



The Eastern Cairngorms

Gordon Rothero explores some of the most challenging and rewarding bryological terrain in Britain.

The Cairngorms are a big range of hills and differ in character from west to east. This account covers only the ground from Glen Derry and the Dee around Braemar, north through Glen Avon to Tomintoul. Even so, this is a huge area, some 30 km from north to south with no public road and terrain not to be taken lightly. Much of this area, away from the main glens and tops, is under-explored and so this is a very partial account and one that I hope will encourage further exploration, but it has to be said that much of the ground is some form of heath with only limited bryophyte interest. As with most of the Cairngorms, the bigger hills are composed of granite and have the typical rounded profile with large, high plateau areas, but scattered around the edges of the area, particularly the south and east, are outcrops of limestone, some of which, like that at Inchory, are extensive. All the sites mentioned are on Ordnance Survey Explorer OL58; the area is all within the Cairngorms National Park and includes part or all of five SSSIs: Eastern Cairngorms, Morrone Birkwood, Creag Clunie and the Lion's face, Craig Leek and Inchory.

△ Figure 1. The South Top of Beinn a'Bhuird and snowy Ear-choire Sneachdach. *Gordon Rothero*

The big hills

The biggest hills and most typical of the Cairngorms in nature are Beinn a'Bhuird (Fig. 1) and Ben Avon with much ground over 1000 m, but there are other hills, such as Beinn a'Chaorainn to the west, also over 1000 m. With

Figure 2. A small red tent in a large landscape. *Gordon Rothero*



this size of catchment, snow accumulation can be prodigious and it is the snowbed bryophyte flora that provides most, but not all, of the interest here. The problem (or the attraction?) with these hills is that they are a long way from anywhere and any worthwhile exploration will require at least one night camping (Fig. 2) or bivvying or a mountain bike, the normal approach being from the south, up the good tracks and paths in Glen Quoich from the Linn of Quoich or in Gleann an t-Slugain from the car park at Keiloch by Invercauld.

The obvious target from Invercauld is the Dubh Lochan on Beinn a'Bhuid. On my last visit there with David Long, we biked up Gleann an t-Slugain and into the upper part of the Quoich Water (not bad, some annoying drainage ditches but a great run back down!). We walked on and camped well below the lochan, near the outflow burn, and worked our way up to the coire and the lochan. The steep slope by the burn has some of the big oceanic-montane hepaticas like *Anastrophyllum donnianum* and *Scapania ornithopoides* and flushes with *Philonotis seriata* (Fig. 3). The lochan and its associated coire and big crags is a wonderfully moody place when the cloud is down and there is lots to see here. Boulders around the loch have a good population of *Paraleucobryum longifolium* (Figs 4, 5), sometimes with *Bryum muehlenbeckii*, *Hymenoloma (Dicranoweisia) crispulum* and *Lescuraea patens*, and small burns above the lochan have *Platyhypnum (Hygrohypnum) molle*. Also in this flushed ground is *Moerckia hibernica* and not far above this, near the base of the crag,

▷ Top Figure 3. *Philonotis seriata*. Gordon Rothero

Middle Figure 4. David Long admiring *Paraleucobryum longifolium* and *Lescuraea patens* by the Dubh Lochan. Gordon Rothero

Bottom Figure 5. *Paraleucobryum longifolium*. Gordon Rothero





△ Figure 6. Maren Flagmeier and Philippa Revill at the site for *Marsupella arctica*. Inset Figure 7. *Marsupella arctica*.
Gordon Rothero

there are patches of *M. blyttii* along with other snowbed species like *Kiaeria glaciale*, *K. starkei*, *Polytrichastrum sexangulare* and *Cephalozia (Pleurocladula) albescens*. There are also good snowbed bryophytes in Ear-choire Sneachdach below the South Top and probably in the nearby Coire na Ciche, but I doubt that any bryologist has been to the latter.

The main snowbed sites are up on the plateau and most easily approached from the head of Glen Quoich (already 7 km of good track from the car park) where a good path leads up An Diollaid onto the plateau and the summit of Beinn a'Bhuid. The snowbeds here occur in the incised burns that run north from the North Top of Beinn a'Bhuid, but the most interesting site

is by a small burn that drops into the vast Garbh Choire, about a kilometre north of the North Top. On my trip with David, we approached this site from our camp below the Dubh Lochan; this involved a relentless grind north up by the Allt Dearg (with *Andreaea frigida* and *Marsupella sparsifolia*) and finally onto the plateau by Cnap a'Chleirich and then a long compass bearing in thick cloud and drizzle to the site. Here the main attraction is the second British locality for *Marsupella arctica* (Figs 6, 7), otherwise known in Europe only from a site in northern Sweden and from Svalbard; our other site is in the Lairig Ghru further west. Other typical snowbed species are present with good populations of *Marsupella condensata* and *Nardia breidleri* and springs lower down have *Sphagnum lindbergii* and *S. riparium*. Our soggy descent back to the tent via Coire nan Clach had some reward with a very large population of *Bryum muehlenbeckii* on rocks in the small burn (Fig. 8). This makes it all sound very grim, but I can also remember an idyllic visit here in shorts and t-shirt watching snow buntings feed on insects on the snow patches.

Strictly speaking, Garbh Choire belongs more to Ben Avon, to the east, than to Beinn

◁ Figure 8. The dark red cushions of *Bryum muehlenbeckii* in the outflow burn from Coire nan Clach. Gordon Rothero



a'Bhuid and, as far as I can tell, this huge site is unexplored bryologically, although there is an old Ted Wallace record and I suspect that Derek Ratcliffe will have been here. It has big crags and late-lying snow and so will have a good bryophyte flora and presents a challenge! The Ben Avon plateau has similar snowbeds in the incised burns, as on Beinn a'Bhuid, the upper Allt an Eas Mhoir being a good example, but perhaps not quite so productive. Again exploration here has been limited, with seemingly no records since my visit in 1989, and the north-facing coires out to the Meur Gorm Craigs are bryological terra incognita and await a fit bryologist!

A bit further south from Ben Avon is Creag an Dail Bheag, again best approached from Gleann an t-Slugain, branching off north at a tributary of the Allt an t-Slugain, about 2 km up the glen, where an ugly but convenient track leads up to the south-west slopes of the hill. This is not such a big hill at 862 m, but it is an important one because it is off the granite and has calcareous outcrops and some lovely, flushed, calcareous grassland (Fig. 9), a well-known site

▽ Figure 9. Calcareous grassland on Creag an Dail Bheag. Gordon Rothero



for *Astragalus alpinus* and its associated burnet moth. The steep grassland has lines of flushes running down with the occasional boulder and here it should be possible to find *Scapania degenerii* at the edge of the flushes (Fig. 10). Also, close attention to damp bryophyte-rich turf should produce *Cinclidium stygium*, *Barbilophozia quadriloba* and *Saccobasis (Tritomaria) polita*. Pride of place here goes to *Dicranum spadiceum*, discovered here for the first time in Britain in 2010, an unexpected bonus to an unsuccessful search for *Dicranum elongatum*, last recorded here in 1954 and now feared extinct in Britain. The crags on the north side of the hill have a good collection of calcicoles and also *Lescurea patens* and *Gymnomitrion coralliooides*. In flushes below the crags there is *Oncophorus wahlenbergii*, Sandy Payne has recorded *Campylium (Hypnum) bambergeri* in this area, and, in the burn a bit to the west, there is *Platyhypnum (Hygrohypnum) smithii* and west again an old record of *Dicranum undulatum* (last seen 1941) from a mire "overlooking the Quoich". There is huge scope for exploration here.

▽ Figure 10. *Scapania degenerii* on Creag an Dail Bheag. Gordon Rothero





The southern glens

Glen Lui/Glen Derry, Glen Quoich and Gleann an-t-Slugain are the three big glens leading up into the hills from the south, great places to explore when the weather is a bit iffy for the mountains and, again, a bike is useful if you want to explore the upper reaches of them. Most of the ground is fairly acidic and, while each of the glens has its own character, there are some common features. There are often large areas of block scree which can repay some scrutiny. *Tetralophozia setiformis* is prominent and fairly frequent here and, in the same habitat, but usually more tucked away in crevices in the scree, it is worth looking for the much less common *Sphenolobus (Anastrophyllum) saxicola* (Fig. 11). The surface of the rocks in the crevices is the place to look for *Cynodontium jenneri* (Fig. 12) and *C. strumiferum* and small, dark green cushions on flat, dry surfaces, buried deep in the boulders could be *Grimmia incurva* – look for the tiny hair-point. Along the base of the scree, *Tetraplodon mnioides* is not uncommon, usually on fox scats but also on pellets where birds perch. It is sometimes accompanied by *T. angustatus*, distinguished by its much shorter seta (see cover photograph).

▷ Top left Figure 11. *Sphenolobus saxicola* in Glen Quoich.

Top right Figure 12. *Cynodontium jenneri* in Glen Quoich.

Middle left Figure 13. Calcareous outcrops by the burn in Glen Derry.

Middle right Figure 14. *Schistidium trichodon* in Glen Derry.

Bottom left Figure 15. *Dicranum polysetum* in Glen Quoich.

Bottom right Figure 16. *Dicranum spurium* near Luibeg in Glen Derry.

▷ Figure 17. *Mesoptychia heterocolpos* at Morrone.

All photographs Gordon Rothero

In Glen Derry there is an outcrop of limestone in the burn near the upper edge of the woodland which has a good calcicole flora including patches of *Schistidium trichodon* (Figs 13, 14) and a little *Scapania gymnostomophila* and there are also mire areas with *Sphagnum austini* and *S. fuscum* s.l. Much lower down, not far from the Linn of Dee car park there are a few cushions of *Dicranum undulatum* in the bog at the edge of the woodland on the east side of the Lui Water. Mire areas are also a feature of upper Glen Quoich, again with *Sphagnum austini* and *S. fuscum* s.l. and a good liverwort flora, with *Calypogeia sphagnicola*, *Cephalozia connivens*, *C. loitlesbergeri*, *Kurzia pauciflora*, *Mylia anomala* and *Riccardia latifrons*. Above Glen Quoich on the west side are two narrow glens, Clais Fhearnaig and Poll Bhat. Clais Fhearnaig has some limestone with *Flexitrichum (Ditrichum) flexicaule*, *Leucodon sciurooides* and *Pseudoleskeella catenulata* and acid screes with *Sphenolobus saxicola*. Poll Bhat is an odd spot and a stiff climb, but it does have *Cynodontium tenellum* and *Herzogiella striatella*.

The bryophyte biomass in the woodland in the glens is impressive but not very diverse and





△ Figure 18. *Scapania cuspiduligera* at Morrone.
Gordon Rothero

you have to look hard to find some interest. In upper Glen Quoich there is a small population of *Dicranum polysetum* (Fig. 15), easily overlooked as *Dicranum majus*. Where the woodland is a bit more humid, it is worth checking any logs for *Buxbaumia viridis* which has several recent records from Mar Lodge estate. Where there are old junipers, it is worth looking out for *Lophozia longidens* as an epiphyte. Leggy heather on south-facing slopes is another rather dull habitat but perseverance will eventually be rewarded with patches of *Dicranum spurium* (Fig. 16) which has a number of sites in all the glens, but beware as this is also a habitat favoured by adders which are quite common here!

The Braemar limestone

There are three other important limestone outcrops near Braemar and access to one of them, Morrone, is through the town, parking by the duckpond! The flushes and the crags on Morrone have a rich (and very accessible!) bryophyte flora, particularly at the western end of the site where meandering up through the open birch woodland via the stony flushes to the open slopes above could produce *Amblyodon dealbatus*, *Cinclidium stygium*, *Meesia uliginosa*, *Mesoptychia (Leiocolea) gillmanii* and, higher up, *Barbilophozia quadriloba*, *Saccobasis polita* and *Tayloria lingulata*. The limestone crags at the west end have a good population of *Stegonia latifolia*



△ Figure 19. *Clevea hyalina* on Craig Leek.
Gordon Rothero

and also *Encalypta rhaftocarpa*, *Jungermannia polaris*, *Mesoptychia (Leiocolea) heterocolpos* (Fig. 17), *Scapania cuspiduligera* (Fig. 18) and *S. gymnostomophila*.

The other two outcrops, Craig Leek and the Lion's Face, are at Invercauld with Craig Leek being by far the most extensive as well as being a great place. There is a car park at Keiloch and a short walk up the glen to Felagie brings Craig Leek into view. The star of the show here is the thalloid liverwort *Clevea (Athalamia) hyalina* (Fig. 19), first found here in 1999 and one of only two British populations, the other being just down the road at Crathie. It is sparsely scattered on mineral soil on the ledges on the east- and north-facing crags, often with *Stegonia latifolia*, but becomes necrotic and difficult to spot by summer, so an early spring visit is needed. There is a big population of *Leucodon sciuroides* here on the boulders, sometimes with the rare stalk-ball fungus, *Tulostoma niveum*, and occasional cushions of *Schistidium atrovfuscum* and patches of *Pseudoleskeella catenulata* and rarely *P. rupestris*. *Tortula leucostoma* has been recorded here but has not been seen for some time. In the mire at the base of the eastern slopes there are a number of cushions of *Dicranum undulatum* (Fig. 20). South of the main road, the Lion's Face is not so extensive, but has some of the same species, including *Stegonia latifolia* and flushes with *Scapania degenerii*. The acidic crags and scree



△ Figure 20. *Dicranum undulatum* in the mire below Craig Leek. Gordon Rothero

to the east on Carn nan Sglat have one of the very few recent British records of *Cynodontium polycarpon*, and *Grimmia incurva* is tucked away in the scree.

The northern glens

The big glen in the north of our area is Glen Avon where the river Avon flows down from Loch Avon and drains the north side of our hills. Again, the glen and the subsidiary valleys on both north and south sides appear to have few, if any, bryophyte records, the exception being the extensive limestone outcrops at Inchrory (Figs 21, 22). From the parking on the Delnabro road south of Tomintoul, it is over 10 km to Inchrory and again a camp or a bike (or both!) is essential to give time to explore – the estate track is very good. I had an excellent trip here in 2009 with David Long, Oliver Moore and Sandy Payne, and, with the help of the Royal Botanic Garden Edinburgh, we had permission to drive and camp at the big bend in the Avon just south of the big house. The limestone actually starts much further north where the Burn of Little Fergie has flushes with *Catoscopium nigritum* (Fig. 23) and rocks with *Racomitrium canescens*, *Schistidium trichodon* and the cute little cabbages of *Stegonia latifolia* (Fig. 24). A bit further south, Foals Crag has some very steep ground which is tricky to explore, but there are good things here including *Flexitrichum flexicaule*, *Pseudoleskeella*



△ Figure 21. Glen Avon at Inchrory with the limestone stretching north. Gordon Rothero

▽ Fig. 22. Oliver Moore on the limestone 'clitter' at Inchrory, the flush in the foreground has *Amblyodon dealbatus* and *Catoscopium nigritum*.
Gordon Rothero



catenulata, *Pterigynadrum filiforme*, *Racomitrium canescens* and *Scapania calcicola*. The limestone crags and flushes on the east side of the glen extend south for another 5 km or so into Glen Builg, with a similar mix of species. *Leucodon sciuroides* and *Schistidium trichodon* are quite frequent on the boulders, with *Flexitrichum flexicaule* and *Tortella bambergeri* s.l. and in the flushes *Catoscopium nigritum* is frequent as are small stands of *Amblyodon dealbatus* and *Meesi*



uliginosa. The ravine of the Ailnac Bhuilg has produced *Seligeria acutifolia* and a bit further south, the west-facing crags have good patches of *Buckia (Hypnum) vaucheri*.

North of Inchory, just below the car park on the public road, the Water of Ailnack (try 'An-yak') joins the Avon and above the estate buildings. The long ravine of the Ailnack (Fig. 25) is just brilliant and provides one of the best bryophyte sites in Britain, with well over 200 species listed, many of them nationally rare or scarce. It is an impressive place, being the largest meltwater channel in Scotland at some 10 km long and 100 m deep, but more important for us is that the river has cut down through rocks that are calcareous, including similar limestone to that at Inchory, plus conglomerates with a calcareous matrix. Descending into the ravine from the Delnabo estate track on the north side is challenging – there are one or two places where it is steep but not too scary. When you are down, progress along the bottom of the ravine depends on the water level – this is a big river and you need low water (Fig. 26). There is an extraordinary mix of montane calcicoles like *Buckia vaucheri* (Fig. 27), *Myurella julacea*, *Pseudoleskeella rupestris*, *Schistidium atrofuscum* (Fig. 28), *Tayloria lingulata*, *Jungermannia polaris* and *Solenostoma confertissimum*, with more xerophytic species like *Aloina rigida*, *Didymodon icmadophilus*, *Pterygoneurum ovatum*, *Racomitrium canescens* (Fig. 29) and, notably, *Schistidium helveticum* and *Tortula inermis*, both new to the Britain when found here a few years ago. There are other uncommon calcicoles here, with *Catoscopium nigritum* in flushes and *Dicranella grevilleana* on open wet soil and, where the rocks are more

◁ Top Figure 23. *Catoscopium nigritum*.

Middle Figure 24. *Stegonia latifolia* at Inchory.

Bottom Figure 25 . The ravine on the Water of Ailnack.

All photographs Gordon Rothero



△ Figure 26. Liz Kungu crossing the very low water in the Ailnack – much photographed! Gordon Rothero



△ Figure 27. *Buckia vaucherii* on crags by the Water of Ailnack. Gordon Rothero



△ Figure 28. *Didymodon cf. icmadophilus* with *Schistidium atrovfuscum* by the Ailnack. Gordon Rothero

acidic, *Coscinodon cribrosus* has its most northerly British locality. And, as far as I know, only the lower part of the ravine has been explored. When the BBS went there in 2010, even blessed with very low water, we managed to cover barely 500 m of new ground, leaving a challenge for somebody!

Within this huge area there are certainly more, excellent sites for bryophytes that are



△ Figure 29. *Racomitrium canescens* on calcareous mineral soil by the Ailnack. Gordon Rothero

awaiting discovery, in Garbh Choire on Beinn Avon, in the high, lonely coires above the River Avon, more limestone in the Creag an Dail Bheag area and at Inchory and, perhaps, on the remote, crumbling Castle on the Ailnack. Surely there must be someone out there tempted by the unknown!

Gordon Rothero

e gprothero@aol.com