



# BBS Spring meeting 2023: Rosthwaite, 25 March–1 April

**Clare Shaw** reports on a productive and extremely well-attended meeting

Organisation of the Lake District BBS Spring meeting was started by Diane Dobson way back in 2018 and it was originally intended to take place in 2021, but was twice cancelled due to Covid. Having helped out in the early stages, I took over the organisation when Diane's health issues left her unable to continue with the work. With limited experience of BBS meetings, it was with some trepidation that I watched the number of potential attendees climb into the 60s in the weeks leading up to the meeting. This was double the numbers of the two meetings I had attended and I was anxious about how the logistics would work with such large numbers, and whether the tiny village of Rosthwaite would cope with the traffic. Happily, visions of traffic jams through the Borrowdale valley and irate farmers with blocked gateways were not realised and the week

△ Figure 1. Enjoying the sunshine at Blea Tarn.  
*Clare Shaw*

passed off happily with no major mishaps. It was, however, difficult to keep track of over 50 people, so my apologies for not attempting to name all the members of the different recording groups.

The following people attended the meeting, whether for a couple of days or for the whole week: Neil Bell, Sophia BenJeddi, Astrid Biddle, Thomas Blockeel, Andrew Branson, James Brockbank, Peter Bullard, Agneta Burton, Rachel Carter, Chris Carter, Mags Crittenden, Pete Forrest, David Freeman, Jon Graham, Sue Grahame, George Greiff, Mark Griffin, Sarah Grinstead, Claire Halpin, Gordon Haycock, Steven Heathcote, Nick Hodgetts, Mark Jackson, Ellen Jones, Christine Kelly, Izzy Kervin, Liz Kungu, Gary Lawrence, David Long, Chloe Lumdsdon, Michael Lüth, Pete

▷ Figure 2. Gary Lawrence photographing *Hageniella micans* (close-up below) at a new site in Johnny's Wood. *Clare Shaw*

Martin, Andy McLay, Andrew McLeod, David Mesarcik, Catherine Mowat, David Newman, Sean O'Leary, Sharon Pilkington, Chris Preston, Karen Rogers, Gordon Rothero, Lucia Ruffino, Jeff Scott, Clare Shaw, Jonathan Sleath, Mark Smith, Lil Stevens, Alastair Stevenson, Philippa Thompson, Jo Wilbraham.

As is well known, the Lake District is an area of high rainfall and the high humidity makes it a good area for bryophytes. It has therefore been generally quite well surveyed, but records tend to cluster in the popular destinations. One of Diane's key aims for the meeting was to explore areas with no bryophyte records or low numbers of records. These sites were interspersed with locations known for their interesting species. Though we were based in Cumberland (vc 70), we also visited sites in Westmorland (vc 69).

### Saturday 25 March: arrival

As people started to arrive on the Saturday a group of us met up in front of the Borrowdale Institute for a quick tour of the rarities of Johnny's Wood, just across the fields behind Borrowdale YHA. This is a very accessible SSSI with several rare bryophyte species. As some of us had previously visited the site several times, we quickly refound the target area, on a steep slope, where we admired patches of *Bazzania tricrenata*, *Herbertus hutchinsiae*, a swathe of *Ptilium crista-castrensis* growing with *Hylocomiastrum umbratum*, and a couple of small 'balconies' of *Plagiochila punctata*.

Heavy rain was setting in and we headed back down the slope to explore the tiny beck, waterfalls and flushes to the right of the path. Gary Lawrence quickly found a stunning new site for *Hageniella micans* on the slope of a large



boulder (Fig. 2). Although nationally scarce, this is found in several locations in these woods, but this was a particularly nice example. We failed to find *Metzgeria leptoneura*, previously recorded in one of the small waterfalls, and with rain getting heavier and a busy week in prospect we

headed back to Rosthwaite. We had the use of the upstairs room at the Institute in Rosthwaite for microscope work and as a general base for the week, and this would prove a useful communal space on some of the rainier days.

### Sunday 26 March: Borrowdale/Derwentwater area (vc 70)

#### Honister Pass

On the Sunday morning, a group of seventeen decided to go to Honister Pass, a site which has already been well recorded and has a lot of bryological interest. After a lot of indecision twelve set off with Peter Bullard along the tramway to investigate an area that is noted for its interesting vascular flora. Bryologising immediately started to become interesting with the appearance of *Cololejeunea calcarea*, *Andreaea hookeri*, *Entosthodon attenuatus* and *Schistidium strictum*. Much interest was taken in fruiting *Andreaea* as Michael Lüth was on an *Andreaea megistospora* mission, and capsules were duly packeted to be taken away and inspected under the microscope, but the species was not confirmed. The group

had an impromptu epiphyte workshop around a tree with four *Ulotas*, followed by a rowan with *Lewinskya affinis*, *L. striata* and *Orthotrichum stramineum*. Lunch was enlivened by the discovery of *Eremonotus myriocarpus* growing next to the stream, previously recorded here in 2019 at what is probably its only remaining location in Cumbria and indeed England (Fig. 3). Fruiting *Isopterygiopsis pulchella* was recorded, also *Marchantia quadrata*, *Scapania aspera* and *Racomitrium ellipticum* (only the third record in vc 70 in the last 50 years; Fig. 4). The day finished with an excursion to the waterfall above the car park, adding *Barbilophozia sudetica* with its brownish gemmae to the day's list of 75 species.

The second group headed west and started recording at Dubs Quarry where there were a surprising number of calcicoles (*Ctenidium molluscum*, *Tortella tortuosa*) amongst the matrix of calcifuges, and some fine fruiting *Tortula subulata s.str.* Descending to the beck and working westwards, one fine flush was found with fruiting *Scorpidium revolvens* concealing shoots

▽ Figure 3. *Eremonotus myriocarpus*, Honister Crag. Michael Lüth





△ Figure 4. *Racomitrium ellipticum*, Honister Crag.  
Michael Lüth



△ Figure 5. *Habrodon perpusillus*, Brandelhow Park.  
Clare Shaw

of *Sarmentypnum sarmentosum*. After lunch by the stream, the afternoon was spent looking at Little Round How. There were fine populations of *Andreaea rothii* and *A. rupestris*, *Gymnomitrium crenulatum* and *G. obtusum*. In a small area of boggy ground at the foot of the How, *Calypogeia sphagnicola* was detected amongst *Sphagnum papillosum*. Just over 100 records had been made by the end of the day.

#### Brandelhow Park

A group including Tom Blockeel, Gordon Haycock *et al.* headed for Brandelhow Park from the NT car park near Hawse End. The woodland on the way down to Hawse End in NY2421 had some good epiphytes, notably a patch of *Habrodon perpusillus*\* which Tom Blockeel found on a sycamore (Fig. 5). *Orthotrichum tenellum* was also found in this area, on a sycamore branch. On the lane from Hawse End to Brandelhow in monad NY2521 there was some *Scleropodium cespitosum* on tarmac at the road edge. The group then crossed into monad NY2520, which includes the northern part of

Brandelhow Park. *Calliergon cordifolium* was found by Gordon in wet woodland at Otterfield Bay. On the lakeside just outside Brandelhow some very fine *Nogopterium gracile* on tree bases was admired, with *Climacium dendroides* present nearby. *Grimmia hartmanii* was on lakeside boulders. In Brandelhow Park during the stop for lunch contact was made with Andy McLay, who had been delayed by issues with parking. *Dicranodontium denudatum*, *Leucobryum albidum* (confirmed as a locally frequent species in Britain in the article by Ottley *et al.* (2023), in print as the meeting took place) and some fine patches of *Hylocomiastrum umbratum* were noted. Andy had already recorded the woodland in NY2520, so it was decided to head south to the next monad, NY2519. A *Grimmia* that Tom collected from a lakeside boulder just inside this monad turned out to be *G. lisae*, in the form once known as *G. retracta*. Generally, however, the woodland in this monad was less productive from a lack of streams and rock outcrops. The group emerged onto a small area of old mine workings, which had patches of *Racomitrium*



△ Figure 6. *Braunia imberbis*, Swanesty How. Claire Halpin

*elongatum*. Ascending the lower slopes of Cat Bells in NY2419 *Grimmia donniana* in scree was found. A gully above the minor road looked interesting but turned out to be unproductive. However, *Kiaeria blyttii* was a nice find on a small crag nearby.

#### *Manesty salt well and lake shore*

Nick Hodgetts and his small group chose to explore Manesty Wood and the surrounding area, which provided a wide range of habitats and bryological niches, from humid broadleaved woodland with streams, flushed areas and large rocky outcrops, to an open lakeshore and a steep acid grassland hillside with flushes and numerous rock faces. A large dry-stone wall and the woodland floor at its base right at the entrance to the wood provided plenty of interest, including *Andreaea rothii* and *A. rupestris* almost side by side, *Barbilophozia barbata*, *Lepidozia reptans*, *Heterocladium heteropterum* and *Ptychomitrium polyphyllum*, amongst others. Trees in the wet woodland provided further diversity with *Metzgeria violacea*, *Dicranum fuscescens*, *Orthotrichum pulchellum* and *Plenogemma phyllantha*. *Bazzania trilobata*, *Bartramia pomiformis*, *Dicranum majus*, *Sphagnum girgensohnii* and *S. quinquefarium*

were noted on and around a large rock with flushes at the base. Moving out of the wood and towards the moorland, *Colura calyptrifolia* was found on a large patch of leggy gorse. Aside from the wonderful views of Cat Bells and Derwent Water, the moorland flanks and steep boulder-strewn acid grassland brought further species, including *Gymnomitrium concinnatum* and *G. obtusum*, *Breutelia chrysocoma*, *Grimmia torquata*, *Pogonatum aloides* and *Pohlia nutans*, with *Cynodontium bruntonii* on crags. The return journey to the cars took the group past some moorland areas with a little more base-rich influence. *Aneura pinguis*, *Bryum alpinum*, *Campylium stellatum*, *Dicranum bonjeanii*, *Funaria hygrometrica* and *Sphagnum inundatum* were added to the list in these areas. The impressively long list of species largely reflected the habitat diversity.

#### *Holmcrag and Scarbrow Wood*

A large group of bryologists met at the parking place in Grange. They decided to record as a group for the morning and visited the workings at Swanesty How, NY2417. A dry-stone dyke bordering the main site provided a range of *Racomitrium* species, and several clumps of *Grimmia donniana*. The site was open hill

ground, predominantly acidic vegetation and Sharon soon found the first of a few populations of *Braunia imberbis* on the site, always a lovely plant to see (Fig. 6). Although the Lake District has a cluster of records for this plant the vast majority of these are well over 50 years old. A rock outcrop provided a good comparison for the identification of *Gymnomitrium* with adjacent populations of *G. crenulatum* and *G. obtusum*.

After lunch sheltered by a rocky knoll, the party divided into two groups to record the woodland on the east and west banks of the River Derwent. The east bank was a narrow strip of woodland between the road and the river south of Grange in NY2517 and NY2516. The wet *Salix* woodland near the start graded into mossy oak woodland with numerous moss-covered boulders and rock outcrops. The water level was too high to allow much access to the riverside banks and boulders but *Metzgeria conjugata* was found on the river bank at one point and

Gordon Rothero found *Chionoloma tenuirostre* var. *tenuirostre*. The oak woodland had extensive *Bazzania trilobata*, David Long found one population of *Hylocomiastrum umbratum* and there was a small area of *Loeskeobryum brevirostre* in the southern monad. Some nice populations of *Cynodontium bruntonii* were photographed by Claire Halpin.

After a good day out in the field, thirty people reconvened at Royal Oak in Rosthwaite for a dinner organised by Mags Crittenden. The food was good and it was a nice opportunity to catch up with people and meet some new faces, particularly as the large number of attendees spread at accommodation across the area made it difficult to keep up with everybody.

#### Monday 27 March: Langdales area (vc 69)

Monday was a glorious sunny day, but unfortunately the unforeseen and very badly timed closure of the road through Great Langdale

▽ Figure 7. Browney Gill. Claire Halpin





△ Figure 8. *Anthelia julacea*, Browney Gill. Claire Halpin

caused a few issues, including a traffic jam through Little Langdale as traffic was diverted along this alternative route. Nonetheless, a good-sized group managed to reach the Browney Gill site, at the end of Great Langdale.

#### *Browney Gill*

Browney Gill (Fig. 9) proved to be (for some) an alarmingly steep gully, and some of the

▽ Figure 10. *Campylopus setifolius*, Browney Gill. David Long



△ Figure 9. *Entosthodon attenuatus*, Browney Gill. Claire Halpin

group chose to divert around it! Others found it, however, to be accessible, though some scrambling was needed in places. Variable geologically, there were a few outcrops with massive clumps of *Tortella tortuosa*, for example by the waterfall. Elsewhere the rocks were uniformly acidic. Highlights included fruiting *Cynodontium jenneri*, sheets of *Anthelia julacea* on wet rocks (Fig. 8), *Rhabdoweisia crenulata*, *Marchantia quadrata* in quantity, and an impressive clump of *Marsupella aquatica*. A good patch of fruiting *Entosthodon attenuatus* was found in the upper part of the ravine (Fig. 9). David Freeman found *Pulvigerella lyellii* on rock and David Long was pleased to find *Campylopus setifolius*\* (Fig. 10). Returning at the end of the day, while the rest of the party was content to sit in the sun and compare notes with another group, Jonathan Sleath hunted along the edge of Oxendale Beck in a search for *Bryum riparium*\* – and found it!

#### *Blea Tarn*

A large group arrived at Blea Tarn above Little

Langdale (Fig. 1) and started investigating the basic mires around the tarn. Almost immediately *Splachnum ampullaceum* was found on dung, with immature capsules. Further into the mire was *Scorpidium revolvens* and *S. scorpioides*, *Orthocaulis atlanticus*, *O. floerkei*, *Campylium stellatum*, *Straminergon stramineum* and *Sphagnum palustre*, *S. rubellum*, *S. russowii* and *S. subnitens*. Nick later confirmed *Chionoloma cylindrotheca* from this site. The group then split, with one group setting off up Lingmoor Fell by way of a small ravine, where *Barbilophozia barbata* and *Tritomaria quinqueidentata* were found. Higher up were slightly basic flushes with spectacular sheets of *Scorpidium scorpioides* and mats of *Scapania undulata* tangled with *Jungermannia eucordifolia*. It was a fine day with some wonderful views up to the Langdale Pikes.

The other Blea Tarn group worked its way around the south and west side of the tarn and along a track through a larch plantation with steeper banks and associated scrub areas. Through the southern plantation area, large patches of *Dicranum majus* were notable and, along the southwest side, the group stopped for lunch beside an area of larches where *Campylopus introflexus* formed the main ground cover. *Microlejunea ulicina* was recorded on many of the larch trees on the banks above the tarn, but other epiphytes seemed restricted to *Lewinskya affinis* and *Ulota* species, though tree stumps nearer the tarn edge were covered by mixed liverworts and yielded three *Calypogeia* species. *Pellia epiphylla* was fruiting prolifically along a stream descending steeply from the bank into the tarn, while a small waterfall in the beck had thick banks of green *Marsupella aquatica*.

#### *Blea Moss*

Three bryologists plus two husbands set out towards Blea Moss. Walking down the road, they

crossed a few streams giving access to a range of bryophytes including *Fissidens osmundoides*. Heading downhill the route towards Blea Moss passed junipers which unsurprisingly yielded little of interest epiphytically. Blea Moss itself seemed rather dry for the time of year and provided only two species of *Sphagnum*. Having crossed the moss, one of the party proceeded to scale the heights of Castle Howe, possibly the site of an Iron Age hill fort. Heading back to the car park, a number of ruderal species were picked up. This monad, NY2903, yielded 76 species with some rather fine liverworts, including *Calypogeia arguta*, *Gymnocolea inflata*, *Lepidozia reptans*, *Odontoschisma sphagni*, *Pellia endiviifolia*, *P. epiphylla*, *P. neesiana* and *Tritomaria quinqueidentata*.

#### *Fletchers Wood*

Tom Blockeel, Andy McLay and George Greiff went to look at Fletcher's Wood after deciding not to try to reach Browney Gill. Working along the track along the north side of the wood in NY3204, they found it unproductive, with much conifer planting and felled areas. However, *Trichocolea tomentella* was located by the stream, and there was some *Chionoloma tenuirostre* var. *holtii*\* with sporophytes. Leaving the wood, they crossed over to Howe Banks at the southern end of Lingmoor Fell in NY3104. A small disused quarry had *Grimmia donniana*, *Racomitrium elongatum* and *Thuidium delicatulum*. Tom was puzzled by an extensive patch of a small *Racomitrium* on an inclined rock face nearby, which proved to be an unusual narrow-leaved form of *R. obtusum*, although mature, as demonstrated by the presence of sporophytes. From there, the group worked around the southern slopes of Lingmoor Fell, where some flushes had *Scorpidium scorpioides*, and then up to the area above Lingmoor Quarry

in NY3004. A small north-facing crag had *Pohlia elongata* var. *elongata*, but it was disappointing to see some degraded communities on the rock faces here, with algae and moribund bryophyte cushions, presumably a consequence of nutrient deposition.

### Tuesday 28 March: Buttermere area (vc 70)

#### Butrness Wood

After a few false starts and tight three-point turns on the way to the parking place, a merry group set off in the rain for Butrness Wood in Buttermere. About 60 woodland species were recorded, including *Bazzania trilobata* and *Tritomaria exsecta* with brown gemmae. Pete Martin finished the morning with a trail along the lakeshore looking for *Grimmia*. Spirits were

good but the rain was unrelenting and the group decided to retire at lunchtime, returning to the lab and their microscopes, where they were privileged to be given an impromptu *Schistidium* presentation by Michael Lüth.

#### Holme Wood, Loweswater

Holme Wood lies beside Loweswater and NY1221 and NY1121 were recorded. There were some scattered areas with native trees but most of this site was mature conifer woodland, some of which was being felled and so access was restricted. *Neckera pumila* was found on a tree close to the entrance to the wood, and *Didymodon sinuosus* on a tree root a little further along. *Climacium dendroides* and *Nogopterium gracile* were recorded amongst a range of epiphytes on the lakeside trees. A lakeside building provided some diversity of microhabitats with *Bryoerythrophyllum recurvirostrum* and *Rhynchostegium confertum* on the walls. The group then headed upslope along the beck to the waterfalls at Holme Force, a steep waterfall towards the northern end of the wood in NY1121, which has the only rock outcrops in the woodland (Fig. 11). The lower beck had *Heterocladium wulfsbergii*. There was *Hylocomiastrum umbratum* on banks near the Force, and the stream below the waterfall had *Metzgeria conjugata* and *Chionoloma tenuirostre* var. *holtii*\*. The falls themselves were surrounded by large colonies of *Dichodontium flavescens*. *Metzgeria leptoneura* was recorded in 2020 but was not refound. However, Gordon Rothero discovered *Lepidozia pearsonii* among the crags on the east bank of Holme Force. After lunch some of the group investigated the tarn above High Nook Farm in NY1219, which is surrounded by a valley mire with flushed slopes and much bracken on the hills above. The tarn



< Figure 11. Holme Force, Holm Wood. Anne Branson

itself was found to lack boulders and therefore bryophytes, and the bog, wet heath and rocks near the tarn were very acidic. Recording was difficult because of an unexpectedly stiff and cold wind blowing drizzly rain, but *Racomitrium obtusum* was recorded from the boulders on the slope, and a large population of *Anastrepta orcadensis* was recorded in the wet heath below Black Crag. *Marsupella aquatica* and *Nardia compressa* grew in Highnook Beck.

*Lanthwaite Wood and Highpark Mire*

The group heading to Lanthwaite Wood seemed to avoid the worst of the wet weather and enjoyed a full day out in the field. Diane Dobson had been brought by Rachel and Chris Carter to enjoy a couple of hours recording. The woodland yielded a good number of species including *Cephalozia curvifolia*, *Metzgeria consanguinea*, *Microlejeunea ulicina*, *Neckera pumila*, *Tetraphis pellucida* and *Zygodon viridissimus*. Nick Hodgetts spotted some crags just above the path where *Cynodontium bruntonii* was found – a new species to some (Fig. 12). Heading down to the River



△ Figure 12. *Cynodontium bruntonii*, Lanthwaite Wood. Astrid Biddle

Cocker *Lejeunea cavifolia*, *Fontinalis antipyretica*, *Hyocomium armoricum*, *Homalia trichomanoides* and *Sciuro-hypnum plumosum* were added to the list. A second set of higher crags proved a little disappointing, though *Bartramia pomiformis* was found, and more *Cynodontium bruntonii*, conveniently situated next to *Amphidium mougeotii* for comparison. *Rhabdoweisia fugax* as

▽ Figure 13. *Heterocladium wulfsbergii*, Birker Fell. Michael Lüth



well as *R. crispata* were later confirmed. Heading back down and around the foot of a very dark and choppy Crummockwater there were large amounts of *Climacium dendroides* on the edge of a concrete path along the lakeside and a nice patch of *Loeskeobryum brevirostre* in a small patch of open woodland. The group reached the second site, Highpark Mire, which had a very wet bog, with large quantities of *Myrica gale*. There was a good range of *Sphagnum* species, including *S. angustifolium*, *S. auriculatum*, *S. inundatum* and *S. papillosum*, along with *Odontoschisma sphagni*, *Campylium stellatum* s.str. and *Straminergon stramineum*.

### Wednesday 29 March: Wastwater and Eskdale area (vc 70)

#### Birker Fell

A large group met at Birker Fell and worked up the beck from the bottom of Spothow Gill. Small trees lower down had a range of epiphytes including *Cryphaea heteromalla*, *Plenogemma phyllantha*, *Ulotia bruchii* and *U. calvescens*\*. Tom Blockeel was soon ensconced in the ravine, while some preferred to take a less vertiginous

▽ Figure 14. Finding the *Aneura mirabilis*, Low Coppice.

Michael Lüth



route around the edge. On the slope masses of *Bazzania trilobata* were soon discovered, which it was hoped might presage some more interesting species. Apart from some *Loeskeobryum brevirostre*, however, most of the interest was down in the ravine, where *Mesoptychia bantriensis*, *Metzgeria consanguinea*, *Plagiochila spinulosa*, *Bartramia halleriana* and *Heterocladium wulfsbergii* (Fig. 13) were found. There were exposures of base-enriched rock, with *Anoetangium aestivum* and *Gymnostomum aeruginosum*. The main group stopped for lunch in intermittent sunshine at the top of the slope as Tom, Philippa and Nick extricated themselves from the ghyll. The group then made its way towards some crags where *Gymnomitrium crenulatum* was found, together with large quantities of *Andreaea rothii* and *A. rupestris*. The rain was starting in earnest and it was decided that the rocks were too acidic to have much of interest, and so they made their way to one of the woodland sites.

#### Great and Low Coppice, Nether Wasdale

Parking at Cinderdale bridge, the group walked up to Great Coppice in unrelenting rain. This proved to be a disappointingly dull beech coppice woodland and the group scattered widely amongst the trees. A great shout brought everyone back together again at the place where Nick Hodgetts, displacing *Sphagnum palustre*, had discovered some *Aneura mirabilis*\* (Fig. 14). Sensing that anything after that would be an anticlimax the group slowly wandered back toward the road. On the north side of Great Coppice by the River Irt in NY1203 Steven Heathcote and Tom Blockeel dropped down a steep bank to an inlet formed by a small tributary stream, where they were rewarded by several small tufts of the elusive *Daltonia splachnoides*\* on the trunk of a willow – this is a new moss for the Lake District.

### Foxbiel Wood

A small group headed to the NT offices at Gaterigghow before heading up to Foxbiel Wood to record the two monads NY1003 and NY1103. The first monad had a series of low crags along the edge of the wood which provided some bryological interest, including a large population of *Philonotis capillaris* at NY10760364. This is a relatively rare plant in the Lake District, with very few recent records. After lunch Gordon Rothero found *Rhabdoweisia crenulata* on the crags above the lunch spot. The dry-stone walls surrounding the woods had abundant *Porella platyphylla*. In a small area of wet woodland near the edge of the monad David Long found both the large woodland *Aneura* and *Trichocolea tomentella*.

The next monad proved somewhat challenging as the rain set in and having reached the wet woodland the ground became increasingly soft. A good range of woodland species was found, but trying to complete a circuit of the woods proved problematic as progress was blocked by wet ground.

### Goldscope mine

A small group decided to investigate Goldscope mine, west of Derwentwater (Fig. 15). Copper and lead were first mined here in Elizabethan times, and large areas of polluted stony soil remain, with some flushes on the hillside. Jonathan Sleath quickly found a good patch of *Ditrichum plumbicola* on some of the most polluted soil. There were large soggy masses of *Solenostoma gracillimum* in wetter areas, while common species in drier areas included *Cephaloziella* species, including *C. stellulifera*\*, *Gymnocola inflata*, *Ceratodon purpureus* and *Pohlia nutans*. Following the course of a worked-out copper vein over the hill, the group failed to re-find *Grimmia atrata* and spent much time looking at *Grimmia torquata*. They retreated at 2



△ Figure 15. A precarious crossing, Goldscope mine.  
Claire Halpin

pm in face of heavy rain. *Gymnomitrium alpinum*\* was later confirmed from this site.

### Thursday 30 March: Ullswater area (vc 70)

#### Matterdale Common and Wolf Crag

A large group met at High Row to explore Matterdale Common, then split up into three or four groups which sometimes overlapped in some monads or rejoined other groups, in a perfect illustration of the complex interactions (aka chaos) that can ensue with a large party. There was a good path round the higher ground to Wolf Crag, so one group set off to Wolfcrag Moss to try and re-locate the *Moerckia flotoviana* last seen at the east end of Wolf Crag in 1993 by



△ Figure 16. *Orthothecium intricatum*, Wolf Craggs.  
Claire Halpin

Rod Corner. There is a series of flushes draining down from Wolf Craggs to Mother Sike, and all of them were searched in both NY3522 and NY3622. The flushes had *Dicranum bonjeanii*, *Palustriella commutata*, *P. falcata*, *Scorpidium cossonii*, *S. scorpioides* and *Sphagnum teres* at the east end, but neither *Moerckia* nor *Cinclidium stygium* was found and the ground did not look especially promising 30 years after the original record. There was a small area of wet bog in NY3622, with a range of *Sphagna* including *S. medium* and also *Mylia anomala*.

A second group (Stephen Heathcote, Nick Hodgetts, Andy McLay *et al.*) worked from east to west along the north-facing crags, finding a large range of species. There were many calcicoles such as *Isopterygiopsis pulchella* and *Orthothecium intricatum* (Fig. 16), and cushions of several species including *Anoetangium aestivum*, *Bartramia pomiformis*, *Cynodontium bruntonii*, *Grimmia torquata* and *Schistidium strictum*. There were scattered *Reboulia hemisphaerica* and *Poblia cruda* throughout and a small patch of *Rhabdoweisia crispata* was found. A mound of *Isothecium interludens* was recorded at the base



△ Figure 17. *Antitrichia curtispindula*, on a wall near Rush Gill. Andrew Branson

of one of the crags. Towards the centre of the crags a narrow ravine provided the first record of *Bazzania tricrenata* and shortly afterwards a single patch of *Herbertus hutchinsiae* was recorded growing mixed with *Breutelia chrysocoma*. The more acid rocks had patches of *Gymnomitrium crenulatum* and *G. obtusum*. *Mesoptychia collaris*, *Plagiochila bifaria*, *P. punctata*, *Bartramia halleriana*, *Chionoloma cylindrotheca*, *Grimmia torquata* and *Isopterygiopsis pulchella* were also recorded.

From the end of the crags the group headed to the known (2021) location for *Tomentypnum nitens* where after some careful searching it was located growing together with *Trichocolea tomentella* in a flush which also had *Sphagnum contortum*, *S. molle* and *S. warnstorffii*\*. *Cephalozia pleniceps*\* was found by Chris Preston among *Aulacomnium palustre* and *Sphagnum warnstorffii* here, by an upper tributary of Groove Beck.

A third group with Sharon Pilkington explored monad NY3620, in the lower part of the common around Rush Gill. They found *Antitrichia curtispindula* (much less common in Cumbria than it once was) on a lane wall

(Fig. 17), and a good list of records including *Dichodontium flavescens*, *Hygrohypnella ochracea*, *Pohlia wahlenbergii* var. *wahlenbergii*, and *Racomitrium sudeticum*. A puzzling *Grimmia* collected by Andrew Branson was later confirmed as *G. elongata*.

#### *Birk Crag wood*

A small group chose to visit Birk Crag wood, a small woodland above Ullswater in private ownership, inhabited by small, fat pigs. The woodland delivered a few indicators of basicity such as *Isothecium alopecuroides*, *Neckera crispa* and *Palustriella commutata*. There was some nice *Frullania fragilifolia* on some crags, but nothing else of particular interest, so after lunch in the sun it was decided to move on to Matteredale Moss. In the rain, the group compiled a species list for a monad not far from the car and spent some time trying to refind *Tomentypnum nitens* previously recorded from the site. Everyone was just about to give up when the cavalry arrived in the guise of Nick Hodgetts and company, who soon located the *Tomentypnum* with a bonus *Trichocolea tomentella* alongside.

#### *Glencoyne Park*

A small group with Tom Blockeel started out at the car park on Park Brow, and worked their way round to Groove Gill, finding *Barbilophozia barbata* on a rock outcrop on the way. The attractive wooded gill had plenty of interest. There were some very fine patches of *Porella cordaeana* on stones and rocks along the banks of the stream. In the steep upper parts of the gill, base-rich rocks had *Plagiochila britannica*, *Gymnostomum aeruginosum*, *Mnium stellare* and *Palustriella commutata*, and one mossy rock face had a large patch of *Plagiochila spinulosa*. In the afternoon the group explored the Park, mostly in NY3919, but bryophytes were generally sparse. Some small

rivulets and seepages had *Climacium dendroides* and *Thuidium delicatulum*, and a flush with *Palustriella commutata* was found. *Myriocoleopsis minutissima* was recorded on sycamore. Another sycamore nearby had five species of *Orthotrichum s.lat.*, including *Lewinskya striata*.

#### *River Greta*

Rachel Carter and Sue Grahame, accompanied by husbands, went to explore the footpath on the route of the Keswick to Threlkeld Railway, near Keswick. Joining the path at the Threlkeld end, where the track runs between the River Greta and an area of mixed woodland, they found typical woodland mosses and tree epiphytes and a large population of *Tetraphis pellucida* on a series of rotting fence posts at the edge of the wood. Further along, the track runs through a deep cutting, each side of which was covered with bryophytes. On the northern (south-facing) wall of the cutting were some quite spectacular cushions of *Amphidium mougeotii*. This northern wall was very wet, with water dripping down in places, and yielded *Diplophyllum albicans*, *Fissidens taxifolius* and *Rhizomnium punctatum*, among others. The southern (north-facing) wall of the cutting was much drier, with a sparser and less diverse bryophyte population. *Bartramia pomiformis* was found here along with *Pseudotaxiphyllum elegans* and the liverworts *Pellia epiphylla* and *Plagiochila porelloides*.

Going into the adjacent monad the track ran through a tunnel, with plenty of bryophytes on the rocky sides at either end including *Lejeunea lamacerina*, *Homalia trichomanoides* and *Oxyrrhynchium speciosum*, then reached the river, which had typical bryophytes, including *Schistidium rivulare*.

Torrential rain on the way back prevented any useful recording, except for two old friends *Grimmia pulvinata* and *Tortula muralis* on the



△ Figure 18. Admiring *Syzygiella autumnalis* and *Tritomaria exsectiformis* on a rotting log, Rydal Park.  
Andy McLeod



△ Figure 19. *Tritomaria exsectiformis*, Rydal Park.  
Claire Halpin

approach to the road. Then they returned home for a cup of tea and some delicious cake.

### Friday 31 March: Rydal Hall grounds and Rydal Beck (vc 69)

A huge group parked up at Rydal Hall and scattered around the grounds, which already had some good records of Atlantic bryophytes. Almost immediately, not far above the buildings, there was some very fine *Jubula hutchinsiae* in a wet recess, with another population further up the ravine. Possible *Plagiochila bifaria* proved to be *P. spinulosa*, but good *P. bifaria* was later recorded, as well as *P. punctata*. Sharon found a tiny patch of *Anastrophyllum hellerianum*\* on a stump by the path above the beck, and later found more on a tree. This species was recorded here in 1965 but hadn't been seen since. Other species seen included *Dicranodontium denudatum*, *Grimmia hartmanii*, *Isothecium holtii*, *Leucobryum juniperoides* s.str. and

*Pseudohygrohypnum eugyrium*. A rotting log by the stream had large quantities of *Syzygiella autumnalis* with *Tritomaria exsectiformis* (Figs 18, 19). Tom searched hard in the ravine for tiny Lejeuneaceae, which he thought ought to be present there, and eventually succeeded with *Harpalejeunea molleri*\* on a rock face by the beck just beyond the park wall. Also seen along this part of the beck were *Anoetangium aestivum* and *Nogopterium gracile*, both in small quantity, and an aquatic *Schistidium* with narrow leaves. It proved to be *S. rivulare* rather than *S. agassizii*. The day closed over tea and cake in the café.

### Watendlath (vc 70)

The Scottish contingent was returning home on Friday afternoon, so they chose to visit a monad near Rosthwaite for their last morning. This was in NY2716 at Watendlath. After a scramble up Raise Gill to record the stream and small ravines, they recorded the Tarn margin and hillside

flushes. The small area of the monad explored proved surprisingly rich with at least 130 species, including *Gymnomitrium obtusum*, *Isopterygiopsis pulchella* and *Tortella tortuosa* in the ravine and *Dicranum bonjeanii*, *Scorpidium cossonii* and *S. scorpioides* in the sheep-grazed hillside flushes at the north end of the tarn. Gordon Rothero found *Grimmia lisae*\* on rocks at the edge of the tarn.

Jonathan Sleath made a short excursion to Combe Gill, Stonethwaite (vc 70) to track down *Bryum mildeanum*\*, which had been recorded here by the Rev. C.H. Binstead in 1929. Not only did he find it, but he has succeeded in growing on the small amount he collected!

### Saturday 1 April: departure

*Johnny's Wood revisit (v.c. 70)*

Clare, Philippa and Astrid decided to have a look at Johnny's Wood before heading off. During a quick tour of the highlights seen by the other group the previous Saturday, they were pleased to find a rotting log with good quantities of *Tritomaria exsecta*, not recorded here since 1958. They then headed for the steep slope at the far end of the woodland, where there are large banks of *Anastrepta orcadensis* (Fig. 20) and *Bazzania tricrenata*, and a few patches of glistening *Hageniella micans*. The wood was bursting with bird song and spring was in the air. It was a delightful finish to a very satisfying meeting.

### Summary

The week was very productive. A total of 58 attendees finally came, some only for a day or two, and producing 4480 records in 42 monads and two vice-counties, including nine new vc records and 11 debracketers. Not a bad outcome in a county that is well visited. For many of us the week was a fantastic learning experience, and some people commented that almost everything in the week was new as they were exposed to



△ Figure 20. *Anastrepta orcadensis* in large quantities, Johnny's Wood. Astrid Biddle

new habitats and a range of species they had not encountered before.

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