

BRITISH BRYOLOGICAL SOCIETY

PRESIDENT: PROF. P. W. RICHARDS

BULLETIN

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WARBURG MEMORIAL FUND

An award of up to £100 will be made in 1980. Botanists under 25 wishing to be considered for the award should write to the address below giving the following information:

1. Full name and address and date of birth
2. Education and examination record to date
3. Proposed further education
4. Short details of project involving travel, and an estimate of expenses and information relating to candidate's experience and other qualifications for carrying out the proposed work
5. Name and address of 2 referees to whom the Trustees may refer

Preference will be given to candidates who intend doing a project involving fieldwork. The successful applicant will be asked to submit a report on the work they have carried out as a result of the scholarship.

Applications must be lodged not later than 31 December 1979, and sent to:

The Secretaries, Warburg Memorial Fund, Botanical Society of the British Isles,
Department of Botany, British Museum (Nat.Hist.), Cromwell Road, London, SW7 5BD

REPORTS OF OFFICERS FOR 1978

(a) GENERAL SECRETARY'S REPORT

It is a pleasure to report that at the time of writing our membership stands at 519 (492 Ordinary & Junior, 9 Honorary and 18 Family Members) which is an increase of 38 on the total one year ago (45 new members joined during 1978). This is the first time since 1970 that the 500 mark has been topped and, more importantly perhaps, is the highest membership number achieved in the Society's history. The previous highest number was 510 quoted by the then Secretary, Dr. Dalby, in his annual report for 1970; but this number included 30 Institutional Members and 9 Exchange Members now excluded from our totals. Membership numbers (including Institutional and Exchange Members) were hovering around the 470-490 mark for the seven years 1971 to 1976, but in 1977, in spite of the fact that our 36 Institutional Members had been taken out by Blackwell's as subscribers and the 9 Exchange Members were not counted in the totals, the membership reached 481. This was the first major rise since the decline in 1971 when the subscription was raised from 35 shillings to £3.50. And the rise has continued to the present. Why a new generation of bryologists should suddenly have materialized is not known, but certainly during the last few years the Society has been more active than ever before and the word may have got round. It is gratifying to report that the present Ordinary subscription rate of £6.00 which has been in operation since 1975 does not need to be raised in the immediate future, in spite of ever-increasing printing costs.

I am sorry to have to report the deaths of two of our members, Mr. Alan Watson of Torpenhow, Carlisle and Mrs. A.L.K. King of Co. Dublin. Mr. Watson had joined the Society at the end of 1975 and put in an immediate appearance by attending the Taxonomic Workshop in Cardiff in the November of that year. Mrs. King had been a member for 25 years when in 1974 she wrote to me most apologetically that she felt she must resign from the Society because of her failing eyesight. She will be remembered as the most active bryologist for many years in the east of Ireland, and as the discoverer in 1957 of *Meesia tristicha* new to the British Isles in West Mayo. I wish also to report another sad loss, that of Mrs. Vivienne Glennie, who died during the year. She was on the staff of Blackwell Scientific Publications, Ltd., our publishers, and had worked in very close cooperation with our previous Editor, Dr. Whitehouse. It was much due to her skill in editorial procedures that Dr. Whitehouse was able to forge such an internationally renowned journal for the Society.

We had the usual rash of meetings in 1978 except that the AGM and Paper-reading meeting, and the Summer field meeting, were combined into an International Symposium and field meeting based on Bangor in August. This was an unqualified success, giving us a chance to meet some of our foreign members for the first time. Thanks are due to Jeff Duckett and Giles Clarke for the unenviable task of organization. The Spring meeting was based on Carmarthen and was organized with beginners in mind in that the more expert made a special effort to give instruction. A laboratory set up in the HQ proved to be such a resounding success that future organizers of field meeting might do well to try to arrange the same facili-

ties, if possible. Tom Blockeel arranged the Taxonomic Workshop in Leeds and thanks are due to Tony Smith and Martha Newton, the experts on this occasion, for instruction in identifying some difficult moss taxa.

The year saw the publication of the usual two parts of the Journal of Bryology and thanks are due to the two outgoing Editors, Drs. Whitehouse and Birks, and their replacement, Dr. Smith, for maintaining such high standards in this. Two Bulletins were also produced, and the Conservation sub-committee finalized the Code of Conduct which was distributed to all members.

The Officers of the Society have remained the same but we welcome George Geyman to the newly created post of Membership Secretary to which he was appointed at the AGM. I personally welcome the decision to create this post for, though I have enjoyed having a close relationship with the members, I will now be able to do my remaining duties more efficiently. I urge you all to make George's term of office as easy as possible.

It was a unanimous decision at the AGM that Professor William Steere be made an Honorary Member of the Society in recognition of his outstanding bryological work for nearly 50 years.

One of the major events of the year was the publication of Tony Smith's new great work The Moss Flora of Britain and Ireland for which his wife, Ruth, did the splendid illustrations. This will, without doubt, remain the standard work for many years to come, and congratulations are due to them both. Congratulations are also due to our Meetings Secretary, Jeff Duckett, who was appointed to the Chair of Plant Biology and Microbiology at Queen Mary College, London.

In concluding I wish to thank everyone who has had a hand in promoting the well-being of the Society and making 1978 a memorable year.

A.R. Perry,
March, 1979.

(b) TREASURER'S REPORT

Last summer I sold all our holdings in Unit Trusts, which yielded £2,631. All our capital is now invested in a National Savings Investment Account and, with accumulated interest, on March 25th amounted to £10,483. (Interest rate at present 12% p.a.).

1979 subscriptions have brought the balance in our current account up to about £2,300 and there are still about 180 subscriptions unpaid, i.e. about another £900 to come in. This should meet all our expenses for 1979.

INVESTMENT POLICY

We have never before had such a large capital sum at our disposal, nor has it before been all liquid. Council may therefore wish to consider what we should do with our money. Do we wish to accumulate more capital? Do we want to keep the present capital intact and use our investment income (for 1979 it will be about

£1,250) ? Or do we wish to run down our capital by keeping subscriptions down, supporting various projects or reprinting back issues of the Journal and Transactions ?

We should also consider how the capital is to be invested. In my view, Equities and ordinary Unit Trusts have no advantages for us - they are risky, yield a low income and are troublesome to manage.

There are two Unit Trusts which are specially managed to take advantage of the tax position of Charities - Charifund and Chari-bond. I have looked into the recent performance of these, which offer the prospect of small capital gains and the risk of small capital losses, and do not offer a particularly good rate of interest.

Probably the highest rate of interest (with security of capital) we can obtain would be in a local authority bond - circa 13-14%, but this would mean tying our capital up for 3-5 years.

In the coming year of uncertainty, it seems to me that a non-tax-paying society should forget possibilities of capital gains and go for as high an interest rate as possible whilst still keeping fund available at short notice. These criteria are met by a National Savings Investment Account and it is where I suggest we keep our capital, at least until the autumn Council Meeting.

SUBSCRIPTIONS

With two Bulletins and a Journal of Bryology of about 240 pages, our members are getting reasonable value for their £6 subscription.

The Society's outgoings consist of (i) our share of publishing the Journal, (ii) printing the Bulletin and (iii) miscellaneous expenses - circa £100 p.a. In general these expenses ought to be met by members' subscriptions and, in recent years, they have comfortably done so. It is difficult to predict in April 1979 whether a £6 subscription will meet the expenses of 1980 and, I suggest if they did not, for one year the shortfall could be met from our investment income. Thus, I would favour not raising the members' subscriptions for 1980 but being prepared to do so in 1981 - it will then have been held constant for six years.

W.D. Foster
April 1979.

(c) EDITOR'S REPORT

There was a curious lack of papers submitted for volume 10 part 1 of the Journal even though despatch to the printers was delayed until the end of January 1978. Since then there has been a steady flow of papers. Twenty-two papers were submitted for the 1978 parts of the Journal; two were rejected and the third has failed to reappear following a request for abbreviation. Members of the Editorial Board have been most helpful in refereeing papers and I would particularly like to thank Dr. H.L.K. Whitehouse for his assistance when I took over the editorship.

A.J.E. Smith,
6 March 1979.

(d) REPORT OF THE RECORDER FOR MOSSES

Work on the new Census Catalogue is proceeding steadily, and I have now examined material in all the major British herbaria except for MANCH. A large parcel of material from MANCH now sits on my desk awaiting examination, and when that is done, herbarium checking will be complete except for the herbarium of E.C. Wallace.

The pattern of records for the year is given in the Table. It has been distorted by 2 factors: publication of a great many "new" species that had been in the pipeline, and the absence of the Recorder in the U.S.A., which has meant that records made during the autumn have mostly not been included. To judge from the "old" species (ones included in Dixon's Handbook, including those given a lower rank there) there has been less recording than last year in Scotland; but this has been offset by a very welcome increase of recording in Ireland.

	Old spp.	New spp.	Vars.	Total
England	33	98	14	145
Wales	15	28	5	48
Scotland	18	64	2	84
Ireland	29	20	1	50
Total	95	210	22	327

I should like to express my thanks to Messrs Corley and Crundwell for help given on several occasions through the year.

M.O. Hill,
Ithaca, N.Y.
Jan. 1979.

(e) REPORT OF THE RECORDER FOR HEPATICS

There are 90 records in the 1978 list, a substantial decline on last year's exceptional figure of 140; but after the removal of records for newly added species, and species undergoing revision, the number of records remaining is 65, against 62 in 1977. It is encouraging that there has been a rise in the number of contributors of records from 19 in 1977 to 26 in 1978. The number of new records from B.B.S. meetings is exceptionally low, due to the amalgamation of the summer and paper-reading meetings, and the holding of the joint meeting in a well-worked area.

Mrs. Paton and Mr. Long have checked a number of specimens, and have sent in various amendments; I am extremely grateful to them.

M.F.V. Corley,
Feb. 1978.

(f) LIBRARIAN'S REPORT

Sales:	Census Catalogues	63 (all at half price)
	Transactions/Journal(parts)	79
	Library Catalogues	9
	BBS & MEC Reports	6
Loans:	34 items of books/separates,	2 loans of slides.

Kenneth J Adams,
Feb. 1979.

(g) BIBLIOGRAPHER'S REPORT

The number of entries in this year's two parts of the bibliography is somewhat higher than last year's, partly as a result of the Bordeaux Symposium volume which appeared during the summer. There is a strong and continuing interest in bryophytes as subjects for research. It seems that there is a growing appreciation amongst biologists as a whole of the kind of research topic for which bryophytes can give particularly useful data.

This year sees the publication of the Society's 50th list of recent literature. From now on the parts will be numbered for ease of reference.

G.C.S. Clarke,
Dec. 1978.

(h) CURATOR'S REPORT

194 mosses and 61 hepatics were received from the Recorders and have been incorporated. 454 packets have been sent out on loan to the following recipients: M.F.V. Corley (326), Miss V. McAdam (92), G.G. Geyman (20), M.O. Hill (8), Mrs. J.A. Paton (4), Dr. H.L.K. Whitehouse (2), P.M. Benoit (2). The extraction and replacement of large numbers of specimens, especially when numerous taxa are required, involves National Museum of Wales staff, notably Mrs. A.B. Pinkard, in a great deal of work. In order to cut down on this it would be helpful if members would visit Cardiff to extract loans personally whenever possible. Microscopes and bench space are available if required. The bryological section of the library contains most of the standard works.

S.G. Harrison,
March 1979

(i) REPORT OF THE MAPPING SECRETARY

During 1978 considerably fewer record cards than had been hoped for were sent in although from letters received it is evident that bryophyte recording is proceeding in some areas that I was unaware of. There is still, however, a desperate need to stimulate activity in many parts of Scotland. The request in the October Bulletin for members interested in participating in weekend excursions produced little response.

Several points arise from the publication of the provisional atlas:

(a) Although incomplete the maps reflect well the distributions of most species in Britain. This would suggest that to aim for the production of a complete atlas is a viable proposition.

(b) The format of the maps is a great improvement on that of previous atlases prepared by B.R.C. Something of this style should be aimed for for the complete atlas.

(c) Instances of missing or incorrect records suggest there should be some form of checking before maps are printed. The rough proofs produced by B.R.C. were not adequate to detect small inaccuracies. A number of vice-county records were omitted simply

because of the inadequacy of the information and the time involved searching 1" O.S. maps for obscure localities.

(d) Some mention should be made of the date the records were submitted for publication (i.e. 1975) as the implication is that the maps are complete to 1978.

I have been corresponding with B.R.C. about the production of a complete bryophyte atlas and the results are listed below. I hope to see Mr. Heath (now in charge of B.R.C.) to discuss matters in more detail with him soon.

(a) B.R.C. are prepared in principle to assist in the production of a Bryophyte Atlas.

(b) Publication of the Atlas could be a joint NERC/NCC publication.

(c) It would be necessary to transfer all records to summary cards for each 10 km square.

A.J.E. Smith,
March 1979.

(j) MEETINGS SECRETARY

In contrast to normal practice the Society held only three meetings in 1978. Instead of separate summer field and autumn paper reading meetings the two were combined into the First International Symposium organized by the Society. It was therefore particularly gratifying that over 100 members (including more than 20 from overseas) attended and the Society should seriously consider a similar venture in the not too distant future. The published proceedings of the Symposium entitled 'Bryophyte Taxonomy', should appear later this year.

As in previous years there was a good attendance at the spring meeting and special thanks are due to the local secretary for producing an extremely well organized programme. New and inexperienced members also expressed their pleasure for the help given them in the field. The taxonomic workshop is now well established as an annual event in the BBS calendar but it is becoming increasingly difficult to find experts to speak on new areas.

J.G. Duckett.
June 1979.

(k) CONSERVATION OFFICER'S REPORT

The main achievement of the Conservation Committee has been the publication of the Code of Conduct during the summer; copies were dispatched to all members with the last Bulletin. We are now continuing with our tasks of compiling all available information on the most rare species in the bryophyte flora of the British Isles and an accurate compilation of sites of bryological interest in Britain. Copies of the Code of Conduct have been sent to all field study centres and are in process of dispatch to biology and botany departments of all Universities, Polytechnics and Colleges with the request that they be given to staff responsible for field courses; it is hoped that this will discourage indiscriminate and large-scale collecting of the less common species. It is also

proposed to send copies to natural history museums. Further copies are available from the Conservation Officer at the following address:

School of Biological Sciences
Thames Polytechnic,
Wellington Street,
LONDON, SE18 6PF.

During the course of the year, the site of one endangered species of Barbula has been notified to the Nature Conservancy Council and satisfactory arrangements for the conservation of the habitat have been made.

P.D. Coker,
March 1979

PROCEEDINGS OF THE BRITISH BRYOLOGICAL SOCIETY

THE SPRING MEETING, 1978, CARMARTHEN

This was based on Carmarthen, S. Wales, from 5 to 12 April, and though towards the end of the week numbers dropped to about 12, there were 31 participants. Most of these stayed at the headquarters, Trinity College, Carmarthen, where excellent accommodation, food and other facilities were liberally provided. As local secretary I had decided to make a special effort to help beginners and less-experienced members on this meeting, and by arrangement with Trinity College set up a laboratory for our use. Members were invited to bring along their microscopes and other equipment for indoor work. The exercise was a great success and I thank many of the more experienced members for lending innumerable guiding hands throughout the week. The vice-county of Carmarthenshire (v.c. 44) was, except for a few localities in the east, poorly worked bryologically, and consequently under-recorded in the Mapping Scheme Situation Map (see J. Bryol. 10, 73 (1978)). The main aim of this meeting was therefore to improve this. All the localities mentioned below, unless otherwise stated, are in v.c. 44.

6 April. A wooded Carboniferous hillside with a north westerly aspect, Limestone Hill Wood, Crwbin (22/4612) is the locality of some locally rare vascular plants. Bryologically it proved very useful for the beginners though nothing of great interest was found. Habitats included a disused quarry (worked last about eight years before), limestone faces, scree and refuse from the quarry, limestone grassland and deciduous woodland. Some of the younger rock faces were not yet colonized, but older and more humid ones had Mnium stellare, Neckera crispa and Reboulia hemispherica. In the turf grew Climacium dendroides, Dicranum bonjeanii and Rhodobryum roseum and Pseudoscleropodium purum with sporophytes was noted. The epiphytes were not very good, but included Zygodon baumgartneri and Bryum flaccidum.

We moved to Mynydd Llangyndeyrn (22/4813) after a pub' lunch. Here the acid gritstone outcrops were obviously influenced by the active limestone quarrying nearby because they had a curious assemblage of species: Andreaea rothii and Ptychomitrium polyphyllum

growing cheek by jowl with Encalypta streptocarpa and Tortella nitida. After a short walk-about the party left for The Moat, Llandry (22/4305), a farm standing on Lower Coal Measures and unusual in that only a small proportion of it had been cultivated by its conservation-conscious owner. Though nothing of outstanding interest was found, a reasonably good list of species was recorded and we were able to compare Metzgeria temperata, only recently reported for Britain, with M. fruticulosa s.s. Pembrey Country Park and beach (c. 22/3900), a dune system now much-modified by Man for the recreative population and an adjoining disused railway line (22/4101), were worked next and the usual psammophiles seen, together with Bryum dunense, Campylopus introflexus and Drepanocladus aduncus. Further halts were made on the way back to Carmarthen. Martin Corley spent the day on the coast between Amroth and Marros Sands (22/1907) and produced a valuable list of species including Weissia perssonii.

7 April. The Welsh National Water Development Authority had been told of our proposed trip to Llyn y Fan fach in the Black Mountains and we were met by one of its employees, who opened locked gates and allowed us to park at 22/804228. Some of the less vigorous were then given a lift in the WNWDA landrover nearly to the llyn. One party examined the waterside rocks which were found to be very dreary, and then the Old Red Sandstone cliffs above. The wind whipped coldly off the llyn and there were icicles and sheets of thin ice all over Bannau Sir Gaer, making the going treacherous; however, Martin Corley detected Barbula ferruginascens. The rock is basic in places and here supported such vascular plants as Sedum rosea and Asplenium viride and also the best bryophytes. To the east of the llyn the rocks had Amphidium lapponicum, Gymnostomum calcareum, Pohlia cruda, Seligeria recurvata, Leiocolea heterocolpos and Scapania aequiloba. Alan Crundwell found Grimmia stirtonii on a rock in the moorland by Afon Sychlwch. Vice-county 42 was entered by Rod Stern and George Bloom after ascending the escarpment and walking over the Nardus-plateau on top. In an attempt to get warm Peter Pitkin made a rapid circuit of Llyn y Fan fach and returned to the parked cars, working down the Afon Sawdde. Here he found some interesting flushes and recorded Moerckia flotowiana. The territory to the west of the llyn was worked by Mark Hill and Martin Corley who followed Afon Mihertach down from Carreg yr Ogof. They obtained a good field recording card, with 145 species.

8 April. We were joined by Helen Ramsay on our trip to Pembrokeshire. The main locality was Tycanol Wood (v.c. 45: 22/0937), an SSSI noted for its rich lichen and fern floras. It is a sessile oak wood with many shaded and exposed tors of quartzite-dolerite. In some places sluggish streams are choked and flood over the woodland floor creating marshy communities with willows and Sphagnum. In such a place Peter Pitkin dug up Cryptothallus mirabilis. The epiphytic communities were very dry - March to May is perhaps the driest time of the year in this part of Wales - but the rock outcrops and boulders kept us occupied and had Dicranum scottianum, Hedwigia ciliata, Hypnum mammillatum, Rhabdoweisia fugax, Plagiochilla killarniensis and Scapania umbrosa.

A small party visited Llannerch alder carr, a West Wales Naturalists' Trust reserve (v.c. 45: 22/057353), probably the best example in Pembrokeshire of a mature alder carr, providing an abundance of rotten stumps and fallen trees. The epiphytes were

rich, with several species of Orthotrichum and Ulota. Plagiothecium latebricola grew on a sedge tussock. Another WWNT reserve, Cwm Felin-y-Gigfran (v.c. 45: 22/117373), was looked at by the main party. This is a steep slope in the Nevern valley with craggy outcrops of intrusive Ordovician rocks which, however, were dried to a frazzle. Nevertheless, the riverside trees and large boulders in the river were fruitfully searched and yielded Orthotrichum stramineum, Scleropodium cespitans, Lophocolea fragrans and Porella pinnata. On the same day lists were also made by one party for Pencelly forest (v.c. 45: 22/1139), and by another for Afon Cych (v.c. 44: 22/23).

A Council Meeting was held in Trinity College during the evening.

9 April. Though this day was 'free' most people joined into one party and visited the localities offered in the programme. In the morning Wern-ddu farmland (22/375179) was worked. Here, Cephalozia turneri was demonstrated on a roadside bank. The stream was followed north-westwards through wet woodland with slightly basic sandstone outcrops and Fissidens celticus and Trichocolea tomentella were noted. Moorland with Molinia was crossed and Llanllwch Mire (22/3618), described by some as the most impressive raised bog in South Wales, reached. Until recently this had been threatened by tipping by Carmarthen Corporation. Nine species of Sphagnum, Cephalozia connivens, Lepidozia sylvatica, Mylia anomala and Riccardia latifrons were noted, but the area had been subjected to drainage and drought. The area of bog on the north side of the railway line was found, in a cursory examination, to be wetter, though nothing bryologically exciting was seen. Later, Beacon Bog, Llangynog (22/355165), an actively growing basin mire with the typical pool and hummock facies, was visited. Here a very similar species list to that obtained at Llanllwch was made. Cladopodiella fluitans was abundant. Other localities visited during the day by various parties were Giust Point, Laugharne Sands (22/3107) which is mostly M.O.D. property so out-of-bounds, and woods north of Llanybri (22/3313).

10 April. The main excursion was to Dynevor Park (22/6122). Here the woods and deer park are of national importance for the fauna of dead wood for it is one of the few remaining sites in Wales that dead wood is not cleared. Lichenologically its ancient oaks are very important, with numerous rarities. But, though over 100 bryophytes were noted, none was very exceptional. The internationally famous Ordovician limestone outcrops below the Park had Porcella laevigata and it was in the rubble below them that Jean Paton, using what can only be described as a micrometerized hand lens, detected Plagiochila britannica (see J. Bryol. 10, 245-56 (1979)). The Castle Woods, adjoining the Park, were also explored, as was the castle itself. Alan Crundwell turned up Bryum donianum in a lanebank near Dynevor Park. A small party visited Allt y Wern oak woodland (22/580216), an SSSI with huge oaks, but found it very dry and bryologically disappointing.

In the afternoon Cwm Cib Farm (22/653217), which had an oak/ash wooded valley, was found to be perhaps the best area for beginners that we visited during the week for it had large quantities of the larger, commoner bryophytes such as Hookeria lucens, Rhytidiadelphus loreus and Chiloscyphus polyanthos. Pastureland was also examined and the more aesthetic Dicranella schreberana, D. staphylina and Ephemerum serratum var. minutissimum found. Then we were invited

into the farmhouse for warming cups of tea. On the way back one party, with darkening sky overhead and in flurrying snow, stopped to look at the bank of the Afon Tywi at White Mill (22/4621). But although Epipterygium tozeri was noted in fair quantity a minor blizzard quickly developed and sent us scurrying back to the car.

11 April. The day broke with 2 cm. of snow on the ground and we questioned our mental faculties. However, we arrived at Green Castle (22/3916) undaunted and followed a rocky stream with clayey banks down through deciduous woodland to the Afon Tywi, carefully examining beds of Fissidens as we went. Fissidens celticus occurred in several places and many bryophytes were fertile, for example Amblystegium tenax, Thamnobryum alopecurum, Calypogeia fissa and Conocephalum conicum. Lower down in the wood the rock became softer and slightly less acid with a corresponding change in the plant communities. Afterwards Sir John's Hill, Laugharne (22/3010) was worked. This is a wooded scarp on Old Red Sandstone on the doorstep of Dylan Thomas' birthplace. Pohlia lutescens, Rhynchostegiella teesdalei and Lophocolea fragrans were noted here. Later, Honey Corse (22/282091), a hill of Carboniferous limestone with scrubby woodland of blackthorn and hazel, was explored. Elders abounded and were richly covered with epiphytes, and the boulders had great quantities of Brachythecium populeum, Cirriphyllum crassinervium and Isothecium myurum. Chris Preston, on a solo expedition to the Afon Teifi and woods near Henllan (v.c. 46: 22/3540) turned up perhaps the most exciting bryophyte of the whole week - Cryphaea lamyana - on an ash trunk by the river, previously known in the British Isles only from E. Cornwall and Devon. This discovery extended its known range in Britain by 120 km northwards.

Thus ended a very friendly meeting, made possible by generous landowners, organizations and local authorities who freely gave of their time to help the Society and permission for our visits. It was very gratifying to note the genuinely keen and conscientious way in which everyone, beginners and experts alike, helped with field recording. This enthusiasm resulted in record cards being made for 19 10km grid squares. However, much still remains to be done in the area: some of the cream was sampled, but much of it, and all the milk, still remains.

I thank all those who sent me lists of bryophytes they recorded on the meeting which have been so valuable in the preparation of this account.

A. R. PERRY.

MINUTES OF THE ANNUAL GENERAL MEETING, 1978.

Minutes of the Annual General Meeting held at 1630 hrs on Saturday 19 August, 1978 in the School of Plant Biology, University College of North Wales, Bangor.

PRESENT: Prof. P.W. Richards (President - in the Chair) and 42 other members.

CONDOLENCES: It was announced that our members Mme. V. Allorge and Mrs. A.L.K. King had died.

(1) APOLOGIES: Apologies for absence received from Dr. A.L.D. Bebbington, Dr. W.D. Foster and Mr. S.G. Harrison.

(2) MINUTES: The Minutes of the Annual General Meeting held on 1 October, 1977, in Beaumont Hall, University of Leicester, were approved and signed.

(2') HONORARY MEMBER: Prof. W.C. Steere was unanimously elected to Honorary Membership of the Society.

(3) MATTERS ARISING:

(a) SUBSCRIPTIONS TO LEARNED JOURNALS: Reported:- That the Society had renewed its subscriptions to the Revue Bryologique and the The Bryologist. And that it was proposing to subscribe to Journal of the Hattori Botanical Laboratory.

(b) READING CIRCLE: Resolved:- That we thank Mr. Brian O'Shea for his work in resurrecting the Reading Circle which was now in a thriving state.

(4) OFFICERS' REPORTS FOR 1977:

(a) SECRETARY'S REPORT: The Secretary reported a healthy membership number of about 480 by the end of March, 1978, but of these about 100 had still not paid up for the current year. Members were reminded that subscriptions become due in January each year, and foreign members were again asked to pay not by girocheque but in £ sterling. He welcomed as distinguished new members to the Society since the beginning of the Symposium Drs. Carrothers, Neidhart and Norris and was pleased to report that Dr. Héban had rejoined the Society after a period of hibernation. The President announced that Council had decided that the Secretaryship had become a very onerous duty and that the work of the Secretary would be lightened if Membership aspects were dealt with by someone else. Council had therefore agreed to create a new post of Membership Secretary and had asked Mr. G.G. Geyman to take on these duties. This Mr. Geyman had agreed to do. He was presented to the A.G.M. and was duly elected.

(b) TREASURER'S REPORT: In the Treasurer's absence the Secretary reported that there was no intention to raise the membership subscription in 1979 but that eventually an increase in subscriptions would be essential to meet ever-rising printing costs. However, it was Council's intention to delay making an increase as long as possible.

(c) EDITOR'S REPORT: Dr. Smith reported that the previous Editor, Dr. Whitehouse, had completed all outstanding parts of the Journal and that vol. 10 part 2 would appear either in December or January.

(d) REPORT OF RECORDER FOR MOSSES: Mr. Hill said that the announcement of the intention to produce a new Census Catalogue had brought in a lot of new records in 1978.

(e) REPORT OF RECORDER FOR HEPATICS: Mr. Corley announced a similar increase in the number of new hepatic records. He thought the new Census Catalogue would be ready for publication about 1980.

(f) LIBRARIAN'S REPORT: Dr. Adams requested that members ordering publications from the Library should not send cash with their orders. He reported that xeroxing requests were now more numerous than before, and there would be correspondingly longer waits.

(g) REPORT OF THE BIBLIOGRAPHER: Dr. Clarke requested members to send him notices of any bryological literature in obscure publications.

(h) REPORT OF THE CURATOR: Mr. Harrison had written to point out that requests to borrow large numbers of specimens from the Herbarium required a great deal of work in extraction and replacement; it would help if members would visit Cardiff to extract loans themselves whenever possible. In answer to a question from the floor the Secretary confirmed that the abbreviation BBSUK for the Society's Herbarium had been accepted by Index Herbariorum.

(i) REPORT OF THE MAPPING SECRETARY: Dr. Smith said there had been a good response to his request for field records for the mapping scheme. He asked members to let him know where they intended recording so that he had a picture of the position.

(j) REPORT OF THE MEETINGS SECRETARY: Dr. Duckett said that over the last year the summer meeting had been poorly attended but the others were well attended. Mr. Wanstall from the floor suggested that we should consider September in order to avoid family holidays if another meeting such as this Symposium be arranged. The President said that the Carmarthen meeting in spring had been a success because beginners were given particular help.

(k) REPORT OF CONSERVATION OFFICER: The President announced the completion of the Code of Conduct which would be distributed with the next Bulletin. He said the Conservation Committee had been collecting data on rare or decreasing species.

(5) ELECTION OF THREE MEMBERS OF COUNCIL: Three new elected members were required to fill vacancies that would become available at the beginning of January, 1979, due to the retirement of Drs. Bebbington and Newton and Mr. Synnott. Four nominations had been received, viz. Mr. M.V. Fletcher, Dr. P.H. Pitkin, Mr. C.D. Preston and Mr. R.G. Woods. Voting slips were handed out and the following three were duly elected to serve for two years from 1 January, 1979: Mr. Fletcher, Dr. Pitkin and Mr. Woods.

(6) PLACE AND DATE OF THE ANNUAL GENERAL MEETING, 1979: It was agreed that this should be in Manchester, 22 September, 1979, with Dr. Martha Newton acting as local secretary.

(7) OTHER MEETINGS IN 1978, 1979 AND 1980:

(a) TAXONOMIC WORKSHOP, 1978: This would be on 11-12 November in Leeds University with Mr. T. Blockeel acting as local secretary. Suggestions for guest speakers were requested.

(b) SPRING MEETING, 1979: This would be 4-11 April and based on Ludlow with Mr. M. Pearman acting as local secretary. He had already arranged accommodation.

(c) SUMMER MEETING, 1979: This would be between 18 August and 1 September in Ireland, with Mr. D. Synnott acting as local secretary. The first week will be based on Limerick where good contributions to the mapping scheme can be expected to be made, and the second week in the Glengarriff area, the hunting ground of Miss Hutchins.

(d) TAXONOMIC WORKSHOP, 1979: Reading or London were considered for this.

(e) SPRING MEETING, 1980: Pembrokeshire or Bedfordshire were considered.

(f) SUMMER MEETING, 1980: Co. Durham was suggested as a possibility for this.

The Secretary made the suggestion that more weekend recording meetings might be organized in order to work poorly-known areas. It was agreed that Dr. Smith should prepare a list of such areas and ask various people to lead day or weekend meetings in them.

(8) ANY OTHER BUSINESS:

SYMPOSIUM VOLUME: It was announced by Dr. Clarke that a special Symposium volume was to be produced and that though the price was as yet unknown, all members of the B.B.S. and of the Systematics Association would be entitled to a 25% reduction.

The Meeting ended at 1727 hours.

A.R. PERRY.
General Secretary,
October, 1978.

THE SUMMER MEETING, 1978, BANGOR, NORTH WALES

The summer meeting followed immediately after the Symposium on Modern Approaches to Bryophyte Systematics, and was much better attended than usual, with perhaps 50 participants on the first excursion, dropping gradually to the more manageable number of 15 or so on the last. The Bangor area is well known bryologically, and we did not expect to make many new finds. However, numerous useful records were made for the mapping scheme, and there were even a few new vice-county records, including Seligeria brevifolia new to Britain.

Sunday 20 August. The first excursion was to the old slate quarries at Talysarn, an area of industrial dereliction with mossy old tracks, walls and waste heaps. We were dismayed, therefore, to find not old tracks and walls when first we arrived, but a great sea of slate rubble in the process of being "landscaped" by the authorities. With trepidation we set out across this great grey ugliness, threading our way among vast bulldozers, which threatened to landscape us as well as the slate. All bryologists got through safely, and most were rewarded with a copious array of bryophytes, including several that were uncommon - e.g. Campylopus subulatus, Philonotis arnellii, Diplophyllum obtusifolium, Marsupella funckii and Riccia warnstorffii. Unfortunately, some participants got left behind, and were deterred by a notice "private, keep out, beware guard dogs" daubed on a wall, with the result that they missed the better ground. However, this inauspicious start was soon put to rights in the afternoon, where warm and sunny weather attended us on the crags of Craig Cwmduelyn. There were several Atlantic species to be seen, including Campylopus setifolius, Dicranum scottianum, Barbilophozia atlantica, Douinia ovata, Gymnomitrium crenulatum and Plagiochila punctata. Those who felt in need of a further dose of the Atlantic went to Llwyn-coed Wood near Cymyglo, where they saw Anastrepta orcadensis, Drepanolejeunea hamatifolia, Metzgeria temperata and Plagiochila spinulosa.

Monday 21 August. This day was scheduled for Snowdon, but the weather was not too good. Indeed, it was rather bad, and had we known that our two Spanish participants would take the train to the top of Snowdon we should have sung "Farewell and adieu to you fine Spanish Ladies" in most doleful tones, for fear that they would not return. The majority of the party set off to go up Cwm Glas Mawr, and got unpleasantly steamed up in the drizzle.

Several plants of interest were seen near Llyn Glas, including Amphidium lapponicum, Andreaea alpina, Seligeria brevifolia, Tetradontium brownianum, Bazzania tricenata, Eremonotus myriocarpus, Herberta adunca, H. straminea, Hygrobiella laxifolia, Marsupella ustulata and Porella cordaeana. In search of better weather the party descended to the lowlands early, and went to Tyn-y-Maes by the Afon Ogwen above Bethesda. A number of interesting plants were seen, including Ulota hutchinsiae, Barbilophozia atlantica and Lepidozia pinnata.

Tuesday 22 August. The day due to be spent on Anglesey started wet, and as we sat in our cars at Newborough Warren we contemplated the dankness of an Atlantic climate. No sooner had we stepped out, however, than the rain abated, and we had a very pleasant morning, made particularly agreeable by beautiful displays of Pyrola rotundifolia and other flowers among the dunes. The bryophytes included several uncommon species in large quantity, e.g. Campyllum elodes and C. protensum in almost every slack, Catoscopium nigrum more local but very abundant in some slacks, and Tortella inclinata in great profusion on drier ground. In addition there were smaller quantities of Barbula reflexa, Drepanocladus lycopodioides, Rhynchostegium megapolitanum, Moerckia flotowiana, Petalophyllum ralfsii and Riccardia incurvata. The Petalophyllum was notably scarce, and was only found after careful searching; presumably it must go underground in the summer, as it can be locally abundant in other seasons. Tortula ruraliformis c. spor. was found growing intermixed with T. ruralis, and was distinct, in habit, stature and colour. The large size of the spores (16-19 µm) suggests that it may be worth more than the varietal or subspecific rank accorded to it by recent authors (e.g. Düll, 1977; Smith, 1978). A rapid dash to see the Aberffraw rarities was followed by a visit to the woods by Plas Lligwy on the other side of the island. Walls by the house produced Tortella nitida, and a limestone outcrop in the woods was clothed with a really admirable profusion of Marchesia mackaii. Other limestone species included Isoetium striatulum, Scorpiurium circinatum and Taxiphyllum depressum.

Wednesday 23 August. The party went to Tanygrisiau near Blaenau Ffestiniog, and explored the area around Llyn Cwmorthin. Pseudobryum cinclidioides and Scapania paludosa were found growing together in a flush; Leptodontium flexifolium, Marsupella ustulata and Scapania umbrosa occurred on moorland and among rocks. But the area did not hold our interest, and we moved on to the gorge of the Afon Cynfal at Rhaeadr y Cwm. The sides of the gorge were steep and difficult to work, but proved rewarding, with Anoetangium warburgii (male), Barbula ferruginascens, Oedipodium griffithianum, Cololejeunea calcarea, Colura calyptrifolia, Eremonotus myriocarpus and Leiocolea bantriensis.

Thursday 24 August. Undeterred by the dreary conditions we had experienced on Snowdon, we set out for the gloomy cliffs of the Black Ladders (Ysgolion Duon). Attractive higher plants were notably abundant on ungrazed ledges, but the rock was perhaps a little too hard to be really outstanding for bryophytes. Nevertheless, many plants of interest were seen, including several that had been found in Cwm Glas Mawr, and also Dicranum blyttii, Hypnum callichroum, Isoetium myosuroides var. brachythecioides, Plagiothecium denticulatum var. obtusifolium, P. platyphyllum, Splachnum sphaericum, Tetraplodon mnioides, Calypogeia trichomanis, Cephaloziella pearsonii, Marsupella adusta, Radula lindbergiana (female), Scapania scandica, S. uliginosa and Sphenolobus minutus.

Friday 25 August. In the morning we set out to "do" the rarities of the Conway Valley for our overseas visitors, and Jeff Duckett succeeded in showing them Ditrichum plumbicola, Fissidens monguillonii, Myrnia pulvinata and Orthotrichum sprucei in quick succession near Trefriw. Then we went to Coedty Reservoir above Tal-y-bont, where there was a most attractive riparian community of a type not infrequent in Scotland but very rare in Wales, including Archidium alternifolium (abundant), Bryum bornholmense, Hypnum lindbergii, Pohlia camptotrachela, P. drummondii, Haplomitrium hookeri, Riccardia incurvata and Riccia sorocarpa. Finally we went to look at the ravine of the Afon Dilyn, where Aphanolejeunea microscopica grew on rocks by the waterfall; but the other species were mostly ones we had seen on previous days.

All in all, the meeting was a most successful one, and a fitting sequel to the symposium. It was particularly pleasant to have so many overseas visitors on the excursions, as they looked at our plants with fresh eyes. Anthelia julacea, Breutelia chrysocoma, Eurhynchium swartzii, Heterocladium heteropterum, Hyocomium armoricum and Leptodontium flexifolium became objects of special interest, instead of "just those common things again". That was a real pleasure. It would be good now if more British bryologists would go overseas to give foreign bryologists the reciprocal pleasure. If the foreigners can take the trouble to come here, then surely we also should take the trouble to range more widely than in the past.

M.O. HILL

TAXONOMIC WORKSHOP, 1978

The fifth taxonomic workshop was held on Saturday, 11 November in the Botany Department of the University of Leeds, and was followed on Sunday, 12 November by a field excursion to the Hebden valley and Hardcastle Crag near Hebden Bridge in the metropolitan district of Calderdale (v.c. 63).

Some fifteen members attended the workshop session in the University, and heard first Dr. M.E. Newton discuss the problems of sterile Brachytheciaceae. Dr. Newton gave hints on distinguishing species which might be confused with this family, and stressed the importance of the nerve projection on the dorsal side of the leaves of Eurhynchium spp. as a character separating them from their former congeners now placed in Rhynchostegium and Rhynchostegiella. Advice was given on the problems of several groups of superficially similar species within the family. After lunch, Dr. A.J.E. Smith outlined some important key characters helpful in the identification of Schistidium, Grimmia, Bryum, Mnium and Plagiothecium spp. During both morning and afternoon much useful work was done and many ideas swapped as members examined specimens under the microscope.

All are indebted to Prof. H.W. Woolhouse for permission to use the facilities of the Botany Department, to Dr. D. Bartley and Mr. G.A. Shaw for their invaluable assistance in making arrangements at the University, and to Dr. Newton and Dr. Smith for so readily giving us their time and advice.

Eleven enthusiasts gathered on an overcast morning to examine the bryophyte flora of Hardcastle Crag. This well-known beauty spot

may justifiably be described as the best remaining locality for bryophytes in the much urbanised vice-county of South-West Yorkshire. The Hebden Water cuts a deep north-south gorge in the millstone grit moorland, and exhibits the characteristic southern Pennine clough flora, generally calcifuge but with local basiculous elements. The locality was well known to the Todmorden botanist John Nowell, who discovered Atrichum crispum here in one of its earliest sites.

On banks by the small stream and in adjacent pasture below the Greenwood Lee car park were found Nardia geoscyphus, Sphagnum russowii, Pohlia lutescens* and P. lescuriana*. Inside the woods, the party descended via the main track and observed en route Schistostega pennata in a hollow among gritstone on the trackside bank, Dicranodontium denudatum covering an old log, and fine Scapania umbrosa on the damp blocks of a wall and some old steps. On the rocks in and by the river, Atrichum crispum and Marsupella emarginata were among the species noted, with Sphagnum quinquefarium on a nearby bank. Eventually the river was crossed and the party reached the streamlet where Jubula hutchinsiae was discovered by James Needham in 1896. Many members were surprised to see that most of the material here is fully aquatic, its glaucous tufts clearly distinct from the accompanying Chiloscyphus. Several small patches were seen, but the species can scarcely be described as abundant, as it has been on previous occasions.

The next area visited was the riverside cliffs north of Gibson Mill. These produced, inter alia, Saccogyna viticulosa, Tetradontium brownianum, Seligeria recurvata, Blindia acuta, Gymnostomum aeruginosum, Amphidium mougeotii, Bryum sauteri* and Heterocladium heteropterum. However, owing to a torrential downpour and very poor light conditions, some species known to occur here were missed, including Lejeunea lamacerina, Bartramia ithyphylla and Isopterygium pulchellum. Nowellia curvifolia was a nice find on logs here in the home country of its eponymous finder.

By now only five of the original group remained, their optimism rewarded by some improvement in the weather. There was no time to investigate the upper reaches of the gorge (with Andreaea crassinervia and Mylia taylori), nor the Blake Dean area, where a little Solenostoma caespiticium had been seen three weeks earlier by the local secretary. Instead the party ascended the east bank, where one member was sufficiently lynx-eyed in the gathering gloom to spot Bazzania trilobata*, the first v.c. record this century and confirmation of an old record. The final stop of the day was at a small but remarkable outcrop of calcareous grit, whose bryoflora was in total contrast to the adjacent and typical millstone grit. The principal species were Lejeunea cavifolia, Cololejeunea calcarea, Fissidens cristatus, Tortella tortuosa, Schistidium apocarpum, Zygodon viridissimus var. stirtonii, Neckera crispa, Homalothecium sericeum and Ctenidium molluscum.

The final ascent from the woods was made in gale-like conditions with driving rain; the clouds and dusk descending among the trees gave an aspect of wilderness to the gorge below. Yet few of those present could have failed to observe the effects of atmospheric pollution. Those optimistically scrutinising old elder found only a limited community dominated by Orthodontium lineare; the once rich epiphytic flora, including Ulotia drummondii, collected in 1834, has long been extinct.

T.L. BLOCKEEL

FUTURE MEETINGS OF THE SOCIETY

(a) Summer Field Meeting, 1979: Ireland, 18 August - 1 September.
Local Secretary: Mr. D. Synnott, National Botanic Gardens,
Glasnevin, Dublin 9, Eire. Full details in Bulletin 33, 2 (1979).

(b) Annual General Meeting and Paper-Reading Meeting, 1979:
Manchester University, 21-23 September. Local Secretary: Dr. M.E.
Newton, Shaw Bank, 143 Mottram Old Road, Stalybridge, Cheshire,
SK15 2SZ, and Department of Genetics, University of Leeds, LS2
9JT.
Accommodation has been reserved in a Hall of Residence, Hulme Hall,
where lectures will also take place. All rooms are fitted with
washbasins. Costs for accommodation are:-

Inclusive cost for the whole weekend (Fri. evening -
Mon. morning - £23.47. Bed and breakfast - £4.54.
Lunch - £1.81 (packed on Sunday £1.13). Dinner - £2.15.

Since we have to book in advance please contact Dr. Newton for
full details and booking forms which must be returned not later
than 31st August 1979. Meals will be available to those who are
not staying at Hulme Hall but these must also be booked in advance.

The Paper-reading meeting will take place on 22 September in Hulme
Hall. Amongst those who have agreed to speak at this meeting are:-

Mr. L.P. Nyman and Dr. E.G. Cutter (Manchester University);
"Control of bud on growth in the gametophore of Plagiomnium".

Professor D.J. Cove (Leeds University):
"Genetical and morphogenetical studies on Physcomitrella
patens".

Mr. P.M. Hayward and Dr. R.S. Clymo (Westfield College,
London University):
"The growth of Sphagnum; effects of environment".

Dr. C. Gliddon (University College of N. Wales, Bangor):
"Studies of the population biology of Pellia species".

Dr D.H. Brown and Dr G. Buck (Bristol University):
"The cation content of bryophytes".

The ANNUAL GENERAL MEETING will take place on 22 September, 1979
at 1650 hrs in Hulme Hall, Manchester University.

ANNUAL GENERAL MEETING, MANCHESTER, 1979

A G E N D A

1. Apologies for absence
2. Minutes of the last A.G.M., Bangor, 1978 (see pp.12-14 of this
Bulletin)
3. Matters arising

4. Officers' Reports for 1978 (see pp.2-8 of this Bulletin)
 - a) General Secretary
 - b) Treasurer
 - c) Editor
 - d) Recorder for Mosses
 - e) Rbcorder for Hepatics
 - f) Librarian
 - g) Bibliographer
 - h) Curator
 - i) Mapping Secretary
 - j) Meetings Secretary
 - k) Conservation Officer
- 5 Election of Officers, 1980-81
 - a) Vice-President
 - b) Officers (all are due for re-election as from 1.1.1980)
6. Election of three members of Council (Dr. Harrington, Mr. O'Shea and Mr. Pearman retire at the end of 1979)
7. Place and date of Annual General Meeting, 1980
8. Other meetings in 1979, 1980 and 1981
9. Any Other Business

After dinner there will be a reception. Members who would like to display exhibits should contact Dr. Newton regarding their requirements for space and facilities.

Sunday 23 September. Field excursion to the Cheesden Brook between Bury and Rochdale. Discelium nudum grows in abundance in this area.

(c) Taxonomic Workshop 1979: Queen Mary College, University of London; 27-28 October.

This meeting will be held at the University's field station at Dytechleys near Brentwood which has well equipped laboratories and accommodation for those wishing to stay overnight on the Saturday.

Local Secretary: Mr. P.J. Wanstall, Dept. of Plant Biology and Microbiology, Queen Mary College, Mile End Road, London E1.
Telephone number: 01-980 4811.

The topics this year will be: Dicranum, Dicranella and Ditrichum and the identification of arable field bryophytes.

As at previous workshops the first day will be devoted to the handling of material (freshly collected in the vicinity of the field station) and will be followed by a day in the field. The meeting has been especially arranged to assist beginners and those who lack confidence in naming and examining bryophytes. Intending participants should write to Mr. Wanstall for further information.

(d) Spring Field Meeting, 1980: Dyfed. Local Secretary: A.R. Perry. Full details in next bulletin.

(e) Summer Field Meeting, 1980: Durham. Local Secretary: Rev. G.G. Graham.

LIBRARY SALES & SERVICE, 1979

Members wishing to borrow papers from the Library should indicate when a xerox copy would do instead of the original. With bound journals this would save enormously on postage. The cost of xerox copies is 5p per exposure. It should be noted that the Librarian is under no obligation to supply xerox copies but is willing to do so while xeroxing facilities are available.

Members wishing to consult items in the Library in person are asked to contact the Librarian (Tel: 01 508 7863), at least three days in advance. The nearest underground station is Loughton on the Central Line.

FOR LOAN:

(a) Approximately 200 bryological books, bryological journals and several thousand reprints of individual papers. Catalogue to the books and journals available from the Librarian, price 10p.

(b) Transparency collection, list available (S.A.E.). 624 slides in the collection. Loan charge 25p plus return postage. Only 50 slides may be borrowed at once to minimise possible loss.

FOR SALE:

Moss Exchange Club Reports for 1902 (5p).

British Bryological Society Reports: Limited stock. 1927 (13p), 1944/5 (25p)

British Bryological Society Bulletins: All back numbers 40p each.

Transactions of the British Bryological Society:

- Vol. 1 parts 1-5 (£1.60 each)
- Vol. 2 parts 1-4 (£3.00 each)
- Vol. 3 parts 1-5 (£3.00 each)
- Vol. 4 part 1 (£3.00), part 2 (£1.50), parts 3-5 (£2.00 each)
- Vol. 5 part 1 (£2.00), parts 2-4 (£3.00 each)
- Vol. 6 part 1 (£3.00), part 2 (£4.00)

Volume 6 part 2 completes the series of Transactions. Volume 7 part 1 continues the series but is renamed Journal of Bryology.

- Vol. 7 parts 1-4 (£2.50 each)
- Vol. 8 parts 1 & 2 (£3.00 each), part 3 (£3.50), part 4 (£5.00)
- Vol. 9 parts 1 & 2 (£4.50 each), parts 3 & 4 (£6.00 each)
- Vol. 10 parts 1 & 2 (£7.00 each)

Census Catalogues:

- | | | |
|---------------|--|-----------|
| Duncan, J.B. | Census Catalogue of British Mosses, 2nd edition 1926 | (13p) |
| Sherrin, W.R. | Census Catalogue of British Sphagna. | 1946 (5p) |
| Paton, J.A. | Census Catalogue of British Hepatics, 4th edit. 1965 | |
| | Remaining stock at half price: plain 19p, interleaved 22p. | |
| Warburg, E.F. | Census Catalogue of British Mosses, 3rd edition 1963 | |
| | Remaining stock at half price: plain 19p, interleaved 22p. | |

POSTAGE & PACKING EXTRA. Please do not include cash with U.K. orders.

Customers will be invoiced for the correct amount including P & P with goods to minimise correspondence.

All the above items are available from the B.B.S. Librarian:

Dr Kenneth J Adams, 63 Wroths Path, Baldwins Hill, Loughton, Essex IG10 1SH

REFEREES (August, 1979)

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 TO UNIVERSITIES OR INSTITUTIONS.

The general Referee will help beginners who are having difficulty in placing their material in a genus. The numbers refer to genera in the current editions of the Census Catalogues.

General Referee: Mrs. A.G. Side, 82 Poplicans Road, Cuxton,
Rochester, Kent, ME2 1EJ.

Hepatic Referees:

- 1-9, 14-19, 21-30, 66, 67, 76-82: Prof. J.G. Duckett, Plant Biology & Microbiology, Queen Mary College, Mile End Road, London, E1 4NS.
10, 11, 71-74: Dr. H.J.B. Birks, Botany School, Downing Street, Cambridge, CB2 3EA.
12, 13, 20, 31-33, 45-47, 68-70: D.G. Long, The Herbarium, Royal Botanic Garden, Inverleith Row, Edinburgh, EH3 5LR.
34-44, 63-65: M.F.V. Corley, Pucketty Farm Cottage, Faringdon, Oxon., SN7 8JP.
48-53: Dr. G.C.S. Clarke, Department of Botany, British Museum (Natural History), Cromwell Road, London, SW7 5BD.
54-56: Mrs. Hilary H. Birks, 16 Greystoke Road, Cambridge, CB4 1DS.
57-61, 75: M.O. Hill, Institute of Terrestrial Ecology, Penrhos Road, Bangor, Gwynedd, LL57 2LQ.
62: Mrs. J.A. Paton, Fair Rising, Wagg Lane, Probus, Truro, Cornwall, TR2 4JU.

Moss Referees:

- 1: M.O. Hill; (address above); A. Eddy, Dept. of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD.
2-7, 131: M.O. Hill (address above).
8-9, 54-56: Dr. A.J.E. Smith, School of Plant Biology, University College of North Wales, Bangor, Gwynedd, LL57 2UW.
10-33: M.F.V. Corley (address above).
34, 57-69, 80-89, 91-97, 100-124: E.C. Wallace, 2 Strathearn Rd., Sutton, Surrey.
35-53: Dr. D.F. Chamberlain, Department of Botany, Royal Botanic Garden, Edinburgh, EH3 5LR.
70-78, 90: Dr. E.V. Watson, Department of Botany, The University London Road, Reading, RG1 5AQ.
79: Dr. P.D. Coker, School of Biological Sciences, Thames Polytechnic, Wellington Street, London, SE18 6PF.
98, 99: Dr. S.W. Greene, Institute of Terrestrial Ecology, Bush Estate, Penicuik, Midlothian, EH26 0QB.
125-130, 132-161: Mrs. J. Appleyard, Sunnyside, West Horrington, Wells, Somerset, BA5 3ED.

CONTRIBUTIONS FOR THE NEXT BULLETIN
SHOULD REACH THE SECRETARY BY
1 DECEMBER 1979

NEW VICE-COUNTY RECORDS AND AMENDMENTS TO THE CENSUS CATALOGUES

All undated records are based on specimens collected in 1978.

HEPATICAE

M.F.V. Corley

The names and numbers follow Paton, Census Catalogue of British Hepatics ed 4. (1965).

- 1/1. Anthoceros punctatus, waste ground in farmyard, Milton of Drimmie, Blairgowrie (89), Long & Chamberlain.
- 8/1. Marchantia polymorpha var. polymorpha, runnel behind beach huts, Littlestairs, Hope Beach, Shanklin (10), Snow: β var. alpestris, burned humus and soil in quarry and on path, Goonhilly Downs, N. of Penhale, the Lizard (1), Paton, 1977.
- 10/4. Riccia warnstorffii, soil exposed on margin of Stithians Reservoir, (1), Paton, 1973; track in disused slate quarry, Talysarn (49), Paton.
- 10/5. Riccia glauca, soil, stubble field, Galgate (60), Wigginton.
- 11/1. Ricciocarpus natans, surface of a pond in north Nottinghamshire (56), N. Lewis, comm. Henley.
- 12/1. Riccardia incurvata, periodically inundated sandy soil by beck above Oakengates (60), Wigginton.
- 12/3. Riccardia sinuata, wet rocks by the road, S.E. of Stackallen Bridge, Slane. (H.22), Synnott.
- 12/4. Riccardia latifrons, on Sphagnum, Bohemia Bog, Godshill (10), Rose, 1977.
- 12/6. Riccardia pinguis, tufa by the sea shore, Gormanstown (H.22), Synnott.
- 13/1. Cryptothallus mirabilis, under Sphagnum recurvum near birch trees, Nr. Knoll House Hotel, Goodrington Heath (9), Pitkin, 1977.
- 14/3. Pellia neesiana, on damp track, Close Wood, nr. Chippenham (7), Appleyard.
- 15/2. Metzgeria fruticulosa, on elder, W. side of Fowl Mere (28), Wigginton, 1977; on willow in young woodland, Bearse Common, St. Briavels (34), Orange; elder branch, The Moat, Llandyry, Kidwelly (44), Perry; on elder, Belling Burn, Kielder Forest (67), Petty; on elder, Auchenmalg, nr. Port William (74), Stirling, 1972; on elder, Fir Mill, nr. Gartmore (87), Crundwell, 1961; on trees, Oughterard, Connemara (H.16), W. Sutcliffe, 1860, (Bankfield Museum, Halifax).
- 15/2A. Metzgeria temperata, on ash in woodland, Bearse Common, St. Briavels (34), Orange; on sycamore in marshy woodland, Newhall estate, nr. Carlisle (83), Long; on rotting branch of hazel, ravine of Cailness Burn, Loch Lomond (86), Crundwell; on oak in thicket, Drummond Castle Woods, nr. Crieff (88), Long; on ash, allt Dubh Uisge, just N. of Ardlui (99), Crundwell; Drum Manor, nr Cookstown (H.36), M.P.H. Kertland, 1950, (Ulster Mus.).

- 15/5. Metzgeria pubescens, Huntly Clints, Ettrick (79), Corner, 1977.
- 17/2. Moerckia flotowiana, Roche's Marsh, at road junction 2 miles E. of Kilfenora (H.9), Pitkin, 1977.
- 20/8. Fossombronina pusilla var. α pusilla, gravel drive, Armadale Castle, Sleat Peninsula, Isle of Skye (104), Corley.
- 20/9. Fossombronina wondraczekii, clay soil on farm track, Sulby (71), Wigginton.
- 21/1. Haplomitrium hookeri, gravelly margin of loch, Lochan Eireannaich, Kirkton Glen, Balquhadder (87), Long.
- 24/1. Pleuroclada albescens, delete 91, no specimen exists (Paton, 1976).
- 27/1. Ptilidium ciliare, damp rocks, N. side of Bellewstown (H.22), Synnott, 1977.
- 30/1. Bazzania trilobata, near foot of wooded slope in gorge, Hardcastle Crag, Hebden Bridge (63), Roberts.
- 31/5. Lepidozia trichoclados, Ardingley Rocks (14), W.E.Nicholson, 1904, (NMW); delete H.8, specimen is L. sylvatica.
- 31/6. Lepidozia sylvatica, peat bank in bog, W. of Llanllwch, S.W. of Carmarthen (44), Paton, (B.B.S. Exc.); peaty bank by stream, N.W. of Bachnagairn, Clova (90), U.K.Duncan, 1962, (CMM); peat bank near Loch nam Faoilteag, N. of Milton, Glen Urquhart (96), Paton; peaty bank, nr. Loch Nigheann Fhionnlaidh, S. of Tarskavaig, Sleat Peninsula, Isle of Skye (104), Corley; peaty bank on moor, Musheramore, Boggeragh Mts. (H.4), Corley, 1966; on peat, Slieveveagh, nr. Ballylanders (H.8), Corley, 1966.
- 34/2. Lophozia wenzelii, peaty hollow overlying limestone on plateau above cliffs S. of Inchnadamph (108), R.M. Schuster & W.B.Schofield.
- 34/7. Lophozia obtusa, sheltered bank, Glentarroch Burn, S. of Lochindorb (95), Paton.
- 34/11. Lophozia bicrenata, wet clay bank, Hill 426, Greenanstown, Naul (H.22), Synnott.
- 35/1. Leiocolea turbinata, wet rocks and tufa by the road, S.E. of Stackallen Bridge, Slane (H.22), Synnott.
- 35/4. Leiocolea bantriensis, basic flush below E. facing cliffs at head of Kirkton Glen, Balquhadder (87), Long.
- 35/5. Leiocolea heterocolpos, ledge on base-rich sandstone crags, Bannau Sir Gaer, Black Mountain (44), Paton; rock crevice in gorge, Afon Rheidol below Devil's Bridge (46), Corley.
- 36/5. Barbilophozia kunzeana, peaty hollow overlying limestone on plateau above cliffs S. of Inchnadamph (108), R.M.Schuster & W.B.Schofield.
- 36/6. Barbilophozia hatcheri, with other bryophytes on slate quarry waste, Hodge Close, Tilberthwaite (69), Blackstock.

- 37/2. Tritomaria exsecta, rock in oak woodland, Stoat's Burn, N. of Rowardennan (86), Crundwell.
- 37/3. Tritomaria exsectiformis, shaded millstone grit boulder near head of small valley, Clougha, Lancaster (60), Wigginton.
- 39/1. Sphenolobus helleranus, rotting log in wooded glen near Corris (47), Benoit.
- 43/1. Anastrepta orcadensis, among Sphagnum under heather, bank of Shortcleugh Water, Leadhills (77), Crundwell et al.
- 48/3. Nardia geoscyphus, sandy bank by beck, above Oakengates (60), Wigginton; beside Dorback Burn, below Dorback Lodge, Braes of Abernethy (95), Paton.
- 49/1. Jamesoniella autumnalis, sandstone rock at ground level, Rowton Wood, nr. Lancaster (60), Wigginton.
- 52/7. Marsupella ustulata, crumbling rocks in N. facing corrie, Polmood Craig, Broad Law, Tweedsmuir (78), Long; moist vertical acid rock-face, Allt na Dunaiche, Bla Bheinn, Isle of Skye (104), Corley.
- 52/11. Marsupella emarginata, Hill 426, Greenanstown, Naul (H.22), Synnott.
- 56/2. Plagiochila asplenioides var. β major, bank of minor stream in woodland, Newton Wood, Knebworth (20), Bloom.
- 56/3. Plagiochila spinulosa, delete H.10 and H.31, specimens are P.killarniensis.
- 56/3A. Plagiochila killarniensis, wall by road near sea, Prawle Point (3), Corley, 1965; shaded boulder, Tycanol Wood, N. of Brynberian, (45) Paton; crotch of tree by stream, Cwm y Llan, nr. Beddgelert (49), Appleyard & Richards; limestone boulder in ravine, Tokavaig, Sleat Peninsula, Isle of Skye (104), Corley; ledges of recently disused slate quarry, hills between Ballina and Newtown (H.10), A.D.Banwell et al., 1957, (BBSUK); damp rocky bank, hazel scrub, Monasterchoise, Fieldstown (H.31), Synnott, 1968, (BBSUK).
- 56/4. Plagiochila atlantica, rock-face in oak woodland, E. bank of Loch Choille-Bharr (101), Kenneth.
- 58/2. Chiloscyphus pallescens, flush in N. facing corrie, Polmood Craig, Broad Law, Tweedsmuir (78), Long.
- 62/1. Cephaloziella pearsonii, gritty acid rock-face in wooded glen near Corris (47), Benoit.
- 63/5. Cephalozia connivens, vertical peat face, Llanllwch Mire, nr. Carmarthen (44), Preston.
- 63/7. Cephalozia media, dead branch, Colerne Park, nr. Colerne (7), Appleyard; rotting branch, Fonthill Terraces, nr. Hindon (8), Appleyard.
- 64/1. Cladopodiella francisci, sandy bank, R. Dalnain, nr. Eil below Caggan, S.W. of Carrbridge (95), Paton.

- 65/1. Nowellia curvifolia, decaying log in oakwood, in valley by lake, Wychwood Forest, Cornbury (23), Rose.
- 66/2. Odontoschisma denudatum, bare peat, Dalystown Bog, S.W. of Trim (H.22), Synnott.
- 69/2. Diplophyllum taxifolium, delete 68, specimen (BBSUK) is D. albicans.
- 69/3. Diplophyllum obtusifolium, soil on bank of forestry road, Cardrona Forest, nr. Kirkburn, Peebles (78), Long; crumbling soil on bank by forestry road, Kirkton Glen above Balquhiddier (87), Long.
- 70/3. Scapania calcicola, mossy ledge on limestone, E. facing cliffs at head of Kirkton Glen, Balquhiddier (87), Long.
- 70/9. Scapania umbrosa, small partly embedded boulder in Tycanol Wood, N. of Brynberian (45), Paton.
- 70/10. Scapania aequiloba, base-rich sandstone crags, Bannau Sir Gaer, Black Mountain (44), Paton & Crundwell; basic agglomerate rocks, Corrie of Balglass, Campsie Hills (86), Stirling et al., 1965.
- 70/11. Scapania aspera, magnesian limestone boulder, Anston Stones (63), Blockeel; delete H.38, locality is in H.28.
- 70/15. Scapania degenii, basic flushes, below cliffs at head of Kirkton Glen, Balquhiddier (87), Long; delete 94 (typing error) transfer record to 95; damp soil at base of flushed basalt cliff, The Storr, Isle of Skye (104), Corley.
- 70/20. Scapania compacta, delete 7, locality is in 8, transfer record to 8.
- 73/1. Porella laevigata, limestone rock, Hare Island, Lough Ree (H.23), J. Russell comm. Pitkin.
- 73/4. Porella cordaeana, siliceous rock by road, Hill 426, Greenanstown, Naul (H.22), Synnott.
- 74/1. Marchesinia mackaii, moist magnesian limestone cliff, Anston Stones (63), Blockeel.
- 75/1. Lejeunea cavifolia, on dead tree, Burderop Wood, nr. Swindon (7), Appleyard.
- 78/2. Cololejeunea rosettiana, moist face of magnesian limestone cliff, Anston Stones (63), Blockeel.

MUSCI

M. O. Hill

The names and numbers follow Warburg, Census Catalogue of British Mosses, ed.3 (1963).

- 1/1. Sphagnum palustre, boggy ground, Spyre Park nr. Melksham (7), Appleyard.
- 1/3. Sphagnum papillosum, place 7 in square brackets, record has not been traced and seems unlikely, comm. Appleyard.

- 1/12. Sphagnum recurvum α var. mucronatum (Russ.) Warnst., bog margin, NW of Petersville Cross Roads, N. of Moynalty (H.22), Synnott; γ var. tenue, Britty Common nr. Buckland St. Mary (5), Appleyard.
- 1/22. Sphagnum fuscum, acid bogland nr. Trawsfynydd (48), Benoit.
- 1/25. Sphagnum capillaceum, with Calluna, about 50 m S. of the cleared strip, Oxhey Woods (20), J.D. Sleath & G.H. Harper.
- 2/3. Andreaea rothii δ var. crassinervia, gritstone boulders in stream, Hebden Water, High Greenwood (63), Blockeel, 1977.
- 3/3. Atrichum angustatum, place 9 in square brackets, the record has not been traced (Distr. Map, J. Bryol. 8, 495, 1975).
- 5/2. Polytrichum aloides, quarry, Teevurcher, N. of Moynalty (H.22), Synnott.
- 5/3. Polytrichum urnigerum, quarry, Teevurcher, N. of Moynalty (H.22), Synnott.
- 5/6. Polytrichum piliferum, Lower Palaeozoic rocks, N. side of Bellewstown (H.22), Synnott.
- 8/2. Fissidens bambergeri, bank of stream, Norton Common, Letchworth (20), Bloom, 1977.
- 8/8. Fissidens rufulus, limestone boulder, Ease Beck, Leck (60), Wigginton; delete 45 and 101, specimens (BBSUK) are incorrectly named, comm. Corley.
- 8/10. Fissidens rivularis, in deep shade on rocks in the Bach Howey stream near its confluence with the River Wye, between Glasbury and Bulth Wells (43), Townsend, 1977.
- 8/12. Fissidens exilis, bank of stream in woodland, Somerville Slane (H.22), Synnott.
- 8/14. Fissidens osmundoides, old peat cuttings, Lough Goller bog, S. of Lisdoonvarna (H.9), Pitkin, 1977.
- 11/2. Pleuridium subulatum, roadside ditch, Killiemor, Loch na Keal, Mull (103), Corley, 1976.
- 12/5. Ditrichum zonatum β var. scabrifolium, rock crevices in ravine, Devil's Bridge, Afon Rheidol (46), Corley.
- 17/5. Seligeria paucifolia, chalk rubble with Rhynchostegiella tenella, landslide nr. Culverhole Point, E. of Axmouth (3), Corley, 1969.
- 21/1. Pseudephemerum nitidum, wet bank, R. Findhorn, near Laggan, Strath Dearn (96), Paton.
- 22/2. Dicranella schreberana, pasture, Cwm-Cib, E. of Llandilo (44), Paton; Roche's Marsh, at road junction 2 miles E. of Kilfenora (H.9), Pitkin, 1977; side of ditch, Petersville Cross Roads, N. of Moynalty (H.22), Synnott.
- 22/4A. Dicranella staphylina, gateway, Pen-y-Banc Farm, W. of Dynevor Castle, Llandilo (44), Paton; damp meadow, Oxmardike, Newport, Humber-side (61), Blockeel.

- 29/5. Dicranum montanum, on log among saplings, old quarry nr. Rosebery Reservoir, Temple (83), Long.
- 29/11. Dicranum majus, fringe woodland, W. of Moate Farm, Moynalty (H.22), Synnott.
- 31/5. Campylopus pyriformis β var. azoricus, among Mylia anomala on peat, Addleborough, Wensleydale (65), Blockeel, conf. Corley.
- 31/9. Campylopus atrovirens, around rocks on boggy hillside, Croghan (H.12), Pitkin, 1975.
- 33/2. Leucobryum juniperoides, on earth, Sherrards Wood, Welwyn Garden City (20), Bloom, 1977, conf. Corley; delete H.1 and substitute H.2, which is the correct vice-county for Torc Cascade, comm. Synnott.
- 35/2. Tortula ruraliformis, sand dunes at Marske nr. Redcar (62), P. Robertson.
- 35/7. Tortula virescens, on concrete, ford over River Beane at Walkern (20), Bloom.
- 35/9. Tortula latifolia, on muddy Ulmus roots by River Black Devon, nr Alloa (87), Long.
- 35/10. Tortula subulata, soil on wall top, Bellewstown (H.22), Synnott.
- 35/14. Tortula stanfordensis, vertical bank of R. Severn at Upper Arley, NW of Kidderminster (39), Fisk; path by bridge over R. Elwy nr. Trefnant (50), Hill; shady soil banks beside paths, St. Stephen's Green, Dublin (H.21), Pitkin - new to Ireland.
- 36/1. Aloina brevirostris, bare chalk, Dean Hill (11), Paton, 1957 (OXF); delete 83, the type specimen may have been Swedish, and extant Scottish gatherings named A. brevirostris are all A. rigida.
- 40/1. Pottia lanceolata, path by R. Boyne below Novan (H.22), Synnott.
- 41/2. Phascum cuspidatum, damp clay by the Boyne, Bective Bridge (H.22), Synnott: β var. piliferum, cliff top, bay E. of Tantallon Castle (82), Chamberlain & Long, 1974.
- 42/1. Acaulon muticum β var. minus, delete 13 and 71, specimens (BM) are incorrectly named.
- 44/1. Barbula convoluta β var. commutata, limestone turf in quarry, Crwbin (44), Crundwell.
- 44/4. Barbula hornschiuchiana, gravelly footpath on river bank, R. Teviot, Kelso (80), Long.
- 44/13. Barbula nicholsonii, concrete by small pond, Wintergreen Wood nr. Knebworth (20), Bloom.
- 44/16. Barbula tophacea, tufa by road, SE of Stackallan Bridge, Slane (H.22), Synnott.
- 44/19. Barbula ferruginascens, crevice of sandstone rocks on cliff above Llyn y Fan Fach, Black Mountain (44), Corley.

- 44A/1. Trichostomopsis umbrosa (C.Mull.) Robins. 11, 15, 21, 24, 29 - new to the British Isles (Crundwell & Whitehouse, 1978).
- 48/2. Anoetangium warburgii, steep, moist, N.-facing base-rich rock below waterfalls, Rhaeadr-y-Cwm, E. of Ffestiniog - male plants (48), Paton & Synnott.
- 51/5. Trichostomum brachydontium, soil pockets in Magnesian Limestone coastal cliffs, Blackhall Rocks (66), Graham, 1975.
- 52/1A. Weissia perssonii, soil of landslip on sea cliffs, W. end of Marros Sands nr. Pendine (44), Corley.
- 54/1. Coscinodon cribrosus, S.-facing slab, Agassiz Rock, Edinburgh (83), Long.
- 55/7*. Grimmia agassizii, submerged rock, S. bank of R. Tees, Low Force, Holwick (65), Blockeel.
- 55/11. Grimmia laevigata, tiled roof, Fairfield church (15), Side.
- 55/24. Grimmia trichophylla, on wall, Middle Combe nr. Shaftesbury (8), Appleyard; Lower Palaeozoic rocks, N. side of Bellewstown (H.22), Synnott.
- 55/26. Grimmia stirtonii, rock, ca. 500 m alt., moorland nr. Afon Sychlwch, Black Mountain (44), Crundwell.
- 56/4. Racomitrium fasciculare, quarry, Teevurcher, N. of Moynalty (H.22), Synnott.
- 56/5. Racomitrium heterostichum, roadside quarry, Teevurcher, N. of Moynalty (H.22), Synnott.
- 56/7. Racomitrium canescens α var. canescens, disused slate quarry, Stonesfield (23), Warburg, 1958 (OXF); rather calcareous dry rocks by Trimpey Road, over Habberley Valley, Kidderminster (37), J.B.Duncan & P.G.M.Rhodes, 1911 (BM); dunes, Tywyn Aberffraw (52), M.F.Gardner & S.G.Knees; stabilized dunes, Sandscale, Barrow-in-Furness (69), G.Halliday, 1968 (LANC); Dundrum sandhills (H.38), S.A.G.Caldwell, 1961 (herb. Fitzgerald): β var. ericoides, Trungle Moor, Penzance (1), W.Curnow & H.N.Dixon, 1886 (BM); stony track, Downhead Common (6), Rose, 1959 (BCW); Coates Common (13), Rose, 1948 (BCW); Tuddenhams, Breckland (26), G.Halliday, 1954 (LANC).
- 56/8. Racomitrium lanuginosum, quarry, Teevurcher, N. of Moynalty (H.22), Synnott.
- 58/3. Funaria attenuata, lane bank above R. Findhorn, S. of Drynahan Lodge, Streens (96), Paton.
- 58/4. Funaria fascicularis, grass slope, remnant of Codicote Heath (20), Bloom.
- 71/2. Orthodontium lineare, rotten conifer log in marshy wood by R. Earn nr. Bridge of Earn (88), Long.
- 72/1. Leptobryum pyriforme, open felled ground, Kingsdown nr Bath (7), Appleyard.

- 73/7. Pohlia drummondii, distribution is combination of records of 73/7 and 73/9, as indicated by Lewis & Smith (1978), but retain record for v.c. 94 (omitted by Lewis & Smith), specimen (BBSUK) lacks gemmae, but must be assigned here; gravelly track, old china clay works, Temple (2), Paton, 1966.
- 73/8. Pohlia gracilis (= P. filum (Schimp.) M^{art}.), distribution in BBS records is correct; that for v.c. 44, omitted by Lewis & Smith (1978), is also correct, and is - non-calcareous sand soil in shallow hollow nr. old limestone quarries, Foel Fawr, S. of Llangadock (44), Paton, 1965 (herb. Paton).
- 73/9. Pohlia rothii, existing records refer to P. drummondii and must be deleted; replace by - 1, 2, 12, 17, 22, 76, 86, 99, H.1, H.3, H.6 (Lewis & Smith, 1978).
- 73/11. Pohlia annotina (= P. proliger, sensu Lewis & Smith, 1978), streamside above Llanddeusant (44), Corley & Hill.
- 73/12A. Pohlia camptotrachela (Ren. & Card.) Broth., 1, 2, 4-6, 11, 41, 42, 44, 46-50, 58, 63, 65, 69, 71, 73-76, 81-84, 86, 87, 90, 97, 98, 100, 102, 103, 105, 107, 109, 112, H.3, H.12, H.20, H.35, H.39 - new to the British Isles (Lewis & Smith, 1978); and add - mud by edge of Belmont Reservoir, N of Bolton (59), Blockeel, 1975; gravelly ditchbank nr. Water of Ruchill, Glen Artney (88), Paton, 1977; ditchbank nr. Bridge of Derrybeg, SW of Charlestown of Aberlour (94), Paton, 1977; steep bank in woodland beside Allt Iomadaidh, SW of Bridge of Brown (95), Paton, 1977; bank of pond, S. of L. Loy (96), Appleyard, 1977; soil by road in Betula woodland, Portincaple, L. Long (99), Long.
- 73/12B. Pohlia muyldermansii Wilcz. & Dem., 42, 48, 49, 69, 72-74, 78, 81, 83, 86-88, 96-98, 100, 101, 103, 108, H.1, H.3, H.6, H.7, H.16 - new to the British Isles (Lewis & Smith, 1978); and add - sandy bank beside Allt Iomadaidh, SW of Bridge of Brown (95), Paton, 1977.
- 73/13B. Pohlia lutescens, bank beside cliff top, path SE of Laugharne (44), Paton; bank of R. Dulnain nr. Inverlaidnan, W. of Carrbridge (95), Paton.
- 76/1. Anomobryum filiforme, by Shortcleugh Water, Leadhills (77), Chamberlain et al.
- 77/4. Bryum pendulum, among rocks on shore, Great Cumbrae, Strathclyde (100), A.W. & K.M. Cocking.
- 77/20. Bryum creberrimum, sparse turf on bank, Devil's Elbow, Gleann Beag (89), Townsend & S.S. Hooper, 1977.
- 77/21. Bryum pallescens, crumbling shale by road, SE of Stackallen Bridge, Slane (H.22), Synnott.
- 77/25. Bryum argenteum β var. lanatum, bare soil on tip, Whitley Forest (16), Side, 1977.
- 77/26A. Bryum gemmiferum Wilcz. & Dem., 1, 3, 6-10, 12, 14-24, 26-33, 35, 36, 38, 45, 47-51, 53, 55, 57-59, 61, 64, 71, 82, 88, 106, 108, H.12, H.21 - new to the British Isles (Smith & Whitehouse, 1978); and add - bottom of ditch, Whitgift nr. Goole (63), Blockeel, 1977; damp sand on shingle bank by river nr. Haugh Head, S. of Wooler (68), Long; damp

- sand on shingle bank by river nr. Haugh Head, S. of Wooler (68), Long; damp muddy river bank by R. Tweed opposite Carham Hall, Birgham (81), Long; narrow ledge on rocks nr. waterfall, Allt Mor, Inninbeg, Ardtornish Bay, Morvern (97), Paton, 1976; gateway nr. Mill Loch, Island of Gigha (101), Appleyard, 1972.
- 77/26B. Bryum gemmilucens Wilcz. & Dem., 6, 9, 20, 27, 29, 34, 38, 62 - new to the British Isles (Smith & Whitehouse, 1978).
- 77/26C. Bryum dunense Smith & Whitehouse, new species, 1-3, 6, 9, 16, 28, 29, 41, 46, 48-52, 59, 71, 73, 75, 82, 88, 112, H.28, H.34, H.35, C. (Smith & Whitehouse, 1978); and add - bare patch in grass, sand pit, Willbury Hill, Letchworth (20), Bloom; side of sandy ditch, Willbury Hill (30), Bloom, 1977.
- 77/27. Bryum radiculosum, old wall of bridge, Earlston nr Leaderfoot (81), Long; parapet of bridge, nr. Easter Muirhead, SE of Dollar (87), Long.
- 77/27A. Bryum tenuisetum, mud beside shallow pool, the Begwns, S. of Painscastle (43), Townsend, 1977.
- 77/28. Bryum microerythrocarpum, bare sandy soil by R. Wye, Hay-on-Wye (42), Townsend, 1977; soil pockets on grassy bank, Crossgill, Caton (60), Wigginton; soil overlying rock by road, Killiemor, Loch na Keal, Mull (103), Corley, 1977.
- 77/28*. Bryum bornholmense, on earth of open woodland, Combs Wood nr Whemstead (20), Bloom; peaty soil, Llanillwch Mire nr Carmarthen (44), Preston; bare peat on burned bog, Dalystown, SW of Trim (H.22), Synnott.
- 77/29*. Bryum ruderale, bare soil in pasture, Berth-lwyd, SW of Carmarthen (44), Crundwell.
- 77/30. Bryum klinggraeffii, grass ley, The Moat, Llandyry (44), Whitehouse.
- 77/30*. Bryum violaceum, potato field, Nether Kellet (60), Wigginton; wet meadow in St. Peter's Valley, Jersey (C), du Feu, 1977.
- 77/36. Bryum donianum, lane bank nr Pen-y-banc Farm, Llandeilo (44), Crundwell.
- 77/37A. Bryum elegans, on Carboniferous limestone rocks, Y Moelydd, nr Nantmawr (40), Benoit.
- 77/37C. Bryum flaccidum, elder and ash, Cusop Dingle, Hay-on-Wye, (42), Townsend, 1977; trunks and branches of old elder trees by roadside, Bracken-thwaite nr. Beetham (69), Wigginton; on Sambucus in shady wood, by R. Earn nr. Dupplin Castle (88), Long.
- 79/10. Mnium affine, chalk turf, Bidcombe Hill, nr. Maiden Bradley (8), Appleyard.
- 79/11. Mnium rugicum, marshy edge of bog, NW of Petersville Cross Roads, N. of Moynalty (H.22), Synnott.
- 79/14A. Rhizomnium magnifolium (Horik.) Kop., 90, 96, - new to the British Isles (Crundwell, 1978); and add - flush, 550 m alt., Buck of Cabragh (93), Richter, conf. Crundwell - male plants.
- 81/1. Aulacomnium palustre, among Sphagnum palustre, Spye Park nr. Melksham (7), Appleyard.

- 81/3. Aulacomnium androgynum, on Sambucus on river bank, R. Black Devon nr. Alloo (87), Long; old peat bank with Mnium hornum, Ardee Bog (H.31), Synnott.
- 84/1. Amblyodon dealbatus, 'Roche's Marsh', at road-junction 2 miles E. of Kilfenora (H.9), Pitkin, 1977.
- 87/2. Bartramia pomiformis, roadside wall, SE side of Hill 689, 4 miles NE of Moynalty (H.22), Synnott.
- 87/3. Bartramia ithyphylla, sandy bank, Reigate Road nr. Dorking (17) in (), H.W.Monington, 1899 (BM), conf. Gardiner; rock cleft, Hutton Lowcross Woods, Guisborough (62), Blockeel; roadside wall, SE side of Hill 689, 4 miles NE of Moynalty (H.22), Synnott.
- 90/1. Philonotis rigida, place 50 in square brackets (Distr. Map, J.Bryol. 10(1), 81, 1978.
- 90/2. Philonotis fontana γ var. tomentella, sandy ground on river bank, Portinscale, Keswick (70), C.H.Binstead, 1924 (BM - as 'P. capillaris').
- 90/3. Philonotis caespitosa, mud in pasture, Craig Breidden (47), Wigginton; wet pasture just above Havelock Wood (60), Wigginton.
- 90/3A. Philonotis marchica, existing records are old and should be placed in (); recently refound on wet detritus at foot of cliff behind beach huts, Littlestairs, Shanklin (10), Mrs. L. Snow.
- 94/1. Ptychomitrium polyphyllum, roadside wall, Petersville Cross Roads, N. of Moynalty (H.22), Synnott.
- 98/3. Orthotrichum cupulatum, wall by lake, Knebworth Park (20), Bloom: β var. nudum, boulder in Dynevor Park, W. of Llandilo (44), Paton.
- 98/7. Orthotrichum striatum, elder, Piggledene nr Marlborough (7), Appleyard.
- 98/10. Orthotrichum sprucei, on Salix by R. Ure, Aysgarth, Wensleydale (65), Blockeel.
- 98/12. Orthotrichum stramineum, elder, Felin-y-Gigfran, SW of Eglwysrwr (45), Corley.
- 98/15. Orthotrichum pulchellum, elder, West Lowfield, Kirkby Fleetham, nr Catterick (65), Preston.
- 99/1. Ulota phyllantha, elder, old chalk quarry, Ashwell (20), Bloom.
- 103/1. Cryphaea heteromalla, on Sambucus in thicket on river bank nr. Union Bridge, Horncliffe (68), Long; on Sambucus in marshy thicket, by R. Earn nr. Bridge of Earn (88), Long.
- 103/2. Cryphaea lamyana, trunk of Fraxinus beside Afon Teifi, Bangor Teifi, nr. Henllan (46), Preston - new to Wales.
- 123/4. Thuidium delicatulum, on lead-mine waste, SE side of Leadhills (77), Crundwell et al.
- 126/5. Campylium elodes, base of trees in a marsh, Thingley Junction, nr. Chippenham (7), Appleyard.

- 130/2. Amblystegiella sprucei, moist Magnesian limestone, Anston Stones (63), Blockeel.
- 131/4. Drepanocladus fluitans β var. falcatus, margin of large loch nr. Dor-back Burn, Dava, NE of Lochindorb (95), Paton.
- 131/6. Drepanocladus revolvens α var. revolvens, channels at foot of boggy slope, Croghan (H.12), Pitkin, 1975.
- 131/8. Drepanocladus uncinatus, under Salix cinerea by Ballyhoe Lough (H.22), Synnott.
- 135/4. Isoetecium striatulum, limestone block at base of wall, edge of woodland, Warton Crag, Carnforth (60), Wigginton.
- 136/1. Scorpiurium circinatum, on loose stones, Glovers Wood nr. Charlewood (17), Milnes-Smith & Gardiner.
- 137/3. Camptothecium nitens, in mixed Phragmites-Cladium fen, Weston Fen, nr. Hopton (26), Birks; basic flush below E-facing cliffs at head of Kirkton Glen, Balquhiddier (87), Long.
- 138/4. Brachythecium salebrosum, dead trunk, chalk pit in Bramfield Wood (20), Bloom.
- 138/5. Brachythecium mildeanum, delete 20, specimen (BBSUK) is incorrectly named; quarry, Cobh Island, Cork Harbour (H.5), I.Carroll, 1852 (CRK).
- 138/12. Brachythecium populeum, on roots of Fraxinus, Noar Hill, Empshott (12), Rose.
- 139/1. Scleropodium caespitosum, on tarmac of lane, Crymlyn, W. of Aber (49), Hill.
- 140/3. Cirriphyllum crassinervium, Huntly Clints, Ettrick (79), Corner, 1977.
- 141/4. Eurhynchium praelongum β var. stokesii, wet woodland, The Strings, nr. Lyneham (7), Appleyard; old chalk quarry, Ashwell (20), Bloom.
- 141/6. Eurhynchium schleicheri, calcareous bank by R. Elwy nr. Trefnant (50), Hill.
- 141/12. Eurhynchium megapolitanum, sand dunes, S. end of Morfa Harlech (48), Benoit.
- 142/3. Rhynchostegiella teesdalei, limestone in stream-bed, tributary of Aille River, Spa Wells, Lisdoonvarna (H.9), Pitkin, 1977.
- 149/1. Plagiothecium latebricola, on fern stools, Spyre Park nr. Melksham (7), Appleyard; on Carex paniculata tussock in alder carr, Llannerch, Afon Gwaun (45), Corley; rotting log in wood 1 km E. of Glasinfryn, nr. Bangor (49), Hill.
- 149/4. Plagiothecium denticulatum α var. denticulatum, tree base, Colerne Park, nr. Colerne, (7), Appleyard.
- 149/6. Plagiothecium curvifolium, on base of Betula among conifers, Portmoak Moss, Scotlandwell (85), Long.
- 149/10. Plagiothecium succulentum, Burderop Wood nr. Swindon (7), Appleyard.

- 152/1. Platygyrium repens, on Sambucus in marshy wood, R. Tyne nr. Westfield, Haddington (82), Long.
- 154/1. Hypnum cupressiforme δ var. mamillatum, boulder in wood, Tycanol, W. of Eglwysrw (45), Corley.
- 154/7. Hypnum lindbergii, floor of quarry, Teevurcher, N. of Moynalty (H.22), Synnott.

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Contributors of records, 1978

Mrs. J. Appleyard, P.M. Benoit, H.J.B. Birks, T. Blackstock, T.L. Blockeel, G. Bloom, D.F. Chamberlain, M.F.V. Corley, R.W.M. Corner, A.C. Crundwell, Miss E.H. du Feu, R.J. Fisk, J.C. Gardiner, G.G. Graham, Miss P.A. Henley, M.O. Hill, A.G. Kenneth, D.G. Long, Mrs. M. Milnes-Smith, A. Orange, Mrs. J.A. Paton, A.R. Perry, S.J. Petty, P. Pitkin, C.D. Preston, P.W. Richards, R. Richter, J. Roberts, F. Rose, Mrs. A.G. Side, A.J.E. Smith, Mrs. L. Snow, A.McG. Stirling, D.M. Synnott, C.C. Townsend, H.L.K. Whitehouse, M.J. Wigginton.

REQUEST FOR MATERIAL OF ATRICHUM UNDULATUM

We are carrying out a survey of the distribution of the different chromosome races of Atrichum undulatum and would be most grateful for living material from anywhere in Britain and Ireland. We require gatherings of 10-20 shoots, with or without capsules, with brief details of habitat, locality, altitude if possible, and a four or six figure grid reference. We would like to see as much material as we can, hence collections from more than one population in a particular locality would be useful. Please send gatherings to Dr. A.J.E. Smith, School of Plant Biology, University College of North Wales, Bangor, Gwynedd, LL57 2UW, U.K. Postage will be refunded.

ADDITIONS AND AMENDMENTS TO THE MAILING LIST

NEW MEMBERS TO JULY, 1979

BLACKSTOCK, T.H., Nature Conservancy Council, Ffordd Penrhos,
Bangor, Gwynedd. (1979)
BUTTERFASS, Prof. T., Dreiechstrasse 21, D-6382 Friedrichsdorf,
BRD. (1979)
CARPENTER, R., 83 George Street, Ryde, Isle of Wight, PO33 2JF.
(1979)
EGGERS, Jens, Vehrenkampestr. 17, D-2000 Hamburg 54, W.Germany.
(1979)
HARTLEY, Mrs S., 238A Shrewsbury Road, London E7. (1979)
HIROHAMA, T., Biological Institute, Kanagawa Dental College,
Yokosuka, Kanagawa Prefecture, Japan. (1979)
JEFFERIES, Mrs K.L., 49 Brook Street, Tavistock, Devon. (1979)
MOORE, C.J., Botany Department, Monash University, Clayton,
Victoria 3791, Australia. (1979)
NEWTON, Miss A., Higher Farm, Yetminster, Dorset, DT9 6LF. (1979)
PAGE, Miss S.E., Botany Department, University of Nottingham,
University Park, Nottingham, NG7 2RD. (1979)
PARKER, D.M., Botanic Gardens, Ness, Neston, Wirral, Cheshire,
L64 4AY. (1979)
RICHARDS, Mrs L. A., Upper Chalfont Cottage, Chalfont, nr
Chinnor, Oxon., OX9 4NH. (1979 Junior)
RIELEY, Dr J.O., Department of Botany, University of Nottingham,
University Park, Nottingham, NG7 2RD. (1979)

CHANGES OF ADDRESS

ALEXANDER, R.W., Department of Geography, University of Liverpool,
Roxby Building, P.O. Box 147, Liverpool, L69 3BX.
BIRD, Dr C.D., Box 165, Mirror, Alberta T0B 3C0, Canada.
BUCK, W.R., New York Botanical Garden, Bronx, New York 10458, USA.
CROSBY, Dr Marshall R., Missouri Botanical Garden, P.O.Box 299,
St Louis, MO 63166, U.S.A.
DELANEY, K.D., Rothamstead Manor, Harpenden, Herts., AL5 2JQ.
DE TRUCCO, Ms G. Bellolio, 1216-1343 Meadowlands Drive, Ottawa,
Ontario, K2E 7E8, Canada.
FIELD, Ms E.M., 24 Airds Drive, Lochvale, Dumfries.
FREY, Prof W., Botanisches Institut I der Justus-Liebig-
Universität Giessen, Senkenbergstr.17-21, D-6300 Lahn-
Giessen, BRD.
GIAVARINI, V.J., 27 Kiln Close, Corfe Mullen, Wimborne, Dorset,
BH21 3UR.
KNEES, Miss S.G., Botany Department, Plant Science Laboratories,
The University, Whiteknights, Reading, Berks.
NEWMAN, W.J., c/o 86 High Street, Ibstock, Leicester, LE6 1LH.
PEACE, W.J.H., Botany School, Downing Street, Cambridge, CB2 3EA.
RUTT, R., The Right Reverend the Bishop of Leicester, Bishop's
Lodge, 10 Springfield Road, Leicester, LE2 3BD.
WIGGINTON, M.J., Nature Conservancy Council, Calthorpe House,
Calthorpe Street, Banbury, Oxon.

RESIGNATIONS

GANGULEE, Prof H.C., Calcutta, India.
JOHNSON, Prof A., Nanyang University, Singapore.

BRITISH AND SOUTH AFRICAN BRYOLOGICAL CONCORDANCE

Shaun Russell
(University of Fort Hare, Alice, S.A.)

The contribution from "Anonymoss" (Mobile Homes for Mosses, Bulletin March 1979) revived memories of my first car, also a Triumph Herald Estate, which gave stirring service during my earliest bryological forays in Devon and Cornwall as a student at Plymouth Polytechnic during the early seventies. Unlike your correspondent however, I never managed to grow mosses on my Herald, although there was usually plenty of green stuff around the battery terminals!

My chances of propagating an itinerant Bryetum are considerably reduced now that I have moved to South Africa, as the dryness of the climate here precludes the growth of all but the hardiest of bryophytes over much of the country.

After arriving, and armed with the only treatise on South African bryophytes (T R Sim, Bryophyta of South Africa, Cape Town 1926), I battled to identify some of the most common local xerophytes e.g. Hyophila zeyheri, Ptychomitrium crispatum, Brachythecium implicatum etc. (these are all confined to Southern Africa or adjacent regions). I was pleasantly surprised therefore, to find many old friends such as Bryum argenteum, Bryum capillare and Hypnum cupressiforme, the latter performing it's usual varietal antics of course!

I found Tortula muralis on kerbstones around drains in the cities, Funaria hygrometrica colonising old bonfire sites and Leptobryum pyriforme on pot plant soil in the greenhouse, just as though I'd never left home. We do not have blanket bogs here so Polytrichum commune finds a foothold on damp rock ledges in the forests as well as in more exposed mountain habitats. Plagiomnium rostratum is also common on damp soil in shady forest conditions throughout South Africa.

Other less frequent reminders of home are Tortula ruralis, Grimmia pulvinata, Pohlia nutans and Ceratodon purpureus. Cratoneuron filicinum takes on a dwarf form and crawls among other mosses in a few localities at high altitude in Natal while Polytrichum juniperinum and P. formosum have only been reported for South Africa for the first time during the last year. Racomitrium lanuginosum is confined to the Southwestern Cape and is only abundant on and around Table Mountain.

In this country of course it is not possible to get much more "temperate" than the top of Table Mountain, poised as this notable landmark is, virtually at the southern tip of the continent. If you travel about 2000 km South East towards Antarctica however, you will come to Marion and Prince Edward Islands, which were annexed from Britain by Jan Smuts in 1948. There you will find a few more reminders of home in the form of Drepanocladus aduncus, Brachythecium rutabulum, Distichum capillaceum and several other cosmopolitan species of exposed habitats.

As might be expected, most of the moss species that Britain and South Africa have in common are cosmopolitan, about three-quarters

of our 71 shared species in fact (a total of 591 moss species are listed for Southern Africa). 95 of the 190 Southern African moss genera are found in both countries though, which accounts for the relative familiarity of the South African bryoflora to an immigrant from the U.K.

It is only possible to quote these figures since the publication this year of a checklist of the Southern African Bryophytes (R E Magill & E A Schelpe, S.A. Botanical Survey Memoir No. 43). Dr Magill is working at the National Herbarium in Pretoria on a fully fledged moss Flora to follow the checklist (see Bulletin of Bryology XII, Taxon 26 (4), 1977). The Flora is sorely needed to boost bryological study in South Africa where, in an area 5 times the size of Britain, active bryologists can be counted on the fingers of one hand.

Returning to the plants themselves, there are a few British species that occur with greater frequency in South Africa e.g. Rhodobryum roseum of our forest floors, Grimmia laevigata, a mountaintop pioneer and Leptodictyum riparium which is common in marshy ground up to the highest altitudes (over 3000m in the Drakensberg). Leptodon smithii is one of South Africa's commonest epiphytes, present in almost every forest and bush clump across the country.

What South Africa does have of course, are plenty of impressive tropical forest species with names that even sound exotic like: Pilotrichella, Aerobryopsis, Floribundaria etc. Can they really compensate for what South Africa lacks however? There is not a sign of a Hookeria or a Hylocomium, a Pseudoscleropodium or a Rhytidiadelphus; Ctenidium, Dicranum, Pleurozium, Thamnum, all are lacking and, if you want gemmae for a student practical class, the nearest Tetraphis is 9000 km away!

A similar tale could be told for the Hepatics in South Africa, which are however much less well known. At least I can recognise a few mosses and liverworts here now, and with 16000 species of almost totally foreign looking vascular plants to contend with, I shall be sticking to the bryophytes for the time being!

WYE VALLEY WOODLANDS

The Nature Conservancy is carrying out a plant survey of the old woodlands in the Wye Valley Area of Outstanding Natural Beauty between Hereford and Chepstow and is including the bryophytes as far as time allows. I would be glad to receive any recent records from those with greater expertise than mine, which could be included in the report, suitably acknowledged of course, and these should be sent to me direct as soon as possible.

P.J. Port, Hollybush Cottage, Newton, KINGTON, Herefordshire.

A.R. Perry, Hon. Gen. Secretary BBS, National Museum of Wales, Cardiff CF1 3NP
