

Philippa Thompson reports on a meeting in the most botanically celebrated mountain range in Britain

he Ben Lawers meeting in September 2023 was designed to augment the Centenary AGM in Edinburgh. The area is not too far from Edinburgh and is a paradise of botanically rich mica schist, a magnet for any self-respecting mountain botanist in the UK. It also just happened to be the location of the first ever BBS meeting held in Scotland. Gordon Rothero immediately offered to help with the planning and a property was booked just outside Killin. Morenish House by the side of Loch Tay was large enough to accommodate most of the group and others were able to find alternative

 \triangle Figure 1. Approach to Coire nan Cat. Claire Halpin accommodation not far away.

Twenty-two people attended the meeting: Neil Bell, Bill Boyd, Jeremy Fraser, Tsvetoslav Georgiev, Claire Halpin, Leonora Hunt, Lyn Jones, Liz Kungu, Mark Lawley, David Long, Peter Martin, Julia Masson, Andy McLay, Sam McVie, Oliver Moore, Seán O'Leary, Gordon Rothero, Clare Shaw, Wendy Taylor-Batt, Philippa Thompson, Wouter Van Landuyt and Dan Watson.

On the first evening, Sunday 10 September, Clare Shaw, who had driven straight up from the Lake District, had a magnificent meal ready for



△ Figure 2. Aongstroemia longipes, dam below Lochan nan Cat. Clare Shaw

all the hungry Morenish House residents who had attended the excursion to Alva Glen earlier that day. Mark and Jeremy, who had also driven straight up that day, had taken time out to record in Killin, finding *Habrodon perpusillus* on ash trees by a car park in the centre of the village before arriving in time for the meal. After supper plans were made for the next day's excursions.

11 September, Coire nan Cat

Mark Lawley and Lyn Jones elected to explore virgin territory on Meall Buidhe above Glen Lyon, but everyone else elected to go to Coire nan Cat which nestles to the east of the summit of Ben Lawers itself. This is an area, owned and managed by the National Trust for Scotland (NTS) that has been well worked in the past, but that encompasses such an extent of boulder field and crag that there is still the possibility of finding new things. There was a complicated arrangement whereby half the party were taken up in vehicles. The rest of us started an hour

earlier at 8 am, with surprisingly few grumbles, to walk up from the Ben Lawers hotel so that we would all meet at roughly the same time at the Hydro dam, for the last leg of the walk into the Coire. As two of our mountain experts, Gordon Rothero and David Long, were in the vehicles, this arrangement was quite crucial! All went according to plan, although the vehicles had an interesting encounter with some highland cattle and many gates, and Claire's Freelander had a slight altercation with a concrete drain. The walking party arrived just in time to be shown Aongstroemia longipes (Fig. 2) by the others who had had enough time to investigate 'grots' in the gravel around the parked vehicles but had not yet had time to get bored.

The last mile of walking to Lochan nan Cat was swiftly accomplished (Fig. 1) and after a wobbly crossing over the stepping-stones at the lake outflow, bryologising started in earnest. The first excitement of the day was *Grimmia anomala*, growing in patches with pale gemmae on

boulders by the lakeside. Luxuriant cushions of Grimmia ramondii and Antitrichia curtipendula were admired. The group then gradually spread out. David Long was on a mission to refind Plagiothecium piliferum, last recorded in 1903, and worked around to the sites where it was last seen. Many of the group were seeing species for the first time, so our experts had to field a lot of questions. Scapania degenii was identified and duly admired by the side of a basic flush. The characteristic strings of Drepanocladus trifarius were also located and pointed out. A quality specimen of Pohlia drummondii with large brown bulbils was examined and Herbertus stramineus was admired. Racomitrium himalayanum was identified with its wiggly hair point and the characteristic hole in the middle of its growth. It presumably grows outwards from a central point and then gradually decays from the centre, like a fairy ring. Several cushions of fruiting Amphidium lapponicum with its characteristic short seta were found and fruiting Hymenoloma crispulum was abundant, looking similar to its lowland cousin Dicranoweisia cirrata. In the quest to relocate some Mnium thomsonii that Gordon had just recorded, Philippa put a hand under a boulder and came out clutching Metzgeria pubescens. To her total surprise Gordon came powering over in some excitement. One of the century-old herbarium specimens of the missing Plagiothecium piliferum had M. pubescens mixed in it. However, a detailed search revealed nothing new and whilst Philippa continued to look for the Mnium thompsonii, everyone else took time out to have lunch. Dan, Oliver and Bill disappeared up Cat Gully to check the patch of Drepanocladus turgescens which occurs on the Bealach above. This rare moss was still present but there were smaller amounts than when it was last recorded in 2021. A highlight for the others was a patch of Syntrichia norvegica, with

its reddish hair point looking like a shiny crown of copper wire, characteristically tucked in the shelter of a boulder. A nearby tiny *Scapania* with brown gemmae turned out to be *S. cuspiduligera*. *Pohlia flexuosa* was found growing in the boulder scree and Gordon found some *Sciurohypnum reflexum*. Late afternoon and the group grudgingly tore themselves away from the crags, wandering back along the lakeside in dribs and drabs, to return to the arranged meeting place at the dam for four o clock. A fabulous day made possible for us all thanks to Dan's support with the NTS vehicle and Claire's agreement to bring her Freelander along.

Meanwhile on new ground on Meall Buidhe, after a strenuous climb, Mark and Lyn compiled a respectable list of 88 species in Glas Choire to the east of the summit, although the rocks turned out to be disappointingly acidic. The highlights of the day were *Gymnomitrion alpinum*, *Bryum dixonii*, *B. riparium*, *Dicranella cerviculata*, *D. grevilleana* and *Pohlia flexuosa*.

12 September, Loch na Lairige

The next day everybody elected to explore the slopes on either side of Loch na Lairige. A change of plan at the last minute made a casualty of Oliver, who had arrived independently at the dam at the south end of the Loch. He walked up to an empty car park which was odd because moments before it had been a chaos of bryologists and parking cars. In the five minutes it had taken Oliver to park and walk back, everyone else had vanished! By the time that Philippa realised what had happened, it was impossible to do anything about it. Capitalising on an unplanned opportunity, Oliver went on to record 157 species by himself, from NN6039 east of the Loch, including numerous uncommon bryophytes amongst which were Abietinella abietina var. abietina, Amphidium lapponicum, Mnium



△ Figure 3. Clare, Wouther, Tsvet and Liz above Loch na Lairige. Leonora Hunt

lycopodioides, Myurella julacea, Pseudoleskeella catenulata and Rhytidium rugosum.

Meanwhile a group that included David Long went to investigate the adjacent northern monad, NN6040, which up to that point, although showing plenty of records on the National Biodiversity Network, held only a single record of Meesia uliginosa on the BBS database. They parked at the northern end of the Loch and walked south down the road, exploring the flushes by the road and then working their way uphill over grassy slopes dotted with scattered crags which turned out to be satisfyingly baserich (Fig. 3). A small Thuidium growing in the turf was confirmed later to be *T. recognitum*. They examined three rocky gullies, reaching a high point of about 700 m close to NN60354042. In the first gully there were several patches of Myurella julacea, looking like pale threads growing among other bryophytes and new for the monad. There was also abundant Herbertus stramineus, Grimmia ramondii and G. torquata.

After lunch David found Thuidium assimile in the grass at the base of the second gully and Mnium thomsonii sheltering under an overhang. Near the start of the final gully Encalypta alpina and E. ciliata were found, as well as Scapania calcicola, another new record for the monad. Towards the end of the day, they walked down to NN5940, by the reservoir margin to record a few loch shore species. A small patch of fertile Jungermannia was collected, and later when helping with the microscope work Gordon identified J. pumila, Solenostoma hyalinum and S. obovatum. Solenostoma subellipticum was also recorded in the monad. The group found well over 100 species during the day, including Lophozia longidens, Racomitrium himalayanum and Sphagnum angustifolium.

The rest of the group headed west to Creag an Lochain, NN5940, a well-recorded monad with a rich assemblage of species scattered amongst a complex system of crags and gullies on the slopes of Meall Tarmachan. Pete peeled off early on a



△ Figure 4. Bryoerythrophyllum caledonicum, Creag an Lochain. Claire Halpin

solitary Grimmiale excursion, which yielded Grimmia longirostris amongst others and a record of Didymodon spadiceus. Everyone else shadowed Gordon, saturating him with questions and luxuriating in an abundance of montane calcicoles. Tactile cushions of Grimmia torquata were ubiquitous. Mark Lawley circulated around the group, disappearing up and down gullies, and occasionally returning with treasure, including some shoots of Bryoerythrophyllum caledonicum (Fig. 4) which the group were able to compare with the thinner leaved *B. ferruginascens*. He later found some Scapania gymnostomophila growing with Jungermannia borealis and confirmed a very dark Schistidium to be S. trichodon. At lunchtime, sitting in the sunshine, but in a sharp wind, the group were able to pick out, with binoculars, David Long's group across the valley also having lunch. Three Encalypta species were recorded, Encalypta alpina, E. ciliata and E. rhaptocarpa, and the branching of Stereodon hamulosus (Fig.



△ Figure 5. Stereodon hamulosus, Creag an Lochain.

Claire Halpin

5) was compared with Ctenidium molluscum and Hypnum jutlandicum. Some fruiting Plagiopus oederianus was discovered and admired by the group. A very upright robust Grimmia spotted by Philippa in a steep gully turned out to be Grimmia ovalis, last recorded in this monad over 50 years ago by Jeff Duckett, E.R.B. Little and Jean Paton. Gordon found the same species in a neighbouring monad during a meeting recce in June. Continuing across the crags from the gully, Dan discovered a very healthy Woodsia alpina near a luxuriant cushion of Rhytidium rugosum. It was a steep gully and the end of the day, but unable to stand the excitement happening above their heads, the entire group came up one by one to join the party and to pay homage to the magnificent Woodsia. A little social gathering was held high up amongst the crags – a fitting climax to the day's activities. The excursion finished with a bit more desultory recording by the loch margins as everyone sauntered happily back to



△ Figure 6. Habrodon perpusillus, Allt Airigh an Fhraoich. Claire Halpin

the vehicles at the end of the lake. Reunited with Pete back at the car park, a specimen of *Ptilium crista-castrensis* was produced and duly admired by those who had not come across this spectacular species before.

13 September, three different venues

On Wednesday the group split into three. Claire, Clare, Liz and Jeremy opted for a lowland day and had a very enjoyable time recording a small area of the woods south of the River Lochy in NN5434. They parked by the road just south of the power station, and the first find of the day, by Clare, was *Habrodon perpusillus* growing on one of the mature Norway Maples planted near the road (Fig. 6). The roadside and bridge yielded many of the expected common species, and then they headed into the woods, up the Allt Airigh an Fhraoich, a rocky stream running through acid birch-oak woodland. Both *Tritomaria exsectiformis* and *T. exsecta* were found in profusion in the woods. Cushions of *Porella*

platyphylla were growing on rocks in the water. After heading south through the monad to an unnamed stream, they found a large population of *Syzygiella autumnalis* with numerous perianths on a fallen, but still living birch – the highlight of the day. 149 species were recorded in the monad.

Meanwhile, the rest of the group headed north-west to Meall Ghaordaidh in Glen Lyon. Mark, Sam, Leo, Tsvet and Dan covered a fair area of NN5040, starting at the southwestern crags of Creag a' Mhadaith, crossing blanket bog, an upland burn and a boulder field to the northern facing crags of Creagan an t-Sluic, and then finishing by the more basic crags in the southeastern corner of the monad by the end of the day. They were pleased to find Ptilium crista-castrensis in some boulder scree, as well as a good patch of Anastrepta orcadensis. They ended with a respectable list of just under 100 species, although the site was less interesting than anticipated. They also enjoyed having Dan's dog, Beans, with them for company (by special dispensation on a bryology meeting!) although she did become fed up with bryologising by lunchtime and decided to spend the afternoon playing fetch with heather branches and barking at stones.

Gordon, Wouther, Pete, Seán, Wendy and Philippa stayed closer to the vehicles and explored Craig Loaghain on the northern slopes of Meall Ghaordaidh. Again, the rocks were disappointingly acidic, but 119 species were recorded in NN5141 including Anastrepta orcadensis, Sphenolobus minutus, Campylopus fragilis and Ptilium castra-castrensis. Pleurozia purpurea and Mnium thomsonii were found in the neighbouring monad of NN5041 and Seán found some Chionoloma cylindrotheca, a new record for vc 88. A buzz of excitement came at the end of the day when Philippa found a coppery liverwort high up in a gully that she thought was



△ Figure 7. Coire Riadhailt. Clare Shaw

Mastigophora woodsii. Luckily nobody bothered with the steep climb to come up and have a look because it turned out to be nothing more than a luxuriant specimen of *Ptilidium ciliare*. Another learning experience on the rocky road of trying to become a half-competent bryologist!

14 September, Beinn nan Eachan and Meall Garbh

On the final day one party drove to Coire Riadhailt on the northern side of Beinn nan Eachan and had a look at the northern facing rocks and gullies in NN5738 (Fig. 7). It was an unsettled day with strong winds and showers. Once everyone reached the crags, undeterred by the weather, *Amblyodon* and *Meesia* were quickly found. After sheltering for lunch, they progressed up a gully, very exposed to the weather, with new

▶ Figure 8. Philonotis tomentella, Coire Riadhailt. Claire Halpin species seemingly always growing in the windiest of spots. The gully widened and became a wide flush dominated by stands of *Philonotis fontana* with *Sphagnum squarrosum* at the very top. The group split, with some continuing along the crags southward and others going back down the gully, new species still being discovered on the descent, before both groups met back at the bottom. A



small liverwort collected by Gordon from the edge of the gully turned out, unexpectedly, to be *Barbilophozia quadriloba*. Claire had an exciting find of *Philonotis tomentella* at the base of some crags (Fig. 8). There are several records of *Philonotis tomentella* in vc 88, dating back to before the existence of the BBS, but only one within the last 50 years. On the walk back they stopped for a lie down ... to see what bryophytes could be found in some mine waste! *Encalypta streptocarpa* and *Pohlia nutans* were found here.

The other group drove with Dan Watson along the old access track to the quarry on the southern side of Beinn nan Eachan and made their way up to the south-west facing slopes of Meall Garbh. The first excitement of the day was revealed as people exited the vehicle. The quarry floor was dotted with copious small cushions sporting the little golf club capsules of Meesia uliginosa, a species that was obviously very comfortable colonising this manmade habitat. The group set off, blown uphill by an increasing gale, a fine mist of rain in the air and a most unpromising cloud line hovering around the base of the crags. On reaching the crags the group split up with Pete setting off on another Grimmia hunt and the rest of the group settling into a species-rich gully. Species that had been recorded earlier in the week were found, testing everybody's recognition skills: Amphidium lapponicum, Encalypta alpina, E. ciliata, Mnium thomsonii, Myurella julacea, Plagiopus oederianus, Rhytidium rugosum and many more. Miraculously, the weather improved as the day went on. The cloud lifted and the sun came out. Only a small area of crag had been looked at, but there was plenty of interest and it was with reluctance that the group set off down the mountain at the end of the afternoon to drive back out again.

The meeting finished with a group meal on the Thursday evening at the Killin Hotel. Dan

Watson joined to say goodbye after the meal. Most impressively, he had just fitted in a fitness training session between leaving the mountain and arriving at the hotel! Organisers of meetings should take note, obviously the BBS is lacking in ambition!

Conclusions

The Ben Lawers area is renowned for its botanical interest and most of the interesting ground has been well worked over the last 200 years. However, there were new records for many species of interest. It was exciting, although not a bryophyte, to find another site for the rare fern Woodsia alpina. The Drepanocladus turgescens site was revisited, although it is worrying that it did not appear to be in good condition. Just over 1500 records were made in 15 monads during the meeting, with one new record for vc 88. Syzygiella autumnalis, Grimmia ovalis and Philonotis tomentella were notable records. An important aspect of the meeting was that it provided a wonderful opportunity for people to learn to recognise some of the UK's rarer species in the company of experts and thanks are due to those experts for coming along and giving their support.

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