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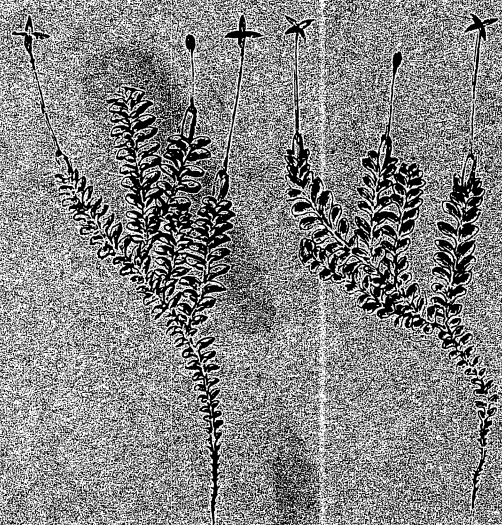

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BRITISH BRYOLOGICAL SOCIETY

PRESIDENT: DR M.C.F. PROCTOR

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C O N T E N T S

S U B S C R I P T I O N S

Subscriptions for 1984 became due on 1 January. Any members who are still in arrears are requested to pay up as soon as possible. This action will be very much appreciated and will obviate the need for expensive personal reminders later. Current subscription rates are as follows:

Ordinary membership £10: Junior membership £5: Family membership £1.

North American members may send their payment in US$ ($20:$10:$2) direct to Prof Nancy Slack, Biology Dept., Russell Sage College, Troy, NY 12180. All other subscriptions should be sent to our Membership Secretary, G.G. Geyman, 48 Gascoigne Gardens, Woodford Green, Essex, IG8 9NU, U.K.; members in EEC countries may now pay by Eurocheque but other foreign, and British, members should pay in £ sterling.

THE SPRING MEETING, 1983, ILKLEY

Large areas of the Yorkshire Dales have never been visited by the Society and the opportunity was therefore taken during the Spring Meeting at Ilkley to visit some of the characteristic habitats of the Dales country where the mountain limestone in particular supports some rich bryophyte communities. Ilkley was well situated for this purpose, being only a few miles north of the Leeds/Bradford conurbation and yet giving easy access to Upper Wharfedale and the Craven Pennines, The headquarters for the meeting was the Ilkley Campus of Bradford & Ilkley Community College, which allowed tha majority of participants to be accommodated together at a reasonable price, and with the further advantage that microscopes were available for evening use. The number attending exceeded 30 during the weekend part of the meeting but was lower during the earlier and later stages. We were pleased to welcome two of our foreign members on some of the excursions, Lillian Franck from West Germany and Sue Studlar from Kentucky.

All the excursions were to the large vice-county of mid-west Yorkshire (64) which contains a number of classic and well-bryologised sites. It was possible to visit three of the major geological strata of the vice-county (millstone grit, carboniferous limestone and magnesian limestone), but the rich and interesting Ingletonian rocks in the north-west of the vice-county were rather too distant to come within the scope of this meeting.

7 April. The first excursion of the meeting was to the millstone grit in Nidderdale. Although this formation is viewed with some disapprobation by many botanists, the particular site visited at Skrikes Wood (Ravensgill) has a number of interesting features. It is a wooded ravine with the stream bed filled with large boulders and although situated on the eastern slopes of the Pennines, it supports a flourishing population of Jubula hutchinsiae, this being seen in at least three separate places in the stream bed. Isothecium holtii also occurs here but was not seen on this occasion. The sheltered boulders in the woodland had a good growth of hepatics, including Bazzania trilobata, Calypogeia integristipula, Tritomaria exsectiformis, Sphenolobus minutus, Mylia taylorii and Scapania umbrosa. There were, however, some surprising absentees: no Lejeunea was seen although both L. cavifolia and L. lamacerina are known from other, apparently less favourable, sites on the millstone grit in the county.

The woods were entered from the road near Yorke's Folly, and on the descent to the stream members were delighted by the glow of Schistostega pennata shining brightly from the bottom of rabbit holes. Also seen were Tetrodontium brownianum on a wet underhang in an old rock cutting and Scapania scandica on a half-buried stone.

Later in the day the more open stream banks above Skrikes Wood were reached. Sphagnum girgensohnii, Blindia acuta and Jungermannia sphaerocarpa were additional species, and Andreaea rothii, a rare plant on the millstone grit, was seen on rocks by the stream.

8 April. On the day designated for a visit to Malham Tarn it was disconcerting to find the morning sky full of snow. Some of the lower ground was clear, but on arrival at the Tarn the party found the area living up to its reputation as an arctic-alpine refugium, being covered with an unbroken blanket of snow. A rapid retreat was therefore made below the snow-line to Gordale Bridge and the limestone woodland at Janet's Foss. Some of the common limestone species were growing in luxuriance on the shaded rocks, along with

Pedinophyllum interruptum, Plagiochila britannica, Porella cordaeana, Radula complanata, Cololejeunea rossettiana, Seligeria donniana, S. acutifolia, Rhynchostegiella teesdalei and Orthothecium intricatum.

After lunch at Gordale Bridge the party worked upsteam into the celebrated gorge at Gordale Scar. The extensive limestone scars and pavements give a barren aspect to the landscape, but Cololejeunea calcarea, Reboulia hemisphaerica, Encalypta rhaptocarpa and Mnium thomsonii were additions to the day's list, and a small form of Isothecium striatulum was found at the base of a wall. The more persistent members walked up the Gordale Beck to look at the calcareous flushes near Mastiles Lane. Leiocolea bantriensis, Gymnostomum recurvirostrum, Amblyodon dealbatus and Orthothecium rufescens were on hummocks in the flushes and Scorpidium scorpioides was conspicuous in the runnels.

9 April. In spite of the previous day's snow it was decided to persevere with the scheduled visit to Pen-y-ghent, the highest ground to be attempted during the meeting. In the event the decision was amply justified: only small patches of snow remained on the summit of the hill, and after a dull start the day grew bright and sunny and the limestone landscape was shown to great advantage. The morning was spent on the high Yoredale limestone cliffs below the summit plateau, where the splashes of purple saxifrage (Saxifraga oppositifolia) were a welcome sight after the moorland trek from the road at Dalehead. The party largely confined itself to the south-western cliffs. Pseudoleskeella catenulata is plentiful here and the rediscovery of Myurella julacea in its third English station was especially pleasing. Other species seen were Barbilophozia barbata, B. hatcheri, Distichium capillaceum, Encalypta rhaptocarpa, Barbula reflexa, Tortella densa, Pohlia cruda, Plagiobryum zieri, Bryum elegans and Orthothecium intricatum. Pottia lanceolata and P. intermedia were recorded from soil on or near the cliffs.

After lunch the party drove the short distance to Giants Grave at the head of Pen-y-ghent (or Hesleden) Gill. Zygodon gracilis was an object of immediate admiration on the wall where it was first found, in fruit, by John Nowell in 1866. There is still a good quantity of the species here and there was a general feeling that it ought to occur on many such walls in the high limestone country. The Gill itself is fed by underground limestone streams which emerge near its head at about 350 m. altitude. The upper part is almost treeless and on the moist rock outcrops Orthothecium rufescens and Plagiopus oederi are particularly attractive and conspicuous elements of the flora. Other species recorded included Leiocolea alpestris, Tritomaria quinquedentata, Pedinophyllum interruptum, Plagiochila spinulosa, Cololejeunea calcarea, Seligeria trifaria, S. acutifolia, Barbula ferruginascens and some of the species already seen on the Pen-y-ghent cliffs.

A Council Meeting was held during the evening at Ilkley College.

10 April. This day produced the worst weather of the meeting, the morning visit to Grass Wood in Wharfedale being hampered by almost constant rain. This extensive wood has suffered much in the past from timber extraction but many of the characteristic mountain limestone species were seen, particularly on Gregory Scar: there was some fine Porella arboris-vitae, along with Cololejeunea calcarea, Seligeria donniana, S. acutifolia, Barbula reflexa and Hylocomium brevirostre. This was a good place for beginners, the commoner woodland species being fine and plentiful.

No single excursion was planned for the afternoon. On the departure from Grass Wood, one car-load called in at Linton nearby and found Tortula virescens on sycamore by the village green. Some members returned to Malham in a second attempt to examine the Tarn Moss area. However the weather was

cold and uninviting and not many of the known specialities were seen. New records for this well-worked area were Sphenolobus minutus on the peat of the Moss and Plagiochila britannica on a limestone wall. A prolonged search was made for Dicranum flagellare in its only Yorkshire station in the woodland west of the Tarn House and resulted in Campylopus paradoxus with flagellae and a small amount of D. flagellare without them. The extensive areas of lead-mine waste on Grassington Moor at Yarnbury were visited by a third group. Lophozia excisa, Barbilophozia barbata and Weissia controversa var. densifolia were among the species they found.

11 April. This day, chosen for a visit to the Wharfe Banks between Bolton Abbey and Barden Bridge, proved cold with some heavy hail showers, but nonetheless bryologising in the sheltered woodland was both pleasant and fruitful. A combination of delightful topography, a rich and varied flora and easy accessibility from the industrial south made this a popular venue for botanists during the last century and it remains a superbly attractive piece of countryside. The rock here is millstone grit, but in parts it is highly calcareous and this accounts for much of the variety in the flora. A few species formerly known are apparently no longer present, including the once plentiful Antitrichia curtipendula, but this was still the richest site visited during the meeting, with some 140 species seen on the day. The route taken was from Cavendish Pavilion along the west bank to beyond the Stridd and back along the east bank. Species of the calcareous grit included Leiocolea alpestris, Pedinophyllum interruptum, Scapania cuspiduligera, Cololejeunea rossettiana, Distichium capillaceum and Mnium thomsonii, while the calcifuge flora included Calypogeia integristipula, Tritomaria exsectiformis, Harpanthus scutatus, Scapania umbrosa, S. scandica, Cynodontium bruntonii, Dicranodontium denudatum, Leucobryum juniperoideum and Bartramia pomiformis. Pohlia lutescens grew with Ditrichum cylindricum on some trackside ruts. Species confined to the flood zone, and often embedded in alluvial sand, were Dichodontium flavescens, Barbula spadicea and plentiful B. nicholsonii, with Orthotrichum sprucei and O. rivulare on tree roots and branches. Plagiochila britannica was also on alluvial sand at the base of a tree. At the Strid, Cinclidotus mucronatus was refound growing vertically downwards from the underside of rocks overhanging the river, and was thus confirmed to be in no danger from the trampling feet of visitors. The sheltered and ancient nature of the woodland has preserved relatively rich epiphytic communities along this part of the Wharfe. Lejeunea ulicina is here at the eastern limit of its distribution in the north of England. Metzgeria temperata and Dicranum montanum were seen on several trees (and both also on millstone grit boulders), and there were other species such as Tortula laevipila and Radula complanata which would not be accounted remarkable in districts where the air is cleaner.

A number of interesting observation were made by members. Capsules were reported on Plagiomnium undulatum and Mrs Appleyard found galls on Rhizomnium punctatum and Scapania umbrosa. Much attention was paid to the fertile material of Dichodontium. At first confusion was caused by capsules of Barbula spadicea lurking in the Dichodontium tufts, but it became clear that both forms of capsule were present on gametophytes that appeared macroscopically indistinguishable, and it was thought that there was scope for further investigation into their taxonomy. A pleasant diversion from bryology was provided by some fine flowering plants of the Yellow star-of-Bethlehem (Gagea lutea) in sandy soil on the river banks.

12 April. The final day of the meeting brought a marked change in scenery with a visit to the low-lying magnesian limestone near Ripon. The magnesian limestone has a quite different character from the carboniferous and several species were seen which had not been observed during the rest of the meeting. The morning was spent at Burton Leonard Lime Quarries, recently acquired as a

Reserve by the Yorkshire Naturalists' Trust, and the Society was welcomed by representatives from the management committee. The lower quarry contains some small areas of short turf and semi-bare ground. In such places were seen Leiocolea badensis, Pottia lanceolata, Phascum curvicolle, Thuidium abietinum ssp. abietinum, T. philibertii and Entodon concinnus. Burton Leonard was one of the original British stations for Lophozia perssonii and on the present occasion the species was seen in two places, on calcareous soil under a turfy overhang at the top of a bank and on a moist part of the sheltered quarry face. The upper quarry has been largely filled in with rubbish, but there remain some shaded rock cuttings with Preissia quadrata, and a group of elder trees with a relatively well-developed epiphytic flora which included Orthotrichum pulchellum.

In the afternoon the party moved on to Fountains Abbey and the Skell valley. The richest ground was in the valley east of the Abbey at Mackershaw Woods. Tortula marginata, Gymnostomum calcareum and Mnium marginatum were on boulders in the wood, and Dicranum tauricum was on a log. Between the woods and the Abbey, Amblystegium compactum was seen in a known station on the vertical banks of the stream. The grassy slopes of the valley were beginning to dry out in the spring sunshine, but Pottia recta and P. lanceolata were still in evidence on calcareous earth. Leiocolea badensis was widespread.

In such well-bryologised localities, not many new records were either made or expected during the excursions, and there were no real surprises. However members were able to enjoy some splendid bryophytes in equally splendid surroundings and in particular to see such species as Zygodon gracilis and Pedinophyllum interruptum which are unknown or very scarce outside the Pennines. Moreover lists were made and reports are in preparation for a number of the Reserves and other sites visited. Thanks are due to the landowners and Reserve managers who gave their help and permission in arranging the excursions, but most of all to the members who took part in them and forwarded their results to the Local Secretary.

T.L. BLOCKEEL

THE SUMMER MEETING, 1983, KERRY

First week: Killorglin, 21-27 July

21 July Tomies Wood. The week began with a visit to Tomies Wood, the most extensive of the oakwoods of Killarney. We made a short stop at an experimental exclosure, where we saw the dramatic effects on the ground flora of excluding grazing mammals (sika deer mainly). (The resulting lush undergrowth may be to the detriment of the bryophytes in the short term, but the experiment indicates that in the longer term a reduction in grazing pressure is required to ensure the survival of these woods.)

We drove through the wood, then made our way down the steep hillslope to where the stream below O'Sullivan's Cascade flows into Lough Leane. The rocks in the stream bed bore abundant Rhynchostegium lusitanicum and Isothecium holtii. The sides of the wooded glen yielded a profusion of oceanic species: Sematophyllum demissum and S. micans, Plagiochila spp. (including P. killarniensis), Cephalozia spp. (including C. hibernica), Radula holtii, etc.

Newcomers to the B.B.S. learnt fast and feverishly, at the same time adapting themselves to the rather special pace of bryologists. The hundred metres or so from L. Leane upstream to O'Sullivan's Cascade became a vast distance, so much was there to encounter along the way. In fact, the bulk of the party

never really arrived at the Cascade; it was time to leave for our lunches while most of us were as yet scarcely in sight of the pool below the lowermost falls. This was the first occasion for the Scots contingent to display their rock-climbing prowess; instead of going down and around like the rest, Gordon Rothero and David Long clambered straight up the series of falls - and were rewarded with the find of Cyclodictyon laetevirens.

After lunch we followed the stream past Lamb's Falls and up through the wood, getting better acquainted with the same rich flora.

Back to the cars, and thence to the open shore of L. Leane near Tomies Cottage. The lakeshore was backed by an interesting, heterogeneous area of fen and flush, from which Jean Paton soon flushed out two new records for H.1: Riccardia incurvata and Ephemerum serratum var. minutissimum. The latter represented for some of us a new order of magnitude in our bryophyte concepts! Relaxing at the end of the afternoon from the high discipline of pure bryology, we were able to lift our gaze to such giants as Wahlenbergia hederacea, Scirpus setaceus and Eleocharis acicularis (probably best spotted by looking for bryophytes...)

22 July The MacGillycuddy's Reeks: Beenkeragh. The mountains looked hazy and remote on this sultry day. We trekked up the long trail to the Hag's Glen and Lough Gouragh, pausing at the outflow from the lake for rest and/or collecting. Cyclodictyon was located by the Dutch contingent in a cleft in the cliffs above the lake. A tricky set of rock-faces soon separated the goats (mainly Scots) from the sheep (the shepherd, Donal Synnott, striking upward with the goats). A long, stiff climb was broken, for the sheep, by a picnic on a craggy ridge with a view of the towering peak and stupendous cliffs of Carrauntuohil (3414', the highest point in Ireland). Most of the party subsequently converged around the summit of Beenkeragh (3314'); the Scots, of course, went on to conquer Carrauntuohil as well. The cliffs of the saddle between the two peaks proved to be the richest ground. The long spell of hot, dry weather meant that the dryness of the ground was remarkable, even at 3000'; this was a boon for climbing, but not for bryophyte-spotting. The principal finds at the higher altitudes included Scapania ornithopodioides, Sphenolobopsis pearsonii, Mastigophora woodsii and Sphagnum subfulvum. Scapania nimbosa, found by Careen McDaeid on Beenkeragh some years previously, eluded us on this occasion.

23 July Glenbeigh area: Lake Coomasaharn. An idyllic place, on an idyllic day. The party worked its leisurely way around the western shore of Lake Coomasaharn, making towards the corrie cliffs at the head of the lake. The air temperature must have risen into the 80's; the bogs went 'scrunch, scrunch, scrunch' under our feet, instead of the familiar 'squelch, squelch, squelch'. At lunchtime some of us experienced the inhabitual pleasure of a cooling dip in a corrie lake.

The corrie cliffs yielded some species that were becoming familiar - we were by now quite blasé about Cyclodictyon, found here in some quantity. The abundance of a small form of Jungermannia gracillima was notable; Jean Paton assured us that, whilst it would never key out to this, this was what it was. We believed her.

We scrambled up into the higher corrie containing Lough Cullen. At the water's edge, David Long spotted the tiny, unliverwort-like liverwort Haplomitrium hookeri, not recorded in Kerry for over a hundred years. The cliff-hanging exploits of Gordon Rothero resulted in the discovery of Leptodontium recurvifolium.

D.L. KELLY.

24 July. After a late start the party travelled westward from Killorglin along the north coast of the Beara Peninsula. First stop was at the sand dunes at Rossbehy (64 91), near Glenbeigh. A brief search on hands and knees produced a short list of about twenty bryophytes, including Fossombronia incurva and Bryum marratii. Moving further west the next port of call was the coastal heath near Roads (51 87), west of Kells Bay. Here we said farewell to the group from Trinity College who departed for Dublin after lunch. Bryologising continued in earnest despite the descending cloud layer and the advent of the first rain of the meeting. A deep coastal ravine, south of Gull Rocks (51 87), yielded yet more Cyclodictyon laetevirens as well as Jubula hutchinsiae, Anthoceros husnotii, Fissidens curnovii and Dicranella rufescens amongst others. Jean Paton noted Cladopodiella francisci growing abundantly on gravel banks along the coastal path whilst Donal Synnott continued to collect candidates for Sphagnum subfulvum on the flushed peaty slopes above. Colura calyptrifolia and Drepanolejeunea hamatifolia were spotted by David Long growing as epiphytes on Ulex europaeus. On the return journey to Killorglin the party stopped briefly to examine a small wooded valley in Kells (55 87). This produced such notable species as Plagiochila killarniensis, Marchesinia mackaii (epiphytic on trunks of Ash trees), and Frullania teneriffae. Pylaisia polyantha was recorded in the field growing on trunks of Lime trees. However, specimens examined more critically at a later date proved to be Hypnum cupressiforme var. resupinatum.

25 July. The party reassembled in the morning on the west shore of Caragh Lake, just north of Lough Beg (71 90). Here, Archidium alternifolium was found growing in abundance on the seasonally flooded lake margin. An hour's bryologising turned up Fossombronia foveolata, Ephemerum serratum, Plagiochila killarniensis and Hypnum lindbergii, amongst others, but a search for Haplomitrium hookeri proved unsuccessful. A short drive southward along the road brought us to a tributary of the Caragh River, just north of the Meelagh River (69 86). A search amongst the boulder strewn wooded river banks yielded a rich bryoflora including Sematophyllum demissum, Adelanthus decipiens, Fissidens pusillus, Blepharostoma trichophyllum and Lejunea lamacerina. An examination of the woodland at Blackstones Bridge (71 86) proved much less fruitful so the party moved on to the north-west shore of Lough Yganavan (71 96). Although more Fossombronia foveolata and Archidium alternifolium were found on this sandy/peat lake shore, bryophytes had to take second place to an exceptional higher plant flora which included Radiola linoides, Sisyrinchium bermudiana, Cicendia filiformis, Scutellaria minor and Parentucellia viscosa, all in great abundance.

26 July. The party split into two groups, the main body spending the day at Coomnacronia Lake (60 86). Approach was made across moorland from a rough track which runs to near the lower Coomaglaslaw Lake. The rising moorland to the lip of the corrie had a number of Schoenus nigricans flushes which contained Calliergon stramineum and Drepanocladus revolvens. The boulders at the outlet of the lake, at about 1100 ft., had Radula voluta, R. aquilegia, Neckera crispa, Pterogonium gracile and Ulota hutchinsiae. Along the eastern shore Glyphomitrium daviesii was found by Huub von Melick. This area also produced Racomitrium ellipticum, Adelanthus decipiens, Drepanolejeunea hamatifolia and Colura calyptrifolia. Jean Paton recorded several more interesting species including Radula carringtonii and Fontinalis antipyretica var. gigantea. Basic cliffs at the south west end of the corrie yielded Anoectangium aestivum, Leptoscyphus cuneifolius, Eremonotus myriocarpus, Campylopus setifolius, Lophozia ventricosa var. silvicola and Cephaloziella stellulifera, to name but a few. Time did not allow a visit to Coomaglaslaw, to the east at about 850 ft., but a look from the lip of that corrie suggested that the better rocks are in the south-west corner under Mullaghnarakill.

A second group, David Long, Gordon Rothero and Neil Lockhart, set off early in

the morning to walk the ridge path of the Magillicuddy Reeks. Access to the ridge was made by following the Black Stream (83 86) up to the corrie Cummeenapeasta. Antitrichia curtipendula was found on boulders around the lake. The boulder scree to the east of the lake provided the route to the ridge, at c.2,800 ft., and also produced many interesting bryophytes including Douinia ovata, Mastigophora woodsii, Anastrepta orcadensis, Tetrodontium brownianum, Hygrobiella laxifolia, Dicranella subulata and Barbula ferruginascens. The long walk to Carrantwohill was rewarded by finds of Scapania nimbosa, S. ornithopodioides and Bazzania pearsonii beneath its summit.

NEIL LOCKHART

Second Week: Kenmare, 27 July - 3 August

Kenmare, apart from its idyllic setting on the Ring of Kerry, is also noted for its pubs, eating places and the availability of live "Irish music". All of these were sampled in varying degrees of willingness by the fifteen people who attended the second week of the summer meeting. The strong Irish influence present during the first week was replaced by an august car load from across the water, giving us English a slight numerical advantage over the strong Continental contingent. The headquarters hotel was not ideal seemingly having sacrificed itself to the coach trade, although the music which reverberated through the building each evening was on occasion acceptable (at least to me), a term which could not really be applied to the landlord's poetry! Of those not resident in the headquarters, two stayed in palatial guest houses, whilst the rest of us camped; the Dutch party on a site that was scenic and expensive and Ms Schaepe and I on one that was singularly esoteric but very cheap. The weather was good, the oppresive humidity of the first week had gone and the small amount of rain had the virtue of wetting out the more exposed bryophytes. For those with a statistical bent the total number of species seen during the week was 343, with 9 confirmed vice-county records and one species, Fissidens rivularis, new to Ireland. The chief pleasure for me was to become more familiar with species like Jubula hutchinsiae, Drepanolejeunea hamatifolia, Aphanolejeunea microscopica and Colura calyptrifolia, which were seen nearly every day, and also to be able to call upon the depth of knowledge possessed by those present, to set my identification problems into some sort of context. The genial spirit of the two weeks was due in no small part to Donal Synnott's hard work and his ability to render the necessary organisation relatively inconspicuous and, of course, to the Guinness!

27 July. The Move to Kenmare via Torc Cascade (OO/9684 H2) and Muckcross Island (OO/9586 H2).

Most of the survivors of the first week paid brief respects to Torc Cascade. The level of tourist pressure and the unsympathetic afforestation were rather depressing, but many of the rare species are still apparent, at least to the skilled observer. Dumortiera hirsuta was magnificent in fruit and Acrobolbus wilsonii, Radula holtii, R. carringtonii, Lejeunea hibernica and L. holtii were refound. After lunch with wasps and tourists, the limestone on Muckcross was visited. Our objective, Doo Lough, was rather disappointing as were the dry limestone blocks in the woodland, giving an abundance rather than a variety of bryophytes. The large patches of Marchesinia mackaii gave me real pleasure as I had only seen it before in very small quantity. Also of interest were the pale green shoots of Cololejeunea rossettiana, epiphytic on Thamnobryum alopecurum and Telaranea nematodes on humus under birches.

Accommodation problems having been settled, the full group met in the headquarters hotel where the level of conversation varied directly with the

level of the loud bass guitar which seems to be the prerequisite of "Irish Country 'n' Western" music.

28 July. Looscaunagh Woods (00/8981 H1) and Woodland on the Galway River above Galway Bridge (00/9179 H2).

Looscaunagh Woods were approached through Derrycunihy Woods where the extent of the "pervasive ponticum" was very sad, although attempts at control are evident. Looscaunagh itself, is a patchy oak woodland on steep ground above the upper lake and was, like everywhere else this summer, very dry Open glaciated slabs between the lake and the wood gave Campylopus polytrichoides and a boggy pool gave Donal a chance to demonstrate brown Sphagnum, resembling S. subfulvum. Once in the wood, the party became rather spread out but several groups coalesced for lunch and then explored a dry stream bed and associated crags, which gave a good list. The more open rocks had both Sematophyllum micans and S. demissum, while the stream bed yielded Fissidens taxifolius ssp. pallidicaulis, Oxystegus hibernicus, Leptoscyphus cuneifolius, Lejeunea hibernica, Colura calyptrifolia and Jubula hutchinsiae. On the woodland floor Telaranea nematodes was relatively frequent.

The woodland upstream of Galway Bridge would clearly repay a longer visit than we were able to give it. Access through the Rhododendrons was not promising, but the woodland close to the burn was excellent, having much the same flora as Looscaunagh. The rocks on either side of the burn for 300 m had an abundance of Sematophyllum demissum, while copper coloured patches of Radula aquilegia were common on rocks in the burn itself. Plagiochila atlantica was found on a holly in a sheltered glade.

29 July. Horses Glen, Mangerton Mountain (00/9980-9982 H2)

Horses Glen is a valley of three loughs - in order of ascending height Lough Garragarry, Lough Menagh and Lough Erhogh. The approach to the Glen was somewhat complex and Mr and Mrs Rubers and Hub von Melick became separated from the rest of the party and were glimpsed only distantly. The day started clear and sunny and several pairs of off-white knees braved the initial gorse-ridden path. However a rapid build-up of cloud put paid to any thoughts of a swim and the day remained overcast and damp. The shores of Lough Garragarry were greeted with attitudes of supplication which seem inevitable in the search for Haplomitrium hookeri. A chilly lunch was taken on the shores of Lough Menagh and nearby rocks gave Dryptodon patens and Glyphomitrium daviesii. The rocky burn that tumbled down from Lough Erhogh looked promising and during the ascent produced Leptodontium recurvifolium, Jungermannia hyalina, Hygrobiella laxifolia, Radula voluta, R. carringtonii, R. lindbergiana, Porella obtusata, Lejeunea holtii and Jubula hutchinsiae. The block scree and the upper coire had a small amount of Anastrepta orcadensis, more of Mastigophora woodsii and ledges full of Herberta aduncus ssp. hutchinsiae and Pleurozia purpurea. Above Lough Erhogh, Jean Paton found Scapania scandica.

30 July. Ross Island (00/9488 H2)

This is essentially a large woodland garden associated with the Castle and incidentally is a peninsula jutting out into Lough Leane. The attraction for us was the limestone on the lough shore and the existence of some old copper mines which seem to have a strong fascination for bryologists. The low level of the lough allowed simple scrambling over the boulders on the southern shore and these were thoroughly scoured. Scorpiurium circinatum was abundant on the upper rocks along with Marchesinia mackaii and Anomodon viticulosus. The dry pendent mats of Thamnobryum alopecurum on the lower boulders were examined for the smaller Lejeuneaceae and yielded the more common species and Lejeunea

holtii. These rocks also gave David Long Fissidens rivularis, new to Ireland, while Jean Paton found Tortella nitida. The copper mines were disappointing, with little in the way of spoil heaps, though they provided a pleasant lunch spot and one of the lagoons enabled Rod Stern to have a preparatory dip before launching forth into Lough Leane itself. Some rocks near the lunch spot gave Jean Paton the chance to demonstrate a convincing candidate for Plagiochila britannica, with P. porelloides close at hand for comparison. The woodland was very dry but produced Cryphaea heteromalla and Scapania aspera.

In the afternoon the group split; one group going to re-examine the woods above Galway Bridge and the rest to accompany Donal on a pilgrimage to the only Kerry site for Sphagnum pulchrum. The walk to see the Sphagnum in Cores Bog (00/9481 H2) was longer than expected as the bog proved rather more difficult to find than the plant. Being one who is inclined, literally and metaphorically, to edge around Sphagnum with some suspicion, I was impressed with the distinction and beauty of S. pulchrum, a plant worthy of pilgrimage. As indeed was the superb raised bog with S. fuscum, S. imbricatum, Rhynchospora fusca and all three Drosera species.

31 July. Bellaghbeama Gap (00/7478 H1) and the Northern Slopes of Mullaghanattin (00/7377 H1).

The winding road up to Bellaghbeama Gap was followed in a persistent drizzle. Burns near the Gap were checked in a successful attempt to re-locate Lejeunea holtii, seen there previously by Jean Paton; the search also turned up L. hibernica and Radula carringtonii. Moving westward over the Gap, the party then struck off across the hillside to the northern slopes of Mullaghanattin, an 'unworked' area. The initial burns and slopes gave little of interest save an indication of some calcareous ground, another site for the putative Sphagnum subfulvum and carpets of the small bell flower, Wahlenbergia hederacea. The weather cleared dramatically for lunch and in the afternoon bodies could be observed on the farthest flung ledges of the hill. The hill in general, and one gully line in particular, proved quite rich, giving perhaps the best composite card of the week. Acrobolbus wilsonii was found in two spots in wefts with Lejeunea hibernica, and, in one case, also with Leptoscyphus cuneifolius. Anne-Marie Schaepe found Moerckia hibernica, new to Kerry, and in the same boggy patch David Long found Haplomitrium hookeri and Riccardia incurvata. A very wet scramble into one dark, dripping cleft was rewarded by Dumortiera hirsuta, well worth the discomfort. Other species of note in a long list were: Distichium capillaceum, Campylopus setifolius, Leptodontium recurvifolium, Grimmia torquata, Isopterygium pulchellum, Anastrepta orcadensis, Leiocolea alpestris, L. bantriensis, Sphenolobopsis pearsonii, Eremonotus myriocarpus, Scapania scandica, Mastigophora woodsii, Lejeunea holtii and Radula lindenbergiana. If the eyes were raised briefly from the ground in response to the raucous cries above, choughs could be seen wheeling from crag to crag; altogether an excellent day.

1 August. Rossmore Island (00/7565 H1) and Blackwater Bridge and River (00/7868 H1).

A day by the seaside proved a little disappointing, although several interesting plants were seen. Plants of note from the woodland on Rossmore Island were Metzgeria fruticulosa, Plagiochila killarniensis, Lophocolea fragrans, Cololejeunea minutissima and Frullania microphylla. A move was made back up the coast for lunch where a precipitous descent proved the undoing of one member, but happily the most severe damage seemed to be to a can of lemonade. At Blackwater Bridge Dumortiera hirsuta was dutifully refound and Jean Paton found Lejeunea holtii. Further upstream, on the banks and associated woodland, several interesting finds were made: Fissidens curnovii, Philonotis rigida and Jubula hutchinsiae. The party drifted apart during the

afternoon seeking a variety of objectives, ranging from dubious Hypericums to lead mines and tea shops.

2 August.

Our last day was a sort of 'free day'. A substantial group went to the woods at Five Mile Bridge (OO/9383 H2) and then on to O'Sullivan's Cascade (OO/9684 H1) which most of this group had not seen on the first week. The desire to see Cyclodictyon laetevirens seemed to be the driving force behind this itinerary. However the Cascade was cascading again and this precluded an ascent. However, Dumortiera hirsuta was seen, a plant we had missed on the first visit.

The Continental team plus myself, were whisked away by Donal to the hills above the Healy Pass. The highest hill, Knockowen (OO/8-5- H1) has a northern coire, a projecting ridge, Cushnafiacale (a beautiful name) and an unusual flower, and these were our objectives. The approach was made up a very pleasant valley, where the gravel by the burn enabled three of us to find Haplomitrium hookeri unaided by David Long, a considerable event! Where the gully steepened near the lip of the coire, a dripping cave yielded Cyclodictyon laetevirens for the first time on the Kenmare week, and in fruit. Above the coire the ground steepened and species of interest included: Campylopus schwarzii, C. shawii, Hylocomium umbratum, Douinia ovata and an abundance of Colura calyptrifolia. An interesting scramble debouched onto the summit ridge and Donal re-found his tiny flower.

In the evening a tour of the restaurants in Kenmare was ultimately successful in finding one capable of coping with our large party and the end of the meeting was celebrated in style.

G.P. ROTHERO.

BRYOPHYTE TAXONOMY TRAINING COURSE, 1983, MANCHESTER

This special course was supported financially by the Systematics Association, to whom the B.B.S. is very grateful, and was held in the Botany Department at Manchester University during the week of September 2-9 by kind permission of Professor E.G. Cutter. It attracted bryologists from many parts of Britain as well as from Portugal and Germany. Full details of the course are to be published elsewhere.

JUBILEE MEETING, 1983, LONDON

This paper-reading meeting on the weekend of September 17-18 was held by kind permission of Professor W.G. Chaloner at Bedford College, London, attracting a large attendance in celebration of the Society's Diamond Jubilee. The proceedings are to be published in full elsewhere.

TAXONOMIC WORKSHOP, 1983, ROEHAMPTON INSTITUTE, WHITELANDS COLLEGE, LONDON

Imagine the local secretary's relief when she woke on the morning of Friday, 25 November to find that the thick frost, which had enveloped the world for the previous four days, had gone. A pneumatic drill was about to be added to the list of essential equipment needed by a budding bryologist! But imagine

even more, her horror that evening when the weatherman announced on the television that the rain, which had set in over the country during the afternoon, was to be "with us for the next thirty six hours". It did not take any calculating to know that those thirty six hours included much of the coming weekend - the workshop weekend! However, the sun proverbially shone upon us as twenty six "students", clutching the results of the first and essential technique to be learnt by any potential bryologist, that of making newspaper collecting-packets, two tutors, one local secretary-cum-demonstrator and a hopeful B.B.S. Membership Secretary, set off, sans pluie, for Wimbledon Common. The search for "if it is small and green, then it is probably a bryophyte" was about to begin!

The group was a very mixed one, five participants confessing to knowing nothing at all about bryophytes, three had learnt something only at school, six had had an undergraduate introductory course, six had studied a more advanced course at University or College and five were self-taught. (One person was not confessing to anything!) Nearly all said that they had come for personal interest and fifteen added that they had also come for professional reasons. Of the latter, eleven were teachers from primary and secondary schools, Further Education establishments, and a field centre. People had travelled not only from London and the Home Counties, but from as far afield at Peterborough, Grantham, Southsea and even Germany. Nine were members of the B.B.S. and seventeen were not.

Wimbledon Common is a Site of Special Scientific Interest and permission to collect had been obtained from the Wimbledon Common and Putney Common Conservators. Although bryologically poor it has a uniquely rich bryophyte flora for an urban, polluted environment. A beginner can be introduced, therefore, to an interesting variety of moss and liverwort species without being overwhelmed. A pleasant two hours were spent hunting bryophytes, Alan Eddy and Alan Harrington skilfully pointing out potential habitats and features of interest and distinction in the different plants, but tantalizingly refusing to identify anything!

After lunch which was more conducive to a good sleep than working in the laboratory, the task was started of learning to identify bryophytes with a key, and learning a range of techniques for examining them. By five o'clock, when the first day ended, skills were obviously developing and successes being enjoyed because a request was made to start a species list!

On Sunday, the gods were not so kind and it poured with rain all day, delaying the morning's excursion. Alan Eddy began the morning by drawing together some of the features of bryophyte growth forms and structure, which had been met with the day before, and describing some new techniques necessary to see further points of taxonomic interest.

By half past ten the rain had eased, but not stopped, and promised no further improvement, so a small procession of cars made its way back to Wimbledon Common, this time to an area with a Sphagnum bog. Of the eight recorded species of Sphagnum on the Common, only three were found, two at the bog and a third round the edge of one of the Common ponds.

All enjoyed a welcome cup of coffee on return to base, before half of the group began their work in the laboratory while the rest gathered to discuss ideas about "teaching bryophytes" in school. Dr June Chatfield, of the Gilbert White Museum at Selbourne, mentioned work they had done at their field centre and the local secretary described and showed some of the work that she is doing with a class of nine year olds at Twickenham. Problems of teaching the concept of an alternation of generations to older pupils, and possible approaches, were discussed amongst other problems of motivation and timing of

studies within the academic year.

After another good lunch and a brief introduction to Sphagnum, work continued in the laboratory, with some demonstrations of items of interest also being available for examination.

Ted Wallace joined the workshop on Sunday, and after being "mislaid" at the beginning of the morning's excursion, offered guidance in the afternoon to anyone requiring it, using the selection of specimens in his very generous gift of nearly three hundred packets of mosses.

At four o'clock people began to disperse, all saying how much they had enjoyed the workshop and many telling of its particular value to them. Participants had come with a variety of expectations and seemingly those expectations had been realised, with some people thirsting for more! A request was made by some participants for a follow-up workshop and also for help with the introduction of work with mosses into a Middle school. Certainly those concerned with running the weekend were pleased with the reception of the workshop and the keen interest of all who took part; and George Geyman anticipates some new members for the Society. The search of the Common had not been extensive, nor particularly thorough in the areas visited, nonetheless thirty different species had been recorded by the end of the workshop.

Quote of the weekend, from two of the younger participants: "What do we need microscopes for?"

J. IDE.

FUTURE MEETINGS OF THE SOCIETY

SPRING FIELD MEETING, 1984, **Brecon**, 11-18 April.

Organizer and Local Secretary: Mr P.J. Port, Hollybush Cottage, Newton Lane, Kington, Hereford & Worcester. Tel.: Kington (0544) 230669
Headquarters: Castle of Brecon Hotel, Brecon, Powys (AA**) Tel.: Brecon (0874) 2551 and 2942. (single room, B&B £14.50).
Bookings: The local secretary will supply details of the full range of available accommodation on request, and members should make their own bookings direct, bearing in mind that the 11th. is the day of arrival and the 18th. the day of departure.

The programme has been drawn up jointly by the local secretary and Dr R.G. Woods, a B.B.S. member with intimate knowledge of the county built up in the course of his work with the Nature Conservancy. It is proposed to visit a wide range of habitats, including upland reservoirs and streams, a bog, limestone cliffs, banks of the R. Usk, disused quarries and limestone woodland. In doing so, participants can expect to see a large number of interesting species, with the added stimulus of contributing records for the bryophyte flora of Breconshire which is now in preparation. The meeting will thus prove rewarding to the expert, but assistance will also be on hand for beginners, with an opportunity to examine specimens in a nearby laboratory each evening.

SUMMER FIELD MEETING, 1984, **Wooler, Northumberland**, 18-25 July.

Organizer and Local Secretary: Mr P.J. Lightowlers, Institute of Terrestrial

Ecology, Bush Estate, Penicuik, Midlothian, EH26 OQB.
Headquarters: Ryecroft Hotel, Ryecroft Way, Wooler, Northumberland, NE71 6AB. Tel.: Wooler (0668) 81459. (B&B £11.50)
Bookings: Full details of the programme and of alternative accommodation are available from the local secretary. The dates given are those of arrival and departure.

Wooler, a stone-built market and holiday town overlooking the R. Till, is ideally situated for convenient access to a wide variety of bryophyte habitats. They range from the alpine rocks, slopes and flushes of the Cheviots to the sand-dunes of the magnificent coastline and include upland peat bogs, steep wooded denes and rocky river banks. An attractive programme has been drawn up and the local secretary will be please to supply details.

AUTUMN PAPER-READING MEETING, 1984, **Birmingham University**, 15-16 September.

Local Secretary: Dr D.C. Lindsay, 20 Gibbs Hill Road, West Heath, Birmingham, B31 3NZ.

Accommodation has been reserved at the Manor House Hall of Residence, Northfield, allowing all the indoor proceedings to be held in one place. With a lecture programme covering a vast range of topics, indeed from sophisticated photography of the plants themselves to their physiological behaviour, there should be something of interest for everyone. The meeting will then continue with a field excursion to places of bryological interest on the Sunday. Full details will be available from the local secretary in the late spring and will also appear in the next Bulletin.

TAXONOMIC WORKSHOP, 1984, **Keele University**, 17-18 November.

Local Secretary: Dr R. Murphy, 73 St. Christopher Avenue, Penkhull, Stoke-on-Trent, ST4 5NA.

A taxonomic workshop to deal with the identification of difficult groups of bryophytes will be held in the Department of Biological Sciences by kind permission of Professor C. Arme. Members requiring overnight accommodation may wish to note that the University has 3 twin and 3 single rooms available for guests. These rooms have been provisionally reserved for members of the Society for the 16, 17 and 18 of November. Please write direct, mentioning membership, to Mrs J.K. Trickett, Residential Services, The University, Keele, Newcastle, Staffs., ST5 5BG. (Tel.: (0782) 621111). Charge per person (1983): £9.50, breakfast extra. A list of other accommodation in the area will of course be available later from the local secretary, as will details of the programme to be published in the next Bulletin.

SPRING MEETING, 1985, **Chichester, West Sussex**, April.

Organizer and Local Secretary: Mr R.C. Stern, 14 Cherry Avenue, Yapton, Arundel, West Sussex, BN18 OLB.

Details will appear in a future issue of the Bulletin.

SUMMER MEETING, 1985, **Bavarian Alps**, 28 July-3 August.

Organizer and Local Secretary: Prof. Dr R. Düll, Lehrstuhl f. Biologie (Botanik), D. Pädagog, Hochschule, 4100 Duisburg 1, Lotharstrasse 65, West Germany.

An excursion is planned to the bryologically rich area between Lenggries and Garmisch where about 500 to 600 species are known to occur. The meeting, of a

week's duration, will also include two days in the Berchtesgaden area. Full details will be published in a future issue of the Bulletin but it may be noted that, in organizing what promises to be a most attractive programme, Prof. Düll has it in mind that some participants may welcome the opportunity to extend it by also attending one or both of the Hungarian meetings advertized below.

AUTUMN PAPER-READING MEETING, 1985.

It has been suggested that members might like to consider the possibility that this should be held in Cardiff.

LOCAL MEETINGS

For details of meetings in the following areas, please contact the organisers given below, enclosing a stamped addressed envelope.

BERKSHIRE AND OXFORDSHIRE AROUND ABINGDON: Mr G. Bloom, 15 Tatham Road, Abingdon, Oxon. OX14 1QB. Tel.: Abingdon (0235) 26893.

CUMBERLAND IN VICINITY OF WHITEHAVEN: Mr C. Haworth, 5 Standings Rise, Whitehaven, Cumbria, CA28 6SX.

S.W. OF HEREFORD (Grid Square SO(32) 33): Mr A.R. Perry, Department of Botany, National Museum of Wales, Cardiff CF1 3NP. Tel.: Cardiff (0222) 397951 ext 267.

VICINITY OF READING: Mr M.V. Fletcher, 70 South Street, Reading, Berks.

WISBECH/KING'S LYNN AREA: Mr R. Stevenson, 57 Tennyson Avenue, King's Lynn, Norfolk. Mr R.P. Libbey, 143 Gaywood Road, King's Lynn, Norfolk, PE30 2QA. N.B. It is clear that, despite the recent flora, Norfolk is badly underworked in most squares, and S. Lincolnshire is underworked too. Much useful work could be done, therefore, in this area, as it could in the areas mentioned above.

OTHER BRYOLOGICAL MEETINGS, 1984-1987.

11-18 April, 1984: Lichens and Mosses of Somerset Woodlands. Dr Francis Rose, Leonard Wills Field Centre, Nettlecombe Court, Williton, Taunton, Somerset, TA4 4HT. Details from the Warden, Mr. J.H. Crothers.

14 April, 1984 Essex Field Club meeting. Mosses and Liverworts of Hatfield Forest (near Bishops Stortford, Essex). B.B.S. members welcome. Meet Bush End entrance car park ref: TL 547 202. Bring boots and packed lunch. If transport from London or Bishops Stortford required contact leader: Ken Adams, 01 508 7863.

1-4 June, 1984: Mosses and Liverworts Weekend. Dr Keri Dalby, Drapers' Field Centre, Rhyd-y-creuau, Betws-y-coed, Gwynedd, LL24 0HB. Details from the Warden, Mr. A.J. Schärer.

29 June-2 July, 1984: The Ecology of Mosses, Liverworts and Lichens. Dr Mark Seaward, Malham Tarn Field Centre, Settle, N. Yorkshire, BD24 9PU. Details from the Warden, Dr R.H.L. Disney.

31 August-7 September, 1984: Mosses and Liverworts. Dr M.E. Newton, Preston

Montford Field Centre, Montford Bridge, Shrewsbury, SY4 1DX. Details from the Warden, Mr J.A. Bayley.

26 September–3 October 1984: Bryophtes. Brian Brookes. Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire, PH10 7PG.

The course at Kindrogan is run by our member Brain Brookes who is the Warden. This course is particularly suitable for beginners. He welcomes individual adults and small groups at Kindrogan, either to participate in advertised courses or on an assisted basis. The fee for the bryophyte course is £98, which is inclusive of board, accommodation and all academic facilities. He would be pleased to provide copies of the full programme and further details of any 1984 courses on request. S.A.E. appreciated.

5–10 August, 1985: I.A.B. Conference of Bryoecology, Vácrátót and Budapest, Hungary. Details from Dr T. Pócs, Research Institute for Botany, Hungarian Academy of Sciences, H-2163 Vácrátót, Hungary.

The conference, under the chairmanship of Prof. P.W. Richards, is intended to cover all fields of bryophyte ecology. The six sessions will be convened by, respectively, Dr M.C.F. Proctor, Drs H.J. During, Prof. N.G. Slack, Dr R. Wyatt, Dr R.E. Longton and Dr J. Sarosiek. There will also be field excursions to sand and alkaline steppes and to xeric bryophyte communities on dolomite and volcanic rocks.

12–14 August, 1985: 4th meeting of Central and East European Bryologists, Eger, Hungary. Details from Dr S. Orban, Botanical Department of the Ho Si Minh Teachers' College, Eger, Pf. 43, H-3301, Hungary.

Lectures during the first two days will cover all aspects of bryology and participants from all countries are welcome. An excursion will also be organized to the Zemplen Mountains, the richest bryological area in Hungary.

Preliminary Announcement

XIV International Botanical Congress

Under the auspices of the International Union of Biological Sciences

Berlin (West), Germany, 24th July to 1st August 1987

The **Programme** will comprise 6 Divisions: metabolic botany, developmental botany, genetics and plant breeding, structural botany, systematic and evolutionary botany, and environmental botany. All plant groups will be considered, and aspects of both pure and applied research will be covered. Special emphasis will be laid on inter- and multi-disciplinary topics. There will be plenary sessions, symposia, and sessions for submitted contributions (posters).

The **Nomenclature Section** will convene in Berlin on 20th to 24th July 1987.

Pre- and post-congress scientific **Field Trips** will be arranged to various parts of Central, South and North Europe.

The **First Circular**, containing further details and a preliminary registration form, is now available. Send your name and full address to ensure your inclusion on the mailing list. Your early reply will be appreciated.

Chairman of the Organizing Committee: Prof. Dr. Dr. h.c. K. Esser.

Enquiries should be sent to the Secretary of the Organizing Committee, Prof. Dr. W. Greuter.

Congress Address: XIV IBC, Bot. Garden & Museum, Königin-Luise-Str. 6-8, D-1000 Berlin (West) 33, Germany.

REFEREES (January, 1984)

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. If anyone has difficulty in getting a specimen named they should send it to the appropriate Recorder - Mr Corley for hepatics or Mr Hill for mosses (addresses below).

The general referee will help beginners who are having difficulty in placing their material in a genus. The numbers refer to genera in Distribution of Bryophytes in the British Isles by M.F.V. Corley and M.O. Hill.

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

Hepatic Referees:

1,2,15-17,38,53-55,64-67,69: D.G. Long, The Herbarium, Royal Botanic Garden, Inverleith Row, Edinburgh EH3 5LR

3-10,13,14,18-24,36,37,39-44: T.L. Blockeel, 20 Heathfield Close, Bingley, W. Yorkshire BD16 4EQ

11,12,58: Mrs J.A. Paton, Fair Rising, Wagg Lane, Probus, Truro, Cornwall TR2 4JU

25-35,45-47,59-63: M.F.V. Corley, Pucketty Farm Cottage, Faringdon, Oxfordshire SN7 8JP

48-52,78-86: M.J. Wigginton, Nature Conservancy Council, Calthorpe House, Calthorpe Street, Banbury, Oxfordshire OX16 8EX

56,57,68,70-74: Prof. J.G. Duckett, Plant Biology & Microbiology, Queen Mary College, Mile End Road, London E1 4NS

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

Moss Referees:

1: M.O. Hill, Institute of Terrestrial Ecology, Penrhos Road, Bangor, Gwynedd LL57 2LQ; A. Eddy, Dept. of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD

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

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

37,38,62-66: Dr A.J.E. Smith, School of Plant Biology, University College of North Wales, Bangor, Gwynedd LL57 2UW

39,67-81,96-104,106-109,112-138: E.C. Wallace, 2 Strathearn Road, Sutton, Surrey

40-61: Dr D.F. Chamberlain, Department of Botany, Royal Botanic Garden, Edinburgh EH3 5LR

82-90,105: Dr. E.V. Watson, Little Court, Cleeve, Goring on Thames, Reading, Berkshire RG8 ODG

91-95: Dr P.D. Coker, School of Biological Sciences, Thames Polytechnic, Wellington Street, London SE18 6PF

110,111: M.J. Wigginton (address above)

139-142,144-175: Mrs. J. Appleyard, Sunnyside, West Horrington, Wells, Somerset BA5 3ED

READING CIRCLE

The Reading Circle circulates copies of the contents lists of the leading bryological journals. Any articles that are of interest may be requested, and a photocopy is supplied. For details of the scheme, and charges, please apply to the Reading Circle Secretary, Richard Fisk, 20 The Paddock, Tarporley, Cheshire (Tel.: (08293) 3405 (home); (0565) 54511 (office)

B.B.S. MAPPING SCHEME

The final year of the present phase of bryophyte recording brought in approximately 900 record cards, the majority of these adding records to under-worked squares. The recording situation at the end of 1982 is as follows:

Well-worked squares	Under-worked squares	Unworked squares	Total
	GT BRITAIN		
1293 (47.8%)	1061 (39.2%)	353 (13.0%)	2707
	IRELAND		
85 (8.6%)	403 (40.6%)	505 (50.9%)	993

The unequal distribution of bryologists and B.B.S. meetings between southern and northern Britain is revealed by the following figures:

Well-worked squares	Under-worked squares	Unworked squares	Total
	V.C.'s 1-71		
971 (57.7%)	604 (35.9%)	107 (6.4%)	1682
	V.C's 72-112		
319 (31.3%)	456 (44.7%)	245 (24.0%)	1020

Squares with less than 10 species recorded have not been included in the above data. The number of species per recorded square in Great Britain varies from 10 to 409 (a square in N. Wales) with a mean of 129; in Ireland from 10 to 307 (a square in Co. Kerry) with a mean of 101. Under-worked squares are those from which less than 150 species have been recorded from lowland areas and less than 200 from montane areas.

FURTHER RECORDING. It is intended that recording should continue. The mapping scheme has resulted in the accumulation of more data on bryophyte distribution in the British Isles than in any other geographical area and it is now possible to provide ecologists, phytogeographers, etc. with very useful information. Additional recording will add to the value of the data already accumulated and it is proposed that field recording should continue unabated.

RECORD CARDS. It is intended producing new field record cards with updated nomenclature. It has become clear that some species listed on the present card are so infrequent as not to merit inclusion whilst some relatively frequent species are omitted. The species composition will therefore be altered. It would be of assistance to the mapping committee in designing new cards to have the views of members on format. Should there be more or fewer species, should there be room to indicate presence of gametangia or capsules, frequency, etc. but bearing in mind that additonal data on cards immediately complicates interpretation?

REQUEST FOR ASSISTANCE. A trial investigation of about 10 species has revealed that there are no field records from 10-20% of vice-counties from which particular species are recorded. In order to make the distribution maps as compatible as possible with Census Catalogue records it is intended attempting to trace missing vice-county records and include these with the field records. The majority of such records will be in M.E.C. and B.B.S. Reports, Trans. Br. bryol. Soc., J. Bryol. and B.B.S. Bulletin lists. It

would greatly expedite matters if members would be kind enough to volunteer to trace missing v.-c. records and, if possible, grid them.

There are two ways in which this may be done: (a) tracing records of particular genera or families; (b) tracing all missing records from particular vice-counties. Data on records will soon be available from the Biological Records Centre and it will be possible to provide members with either lists of vice-counties for which there are field records of particular species or lists of species for which there are field records from particular vice-counties. Assistance in tracing missing records will greatly expedite the publication of a bryophyte atlas.

A.J.E. Smith, School of Plant Biology, University College of North Wales, Bangor, Gwynedd LL57 2UW, U.K.

HONORARY MEMBERSHIP

Council of the British Bryological Society has appointed a standing committee comprising the President, General Secretary and the two most recent Past-Presidents to advise on the nomination of Honorary Members. According to the Society's rules Honorary Members "shall be bryologists who have rendered outstanding services either to bryology or to the Society. They shall be nominated by the Council and elected at an Annual General Meeting". Suggestions for nomination may be made at any time trough the General Secretary.

WARBURG AWARD

The Warburg Award announced in Bulletin 41 was awarded to Mr. F.J. Rumsey of the Department of Botany, Reading University, to enable him to participate, with Professor D.M. Moore, Dr. J.R. Akeroyd and Dr. S.L. Jury, in field work aimed at improving our knowledge of the flora of Sicily. The work took place during a four week period in July and August 1983. Mr. Rumsey had special responsibility for studies on bryophytes.

REQUEST FOR LIVING MATERIAL

If anyone would be good enough to send me samples of any of the following liverwort species, I should be very grateful indeed. The material, for chromosome studies, need not be fertile but should amount to about enough to fill a pound jam jar, provided its abundance allows it. Packed in polythene bags, with habitat details and a six figure grid reference, the specimens should reach me in good condition and I should be happy to refund postage. (Dr. M.E. Newton, Department of Botany, University of Manchester, Manchester, M13 9PL).

Pellia endiviifolia
P. epiphylla
P. neesiana
Plagiochila asplenioides
(P. asplenioides var. major)
P. porelloides
(P. asplenioides)
Chiloscyphus pallescens
C. polyanthos
Frullania dilatata
F. tamarisci
Barbilophozia floerkei
Gymnocolea inflata
Ptilidium ciliare
Pleurozia purpurea
Odontoschisma denudatum
O. sphagni
Mylia anomala
M. taylorii

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Corley,M.F.V. & Hill,M.O.	Distribution of Bryophytes in the British Isles A Census Catalogue of their Occurrence in Vice-counties Price including P. & P. Non-members (£6.00) Members	1981	(£5.00)

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RACOMITRIUM ELONGATUM FRISVOLL IN BRITAIN AND IRELAND

M.O. HILL
(Institute of Terrestrial Ecology, Bangor)

In a world-wide revision of the Racomitrium canescens complex, Frisvoll (1983) recognizes four species of the group in Europe. One of these, R. panschii (C. Müll.) Kindb. is confined in Europe to Svalbard. The other three species, R. canescens (Hedw.) Brid., R. ericoides (Brid.) Brid. and R. elongatum Frisvoll are widespread; all three occur in both Britain and Ireland.

Frisvoll's paper resolves a long-standing question of the specific distinctness of R. canescens and R. ericoides. The difficulties that British bryologists experienced in distinguishing these two taxa were largely due to the existence of the third species, R. elongatum. Now that this has been recognized, the Racomitrium canescens group should present few further difficulties. The following key, which applies only to the range of variation known from Britain and Ireland, should serve to distinguish the species.

1. Nerve ½–¾ length of leaf, ceasing well below apex; leaves weakly keeled above; hair-point well developed, strongly papillose above; papillae on lamina near nerve in lower leaf (i.e. about ⅓ from base) mostly 1–2 times as high as wide — R. canescens

   Nerve extending to near apex; leaves strongly keeled above; hair-point well developed or not, papillose or ± smooth (though denticulate) above; papillae near nerve in lower leaf ¼–1 times as high as wide — 2

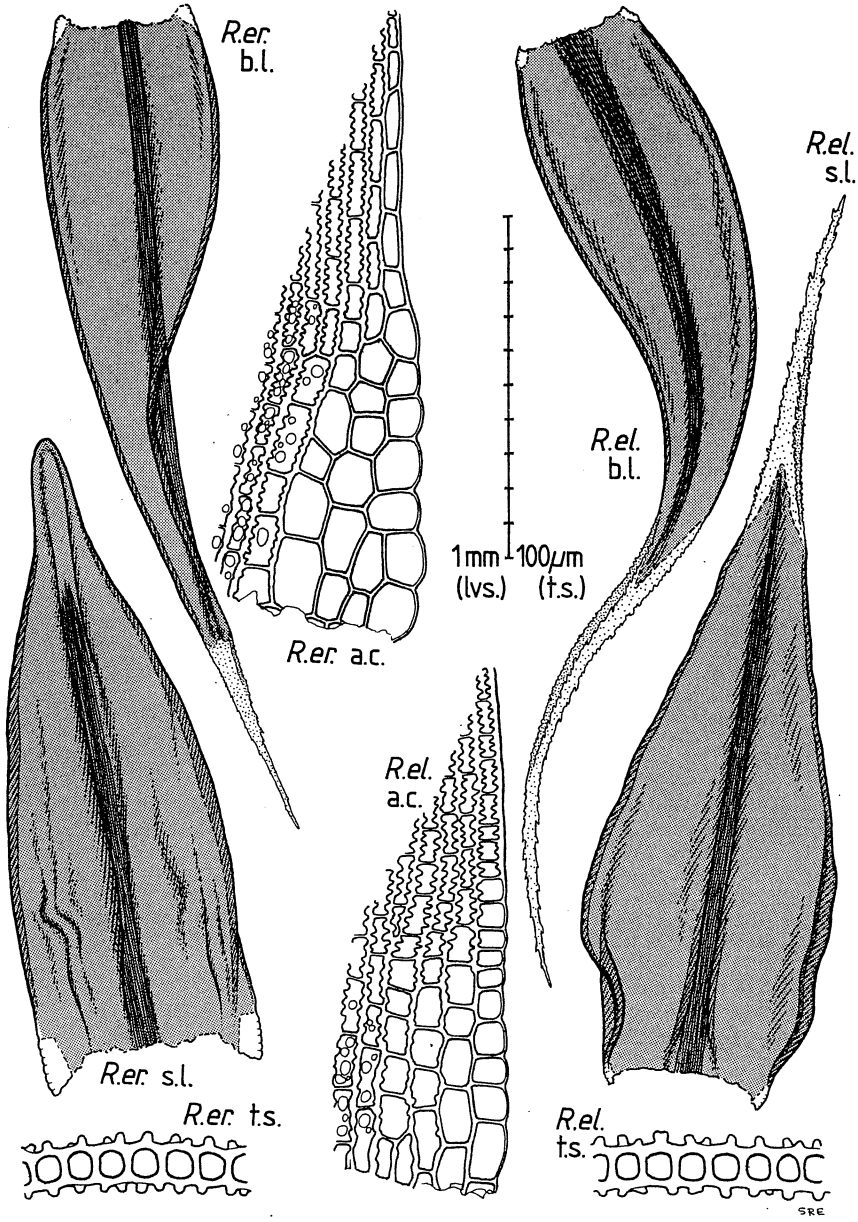
2. Hair-point variable, sometimes lacking, when well developed then flexuose but not reflexed when dry, non-papillose though somewhat denticulate above (± papillose at base), not decurrent at base; cells at margin of lamina just above basal auricles mostly elongate, thin walled (examine several leaves) — R. ericoides

   Hair-point well developed, reflexed when dry, denticulate, papillose throughout. decurrent (i.e. extending further downwards at margin of leaf than in middle); cells at margin of lamina just above basal auricles mostly quadrate, thick-walled — R. elongatum

Racomitrium canescens has broader leaves than the other two species and is less branched; its habit is often reminiscent of Hedwigia ciliata. It is a calcicole in Britain and Ireland, the chief habitats being calcareous sand dunes and limestone grassland. The other two species are normally, but not exclusively, calcifuge. I have seen three mixed collections from Britain, with intermingled R. canescens and R. ericoides. R. canescens has been found once with capsules in Britain, on the Sands of Barry (v.-c. 90).

Because of its strongly papillose hair-point and the long papillae on the lamina, R. canescens is not likely to be confused with R. ericoides. On the other hand, R. elongatum also has a strongly papillose hair-point and, at least in some non-British forms, can have long papillae on the lamina. In R. canescens, the nerve is shorter and often slightly forked; furthermore the marginal cells of the lamina just above the basal auricles are mostly thin-walled and elongated. In R. elongatum, the nerve is long and does not fork, and the supra-alar marginal cells are thick-walled and quadrate

Racomitrium ericoides is much the commonest segregate of the three in the British Isles, and also the most variable. In mixed stands with R. canescens


R.er.
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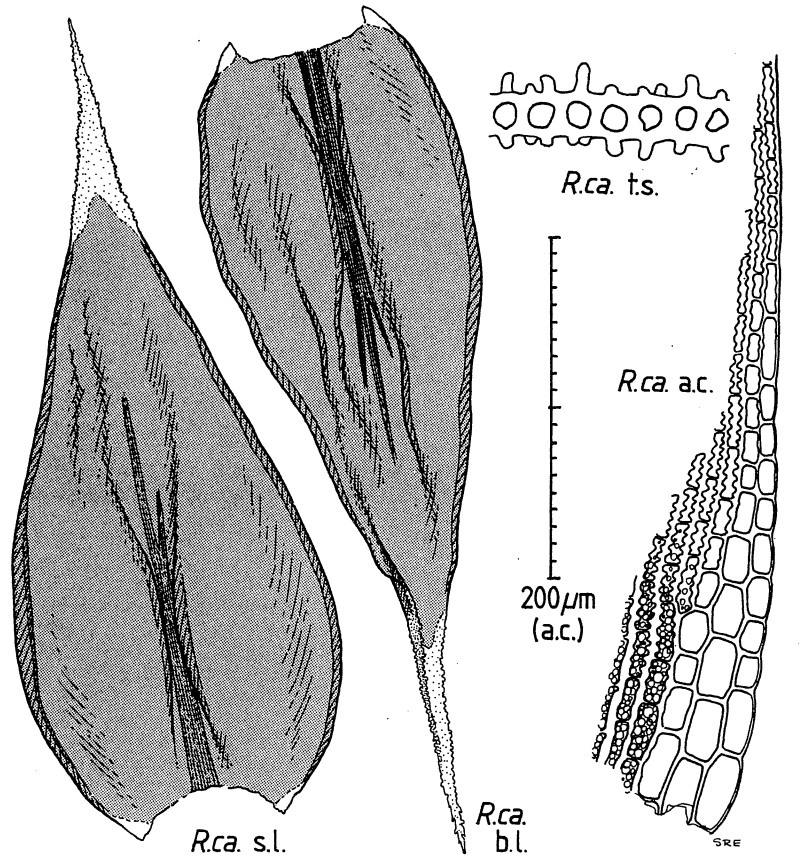

Figure 1 (drawn by S. R. Edwards). Racomitrium canescens complex, species known from Britain and Ireland. Symbols: R.ca., Racomitrium canescens; R.er., R. ericoides; R.el., R. elongatum; s.l., stem leaf; b.l., branch leaf; a.c., alar cells from stem leaf; t.s., transverse section, one third from base, from stem leaf.

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and R. elongatum, it is normally conspicuous because of its shorter, poorly developed hair-point. However, forms with long hair-points do occur, and may need careful examination to distinguish them from R. elongatum. Capsules are frequent.

Racomitrium elongatum is certainly commoner than R. canescens in Britain, and may prove to be widespread and frequent through much of the country. I have so far seen only two specimens from Ireland, but R. elongatum is likely to be widespread there also. Its normal habitat is open, stony, acid ground, especially on tracks and in quarries. In Wales, it is frequently mixed with R. ericoides, and in such mixtures, the differences are normally obvious. Capsules have not been found in Britain or Ireland.

Even when R. ericoides is absent, R. elongatum should rarely present much difficulty in the field. The decurrent hair point, reflexed in the dry state (rather as in Campylopus introflexus) will distinguish it. Microscopically, the quadrate supra-alar marginal cells provide a valuable distinguishing character, but these are not present on every leaf, and it is advisable therefore to examine several leaves. Outside Britain, forms of R. elongatum occur with papillae as long as those of R. canescens. Dr E.W. Jones has shown me such a specimen from Landes, France. Quite possibly, such forms occur also in Britain.

In the light of Frisvoll's paper, it is necessary to revise the vice-county distribution of R. ericoides and to give a distribution for R. elongatum. I have confirmed the following specimens.

Racomitrium ericoides, slate quarries, Camelford (2), H.N. Dixon, 1886 (NMW); tramroad nr Brickleigh Down (3), E.M. Holmes, 1868 (NMW); steep grassland nr Meldon, above Okehampton (4), Hill, 1982; old slate quarry, nr Wiveliscombe (5), Appleyard, 1980 (BBSUK); grassy track, Shepton Forest (6), Appleyard, 1969 (BBSUK); stony path and ride sides, Houghton Wood, nr Winterbourne Houghton (9), E.W. Jones, 1936; Tiptree Heath (19 in ()), E.G. Varenne, 1860 (BBSUK); mixed with R. canescens in ballast pit, Holt (27 in ()), W.H. Burrell, 1902 (NMW); clinker on side of sewage bed, Madingley Park (29), S.J.P. Waters, 1961 (BBSUK); Dowdeswell viaduct nr Cheltenham (33), H.H. Knight, 1910 (NMW); roadside, Abbots Wood, Forest of Dean (34), H.H. Knight, 1912 (NMW); boulders, the Blorenge (35), A.E. Wade, 1925 (NMW); on Woolhope Limestone, Wickham's Bank (37), A. Bennett, 1933 (NMW); rocks filling drainage channels, old railway cutting, Monks Kirby (38), T. Laflin, 1965 (BBSUK); Longmynd, nr Pole (40), R. de G. Benson, 1890 (NMW); rocks, Craig Ogwr (41), A.J.E. Smith, 1961 (NMW); Irfon valley, Abergwesyn (42), A.E. Wade, 1929 (NMW); by the Wye nr Builth (43), E. Armitage, 1926 (NMW); by River Towy, Llandovery (44), H.H. Knight, 1908 (NMW); Maenclochog (45), J.E. Arnett, 1926 (NMW); shingle by River Teifi nr Pontrhydfendigaid (46), P. Curry, 1981 (BBSUK); grassy turf by Wye, Llangurig (47), A. Orange, 1983; Barmouth (48), A. Sutton, 1929 (BBSUK); on Miners' Track, Snowdon (49), A.A. Frisvoll, 1980; Llandegfan Common (52), A.E. Wade. 1949 (NMW); Fernilee, nr Buxton (57), J. Whitehead. 1863 (NMW); Shedding Clough, Todmorden (59), Wood, 1847 (OXF), det. Frisvoll; Ease Gill (60), A. Wlson & J.A. Wheldon, c. 1900 (NMW); banks of Wharfe, Burnsall (64), W.C. Millar, 1929 (BBSUK); Garsdale (65), Appleyard, 1948; stony ground, Hamsterley Forest (66), T.L. Blockeel, 1980; Moor Road, Westburnhope (67), E.M. Lobley, 1931 (BBSUK); Ambleside (69), E.E. Gore, 1879 (NMW); rock by Shoulthwaite Beck, Borrowdale (70), A.J.E. Smith, 1959; on stones in Tail Burn, Loch Skene (72), W.C. Millar, 1928 (BBSUK); ground in Craignair granite quarry, Dalbeattie (73), H. Milne-Redhead, 1955 (herb. A.J.E. Smith); on stone, side of a marsh, Selkirk Common (79), J.R. Simpson, 1922 (NMW); sandy ground, Black Burn, Newcastleton (80), E.M. Lobley & A. Thompson, 1949 (BBSUK); Longformacus (81), anon., 1927 (BBSUK); on sand, Whiteadder bank, Snailscleugh (82), W.C. Millar, 1927 (BBSUK); gravelly footpath on moorland, Logan Burn, Pentlands Hills (83), Long, 1976; on thatched roof, Markinch (85), W. Young, 1911 (BBSUK); nr Loch Lubnaig (87), W.N. Tetley, 1911 (BBSUK); Cam Creag (88), B.M. Sutton, 1929 (BBSUK); Sidlaw Hills (90), D.R. Robertson, 1921 (NMW); stony soil over limestone rocks, Craig Leek, Braemar (92), Corley, 1983; dry soil on river bank, Water of Ailnack, Tomintoul (94), Corley, 1983; on stones by river, Dulnain (95), E. Armitage, 1909 (BBSUK); Ben MacDhui (96), J.H.G. Peterken, c. 1950 (BBSUK); Ben Nevis (97), J.B. Duncan & H.H. Knight, 1908 (NMW); gravel at edge of forestry track, Loch Creran (98), Corley, 1983; Isle of Arran (100), Appleyard, 1947; rock, Duntulm, Isle of Skye (104), H.N. Dixon, 1893 (NMW); sandy shore, Opinan (105), Paton, 1950; Maoile Lunndaidh (106),

H. Milne-Redhead, 1952 (herb. A.J.E. Smith); limestone rocks nr Elphin (108), A.J.E. Smith, 1960; roadside, Windy Gap, between Caragh Lake and Glenbeigh (H.1), P.W. Richards, 1951 (BBSUK); roadside nr Galway's Bridge (H.2), Appleyard, 1983; bank of road below Coomataggart Mt, nr Gougane Barra (H.3), A.L.K. King, 1953 (BBSUK); track in bog, Lyrenamon, NW of Garrignavar (H.5), R.D. Fitzgerald, 1967 (BBSUK); roadside quarry, Cummer Vale, NW of Gorey (H.12), D. Synnott, 1975 (DBN); track in old quarry, Lackan, nr Oldleighlin (H.13), R.D. Fitzgerald, 1969 (BBSUK); rocky place by the roadside nr Lough Cutra (H.15), J. Appleyard. 1957 (BBSUK); on granite in Cloosh Valley, Connemara (H.16), A.L.K. King, 1955 (DBN); moorland at Letter Cross, Slieve Bloom Mts (H.18), A.L.K. King, 1965 (BBSUK); Cupidstown Hill (H.19), A.W. Stelfox, 1946 (BBSUK); hillslope above Rocky Valley (H.20), A.L.K. King, 1956 (DBN); Kilakee (H.21), D. Orr, 1850 (DBN); shore of Boyle R., W of Boyle (H.25), D. Synnott. 1981 (DBN); nr Louisburgh (H.27) H.W. Lett, 1910 (DBN); Ben Weeskin (H.28), W.N. Tetley, 1911 (BBSUK); on ground, Boggaun, nr Manorhamilton (H.29), R.D. Fitzgerald & A.R. Perry, 1963 (BBSUK); by river, Lower Cuilcagh (H.30), W.N. Tetley, 1909 (BBSUK); Anglesey Mt (H.31), H.W. Lett, 1883 (DBN); beside railway sleepers, Castleblaney (H.32), J.S. Thomson, 1947 (BBSUK); stone slope nr the bridge, Correll Glen (H.33), W.N. Tetley, 1907 (BBSUK); Killyheys (H.35), C.A. Cheetham, 1907 (DBN); sandhills, Newcastle (H.38), C.H. Waddell, 1883 (DBN); Portrush sand-hills (H.39), A. Sutton, 1928 (BBSUK).

Racomitrium elongatum, nr Princetown, Dartmoor (3),H.N. Dixon, 1894 (BBSUK); spoil heap of old mine working, South Zeal (4), R.J. Fisk, 1982 (BBSUK); Verwood (9 in ()), H.H. Wood, 1980 (OXF), det. Frisvoll; nr Long Cross, W of Bramshaw (11), Paton 1957 (OXF), det. Frisvoll; in grass, Shortheath Common, nr Kingsley (12), Wallace, 1951 (BBSUK); Nomansland, S of Wheathampstead (20 in ()), A.E. Gibbs, 1882 (BBSUK); the Moelydd, NW of Nantmawr (40), P.M. Benoit, 1978; Abergwesyn (42), A.E. Wade, 1929 (NMW); Stanner Rocks (43), S.G. Harrison, 1965 (NMW); stabilized shingle, beside A. Teifi, nr Pontrhydfendigaid (46), Orange, 1981; between Llanidloes and Caencoed (47), J.A. Webb. 1940 (NMW); roadside cliff, 3 km E of Ffestiniog (48), S.G. Harrison, 1970 (NMW); trackside in quarries, Talysarn, nr Caernarfon (49), Frisvoll & Hill, 1980; Newborough Warren (52), Appleyard, 1950 (BBSUK); Cheviot (68), J.B. Duncan & W.C. Millar, 1925 (BBSUK); Honister Pass (70), Warburg, 1944 (OXF), det. Frisvoll; sandy ground among Calluna, above Trottingshaw, Longformacus, Lammermuir Hills (81), Long, 1965; Tents Muir (85), D.R. Robertson, 1924 (NMW); Ben Lawers (88), Fraser, 1868 (OXF), det. Frisvoll; damp gravelly slope by forest track, Glendoll Forest above Glendoll Lodge, Clova (90), Long, 1983; at side of stream, 830 m alt., White Mouth, Lochnagar (92), Corley, 1983; gently sloping wet ground, 1000 m alt., Benaidh Bheag, Braeriach, Cairngorms (96), E.W. Jones, 1956; Glen Docherty (105), E.S. Salmon, 1896 (NMW); road by Upper Lake, Glendalough (H.20), Synnott, 1975 (DBN); Sallagh Braes (H. 39), J. Glover, 1910 (NMW).

Special thanks go to Sean Edwards for drawing the figure. I thank the curators of the following herbaria for the loan material: British Bryological Society (BBSUK), National Botanic Gardens, Glasnevin, Dublin (DBN) and National Museum of Wales (NMW). I thank also those members of the BBS who have sent material for examination while I was preparing this account.

REFERENCE

Frisvoll, A.A. (1983). A taxonomic revision of the Racomitrium canescens group (Bryophyta, Grimmiales). Gunneria 41, 1-181.

ZYGODON FORSTERI (With.) Mitt. IN EPPING FOREST

Originally found new to science by Edward Forster on a felled tree in a timber yard at Chapel End, Walthamstow c. 1790, Zygodon forsteri was eventually tracked down to Monk Wood in Epping Forest by E. M. Holmes (1882). Percy Thompson and his wife searched the Forest for it and by 1912 had found it in Monk Wood, Little Monk Wood, and by the Verderer's Path, on a total of six trees. Although recorded repeatedly n the Forest in the pages of the Essex Naturalist through to 1928, when Sherrin recorded it on an Essex Field Club foray, the latter is the last record for Epping Forest that I have been able to find prior to my discovery of a colony in a seepage channel on a small reclining beech on Goldings Hill in 1978. Having searched every tree on the same interfluve without success, as well as many areas elsewhere on the Forest, it did not seem to be particularly rash to offer £5 to any member of my family finding additional colonies.

In April this year while mapping the distribution of Leucobryum glaucum and L. juniperoideum n the Forest with the family, my wife Janet came across a colony, and within half an hour cushions had been located on a total of five trees. Since then two further trees, also in Monk Wood, have been found with Zygodon forsteri patches on them. Also this year, Fred Rumsey found a colony on a dying beech north-west of Wake Valley pond. In our enthusiasm to refind it we searched the area on returning from the Box Hill B.B.S. trip, and failed to do so - but found it instead on yet another tree in the same general area, over a kilometer from the Goldings Hill site.

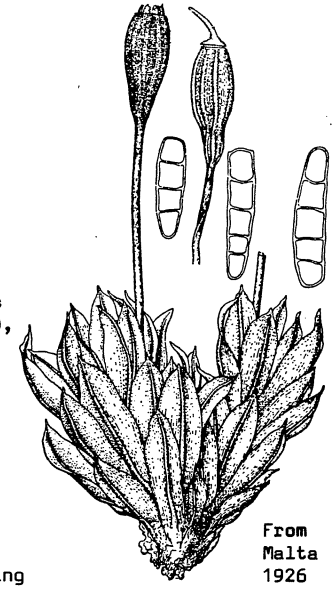
On the basis of these finds we estimate that Z. forsteri probably occurs on some twenty to thirty trees in Epping Forest. The best time to locate colonies is in April when the bright-green Pottia-like immature capsules occur in dense conspicuous clusters. In April 1984 we intend to carry out a tree by tree search of the old beech groves (some 2 km^2 in extent) noting the coordinates and photographing every tree with colonies in preparation for a five-year autecological study.

The beeches of Epping Forest are dying in large numbers, possibly partly as a result of their considerable but uniform age, but we suspect largely in response to the killer drought of 1976, exacerbated by the weakening effects of acid rain. If a Red Data List of British bryophytes is ever compiled for their statutory protection, Z. forsteri must surely be on it. We need to know more about its ecology, however, particularly the rate at which it can colonise new trees, before any reliable recommendations can be made for its conservation.

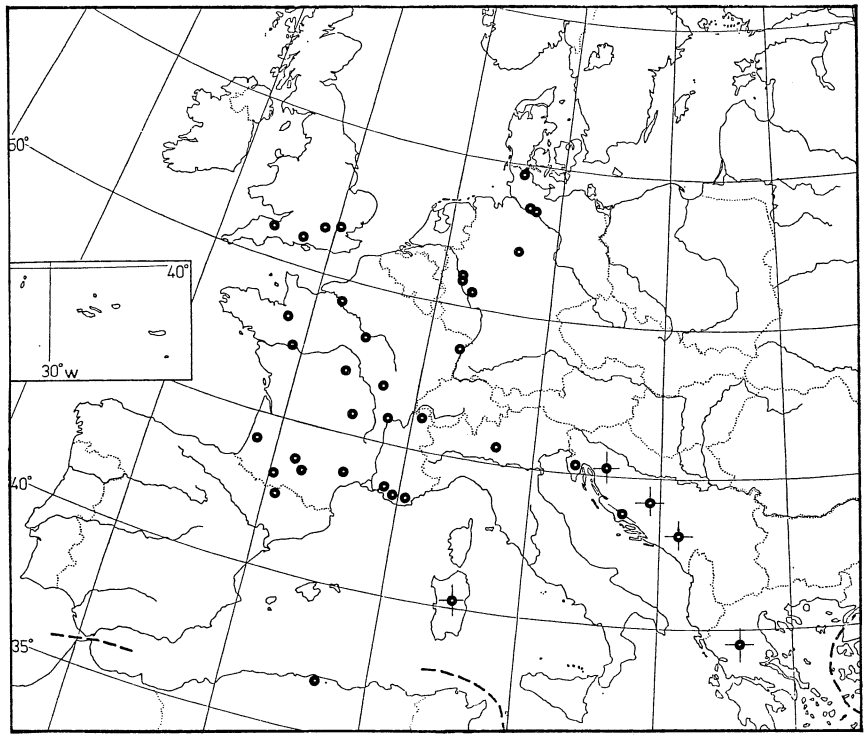
Z. forsteri is currently known elsewhere in this country only from the New Forest (Proctor, 1961), and from Burnham Beeches, where Brian O'Shea refound it in 1966, almost certainly in W. E. Nicholson's original location of 1902.

In addition to studying the British populations I would like to visit sites on the continent and would be grateful for any closely localised records, past or present, both for this purpose and to fill in the very tentative map of its world distribution overleaf.

P.S. the reward for finding a new colony in Epping Forest has deflated to 50p !



From Malta 1926



The Distribution of Zygodon forsteri (With.) Mitt. A very tentative map, from records culled from the literature.

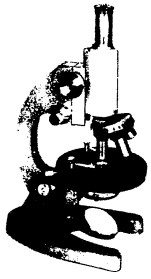
References:

Malta, N. (1926) Die Gattung Zygodon. Act. Botan. Univ. Latviensis. 1 Riga 96.

Proctor, M. F. C. (1961) The Habitat of Zygodon forsteri (Brid.) Mitt. in the New Forest, Hants. Trans. Br. bryol. Soc. 4 107 - 110.

K. J. Adams

A CHEAP RELIABLE MICROSCOPE FROM CHINA



The amateur membership of the BBS would probably be much higher if a microscope adequate for bryology was available at an affordable price.

The L201 microscope from the People's Republic of China is well worth considering. It has a focusing Abbe condenser, rotating stage and takes standard objectives and eyepieces. Complete with wooden box, X5, X10, X45 objectives and X6, X10 and X15 eyepiecesit is currently available from the BBS librarian at c. £110 with optional plug-in lamp at c. £20. (prices depend on available discount). N.B. only available from London or a BBS meeting by personal collection to avoid carriage costs.

B.B.S. PROVISIONAL SAFETY CODE

In common with other scientific and natural history societies, the B.B.S. has seen fit to draw up a safety code, particularly in relation to field meetings. Although still as yet provisional, it is considered desirable to put its recommendations into practice as soon as possible. For that purpose, every local secretary will have a copy for consultation by participants but, in addition, the following extract is published in advance.

PARTICIPATION IN MEETINGS. The B.B.S. will, through the local secretary, draw your attention to the points listed above. It is the duty of all participants to practice extreme care and commonsense and not to take risks. The following points are particularly important in taking ultimate responsibility for your own safety.

1) Ensure that you are adequately clothed and equipped.
2) Never leave the main party without notifying the leader of your plans.
3) Pay particular attention to the hazards of the terrain and their potential danger, as a result of your actions, to others. For example, be careful not to dislodge loose stones and boulders.
4) Do not rock-climb without experience and the proper equipment.
5) Do not damage walls, fences, hedges, gates, etc..
6) Leave gates open/shut as the party finds them.
7) Take care not to start a fire.
8) Familiarize yourself with the procedure to adopt in the event of an accident in the field.

CLOTHING AND EQUIPMENT. Always carry wind- and water-proof outer clothing and wear suitable footwear, e.g. walking boots or, in certain circumstances, wellingtons. All clothing should be suitable for the job and for the worst potential weather. Carry sufficient food and drink for the excursion, with some extra in case of emergency. A first-aid kit is also advisable. In mountains, the following are necessary.

1) Two warm, long-sleeved sweaters of wool or similar material.
2) Properly fitting walking or climbing boots with commando-type or Vibram soles, worn over suitable woollen socks. Footwear should be waterproof but wellingtons should not be worn.
3) A rucksack with spare sweater and (if not being worn) anorak/cagoule and overtrousers.
4) A whistle, compass, maps, torch, first-aid kit.
5) A survival bag if more than ½-hour from nearest inhabited place.

PROCEDURE IN THE EVENT OF AN ACCIDENT IN THE FIELD. First-aid must be rendered at once, and medical and relief help should be sought if necessary. Prevention of exposure is almost always possible, through adequate clothing, equipment and procedure, but if a case is suspected the initial treatment is additional warm clothing and a wind-proof or water-proof outer garment, plus ingestion of a source of rapidly absorbed food, such as sugar or glucose in solid or liquid form, preferably hot liquid.

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THE INTERNATIONAL DISTRESS CODE IN MOUNTAINS

SIX long flashes/blasts/shouts/waves in succession, repeated at 1 min. intervals.

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The following publication may also prove helpful: Jackson, J. et al. (reprinted 1982). Safety on Mountains. Obtainable from the British Mountaineering Council, Crawford House, Precinct Centre, Manchester University, Booth Street East, Manchester, M13 9RZ.

THE BUILDERS OF BRITISH AND IRISH BRYOLOGY: A BRYOHISTORICAL PROJECT

by
S.W. Greene* and L.T. Ellis**

Who were they and when did they live? What did they achieve? Where can we learn something of the lives and works of the men and women who laid the basis of what we know today about the composition and distribution of the British and Irish bryofloras? Interest in information of this sort was shown by participants in a Discussion held during the recent B.B.S. Jubilee Meeting, September, 1983 (Greene, 1984). Such information, in one form or another, is regularly wanted by taxonomists, writers of local floras, and by many others interested in Natural History. Some of it can be found by consulting Desmond's (1977) Dictionary of British and Irish botanists and horticulturists, the Dictionary of national biography (1885 to date) or Stafleu and Cowan's (1976-1983), indispensable Taxonomic Literature. But examination of these reveals many gaps. For example, dates have not yet been established for some of those listed, while for others the existence of published bibliographies or portraits is not indicated, and for some the whereabouts of their original herbarium is unknown. More importantly many who have contributed are not listed. In fact, to our knowledge no "roll of honour" has ever been compiled of those who have worked on the British and Irish bryofloras, the various lists of members of The Moss Exchange Club and The British Bryological Society, and the lists of bryologists given by Hedge and Lamond (1970, p.44-48) and Desmond (1977, p.702-704, 718) being all that is readily available.

SCOPE OF PROJECT

The intention is to assemble and publish as comprehensive a set of information as possible on all who have worked on the taxonomy, biology, floristics and distribution (within these islands) of the British and Irish bryofloras including those who have worked on the bryofloras of the Channel Islands. The project has been submitted for approval to Council of the British Bryological Society as a Society-sponsored project.

The information will be assembled in the form of a permanent data bank to be kept in the British Museum (Natural History). The data to be included will be full names with dates and place of birth and death; brief details of career and interest in bryophytes; references to obituaries, biographies etc; lists of published works; photographs and portraits; the location and extent of an author's herbarium; the nature and location of unpublished manuscript information, such as diaries, letters, drawings, field note books, accounts of surveys of the bryoflora of named areas, etc., and published sources of authenticated examples of hand-writing. Because of the comprehensive coverage of the British Museum's Library, particularly of Journals and Bulletins of British Natural History Societies, copies will not be needed of most of the published data. But it is hoped to obtain, whenever possible, the originals or copies of unpublished manuscripts, etc. and to incorporate these into the Society's Archive Collection or the collections of the British Museum (Natural History).

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OBJECTIVES

The immediate intention is:

(i) To prepare and publish an alphabetical Index of the names and dates of all who have collected bryophytes or published on the taxonomy, biology, floristics and/or distribution of British and Irish bryophytes from earliest times up to the present day.

(ii) To give sources for every entry, e.g. to an obituary or a biography, to a name in a published list of bryologists or a list of contributors to a vice-county or regional flora, to a name of a collector in a national or personal herbarium, etc.

The more long-term aims include:

(iii) To include in the data bank full details of all sources of information about each entry in the Index.

(iv) To publish brief biographical facts about the life, work and bryological interests of as many people as possible in the Index to show their contribution to the study of the British and Irish bryofloras, whether as collectors or authors, or both. A list of their bryological publications would be included as would the locations of original collections, important sets of duplicates and any other relevant data, e.g. the occurrence and nature of manuscript material.

METHODS

The only way a project such as this can be successfully undertaken is by careful and methodical research into the likely sources of information which fall into four categories:

(i) Publications
(ii) Information from specimens
(iii) Unpublished manuscript data
(iv) Accounts of contemporaries

(i) Publications

The most valuable papers about the lives and works of bryologists are obituaries and biographies published in Society Journals, Bulletins, Newsletters, Annual Reports, etc., but accounts in reports of Naturalists' Trusts, School and University magazines, newspapers, etc., although of a more general nature, can often be important for putting into perspective a person's bryological interests. Disappointingly, facts in these notices are often in-accurate and so data from a number of contemporary sources are essential. Since it is also desired to build up a list of each author's publications, references to original articles, reviews, etc. will also be needed. Some serials and journals have already been abstracted, e.g. Moss Exchange Club Reports, Reports of the British Bryological Society, Transactions of the British Bryological Society, Journal of Bryology and the Bulletin of the British Bryological Society. The whole of the Journal of Botany has also been abstracted for obituaries and biographies. Shaw (1976) has provided a very useful index to bryological references in the Naturalist, 1875-1975.

For those who have been content to collect bryophytes without publishing on them, a good source of information are the introductions to county, regional and some national floras. Recently Pearman (1979) updated Taylor's (1954,1955) lists of bryophyte county floras so that an excellent framework is available within which systematic abstraction can be carried out.

Another valuable source of the names of collectors is to be found in the published lists of specimens sent in for the Society's annual exchange and in the list of new vice-county records formerly published in the Transactions, and later

the Journal, but from 1975 in the Bulletin. Accession lists of herbaria and indexes of collectors, e.g. Murray (1904) for the British Museum (Natural History), Hedge and Lamond (1970) for the Royal Botanic Garden, Edinburgh, and S.G. Harrison's account for the Welsh National Herbarium (in prep.), are valuable sources of names as are the accounts of Bryological collections in Britain which have appeared from time to time in the Transactions and the Journal. None of these sources has yet been abstracted.

(ii) Information from specimens

Unfortunately most herbaria do not have published indexes and then the only way to get a list of collectors is to work through the individual collections. The difficulties are not great in the case of small, personal or local herbaria, but for the larger city or regional herbaria it seems to be an impossible task in a reasonable period of time. Nevertheless, it remains the only reliable way of obtaining these data.

(iii) Unpublished manuscript data

The manuscript information of most value to the taxonomist or student of local Natural History consists of field notebooks, collecting itineraries and related data which may give vital information on incompletely labelled specimens or localities with lists of local rarities, etc. Also letters and notes can throw much light on how individuals viewed particular taxa and so be helpful in clarifying an individual's species concept, for example in a difficult genus. Bridson, Phillips and Harvey (1980) in their Natural history manuscript resources in the British Isles have provided an index to what is known to be available in museums and herbaria throughout Great Britain and Ireland. But the extent and content of manuscript material still in private hands is unknown and, sadly, its value is often totally unappreciated.

(iv) Accounts of contemporaries

It is surprising the amount of valuable and hitherto unrecorded information that comes to light by talking to friends and relations of deceased colleagues. It is often the only means of obtaining information about the disposal of collections, manuscripts, etc. The authors also hope that through this source they may hear about early members of families or people who were little known outside their local area who collected or recorded bryophytes. All suggestions of where to look or who to go and talk to will be most welcome.

CALL FOR PARTICIPATORS

From what has been said it will be appreciated that the assembly of a data bank with the types of information discussed above would be greatly assisted by the participation of contributors and collaborators. The authors define a contributor as anyone who provides information but does not wish to be further involved in its preparation for publication. All such contributions will be fully acknowledged in print. On the other hand they envisage a collaborator as someone who not only provides information for the data bank, but who also wishes to become actively involved in its preparation for publication. Indeed, it is the intention to encourage as many as possible to participate as collaborators and publish their data, thus speeding its availability.

Those willing to participate will be provided with the standard data sheets used in the data bank, together with the few simple instructions on how to complete them. Information will also be circulated amongst participants as to who is undertaking what particular job of abstraction as a way of avoiding duplication of effort: periodic progress reports, with requests for data proving elusive, will be published in this Bulletin.

It is hoped that would-be participants will not be deterred by the size and scope of the project. Any information, however trivial, will be very welcome since it is the drawing together of facts, large and small, from a variety of sources that is likely to give the best results. Some may be willing to help, but be apprehensive that a job like abstracting a journal or the names of collectors in a herbarium may take more time than they have available. Large jobs of this sort can be split between two or three people who can give each other help and advice. Thus it is hoped that none will be put off participating.

The project has been conceived as a bryohistorical investigation to see what can be discovered about the lives and bryological activities of those who have worked with British and Irish bryophytes, i.e. for once the focus is on the bryologist rather than the plant. With the help of contributors and collaborators, the authors look forward to establishing a data bank of information about the builders of British and Irish bryology and to publishing as much of the data as possible.

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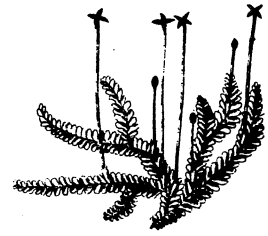

ADDITIONS AND AMENDMENTS TO THE MEMBERSHIP LIST

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MEIKLE, R. D., Kew
ROBERTSON, P., Middlesbrough
SPOUGE, Mrs V., Chelmsford
WARD, Mrs J., Haywards Heath

DELETIONS

BROWN, S. J., Long Eaton
SOLLMAN, F., Netherlands

The British Bryological Society 1923-1983, by P.W. Richards, Cardiff, 1983 - a correction

A correction to paragraph 6 on page 3 is required. This should read as follows:

The British Bryological Society, 1945-1983. In June 1945, a few weeks after the war in Europe ended on 'VE Day', a small group of members met for a weekend at a hotel in Borrowdale to discuss reviving the Society and in September an informal Annual Meeting was held in London, presided over by W.R. Sherrin in the absence of Miss Armitage, the President, who was ill. This was followed by a field trip in Surrey. An Annual General Meeting and Excursion in the pre-war style was held in Appleby, Westmorland, in April, 1946. To celebrate the 50th Anniversary of the founding of the Moss Exchange Club a Jubilee Meeting was held in London in September, 1946, and this incorporated a dinner at the Eccleston Hotel at which Dr. John Ramsbottom of the British Museum (Natural History) was the guest of honour.

Edited by

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