

It was decided to make a quick call at **Barnhamcross Common** (v.-c. 26) to look at *Leptodontium gemmascens*. Conditions were very dry and the first arrivals could not find it but Fred Rumsey, who has studied the area, showed us some good patches.

Despite howls of protest it was decided to postpone lunch until we arrived at **Cranberry Rough** (v.-c. 28) where we picnicked on the edge of the old railway cutting. While we refuelled, Amy Eycott gave us a brief history of Breckland and helped get us moving by pushing Robin off his stool. Cranberry Rough is the site of an old lake basin, Hockham Mere, which is famous in Quaternary circles because analysis of the pollen present in the sediments demonstrates key changes in vegetation during Neolithic times. The lake was drained rather unsuccessfully, leaving the present mire, consisting of a rather dull marsh and areas of sallow carr. For the effort required to plough through this rough terrain rewards were slight: *Frullania dilatata*, *Calliogon cordifolium* c.fr. and *Orthotrichum pulchellum* topped the list. We were joined by Nick Gibbons and Jonathan Spencer English from Forest Enterprise. Some time was spent discussing the possible future management of the site, including the introduction of large mammals to clear some of the scrub. The general feeling was that, bryologically speaking,

they could do what they liked, with little loss. Since there was some danger of losing the entire party in the mire a tactical retreat was made. On regaining the relative safety of the marsh a large Grass Snake was observed. This moved off towards the mire and took refuge in a hawthorn bush where it draped itself rather decorously around the trunk and lower branches and remained motionless while attempts were made to photograph it.

The meeting then broke up. One party went off in search of Stone Curlews (successful) at Weeting Heath and *Rhytidium rugosum* (unsuccessful) at Grime's Graves where they encountered a frosty reception. Others went home and the residue headed for the Half Moon and welcome refreshment. Since the bottle of wine that had been on offer for the rediscovery of *Orthotrichum obtusifolium* was still unclaimed, it (by now bottles of red and white) was shared by those at dinner.

Acknowledgements

The local secretary would like to thank all who contributed to an enjoyable meeting, particularly the various landowners and organisations who allowed us access to their property, and Bob Ellis for organising such a memorable day at Wheatfen.

Summer field meeting 2003, East Perthshire (first week)

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Introduction

The first week of the summer field meeting was based at Kindrogan Field Centre near Pitlochry, which is now being managed by the Field Studies Council. The meeting was unusual insofar as the first three days were taken up by a

workshop on the genus *Schistidium*, led by Dr Hans Blom. Other features of the meeting were the availability of a laboratory, which meant that specimens could be examined in the evenings, and the presence of a four-strong Czech contingent. Participants staying at the Centre were John Blackburn (Wednesday-Thursday),

Sam Bosanquet, Blanka Buryová, Richard Fisk, Jan Kučera, Elizabeth Kungu, Mark Lawley, Peter Martin (Saturday-Tuesday), Vita Plasek, Mark Pool (Thursday onwards), Chris Preston (Saturday-Tuesday), Gordon Rothero, Jonathan Sleath and Magda Zmrhalová, as well as Hans Blom and his lichenologist wife Dr Louise Lindblom (Saturday-Tuesday). Roy Perry joined the excursions on Friday and Saturday, and Joe Hope swelled the numbers on Monday and Tuesday. Ron Porley stayed in Pitlochry (to be near the Moulin Ale, which then turned out to be on tap in the Centre!). Martin Robinson was within walking distance of his house.

The excursions explored upland areas close to Kindrogan, with the exception of Craighall Gorge, which is a lowland site. All localities visited were in East Perthshire (v.-c. 89). There was a slight bias towards middle-altitude limestone and schistose crags and base-rich flushes, with which the area is very well endowed. Recording was carried out on a 5-km square basis, and so, although much of the area is bryologically quite well known, considerable progress was made on finer-grain mapping.

Sunday 6 July: Kindrogan (NO0562)

The day was spent around the Centre and in the lab, getting to grips with *Schistidium*. Communities examined on a stone wall, two concrete posts and two bridges were mosaics of *S. apocarpum* and *S. crassipilum*, looking different in their habit and colour. An unsuccessful attempt was made to turn one specimen on the top of the stone wall into *S. elegantulum* subsp. *elegantulum*. People were starting to feel that they were right all along: nearly all Schistidia are either *S. apocarpum* or *S. crassipilum*. This notion was scotched the next day. On the rocks in the River Ardlie *S. rivulare* was also examined. A novel problem was the dampness of the weather, usually not a bad thing for bryophytes but not the best condition for identifying Schistidia, as the peristome teeth are best examined in the dry state.

Monday 7 July: Gleann Beag (NO1375)

The previous day's complacency was soon banished by the morning's excursion to the limestone boulder scree below Creag nan Eun in the upper Glen Shee area. As soon as we had crossed over the fence from the lay-by, the very first rock we looked at sent Hans's adrenal glands into overdrive. It turned out to be a false alarm (*Schistidium apocarpum* rather than a new species for the UK) but the challenge was definitely on. *S. crassipilum*, *S. robustum* and *S. papillosum** were common, the latter looking remarkably different from the others and also extending onto more acidic boulders. *S. trichodon* was occasional and *S. dupretii** was found in one or two small neat tufts on the vertical sides of rocks. Where these species occurred in mosaics the differences were often very convincing.

Eyes inevitably strayed to other things. Some of the boulders were covered in quite a luxuriant form of *Leucodon sciuroides*, provoking later discussion about the merits of var. *morensis*. Gordon found *Didymodon ferrugineus* and *Ditrichum flexicaule**. *Seligeria recurvata* was on the base of the cliffs, and *Pseudoleskeella catenulata*, which was to stay with us all week, made its first appearance.

During the morning rain started and then got harder and harder until it reached the point where the planned afternoon of work in the lab seemed like a really good idea. Before going back a breakaway party consisting of the Czechs, Jonathan and Chris zipped up the hill on the opposite side of the glen to see *Tortula leucostoma*. This was duly found, as was *Stegonia latifolia*.

In the evening Jan gave a presentation on the survey project that he and his colleagues had been carrying out in the Krkonoše Mountains in Bohemia and the Hruby Jeseník Mountains in Moravia. Their painstaking work has resulted in about twenty species being downgraded in the Red List and eight being upgraded. We all felt that this added an extra dimension to the

meeting, and some were certainly tempted to make the journey to the Czech Republic.

Tuesday 8 July: Ben Vrackie (NN9463)

This was a beautiful day, cloudy but dry and becoming sunny in the afternoon. We parked in the car park above the village of Moulin, donned blinkers and route-marched (pausing briefly for *Diplophyllum obtusifolium** in forestry) straight to the Bealach na Searmoin. The crags lining this small pass were not very prepossessing, being rather broken and eroded by sheep, and predominantly acidic with small limestone exposures. One of the first bryophytes to come to notice, however, was abundant *Gymnomitrium coralloides**, rare this far east and not seen in v.-c. 89 for many years. *Racomitrium sudeticum** was examined on a large boulder nearby but Schistidia were absent and so we headed across to Creag Oisinnidh, to the west of the main Ben Vrackie summit, where there were limestone outcrops. It was subtly different from the previous day's site, with *Schistidium strictum* (which was not seen at Gleann Beag) being quite common but *S. papillosum* much less so; *S. robustum* remained extremely frequent. Jan came across *Didymodon vinealis** and *Syntrichia virescens*, Mark noted *Distichium inclinatum**, Gordon recorded *Myurella julacea* var. *scabrifolia*, and in a vertical limestone seam cutting up the slope Sam and then Ron found *Stegonia latifolia*, which subsequently turned up in several more places. *Pseudoleskeella catenulata* was quite plentiful, and there were some impressive carpets of *Antitrichia curtispindula*.

The party split into two at midday. The main group worked their way around the bottom of Ben Vrackie's face, where limestone cliff ledges had *Cololejeunea calcarea*, *Andreaea alpina*, *Bryoerythrophyllum ferruginascens*, *Didymodon ferrugineus*, *Encalypta alpina*, *E. ciliata*, *E. rhaptocarpa*, *Entodon concinnus*, *Leucodon sciuroides*, *Mnium marginatum*, *Seligeria donniana* and *Stegonia latifolia*. Flushes and damp base-rich runnels produced *Harpanthus flotoivanus*, *Scapania calcicola*, *S. degenii*, *S. gymnostomophila*, *S. lingulata*, *S. uliginosa*,

Calliargon trifarium, *Catoscopium nigratum* and *Meesia uliginosa*. There was a good array of *Grimmias*. *G. incurva* and *G. longirostris* occurred on scree leading down to the loch and in limestone runnels at the base of the cliffs, *G. donniana* and *G. hartmanii* were found on boulders, *G. torquata* was recorded on limestone exposures, and *G. curvata* was common, as always in this area. Most abundant of all, however, was *G. funalis*.

Mark, Pete, Chris and Martin worked their way up to the summit, finding more *Catoscopium nigratum* in flushes, *Tetralopbozia setiformis* in boulder scree, and *Grimmia incurva* in scree near the top. On the summit a lone sheep was unusually interested in Pete's celebratory banana and had to be more or less forcibly removed. On the steep descent, *Eurhynchium pulchellum* was searched for in vain, having been found here previously by Mark, but there was reward in the magnificent show of Alpine Milk-vetch (*Astragalus alpinus*) and Purple Oxytropis (*Oxytropis halleri*). Ledges here turned up more *Stegonia latifolia* among *Encalypta rhaptocarpa* and *Myurella julacea*. The return trek down the hill on this sunny evening provided magnificent views towards Dunkeld, with just one brief pit-stop by the rear party to see the only surviving Brown Bog-rush (*Schoenus ferrugineus*) transplant site.

Hans, who was leaving the following morning, was pleased with his trip and remarked on the quality of the sites we visited. Attempts at species new to the UK/Europe/science had all failed but we had all had our eyes opened, and the identification of *Schistidium* species, probably avoided by most people in the past, will be much clearer in the future. Confident statements were made during the remainder of the week that people would not have felt entitled to make earlier on!

Wednesday 9 July: Coire a'Ghearraig (NO0769)

The day started with farewells, not only to Hans and Louise, but also to Chris and Pete. John Blackburn had joined us and Elizabeth was back

after a day's absence. On another fine day the group headed off from the Spittal of Glenshee to walk westwards along a forest track towards Dalmunzie. This was less boring than your average forest track as the cutting on the up-slope side was damp and flushed with lime all the way along. After a couple of kilometres we struck up the Allt Coire Buidhe Beag towards the north-facing corrie that was our destination. Base-rich exposures by the stream had some interest, including *Jungermannia atrovirens*, *Bryoerythrophyllum ferruginascens*, *Dichodontium flavescens** and *Ortobotecium intricatum*, but not enough to cause anyone to linger too long. We skirted a young native pine plantation to the west, seeing plentiful *Dicranoweisia crispula* and *Kiaeria blyttii* on a stone dyke, and finally made it to the large base-rich flush complex that occupies most of Coire a'Ghearraig below the crags.

These flushes provided rich entertainment. Species found included *Anthelia juratzkana*, *Barbilophozia lycopodioides*, *B. quadriloba*, *Jungermannia pumila*, *Leiocolea bantriensis*, *Scapania degenii*, *S. uliginosa*, *Tritomaria polita*, *Amblyodon dealbatus*, *Bryoerythrophyllum ferruginascens*, *Catoscopium nigratum*, *Meesia uliginosa*, *Ortobotecium rufescens*, *Warnstorfia exannulata* and, somewhat surprisingly, *Calliergon giganteum*. However, *Oncophorus wahlenbergii*, found here previously by Mark, remained elusive. The stones in some of the runnels glittered with *Molendoa warburgii*, probably originating from rocks higher up. Gordon was the first to notice False Sedge (*Kobresia simpliciuscula*) in this flush complex, which is a new site for the species. A dry rocky hummock provided an ideal sunny lunch spot before the cliffs and boulders above were tackled in the afternoon.

The small cliffs and rocks fringing the corrie had limestone exposures in the western half, but became more acidic further east. We worked the middle and eastern sections. Gordon found *Brachytbecium reflexum* lurking deep in a boulder jumble, and a small patch of Wilson's Filmy-fern

(*Hymenophyllum wilsonii*), which is extremely rare this far east. At the eastern end other species included *Anastrepta orcadensis*, *Apometzgeria pubescens*, *Scapania aequiloba*, *Andreaea alpina*, *Pterigynandrum filiforme* and *Seligeria recurvata*. The main party drifted westwards, looking at more flushes and particularly searching for the *Oncophorus*, to no avail, while Gordon traversed back in the other direction, covering the eastern end. Little was found here but more *Gymnomitrium corallioides* was some compensation.

Thursday 10 July: Craighall Gorge

This was to have been the Fealar day, but the forecast of heavy rain and wind induced a change of programme. Friday's planned visit to the one lowland site of the week, Craighall Gorge just north of Blairgowrie, was advanced by a day. In the event the rain did not last very long. This site was a bit difficult to get around at times, with river crossings being needed to get to likely-looking cliffs on the west side, and bryologically there are better gorges in the region, but for sheer scenic value it is unsurpassed. The huge conglomerate cliffs rear vertically upwards, and the view up to Craighall House itself, perched on the lip of a towering crag, is positively Wagnerian.

Having parked by the house we filed steeply down to the bottom of the gorge, with Mark Pool, having just joined us, being put straight to work as card-holder. We explored northwards first of all, with occasional forays across to the other side, which were possible only because of the low water-level. The base-rich cliffs were very dry, but where water seeped through and created damper recesses species found included *Apometzgeria pubescens*, *Cololejeunea calcarea*, *Leiocolea heterocolpos*, *Plagiochila britannica*, *Mnium marginatum*, *Molendoa warburgii*, *Plagiopus oederianus*, *Platydictya jungermanniioides*, *Pterogonium gracile*, *Rhabdoweisia fugax*, *Seligeria donniana*, *Syntrichia intermedia* and *Taxiphyllum wissgrillii**. Best of all, Ron added *Gymnostomum calcareum**. *Amblystegium fluviatile* and *Cinclidotus fontinaloides* covered the

riverside stones, and both *Hygrohypnum eugyrium* and *H. luridum* were present. Sam and Richard collected an extreme form of *Plagiochila britannica* that had such strongly bilobed leaves that *P. norvegica* was considered. Sam also found *Fissidens rufulus*, and *Dicranum montanum* was noted on a rotten log by the path; both of these species are uncommon in the region. All of the wych elms and many other trees were lying dead in the bottom of the gorge and there were plenty of old ashes among the standing trees, so there was an opportunity to see epiphytes such as *Frullania dilatata*, *Porella arboris-vitae*, *P. cordaeana*, *P. platyphylla*, *Orthotrichum hyellii*, *O. stramineum*, *O. striatum*, *Syntrichia laevipila*, *Ulota bruchii*, *U. crista* and *Zygodon rupestris*.

The site had been quite well covered by mid-afternoon, allowing further exploration elsewhere. Gordon, the two Marks, the Czech contingent, Jonathan and John returned to Kindrogan to look at the crags and boulders in the forest above the Centre, which yielded *Leiocolea heterocolpos*, *Lophozia longidens*, *Cynodontium jeneri* and *Plagiopus oederianus*. The *Buxbaumia viridis* log was visited but found to be *Buxbaumia*-less for the second year running. Ron, Sam, Richard and Liz, having emerged from the gorge later than the others, took off to Blair Atholl to look for *Aongstroemia longipes* at the foot of Carn Liath, at a site where Mark Lawley had found it in May. Scattered stems were located among *Anomobryum julaceum* on a lay-by at the side of a hill track. Careful searching produced further bonuses in the shape of *Fossombronina incurva*, *Haplomitrium hookeri* and lots of *Poblia drummondii*.

Friday 11 July: Fealar Gorge (NO0079)

Most people felt that the visit to Fealar Gorge was a fitting climax to the week. We used the Centre's two minibuses to get up to this remote site, which is twelve miles off the tarmac. The wooded gorge below Fealar Lodge is lined with wet limestone outcrops and damp, mineral-enriched seepages, which yielded a rich harvest. In a roadside flush near the start Blanka found

Moerckia hibernica and, best of all, *Dicranella grevilleana*, also found by Jan. A long list included *Apometzgeria pubescens*, *Jungermannia confertissima*, *Lophozia longidens*, *Plagiochila britannica*, *Scapania cuspiduligera*, *S. degenii*, *Didymodon ferrugineus*, *Ditrichum flexicaule*, *Encalypta ciliata*, *Molendoa warburgii*, *Orthotrichum rufescens*, *Plagiopus oederianus*, *Pseudoleskeella catenulata*, *Pterigynandrum filiforme*, *Schistidium papillosum*, *S. robustum*, *S. strictum*, *S. trichodon*, *Seligeria acutifolia*, *S. donniana*, *S. pusilla* and *Tortula lanceola**. Mark Lawley added *Anthelia juratzkana*, *Eremonotus myriocarpus* and *Hygrobliella laxifolia*.



Aongstroemia longipes at Carn Liath. Photo: Ron Porley.

Since two 5-km squares were involved, Gordon shot straight off to the further one, lower down the gorge, later to be joined by Mark Lawley, Sam and Ron. Most of the same species were found here, but *Scapania lingulata* and *Cynodontium jeneri* were additional. An especially nice *Saxifraga aizoides* flush produced *Amblyodon dealbatus*, *Catoscopium nigratum*, *Meesia uliginosa*, *Scorpidium scorpioides* and masses of luxuriant *Orthotrichum rufescens*. As he climbed back out on to the track at the end of the day Ron managed to add *Tomentypnum nitens*.

The whole gorge is the subject of a conservation project, having been fenced off for woodland regeneration. The growth is quite spectacular so far and the result will be a considerably enlarged

broadleaved woodland running up to an altitude of 550 m. This has to be good news for the bryophytes in the long term.

On the way back, Gordon, driving the leading vehicle, clearly had one eye on the bar-opening time at Kindrogan, but it still took an hour to get back to the road.

Saturday 12 July: Glen Brerachan (NN9763)

A depleted party consisting of the Czechs, Ron, Roy and Martin set out in the morning to reach Creag Spardain, a limestone hill in Glen Brerachan, on the east side of the Ben Vrackie massif. Ron found *Fossombronina wondraczekii* at the start of the track, which also had a lot of *Blasia pusilla*, *Scapania irrigua* and *Ditrichum heteromallum*. The initial part of the route was through forestry plantation with little interest, but we eventually came out into an extensive area of very broken crags, acidic but with limestone outcrops. The going among the deep heather and boulders was pretty diabolical. *Anastrophyllum minutum*, *Douinia ovata*, *Lejeunea*

cavifolia, *Lophozia longidens*, *Mnium marginatum*, *Rhabdoweisia fugax*, *Schistidium papillosum* and *S. strictum* provided some interest, and Ron found *Campylopus fragilis** and *Tortella nitida**. More productive were the flushes that were scattered along the slope. Alongside the usual flush species were *Jungermannia obovata*, *Leiocolea bantriensis*, *Riccardia multifida*, *Calliergon sarmentosum*, *C. stramineum* and *Meesia uliginosa*. Blanka and Roy found a few stems of *Calliergon trifarium*.

Ron and Martin battered on and made it to the target crag, Cona Chreag, with a few tantalising minutes in hand. The slab-like cliff-face here was unlike any other we had seen, being peppered liberally with cushions of *Grimmia ovalis** and otherwise pretty well decorated with *Antitrichia curtispindula*, *Bryoerythrophyllum ferruginascens*, *Homalothecium sericeum* and *Leucodon sciuroides*.

Summary

The week came to an end with eight new vice-county records; seven old records were updated. A total of over 370 bryophytes was recorded.

Summer field meeting 2003, East Perthshire (second week)

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Introduction

Following the first week of the summer field meeting, most of the participants headed home, leaving a hard core of five reprobates (Roy Jeffery, Liz Kungu, Mark Lawley, Seán O'Leary and Mark Pool) to pass a joyful week scampering over the hills of East Perthshire (v.-c. 89) in search of bryophytes. Unbroken sunshine blessed each day save the last, and with England melting in a heat wave, we gave thanks

as delightful mountain breezes caressed our brows and cooled our backs.

Rather than exploring classic bryological hot spots, we sought out little-known localities in order to extend the sum of knowledge. Several of these were far from tarmac, and Martin Robinson gave invaluable assistance by securing permission from landowners to drive several miles along tracks on private estates. This saved us long walks, and left a lot more time for bryologising.