult to obtain. I much appreciate receiving details of papers and books which I may have overlooked.

L.T. Ellis, February 1993

d) BULLETIN EDITOR'S REPORT

Two issues of the *Bulletin*, 59 and 60, were prepared and published during the year, and, thanks to the members who supply interesting or topical articles, this publication continues to be enjoyed by many. I am particularly grateful to those people who save me many hours of typing by supplying their material on disk.

A.R. Perry, February 1993

e) CONSERVATION OFFICER'S REPORT

1. 33 species of bryophytes are now given legal protection by inclusion in Schedule 8 of the Wildlife and Countryside Act 1981 and Schedule 8 (Part 1) of the Wildlife (Northern Ireland) Order 1985. The list includes 2 species which are additional to those originally proposed by the BBS; these are *Drepanocladus vernicosus* and *Petalophyllum ralfsii* which are regarded as endangered in Europe and included in the Bern Convention.
2. Progress on preparation of a Red Data Book for bryophytes has continued with Nick Stewart and Judith Church working for Plantlife on this project managed by the Joint Nature Conservation Committee.
3. The JNCC is currently reviewing its work on plant conservation and is consulting the BBS in this respect. The JNCC has been urged to retain the post of Lower Plant Specialist in view of its great importance for bryophyte conservation.
4. Conservation Committee met in September during the BBS meeting in East Sussex. Alan Crundwell has now joined the Committee, and both Donal Synnott and Jeff Bates were co-opted for the meeting. Among the items discussed were the threatened development at Mullaghmore, Co. Clare (RCS has made further representations about this) and the possible difficulties some Regional Recorders may have in respect of releasing information to outsiders.
5. RCS has continued to attend meetings of Plantlife Conservation Committee and was elected to the Board of Plantlife at its AGM. A new body has been established – Plantlife

Link – with representatives from botanical and conservation organisations; Giles Clarke is representing the BBS.

R.C. Stern, January 1993

f) CURATOR'S REPORT

Voucher specimens incorporated during the year were 91 mosses and 35 liverworts. There were 16 loans from BBSUK, totalling 256 mosses and 130 liverworts.

A.R. Perry, February 1993

g) JOURNAL EDITOR'S REPORT

My retirement as editor marks the end of our association with Blackwell Scientific Publications. When in 1971 Dr Harold Whitehouse, as editor, moved publication of the *Transactions of the British Bryological Society* from C.U.P. to Blackwell Scientific Publications the flagging publication was transformed to *Journal of Bryology*. This resulted in a greatly increased circulation which helped to replenish the almost empty coffers of the B.B.S. Despite cut-backs by many educational and research institutes both in Britain and abroad because of financial stringencies during the 1980s, Blackwell's managed to maintain high circulation figures. It was only because of spiralling costs that the B.B.S. and Blackwell's had to part company.

There were some problems such as frequently changing subeditors (a phenomenon familiar to many journal editors) and quality of typography and illustrations, but these are inevitable, although with modern publishing techniques these are becoming less troublesome. Some of the subeditors and particularly the last, Erica Schwarz, were extremely helpful.

Being editor puts backbone into at least half of the saying "How to make friends and influence people" and it is an experience I have enjoyed. I was helped by many people, reviewers, index compilers, proof readers and secretaries, to all of whom I am most grateful.

With regard to volume 17, parts 1 and 2, the number of submitted papers was still low, but the size of the parts was maintained by the publication of a number of excellent papers given at the Biology of *Sphagnum* and Experimental Bryology symposia held at Exeter in July, 1991. It was also a particular pleasure to me, as author of a British moss flora, to accept for publication the descriptions of three mosses (including one new to science) new to the British Isles.

A.J.E. Smith, January 1993

ACTING EDITOR'S REPORT

The major task in 1992 was to find a replacement publisher for the *Journal* owing to Blackwell's intention of considerably increasing the costs to the Society. A working party comprising Professor J.G. Duckett, Dr G.C.S. Clarke, Dr M.E. Newton, Dr M.O. Hill, Dr D.H. Brown and myself approached several publishers and received tenders from Cambridge University Press and W.S. Maney & Son. A contract has now been drawn up with the latter as reported elsewhere. Maney's will take over the publication of the *Journal* from volume 17, part 3. This is planned for publication in June 1993 and copy for this part is now with Maney's.

A new panel of Associate Editors was appointed in 1992. Here, my aim has been to widen the international base of the *Journal* a little. The following have accepted appointment as Associate Editors: D.H. Brown (Bristol), J.G. Duckett (London), J. Enroth (Helsinki), S.R. Gradstein (Utrecht), L. Hedenäs (Stockholm), J.A. Lee (Manchester), D.G. Long (Edinburgh), R.E. Longton (Reading), M.E. Newton (Liverpool), J. Shaw (New York). Several of these have agreed to take on full editorial responsibilities for papers in their fields thus reducing the workload of the Editor and allowing more thorough refereeing of manuscripts. Some changes in the cover design and style of the *Journal* have been discussed at Council and will take effect from volume 18. The majority of these changes will be announced in a revised *Instructions for Authors* in volume 17, part 3.

Members of the Society will wish to join me in thanking our retiring Editor, Dr A.J.E. Smith, and his Editorial Panel for their considerable labours in maintaining the high standard of *Journal of Bryology* over many years.

J.W. Bates, February 1993

h) LIBRARIAN'S REPORT

Sales:	J. Bryology (parts)	87
	TBBS (parts)	40
	Distribution of Bryophytes	7
	Census Catalogues (old)	7
	Hepatics of Europe and the Azores	6
	BBS Bulletins	60
	BBS Library Catalogues	3
	Moss Wall Charts	1
	Special Volume: Jubilee	3
	Special Volume: Chromosomes	7
	Special Volume: Tropical Bryophytes	4
	Bryology (Linn.Soc.)	4
	German/English Glossary	1
	×20 lenses	29
	Stainless steel forceps	10
	BBS ties	4
Loans:	35mm slides	2
	Micrometer slide	2

A number of books and a considerable number of journal parts and separates were left to the BBS Library by Eustace Jones.

Ken Adams, January 1993

i) MEETINGS SECRETARY'S REPORT

The year began with a spring field meeting based in the picturesque village of Ellesmere, near Shrewsbury, which proved a good base for exploring northern Shropshire. The meeting was very popular although some of the rarities members hoped to uncover during the week proved elusive. This could hardly be blamed on the local secretary, Ron Shoubridge, however, whose careful organisation and planning paid off.

Our two-week Scottish summer meeting was based partly in Lochinver, a picturesque fishing port in the far north-west, and partly in the Uists, Western Isles. Gordon Rothero was local secretary for the first week, which proved popular and, in terms of species seen and new records made, highly successful. Gordon is to be congratulated and thanked for another well run Scottish meeting.

Peter Pitkin was bold to agree to organise a meeting in the Western Isles, with all the attendant logistical problems. The meeting attracted eight dedicated bryologists, understandably fewer than the previous week. Those who attended saw much of the special flora that Benbecula and the Uists have to offer. Many of the species will hopefully be seen in future by many more BBS members, thanks to the diligence of Harold Whitehouse who photographed many of the highlights.

The autumn meeting was held in the Isle of Thorns training centre, a field station belonging to the University of Sussex. The venue was comfortable and the weather fine, setting off well the beautiful surroundings of the Ashdown Forest. I am particularly grateful to those who addressed the meeting, all of whom gave presentations of a very high quality. David Streeter is also to be thanked for the faultless organisation.

Ken Adams kindly agreed to organise a taxonomic workshop, a category of meeting which although popular with some members, is very difficult to find local secretaries for. The organisers of taxonomic workshops need to have both expertise to share and time to make the necessary arrangements for laboratory space and accommodation, an increasingly rare combination.

It was satisfying, therefore, to see that Ken's meeting, based at the University of East London at Stratford, was a notable success. We were particularly fortunate to have a renowned expert on *Fissidens*, Dr Ida Bruggeman-Nannenga of the Netherlands, in attendance,.

I have continued the practice of gathering attendance figures at meetings for on-going comparison. This year's overall figures should be rather more typical than last year's, which included two international symposia. The numbers in brackets are the numbers of residential participants.

	1992	1991
Spring Meeting	48 (40)	37 (26)
Summer Meeting I. Lochinver	16 (16)	-
Summer Meeting II. Western Isles	8 (8)	-
Sphagnum Excursion	-	36
Sphagnum Symposium	-	70
Experimental Bryology Symposium	-	55 (49)
AGM Weekend	50 (40)	49 (38)
Workshop Meeting	13 (0)	22 (19)
TOTAL	135	269

The network of regional secretaries, who arrange local meetings around the country, continues to flourish. The birth of a very active southern group, led by Howard Matcham, seems particularly encouraging and I continue to hope that other groups will also spring up where there are concentrations of bryological expertise.

I would like to thank again all those secretaries, both local and regional, this year and in previous years, who have done the donkey work required to keep up the society's active meetings programme. I can only hope that my successor, Nick Hodgetts, has as much luck as I have had in the co-operation he receives from the membership.

Philip Lightowlers, February 1993

k) MEMBERSHIP SECRETARY'S REPORT

The table gives membership numbers over the last five years. An indication of the changes in membership is given by the turnover ratio: (Gains + Losses)/Total. It is seen that this is remarkable constant but it will be noted that the balance is maintained by an upward trend in UK members and a downward trend in Overseas members. The net total shows a welcome upward trend which includes a steady increase in family membership.

	1988	1989	1990	1991	1992
New Members					
UK	17	20	20	19	26
Overseas	9	7	8	9	4
Total Gains	26	27	28	30	30
Members lost by:					
Death	3	8	5	3	4
Resignation	8	11	9	11	9
Other	18	10	15	9	13
Total Losses	29	29	29	23	26
Total overseas	194	207	199	190	186
Total UK	338	323	330	352	360
NET TOTAL	532	530	529	542	546
Comprising:					
Honorary	13	14	13	12	11
Ordinary & Junior	506	502	503	512	513
Family	13	14	13	18	22
Turnover Ratio ×100	10	11	11	11	10

A.V. Smith, January 1993

k) PUBLICITY OFFICER'S REPORT

SWEAT-SHIRTS: Of the original order for 56 BBS sweatshirts, still only 31 have been sold, most (28) at the 1991 Sheffield meeting. None has been sold at any subsequent BBS meeting, and the last was sold on 11.iii.92 by post. The reason, as reported in my 1992 Report, is because all of the Large and XLarge sizes sold out at Sheffield. I have had many requests for larger sizes, but despite my requests at the Spring and Autumn 1992 Meetings to order more larger sizes, Council insisted that the remaining smallest size must be sold first. Council also refused my repeated requests that these should be reduced in price to cost (£8.89 each), to encourage sales e.g. for members' children. I shall therefore not carry the considerable bulk of the remaining shirts to any more meetings, and regard the matter as closed.

MOSS GARDENS: I have requested in *Bulletin* 61, information concerning any Moss Gardens in Britain and Ireland, in the hope of establishing a list. This may provide opportunities for raising public awareness of bryophytes and of the BBS.

POSTCARD COMPETITION: There has been an excellent response from members, with 100 entries; this compares with only one entry the previous year. The standard is very high, and the Society is assured of a first class set of BBS cards.

COMMON NAMES: Council (Autumn 1992) agreed that a list of common names for bryophytes should be drawn up and published. I now have a list of 1,808 common names of British bryophytes, from 47 sources, in addition to 46 common names for non-British mosses for example of tropical plants whose common names are attributed to British bryologists. The list has been circulated, as suggested at Council, to a subcommittee of six people, to select "preferred" names for legal and other uses, although strong feelings against any coercion of use were expressed.

TRAVELLING EXHIBITION: Despite premature reports of its death, the Exhibition is still in demand, and is due next at the Borders Regional Council Rangers Service (operated out of Harestanes Countryside Visitors Service, Jedburgh), during June 1993. Since the last Report, it was returned from the Armagh County Museum to Cliffe Castle, Keighley, where it has been stored until now. Since the Exhibition first opened on 5 December 1987 at Keighley, it has travelled constantly with breaks only for maintenance, except for the last half of 1992 (when Sheffield was due to take it, but cancelled because of cuts due to financial losses over the Student Games). This is remarkable for such an exhibition, and according to Caroline Krzesinska (Bradford Museums and Art Galleries Exhibitions Officer) is due to the "paucity of well researched and well presented Natural History exhibitions". This is a fine compliment, and the BBS can be justly pleased. However, future bookings now look thin, and the Society may shortly inherit the Exhibition. It is in "remarkably good condition", which justifies the Society's decision to fund professional construction.

FLORA BRITANNICA: I have received no reply to either of my two letters to the Project Co-ordinator (in response to a request for information on folklore, local uses, common names, etc., relating to the British flora), asking that cryptogams in general and bryophytes in particular should not be under-represented in his compilations. There is an obscure note in small type and parentheses in the middle of page 26 of *Flora Britannica - The Handbook*, saying: "(including trees and ferns, and excluding only lower plants such as fungi and lichens)". Bryophytes seem not worthy of note even in exclusion. Should the BBS accept this snub, or push again at this opportunity to raise the profile of our lowly plants?

S.R. Edwards, February 1993

I) READING CIRCLE SECRETARY'S REPORT

Reading circle contents lists were circulated to 27 members. Only four journals have been available again: *Annales Botanici Fennici*, *Cryptogamie*, *The Journal of the Hattori Botanical Laboratory* and *Lindbergia*. We hope that *The Bryologist* will be available again during 1993. A total of 43 articles were requested by 9 members in the past year, accounted for, in the main, by a number of back issues of the Hattori Laboratory journal being circulated.

Financial Statement

INCOME

Members' credit at 1.i.1992	£90.59
Income	£100.00
Total	£190.59

EXPENDITURE

Photocopies supplied	£39.00
Postage	£16.13
Administration	£2.70
Total	£57.83

Excess of income over expenditure	£132.76
Less members credit at 31.12.1992	£135.47
Excess of expenditure	£2.71

M.A.S. Burton, February 1993

m) REPORT OF THE RECORDER FOR HEPATICAE

Records show a welcome increase on 1991 with a significant number from BBS meetings. Perhaps the most unexpected discovery was *Lophocolea bispinosa* in Dorset, far from any known colony. Other significant finds in England were *Lophozia capitata* in Norfolk and the rediscovery of *Plagiochila killarniensis* in the New Forest. In Scotland, noteworthy range extensions for a number of local species have been established, such as *Scapania lingulata* in the Southern Uplands, *S. degenii* in W. Ross and Easternness, and some nice finds new to the Outer Hebrides, e.g. *Odontoschisma elongatum* and *Cephalozia macrostachya*.

	New records collected 1991-92	New records collected pre-1991	Deletions
England	14	1	2
Wales	1	1	0
Scotland	19	5	7
Ireland	3	4	0
TOTALS	37	11	9

Once again Jean Paton has very kindly checked a number of vouchers and her work on *Lophozia* has clarified the status and distribution of several critical taxa. This work is gratefully acknowledged. During 1992 the Recorder has been revising the distribution of the three 'redefined' subspecies of *Marchantia polymorpha* in the British Isles and will be pleased to check additional material to fill in some of the many gaps.

D. G. Long, February 1993

n) REPORT OF THE RECORDER FOR MOSSES

There has been a welcome increase in records in 1992 after the low point in 1991. Equally pleasing has been the increased number and wide geographical spread of contributors. The records this year incorporate some of the results of a revision of herbarium material of *Seligeria* by Lidia Gos (Poland), and the records for Sussex have been brought up to date following the publication of the *Atlas of Sussex Mosses, Liverworts and Lichens*. An analysis of the year's records follows.

	New records collected 1991-92	New records collected pre-1991	Deletions
England	58	6	9
Wales	8	4	2
Scotland	43	5	11
Ireland	6	2	0
TOTALS	115	17	22

Three additions have been made to the British Flora (*Hygrohypnum styriacum*, *Sanionia orthothecioides*, and a new species *Thamnobryum cataractarum* which is closely related to the Madeiran endemic *T. fernandesii*). Among other noteworthy records are the new localities for *Seligeria brevifolia*, *Brachythecium starkei* and *Platygyrium repens* in Scotland, *Tortula freibergii*, *Aloina brevirostris*, *Pottia caespitosa*, *Ephemerum stellatum* and *Homalothecium nitens* in England, and *Barbula nicholsonii* in Ireland. There is further evidence of the recovery of certain epiphytic species, as illustrated by the discovery of *Orthotrichum lyellii* in London.

Finally, I wish to thank Alan Crundwell and Martin Corley for their assistance with difficult specimens, Howard Matcham for guidance in bringing the Sussex entries up to date, Roy Perry for several loans of specimens from NMW and BBSUK, and David Long for his comments on the list of new vice-county records.

T.L. Blockeel, February 1993

o) RECORDING SECRETARY'S REPORT

The number of completed record cards returned has been modest despite large quantities of new cards being distributed. Since the new recording scheme was launched in 1991 the totals of cards returned by vice-counties are: v.-c. 3(10), 4(3), 8(43), 11(2), 15(38), 17(18), 24(1), 38(3), 39(1), 56(1), 57(19), 58(5), 61(2), 62(2), 63(7), 64(4), 65(1), 96(9), 110(12), H8(33), H35(13). These figures exclude "pink card" records and a small number of vice-counties where Regional Recorders (including the writer) are currently copying backlogs of records onto the new cards. There is abundant evidence, from accounts in the *Bulletin* of local flora projects and organised meetings, that much more recording is taking place than the returns suggest. The situation might improve if Regional Recorders got into the habit of sending in completed cards at the end of each year.

In 1992 Council approved a pilot scheme to record epiphytic bryophytes in selected tetrads along a belt extending from Devon and S. Wales to East Anglia. This will run from 1 September 1992 until 31 May 1993. Hopefully it will provide a "snapshot" view of the status of epiphytes including their recolonisation of areas formerly affected by SO₂ pollution. If there is demand, other "targeted" recording projects may be initiated in addition to the continuing national recording scheme.

J.W. Bates, February 1993

MINUTES OF THE ANNUAL GENERAL MEETING, EAST SUSSEX, 1992

Minutes of the Annual General Meeting held at the Isle of Thorns Training Centre, Chelwood Gate, East Sussex, at 4.30 p.m. on Saturday, 26 September, 1992.

PRESENT: Prof. J.G. Duckett (President, in the chair) and 45 other members.

The President opened the meeting by recording the deaths in the past year of two honorary members, Dr S. Hattori and Dr E.W. Jones, of Dr T.D. Swinscow, a member for nearly forty years, of Dr A. Furbank, and of Dr G. Sayre, who relinquished membership only in recent years, and members stood as a mark of respect.

- (1) **APOLOGIES FOR ABSENCE:** Apologies had been received from Miss J.M. Ide, Mr F.R. Lammiman, Mr & Mrs H.W. Matcham, Mr C.D. Preston, Dr A.J.E. Smith and Dr E.V. Watson.
- (2) **MINUTES OF THE LAST A.G.M., SHEFFIELD, 1991:** Circulated in advance in *Bulletin 60*, these were approved and signed as a correct record.
- (3) **MATTERS ARISING:**
 - a) Item 3(k), **Subscriptions for Senior Members:** Prof. Duckett reported that Council had discussed the feasibility of a reduced subscription for senior members but considered it to be inappropriate.
 - b) Item 5, **Journal of Bryology:** Prof. Duckett reported that the committee set up by Council had appointed Dr J.W. Bates as acting Editor of the *Journal*, and he had participated in the search for a new publisher. Of six firms approached, two had submitted tenders, that from W.S. Maney & Son, Limited, of Leeds, having been in the region of £5,000 compared with £13,000-£14,000 from Cambridge University Press. The former had been approved by Council as the new publisher of *J. Bryol.* beginning with vol. 17, part 3.
 - c) Item 9, **Centenary Meeting:** Prof. Duckett reported that Council had set up a small committee to look at possible ways of celebrating the Society's centenary in 1996. Ideas would be welcomed and should be sent to Dr M.E. Newton.
 - d) Item 10c, **Payments by Credit Card:** Dr G.C.S. Clarke reported that arrangements had been made to facilitate payments, particularly for overseas members. All the usual credit cards, with the exception of American Express, could be used, and the evidence was that the facility was appreciated. The initial cost to the Society had been £60, and charges thereafter would be 3% of the sums involved.
- (4) **REPORTS OF OFFICERS FOR 1991:** These had been published in *Bulletin 60* in advance of the meeting, and led to the following comments:
 - b) **Treasurer:** Dr Clarke apologized for his inability to provide audited accounts, owing to the fact that the auditor was then in Hong Kong, and appealed to members for assistance in finding an honorary auditor. At the time of writing his report, Blackwell's account had not been presented. It proved to have been for £7,932.83, some £2,600 less than estimated, with the result that the Society was further in the black than had been predicted.

j) **Membership Secretary:** Mr A.V. Smith supplemented his report by saying that even as late as September there remained a significant number of unpaid subscriptions. He also expressed his deep appreciation of the assistance of Dr D.G. Horton in collecting subscriptions from North American members. Prof. Duckett said that Mr Smith had agreed to seek out comparative data with which to assess trends in membership numbers against those of similar societies. Mr D.T. Streeter said the British Lichen Society was almost identical in overall numbers, and the British Arachnological Society was thought to be, as well.

k) **Publicity Officer:** Mr E.R. Hurr questioned the policy of not re-ordering sweatshirts until the 32 small ones had been sold. He would like to buy a B.B.S. sweatshirt but, as he put it, "Nature had had its way", and those in stock would not fit. Dr S.R. Edwards said he was sympathetic and it was his view that the small sweatshirts would not sell at the original price. It was ascertained that ten of those members present would purchase a larger size if it were available. The matter was therefore deferred for discussion at the next Council meeting.

(5) REPORT FROM COUNCIL:

a) **Council Minutes:** Prof. Duckett said that Council meetings were not intended to be mysterious to members of the Society. Members were able to inspect the minute book on request at either of the two meetings to which it was normally taken. The main items of discussion were also reported in an annual newsletter in the *Bulletin*.

b) **Trudy Side Bequest:** Prof. Duckett said Council would shortly be discussing this in detail, and an appeal was made for anyone with good ideas to contact Dr Clarke as soon as possible.

c) **Photographs of Dr E.W. Jones:** Prof. Duckett asked whether anyone with a good photograph of Dr Jones would be willing to allow its reproduction.

d) **Cumulative Index for B.B.S. Journals:** Prof. Duckett reported that this, drawn up by Dr P.E. Stanley, would be finalized with volume 17 of *J. Bryol.* and published shortly. A quotation in the region of £1,800 had been received from the new publishers, Maney & Son.

e) **Honorary Membership:** The Honorary Membership Committee was set up in 1984 to consider recommendations prior to discussion by Council. Prof. Duckett asked that anyone wishing to make proposals should do so by submitting a written account of relevant achievements to Dr Newton in advance of a Spring meeting of Council.

(6 & 7) ELECTION OF OFFICERS AND ELECTED MEMBERS OF COUNCIL:

These two items were taken together. Prof. Duckett said that all vacancies had been advertized in the *Bulletin*. Council wished to nominate Mr N.G. Hodgetts for the post of Meetings Secretary, and Dr J.W. Bates, currently acting Editor, as Journal Editor. Council had also nominated Mr C. Curtis, Mr R.J. Fisk and Mr C.D. Preston as Elected Members, and their present incumbents, Dr M.E. Newton, Dr G.C.S. Clarke and Dr J.W. Bates, for re-election as, respectively, General Secretary, Treasurer and Recording Secretary. No other nomination had been received.

In response to a question from Mr D.G. Long, Dr Newton confirmed that there was no bar to Dr Bates continuing as Recording Secretary, which he wished to do, on taking up the post of Journal Editor.

In the absence of other nominations, all were declared elected.

Prof. Duckett thanked all outgoing members for their services, mentioning in particular Dr P.J. Lightowlers, retiring as Meetings Secretary, and paying special tribute to Dr A.J.E. Smith after 30 years on Council.

- (8) **CHANGE OF RULES: FINANCIAL MATTERS:** Prof. Duckett said Council had wished to protect the Society against hasty financial decisions at an A.G.M. or a Council meeting, and had therefore notified members of a resolution it intended to put before the A.G.M. Its purpose was described by Dr Clarke as a means of ensuring that all relevant background information would be examined before reaching a decision. Mr A.C. Crundwell's doubts centred on a possible lack of flexibility if a need arose for speedy action on expenditure, but Dr Newton said the Executive Committee had power to act on urgent matters arising between Council meetings. In response to a question from Mr M.V. Fletcher, she also confirmed that there was scope within the Rules for a Special General Meeting to be called at the discretion of the Council or at the written request of any 50 members.

Prof. Duckett said that it was Council's wish to omit the word "respectively" from the published resolution.

The **resolution** (proposed by Dr P.E. Stanley, seconded by Mrs J.A. Paton) was put to members as followed and passed unanimously:

Expenditure of £500 or more, other than that incurred in normal Society business, shall be considered by Council or an A.G.M. only as an agenda item. Questions raised without prior circulation of details shall be referred back to either the Executive Committee or the next Council meeting.

- (9) **PLACE AND DATE OF NEXT ANNUAL GENERAL MEETING:** Dr Lightowlers announced that this would be at the College of Ripon and York St John, in Ripon, at 4.30 p.m. on Saturday, 18 September, 1993.

- (10) **OTHER FUTURE MEETINGS:** Dr Lightowlers reported that all meetings in 1993, with one exception, had been advertized in *Bulletin* 60. There remained some doubt about the workshop meeting because the intended venue, London University Botanic Garden, had now closed. However, he hoped all would become clear in time for the next *Bulletin*.

(11) **ANY OTHER BUSINESS:**

- a) **Reports of local group meetings:** Dr F. Rose asked that some recognition of local meetings might be made in the *Bulletin* and drew particular attention to one held by the Southern group. Mr A.R. Perry said the one mentioned had been briefly reported. He welcomed such reports but was dependent on what was sent to him.
- b) **Bryophyte work in Ireland:** The question of B.B.S. funding was raised as a possible way of stimulating work in Ireland, perhaps by refunding out of pocket expenses. Mr D.M. Synnott expressed the view that it would be more beneficial to assist a well-defined project in a particular area rather than spread thinly whatever resources might be available. Various ideas were put forward by Dr R.E. Longton and Prof. Duckett, and it was agreed that these and others would be discussed by Council.
- c) **Joint meeting with British Lichen Society:** Mr Streeter, speaking as a member of both societies, urged the B.B.S. to begin thinking about a joint meeting with the B.L.S. in a place of interest to both, perhaps on the W. coast of Scotland. The possibility seemed attractive and would be discussed in Council.
- d) **Plantlife:** Mr R.C. Stern, wearing the sweatshirt of Plantlife, briefly outlined the society's achievements and intentions. In existence for 2½ years, it was currently buying meadows for plant conservation, and had various other projects in hand. He asked members to consider joining, and had application forms with him.

Dr M.C.F. PROCTOR, HONORARY MEMBER: Prof. Duckett, in asking members to consider Council's recommendation that Dr Proctor be made an honorary member, was met by spontaneous applause. He spoke briefly but warmly of Dr Proctor's contribution to bryology and of his encouragement of beginners.

There being no other business, the meeting adjourned at 5.27 p.m.

Dr M.E. Newton, Hon. General Secretary
October 1992

FUTURE MEETINGS OF THE SOCIETY

SUMMER FIELD MEETING 1993, Dumfries and Galloway, 29 July - 3 August.

Local Secretary: Alastair Rowan, 1 Robertson Avenue, Dumfries, DG1 4EY. Tel.: 0387 63051.

Headquarters: Urr Valley Country House Hotel, Castle Douglas.

For details of this meeting please refer to *Bulletin* 61, page 20.

ANNUAL GENERAL MEETING AND SYMPOSIUM MEETING 1993, Ripon, 17 - 19 September.

Local Secretary: Mike Longman, 8 St. Quentin Rise, Bradway, Sheffield, S17 4PR. Tel.: 0742 368010.

This meeting has been arranged at the campus of the University College of Ripon and St. John, in the attractive North Yorkshire town of Ripon. The price of full accommodation is £38.75 inclusive of VAT. All those wishing to attend are asked to contact the local secretary as soon as possible and **no later than 1 September**. The nearest railway station is Harrogate, and those intending to come by train are requested to let him know so that transport to Ripon can be organised.

The programme for the meeting will be the conventional one of a paper reading on the Saturday starting at 9.00 a.m. followed by the AGM later in the afternoon (about 4.30 p.m.). In the evening a conversazione will be held and members are requested to bring along exhibits. On Sunday a field excursion to Hackfell Wood, a Woodland Trust property on the River Ure, is planned.

The symposium this year has a special theme commemorating the 100th anniversary of the death of Richard Spruce (1817-1893), hepaticologist, botanist and explorer and a native of Yorkshire. The programme of papers will include:

Dr Barbara Crandall-Stotler (Southern Illinois University): Apical organisation, gametophyte ontogeny and their phylogenetic implications in the moss *Fissidens*.

Dr Sean Edwards (Manchester Museum): The Spruce collections at Manchester.

Prof. Paul Richards (Cambridge): Spruce – the man.

Dr Philip Stanley (Cambridge): The cumulative index to the *Journal of Bryology*.
Dr Harold Whitehouse (Cambridge): A presentation of stereoscopic bryophyte photographs.

Members may also be interested in attending the Richard Spruce Conference being hosted by the Linnean Society of London at York on 20-22 September; see under 'Other Bryological Meetings' (p. 18) for further details.

The ANNUAL GENERAL MEETING will be held at 4-30 p.m. on Saturday 18 September, 1993, at the College of Ripon and York St John, Ripon.

AGENDA

1. Apologies for absence.
2. Minutes of the last A.G.M., East Sussex, 1992 (see pp. 12-15 of this *Bulletin*).
3. Matters arising.
4. Reports of Officers for 1992 (see pp. 2-11 of this *Bulletin*).
5. Report from Council.
6. Election of Officers (see p. 24 of this *Bulletin*).
 - a) Vice-President.
 - b) Treasurer.
 - c) Bibliographer.
 - d) Bulletin Editor.
 - e) Conservation Officer.
 - f) Curator.
 - g) Librarian.
 - h) Membership Secretary.
 - i) Publicity Officer.
 - j) Reading Circle Secretary.
 - k) Recorder for Hepaticae.
 - 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.

BRYOPHYTE WORKSHOP 1993, Reading, 20 - 21 November.

Local Secretary: Dr. Royce Longton, Department of Botany, School of Plant Sciences, University of Reading, Whiteknights, PO Box 221, Reading, RG6 2AS. Tel.: 0734 875123 ext. 4083 (office); 0734 833952 (home).

The workshop will combine a field excursion on Saturday with a lab. session on Sunday. The main emphasis will be on determining the sexuality of bryophytes under the guidance of Jeff Duckett and Royce Longton. Members planning to attend should contact Royce by 1 November.

SPRING FIELD MEETING 1994, Dorset, 23 - 29 March.

Local Secretary: Dr. Mark Hill, Institute of Terrestrial Ecology, Monks Wood, Abbots Ripton, Huntingdon, Cambridgeshire, PE17 2LS. Tel.: 04873 381.

This meeting will be based in Dorchester in the southern county of Dorset. There are excellent examples of heathland, bog and chalk grassland, and we will also explore some woodland localities. One of the exciting finds in the area in recent years has been *Lophocolea bispinosa* near Hardy's Cottage, and we will be looking for this species. Further details on this meeting will appear in the next *Bulletin*.

SUMMER FIELD MEETING 1994, Western Ireland, 13 - 27 July.

Local Secretary: Donal Synnott, Botany Section, National Botanic Gardens, Glasnevin, Dublin 9, Ireland. Tel. (from Britain): 010 353 1374 388.

The meeting will be centred at Ballyvaughan, County Clare, for the first week (13-20 July) and at Clifden, County Galway, for the second week (20-27 July). More details of the headquarters for each week will appear in the next *Bulletin*. However, it will regrettably not be possible to arrange venues where all participants can stay in the same accommodation.

From Ballyvaughan it is hoped to explore the Burren. The geology is simple, Carboniferous limestone capped with shale in places, but the terrain is varied, including limestone pavements and escarpments, hazel scrub and ash woodland, lakes and turloughs (seasonally flooded areas). There has been no extensive bryological investigation of the Burren since Proctor's pioneering work in the 1950s. *Orthothecium rufescens*, *Calliargon trifarium*, *Drepanocladus lycopodioides* and *Bryum neodamense* are among the goodies which occur among the square miles of *Neckera crispa*, *Tortella tortuosa* and *Breutelia chrysocoma*. Ballyvaughan is a quiet centre favoured by botanical tourists.

Clifden is a bit more hectic (relatively speaking) and early booking is advised. It is a few miles from the centre of Connemara National Park at Letterfrack where a lecture room and laboratory facilities can be provided by Dr Noel Kirby, Park Superintendent.

Exploration of the Twelve Bens, the highest Connemara mountains, is far from complete. *Adelanthus lindenbergianus* and *Plagiochila carringtonii* are relatively recent finds on Benbaun. The Roundstone area is home of the rare Irish heathers *Daboecia*, *Erica mackaiana*, *E. erigena* and *E. ciliaris*. The bryophytes include several enigmatic *Sphagna* and *Myurium hochstetteri* in its only Irish station but in need of refinding. There is native oakwood at Derryclare and Kylemore and good coastal habitats.

A visit to Clare Island would be welcomed by the Royal Irish Academy, now engaged in an exciting resurvey of the island. The original survey, published in 1911, is one of the most comprehensive multidisciplinary surveys ever undertaken. A day trip to the island may be an option for energetic volunteers. A range of accommodation is available for anyone willing to linger. There is a good restaurant and hotel and a cosy pub (but beware of the temptation to remain forever!).

LOCAL MEETINGS PROGRAMME

SOUTH EAST GROUP

A programme of meetings will be circulated in August to all members of the Group. Each annual programme is co-ordinated with the Southern Group to avoid clashes of dates, and we try each year to arrange a joint meeting. If you are not already on the SE Group mailing list and would like to join us, please contact Roy Hurr, 6 The Woodlands, Chelsfield, Orpington, Kent, BR6 6HL. Tel.: 0689 852966.

OTHER BRYOLOGICAL MEETINGS, 1993

July 31 - August 7, 1993. MOSSES AND LIVERWORTS. Tutor: Dr Martha Newton, Kindrogan Field Centre, Enochdu, Blairgowrie, Perthshire, PH10 7PG. Details from the Warden, Dr A. Lavery.

August 20 - 27, 1993. MOSSES AND LIVERWORTS. Tutor: Dr Martha Newton, Preston Montford Field Centre, Montford Bridge, Shrewsbury, SY4 1DX. Details from the Warden, Mr J.A. Bayley.

August 21 - 28, 1993: BRYOPHYTES. A course particularly suitable for beginners based near Dunkeld and led by our member, Brian Brookes, who has run these courses for many years. Details from the Warden, Mr B.S. Brookes, Highland Field Studies, Borelick, Trochry, Dunkeld, Perthshire, PH8 0BX (sae appreciated). Telephone 0350-723222.

August 27 - September 3, 1993. MOSSES AND LIVERWORTS. Tutor: Dr Martha Newton, Malham Tarn Field Centre, Settle, North Yorkshire, BD24 9PU. Details from the Warden, Mr K. Iball.

August 28 - September 3, 1993. XV INTERNATIONAL BOTANICAL CONGRESS, TOKYO. Details in *Bulletin 61*.

September 11-12, 1993. Langstone and Chichester Harbours. Leaders: Dr F. Rose, Mr B.A. Gale and local wardens. A special meeting of the BSBI which BBS members are very welcome to attend. Details in *Bulletin 61*.

September 20 - 22, 1993. RICHARD SPRUCE CONFERENCE, YORK. Details in *Bulletin 61*.

REPORTS OF LOCAL MEETINGS

North West Group / North Western Naturalists' Union

All outings so far this year have been well attended with, on one occasion, two members travelling from the far North East!

Alan Bamforth started the season by leading a trip to Dovestones reservoir in Yorkshire. An interesting and varied site, yielding a good list of species including *Ptychomitrium polyphyllum* which may perhaps be increasing in our area.

Alderley Park is a large estate in Cheshire owned by ICI – not at first sight a promising venue, but a privileged visit for which our thanks are due to ICI. The visit was organised by Owen McCann, and yielded a good list of some 60 species which will be of interest to the well organised Natural History Society which is run there under the auspices of ICI. Hopefully we have given them some material to assist in the management of the site for wildlife and the design of their nature trail.

Martha Newton led a very popular outing to Clough Wood in Derbyshire where, despite a dry season, the number of species found was again 60 and included *Brachythecium salebrosum*. Here the old spoil heap from past lead mining activity provided an interesting substrate and also a pleasant place for lunch.

Most recently, Mike Gosling took us around White Coppice and Leadmines Clough in Lancashire – we do get around! Mike is an expert lichenologist, and was able to show us some interesting species from this group, but it says much for his abilities as a bryologist that those of us who concentrated on the mosses and liverworts were barely able to add to his list of records for that group as well!

Southern Group

A joint meeting with the South East group was held at the Sussex Trust Nature Reserve at Ditchling Beacon, v.-c. 14 E. Sussex. Sixty species were recorded; of these, copious plants of *Phascum curvicolle* and *Pottia caespitosa* were highlights in a day dominated by the Pottiaceae.

Dr Jeff Bates arranged access to two sites on the acidic Eocene sands in East Berkshire. The morning was spent at Imperial College's country campus at Silwood Park. Homage was paid to *Pallavicinia lyellii* on a nondescript streambank, first found in 1968 and known nowhere else in Berkshire. Bryophytes in the ornamental areas included *Plagiomnium cuspidatum* on limestone in the Japanese Garden and abundant *Scapania nemorea* and *Nardia scalaris* on sandy paths and lawn edges. Carr by the Lake produced *Sphagnum squarrosum*. Recently, epiphytes have recolonised spectacularly on *Salix* since the virtual destruction by SO₂ pollution in earlier decades. To a list which already included *Orthotrichum stramineum* and *Ulota phyllantha*, the party added *O. pulchellum*, *O. lyellii* and *Tortula papillosa* – all remarkable finds 37 km from the centre of London.

A smaller party investigated the small valley bog in the grounds of Wellington College near Sandhurst after lunch. Eleven *Sphagnum* taxa were found together with *Cladopodiella fluitans* and *Mylia anomala*; however, we failed to relocate *S. molle* first seen in 1983. Disappointment turned to delight when Professor Jeff Duckett and Roberto Ligrone discovered copious quantities of fruiting *Cryptothallus mirabilis* in nearby carr, the only recent find in v.-c. 22.

The final meeting of the winter was held at Harewood Forest near Andover, v.-c. 12, N. Hants. Formerly MOD property, many of the rides consist of damp concrete, now colonised by *Climacium dendroides*, *Hygrohypnum luridum* and *Hypnum lindbergii*, etc. Several species were added to the 5 km square.

The afternoon was spent exploring the banks of the nearby River Test. A gravel path was smothered with *Scleropodium cespitosum*; *Climacium dendroides* was seen here also in some quantity but the find of the day was *Orthotrichum striatum* on a willow – the first in v.-c. 12 this century.

Howard Matcham and Jeff Bates

RECORDING MATTERS 6

Regional Recorders

The following is a list of the BBS recorders for vice-counties in Britain and Ireland to whom completed field record cards should be sent. Records from vacant vice-counties should be sent directly to the Recording Secretary (address below). Stocks of recording cards are also available from the Recording Secretary.

- 1,2:** Miss R.J. Murphy, Shang-ri-la, Reskadinnick, Camborne, Cornwall, TR14 0BH
3,4: Mr M. Pool, 91 Warbro Road, Babbacombe, Torquay, Devon, TQ1 3PS
6,33,34: Mr P. Martin, The Archway, The Green, Frampton-on-Severn, Gloucester, GL2 7DY
7: Mr R.D. Porley, English Nature, Foxhold House, Thornford Road, Crookham Common, Newbury, Berkshire, RG15 8EL
8,11: Mr R.C. Stern, Botany Bay, Main Road, Fishbourne, Chichester, West Sussex, PO18 8AX
9: Dr M.O. Hill, Monk's Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS
10: Mrs L. Snow, Ein Shemer, Upper Hyde Farm Road, Shanklin, Isle of Wight, PO37 7PS
12: Mr A.C. Crundwell, Acorn Cottage, 12 Kay Crescent, Headley Down, Hampshire, GU35 8AH
13,14: Mr H.W. Matcham, 21 Temple Bar, Strettington, nr. Chichester, West Sussex, PO18 0LB
15: Mr M.C. Watling, 13 Addington Street, Margate, Kent, CT9 1PN
16: Mr E.R. Hurr, 6 The Woodlands, Chelsfield, Orpington, Kent, BR6 6HL
17: Mr P.G. Adams, 5 Elm Cottages, Byttom Hill, Mickleham, Dorking, Surrey, RH5 6EL
18-21: Dr K.J. Adams, 63 Wroths Path, Baldwins Hill, Loughton, Essex, IG10 1SH
22: Dr J.W. Bates, Department of Biology, Imperial College at Silwood Park, Ascot, Berkshire, SL5 7PY
23: Mr G. Bloom, 15 Tatham Road, Abingdon, Oxon., OX14 1QB
24: Dr S.V. O'Leary, J.J. Thompson Physical Laboratory, P.O. Box 220, Whiteknights, Reading, RG6 2AF
25,26: Mr R.J. Fisk, 1 Paradise Row, Ringsfield, Beccles, Suffolk, NR34 8LQ
27,28: Mr R. Stevenson, 111 Wootton Road, King's Lynn, Norfolk, PE30 4DJ
29: Dr H.L.K. Whitehouse, Botany School, Downing Street, Cambridge, CB2 3EA
30: Mr A.R. Outen, 15 Manor Close, Clifton, Shefford, Beds., SG17 5EJ
31,76,86-88,99: Mr N.G. Hodgetts, Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough, PE1 1JY
32,60: Mr M.J. Wigginton, 36 Big Green, Warmington, Oundle, PE8 6TU
35,41,44: Mr A.R. Perry, Department of Botany, National Museum of Wales, Cardiff, CF1 3NP
36: Mr P.J. Port, Hollybush Cottage, Newton Lane, Kington, Hereford, HR5 3NG
38: Mr J.H. Field, 34 Wells Green Road, Solihull, West Midlands, B92 7PG
40: Mr R. Shoubridge, 8 Mary Elizabeth Road, Ludlow, Shropshire, SY8 1LW
42,43,47: Mr R.G. Woods, Countryside Council for Wales, 3rd Floor, The Gwalia, Ithon, Dyfed, SA71 5AD
45: Dr P.M. Rhind, Countryside Council for Wales, Directorate of Science & Policy Development, Plas Penrhos, Bangor, Gwynedd, LL57 2LQ
46: Mr A. Hale, 26 Garth Dinas, Penparcau, Aberystwyth, Dyfed, SY23 3PZ
48-52: Mr T.H. Blackstock, Countryside Council for Wales, Ffordd Penrhos, Bangor, Gwynedd, LL57 2LQ

- 53-54: Prof. M.R.D. Seaward, School of Environmental Science, University of Bradford, Bradford, BD7 1DP
- 55: Mr D.W. Ballard, 84 Leicester Road, Groby, Leicester, LE6 0DN
- 57,61-65: Mr T.L. Blockeel, 9 Ashfurlong Close, Dore, Sheffield, S17 3NN
- 58: Mr A.V. Smith, 1 Carr Meadow Cottages, Glossop Road, Little Hayfield, via Stockport, Cheshire, SK12 5NR
- 66: Rev. G.G. Graham, 3 The Willows, Bishop Auckland, Co. Durham, DL14 7HH
- 69,70: Mr F.J. Roberts, Eden Croft, Wetheral Pasture, Carlisle, Cumbria, CA4 8HU
- 79-80: Mr R.W.M. Corner, Hawthorn Hill, 36 Wordsworth Street, Penrith, Cumbria, CA11 7QZ
- 81: Mr D.G. Long, Royal Botanic Garden, Edinburgh, EH3 5LR
- 82-84: Dr D.F. Chamberlain, Royal Botanic Garden, Edinburgh, EH3 5LR
- 89: Mr M.C. Robinson, Balrobbie Farm, Killiekrankie, Pitlochry, PH16 5LJ
- 96: A.G. Payne, Scottish Heritage, Fraser Darling House, 9 Culduthel Road, Inverness, IV2 4AG
- 97,98,105: Mr G.P. Rothero, Stronlonag, Glenmassan, By Dunoon, Argyll, PA23 8RA
- 100: Mrs K.M. Cocking, 4 Ashwood Crescent, Marple, Stockport, Cheshire, SK6 6LS
- 101-104,110: Mr M.F.V. Corley, Pucketty Farm Cottage, Faringdon, Oxfordshire, SN7 8JP
- Channel Islands:** Mr C.D. Preston, Monk's Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS
- Ireland:**
- H1-H7,H9-H32,H34-35:** Mr D.M. Synnott, National Botanic Gardens, Glasnevin, Dublin 9, Ireland
- H8:** Elinor Wiltshire, 62 Carroll House, Craven Terrace, Lancaster Gate, London, W2 3PR
- H33,36-40:** Mr P. Hackney, Ulster Museum, Botanic Gardens, Belfast, BT9 5AB

Neil Redgate has resigned as recorder for vice-counties 107-109 owing to closure of the Northern Highlands Environmental Records Centre and John Port has relinquished Worcestershire (v.-c. 37) in the hope of encouraging someone more local to take on the job. We thank them for their valuable efforts. Recorders are needed for the following vacant vice-counties: 5, 37, 39, 56, 59, 67, 68, 71-75, 77, 78, 85, 90-95, 106-109, 111 & 112. Donal Synnott would be glad to hear from anyone willing to take on individual vice-counties in Ireland.

BBS Recording Initiative in Waterford and Wexford

Despite the sterling efforts of bryologists over the many years of the BBS Mapping Scheme there are still significant areas of the Britain Isles from which few records of bryophytes have been obtained. Large, thinly populated tracts in Ireland and Scotland away from the western coasts constitute some of the most poorly recorded areas. Now that we have the *Atlas of the Bryophytes of Britain and Ireland* as a guide, it seems logical to try to improve recording in the poorly known regions. In this spirit Council has approved a plan to undertake a concentrated recording programme in two very poorly known and abutting counties in the south-east corner of Ireland, Waterford (H6) and Wexford (H12). This is an attractive area including extensive uplands to over 800 m, lowlands and a long and varied coastline, but in the past visiting British bryologists have usually passed through quickly *en route* to the better known areas in the west. The bryophyte flora will certainly be interesting and yet there are very few records from this region in the *Atlas*.

The aim is to obtain detailed records for the 10-km squares (about 70) and to publish a bryophyte flora of the two counties. The project will be open to all interested persons and we anticipate that most of the recording will be done by individual members or small informal

parties visiting for short periods. It is hoped that the project may stimulate interest in bryology amongst Irish naturalists and it should also contribute to the atmosphere of common purpose in the Society. The rewards for participation are likely to include new vice-county records and new *Atlas* dots a-plenty, plus, for those who contribute significantly, inclusion as an author on publications resulting from the project. Serious participants may be able to obtain a contribution towards their travel and accommodation expenses. It is envisaged that the recording will be done over a five year period, 1994-98. The project will receive an initial boost from the Summer Field Meeting in this area with The Nordic Bryological Society next year. Members wishing to participate in the flora project are invited to attend an inaugural meeting during the AGM and Symposium Meeting at Ripon in September (details of time and place from the local secretary) or they should write to one of the project organisers, Dr Jeff Bates and Mr Donal Synnott. At the meeting we hope to discuss the recording method, data storage and general logistics and to assign some of the major tasks.

Bryophyte Recording in Northern Ireland

Paul Hackney is our Regional Recorder for the counties of Northern Ireland. In this account he describes his recent efforts to put recording in this bryologically neglected Province onto a sound footing.

Bryophyte recording in Northern Ireland (vice-counties H33, 36-40) has long suffered from a chronic shortage of resident bryologists despite the importance of the local amateur botanist C.H. Waddell in the foundation of the British Bryological Society.

The only published bryophyte county floras are those for Down, Antrim and Londonderry (H38-40) in the second edition of Stewart & Corry's *Flora of the North-east of Ireland* (1938), prepared by W.R. Megaw, and the Fitzgeralds' (1960) 'Bryophyte Flora of Co. Tyrone' (*Trans. Brit. bryol. Soc.* 3, 653-687).

More recently there has been a revival of interest in bryophyte recording in the Province. For a number of years Dr Richard Weyl of the Countryside and Wildlife Branch of the Department of the Environment (NI) has been collecting bryophyte lists for the national nature reserves and areas of scientific interest in the Province, and in 1992 I commenced the building up of a computerised bryophyte database at the Ulster Museum, which also holds the Province's only bryophyte herbarium (**BEL**).

The database uses the RECORDER package developed by Dr Stuart Ball and is a part of a general biological database which was recently established in the Museum in association with the Department of the Environment (NI). Our intention is to transfer all available bryophyte information onto RECORDER as time allows, and also to carry out a programme of field recording with a long-term aim of producing a 'bryophyte flora' for Northern Ireland.

Initially my own work is being concentrated on the flora of Co. Tyrone (H36) for two reasons. First, a vascular plant flora of the county is currently being prepared for publication in about 1995 or 1996. Second, the Fitzgeralds' work referred to above and the Ulster Museum herbarium material from this county make it a comparatively simple matter to up-date the Fitzgeralds' 1960 Flora. The new county flora will thus contain both vascular plant and bryophyte records.

Recently I published a new edition of Stewart & Corry's *Flora of the North-east of Ireland* (Institute of Irish Studies, Queen's University of Belfast, 1992), but because of other commitments I was unable to include any revision of the bryophyte section which had been prepared for the 1938 edition by W.R. Megaw. After the *Flora of Tyrone*, a revision of the flora of these three north-east counties will probably become the next priority.

Paul Hackney, Ulster Museum, Belfast, BT9 5AB

Epiphyte Recording

Thanks are extended to all those who participated so readily in this pilot scheme to map the distribution and frequency of epiphytes within selected tetrads in a belt across southern Britain (see this column, *Bulletin* 61). The closing date for the scheme was 31 May 1993 but this has now been extended to 30 November to allow completion of the project. If you have not already done so, please ensure that completed survey cards are sent to the Recording Secretary as soon as possible so that analysis of the data can commence. It is hoped that a report on the project will appear in this column in a future issue of the *Bulletin*.

Dr Jeff Bates, Department of Biology, Imperial College at Silwood Park, Ascot, Berkshire, SL5 7PY

REFEREES (July 1993)

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

HEPATIC REFEREES:

1,2,11,12,38,53-55,58,64-67,69: D.G. Long, Herbarium, Royal Botanic Garden, Edinburgh, EH3 5LR

3-10,18-24: Dr M.E. Newton, Department of Botany, Liverpool Museum, William Brown Street Liverpool, L3 8TN (All mail to be marked 'Private'.)

13-17,36,37,39-44: G.P. Rothero, Stronlonag, Glenmassan, By Dunoon, Argyll, PA23 8RA

25-35,45-47: M.F.V. Corley, Pucketty Farm Cottage, Faringdon, Oxfordshire, SN7 8JP

48-52,78-86: M.J. Wigginton, Joint Nature Conservation Committee, Monkstone House, City Road, Peterborough, PE1 1JY

56,57,59-63,68,70-74: T.L. Blackstock, Nature Conservancy Council, Ffordd Penrhos, Bangor, Gwynedd, LL57 2LQ

75-77: G. Bloom, 15 Tatham Road, Abingdon, Oxfordshire, OX14 1QB

MOSS REFEREES:

1: Dr M.O. Hill, Monk's Wood Experimental Station, Abbots Ripton, Huntingdon, PE17 2LS; A. Eddy, Department of Botany, Natural History Museum, Cromwell Road, London, SW7 5BD

2-10,143: Dr M.O. Hill (address above)

11-36: M.F.V. Corley (address above)

37,38,62-66: Dr A.J.E. Smith, School of Biological Sciences, Brambell Building, University College of North Wales, Bangor, Gwynedd, LL57 2UW
39,67-81,96-104: N.G. Hodgetts, Joint Nature Conservation Committee, Monkstone House, Peterborough, PE1 1JY
40-61: Dr D.F. Chamberlain, Dept of Botany, Royal Botanic Garden, Edinburgh, EH3 5LR
82-90,105: Dr E.V. Watson, Little Court, Cleeve, Goring on Thames, Reading, Berkshire, RG8 0DG
91-95: A. Orange, Department of Botany, National Museum of Wales, Cardiff, CFI 3NP
106-138: M.J. Wigginton (address above)
139-142,144-175: A.C. Smith, End House, 24 Shelfanger Road, Diss, Norfolk, IP22 3EH

ELECTION OF OFFICERS AND ELECTED MEMBERS OF COUNCIL

Dr G.C.S. Clarke (Treasurer) has signified his wish to retire from office at the end of the year, and Dr R.E. Longton (Vice-President) will become President in 1994. The terms of ten other Officers, the Bibliographer, Bulletin Editor, Conservation Officer, Curator, Librarian, Membership Secretary, Publicity Officer, Reading Circle Secretary, Recorder for Hepaticae and Recorder for Mosses, expire at the end of 1993, and their present incumbents are eligible for re-election. The three Elected Members of Council who retire at the end of 1993, Mr A.C. Crundwell, Mr R.D. Porley and Mr G.P. Rothero, are not eligible for re-election in this capacity until two years have elapsed. Members are invited to submit nominations for Officers and Elected Members, sending them, in an envelope marked PRIVATE, to the General Secretary BBS, Dr M.E. Newton, c/o Botany Department, Liverpool Museum, William Brown Street, Liverpool, L3 8EN, to arrive no later than 21 August, 1993. A nomination must not be made without the consent of the person it is wished to nominate. If elections are needed, they will be held at the A.G.M. at the College of Ripon and York St John, Ripon, on 18 September, 1993.

B.B.S. LIBRARY SALES AND SERVICE 1993

FOR LOAN (U.K. Members only):

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

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

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

(c) Microscope stage-micrometer slide for calibration of eyepiece graticules. 10µm divisions. Loan deposit £15.00.

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Vol. 1	parts 1-5	(£2.40 each) £12.00 per volume
Vol. 2	part 1	(£3.00), parts 2-3 out of print
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Vol. 5	parts 1-4	(£3.00 each) £12.00 per volume
Vol. 6	parts 1-2	(£6.00 each) £12.00 per volume - ends series of <i>Transactions</i>
Vols.7-9	parts 1-4	(£5.00 each) £20.00 per volume - renamed <i>Journal of Bryology</i>
Vol. 10	parts 1-4	(£8.00 each) £32.00 per volume
Vol. 11	parts 1-4	(£10.00 each) £40.00 per volume
Vol. 12	parts 1-4	(£11.50 each) £46.00 per volume
Vol. 13	parts 1-4	(£15.50 each) £62.00 per volume
Vol. 14	parts 1-4	(£18.00 each) £72.00 per volume
Vol. 15	parts 1-4	(£22.50 each) £90.00 per volume
Vol. 16	parts 1-4	(£29.75 each) £119.00 per volume
Vol. 17	parts 1-2	(£38.00 each)

B.B.S. Special Volumes:

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

Census Catalogues:

Duncan, J.B., 1926. Census Catalogue of British Mosses, 2nd edition	(20p)
Sherrin, W.R., 1946. Census Catalogue of British Sphagna	(20p)
Warburg, E.F., 1963. Census Catalogue of British Mosses, 3rd edition	(20p)
Paton, J.A., 1966. Census Catalogue of British Hepatics, 4th edition	(20p)
Corley, M.F.V. & M.O. Hill, 1981. Distribution of Bryophytes in the British Isles: a census catalogue of their occurrence in vice-counties	
Price incl. p. & p.: members (£5.00), non-members (£6.00), trade (£4.00)	

Other items:

Evans, D.E. & A.R. Perry, 1987. Moss Wall Chart	Price incl. p. & p. (£2.80)
Grolle, R., 1983. Hepatics of Europe and the Azores: an annotated list of species with synonyms	Price incl. p. & p. (£2.50)
Newton, M.E. <i>et al.</i> (eds), 1988. Bryology: modern research and the ways forward	(£5.50)
Pearman, M.A., 1979. A short German-English bryological glossary	(£0.50)
Perry, A.R., 1992. Mosses and Liverworts of Woodland, 41 pp.	(£2.95)
BBS Tie, claret with single BBS logo	(£4.95)
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PLEASE DO NOT INCLUDE CASH WITH ORDERS. Customers will be invoiced for the correct amount including p. & p. (postage and packing is extra unless stated). Address label legibly printed would be appreciated. All the above are available from the BBS Librarian:
Kenneth J. Adams, 63 Wroths Path, Baldwins Hill, Loughton, Essex, IG10 1SH, U.K.

BBS SWEATSHIRTS

BBS sweatshirts have now been re-ordered again by popular demand. All the Large and Extra Large sizes sold out at the 1991 Sheffield meeting, leaving only the rather small 'Medium' size to sell before a re-order could be made. Council have at last relented and allowed a reprint of the larger sizes. They will be on sale at the 1993 Autumn meeting at Ripon, Yorkshire (17-19 September), at the same price as before. Those unable to wait until then can buy them by post from me, but be warned that the sizes last time were a little on the small size, so small people take a 'Medium', medium people take a 'Large', and comfortable people take an 'Extra Large'. Postal sales can probably not be dealt with until August.

The sweatshirts are 'Genuine 3-needle Tomkin fleece, 50% polyester 50% cotton, machine washable, tumble dry, with 5-needle Raglan stitch', long sleeves, and bear a green and gold(ish) 4" diameter BBS logo (as featured on the *Bulletin* cover) on the left breast. In other words, very attractive, lightweight, warm, suitable for under-jacket wear in the winter, and on their own in the summer. The sweatshirts are available in Ash (a slightly mottled grey) or Burgundy. Cost £12, plus postage and packing (£2.50 first class boxed recorded delivery).

Please send cheque (payable to the British Bryological Society), to: Dr Sean R. Edwards, Manchester Museum, Manchester University, Oxford Road, Manchester M13 9PL (or better still, the postage & packing part payable separately to me).

Liverpool Museum's Bryophyte Herbarium re-organised and re-housed

A compactorisised storage unit was recently commissioned in the Botany Department of the Liverpool Museum (LIV). It now houses the British Isles and world-wide bryophyte herbaria in wide metal drawers. Access to the specimens, whose paper folders are generally stored in 15 x 10 cm 'layflat' polythene tubes, has been much improved and for the first time for many years there is space for further expansion.

British and Irish specimens of Mosses and Liverworts (including Hornworts) are housed separately in alphabetical sequence. Treatment generally follows Smith, but recently published taxa have been intercalated using the nomenclature employed in the RECORDER software package. Oversized specimens are kept in a separate sequence.

During the transfer of specimens to new storage, a list was prepared of those British and Irish species and infraspecific taxa which appear not to be represented at LIV. The word 'appear' is used advisedly, since it is possible that some of these apparently missing members of the British list are present but wrongly identified. Anyone wishing to revise a particular group with this in mind is very welcome to do so, though loans are generally made only to recognised botanical institutions. Free copies of the list of 'absentees' are available from the Liverpool Museum. While we do not wish to encourage the thoughtless collection of rarities, donations of duplicate gatherings (collected within the British Isles) of examples of any of these taxa would be appreciated, as we are hoping to fill some of the gaps by way of exchange.

John Edmondson, Curator of Botany, N.M.G.M., Liverpool Museum, William Brown Street, Liverpool, L3 8EN, U.K.

COARSE *HYPOPTERYGIUM* GROWING

By MICHAEL V. FLETCHER

70 South Street, Reading, Berkshire, RG1 3RA

Dr Watson in his book *The Structure and Life of Bryophytes* mentions this genus. It is remarkable for its erect, pendent, or umbrella-like fronds with leaves in three rows, the row underneath, like the underleaves of many hepatics, often smaller than the lateral leaves. He notes 'A species of *Hypopterygium* has been established for many years in a rocky grotto-type conservatory in Reading'.

In 1968 I visited this Victorian fern grotto, and he gave me some. It was also being grown deliberately in his small greenhouse devoted to Marchantiales etc., on the old University site at Reading. I too have grown it since that time, on rather dry well-drained (clay pot) neutral loam, in moderate shade and humidity. It does not like wet soil and can be left completely dry in summer.

In 1971 Gordon Rowley gave me a similar plant from Table Mountain, South Africa, perhaps of this species. It has been growing similarly since that time. Both reach about 2-5 cm tall.

Unfortunately the obvious lesson had not been not learnt when Ben van Zanten sent me collections of two large New Zealand species in 1974. *H. filiculaeforme* was associated with large moisture-loving hepatics and was therefore kept on waterlogged soil in deep shade and high humidity. Its umbrella-shaped shoots, up to 10 cm tall, soon deteriorated. In the next ten years new growth became progressively more scarce and stunted. The slightly smaller (5-8 cm) *H. novaeseelandiae*, with glaucous blue-green shoots, was kept likewise and fared even worse. It was lost around 1990.

Another medium-large species, *H. atrotheca*, grows in a greenhouse at Glasgow Botanical Gardens, origins unknown. Some was sent to the Reading University collection. From this I was given a few shoots by Royce Longton. It is also abundant on boulders – not soil – in the Edinburgh Botanic Gardens fernhouse.

Since 1992 all species, and most cultures, have been in higher humidity, in enclosed plastic frames in the greenhouse devoted to mosses. Those on soil are now well-drained, not waterlogged. Some are on a thin layer of neutral loam mounted on polystyrene. New shoots are mostly produced in spring. This year they are healthier, and growth is faster, though in very high humidity they may become etiolated. Some cultures of all species show a clear distinction between vertical shoots and creeping stolons.

This garden is full of old bricks. Some have been used to build up garden beds. In a NE-facing corner, peat and soil, piled a few feet high, support miscellaneous ferns. The damp shaded retaining bricks are overhung by ferns and heather. Few mosses grow on them, but in 1987 some of the Reading *Hypopterygium* was pushed into a cleft. It has spread to occupy about 50 cm of the cleft, and stolons spreading across the bricks have reached the clefts above and below. It may flourish since worms, which pull away any loose growth of competing *Eurhynchium* etc. from this brickwork, cannot dislodge them. Fragments have been stuck on damp brick steps etc. elsewhere around the front and back gardens since 1992, but none has yet made substantial growth. Their striking appearance, the frequency with which they appear in greenhouses, and their persistence here (when not waterlogged) both in greenhouse culture and outdoors, suggest that species of *Hypopterygium* could be more generally grown. I will be pleased to acquire other species, and to send live material to anyone who asks for it, of any which are growing here.

MOSES IN ENGLISH LITERATURE

Supplement Two

This *Supplement* is the second part of an occasional column in the *Bulletin*. It is hoped to maintain an interest in the way bryophytes are perceived by the general public, and supplements will continue as members send in quotations of particular interest. The criteria are the same as for Edwards (1992).

MOSS IN THE BIBLE

The question as to whether moss was mentioned in the Bible, hinges upon the meaning of the word hyssop ("ezov" or "ēzôb"). Most Old Testament references (*Exodus* 12:22, *Leviticus* 14:4,6,49-52, *Numbers* 19:6,18, *Hebrews* 9:19) concern procedures involving dipping a bunch of hyssop into blood or water and sprinkling it about; in *Psalms* 51:7 hyssop was used to purge or cleanse, and in *John* 19:29 it was used to support a sponge of vinegar. Moldenke & Moldenke (1952) considered that different plants may be involved, probably *Origanum* species, and *Sorghum* in *John*.

The "hyssop that springeth out of the wall", that Solomon compared with the Cedar of Lebanon (*I Kings* 4:33), is universally agreed to be something else. It has been thought to be the small wall fern *Asplenium ruta-muraria*, or *A. trichomanes*, as well as other plants including moss; see Moldenke & Moldenke (*l.c.*), and see also under Bacon, and Hooke, in Edwards (1992). Much later than Bacon or Hooke, however, the great Swedish naturalist Linnaeus was asked by the Royal Swedish Bible Commission in 1773 to comment on the identification of plants of the Bible, and he wrote a letter to them in which he identified Solomon's hyssop as the moss *Bryum truncatulum*, now known as *Pottia truncata*. The reasoning is hardly conclusive, but the identification is probably at least as good as any other.

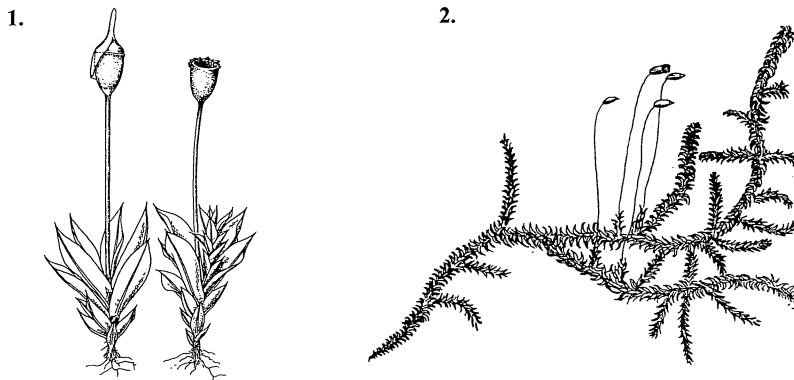
QUOTATIONS

Dutton, G.J.F. (1976). The Craggie. *Climber and Rambler*, August 1976 (originally published in the *Scottish Mountaineering Club Journal*, vol. XXX). [DI].

A clear voice rang out from below and further left.

"What's that boy doing up there? He'll fall off. Quite pointless. There's nothing but *Hylocomium squarrosum* in that groove. I looked very carefully this morning."

This is just one of several references to named mosses and lichens that are liberally peppered through the short rollicking piece about climbing a Scottish mountain face called The Craggie. The taxonomy is occasionally a little dated or suspect, as in: **"Remarkable woman," mused the Doctor, turning again to the wall. "Had an entire liverwort subspecies named after her – *Dicranodontium uncinatum* McHattii; should have been a genus – *Agenesia*."** He appeared greatly amused by this, and chucklings punctuated the falling moss. Miss Aggie McHattie (whose voice it is in the first quotation from this work) is the: **Remarkable woman. Famous lichenologist and moss-classifier.** It may be considered which of our own members this indomitable woman represents. This is the third entry to a growing and interesting genre including Gash (1983) and Domum (1992), in which Latin names are thrown into everyday conversation (see Edwards, 1993).



1. *Pottia truncata*. Solomon's Moss. From *Mosses and Liverworts of Town and Garden*, a small photocopied pamphlet available from the author. 2. *Rhytidiadelphus squarrosus*: The lesser drooping-leaf'd Hypnum. From Dillenius, (1741) *Historia Muscorum*: [XXXIX.39].

Linnaeus, Carl. Letter to Royal Swedish Bible Commission (1773). (in: Fries, 1907).

Isop. *Bryum truncatulum*.

Linnaeus reiterates that Solomon spoke about all from the Cedar of Lebanon to the hyssop ("isop" in Swedish) that grows in the wall, comparing the largest and smallest plants. He then says in Latin: **The houses and walls of Jerusalem are clothed at their base with green moss, the smallest of all; Hasselquist sent me some and it is *Bryum truncatulum*.** Linnaeus lists *Exodus* 12:22, *Leviticus* 14:4,6, *Psalms* 51:7, and *John* 19:29, and says in Swedish: **All moss absorbs liquids and can be used as an aspergillum.** But even so, only that of *I Kings* 4:33 seems a likely candidate for moss.

ACKNOWLEDGMENTS

I thank David Ingram for contributing the Dutton entry, and Inger K.L. Vestergard for translating from the Swedish, and Catherine Bankes for translating from the Latin.

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- Fries, T.M. (ed.) (1907).** *Bref och skrivelser af och till Carl von Linné*, Forsta Afdelningen (1st series), vol. I, pp. 273-277. Stockholm.
- Moldenke, H.N. & A.L. Moldenke (1952).** *Plants of the Bible*. Chronica Botanica Series XXVIII, ed. by Frans Verdoorn. Ronald Press Co., Waltham, Massachusetts.

Other references refer to entries in the *Special Volume No.4*.

Please send any quotations to: Sean Edwards, Manchester Museum, Manchester University, Oxford Road, Manchester M13 9PL.

A TRIBUTE

TO EUSTACE W. JONES (1909-1992)

Soon after the death of Dr E.W. Jones in August 1992 I wrote to several hepaticologists and to many of his friends asking them to write a paragraph or so about him or his work for inclusion in a Tribute. The following pages are the result of this request. Writing of this sort does not come easily to some people and several declined because they felt they could not do him justice. But what was submitted shows him to have been a remarkable and talented man and is a fine record of his achievements. It is surprising how few of the foreign bryologists I contacted had met Dr Jones (though many had corresponded with him): perhaps this is a result of his rare appearances on the international scene (he attended the 8th International Botanical Congress in Paris in 1954, but as far as I can ascertain no other). However, the BBS became very close to his heart and he was a frequent participant in its meetings during the post-war period so most active British bryologists had met him in the field. I have placed the contributions in alphabetical order of the contributors' names.—A.R. Perry.

From George Bloom, Abingdon, Oxfordshire.

I first met Eustace in a guest house in Knutsford. It was the first B.B.S. meeting I had dared to go to because my knowledge of bryophytes was limited. He was very helpful, listening patiently to all my queries which must have seemed naïve to him. This kindness continued for all the years I knew him.

Later, when I moved to the Oxford area, we did some recording together. Even as he grew older, he was still energetic and alert to find good places to search. Besides bryophytes he knew so much about other plants and the history of the woodlands that our recording became especially interesting.

Whenever I visited him, we always inspected his garden. It was the sort of garden I like, not with flowers arranged for mass effect, but planted more or less at random for inspection individually. Most of his garden plants would have been unknown to most gardeners. There were mosses too, though some had disappeared because he no longer renewed the earth on the top of his dry stone walls. Some of his plants are now in my garden as a permanent reminder of him.

From Dr Ella O. Campbell, Massey University, Palmerston North, New Zealand.

Although some of the early papers by Eustace W. Jones were on mosses, e.g. 'The ecology of *Buxbaumia aphylla* Hedw.' (1970), his name is usually associated with hepatics. His knowledge of hepatics was very comprehensive, as evidenced by 'An artificial key to the genera of African hepatics' (1990), which contained useful line drawings and a large bibliography. However, his greatest contribution came from the study of epiphytic species of tropical Africa and the adjacent off-shore islands. Some of these hepatics grow conspicuously on the bark of tree trunks or leaves of shrubs and forest trees or sometimes on rocks. They form a fascinating miniature world attached precariously to the substrate and deriving

nutrient not from the soil but from the surrounding air and from rain water. They show various modifications of form which enable them to survive tropical storms, high temperatures and intermittent water supply and also to disperse to new sites.

Even the collecting of specimens for study must have required great effort. One recalls the amazing stories of the hardships endured by Mungo Park (1799) who in 1796 was given the courage to survive by the sighting of a small moss flourishing in the inhospitable desert; and accounts of the experiences of other travellers who visited Tropical Africa. Preservation of the specimens would not have been easy and many hours of dedicated work would have been involved in determining names and relationships.

With gratitude we applaud the strength and courage of Eustace W. Jones, his ability to recognise the amazing variety found in the small liverworts and his skill in documenting his discoveries by means of descriptions and beautiful illustrations. Long will his memory and the results of his work be treasured by future generations of bryologists.

Jones, E.W. (1970). The ecology of *Buxbaumia aphylla*. *Transactions of the British Bryological Society* 6, 139.

Jones, E.W. (1990). African Hepatics XL. An artificial key to the genera of African hepatics. *Journal of Bryology* 16, 9-40.

Park, M. (1799). *Travels in the Interior Districts of Africa: Performed under the Direction and Patronage of the African Association, in the years 1795, 1796 and 1797,.....* London.

From David Catcheside, Leabrook, South Australia.

I do not think I ever met him – probably chance kept our paths from crossing. My Cambridge days were spent in promoting genetics and cytology and then I was in Adelaide 1952-55. While in Birmingham (to start a molecular biology department) I was absorbed (hobbywise) with the embryo Lichen Society. I did go to Barnstaple in 1956 and to Ireland in 1957. Certainly, I knew and admired Eustace's careful and thorough work with African hepatics. His papers constitute a splendid series.

From Alan Crundwell, Headley Down, Hampshire.

I knew Eustace for almost fifty years and most of my early steps in bryology were taken under his guidance. There is so much that I might write about him, but I will limit myself to just two aspects of his character.

Firstly, his energy. His publications on African liverworts alone are more than most of us achieve in a lifetime. His contribution to British bryology was almost equally substantial, consisting not only of his published papers and his editorship of the *Transactions* but also of the enormous help he gave to other bryologists, especially the many hours he spent with the microscope checking specimens sent to him and in writing carefully detailed notes when correcting misidentifications. Nor must one forget the quality of his work in the field. For instance, until he showed us the way, no-one collected or identified sterile *Ditrichum cylindricum*, which was thought to be a rare moss. Yet his bryology was only a hobby, which he did at home and in his spare time. He was on the staff of the Imperial Forestry Institute at Oxford and an authority on forestry and forest ecology both in the British Isles and in Africa,

with a whole list of fine publications to his name. Beside all this research activity he was an inspired teacher; and he found time, too, for a whole lot of non-botanical interests including church architecture, music and the origins of English place-names.

His energy was not only mental but physical too. He did not learn to drive a car until a few years before he retired. His work on the bryophytes of Oxfordshire and Berkshire was all done with a bicycle, and there was nothing half-hearted about his cycling. I shall never forget one of our own excursions when we cycled all the way up Headington Hill and I wished that I had the nerve to get off when someone so very much senior to me was pedalling happily on.

Secondly, an illustration of his courtesy. He had no special liking for controversy and never wished to score debating points. He was sparing of other people's feelings and if he thought you were talking through your hat and that what you were saying was utter nonsense he would not contradict or point out your error unless it seemed to him really necessary. Instead he would just say "Oh", and it was only those who knew him very well who realised all that monosyllable implied.

From Jeff Duckett, Queen Mary College, London, and President of the British Bryological Society 1992/93.

[A tribute paid to Eustace Jones at his memorial service in Kirtlington Church, Oxfordshire, 1 September 1992.]

Eustace Jones was born in Walsall and educated at Queen Mary Grammar School in that town, where he and two contemporaries were the first to study biology. This was a hazardous business; the school lacked a biology teacher and so the three pupils had to go to the adjacent girls' school for lessons. From this he escaped unscathed and went up to Jesus College Cambridge as a Goldsmiths' Scholar. He was Frank Smart Scholar in 1930 for the best performance in Part I Botany. After Part II Botany he did a Ph.D. in Plant Physiology under the supervision of Dr Briggs and joined the British Bryological Society in 1933. In 1934 he moved to Oxford to his one and only job, as lecturer in Forestry, a post which he held continuously until the age of 63. He did not then retire but resigned in protest at the abandoning of degrees in Forestry. His job gave him the opportunity to travel and he made several scientific visits to Africa beginning in 1947-8 as a member of an expedition to Nigeria led by Paul Richards.

These are the bare facts – what of the man and what did he do with his long life? Eustace Jones, known to and addressed by his botanical friends as Jonah, and Uncle Eustace to his family, was quite simply a man who loved plants – a born botanist. Because he was also extremely gifted in this direction, this enabled him to spend all his life doing what he liked best and did best: study plants. He used his talents well. He had a sharp and critical mind, the ability to make sense out of confusion and previous errors, and, probably most important, to write up his extensive findings and conclusions in the most beautiful English. Jonah had no time for gobbledegook; a venal sin in his eyes was to use two words where one would do. In the Forestry Department at Oxford Jonah taught silviculture – or how to grow trees. Like many shy people he was a first-class lecturer. His professional work also took him out into the field with students where he freely passed on his acute observations on living plant communities. As well as pioneering the transplanting of trees in full leaf, his contributions to

forestry included the definitive edition of *Troup's Silvicultural Systems*, numerous papers on the ecology of African forests and, nearer home, the Biological Flora of Oaks. He was also one of the first to recognise the importance of lichens and mosses growing on trees as indicators of air pollution, which naturally leads on to Jonah's greatest passion – mosses and liverworts. Forestry for which he was paid also gave Jonah the opportunity to study things that grow on trees. Of him it can truly be said, here was a man for whom riches grew on trees.

He was a most active and distinguished member of the British Bryological Society for nearly 60 years and held numerous offices, including the Presidency. He was a long time honorary member of the Society. From his first paper in 1934 to the latest now in press he has published over 70 papers on bryophytes. This is an extremely good record for a professional – for an amateur it is truly remarkable! As an all round botanist, forester, ecologist and taxonomist, Jonah was amongst the best, and as far as African liverworts are concerned, probably the greatest authority there has ever been. Sadly he only gave us 42 papers on this subject. However, all these separate studies will shortly be brought to fruition in a comprehensive *Flora of West Africa*. We will remember him as a man of broad vision and practical common sense which he applied with equal alacrity to the very big (African savanna and oak trees) and to the very small (epiphyllous liverworts on the leaves of tropical rain forest trees).

Apart from studying trees and bryophytes, Jonah played the flute with friends, was an authority on church architecture, a keen gardener and a charming host to all who visited his home in Kirtlington, whether they were botanists making a pilgrimage to see one of the rarest of all British mosses (*Ceratodon purpureus* var. *conicus*) growing on the wall, or members of his family. It is not recorded whether he bought the house before or after he found the moss on the wall. Visits by children to Uncle Eustace's home were always a special treat on account of the ingenious games he devised and interesting things he found for them to do.

Thus we can rejoice in the fulfilled life of a happy man who made the best possible use of his natural gifts and academic freedom. A fine scholar, a serious, shy and humble man of the highest principles, untainted by ambition or academic politics and, most important, a man whose wisdom, company and friendship we have all enjoyed. Jonah, Uncle Eustace, we really will miss you.

From John Engel, Field Museum of Natural History, Chicago.

My knowledge of Eustace W. Jones is solely through his work: I did not have the privilege of meeting him.

I wish, however, to make a remark or two on the bryological career of Dr Jones and the impact of the career. Eustace Jones devoted approximately 40 years to the study of African hepatics and published a long series of papers under the running title 'African Hepaticae'. Dr Jones worked particularly diligently on the family Lejeuneaceae, and devoted many papers in that series to various African genera of that family. These contributions are particularly noteworthy and valuable, since few hepaticologists worked on that family during the 1950s and 1960s. Eustace Jones had tackled other difficult genera such as *Lophocolea* (published in 1953), *Plagiochila* (published in 1962) and *Radula* (published in 1977). The large paper published with A.J. Harrington in 1983 in 'The hepatics of Sierra Leone and Ghana' (*Bulletin*

of the British Museum (Natural History), Botany Series **11**(3): 215-289) is also noteworthy since it covers all hepatics occurring in those area and reflects Jones' broad knowledge and intimate experience with these plants. The passing of Eustace W. Jones is a significant loss to bryology.

From Riclef Grolle, Jena.

The death of Eustace Jones is a great loss indeed. I am most grateful to him for his kind help with specimens and communicating from his rich experiences whenever I turned to him with problems. Eustace is kept in my mind as a very kind and most respected senior colleague and friend.

From Mark Hill, Institute of Terrestrial Ecology, Monk's Wood, Abbots Ripton.

As an ecologist and bryologist of outstanding ability and vision, Jonah exerted a powerful and wonderfully benign influence on many of my generation. He never cared about current fashion, driving round the country in a timber-framed car and always forming his own immensely wise opinion on important issues. He was disarmingly and invariably kind to the young and silly, disagreeing with them in the gentlest possible way as if to imply that anybody could be misled the way they were. But his attacks on received woolly thinking could be trenchant: his blast against the stability-diversity theory as applied to forestry (Jones, 1965) is one of the most devastating attacks on "green" orthodoxy I know.

Jonah maintained that academic ecologists can be out of touch with the lives of plants and the functioning of ecosystems, and that practical men, especially foresters with their long time horizons, often have a more rounded and sounder view. Certainly no-one in this country has demonstrated more effectively the value of long-term observation, both in ecology and in floristics. His company in the field was a constant delight; it was a privilege to share so rich a banquet of ideas and observations and to test one's theories against his finely honed critical intelligence.

How we shall miss his deep vibrant laugh, his voice always basso profundo, his splendid walrus moustache! In a way it is sad that he died relatively young; but this means that we can remember him only as one of the most brilliant and wise of bryologists, a fine and profound thinker, who excelled in so many fields. His vision never faded in life and it is one that continues to illumine the lives of those who knew him.

Jones, E.W. (1965). Pure conifers in central Europe – a review of some old and new work. *Journal of the Oxford University Forestry Society* **13**: 3-15.

From Nick Hodgetts, Joint Nature Conservation Committee, Peterborough.

He was always more than pleased to help in the field when some minute liverwort was causing problems, and dealt with even the most ridiculous misidentifications with quiet tact and charm; this was much appreciated, and played a great part in dispelling the awkwardness that we younger bryologists sometimes feel when approaching the experts.

One of my main memories of Eustace will be of his robustness, although he often seemed deceptively frail. To illustrate this, I remember a Reading University bryological excursion to a chalk woodland, when Eustace bent down to examine some putative *Eurhynchium schleicheri*, not noticing the barbed wire fence between him and it. He sustained a nasty gash to the forehead, but carelessly slapped on an elastoplast, which immediately came unstuck and hung off in an undignified manner; then he simply carried on bryologising.

More recently, since becoming interested in tropical bryophytes, I have come to appreciate the combination of clarity and caution which characterises his classic series of papers on African hepatics. These qualities, along with his patience and expertise, were demonstrated in the 1990 Tropical Bryology Workshop session, when he came to instruct us beginners in the identification of some of the African liverworts.

He also seemed to have refreshingly unfashionable opinions about phylogeny as demonstrated in his recent review of Crum's *Liverworts and Hornworts of Southern Michigan*.

He leaves students of tropical bryology a formidable body of work on African hepatics, including a manuscript *Flora of West African Hepatics*.

From Celina Matteri, Buenos Aires.

I met Eustace Jones very briefly once on the occasion of the BBS meeting in Bristol in September 1980. He impressed me as a charming old man, very kind in his attention to me for being a foreigner. Dr Stanley Greene introduced me to him as one of the best bryologists in Britain. He and Stanley seemed to be very close friends and Stanley admired him because of his mastery of Hepatics. I join all of you, mainly British bryologists in raising a tribute to such a renowned man.

From Dr M.E. Newton, Stalybridge.

Dr Eustace Jones was the epitome of scholarly achievement, completely unpretentious, and genuinely and generously interested in others, the expert and inexpert alike. For those reasons, I remember both my first B.B.S. meeting, when he told me of his grandmother's origins in Rochdale, as well as his last meeting, in Sheffield, when we talked about reasons for changes he had seen in the British flora.

From Sarie Perold, National Botanical Institute, South Africa.

From our letters I knew him well although I only met him once, a tall man with a long stride. As he showed me around the village of Kirtlington I had to quicken my step to keep abreast, both physically and mentally, even though he was my senior by many years. He described himself basically as an ecologist, yet his many papers on African hepatics spanning the last 40 years reveal an intimate knowledge of the taxonomy of this challenging group. My main regret is that, because of other commitments, I kept putting off inviting him to South Africa, so that he could experience at first hand the beauty and plant wealth of the southern tip of the continent, the central part of which he knew so thoroughly. I shall always remain grateful for Dr Jones' generosity, help and kindness to me; he also refereed several of my papers and was

one of the two external examiners for my Ph.D. degree. It was with a sense of personal loss that I heard of his death.

From Peter Pitkin, Nature Conservancy Council for Scotland.

I was Eustace Jones' research student between 1969 and 1972 in the Commonwealth Forestry Institute (the University Department of Forestry) where Eustace (nobody I knew in Oxford called him Jonah) lectured in silviculture. Eustace was not the sort of person who had hobbies, so bryology is better described as the other part of his life. But there were more other parts: he was a gardener, he had an astonishing knowledge of church architecture and English history and he played the flute.

Eustace's reputation as a forester probably equals his reputation as a bryologist, and for many of the same reasons: his profound knowledge accumulated from what he had read and from what he had observed himself, and his rigorous critical approach. He was shy and unassuming, he had no time for ostentation or pretence, particularly the kinds associated with ambition and bureaucracy and he preferred to work alone. But he ate lunch every day in Halifax House, opposite the Institute, and he was a member of the committee. In his latter years in Oxford his editorial work occupied much of his time. He was an editor of *Forestry* from 1970 to 1978.

As a forester, Eustace was most respected for his work on the ecology of the forests of West Africa. He wrote several papers on aspects of the ecology of British native woodland, about which he was characteristically modest but which have since established his considerable status, in the tradition of A.G. Tansley (about whom Eustace had a few interesting things to say) and A.S. Watt (whose student he was in Cambridge). The best known of these papers are his substantial *Biological Flora* of the oak (1959), and his *New Phytologist* paper (1945) on the virgin forest of the north temperate zone. Eustace was also exceptional among foresters in the forties and fifties in his criticism of the policies of the Forestry Commission, which he saw to be destroying the character of many British woods. He was awarded the medal of the Institute of Foresters in 1978.

Forestry in Oxford suffered several upheavals in the 1960s and 1970s. These changes seemed to undermine the teaching and study of forestry as an academic and professional discipline. The structure of the courses changed, with more emphasis on the general, and the department became a sadly lifeless part of what was, in effect, an Oxford University biology department. Silviculture was of preciously little account. In 1971 Eustace retired, two years before the statutory age, largely because his position had become intolerable.

Despite his shyness, Eustace was a kind and charming man. In conversation he would only look at you if he thought you weren't looking at him. He spoke quietly, through his moustache and towards the ground. But he was interesting, informative and completely attentive. In female company he sparkled, in a shy and charming way; Joan Appleyard and Madame Allorge were two particular friends. Madame Allorge sent him wonderful Parisian chocolates for Christmas. There were many amusing tales of his social and linguistic accomplishments on student visits to France.

When lecturing he also avoided looking at his audience and talked to the floor, but he was famous for a trick (which I never saw, myself) of starting to write at the left hand side of a

wide blackboard with his left hand, and, half-way along, tossing the chalk into his right hand, with which he continued the script to the far end.

Eustace's house in Kirtlington was converted, to his own specification, from two smaller cottages. It too was unostentatious and charming: built of yellow rag stone, with stone slates and white paintwork. Inside, the walls were white and the floors were varnished wood. Eustace grew plants from seed on his kitchen window-sill: *Gladiolus* and *Hypoxis* that he had collected himself in Africa. In the living-room, in a full-length window that was once the door to one of the cottages, he had a fine plant of *Sparmannia africana*. In the hearth he kept a pot with a few dried seed-heads of *Allium* species and *Incarvillea delavayi*.

In this room was a piano that Eustace claimed not to play himself, but which he kept for musical evenings with the small group of friends in which he played the flute (I believe he played very well). There was also an unmistakably distinguished record player with very large knobs on the amplifier and a single very large loudspeaker.

Eustace drank very little but he usually kept cider and perry in the house, and I remember a bottle of Armagnac with a handwritten label, brought back from one of the French forestry tours. He gave tea-time visitors toast with gentlemen's relish.

On my first visit to Oxford to discuss the subject of the D.Phil Eustace collected me from Banbury Station in his Morris Traveller, which he drove in a way that did not inspire confidence in passengers. We sat in his garden. All I remember of the discussion was that he did not actually say whether he was prepared to take me on. This came later in a letter: "I would have been even more delighted had you got a first".

The garden was laid out more or less in rectangles. There was a stone-paved area close to the house onto which Eustace's study and herbarium (converted from the out-houses) opened. A startling pink rose, one of the few concessions to ornamental plant-breeding and the name of which I never discovered, climbed against the wall of the house. He seemed slightly embarrassed by it, and rather relieved when it eventually died. He was much more enthusiastic about the *Campsis grandiflora* which climbed over the study. *Hypericum olympicum* and *Erigeron mucronatus* grew self-sown between the paving, and *Epilobium glabellum* grew with them (though it was planted), looking similarly at home.

The main part of the garden was higher than the level of the house. On the side was a rockery, on the other a small lawn and large rectangular beds of herbaceous plants, with very few shrubs, of which I only remember a very big clump of *Phygelius capensis* and two very good bushes of *Halimium* spp. Eustace's particular enthusiasms c.1970 were *Kniphofia* and *Eryngium*. Most of these he grew from seed, some of it collected himself in the wild.

Eustace was generous with his plants. I have his *Sedum praealtum* growing by the front door, where he grew it, keeping a piece in a milk bottle over-winter in case the frost should despatch it, and his *Galanthus plicatus* (one of the nicest snowdrops) will soon be in flower. There are dried flower-heads of his *Allium christophii* and *Allium siculum* dropping seeds and collecting dust in many corners of our house. One of the greatest successes was *Gladiolus purpureo-auratus*, "always too late in Oxford", which he gave me to grow in Dublin, where, as he predicted, it flowered profusely and spectacularly.

Eustace was from the old school of research supervisors. He did not seek out research students, he did not dictate the course or the methods of their research, and he did not expect their research to produce papers that would carry his name. He did, however, take me on bryological excursions, visits to old churches and invited me to his house. In due course I gave him various drafts of a thesis to read, one of which, with great embarrassment to us both, he thought he had lost. The drafts were returned (thankfully, all of them) with meticulous comments on logic, ecological notes, and points of grammar and syntax, but no indication of whether he considered the content satisfactory. Eustace maintained that if this was what I wanted to say, then it was satisfactory. The main purpose of his comment was to help me to say it. Whether or not he felt he succeeded (I thought he did), I recollect with admiration and delight his clear thought, his common sense, and his gift for plain and concise, yet elegant, English.

Eustace could be disarmingly critical. Besides ostentation and pretence he especially disliked gobbledygook and obfuscation, and continental phytosociology of the Braun-Blanquet school. His review of Edlin's *New Naturalist, Trees, Woods and Man (Proc. Bot. Soc. Br. Isles, 2, 320-323, 1957)* is merciless, but well substantiated. He was, however, completely forgiving of the faults of his friends. He was kind, charming and attentive to those of us who were none of these things, and who, by his standard were superficial and ignorant.

From Tamás Pócs, Eszterházy Teachers' College, Eger.

He was among the first tropical bryologists who considered field observations crucial in his taxonomic judgement. I learned a lot from him, when I took him around in my favourite localities in Tanzania at the end of 1970 and early 1971. (This trip resulted in the discovery of many new novelties, among others several new species such as *Calypogeia afrocaerulea* E.W. Jones, *Lejeunea amaniensis* E.W. Jones, *L. cyathearum* E.W. Jones, *Radula pseudo-flaccida* E.W. Jones, *Renauldia lycopodioides* Biz. ex Pócs, *Trichosteleum jonesii* Biz. ex Pócs.) He always called my attention to the variability of species on the spot and warned of the danger of describing new species based on one weak herbarium specimen.

On Christmas eve 1970 Eustace, my wife and I were invited to have dinner with Mrs Stewart, authority on African orchids, in Nairobi. The frontier guards did not allow me and my family to enter Kenya as Hungarian citizens, so we were stranded in Arusha where all the hotels were fully booked. Then came the idea to try the Research Station of the Arusha National Park. We could reach the station late in the evening, among herds of elephants. We popped in unexpected. Desmond Vesey-Fitzgerald, the scientist in the Station, had the company of P.J. Greenway and Mary A.E. Richards, for Christmas dinner. All three were famous names in East African botany but not yet known by us personally. We were very kindly received and accommodated, partly due to the fame of Eustace. Next day we were taken by Desmond into Meru crater and had an unforgettable botanical trip, collecting bryophytes among rhinos and buffaloes. The curiosity of this fantastic meeting was that our hosts could never see each other again, as Desmond died soon after from a heart attack and his guests were quite old, Greenway 73 and Mary Richards 85!

Our nicest experience with Eustace was visiting him in his house near Oxford with Frank White. I do not know whether his very rich rock garden or his cooking made the greater impression. As a bachelor he ran a perfect household alone. I think that later, after he lost his loved sister whom he often visited, his loneliness caused the greatest problem for him.

From Francis Rose, Liss, Hampshire.

Eustace Jones was always *extremely* kind and helpful in correspondence and he was particularly helpful in sorting out for me the *Plagiochila* I found by Loch Sunart (and in Brittany) which he generously said must be published as *P. atlantica* under *my* name: this was a typical generous gesture of a fine man whom I only met at intervals over many years.

From Rudy M. Schuster, University of Massachusetts.

As a fellow hepaticologist, with a long-entrenched interest in tropical taxa, especially Lejeuneaceae, it saddens me to learn that Eustace Jones has passed on.

He had a singularly rational and pragmatic approach to that most difficult of groups, the Lejeuneaceae, and I grew to value what he did very highly. His interest was in the 'nuts and bolts' of taxonomy: phylogenetic speculation (mine included) I think probably irritated him. Evaluated in terms of what he attempted to do, what he accomplished in working on African liverworts was very much, indeed. He and C. Vanden Berghen clearly dominated all research on the hepatics of tropical Africa and what we understand about them to a very large extent reflects their labors. Having for decennia struggled – at times to little advantage – with tropical Lejeuneaceae I benefited from Eustace's critical eye and critical mind. His drawings were always accurate and even though they lack the 'finish' one might have wished, they showed the criteria of the organisms very well indeed. If utility is one gauge of the value of taxonomic work – and it must be a major factor in evaluating taxonomic endeavors – then the many papers by Eustace Jones on African hepatics stand out: they will be used for many decennia. His papers on the Lejeuneoideae ('Schizostipae') are especially valuable because he, almost alone, had what can only be regarded as 'taxonomic courage' in coping with a group that is almost impenetrable. Students of the family Lejeuneaceae have 'avoided' the intractable Lejeuneoideae; his work on the group stands out as a guide for future research, especially on African taxa.

It is remarkable that Eustace did all his work on hepatics as basically a 'side line' to the rest of his professional work. He would not have minded being labelled an amateur hepaticologist; if such he was, I have known many who profess to be professionals whose work is far less professional than his. His work was in the best tradition of much of the taxonomic work on bryophytes by British bryologists, many if not most of whom have not held positions as bryologists.

From George Scott, University of Melbourne.

I met Jonah (on BBS field trips) only two or three times at most, but even once was enough to fix him in the mind for ever: the characteristic poise of head and shoulders and haversack, the deceptively gentle walk, and the gentleness, too, with which he treated the swarms of the less erudite who pestered him for information and identifications. He (and the other senior members of the BBS) set then a tone of helpfulness and camaraderie which made even a raw recruit like myself feel accepted and valued and encouraged. This attitude – of patient encouragement for the young and ignorant, and patient support of the older and ignorant, in an atmosphere of equality, not condescension – seems even more remarkable to me now, in retrospect, than it did then, and I think that it has been a cornerstone of the Society's success.

If he had done nothing more than help to bring this about, he would have earned grateful remembrance, but his influence was much wider and more pervasive. His very great knowledge of liverworts was respected in every corner of the world and his opinions treated with a deference denied to fierier preachers and more vociferous advocates. He was one of a tiny group of taxonomists from whom even a new *Lejeunea* from Central Africa would be accepted without question. When he wrote (I quote from memory) that the search for earlier synonyms was "a mischievous game which is better left unplayed" it was recognised not so much as a passing remark but as the considered judgement of an elder statesman, which is still quoted and receives lip-service at the least. He had, and exercised through his writings, the capacity to simplify complexities by the abundant application of common sense.

Taxonomy, being almost wholly a matter of individual opinion, is inherently disputatious and there are very few, especially of the forthright, who escape without some breath of calumny, but I have never heard of an ill word being spoken about Eustace Jones. For one of his eminence, that is no mean epitaph.

From A.V. Smith, Little Hayfield, Stockport, Cheshire.

I liked and respected Dr Jones very greatly on the basis of my limited personal contact with him at about three spring meetings and AGMs of the B.B.S. My late wife and I first met him at the Norfolk meeting not long after his first heart attack. He had retired temporarily from the trudge across the Norfolk heaths when Fay (who had no knowledge of bryophytes whatsoever) was able to offer him a place to sit and rest – in our car. So she had his company for about an hour and a half and, although perhaps a littler overawed at first, she enjoyed talking to him and she and I both agreed that he was a most charming and gentle man in the traditional and best sense of the word. My own subsequent contact with him more than confirmed this view and he was always most helpful and responsive to even the most simple and obvious questions.

From Rod Stern, Fishbourne, Chichester.

Though it is as a bryologist that members of the BBS will generally remember him he was for many years a lecturer in Silviculture at the Oxford University School of Forestry. He was a stimulating instructor, leading excursions for his students each year in England and Wales and abroad, at one time to France or Belgium, including the classic forests of Les Landes, Belleme, Lyons-La Forêt, the Vosges and the Jura. As a forestry tutor he was always patient, painstaking and helpful to his students, giving a great deal of illuminating comments and often amusing anecdotes, supporting the valuable constructive criticism of the weekly essay. He showed by example the importance of considered judgements based on patient observation and careful study. He was a leading authority on temperate forests and also carried out important work on tropical forest ecology in Africa publishing several papers based on his visits to West Africa in the late 1940s and 1950s. At home he published definitive accounts of the genera *Acer* and *Quercus* for the Biological Flora of the British Isles. For eight years he was co-editor of the journal *Forestry*. In 1978 he was presented with the Institute of Foresters' medal 'in recognition of the contribution made through his research and teaching, to forestry in general and for his service to the Institute as an Editor.'

He had a great sense of humour, enjoying to reminisce about amusing incidents. One of these was when the coach carrying a load of his students became wedged under a low bridge in the Forest of Dean, and subsequently went into a ditch in Mortimer Forest from whence it had to be lifted out with much student power aided by many pit props and a large larch pole.

Eustace's funeral service was in his village church of Kirtlington where his brother and family were present with many bryological friends and a few foresters, reflecting his recent greater involvement with bryology than with forestry.

From Donal Synnott, National Botanic Gardens, Glasnevin, Dublin.

I did not know Dr Eustace Jones well and could never refer to him by the familiar 'Jonah'. He was present on the Knutsford meeting which was my first meeting with the B.B.S. in Great Britain. It was clear that he had already attained a special place in the annals of the B.B.S. and in the hearts of those members who knew him. His restrained and disarming sense of humour was tested and demonstrated when, as the account of the meeting has it, he took to the water.

He came to Glasnevin on one occasion in the 1970s, while on a visit to his friend and former student, Peter Pitkin, then lecturing in Trinity College, Dublin. I volunteered to show him around the Gardens. My plan for a superficial skim through the grounds was soon abandoned. His considerable knowledge of trees and shrubs and interest in the Glasnevin plantings resulted in a leisurely, stimulating and memorable afternoon in the arboretum with bryological interludes discussing the taxonomic merits of *Lophocolea cuspidata* and the effects of atmospheric pollution in the Dublin bryophyte flora.

Dr Jones visited Ireland for bryology a number of times including the Kerry meeting of the B.B.S. in 1951. The account of the meeting is sprinkled with references to his finds and an indication of his doggedness: 'At Torc Cascade a determined search was made for *Cyclodictyon laetevirens* without success; it was however found by Dr Jones on a visit immediately following the meeting'. He had also found what was to become *Plagiochila atlantica* Rose during the meeting and recorded the location very precisely.

A holiday in 1952 resulted in a paper on the bryophytes of north-east Ireland in the *Irish Naturalists' Journal* 11: 115-120, in which his preference for the hepaticae is betrayed. He thanks three stalwarts of northern Irish bryology, the late W.R. Megaw, J.W. Fitzgerald and M.P.H. Kertland, for assistance and records the hospitality and enthusiasm of several Belfast naturalists. I have no doubt they treasured the memories of his charismatic presence. *Ar dheis De go raibh a ainm dhilis*.¹

¹ (which, roughly translated, means:) *May his gentle spirit be at God's right hand.*

From Cliff Townsend, Twickenham, Middlesex.

Whether he studies botany or any other subject, no amount of erudition will rehabilitate the irascible or the boor, and my chief recollection of Jonah in the 40 or so years that I knew him was of patience and kindness. Not that he was not prepared to express himself strongly; but he was one of those gifted with the power of being forthright with a twinkle, so that he never

appeared rude or crushing. He seemed to know something about almost any subject which might come up. I well remember, on the BBS Sedbergh meeting in 1969, encountering Jonah in the fine church of St Mary in Kirkby Lonsdale, which my wife and I were determined to visit. It did not take us long to discover that he was no slouch when it came to church architecture. It was one more of the interests which he indulged in connection with his liking for long-distance walking. His physical strength in the latter respect was phenomenal. When I visited the exciting Mazumbai Forest Reserve in western Tanzania in 1975, they still talked of Jonah's leaving his camera high up in the forest and, declining a guide, returning to collect the camera and get back to base in an incredibly short time. This was four years previously. Our common interest in Africa often led to my sending him liverworts of my own collection, or separated from mosses sent to me by others. Reciprocal mosses occasionally reached me, and usually gave rise to a sinking feeling; if he had been unable to name them himself they usually fell in some hideously over-populated genus such as *Isopterygium*! The mark he left was an indelible and very individual one, both as a person and as a bryologist, and he will be sorely missed.

From Jiri Vána, Univerzity Karlovy, Praha.

I am sorry that E.W. Jones belonged to the small number of bryologists whom I never met personally. I was in contact with him only through letter and specimens – naturally of African Jungermanniaceae, Lophoziaceae and Cephaloziellaceae. I appreciated in his letters very precise and critical observations on the material studied and the very good 'feeling' to find the differences.

From Eric V. Watson, Little Cleeve, Goring-on-Thames, Berkshire.

One of my earliest recollections of Eustace Jones stays in the memory forty years on. We were in Glenbeigh on the BBS meeting in S.W. Ireland in the summer of 1951. He came striding past the window of the little place where I and few others were staying. It was evening and the day's exertions – for most people at least – were over. "Where are you going," we asked. "I am off on a *Colura* hunt," came the reply. Immediately in evidence were two of his most characteristic qualities: unrelenting enthusiasm and a love of the extremely minute.

Many years later, on another BBS field meeting, I happened to be working with Eustace along a ridge in the Cumbrian hills. It was then that he told me how, on solitary holidays in his youth, he had been over all the ground before, coming to know intimately its ecology and its flora. Instantly one recognised that, unlike many of us who were in that particular area for the first time, he had vast experience to draw upon. The same was true, even more notably, where the bryophyte flora of Oxfordshire was concerned. He did not just 'know the plants', he knew and understood thoroughly the ecology of each. To be with him in the field was always a privilege and a delight.

It must have been on the Cornish meeting of Spring 1961 that I had the experience of being Eustace's passenger as he negotiated the narrow, sometimes tortuous, roads. Thus placed, I had the chance to see another facet of his character, namely a tendency not to bother too much about the 'feelings' of engines being driven in an unsuitable gear, while his ceaselessly questing mind impelled him to look in many directions other than the road ahead. As we

went along one would learn much of interest about many subjects (not just bryophytes), but it was with a certain sense of relief that one came to 'journey's end'!

Among bryologists, the world over, Eustace Jones will no doubt be best remembered for his incomparable series of papers on African hepatics; and his vast store of knowledge is going to the greatly missed. Those of us who knew him well, however, will treasure, too, his many endearing qualities: his quiet modesty, his admirable judgement and a sense of humour that lurked always not far beneath the surface. One wishes only that, with the advantage of living not far away, one had come to know him better still.

From Harold Whitehouse, University of Cambridge.

Owing to my hearing problems, aggravated by Eustace's large moustache which prevented lip-reading, I had great difficulty in communicating with him orally. We had an extensive correspondence, however, and this reveals his wonderful insight into the likely factors determining the precise habitat requirements of bryophytes. Here are a few quotations from his letters which illustrate this.

14 January 1963. I should, for example, doubt very much whether *Ptilid. pulcherrimum* is 'undoubtedly spreading'; it is merely one of those very sporadic plants of impermanent habitats which goes on being found in new places (& disappearing from old ones) the longer one goes on accumulating records.

29 September 1981. On Monday I visited the *Zygodon gracilis* in the col south of Penyghent; an extraordinarily windy spot. I couldn't help suspecting that wind-borne drizzle or mist might be the explanation of its limited occurrence in such quantity.

14 October 1981. *Zygodon gracilis*, on northern side of dry stone wall, chiefly near the base, locally very abundant, The Giant's Grave, Penyghent. 21 Sept. 1981. The wall carries a luxuriant growth of bryophytes, especially *Tortella tortuosa* & *Neckera crispa*, but also *Tortula intermedia*, *Distichium capillaceum* & *Scapania aspera*. The site is a col which, on 21 Sept., seemed to be channelling the wind on to the wall. The enclosure is also heavily dunged by cattle, and the suspicion entered my mind that nitrogen might have something to do with the presence of *Zygodon*, combined perhaps with driving rain or mist.

29 May 1985. There are several interesting records, especially *Trichostomopsis umbrosa*. I cannot help wondering whether this is a native species with a very restricted 'natural' habitat from which it has escaped. I found it last summer on a brick wall only a few hundred yards from the Botany Dept. in Oxford, and know to within a few feet where I found it; I have looked for it there twice this year and not been able to find it. Can it be one of these mosses that flare up suddenly, when conditions are just right?

In Oxford and around it, churchyards are certainly now the chief habitat of *Leucodon* – usually on oolitic tombstone, but sometimes on buttresses etc. Obviously high base-status and good illumination are important for it (I think that it was always on the more basic barks such as elm, & sometimes ash – never on oak) and that shelter is needed. All the churchyards in this district where I recollect seeing *Leucodon* have plenty of large trees around them. This is the sort of relevant information that recording by squares so lamentably obscures!

16 January 1986. I have just been looking at your *Leptobarbula* account. It is a pity that geologists are so obsessed with the age of strata. I suspect that if we knew more about the lithology (& perhaps chemistry) of the strata, anomalies such as that reported by Pierrot would disappear. The Cretaceous strata change steadily in character from Normandy southwards, becoming steadily less calcareous. On the other hand many limestones of the Jura and the Alps are Cretaceous and not noticeably different from the neighbouring Jurassic limestone. In the Wye Valley Carboniferous limestone, there are at least four well-defined lithological horizons, and it is the softer more porous of these horizons that support Seligerias & similar choice bryophytes; the hard dolomite is conspicuously barren. The Jurassic limestones in England are even more variable, with no horizon uniform through any considerable thickness!

NEW VICE-COUNTY RECORDS AND AMENDMENTS TO THE CENSUS CATALOGUES

All undated records are based on specimens collected in 1992; 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 (1981), *Distribution of bryophytes in the British Isles: a census catalogue of their occurrence in vice-counties* (1981).

HEPATICAЕ

D.G. LONG

- 1.2 *Anthoceros punctatus*, place 13 & 14 in () (Rose *et al.*, 1991); on damp soil at base of woodland, 0.5m alt., edge of Western Cleddau estuary, Hook, SE of Haverfordwest, 21/91 (45), Stern.
- 2.1 *Phaeoceros laevis* a ssp. *laevis*, woodland ride, foot of Henley Hill near Midhurst 41/28 (13), 1952, Paton 3028 (herb. Paton), comm. Paton, only recent record (Rose *et al.*, 1991); b ssp. *carolinianus*, place 13 in () (Rose *et al.*, 1991).
- 8.1 *Preissia quadrata*, mossy rocks in calcareous flush by burn, 300m alt., Whalplaw Burn on east side of Riddel Law 36/55 (81), Long 22336 (E).
- 12.8 *Riccia subbifurca*, on edges of arable field left intact after spring ploughing, with *R. sorocarpa*, *R. glauca*, *Sphaerocarpos texanus* and *Pottia truncata*, 80m alt., Fair Oak, near Tadley 41/56 (12), Porley; place 14 in () (Rose *et al.*, 1991).
- 12.12 *R. sorocarpa*, on soil on ledges of rock by roadside, 10m alt., by the Baddidarrach road, Lochinver 29/02 (108), Blockeel 21/316.
- 13.2 *Metzgeria temperata*, on *Salix cinerea* bough in wet woodland, 140m alt., Moor Common, 5km SW of High Wycombe 41/89 (24), Bates 2930.
- 13.4 *M. conjugata*, place 13 in () (Rose *et al.*, 1991).
- 16.1 *Cryptothallus mirabilis*, under *Sphagnum subnitens* in flush, 95m alt., Crock Hill, Islands Thorns Inclosure, New Forest 41/21 (11), Stern.
- 17.3 *Riccardia incurvata*, on moist sand at edge of pond, bottom of sand pit, 10m, old gravel pits, Blackborough End, King's Lynn 53/61 (28), Stevenson.
- 22.1 *Fossombronina foveolata*, place 14 in () (Rose *et al.*, 1991).

- 22.3 *F. caespitiformis*, place 13 in () (Rose *et al.*, 1991).
- 26.3 *Barbilophozia floerkei*, delete 14, the voucher [Budlett's Common Rocks, Buxted, 1962, Rose (BBSUK)] is *B. attenuata* (male plants); comm. Paton.
- 26.4 *B. atlantica*, boulder on S summit, The Cairnwell 37/17, (89), 1964, Paton 4251; rock, N end of Creag na h-Iolaire, N of Carrbridge 28/92 (95), 1978, Paton 7165.
- 28.1 *Lophozia ventricosa* b var. *silvicola*, amongst *Bazzania tricenata*, north-facing slopes below summit of Beinn Mhor, South Uist 08/83 (110), Wigginton: c var. *longiflora*, delete entire entry: voucher for 88 [among *Sphagnum* in a moss near Killin, 1911, J. Hunter (BM)] is var. *ventricosa*; voucher for 90 [Fee Burn, Clova, 1912, P. Ewing (CGE)] is a mixture of *L. ventricosa* and *L. wenzelii*; det. & comm. Paton.
- 28.3 *L. wenzelii*, delete 88, voucher [Meall nan Tarmachan, 1912, W. E. Nicholson (CGE)] is *L. ventricosa*; existing voucher for 90 [Between Cairn Broadlands and Craig Mellon, Clova, 1962, E. F. Warburg (OXF)] is *L. ventricosa*; replace by: Fee Burn, Clova, 1912, P. Ewing (CGE); delete 92, no voucher traced; delete 94, voucher [NE corrie, Ben Macdhui, 1968, Paton (herb. Paton)] is *L. ventricosa* and *L. sudetica*; delete 96, voucher [Cairngorm, 1938, E. W. Jones (herb. Paton)] is *L. sudetica*; delete 97, voucher [Ben Nevis, 1880, W. West (NMW)] is *L. sudetica*; delete 108, voucher [above cliffs S of Inchnadamph, 1978, R.M. Schuster & W. B. Schofield (E)] is *L. ventricosa*; all det. & comm. Paton.
- 28.7 *L. capitata*, on moist sand in dried-out pond, at base of *Typha* stalks, 10m, old gravel pits, Blackborough End, King's Lynn 53/61 (28), Stevenson.
- 29.2 *Leiocolea badensis*, place 13 in () (Rose *et al.*, 1991); on limestone spoil in old quarry, 150m alt., Benthall Edge Wood near Ironbridge 33/60 (40), Long 21888; at edge of small trampled flush in grassy valley SW of Baluachdrach, 4km S of Port Askaig, Islay 16/46 (102), Corley.
- 38.12 *Jungermannia paroica*, on thin soil on grit rock on bank of shaded stream, 260m alt., Oaks Wood, Nether Padley 43/27 (57), Blockeel 21/008.
- 39.3 *Nardia geoscyphus*, place 13 in () (Rose *et al.*, 1991).
- 40.3 *Marsupella funckii*, place 14 in () (Rose *et al.*, 1991).
- 46.7 *Plagiochila killarniensis*, on trunk of beech, 280m alt., woodland near Rufus Stone, New Forest 41/21 (11), Bates; on old hazel trunk in sheltered coastal woodland, Nedd 29/13 (108), Hodgetts 2604.
- 48.3 *Lophocolea bispinosa*, wet sandy heath, Bovington 30/89 (9), 1991, Bowen, comm. Hill.
- 48.6 *L. fragrans*, on wall with *Radula complanata*, *Lejeunea cavifolia*, *Lophocolea bidentata*, near Aberaeron, 22/46 (46), 1983, Agnew, comm. Hale.
- 48.4 *L. heterophylla*, limestone outcrop, 75m alt., Lough Gur R/64 (H8), Wiltshire; on rotting log in old oak woodland, Park Hill, Abbeyleix Demesne, Abbeyleix S/48 (H14), 1990, Kelly.
- 54.3 *Diplophyllum obtusifolium*, place 13 & 14 in () (Rose *et al.*, 1991).
- 55.4 *Scapania scandica*, on floor of disused sand-pit, near Trillick (H36), 1957, J.W. Fitzgerald (BEL).
- 55.6 *S. lingulata*, soil-covered rocks by burn, 240m alt., Whalplaw Burn below Gladescleugh Burn 36/55 (81), Long 22321 (E).
- 55.11 *S. degenii*, on wet basic cliffs, 850m, Sron Coire na h-Iolaire, Beinn Bheoil 27/57 (96), 1987, Long 14113 (E); with *Blepharostoma trichophyllum* and other bryophytes on moist base-rich dolomitic sandstone, c 450m, S slopes of Meall a'Ghiubhais, Beinn Eighe NNR 18/96 (105), Blackstock.

- 55.14 *S. compacta*, among Ingletonian grit rocks on east-facing slope, 190m alt., Pecca Falls, Swilla Glen, Ingleton 34/67 (64), Blockeel 21/333.
- 55.17 *S. uliginosa*, in spring, 750m alt., corrie to N of Conival summit, W of Ben More Assynt 29/32 (107), Blockeel & Rothero 21/329.
- 55.20 *S. aspera*, calcareous gully on sea cliffs, 110m, Rough Heugh near Lumsdaine 36/86 (81), Long 21826.
- 57.3 *Odontoschisma elongatum*, intermixed in tufts of *Campylopus atrovirens*, blanket mire on southern slopes of Beinn Mhor, South Uist 08/83 (110), Wigginton; with *Campylopus atrovirens* on boggy ground, Greanan, Pabbay 08/88 (110), Hodgetts 2645.
- 58.2 *Cephalozia subdentata*, place 13 & 14 in () (Rose *et al.*, 1991).
- 58.3 *C. rubella*, moist clay pathside, Abbott's Wood, Arlington 51/50 (14), 1961, Paton 5180 (herb. Paton), comm. Paton, only recent record (Rose *et al.*, 1991).
- 58.5 *C. baumgartneri*, place 14 in () (Rose *et al.*, 1991).
- 58.7 *C. stellulifera*, place 13 & 14 in () (Rose *et al.*, 1991).
- 58.9 *C. turneri*, place 13 & 14 in () (Rose *et al.*, 1991).
- 58.11 *C. integerrima*, place 13 & 14 in () (Rose *et al.*, 1991).
- 59.5 *Cephalozia pleniceps*, place 14 in () (Rose *et al.*, 1991); amongst *Sphagnum* in open mire, 175m, Lurgie Loch 36/63 (81), Long 21692 (E).
- 59.7 *C. macrostachya* a. var. *macrostachya*, amongst *Sphagnum*, blanket mire on southern slopes of Beinn Mhor, S. Uist 08/83 (110), Wigginton; on *Sphagnum*, bog near R. Inny, W of Waterville V/55 (H1), 1968, Paton 7484; peat in bog, S of Longfordpass Bridge, Urlingford S/26 (H7), 1966, Paton 7485; b. var. *spiniflora*, place 13 in () (Rose *et al.*, 1991).
- 59.8 *C. catenulata*, place 13 in () (Rose *et al.*, 1991).
- 59.9 *C. leucantha*, place 81 in () (Braithwaite & Long, 1990).
- 60.1 *Nowellia curvifolia*, on rotting xylem of dead stump in mature *Quercus robur* woodland, near boat-house, Charleville estate, Tullamore N/32 (H18), Kelly.
- 61.1 *Cladopodiella francisci*, place 14 in () (Rose *et al.*, 1991).
- 65.2 *Telaranea murphyae*, delete 17 (Paton, 1992).
- 65.3 *T. longii* Paton, sp. nov., 17, 98 (Paton, 1992).
- 66.3 *Kurzia sylvatica*, under trees on peaty coastal bank, 5m alt., Duart, NE of Drumbeg 29/13 (108), Blockeel 21/307.
- 69.1 *Calypogeia neesiana*, peaty hollow in hummocky bog, 30m alt., Whixall Moss near Bettisfield 33/43 (40), Long 21885.
- 69.6 *C. sphagnicola*, in hummock of *Sphagnum papillosum*, Blawhorn Moss 26/86 (84), Wigginton.
- 72.1 *Ptilidium ciliare*, in very short heavily grazed humid heath rich in *Cladonia* spp., 40m alt., Plaitford Common, New Forest 41/21 (8), 1991, Sanderson.
- 75.4 *Radula aquilegia*, on periodically irrigated vertical face of \pm basic N-facing crag in scrubby birch woodland, 400m alt., head of Coire Mor, Corriemulzie 28/38 (106), Blockeel & Rothero 92/081.
- 77.2 *Porella obtusata*, on *Thamnobryum alopecurum* on boulder by small waterfall, 65-75m alt., Allt na Loinne Meadhonaich, Assynt 29/12 (108), I.M. & P. A. Evans.
- 77.4 *P. cordaeana* a var. *cordaeana*, place 13 in () (Rose *et al.*, 1991).
- 78.5 *Frullania dilatata*, on trunk of *Salix* in waterlogged ground at upper end of lake, 45m alt., Newmillerdam, between Wakefield and Barnsley 44/31 (63), Blockeel 21/073.
- 80.1 *Marchesinia mackaii*, on cliffy slope on Devonian old red sandstone, in small wood of mixed broadleaved species, 0.5 miles SW of Thomastown S/54 (H11), 1991, Kelly & Goodwillie.

- 83.1 *Lejeunea cavifolia*, towards base of tree by muddy pond below disused railway track, 115m alt., Sherrardspark Wood near Welwyn Garden City, 52/21 (20), Smith; on wych elm trunk at edge of wood, N of Baluachdrach, 3.5km S of Port Askaig, Islay 16/46 (102), Corley.
- 83.3 *L. patens*, on rocks in deep wooded ravine, 275m alt., Dirnanean, Enochdu, Kindrogan 37/06 (89), 1991, Rothero 91/005.
- 83.8 *L. ulicina*, in small quantity on *Frullania teneriffae* on bole of ash tree in wooded coastal ravine, 50m alt., Creag an Spardain, c 1.5km SW of Kylesku 29/23 (108), Blockeel 21/253.
- 84.1 *Colura calyptrifolia*, place 14 in () (Rose *et al.*, 1991).
- 85.1 *Cololejeunea calcarea*, shaded limestone rocks by stream in wood, Allt an Loin Bhroaich, 4km S of Port Askaig, Islay 16/46 (102), Corley.

Contributors of records, 1992

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MUSCI

T.L. BLOCKEEL

- 1.6 *Sphagnum teres*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991); north side of old railway barrow pit, Great Bowden 42/78 (55), 1991, Baker, comm. Ballard.
- 1.10 *S. quinquefarium*, on steep N.E.-facing bank by stream, Cardingmill Valley, Long Mynd 32/49 (40), Newton.
- 1.11 *S. warnstorffii*, base-rich short sedge flush, 300 m alt., Afon Gwesyn Valley, nr. Abergwesyn, N. of Llanwrtyd Wells 22/85 (42), 1990, Yeo & Stevens; base-rich *Molinia* flush, 210m alt., Caermeirch, SE of Devil's Bridge 22/77 (46), 1991, Dalley, comm. Yeo; flush, 420m alt., by Burn of Buck, Buck of Cabrach 38/42 (93), Corner.
- 1.13 *S. fuscum*, 590m alt., Buck of Cabrach 38/42 (93), Corner.
- 1.18 *S. platyphyllum*, in rushy edge of basic flush on left bank of Afon Ystwyth, 335m alt., just below confluence with Afon Diluw, 5.5km ENE of Cwm Ystwyth 22/87 (46), Bates & O'Leary B2903.
- 1.20 *S. subsecundum*, floating scraw, Meenaguse Lough G/98 (H35), 1991, Goodwillie.

- 1.21 *S. contortum*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991); in basic flush, Callow Hollow, Long Mynd 32/49 (40), 1990, Newton; in open mire, 175m alt., Lurgie Loch 36/63 (81), Long 21698
- 1.26 *S. pulchrum*, in lawn of *S. recurvum* at edge of pool in mire, 470m alt., by lochan N of Lochan a'Mhill Bhig, Glen Fyne 27/21 (98), Rothero 92/066.
- 1.27 *S. recurvum* a var. *amblyphyllum*, fen at inflow of stream into lake, Rough Mire, Bassenthwaite Lake 35/22 (70), Fojt, comm. Hodgetts: b var. *tenuae*, moist ground under trees, nr. Duddleswell, Ashdown Forest 51/42 (14), Hill.
- 2.2 *Andreaea rupestris* a var. *rupestris*, granite cliff face, Coves Reservoir Park, Gourock 26/27 (76), Hodgetts 2659.
- 2.4 *A. rothii* b ssp. *falcata*, granite cliff face, Coves Reservoir Park, Gourock 26/27 (76), Hodgetts 2660.
- 2.6 *A. nivalis*, on wet ledge on NE-facing crag, corrie to N of Conival summit, W of Ben More Assynt 29/32 (107), Rothero, Blockeel *et al.*, Blockeel 21/325.
- 4.1 *Tetradontium brownianum*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 5.2 *Polytrichum longisetum*, delete 81, the specimen (moor near Dowlaw Burn 36/86, 1927, J.B. Duncan (Hb. R. Hall, and *Trans. Bot. Soc. Ed.* **34** (1946), 291)) is *P. commune*, comm. Long.
- 5.4 *P. commune* c var. *humile*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 12.2 *Pleuridium subulatum*, turf in meadow, 29m alt., Strettington 41/80 (13), 1991, Matcham, first record for more than 50 years (Rose *et al.*, 1991).
- 14.6 *Ditrichum pusillum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 18.1 *Seligeria donniana*, delete 47, the specimen (Llanymynech Hill, leg. U.K. Duncan, 1960 (BBSUK)) is *S. acutifolia*, det. L. Gos.
- 18.2 *S. pusilla*, delete 87, the specimen (Ben Ledi, leg. A.C. Crundwell, 1971 (BBSUK)) is *S. brevifolia* det. L. Gos); shaded limestone rockface, Baluachdraich, 4 km S of Port Askaig, Islay 16/46 (102), Corley.
- 18.2A *S. brevifolia*, rock crevice, 2200 ft alt., north-east side of Ben Ledi (87), Crundwell (BBSUK), det L. Gos, new to Scotland (specimen without capsules, identification based on vegetative characters).
- 18.3 *S. acutifolia*, delete the previous record for 42, the specimen (Craig y Cilau, leg. E.F. Warburg, 1956 (BBSUK)) is *S. pusilla*, det. L. Gos, and replace with: on shaded limestone, Craig y Rhiwarth, nr Craig y Nos (42), 1984, Woods 3211 (BBSUK); ledge of damp, limestone rock in old quarry, Llanymynech Hill (47), 1960, U.K. Duncan (BBSUK), det L. Gos; wet limestone cliff, with *S. pusilla*, Anaconda, Ben Bulben (H28), 1937, H.N. Dixon (BBSUK), det. L. Gos, and upper cliffs, Gleniff (H28), 1970, Synnott (DBN), det. L. Gos; with *S. pusilla*, Crow Glen (H39), 1870, S.A. Stewart (DBN), det. L. Gos.
- 18.4 *S. trifaria*, delete 66, the specimen (Falcon Clints, leg. R.D. Fitzgerald, 1958 (BBSUK)) is *S. pusilla*, det. L. Gos.
- 18.5 *S. paucifolia*, delete 19, the specimen (Audley End to Saffron Walden, Leg. E. Saunders, 1964 (BBSUK)) is *S. calcarea*, det. L. Gos; delete 26, the specimen (Deadman's Graves, Icklingham, Leg. H.J.B. Birks & A.J.C. Malloch, 1969 (BBSUK)) is *S. calcarea*, det. L. Gos.
- 26.1 *Dichodontium pellucidum*, on top of small shaded sandstone rock, in the bottom of a small incised valley, New England Valley 53/37 (54), T. Smith.

- 28.4 *Dicranella crispa*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 32.7 *Dicranum spurium*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 32.9 *D. fuscescens* a var. *fuscescens*, base of birch bole, Tuddenham Heath 52/77 (26), Strauss.
- 32.13 *D. flagellare*, Plashett Wood, Uckfield 51/41 (14), MacFarlane, conf. Corley.
- 32.14 *D. tauricum*, decaying birch log in pond, 150m alt., Bedwyn Brail, Great Bedwyn 41/26 (8), Stern.
- 36.2 *Leucobryum juniperoideum*, on the ground in old oak coppice, 145 m alt., Hodgemoor Wood, Chalfont St. Giles 41/99 (24), Stern.
- 37.2 *Fissidens viridulus*, on loamy woodland bank, Benthall Edge Wood, Ironbridge 33/60 (40), Hill, conf. Corley.
- 37.2B *F. limbatus*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 37.8 *F. crassipes*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 37.9 *F. rufulus*, steep wooded valley, on silty rocks in burn, 70m alt., Tower Dean below Tower Bridge 36/76 (81), Long 21769.
- 37.14 *F. taxifolius* b ssp. *pallidicaulis*, at water-level on concrete V-notch weir in Slapton Wood stream, 40m alt., Slapton Wood 20/84 (3), 1990, Proctor & Bates; in dripping rock crevices on steep bank by stream, 200m alt., Turner Wood, Rishworth 44/01 (63), Blockeel 21/064.
- 37.15 *F. cristatus*, cleft in basic sandstone scar by waterfall, near Linlithgow 26/97 (84), Wigginton.
- 38.1 *Octodiceras fontanum*, submerged on stonework, 120m alt., S. bank of Kennet Lock, Kennet and Avon Canal, Devizes 41/06 (8), Stern.
- 39.2 *Encalypta vulgaris*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 40.8 *Tortula muralis* b var. *aestiva*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991); damp shaded quarry face, 100m alt., Garth Wood, Tynwydd, Cardiff 31/18 (41), Martin.
- 40.11 *T. papillosa*, brick drainage channel at base of wall of church, Alconbury Church 52/17 (31), Hodgetts 2590; ledge of stone building, 20m alt., Pembroke Main Street 12/90 (45), Hambly.
- 40.14 *T. cuneifolia*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 40.15 *T. freibergii*, on sandstone boulders at top of beach, Hayburn Wyke, c. 7km NNW of Scarborough 54/09 (62), Rumsey (cf. Rumsey, 1992).
- 41.1 *Alcina brevirostris*, bankside on waste ground, Low Barns Nature Reserve 45/13 (66), Wharton.
- 42.2 *Desmatodon convolutus*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 45.1 *Pottia caespitosa*, on bare calcareous earth in old quarry, 150m alt., Benthall Edge Wood, Ironbridge 33/60 (40), Blockeel 21/034, also found by Matcham.
- 45.2 *P. starkeana* a spp. *starkeana*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 45.3 *P. commutata*, between short grass on footpath, on chalk, Highdown Gardens, Worthing 51/00 (13), Bishop; soil beside a set of concrete steps opposite the public toilets on path down to beach (brickwork over chalk), Botany Bay, Kingsgate 61/37 (15), Watling.

- 45.4 *P. wilsonii*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 45.5 *P. crinita*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 45.7 *P. intermedia*, grass ley, 80ft alt., north-east of Aversley Wood, Sawtry 52/18 (31), Whitehouse, Preston & Richards.
- 45.9 *P. heimii*, on shaded shale cliff with freshwater seepage, NE shore of Foynes Island, Shannon Estuary R/25 (H8), Reynolds & Reynolds, comm. Wiltshire.
- 46.1 *Phascum cuspidatum* b var. *piliferum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991); in arable field, 100m alt., N.W. of Hart Village 45/43 (66), Blackburn.
- 46.3 *P. floerkeanum*, Claxby Chalk Pit 53/47 (54), Lammiman.
- 49.8 *Barbula reflexa*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 49.10 *B. spadicea*, delete 37, 38 and 39, all records, mostly by Bagnall, are unreliable and unconfirmed, comm. Preston; delete 55, records by F.T. Mott and W.H. Coleman are unreliable and unconfirmed, comm. Preston.
- 49.15 *B. nicholsonii*, on rocks by river Maigue, 60m alt., Bruree R/53 (H8), Wiltshire.
- 49.16 *B. trifaria*, on reef-knoll limestone, 100m alt., Salthill Industrial Estate, Clitheroe 34/74 (59), Blockeel 21/416.
- 49.20 *B. cylindrica*, tombstone, 22m alt., parish churchyard, West Acre 53/71 (28), 1990, Stevenson.
- 50.2 *Gymnostomum aeruginosum*, shaded mortared wall, near Beaumaris Gaol, Anglesey 23/67 (52), 1991, Blackstock.
- 51A.1 *Leptobarbula berica*, at base of shaded wall along track of old railway below the Iron Bridge, on the S. side of the River Severn 33/60 (40), Townsend 92/450.
- 54.6 *Weissia microstoma* b var. *brachycarpa*, on soil of roots of fallen *Betula* at edge of wooded ravine, 180m alt., Langtonlees Cleugh below Well Cleugh 36/75 (81), Long 21853.
- 54.7 *W. squarrosa*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 54.8 *W. rostellata*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 54.10 *W. multcapsularis*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 54.12 *W. longifolia* a var. *longifolia*, acid fallow field, 140m alt., Middle Winterslow 41/23 (8), Matcham & Stern; place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 57.3 *Tortella flavovirens* b var. *glareicola*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 57.4 *T. inclinata*, sand dunes, Balnahard Bay, Isle of Colonsay 17/40 (102), Cocking.
- 57.8 *T. nitida*, small cushion in crevice of shale outcrop, S-facing cliffs by stream nr. sea shore to side of Nant y Grogall, 35m alt., Traeth y Coybal, nr. New Quay 22/35 (46), Williams, comm. Hale.
- 59.1 *Trichostomopsis umbrosa*, bridgework of railway bridge, 45m alt., Salisbury 41/13 (8), Stern.
- 64.1 *Grimmia anodon*, place 83 in (), the last confirmed record was made in 1871 (Arthur's Seat, leg. W. Evans (E)) - the only recent record (on dry basalt rock face, Samson's Ribs, Arthur's Seat 36/27, 1971, Long 1734 (E)) is *Coscinodon cribrus*, comm. Long.
- 64.17 *G. trichophylla* d var. *tenuis*, delete the entire entry - the taxon, which is a good species (*G. muehlenbeckii* Schimp.), is not reliably recorded for the British Isles

- (Smith, 1992): e var. *robusta*, this should be treated as a distinct species, *G. britannica* A.J.E. Smith (Smith, 1992).
- 66.5 *Racomitrium heterostichum*, on rock, 225m alt., beside Lockwood Beck, Cleveland 45/61 (62), Blackburn; top of boulder, 500m alt., by Loch Luchd, Seana Bhraigh 28/28 (106), Blockeel & Rothero, Blockeel 21/214.
- 66.5A *R. affine* sensu Frisvoll, on wall of bridge over Afon Vyrnwy, Pont Llogel, Llwydiarth 33/01 (47), Newton.
- 66.8 *R. lanuginosum*, roof tiles of old building, 140m alt., Ham 41/36 (8), Stern.
- 71.2 *Funaria muhlenbergii*, in crevices of sloping limestone slab, Alberbury 33/31 (40), Newton, Proctor *et al.*
- 71.3 *F. pulchella*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 72.3 *Physcomitrium sphaericum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 75.1 *Ephemerum recurvifolium*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 75.2 *E. sessile*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 75.4 *E. stellatum*, stubble field, 5m alt., Tournier Bury Farm, Hayling Island 40/79 (11), Matcham & Stern; place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 75.5 *E. serratum* c var. *minutissimum*, on soil on moist grassy bank, 100m alt., near the junction of the River Traligill and Allt Poll an Droighinn, Inchnadamph 29/22 (108), Blockeel 21/267.
- 81.1 *Schistostega pennata*, place 13 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 85.7 *Pohlia filum*, on gravel in old quarry, 60m alt., SE end of Lough Nacung Upper B/91 (H35), 1991, Long 20275.
- 85.11 *P. camptotrachela*, gravel roadside verge, 75m alt., Little Assynt 29/12 (108), Pool.
- 85.12 *P. myyldermansii*, peaty crevice of montane rock, north-facing, below summit of Beinn Mhor, South Uist 08/83 (110), Wigginton.
- 85.14 *P. lutescens*, bare soil in ride, 25m alt., Briddlesford Copse, Haven Street 40/59 (10), Stern; on clay soil around pond margin, 150m alt., Naphill Common, nr. High Wycombe 41/89 (24), Porley.
- 85.15 *P. lescuriana*, on gritty soil on bank of moorland stream, 310m alt., Burbage Valley 43/28 (57), Blockeel 21/421.
- 89.15 *Bryum salinum*, damp sandy ground, 10m alt., Achnahaird Bay, N. of Achiltibuie 29/01 (105), Stern, conf. Crundwell.
- 89.18 *B. intermedium*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 89.21 *B. elegans*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 89.24 *B. torquescens*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 89.27 *Bryum pallescens*, in dune slack N. of Freshfield 34/21 (59), Newton.
- 89.30 *B. caespitium* b var. *imbricatum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 89.31 *B. alpinum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 89.38 *B. gemmiferum*, towpath, 90m alt., Shropshire Union Canal, near Whixhall Moss, 3 miles east of Welshampton 33/43 (40), Martin.
- 89.39 *B. gemmilucens*, woodland ride, Northpark Copse, Henley 41/82 (13), 1950, E.C. Wallace & Crundwell.

- 89.40 *B. dunense*, fallow cultivated ground in machair, north of Loch Hallan, South Uist 08/72 (110), Whitehouse.
- 89.42 *B. radiculosum*, crevice of mortar on wall in the village, 5m alt., Lochinver 29/02 (108), Blockeel 21/251.
- 89.43 *B. ruderale*, bare soil in rough grassland, Eden Grange Horticultural Centre, Shildon 45/22 (66), Wharton; bare ground in machair, Pabbay 08/88 (110), Whitehouse.
- 89.48 *B. microerythrocarpum*, ant hill, 110m alt., Chickengrove Bottom, S. of Broadchalke 41/02 (8), Stern.
- 91.4 *Mnium marginatum* a var. *marginatum*, shaded limestone rocks, Baluachdraich, 4km S of Port Askaig, Islay 16/46 (102), Corley.
- 93.3 *Rhizomnium pseudopunctatum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 99.1 *Amblyodon dealbatus*, mossy rocks in calcareous flush by burn, 300m alt., Whalplaw Burn on east side of Riddel Law 36/55 (81), Long 22335.
- 102.4 *Bartramia ithyphylla*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 105.4 *Philonotis caespitosa*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991); on peat/mud, edge of small pool in *J. effusus* mire, Rhos Llawr Cwrt Reserve, Talgarreg, Llandysul 22/44 (46), Williams, conf. J.H. Field, comm. Hale; on mud in seepage area in pasture, near Bathgate 26/97 (84), Wigginton.
- 105.6 *P. tomentella*, mountain flush among block scree, Coire a'Mhadaidh, Conival 29/32 (107), Hodgetts 2613.
- 109.2 *Zygodon baumgartneri*, trunk of old oak, 40m alt., Briddlesford Copse, Haven Street 40/59 (10), Stern; abundant on trunk of mature elm, Aversley Wood 52/18 (31), Preston.
- 109.3 *Z. conoideus*, on Elder at edge of wood, 150m alt., Bradley Wood, Ashbourne 43/14 (57), Blockeel 21/051; on old elder, Woodhall Dean 36/67 (82), Saville, comm. Long.
- 110.5 *Orthotrichum lyellii*, single patch on each of two huge Crack Willows with horizontal boughs, 85m alt., Hampstead Heath, nr. Hampstead Ponds 51/28 (21), Adams; one small but healthy clump on *Salix* in swampy area, Aversley Wood 52/18 (31), Preston.
- 110.8 *O. rivulare*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 110.9 *O. sprucei*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 110.11 *O. cupulatum* a var. *cupulatum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991); on limestone rocks, Baluachdraich, 4 km S of Port Askaig, Islay 16/46 (102), Corley: b var. *riparium*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 110.18 *O. pulchellum*, willow on E bank of canal, Harefield 51/09 (21), Wiltshire; on *Salix* in waterlogged ground at upper end of lake, 45m alt., Newmillerdam, between Wakefield and Barnsley 44/31 (63), Blockeel 21/074.
- 111.3 *Ulota crispa* b var. *norvegica*, on sloping ash trunk in woodland, Morkery Wood 43/91 (53), Hodgetts 2561.
- 112.1 *Hedwigia ciliata*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 113.1 *Fontinalis antipyretica* c var. *gigantea*, submerged in water-filled brick pit, Farcet Brickpit, Peterborough 52/19 (31), 1988, Hodgetts 1361: d var. *cymbifolia*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 113.2 *F. squamosa* c var. *dixonii*, delete 63, the specimen (Hebden Water, leg. E.W. Bentley, 1972 (BBSUK)) is var. *squamosa*, det. Blockeel.

- 115.1 *Cryphaea heteromalla*, on elder in sheltered area below embankment at edge of loch, Beecraigs Country Park 36/07 (84), Saville, comm. Long.
- 116.1 *Leucodon sciurioides* a var. *sciurioides*, edge of tarmac path in churchyard, Tilbrook Church 52/06 (31), Hodgetts 2589.
- 118.1 *Pterogonium gracile*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 123.3 *Thamnobryum cataractarum* Hodgetts & Blockeel, 64 (Hodgetts & Blockeel, 1992), new species.
- 135.1 *Heterocladium heteropterum* a var. *heteropterum*, wet rocks in stream in woodland, near Linlithgow 26/97 (84), Wigginton: b var. *flaccidum*, basic sandstone rocks in woodland, near Linlithgow 26/97 (84), Wigginton
- 140.1 *Campylium stellatum* b var. *protensum*, marshy area, 50ft alt., East Walton Common, East Walton, King's Lynn 53/71(28), 1987, Stevenson.
- 140.3 *C. polygamum*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 141.2 *Amblystegium fluviatile*, on rocks in the Calder River, Almondbury Park, Livingston 36/06 (84), Wigginton.
- 141.3 *A. tenax*, wet rocks in ravine, Abhainn Bhail' Lochdaraich, 4km S of Port Askaig, Islay 16/46 (102), Corley.
- 141.4 *A. varium*, damp grassland on clay soil, 3m alt., waste ground, Hardwick Industrial Estate, King's Lynn 53/61 (28), 1991, Stevenson.
- 141.5 *A. humile*, place 13 and 14 in (), no record for more than 50 years (Rose *et al.*, 1991); wet banks of fishing lake in disused sand/gravel pit, Dunton Bassett 42/58 (55), Ballard.
- 142.2 *Platydictya jungermannioides*, in deep crevice between rocks on N-facing slope, Berneray 08/98 (110), Whitehouse.
- 143.1 *Drepanocladus aduncus*, on compacted mud and silt, 900ft alt., on edge of Alemoor Loch 36/31 (79), Corner; dune slack, c. 10m alt., Foveran Links, nr. Newburgh 48/02 (93), 1952, Birse, and NW-facing shore, c. 2m alt., Loch of Strathbeg, nr. St. Mary's Chapel, Old Rattray 48/05 (93), 1991, Birse.
- 143.5 *D. exannulatus* b var. *rotae*, in vegetation filling lochan, with *Calliergon* spp., 30m alt., Hill of White Hamars, South Walls, Hoy, Orkney 39/38 (111), 1991, Saville.
- 143.8 *D. uncinatus*, delete 112, all specimens traced (see Long, 1992) are referable to *Sanionia orthothecioides*, comm. Long.
- 143.9 *Sanionia orthothecioides* (Lindb.) Loeske, 110, 112 (Long, 1992), new to the British Isles.
- 144.2A *Hygrohypnum styriacum* (Limpr.) Broth., 96 (Corley & Rothero, 1992), new to the British Isles.
- 144.3 *H. luridum* a var. *luridum*, place 14 in (), no record for more than 50 years (Rose *et al.*, 1991).
- 147.4 *Isothecium striatulum*, limestone outcrops below Carreg Cennen Castle 22/61 (44), 1978, Perry (NMW).
- 149.3 *Homalothecium nitens*, in base-enriched springhead in unimproved acidic grassland, 320m alt., Reaps Moor, south of Longnor 43/06 (39), Wheeler.
- 150.4 *Brachythecium salebrosum*, base of Ash tree, 85m alt., Darwell Wood, N. of Netherfield 51/72 (14), Greven & Stern.
- 150.8 *B. starkei*, in irrigated grassland near burn in area of late snow lie, 960m alt., NE flank of Glas Maol above Caenlochan Glen 37/17 (90), Woolgrove, Woodin & Rothero, Rothero 92/040.

- 150.10 *B. reflexum*, in fern litter in block scree, corrie to N of Conival summit, W of Ben More Assynt 29/32 (107), Rothero, Blockeel et al., Blockeel 21/327.
- 153.3 *Cirriphyllum crassinervium*, on rock beside building, Baluachdraich, 4km S of Port Askaig, Islay 16/46 (102), Corley.
- 154.3 *Rhynchostegium murale*, on shaded limestone rocks, Baluachdraich, 4km S of Port Askaig, Islay 16/46 (102), Corley.
- 155.5 *Eurhynchium praelongum* b var. *stokesii*, in mixed woodland above chalk combe, The Warren, near Hawkley 41/72 (12), Crundwell; 150m alt., Tanners Linn, Whiteknowe Head Burn, St. Ann's 35/09 (72), 1991, Corner.
- 155.6 *Eurhynchium swartzii* b var. *rigidum*, place 14 in (), no record for more than 50 years (Rose et al., 1991).
- 156.1 *Rhynchostegiella tenella* b var. *litorea*, place 14 in (), no record for more than 50 years (Rose et al., 1991).
- 156.3 *R. teesdalei*, deep cleft in shale cliff, shore line between Foynes and Cooleen Point R/25 (H8), Wiltshire.
- 158.1 *Entodon concinnus*, turf in disused quarry, 150m alt., above Benthall Edge Wood, Ironbridge 33/60 (40), Matcham.
- 159.6 *Plagiothecium laetum*, on bole of Oak by woodland path, Benthall Edge Wood, Ironbridge 33/60 (40), Bates & Preston.
- 159.10 *P. nemorale*, in mature woodland, NE shore of Foynes Island, Shannon Estuary R/25 (H8), Wiltshire.
- 160.2 *Herzogiella seligeri*, decaying pine stump, 165m alt., Vernditch Chase, S. of Broadchalke 41/02 (8), Stern.
- 163.1 *Taxiphyllum wissgrillii*, wall of sea cave, with *Eurhynchium pumilum*, MacKinnon's Cave, Mull 17/43 (103), Hodgetts 2576.
- 166.1 *Platygyrium repens*, on field maple and hazel, 80 m alt., Pitton Copse, Clarendon Park, 41/23 (8), Stern; on dead fallen *Salix* in boggy woodland, 175m alt., Lurgie Loch 36/63 (81), Long 21693.
- 168.4 *Hypnum mammillatum*, branch of oak, 20m alt., Briddlesford Copse, Haven Street 40/59 (10), Stern.
- 168.6 *H. imponens*, place 14 in (), no record for more than 50 years (Rose et al., 1991).
- 168.9 *H. callichroum*, shaded rocks, 230m alt., Hartsgarth Burn 35/49 (80), Corner.
- 170.1 *Ctenidium molluscum* d var. *robustum*, on wet rock on crag, 400m alt., N-facing slopes of Sail Gorm, Quinag 29/13 (108), Blockeel 21/283.

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BRYOLOGY WORK GROUP OF THE ITALIAN BOTANICAL SOCIETY

On 7 December 1992 the Bryology Work Group of the Italian Botanical Society was created. Its main aim is to stimulate and to coordinate bryological research in Italy. In order to study the less well-known areas for the flora and its distribution, scientific meetings, courses and excursions will be organized. The coordinator of the Group is Prof. C. Cortini Pedrotti and the secretary Dr M. Aleffi, both from the Department of Botany and Ecology of Camerino University.

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