

# BBS Summer meeting 2018: Week 1 Isle of Man

## Chris Preston and Liz Kungu report on the first week of the summer meeting

The Isle of Man (vc 71) lies in the northern part of the Irish Sea, almost equidistant from Ireland, Scotland and England; it is a remarkable feature of the history of our islands that it has retained its independence from all three. It is one of the smallest vice-counties (572 km<sup>2</sup>). It is a primarily acidic island with a solid geology consisting mainly of Ordovician sandstones, mudstones and greywackes, alleviated by a large expanse of glacial deposits and sand dunes at the north end and a small area of Carboniferous limestone in the south. The centre of the island is upland rather than montane, with a highest point of 620 m on Snaefell.

Our knowledge of the bryophytes of the island rests on the flora published by Jean Paton (1971). Jean assessed the earlier records, many made by G.A. Holt, who was born on the island, and H. Beesley and J.A. Wheldon, both residents of nearby Lancashire. Jean added

the results of her own fieldwork, much of it undertaken in a visit lasting two weeks in April 1968. She must have worked very hard during those weeks, as she achieved a remarkably thorough coverage of the island's 14 10-km squares. The island was therefore well recorded for the first *Atlas of Bryophytes* but it has since been neglected. An analysis of the BBS database by Oli Pescott revealed that over 200 taxa were last recorded there between 1960 and 1969, over a hundred more than for any other British or Irish vice-county. Unless re-recorded, these will be bracketed as historic records when the cut-off date is advanced from 1960 to 1970 in the next Census Catalogue.

A visit by the BBS was therefore long overdue, and the Society accepted the suggestion of Jonathan Shanklin that it should join the Botanical Society of Britain and Ireland (BSBI) on a joint meeting. The meeting was based in King William's College, Castletown, and the local

△Fig. 1. Ayres NNR. All photos by C.D. Preston unless stated



△Fig. 2. Desiccated *Calluna* heath at Ayres NNR.

organiser was Philippa Tomlinson (Shanklin, 2019). The College provided accommodation, food and a room for our lab work (Fig. 13), thus making a very convenient centre. The meeting was well attended by over 30 botanists, but unfortunately only four of these were primarily interested in bryophytes (Matthew Adamson, Anne Haden, Liz Kungu, Chris Preston). We formed a companionable car-load but our low numbers clearly limited the amount of recording we could do on the island, and we were further handicapped by the drought of the 2018 summer. Only 12 mm of rain had fallen on the island in the two months before our arrival (16 May to 16 July). Victoria Sloan joined the bryological party for one day and Jonathan Shanklin contributed

some records from the sites visited by the BSBI.

In the following accounts, sites are given with their 1-km squares. All monads were recorded separately. An asterisk (\*) indicates an addition to the Census Catalogue for vc 71 or a first record from the island since 1960.

### Monday 16 July: Langness

Matthew arrived early enough to join a group visiting Langness, where he collected *Weissia perssonii* from soil amongst coastal rocks. We did not see this species again.

### Tuesday 17 July: Ayres NNR and Ballaugh Curragh

Both BSBI and BBS parties made their way to the island's only National Nature Reserve, Ayres NNR, at the northern tip of the island (NX4203, 4303; Fig. 1). If we had any doubts about the effect of the summer drought on the island's vegetation, these were dispelled by the sight of the crispy dry dunes, with *Calluna vulgaris* showing its characteristically orange post-mortem colour



(Fig. 2). Fortunately the site warden, Louise Samson, was able to lead us through the parched landscape to the dune slacks. We were shown a few flowering plants of *Coincya monensis* (Isle of Man Cabbage) here, now a rare plant on the island. Large expanses of mud around one pond had masses of young *\*Riccia cavernosa*



△Fig. 5. Matthew, Victoria and Liz at the *Sphagnum teres* site at Ballaugh Curragh.

(Figs 3, 4) with scraps of *\*Bryum klinggraeffii* and *\*Leptobryum pyriforme*, and *Campylium stellatum*, *Climacium dendroides*, *Drepanocladus aduncus*, *Fissidens adianthoides* and *Sanionia uncinata* in the moist dune turf nearby.

The BSBI charabanc headed off to some species-rich meadows, but these held little bryological promise so Chris, Liz, Matthew and Victoria travelled down a rough country road to Ballaugh Curragh (SC3694, 3695). This was once an area of small hedged meadows but in the area we visited most of these had become overgrown since 1950 and there are now extensive expanses of willow carr with the old

field boundaries embedded within them. This is the headquarters of the island's flourishing population of red-necked wallabies which graze some of the remaining open areas. We were attracted to one such area by the massive clumps of *Osmunda regalis* and here Liz detected freely fruiting plants of *\*Sphagnum teres*, known here to Wheldon but not seen on the island since 1909 (Fig. 5). It was one of six sphagna we found at the site. *\*Campylium protensum* was also present in the fen and we collected *\*Ulota intermedia* from the willows but even in these moist habitats the effects of the drought were evident, and *Hookeria lucens* was particularly badly affected (Fig. 6).

Figs 3–4. The largest pool on the Ayres NNR (<Fig. 3), with masses of *Riccia cavernosa* (▽Fig. 4) in the foreground.



## Wednesday 18 July: Glen Roy and Port Grenaugh

We spent most of the day in Glen Roy (SC4083, 4183), a valley with scattered trees, flushed sides and a rocky streambed as well as old mine buildings leading up to a small dam. We found 120 species in all, including *\*Riccardia palmata* growing on a rotting conifer log on the flushed side of the valley (Fig. 7) and *\*Bryum pallescens*, last collected on the island in 1858, on the sides of the dam wall. Several species were seen here for the only time during the week, namely *Hymenostylium recurvirostrum*, *Scapania gracilis*,



△Fig. 6. Bleached *Hookeria lucens* at Ballaugh Curragh.

*S. irrigua*, *Solenostoma gracillimum* and *Sphagnum cuspidatum*. Victoria, spending the day with the BSBI party, found a fine patch of *Trichocolea tomentella*, which eluded the bryological party. At the end of the day we had time to stop at the small stony bay of Port Grenaugh (SC3170), where the wet slumped cliffs had *\*Didymodon spadiceus* as well as *D. tophaceus*, *Fissidens incurvus* and *Pohlia melanodon*, also plants which we were not to see again on the meeting.

#### Thursday 19 July: Groudle Glen and West Baldwin Reservoir

Groudle Glen (SC4178) is now a rather quiet wooded valley on the east coast of the island. It is difficult to imagine it as the major tourist venue which it was in the 1890s, when over 100,000 visitors a year visited the valley, which had been recently planted with trees and was advertised as 'the fern glen', with a water wheel, lily ponds and a sea lion pool at the coastal end amongst numerous other attractions. Only the decaying remains of this infrastructure now survive (Fig. 8). Anne, Chris and Liz investigated its bryophytes, recording 76 species. We were delighted to re-find *Dumortiera hirsuta* on the dripping side of the valley, where it had been discovered by Jean Paton in 1968; it grew with *Jubula hutchinsiae* and was surrounded by *Pellia* (Fig. 9). There was more *\*Riccardia palmata* on a fallen beech tree. A separate list for Port Groudle (SC4278) at the seaward end of the valley provided an additional 17 species including *\*Bryum sauteri* on pathside

soil.

In the afternoon we headed inland. We stopped briefly at St Adamnan's church or Lonan Old Church (SC4279), where we found *Cryphaea heteromalla* on the kerb round a grave, before going on to the northern end of West Baldwin reservoir (SC3583, 3683). The water level was very low and we hoped that the extensive mud banks would provide some interesting ephemerals but they turned out to be almost devoid of bryophytes, the only find of any interest being a small patch of *Pohlia lescuriana*.

Matthew spent the day with the BSBI, concentrating on flowering plants but making the only record for the week of *Palustriella commutata*, growing with *Adiantum capillus-veneris* and *Eucladium verticillatum* in a sea cave at Traie ny Volain (SC2280). Jonathan collected a variant of *Conocephalum conicum* with narrow thalli from the same site. Matthew also found further *\*Bryum pallescens* at Cross Vein Mine (SC2678).

#### Friday 20 July: Silverdale and cliffs opposite Calf of Man

After the long drought it was a surprise to wake up to light rain which increased in intensity as the morning progressed. We spent much of the day in the lowland valley of Silverdale in the

▽Fig. 7. *Riccardia palmata* in Glen Roy.



limestone area of the island (Fig. 10), recording the monads north and south of the bridge at Rushen Abbey (SC2770, 2771) and taking refuge at lunchtime in the Abbey Restaurant where (to our slight surprise) we found that wet and scruffy bryologists were warmly welcomed. The limited area of limestone around Rushen Abbey has been well worked in the past and the 73 taxa we recorded included no additions to the island list. We did refine *Cirriphyllum crassinervium* and *Hygroamblystegium tenax*, which grow here at their only known sites on the island, though we failed despite much searching to relocate the similarly restricted *Anomodon viticulosus*. *Hygroamblystegium fluviatile* and *Plagiomnium rostratum*, not previously recorded here, were known from one other site on the island. Similarly our record of *Hygrohypnum luridum* constitutes only the second accepted site, although in this case an earlier record from near Rushen Abbey, made by Holt but treated as doubtful by Paton, should perhaps now be reinstated. It was good to see *Oxystegus tenuirostris* var. *holtii* here on Holt's

▽Fig. 8. Groudle Glen, with the waterwheel 'Little Isabella', first built in 1893.



△Fig. 9. *Dumortiera hirsuta* surrounded by *Pellia* on the side of Groudle Glen.

home island.

We made a brief visit at the end of the afternoon to the coast at Sound Cafe opposite the Calf of Man (SC1766), where Liz collected a vegetative *Tortula* from the base of a monument (to Percy Cowley) on the coastal slope which on microscopic examination turned out to have abundant tubers. Although certain identification is difficult in the absence of sporophytes, the material is a good match for *T. viridifolia*, a species from which tubers have not hitherto been reported.

### Saturday 21 July: Glen Crammag and Tholt-y-Will Glen

We left the lowland glens today for an upland stream running through open moorland, Glen Crammag (SC3687, 3786, 3787; Fig. 11). No fewer than 17 of the 83 species we found were seen only here on the meeting, including *Jungermannia pumila* by the stream, *Sphagnum papillosum* and *S. tenellum* on the moorland and *Entosthodon attenuatus*, growing in a fine population mixed with *E. obtusus* on a dripping cliff.

The afternoon site, Tholt-y-Will Glen

(SC3789), turned out to be a humid valley with a shallow stream and some dripping cliffs, surrounded by broadleaved trees including some elms (Fig. 12). It was one of the richest sites we visited, with 93 species. *Hyocomium armoricum* was extremely abundant and the less common species included *\*Dichodontium flavescens*, *\*Hygrobrella laxifolia*, *Lejeunea patens*, *Metzgeria conjugata* and more *\*Ulota intermedia*.

### Sunday 22 July: Elfin Glen, Ramsey and Glen Auldyn

We returned to the north of the island for the last full day of the meeting, starting at Elfin Glen (SC4493). This is another shaded valley, less rich than Tholt-y-Will (53 species) but with a remarkable abundance of *Jubula hutchinsiae* and with *Epipterygium tozeri*, a rare species on the island, on banks in several places.

We went on to Glen Auldyn (SC4292). As we were eating our lunch by the track though this broad valley, a man stopped his vehicle and without any preliminary remarks asked us rather breathlessly whether we had heard that Lewis Hamilton was 14th on the grid [at the

German Grand Prix, which he was to go on to win]. It characterised the remarkable obsession with motor sports on the island. Returning to our own obsession after lunch, we recorded 79 species from the Glen. Matthew found sheets of *\*Blasia pusilla* on the steep shaley bank of the river, a species not seen on the island since 1884. *Fissidens bryoides* var. *caespitans* also grew on the wet river bank, and *\*Bryum pseudotriquetrum* var. *pseudotriquetrum* was fruiting on rocks on the valley side which looked as if they were normally wet but were currently dry. The epiphytes were as good as any of the sites we visited, with *Orthotrichum striatum* as well as the commoner *O. affine*, *O. pulchellum* and *O. stramineum*, and five *Ulota* species, *U. bruchii*, *U. crispa*, *\*U. crispula*, *\*U. intermedia* and *U. phyllantha*. We found *Tetraxis pellucida* on the base of an ancient riverside sweet chestnut, and *\*Bryum klinggraeffii* with *Dicranella staphylina* on the rutted trackside.

On the way home we stopped on the coast north of Laxey to see dwarf oak trees which we had been advised to look at on the sea cliffs. These proved to be less interesting than they sounded,

▽Fig. 10. Matthew investigating riverside habitats in Silverdale.





△Fig. 11. Matthew on a wee bridge over the stream through open moorland at Glen Crammag. A. Haden.

as few epiphytes grew on the trees on this steep, dry rocky slope above the sea. However, close views of choughs on the coastal grassland above provided some compensation.

### Monday 23 July: Rosehill Quarry, Ballasalla

The last day was the second wet day of the week. Anne had an early flight home, but Chris, Liz and Matthew were able to join the remaining members of the BSBI contingent on a trip to Rosehill Quarry (SC2669), a long-disused and partially flooded limestone quarry. This provided a further locality for *\*Ulotia intermedia* as well as some calcicoles we had not seen earlier in the week, *Leiocolea turbinata* on the cliffs of the quarry and *Homalothecium lutescens* and *Syntrichia ruralis* var. *ruralis* on flat limestone

rocks. It was unusual to see *Fontinalis antipyretica* as the most frequent moss on the ground below willow scrub, which must be flooded in wetter seasons.

### Comparison with Jersey meeting

The results of our recording can usefully be compared to those of the BBS Spring meeting on Jersey in 2017. The island of Jersey is smaller than Man but it has a similar bryological history, having also been surveyed by Jean Paton in the 1960s then rather neglected (Preston *et al.*, 017). The statistics for the two meetings are summarised in Table 1 and are broadly comparable. The much smaller party on Man visited a similar number of sites; we recorded slightly more taxa but a smaller proportion of the total island flora. In spite of the summer drought we had no problem in finding areas in which we could bryologise easily, but only by concentrating on the moister and more humid sites. We spent very little time on the open coast, for example, in contrast to the Jersey meeting, and we should perhaps have spent another day on the open moorland.

The species we recorded included 89 bryophytes last seen between 1960 and 1969 and thus threatened with bracketing in the next Census Catalogue. This is a substantial contribution towards improving the recording on the island but there is still much fieldwork to be done to take the island to the stage where it is as well-recorded now as it was fifty years ago.

### Acknowledgements

We are grateful to Jonathan Shanklin for coordinating the arrangements for the joint BBS/BSBI meeting and especially to Philippa Tomlinson for making the local arrangements, providing us with much information on the natural history of the island and arranging a stimulating series of lectures in the evening. Tom Blockeel kindly helped identify some of our more troublesome specimens.



△Fig. 12. Tholt-y-Will Glen.

▽Table 1. A comparison of the results of the BBS meetings on Jersey (2017) and the Isle of Man (2018). Casual records are excluded from the site figures.

	Jersey	Man
Area of island (km <sup>2</sup> )	118	572
Participants on meeting	11	4
Total number taxa recorded	214	227
% island total	65	53
Additions to vice-county	14	9
Debracketers	10	5
Site/monads visited	26	25
Average number taxa per site	44	38
Total number of records	1136	984

## References

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△Fig. 13. Liz and Anne at work in King William’s College.