

Gordon Rothero outlines the bryological riches of a remote and beautiful county

utherland is a huge county, essentially all the north-west corner of Scotland, and so this account is rather more discursive than others in this occasional series and I hope the potential for exploration is clear. The old county is split into two vice-counties and the mountains are mostly in West Sutherland so this account is mostly about vc 108. Many years ago, when I was still relatively young and keen, I ran a field meeting based in the West Sutherland parish of Assynt during which I met and became friends with two local botanists, Ian and Pat Evans. I have been going back ever since, both to West Sutherland and to their house, although

△ Figure 1. Suilven from the east. *All photos by Gordon Rothero*

sadly Pat is no longer with us. So, I will start with Assynt as it is the area I know the best.

The sandstone hills of Assynt

The scenic attractions are very obvious and the towering sandstone peaks of Suilven (Fig. 1), Canisp and Quinag (Fig. 2), rising abruptly from the gneiss plateau, have graced many a Scottish calendar. However, the Torridonian sandstone is not very productive, and these hills are botanically quite poor except for the frequency of the oceanic heath on their northern and eastern slopes. This community is present

in some form on most hills in West Sutherland so comments here apply widely across the area, although muirburn in the past has taken its toll. The oceanic-montane heath is one of our most interesting plant communities and one for which we have an international responsibility; it contains some species with extraordinarily disjunct global distributions. It usually includes a mix of big hepatics like Bazzania pearsonii, Herbertus hutchinsiae, Mastigophora woodsii, Plagiochila carringtonii, Pleurozia purpurea, Scapania nimbosa (Fig. 3), S. ornithopoides and, higher up, Anastrophyllum alpinum, A. donnianum and rarely A. joergensenii. This community is well developed on the north-facing slopes of Quinag, where it is very accessible from the car park at the high point on the road over to Kylesku. For a more diverse flora, you need



△ Figure 3. Scapania nimbosa.

▼ Figure 2. Sail Garbh on Quinag.





△ Figure 4. Conival and Ben More Assynt from Canisp.

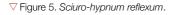
to look for a different geology. Sail Gorm on the north side of Quinag has some gneiss outcrops and the BBS meeting in 1992 found *Mnium thomsonii, Stereodon hamulosus, Mesoptychia heterocolpos* and another of the disjunct oceanic species, *Chionoloma recurvifolium*. The north side of Canisp also has some more base-rich ground with species such as *Bryum zieri, Distichium capillaceum, Isopterygiopsis muelleriana* and, in flushes, *Drepanocladus trifarius*.

Ben More Assynt and Conival

To the east of the sandstone hills are two Munros, Ben More Assynt and Conival (Fig. 4), sitting in the middle of a long ridge running from Loch Borralan, by the Oykel Bridge road in the south, to Glas Bheinn in the north, with the only real break at Bealach Traligill to the south of Conival. The southern part is formed by Breabag and its outliers, with some big and rather lonely coires

on the east side, all in vc 105, and, in vc 108, the west side drops more gently to the limestone on Creag nan Uamh. Above Bealach Traligill the southern flanks of Conival rise steeply to the summit, the vague watershed here forming the Assynt parish boundary meaning, confusingly, that Ben More Assynt to the east is not in Assynt and is in vc 107. The Conival - Ben More Assynt massif has three big coires: Garbh Coire in the south, Coire Reidh in the east and Coire a'Mhadaidh in the north. The geology of these hills is very complex (and much studied), but the upper part of most of both the Breabag and Glas Bheinn ridges is rather dour quartzite and can be quite hard work(!). The quartzite also outcrops on Conival and Ben More Assynt, but here there are also patches of Torridonian sandstone, gneiss, numerous igneous intrusions and, lower down to the west, outcrops of limestone. Some facies of the gneiss can be quite base-rich and it is worth trying to spot these. The best are probably in Coire Reidh to the east, but there are also outcrops in Garbh Choire, Coire a'Mhadaidh and further north in Coire Dearg and Coire Gorm on Glas Bheinn. The limestone reaches its highest point in Bealach Traligill, but there is a distinctly montane bryoflora on the 'high limestone' of Cnoc Eilid Mhathain and on Creag nan Uamh.

I will start in the middle with the Munros. Most will approach Conival from the west, parking by the Inchnadamph Hotel and walking up the path by the River Traligill before grinding steeply up by the Allt a'Choinne'Mhill. Walkers then head onto Conival's north ridge, but the discerning bryologist will press on up the burn to a wee lochan before heading south-east, dropping steeply down into Coire a'Mhadaidh, moving from vc 108 to vc 107. In poor visibility make a note of the route out as getting it wrong could mean a very long walk! The coire has good populations of the big oceanic hepatics in the scree and amongst the broken crags. Heading









△ Figure 6. Top. Coire a'Mhadaidh with the *Andreaea* nivalis crag at the head. Figure 7. Above. *A. nivalis*.

further up into the coire the snow lies a little later and there are stands of *Kiaeria falcata*, *K. glacialis*, *K. starkei*, *Pohlia ludwigii*, *Sciuro-hypnum reflexum* (Fig. 5), *Marsupella sphacelata* and *M. stableri* in the scree and a small population of *Paraleucobryum longifolium*. At the head of the coire is an obvious dripping quartzite crag which has a large population of *Andreaea nivalis* (Figs 6, 7) in its most northerly site in Scotland and, below, flushes with *Rhizomnium magnifolium*

and Scapania uliginosa.

Further to the east below the summit of Ben More Assynt there is Coire Reidh where the gneiss is base-rich in places and is worthy of more exploration than I have been able to give it. It is possible to approach from the Inchnadamph side either by traversing across from Coire a'Mhadaidh or from Bealach Traligill (or over the tops if you are super-fit), but the more obvious approach is from Glen Cassley to the east. There is a small parking area at the end of the public road up the glen and a rough estate track on the west side of the river that eventually leads up onto the hill. It is still a long way but at least you end up at

the bottom of the coire rather than the top and bryologising upwards is always easier! From the coire there are records of Amphidium lapponicum, Aulacomnium turgidum, Hylocomiastrum pyrenaicum, Hymenoloma crispulum, Stereodon hamulosus (Fig. 8), Diplophyllum taxifolium and Gymnomitrion brevissimum and, further south on Carn nan Conbhairean, there is an old Derek Ratcliffe record of Splachnum vasculosum.

The steep south ridge of Conival has some interest, but is difficult to explore and there is more interest in Bealach Traligill (Fig. 9) as the limestone outcrops there and rewards the long walk in from Inchnadamph. Pride of place here

∇ Figure 8. Stereodon hamulosus, Coire Reidh.





△ Figure 9. Top. Bealach Traligill and Breabag from Conival. Figure 10. Above left. *Campylium bambergeri*, Bealach Traligill. Figure 11. Above right. *Herzogiella striatella*, Breabag.

goes to Campylium bambergeri (Fig. 10) in its second locality north of the Central Highlands, but there is also Orthothecium rufescens, Schistidium trichodon, Stereodon hamulosus and Tortella densa. South from here is the Breabag ridge, a long spine of quartzite giving a fine walk and a lot of potential on its eastern flanks where there are big coires which are, I think, totally unexplored bryologically. On the ridge itself,

poking around amongst the grassy rocks can give *Campylopus schimperi, Herzogiella striatella* (Fig. 11) and *Barbilophozia lycopodioides* and, lower down, the oceanic hepatics appear in the scree. In the valley on the north side of Fuarain Ghlasa there are *Philonotis seriata* and *Harpanthus flotovianus* in the flushes. Continuing down this valley brings you to the limestone and Creag nan Uamh.



△ Figure 12. Creag nan Uamh.

Creag nan Uamh

Creag nan Uamh (Fig. 12) is famed for its 'bone caves' where, over 100 years ago, animal bones were found and these proved to be of arctic fox, wolf, lynx, brown bear and even polar bear. The crags and the caves are easily approached from

the large parking area on the A837 and a pleasant and very popular walk from here leads up by the Allt nan Uamh where there is *Platyhypnum duriusculum* in the river and *Antitrichia curtipendula* and *Leucodon sciuroides* on limestone boulders by the path. This soon brings

∀ Figure 13. Limestone boulders below Creag nan
Uamh, with Ian Evans enjoying the typical weather.



 ∀ Figure 14. Microhypnum sauteri below Creag nan Uamh.



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△ Figure 15. Coire Dearg, with Quinag and Eddrachillis Bay beyond.

you to a fine hydrant with *Bryum mildeanum* on the rocks in the burn and *Amblyodon dealbatus* in the turf by the resurgence. The main burn is often dry above this point and the grassy path heads up towards the looming crag and the caves. The limestone boulders on the steep slope below the crags (Fig. 13) have a good range of species including *Encalypta alpina*, *Flexitrichum*



flexicaule s.s., Schistidium robustum, S. trichodon and, found recently, Microhypnum sauteri (Fig. 14) in its only UK site. Up on the crags near the cave are patches of Pseudoleskeella catenulata and some P. rupestris and in the caves themselves, wefts of Conardia compacta. Further up the main valley is a dripping cave where the snottery algal gunge has a large population of Seligeria trifaria s.l. Careful searching for areas of wetter turf should produce Meesia uliginosa and, rarely, Distichium inclinatum.

Coire Dearg and Coire Gorm

North from Conival is another quartzite ridge and a fine airy walk runs out over Beinn Uidhe to Glas Bheinn and its two big coires, Coire Dearg (Fig. 15) and Coire Gorm, the red and the green. Going up the stalker's path by the Allt Poll an Droighinn from Inchnadamph, the first port of call on the ridge is Beinn an Fhurain where *Anastrophyllum alpinum* (as *A. joergensenii*) was first found in Britain (Fig. 16) and, below this,

✓ Figure 16. Anastrophyllum alpinum, Beinn an Fhurain.



△ Figure 17. Plagiomnium medium, Coire Dearg.

the little lochan Lagan Mhuirich has a small stand of *Paraleucobryum longifolium*. Apart from the oceanic heath species the rest of the ridge is rather dull until you get to the coires at the northern end, both of which are more easily approached from the path starting by Loch na

▼ Figure 18. Foinavon and Arkle from Oldshoremore in atypical weather.



Gainmhich on the Kylesku road.

At the back of Coire Dearg the steep slope has an excellent strip of flushed grassland with much Plagiomnium medium (Fig. 17) and some Oncophorus virens and Dicranum spadiceum. Coire Gorm, the green coire much loved by poet Norman McCaig, is a wonderful quiet space, a place to enjoy for its own sake. However, there are bryophytes! The scree at the back of the coire has fine stands of oceanic heath with Anastrophyllum alpinum, A. donnianum, Bazzania pearsonii, Mastigophora woodsii, Plagiochila carringtonii, Scapania nimbosa and S. ornithopoides. Lower down the crags are moderately base-rich and Amphidium lapponicum, Chionoloma recurvifolium, Distichium capillaceum, Grimmia torquata, Stereodon hamulosus and, in flushes, Drepanocladus trifarius, Sphagnum platyphyllum, Moerckia hibernica and Scapania degenii, with on the loch margin Antitrichia curtipendula and Pterigynandrum filiforme.

Foinavon and Arkle

There are numerous hills in the area between Loch Glencoul and Loch More, but the next

big hills are further north in the Reay Forest. In the south-east of this area is a group of hills centred on Meallan Liath Coire Mhic Dhughaill from which there seem to be no bryophyte records apart from the inevitable visit by Derek Ratcliffe in the 1950s, recording Mastigophora woodsii, Plagiochila carringtonii and Scapania ornithopoides, but vascular plant records suggest that the crags might have some bryophyte interest. The best-known hills are in the northwest of this area; Foinavon and Arkle (Fig. 18) form one long quartzite ridge and provide a serious day's walk, but the bryophyte interest is limited by the geology. The oceanic heath is much in evidence on northern and eastern slopes including, on at least one site, the true Anastrophyllum joergensenii and also Sphenolobus saxicola, but you need to get off the quartzite for more variety. The northern end of Foinavon has gneiss at over 800 m on Ceann Garbh and might repay exploration, but the best area is to the south-east of Arkle on Creagan Meall Horn where there are some calcareous outcrops. The best route is from the parking on the main road at the south end of Loch Stack and following the track to Lone and then the good stalker's path up the Allt Horn; it is easy going but a long way. The broken north-facing crags have a good flora, with stands of species such as Amphidium lapponicum, Bartramia halleriana, Myurella julacea (Fig. 19), Orthothecium rufescens, Pseudoleskeella rupestris and Harpanthus flotovianus. To the north beyond Strath Dionard lie another two quartzite hills, Cranstackie and Beinn Spionnaidh, which await further exploration...

Ben Hope

We now head further east. Ben Hope is our most northerly Munro and the only reasonable



△ Figure 19. Myurella julacea, Meall Horn.

approach is from Muiseal where there is some parking by the minor road down Strathmore from Altnaharra. The north-east facing coires again



▶ Figure 20. West face of Ben Hope.



△ Figure 21. Gymnomitrion corallioides, Ben Hope.

have a good development of the oceanic heath and there are snowbed species such as Kiaeria glacialis and Moerckia blytii near the summit, but it is the base-rich outcrops on the western ramparts of the hill that have a more diverse flora and these are much easier to reach (Fig. 20). They are best approached up the main path and striking off north towards the crags after the first steep section. The vascular plant flora has species such as Dryas octopetala, Minuartia rubella, Potentilla crantzii and Salix reticulata and there is a range of calcicole bryophytes, although they are all rather scattered. There is a good population of Gymnomitrion corallioides (Fig. 21) on the loose calcareous ground associated with the Minuartia rubella and small amounts of Encalypta alpina, Orthothecium rufescens, Herbertus stramineus and Nardia geoscyphus. Further along, there are more typical ledges with a tall-herb community, but some are more fractured and open and on one of these there is a small stand of Arctoa anderssonii in its only UK locality. The Moine geology is complex and within the base-rich amphibolite



△ Figure 22. Mielichhoferia elongata, Ben Hope.

there are pockets of 'odd' rock which is much more acidic and in one of these is a small stand of *Mielichhoferia elongata* (Fig. 22) in only its third UK site. As Fig. 20 shows, there is a huge amount of steep ground here to explore, much of which is reasonable scrambling terrain, but the problem is getting onto the 'reasonable ground' and then knowing where you can get off again.

Ben Loyal and Ben Klibreck

Finally, further east again lies Ben Loyal with its syenite tors looking spectacular (Fig. 23), but most interest here is lower down in the woodland and mire to the west. On the tops the flora is fairly mundane, although *Cynodontium jenneri* occurs on the rocks of An Caisteal and *Herzogiella striatella* in Calbhach Coire. Further east again across Loch Loyal, Beinn Stumanadh is a bit more diverse and is far enough east for *Grimmia incurva* and *Tetralophozia setiformis*. Heading south on the Altnaharra road leads to our last Munro, Ben Klibreck, a big lump of a hill (Fig. 24) which has attracted little bryological



△ Figure 23. Ben Loyal, with a hummock of Sphagnum beothuk in the foreground.

activity, although the broken west-facing crags look worthy of some attention, as does Creag na h-Iolaire to the south where there are some good vascular plant records.

Apart from the limestone on Creag nan Uamh, most of these sites have had only one or two visits and a look at the map will show that lots of hills, such as Ben Stack and Ben Hee, are not even mentioned here. So there are many discoveries yet to be made and I hope this quick tour will encourage some of you to make the long trek north to this, the most beautiful area of Britain, and get out into the wild.

Gordon Rothero

e gprothero@aol.com

▶ Figure 24. Ben Klibreck, with lawns of Sphagnum pulchrum in the foreground.

