

# BBS Summer meeting 2015

## Isle of Eigg, Scotland

4th - 11th July

**David Long** reports on the summer meeting on the Inner Hebridean Island of Eigg

Following the very successful summer meetings on the islands of Rum (Rothero 2005) and Raasay (Hodgetts 2014) the island of Eigg remained as a gap in the BBS exploration of the Inner Hebrides; like Raasay it was poorly known for bryophytes, and due to its relatively small size could be covered in some detail in a week. Apart from a few records from 1935 by G. Heslop-Harrison, the only real attempt at a local bryophyte flora was by Blackburn & Lobley (1939) as a result of several visits in the late 1930s. They recorded species such as *Herbertus hutchinsiae*, *Marchesinia mackaii*, *Glyphomitrium daviesii* and *Oedipodium griffithianum*. Records from Eigg and the other 'Small Isles' were reviewed by Lodge (1963). More recently woodland surveys by Ben Averis

in 2000 and 2002 added many species to the Eigg checklist such as *Frullania microphylla*, *Plagiochila bifaria* and *Ulota calvescens*. The island includes 16 tetrads, of which 7 were visited by Ben Averis so much ground remained unexplored; we carried out a tetrad-based survey of as much of the island as possible.

Eigg is approximately 9 km long and 5 km broad, rising to 393 metres on the Sgurr, the most prominent summit on the island. Since 1997 it has been owned and managed by the Isle of Eigg Heritage Trust with many innovative projects including self-sufficiency in renewable energy. Eigg is accessible by ferry from Mallaig and in summer from Arisaig, but no vehicles can be brought on to the island without special permission, adding to its air of tranquility. In spite of its size, Eigg offers varied habitats – open moorland on the plateau, fringed by dramatic basalt cliffs, the prominent peak of the Sgurr composed of columnar basaltic 'pitchstone', some oceanic wooded valleys with ravines and waterfalls, and the coastline with cliffs, some limestone outcrops and sandy beaches. The weather was kind to us, with only one real soaking on the last day.

Accommodation for most was in the Glebe Barn, a spacious and comfortable hostel within

<Fig. 1 (opposite): A land of caves, massacres and *Myurium* - the south coast of Eigg. S. Phillips

walking distance of the pier, and with a small laboratory for microscope work. For evening meals we alternated between self-catering and the local caterers Eigg Bread who brought in excellent locally prepared dishes, and on one evening we ate out at the Galmisdale Restaurant beside the pier. The self-catering reached a peak at the end of the week with a gourmet Mexican meal of fajitas and salsa put together by Clare and Stan, while a major ingredient of Gordon's Bolognese sauce was left in his van in Mallaig, until Liz arrived on the Monday with new supplies. Eighteen members attended most or all of the week: Jeff and Joyce Bates, Neil Bell, Anita Bollmann, Des Callaghan, David Chamberlain, Mark Hill, Rory Hodd, Aline Horwath, Liz Kungu, David Long, Sean O'Leary, Stan Phillips, Mark Pool, Clare Rickerby, Gordon Rothero, Jo Wilbraham and our welcome visitor from the USA Charles Zartman, whose main study area is the Brazilian Amazon. Chas was particularly impressed with the array of Single Malts brought in by the group, and we assured him this was typical of BBS meetings. Stephen Bungard, the BSBI recorder for vc 104, joined us for part of the week. Because of the good numbers and considerable expertise, we split into two groups most days, apart from Jeff and Joyce who diligently recorded BRECOG quadrats all week.

### Saturday 4 July: arrival.

Somehow all the participants managed to gather by lunchtime at the harbour in Mallaig having arrived by road and rail from all over the country, and after purchasing ferry tickets loaded all our personal bags, boxes of food and drinks, microscopes, books etc. on to the ferry – the Loch Nevis, which set off at 14.25 and arrived at the Eigg pier at 15.40 in a spectacular welcoming



△Fig. 2 (top): The group assembled at Massacre Cave. D. Long. △Fig. 3 (below): The beautiful *Myurium hochstetteri* growing on coastal rocks. N. Bell

deluge, soaking everyone to the skin. We walked up to the Glebe Barn, with our bags ferried by car. A few immediately started recording around the hostel, by the end of the week yielding several rarities such as *Grimmia muehlenbeckii* found by David Chamberlain on a small basalt outcrop, the first of many additions to the Eigg bryoflora.



### Sunday 5 July: south coast and woodland

On our first full day on Eigg we enjoyed glorious sunshine and for the morning the group of fifteen explored the south-east coast from Galmisdale point as far as the Cathedral Cave (Uamh Chrabhaidh) (Fig. 4) and Massacre Cave (Uamh Fhraing) (Fig. 2) where the whole population of the island was reputedly massacred in 1577. This may have put some of the team off as only a few ventured deep into the cave; the Cathedral Cave, however, was more popular, accessible without crawling on all fours. *Myurium hochstetteri* was last recorded here (its only known site on the island) in 1953 and to everyone's delight we quickly found two substantial colonies of this beautiful moss – one of our main targets for the meeting (Fig. 3). It provided a wonderful companion while we took lunch and was much photographed. On the coastal rock outcrops nearby we also saw some of the characteristic species of Eigg, to be seen again regularly during the week: *Frullania teneriffae*, *Marchesinia mackaii*, *Plagiochila bifaria*, *Porella obtusata*, *Glyphomitrium daviesii* (fruiting), *Isothecium myosuroides* var. *brachythecioides*, *Racomitrium ellipticum* and *Weissia personii*. *Grimmia muehlenbeckii* was found again, at Galmisdale Point. On the way to the caves we were able to visit a stand of Atlantic Hazel Wood, where the spectacular Hazel Gloves fungus was seen. This special habitat is quite frequent on Eigg, as highlighted by Coppins & Coppins (2012), though many of the stands were showing severe defoliation.

After lunch we headed for the Lodge, built by the then owner of the island Lord Runciman in 1927 and surrounded by ornamental woodland policies, where we divided into two groups to record the four different tetrads involved. One group (David L, Mark H, Mark P, Anita, Sean, Clare and Chas) explored the western



△ From top to bottom: Fig. 4: The group approach the cave of Uamh Chrabhaichd - south coast of Eigg. S. Phillips. Fig. 5: *Ulota calvescens* in Galmisdale woods. S. Phillips. Fig. 6: Clare Rickerby, Jo Wilbraham & Sean O'Leary below the columnic grandeur of the Struay crags. S. Phillips



Fig. 7: *Glyphomitrium davesii* - everyone's favourite acrocarp - Bealach Thuilm - the far north of Eigg. S. Phillips. Fig. 8: *Targionia* growing with the ciliate *Riccia*. R. Hodd

half of the woodland, after examining the nearby track with *Bryum ruderale*, *Calliergonella lindbergii* and *Pohlia camptotrachela*. In the Lodge garden Mark Pool picked up *Pleuroidium subulatum* new to vc 104. Along a shady stream was a typical assemblage of oceanic epiphytes, *Neckera pumila*, *Zygodon conoideus* fruiting, *Cololejeunea minutissima*, *Lejeunea lamacerina*, *L. patens* and *Microlejeunea ulicina*, while *Oxystegus tenuirostris* grew in extensive sheets on a shady soil bank, an unusual habitat.

The other group, led by Gordon (David C, Des, Neil, Rory, Aline, Stan and Jo) looked at the eastern half of the woods and also more open ground north of the pier. They found the same range of oceanic epiphytes, along with *Ulota calvescens* (Fig. 5), and on rock outcrops *Grimmia hartmanii*, *Marchesinia mackaii*, *Isopterygiopsis pulchella*, *Pterogonium gracile* and *Preissia quadrata*. They also explored a small wooded burn where Stan got very enthused by *Cinclidotus fontinaloides* and *Homalia trichomanoides*, though others were more restrained in their excitement.

### Monday 6 July – East coast

Monday dawned another bright sunny day, and we split into two groups, with Gordon's group (Rory, Stan, Des, Aline, Neil, Sean, Clare, Jo and Chas) rising to the challenge of a long walk up the east coast towards the old settlement of

Struidh. The track was steep and treacherous, and in several places the group made forays up to the hazel woodland and crags. The first of these diversions was the most successful, by a waterfall just north of Bealach Clith where Des made the remarkable discovery of *Targionia hypophylla*, growing under basalt ledges, a great rarity in Scotland and in vc 104 last recorded on the Storr on Skye in 1899 (Fig. 8). Clare, Stan and Rory returned on the Friday when Rory picked up a puzzling ciliate *Riccia*, which after lengthy evening debate was identified as atypical *R. beyrichiana*. Apart from the typical Eigg assemblage of small oceanic liverworts, other species seen were *Preissia quadrata*, *Reboulia hemisphaerica*, *Solenostoma subellipticum*, *Antitrichia curtispindula*, *Glyphomitrium davesii*, *Pterogonium gracile*, *Oxystegus hibernicus*, *Rhizomnium pseudopunctatum*, *Ulota hutchinsiae* and of course the now familiar *U. calvescens*. An unexpected sight was that of a vertical dripping rock face festooned with *Calliergon giganteum*.

The second group (two Davids, two Marks and Anita) also studied the east coast, in the area around Kildonnan featuring a sandy bay and Druim an Aoinidh, a basalt escarpment with hazel woodland (Fig. 9). The basalt outcrops and boulders were of interest, with *Frullania fragilifolia*, *Porella obtusata*, *Grimmia lisae*, *Orthotrichum rupestre*, *Pterogonium*



△Fig. 9 (left): The scenic Kildonnan Bay with Atlantic Hazel Wood and the Scurr. D. Long. △Fig. 10 (right): The orange hues of *Herbertus bucbinsiae* below Leit'An Aonaich - the far north of Eigg. S. Phillips

*gracile*, *Racomitrium ellipticum* and *Schistidium pruinatum*, while in the shady hazel woodland we found *Porella arboris-vitae*. *Hennediella heimii* was found on damp ground on the shore and the BRECOG team recorded *Barbilophozia barbata* near here. To rendezvous with Liz whose departure from Edinburgh had been delayed for two days, we took lunch in the garden of the Glebe Barn. A bonus was a close view of a Hen Harrier, the first of several sightings during the week.

Apart from around the Lodge, the only other extensive woodland on Eigg is a large area of heath and bog planted with conifers. This was Liz's introduction to the island and it proved more interesting than expected. On the open rides and patches of bog Mark H notched up 12 *Sphagna* including *S. capillifolium* subsp. *capillifolium* and *S. subsecundum*; other bog species were *Pleurozia purpurea* and *Warnstorfia fluitans*. As usual, the willows had much *Ulota calvescens*, while *Aphanolejeunea microscopica* grew on dead twigs by a stream and *Colura* on *Picea* twigs. We briefly visited the edge of the open bog Blàr Dubh without finding much, but the forestry track had three liverworts new to the island: *Fossombronina incurva*, *F. wondraczekii* and *Marsupella funckii*. Later in the week Jeff Bates found *Ditrichum lineare* here. After re-joining the road Mark H picked up *Campylopus subulatus* on gravelly ground near the school.

## Tuesday 7 July – North-west and North coast

The day dawned cloudy and waterproofs were needed in the morning. A minibus ride to Cleadale got us off to an early start. The first group to be dropped off (David L, David C, Anita, Neil, Liz, Des, Clare and Jo) did so at the restored church on the way to the Bay of Laig, and followed the coast north to the Singing Sands. The coast is particularly scenic with Jurassic limestone outcrops, spectacular Tertiary dykes, and calcareous flushes rich in orchids. The first moss to be picked up was *Plagiomnium cuspidatum*, while on the damp calcareous ledges we found both *Conocephalum* species, *Jungermannia pumila*, *Scapania aspera*, *Didymodon tophaceus*, *Eucladium verticillatum*, *Gymnostomum aeruginosum* and *Tortella tortuosa*. In the flushes were *Chiloscyphus pallescens*, *Trichocolea tomentella* and *Plagiomnium elatum*.

After lunch by the Singing Sands we proceeded round to the north-facing slopes with some different species below the basalt crags: *Bazzania tricrenata* and *B. trilobata* amongst boulders and *Gymnostomum calcareum*, *Hymenostylium recurvirostrum* and *Orthothecium rufescens* on calcareous ledges.

The other group (Gordon, Rory, Stan, Mark H, Mark P, Aline, Sean and Chas) took the minibus to the end of the road at Howlin and crossed the Bealach Thuilm to explore the north-east corner of the island down to Talm and the sea caves nearby. They found many of the species seen by the other group, with some notable additions including *Hygrohypnum eugyrium*



in a stream, *Herbertus hutchinsiae*, *Leiocolea fitzgeraldiae*, *Brachythecium glareosum*, *Hedwigia integrifolia* and *Hylocomiastrum umbratum* on the slopes below the crags and more *Sphagnum skyense* which appears to be widespread on the island. The caves proved a disappointment, with no choice rarities, only ankle-deep sheep poo and a decaying Clyde Puffer wedged in the entrance of the ‘Puffer Cave’.

### Wednesday 8 July - The Sgurr and Beinn Tighe

The Sgurr (Fig. 13) is such an important landmark on Eigg that we made it an excursion for the whole group, walking up the path from Sandavore to the north side of the ridge. It is a massive lump of pitchstone, harder than the surrounding rocks and hence more resistant to past erosion. The main interest was on the north-facing screes and crags. A nice assemblage of large oceanic liverworts amongst the scree included *Anastrepta orcadensis*, *Bazzania tricrenata*, *Herbertus hutchinsiae*, *Mylia taylorii*, *Plagiochila spinulosa* and *Pleurozia purpurea*, while *Kiaeria blyttii* was a new record for Eigg. The base of the crags was a luxuriant garden of calcicoles (Fig. 15), perhaps the best find was Aline’s *Amblyodon dealbatus* new to Eigg, along with *Leiocolea heterocolpos* (Fig. 16), *Solenostoma hyalinum*, *Grimmia curvata*, *G. torquata* and *Orthothecium intricatum*. *Philonotis arnellii* was found by Mark H. Other ledges were more acidic, with beautiful stands of *Campylopus atrovirens* var. *falcatus* (Fig. 17), *Philonotis tomentella* found by Sean, more *Sphagnum skyense*, *Anthelia julacea*, *Douinia*



△Fig. 11 (top): Clare Rickerby on the cobbled ridge of Beannan Breaca - west end of Eigg. S. Phillips

△Fig. 12: *Sphagnum skyense* on the northern slopes of Beannan Breaca - west end of Eigg. S. Phillips

*ovata*, *Gymnomitrium crenulatum*, *G. obtusum*, *Radula aquilegia*, *Campylopus setifolius* and *Rhabdoweisia crispata*.

Lunch was taken here with a superb panorama to the north and out to the island of Rum, while the calls of Red-throated Divers could be heard from the nearby lochans. After lunch Gordon set off at pace with his group (Stan, Mark H, Mark P, Neil, Clare, Aline, Chas and Sean) in a north-westerly direction towards Beannan Breaca and Beinn Tighe, the most remote part of Eigg, traversing a dramatic landscape of escarpments and lochans. This excursion produced an excellent total of 115 bryophytes. *Antitrichia curtispindula* was abundant on boulders by a loch, more *Sphagnum skyense* and *Campylopus*



△Clockwise from top. Fig. 13: An Sgurr. S. Phillips. Fig. 14: Descent from Sgurr with hexagonal basalt wall. R. Hodd.  
 Fig. 15: The *Leiocolea heterocolpos* crag - one of the best bryo sites we found - alas lunch beckons - on the north slopes of An Sgurr. S. Phillips. Fig. 16: *Leiocolea heterocolpos*. C. Rickerby. Fig. 17: *Campylopus atrovirens* var *falcatus* on Sgurr. R. Hodd

*setifolius* were seen; also *Campylopus gracilis*, *Grimmia curvata*, *Pterogonium gracile*, *Ptilium crista-castrensis* and *Sphagnum strictum*.

The other group (David L, David C, Des, Anita, Liz, Jo and Rory) continued along the north-facing slopes of the Sgurr into the western, lesser-known tetrad where many of the of morning's species were ticked off again, *Sphagnum skyense* was by now a familiar sight, but a few different species were added, *Anthelia juratzkana* on soil and *Arctoa fulvella* in rock crevices were nice additions to Eigg, along with *Racomitrium sudeticum* and *Rhabdoweisia crenulata*. *Kurzia trichoclados* was quite abundant on peaty banks under the heather.

After a diversion up onto the ridge to claim the summit and enjoy the panorama, we eventually crossed the ridge via a steep gully down the south slope, admiring the spectacular hexagonal basalt columns and heading down towards the sea via the long-abandoned settlement of Grulin Uachdrach (Fig. 14). On the way *Hedwigia integrifolia* was seen on a large boulder. Our destination was one of the smallest tetrads on the island, consisting of coastal slopes, cliffs and a rocky gully with a waterfall. The terrain was very steep so we cautiously explored down the gully until the stream disappeared over the cliff but we managed to record 66 bryophytes including *Grimmia funalis* and *Weissia perssonii*, and several of the oceanic liverworts common on Eigg such as *Plagiochila bifaria*.

#### Thursday 9 July – Laig and Cleadale cliffs

Unfortunately, Gordon and Jo had to depart due to a threatened ferry strike. The rest of us took the minibus to Cleadale, to explore two of the best-known parts of Eigg visited in the past by several bryologists: one group to Laig Farm with its backdrop of low basalt cliffs and ravines, and



△ Fig. 18: *Riccia beyrichiana* on gravelly patch on edge of the cliffs above Cleadale. S. Phillips

the more adventurous group to the spectacular buttressed cliffs of Bidean an Tighearna above Cleadale.

As on Tuesday, one group (David L, David C, Neil, Anita, Des, Liz, Mark P, Chas) started from the church, walked south along Laig Bay and followed the coast to Poll Ducaill, with north-facing coastal slopes. Another thalloid liverwort new to Eigg was *Blasia pusilla* growing on damp clay banks close to the shore along with *Riccardia chamedryfolia*, *Solenostoma obovatum* and *Dicranella varia*; above we found *Hedwigia integrifolia* and *Glyphomitrium daviesii* on boulders, *Schistidium pruinatum* on a dry basalt outcrop, and *Pogonatum nanum* on soil.

We turned around looking for a nice lunch spot, which we found on a grassy knoll overlooking Laig Farm, then headed into the narrow Abhainn Gleann Chàradaill ravine. We re-found most of the species found by earlier visitors such as *Cinclidotus fontinaloides*, *Colura calyptrifolia*, *Drepanolejeunea hamatifolia* and *Harpalejeunea molleri* along with some additions such as *Blepharostoma trichophyllum* and *Metzgeria conjugata*. Under assault from midges we retreated from the ravine and followed a damp track eastwards, which produced *Pohlia camptotrachela* and *P. drummondii*, along with *Atrichum tenellum* detected by Mark Pool and new to vc 104. Before returning to the Glebe Barn we attempted another ravine, the Abhainn a' Cham Loin, which proved challenging. The



△Fig. 19: Aline Howarth & Rory Hodd as far as you can go without ropes up the Allt Bidein an Tighearna - above Cleadale. S. Phillips

most exciting find was by Des: the first Hornwort for Eigg, *Anthoceros punctatus*. After escaping the jungle we were re-united on the road for the walk home.

The other group, ably led by Rory and Stan (with Aline, Mark H, Sean, and Clare) took on the challenge of the Bidean an Tighearna cliffs which form a spectacular backdrop to the settlement of Cleadale (Fig. 19). They made their way up the steep gully, eventually reaching the summit plateau, from where they walked back to the Glebe Barn. This is probably the most spectacular place on Eigg, and though well-recorded, they nevertheless found several exciting new records. Stan's discovery of *Acrobolbus wilsonii* on a rock face in the gully was one of the best finds of the week, as it has very few other Hebridean sites. Another good find was *Riccia beyrichiana* in a damp hollow on the cliff top (Fig. 18). Other species recorded included *Cololejeunea calcarea*, *Herbertus butchinsiae*, *Metzgeria leptoneura*,

*Radula aquilegia*, *Orthothecium rufescens*, *Oxystegus hibernicus* and *Pogonatum nanum*. There was no sign of *Aulacomnium turgidum*, recorded here by Heslop-Harrison in 1935 but never confirmed, though it grows in a similar habitat on Skye.

### Friday 10 July – western Eigg

The far western coast of Eigg is perhaps the most remote part of the island, but it offered two unrecorded tetrads, both mere coastal slivers, so for the sake of completeness most of the group (apart from three who went to pay homage to *Targionia*) set off on the long walk along the south coast via the two long-abandoned settlements of Grulin Uachdrach and Grulin Iochdrach. The day was cloudy but with a fair bit of rain and our two tetrads turned out to be mostly precipitous cliffs topped with wet heath; however in the second, southern, square we were able to descend to a sheltered cove for lunch, and reached a tally of 100 taxa. *Weissia perssonii* was seen in both tetrads, in its typical habitat of earthy crevices on cliff tops. Other noteworthy species were *Campyliadelphus chrysophyllus*, *Oxyrrhynchium pumilum*, *Sphagnum contortum* and *Plagiothecium cavifolium*. Two special vascular plants admired were *Ajuга pyramidalis* and *Pinguicula lusitanica*.

After the long trudge back to the Glebe Barn in the rain, many of the group decided they had enough energy left to participate in the major event of the Eigg Music Festival ('Feis Eige') by going to the traditional ceilidh later in the evening (until the wee small hours) in the community hall, along with practically the whole of the island's population. Even reluctant dancers eventually succumbed to the music of the excellent ceilidh band. This was a vigorous and very enjoyable event, a novel experience for some of the group, and perhaps a 'first' for the



△Fig. 20: Rum floats like a mirage beyond Cleadale - just another scenic photo from the cliffs above Cleadale. S. Phillips

BBS. Somehow all made it back along the track at 3 am by the light of two mobile phones. We decided this was a fitting end to a splendid week.

### Saturday 11 July - departure

In spite of the previous evening's activities, all were up bright and early to pack our bags and specimens and tidy up the hostel, before walking down to the pier to catch the ferry at 12.30. Thus ended one of the most successful and enjoyable Scottish BBS meetings of recent years. A total of 377 taxa were recorded on the island on the meeting, 267 mosses, 109 liverworts and one hornwort. Of these 145 were new records for the island. Only 34 taxa recorded previously were not re-found, including some rarities such as *Lepidozia cupressina*, *Amphidium lapponicum*, *Campylopus brevipilus*, *Encalypta ciliata*, *Oedipodium griffithianum* and *Oncophorus virens*.

During the week Jeff and Joyce recorded 21 BRECOG plots, mostly in areas visited by the rest of us, and including some of the specialities such as *Myurium*. They found two species new to Eigg not seen by the rest of us, *Barbilophozia barbata* and *Ditrichum lineare*. The meeting owes much of its success to the enthusiasm and hard work of the participants, and I am most grateful for their good humour and support. I would also

like to thank all those on Eigg who contributed a great deal, particularly Stuart and Tamsin McCarthy at the Glebe Barn, Katrin Bach and Saira Renny of Eggy Bread for their wonderful fresh bread every day and their excellent meals, Greg Carr for his minibus, Stephen Bungard for help with planning the excursions, and John 'The Bird' Chester of the Scottish Wildlife Trust for sharing his unique knowledge of the natural history of Eigg.

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