

BBS Summer meeting 2014

Killin, Scotland 26th July to 2nd August

Gordon Rothero and **Rory Hodd** report on last summer's escapades in the mountains

Participants in all or part of the meeting were: Gordon Rothero, David Long, David Chamberlain, Julie Smith, Sara McBride, Ron Porley, Sean O'Leary, Mark Lawley, Stan Phillips, Rory Hodd, David Freeman, Pete Howarth, Des Callaghan, Tom Edwards, Oliver Moore, Liz Kungu, Emma Gilmartin, Clare Rickerby, Valerie Heppel, Agneta Burton, Nick Hodgetts. Dan Watson, the National Trust Scotland ecologist for Ben Lawers and Glencoe, joined us for most of the meeting and provided invaluable Landrover support on a couple of days. Of the group, 14 are based in Scotland, which must be something of a record and one third of the group could also lay claim to being "young". A group of 20 or so is too large for montane botanising so we split into two groups on all days except the last, when the group was smaller; my thanks go to David Long for leading the 'A' team and to Rory

for providing the account of its exploits. This meeting has had a long gestation period; I have long wanted to get more people familiar with the rare montane calcicoles that had such an attraction for an earlier generation of bryologists but had recently been rather neglected in favour of laudable 'square bashing'. The Breadalbane range, and particularly the hills north of Killin along to Ben Lawers, is by far the richest area for these species in Scotland because of the outcrops of calcareous schist and metamorphosed limestone above 750m.

26th July

Most of the group was based at Auchmore Steading self-catering accommodation and this provided a good base (Fig. 1). The hot, dry weather of the past days was breaking down and we were faced with a "changeable" forecast but at



△Fig. 1. View of the Lawers range from Auchmore Steading, with Creag na Caillich on the left, Meall nan Tarmachan along to Ben Lawers on the right. G. Rothero

least the bryophytes were somewhat re-hydrated. Most of the group met at Auchmore on the Saturday evening for a brief briefing and to sort out Sunday's options. Bryological endeavour had already started however with Ron, Rory and David L. finding *Schistidium agassizii* at Fiddlers Bay on the shores of Loch Tay.

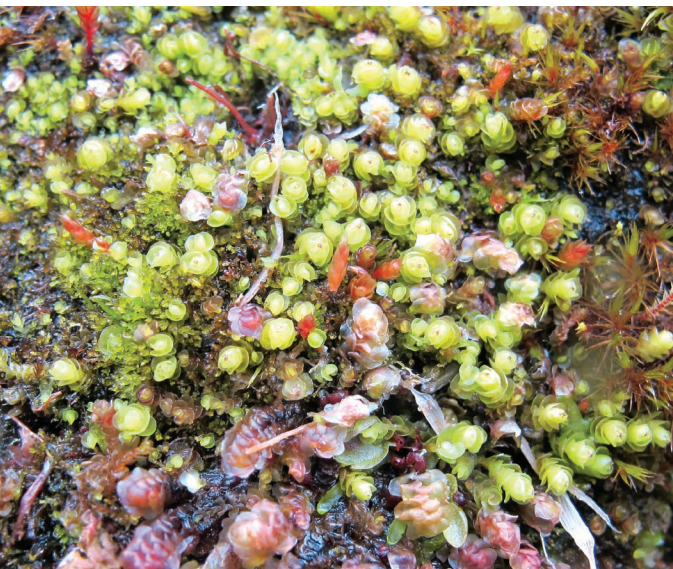
27th July

The aim of the first full day was to guarantee that we would all see some of the rare montane calcicoles for which the Breadalbane range is renowned so we all went to Ben Lawers, with one team going to Meall Corranaich and the other to the SW crags and the Crater on Ben Lawers itself, both teams walking up Coire Odhar.

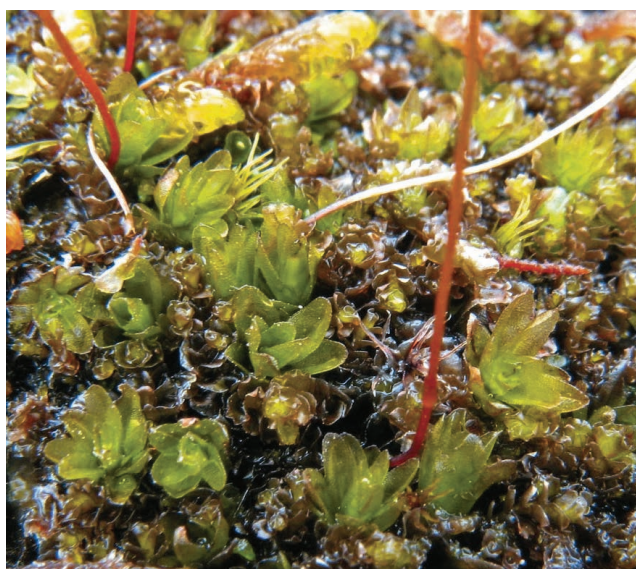
Meall Corranaich

The top of Coire Odhar holds snow (it was Scotland's first ski resort!) and we were able to admire *Moerckia blyttii* and *Lophozia opacifolia* by the path and nearby rocks enabled the group to start to get familiar with common montane species like *Dicranoweisia crispula*. The first target was the flushes low down on the steep NE slopes and these had considerable interest with relatively common species like *Pseudocalliergon*

trifarium, *Scapania uliginosa* and *Odontoschisma elongatum* but also scarce plants like *Tritomaria polita*, *Scapania degenii*, *Solenostoma confertissimum* (Fig. 2), *Meesia uliginosa* and one rarity in *Tayloria lingulata* (Fig. 3), seen in several places. Further on, another extensive flush had a large stand of *Cinclidium stygium*. Getting to the target crags involved a very steep pull but finally we were able to admire *Timmia austriaca* in one of several small stands along this slope. Heading back south along the crags is awkward and involves a bit of up and down, especially for Stan's camera, but there are rewards in quite frequent patches of *Hypnum hamulosum*, *Encalypta alpina*, *Amphidium lapponicum*, *Mnium spinosum*, *Hylocomiastrum pyrenaicum*, *Schistidium trichodon* and small stands of *Jungermannia polaris*, *Bryoerythrophyllum caledonicum*, *Timmia norvegica* and *Hypnum bambergeri*. The block scree below the final crags under the summit is very good and has a different set of species. In very sheltered crevices in the scree there are small stands of *Pseudoleskea incurvata*, *Heterocladium dimorphum* and *Mnium lycopodioides* and rather more frequent patches of *Mnium thomsonii*, *Mnium spinosum*, *Sciuro-hypnum reflexum* and *Pseudoleskeella rupestris*.



△Fig. 2 (left): *Solenostoma confertissimum* on Meall Corranaich. G. Rothero. △Fig. 3 (right): *Tayloria lingulata* in a flush on the north side of Meall Corranaich. S. Phillips.
▽Fig. 4 (below): *Bryoerythrophyllum caledonicum* on Beinn Heasgarnich S. Phillips



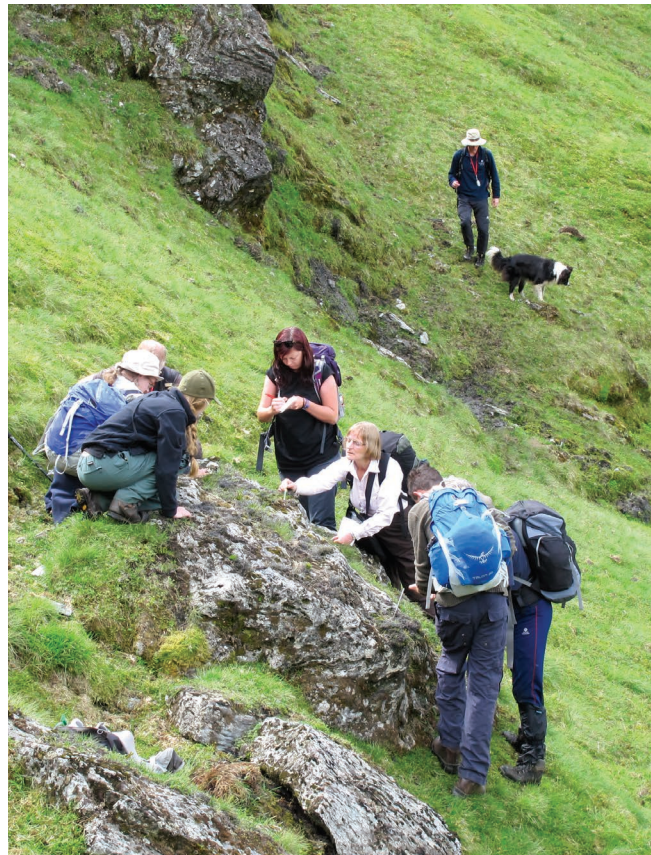
Ben Lawers SW crags

An energetic group, ably shepherded by Dan Watson's collie, Riddle, climbed up to the famous southwest crags below the summit of Ben Lawers, where many of the group were overwhelmed by the abundance of specialist species of upland calcareous rock that are rare or absent elsewhere in the UK and Ireland. Progress through the screes and along the crags was slow, with bryological treasures at every turn. Amongst many others, highlights of the Southwest crags included *Pseudoleskea incurvata*, *Brachythecium cirrosum*, *Racomitrium himalayanicum*, *Ptycodium plicatum*, *Mnium spinosum*, *Campylophyllum halleri*, *Ctenidium procerrimum*, *Scapania calcicola* and *Timmia norvegica*. David Long had the most interesting find of the day (and probably of the meeting) here in *Cratoneuron curvicaule*, the first record of this little known moss in the UK for over a century. After a damp lunch in the mist, the group moved across the slope, aiming for the Ordnance Gully. *Mnium spinosum* and *Plagiomnium medium* were found growing amongst scree, with *Tortella fragilis* and *Gymnomitrium coralloides* observed on rocky slopes. Respects were paid to *Hypnum revolutum*, and a small amount of *Heterocladium dimorphum*





△Fig. 5 (above): *Hygrohypnum smithii* in a burn in Coire Riadhailt, Meall nan Tarmachan. G. Rothero. ▽Fig. 6 (below left): *Tayloria lingulata* in a flush in Coire Riadhailt. G. Rothero. ▽Fig. 7 (below right): Inspecting a large stand of fruiting *Conostomum tetragonum* in Coire Riadhailt. G. Rothero.





△Fig. 8: *Meesia uliginosa* in Coire Riadhailt. G. Rothero

was found in the Ordnance Gully. After a very satisfying day, a return was made via the summit of Ben Lawers, where the mist cleared to give wide ranging views of endless mountains and, nearer at hand, down over Lochan nan Cat and An Stuc.

28th July

Ben Heasgarnich

The northern Corrie of Ben Heasgarnich was the target on day two, in search of *Bryoerythrophyllum caledonicum*. An initially unexciting ascent was enlivened by a number of interesting flush systems, where *Pseudocalliergon trifarium* was frequent. David Long stated that one particular flush was perfect for *Moerkia hibernica*, which he duly found moments later. Flushes on top of the ridge running

towards the summit yielded *Tayloria lingulata*, *Cinclidium stygium*, *Odontoschisma macounii*, *Tritomaria polita* and an abundance of fruiting *Meesia uliginosa*, with a number of rare sedges providing a distraction from the bryophyte flora. The party then descended across steep slopes, where *B. caledonicum* was soon found on a wet rockface (Fig. 4). It was decided to visit a late-lying snowbed, on the way to which the oceanic liverworts *Anastrophyllum donnianum*, *Plagiochila carringtonii* and *Scapania ornithopodioides* were surprisingly encountered in a broad gully. The snowbed proved disappointing, and a return was made via the summit. The “best” habitat of the day was saved for last, with much time spent on hands and knees beside where the cars were parked, resulting in the discovery of *Fossombronina fimbriata*, *F. incurva*, *Haplomitrium hookeri* and *Aongstroemia longipes*.

Coire Riadhailt and Meall Garbh

This the big coire that sits on the NW side of Meall nan Tarmachan and is little visited but has lots of calcareous crags and flushes and a nice rocky summit on Meall Garbh. One boulder on the long but gentle approach had *Pseudoleskeella catenulata* and the initial boulders and crags produced a typical set of montane calcicoles. Pride of place on the initial crags on the west side of the coire goes to the excellent population of *Bryoerythrophyllum caledonicum* but there is also a good stand of *Hygrohypnum smithii* (Fig. 5) in the burn. After lunch in the sunshine a fruiting population of *Conostomum tetragonum* (Fig. 6) was admired by all and moving up to the steep headwall of the coire gave the first stands of *Timmia norvegica* and *Tayloria lingulata* (Fig. 7). These two species and *Meesia uliginosa* (Fig. 8) proved to be sparsely but widely scattered in wet places on the upper slopes and *Racomitrium himalayanicum* occurs on a number of the large



△Fig. 9 (above): *Bryum dixonii* at Meall Ghaordaidh. D. Long. ▹Fig. 10 (right): *Scapania uliginosa*, also found at Meall Ghaordaidh. S. Phillips

boulders in the scree. A decision was made to 'top out' so we headed for the rocky knoll which forms the top of Meall Garbh, a proper summit, which also had good patches of *Hypnum hamulosum* and *Hypnum bambergeri*.

29th July

Meall Ghaordaidh

The bryologically little-known Meall Ghaordaidh was tackled from Glen Lyon, via its northern corrie. Flushes and wet rockfaces on the way up yielded a range of species, including *Bryum dixonii*, *Scapania degenii*, *Orthothecium rufescens* and abundantly fruiting *Oncophorus wahlenbergii*. The cliffs above this were relatively acidic and bryologically disappointing, but a large patch of *Hygrohypnum smithii* was found in a small stream. The ridge was crossed in search of calcareous crags, with a reasonably promising line of crags eventually located. *Rhytidium rugosum* was found sparingly in turf below the cliffs and Oliver and Rory located a small area of good calcareous crags, upon which were found *Pseudoleskeella rupestris*, *Myurella julacea*, *Encalypta alpina* and *Mnium lycopodioides*.

Ben Lawers, Lochan nan Cat

After a (bone-shaking) lift up in the NTS landrover up the track to the intake weir high on



the Lawers Burn, the second group walked up to Lochan nan Cat where the first objective was to re-find *Grimmia anomala* on the loch margin where it was last recorded, as *Grimmia hartmanii*, in August 1902. Groups went round each side of the loch and were soon successful, Ron Porley finding the best stand on the south side. The rest of the day was spent exploring the screes around the head of the loch, with a detour for the more energetic to pay homage to *Pseudocalliergon turgescens* on the An Stuc ridge above. The



scree above the loch is the recorded locality for *Plagiothecium piliferum*, last seen here in 1903 and searched for in vain since then and we had no more success, though patches of *Herzogiella striatella* and *Isopterygiopsis muelleriana* did excite false hopes. *Paraleucobryum longifolium* occurs on the larger rocks and in the interstices there are good stands of *Pseudoleskea incurvata*, *Heterocladium dimorphum*, *Mnium spinosum* and *Mnium lycopodioides*. The *Pseudocalliergon turgescens* team had a successful detour but confirmed the opinion expressed by several bryological visitors, that it is currently not thriving here.

30th July

Ben Challum

On Wednesday, a hardy group headed west to Ben Challum, near Crianlarich. Despite the low cloud, there was an air of optimism in the group that conditions would improve, which was well and truly extinguished by the time the summit was reached, after a long trek through thick, cold mist and sideways rain. After posing for the obligatory soggy summit photo, the group descended the north-facing cliffs into the abyss in search of good ground. Unfortunately this was not forthcoming, with a number of montane species seen, including *Conostomum tetragonum*, as well as lush banks of *Sphagnum fuscum*, but nothing exceptional. A brief clearance of the mist allowed clear views of what looked to be good calcarous crags, 500m below, and inaccessible

△From top to bottom - Fig. 11: *Grimmia anomala* with *Pterigynandrum filiforme* on the shore of Lochan nan Cat. R. Porley. Fig. 12: *Pseudoleskea incurvata* in block scree above Lochan nan Cat. G. Rothero. Fig. 13: *Heterocladium dimorphum* in block scree above Lochan nan Cat. G. Rothero



△Fig. 14 (left): The A team on the summit of Beinn Chaluim in less than ideal conditions... R. Hodder. △Fig. 15 (right): ...meanwhile the B team express sympathy on nice dry Meall Daill just 12km to the north. R. Porley

from that side of the mountain. With the return of the rain and thick mist, there was nothing for it except to retreat, having at least bagged a Munro.

Meall Daill

This remote (and mostly rain-free) hill to the north of Loch Lyon has a few good vascular plant records but, as far as I could tell, it had not been visited by a bryologist. A long but easy walk along the track and a grind up the initial rush-infested slopes led to the first crags and scree of Creag Eoghannan, which were a reminder that most Scottish hills do not have calcareous rock, the only plant of note here was *Bryum riparium*. The base-status of the rocks gradually improved as we headed north along the crags and by lunch we had a reasonable list, Ron finding *Moerckia hibernica* in flush just below our lunch spot. The gully above leading to the summit ridge proved quite calcareous in places; the best find was probably *Barbilophozia quadriloba* but other species included *Pseudocalliergon trifarium*, *Tritomaria polita*, *Scapania degenii*, *Harpanthus flotovianus*, *Solenostoma confertissimum* and *Meesia uliginosa*. The summit ridge was breezy and damp but scattered patches of *Silene acaulis*

suggested that the ground could be productive and so it proved. These exposed ridges can be sites for two nice mosses; *Aulacomnium turgidum* occurs in the drier heath, often in small quantity although here there were some good patches. Where there is a little flushing the moss to look out for is *Oncophorus wahlenbergii* and here there were some very large patches, all fruiting nicely.

31st July

Creag na Caillich

This hill was popular with earlier bryologists because of its proximity to Killin but the approach from the Lawers car park is quite long so it no longer gets much bryological traffic. We took vehicles along the hydro track to cut down on the walking and were soon on the crags and again seeing the usual montane calcicole assemblage. *Encalypta alpina* and *Mnium thomsonii* are quite frequent along the crags and there are smaller amounts of *Solenostoma confertissimum*, *Scapania calcicola*, *Encalypta rhaptocarpa*, *Plagiopus oederianus*, *Myurella julacea* and *Brachythecium glareosum*. Clare found a small population of *Bryoerythrophyllum caledonicum* and also *Palustriella decipiens* and other rarities



△Fig. 16 (top): *Scapania calcicola* on Creag na Caillich. G. Rothero

△Fig. 17 (below): *Rhizomnium magnifolium* in flush on Stuc an Lochain. S. Phillips

here were *Jungermannia polaris* and *Timmia norvegica*. From the crags of Creag na Caillich we continued on round the ridge towards Beinn nan Eachain and here there were some strongly calcareous rocks exposed on the ridge. These produced the best find of the day with large patches of a *Hypnum* which proved to be *Hypnum revolutum* despite my calling it *Hypnum bambergeri* in the field. There was also a fine dark *Schistidium* here which looks very similar to *Schistidium helveticum* but this is still under investigation. From here Nick led us round to an area of block scree on the south side of Beinn nan Eachain which has patches of *Paraleucobryum longifolium* as well as *Pseudoleskea incurvata* and *Sciurohypnum reflexum*.

Cam Creag, Meall nan Tarmachan

The other group was dropped off below Cam Creag, where the now-familiar upland calcareous assemblage of species was well developed, with species growing on the cliffs including *Encalypta rhaptocarpa*, *E. alpina* and *Timmia norvegica*. *Bryoerythrophyllum caledonicum* was soon found by David L. at the top of a precipitous gully, and large patches were found at a number of points further along the cliffs. An area of block scree in the upper part of the corrie was quite productive, *Paraleucobryum longifolium* grew in quantity on the tops of boulders, and Pete unexpectedly found a patch of *Heterocladium dimorphum* on the



△Fig. 18: Rory enjoying the large stands of *Splachnum vasculosum* on Stuc an Lochain. J. Smith

side of a boulder. Flushes were also productive, yielding *Barbilophozia quadriloba*, *Palustriella decipiens*, *Amblyodon dealbatus*, *Meesia uliginosa* and fruiting *Tayloria lingulata*. On the descent, some members of the group were waylaid by an abundance of tasty blaeberreries.

1st August

Stuchd an Lochain

A few bodies had fallen by the wayside so we decided to stay as one large group for the final day. The short but steep haul up to another Lochan nan Cat under Stuc an Lochain was soon dispensed with and figures straggled around the loch margin and up to the broken crags. The initial crags on the west side of the lochan were only patchily calcareous and the most interesting

plants here were small amounts of *Myurella julacea* and *Tritomaria polita*. After a wet lunch the whole team headed up the hill through steep broken ground where other nice things were seen, including *Barbilophozia lycopodioides*, *Harpanthus flotovianus* and *Scapania degenii*, but all in all, the crags were a bit disappointing. At the top of one gully there was a stand of *Arctoa fulvella* and the interest in this was a reminder that, as well as the calcicole rarities, there were also relatively common montane species that were unfamiliar to many in the team. A more speedy group had reached the ridge first and, spurred on by the improving weather, had proceeded to bag the Munro. A re-united party then headed back east along the ridge, planning to head for a very obvious spring line on the west facing slopes of Creag an Fheadain in the hope

that this would produce some good flushes. This hope was realised almost immediately with David L. finding a good stand of *Moerckia hibernica* and other good things followed including *Rhizomnium magnifolium*, *Scapania paludosa*, *Calypogeia azurea* and *Philonotis seriata*. Part of the interest was the varied nature of the flushes along the spring line with some clearly quite acidic and others close by with calcicoles like *Oncophorus virens*, *Pseudocalliergon trifarium* and *Tritomaria polita*. Two flushes at the northern end of the spring line provided the icing on the cake with large stands of both *Splachnum vasculosum* and *Pseudobryum cinclidioides*, inducing an orgy of photography. As seems to

be often the case in Scotland, the population of *Splachnum vasculosum* here appears to be all male so there were no impressive sporophytes to be admired. Sitting on the rocks on the ridge in the late afternoon sunshine, with views over the loch to Rannoch Moor, the Blackmount and the Glencoe hills beyond and looking down the slope as the last stragglers dragged themselves away from the flushes, was a fitting end to a good week.

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▽Fig. 19: Late afternoon sunshine on the *Splachnum vasculosum* flushes with Loch an Daimh and the Blackmount in the background. G. Rothero

