

Many of the additions were of epiphytes reflecting their recovery across SE England.

*Sphagnum palustre* var. *palustre* is not uncommon here but Mark Hill also identified *Sphagnum palustre* var. *centrale*, otherwise currently known from one other site in Britain. Tom Blockeel added four species to the County list, these being *Eurhynchium speciosum*, *Ulotia bruchii*, *Metzgeria fruticulosa* and *Cololejeunea minutissima*. He also found *Orthotrichum tenellum* (the first Bedfordshire record since 1892). Richard Fisk collected *Ulotia phyllantha*, (a species with just one other known Bedfordshire site).

Other additions to the site list were *Bryum moravicum*, *Cryphaea heteromalla*, *Didymodon sinuosus*, *Eurhynchium*

*striatum*, *Hylocomnium splendens*, *Hypnum resupinatum*, *Isoetecium myosuroides* (found by Mark Lawley), *Orthotrichum affine* (found in at least 15 different places!), *O. lyelli*, *Polytrichum longisetum* (determined by Mark Hill), *Pseudotaxiphylum elegans*, *Rhynchostegium confertum*, *R. riparioides*, *Chiloscyphus pallescens*, *Metzgeria furcata* and *Pellia endiviifolia*.

The overall list for the site therefore now stands at 109 mosses and 26 Hepatics, an overall total of 135 species. Forty-nine species of fungi were also recorded during the day of which four were additions to the site list.

My thanks to all those who contributed records making this such a successful event.

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## Summer Field Meeting in East Sutherland, July 1<sup>st</sup>-8<sup>th</sup> 2006

Mark Lawley

*12A Castleview Terrace, Ludlow, Shropshire SY8 2NG*

*“They say that time  
Heals a broken heart.”*

the old song goes,

*“But time has stood still  
Since we fell apart.  
I can’t stop loving you....”*

Most English botanists feel this way about the Scottish Highlands, for absence and distance ever make the heart grow fonder. We yearn for the freedom of wild open spaces, and as car-bonnets pointed north at the beginning of July, our spirits rose with the barometer, in anticipation of adventures coming our way.

Nearly twenty bryologists descended on the coastal village of Golspie in East Sutherland (v.-

c. 107), and disappeared into a variety of hotels, guest-houses, and self-catering accommodation. Along with unbroken fine weather throughout the week, this mixture of lodgings contributed in large measure to the pleasure of our holiday, for the advantages of roomy self-catering accommodation again became evident, just as they had two summers previously in North Aberdeenshire. Some members set up their microscopes in the drawing room in order to determine their gatherings comfortably and in companionable circumstances during the evenings after each day’s excursions, while those of us less allured by the prospect of work sank into the lounge’s soft settees with a cup of tea and planned the morrow’s outings.

Our domestic arrangements also allowed flexibil-

ity with organising meals before and after days in the field – a far cry from the Society's Summer Meeting in 1960 when the custom of serving high teas at an inconveniently early hour in Scottish guest-houses severely curtailed time available in the field. Indeed, the Society's regular practice up to the mid-1950s of vacating the field early for afternoon tea so wound up Warburg that he abolished the habit; Scottish establishments evidently proved more resilient than those south of the border in persisting with these antiquated domestic arrangements.

As with North Aberdeenshire in 2004, we chose East Sutherland for our meeting because its bryophytes were under-recorded, aiming to redress this imbalance in advance of a new edition of the *Atlas*. Accordingly, we planned excursions to numerous hectads (10 km squares) with few records, but the overriding criterion for including sites in the programme nevertheless remained that of choosing a mixture of promising sites and habitats so that we might enjoy our holiday to the full.

With nearly twenty of us present, on most days we split into smaller groups in order not to get under each others' feet, and to cover more ground for the *Atlas*, meeting up to swap experiences each evening. Judith Allinson, John Blackburn, Sam Bosanquet, Des Callaghan, David Chamberlain, Jo Denyer, Bob Ellis, Richard Fisk, Mary Ghullam, Ewa Jablonska, Liz Kungu, Mark Lawley, Niklas Lonnell, Roy Perry, Mark Pool, Chris Preston, Gordon Rothero, Phil Stanley and Jo Wilbraham attended the meeting. We were particularly pleased to welcome Ewa from Poland and Niklas from Sweden, not only as they had travelled so far to join us, but also because they brought with them fresh ways of interpreting our countryside and bryoflora.

### Saturday July 1<sup>st</sup>

Travelling to Sutherland took up most of our inaugural day, but some members nevertheless found time to explore sites at or near journey's end. At **Shin Falls** (NH 5799) in Achany Glen, a few miles south of Lairg, rocks by the river held *\*Andreaea rothii* ssp. *falcata*, *\*Grimmia lisae* (*G. retracta*), *Isothecium holtii*, *\*Oreoweisia* (*Cynodontium*) *bruntonii*, *\*Racomitrium affine* and *\*Rhabdoweisia fugax*, while further down river south of Invershin at **Kyle of Sutherland** (NH 5795) *\*Sphagnum platyphyllum* grew on peaty soil by the rare Estuarine Sedge (*Carex recta*).

The environs of **Dunrobin Castle** (NC 8500) provided another explorer with *\*Bryum radiculosum*, and *\*Syntrichia papillosa* appeared on a lime tree in Golspie itself.

Deciduous woodland bordering a rocky stream and waterfall at **Big Burn** (NC 8400 and 8301) near the northern end of Golspie will doubtless repay further attention at some future time, and on this occasion a rather hurried couple of hours' exploration turned up over 80 species, including *\*Apometzgeria pubescens*, *\*Conocephalum salebrosum*, *\*Eucladium verticillatum* and *\*Mnium stellare*.

### Sunday July 2<sup>nd</sup>

**Grudie Peatlands** near Sallachy, Lairg is a blanket bog and Site of Special Scientific Interest (SSSI) whose 5,000 ha (18,600 acres) extend over parts of four hectads (NC 40, 41, 50 and 51), stretching from Lochan a' Choire in the north to Loch na Fuaralaich in the south, and from Ben Sgeireach and Loch Sgeireach in the north-west to Cnoc Riabhaich in the south-east.

We split into groups in order to explore different parts (and hectads) of this huge site, a policy

which brought reward in the forms of *\*Sphagnum austinii*, *S. fuscum*, *S. magellanicum*, *\*S. platyphyllum*, *S. russowii*, *S. strictum*, *S. tenellum* and *S. teres* along with several commoner congeners. *\*Calliargon giganteum*, *Campylopus brevipilus*, *\*Dicranella cerviculata*, *\*Dicranum montanum*, *\*Plagiomnium ellipticum*, *Poblia bulbifera*, *P. campototrachela*, *\*P. drummondii*, *\*P. filum*, *\*Scorpidium (Drepanocladus) cossonii*, *Splachnum sphaericum*, *Tetraplodon mnioides*, and the liverworts *Anastrophyllum minutum*, *Anthelia julacea*, *\*Barbilophozia attenuata*, *\*Cephalozia connivens*, *\*C. loitlesbergeri*, *Cladopodiella fluitans*, *Kurzia pauciflora* and *\*K. trichocladus*. *Odontoschisma denudatum*, *\*Scapania compacta*, *\*S. scandica* and *\*Riccardia latifrons* also went on the cards, and everywhere one looked the beautiful purple shoots of *Pleurozia purpurea* added unrivalled colour to the ground. Few-flowered Sedge (*Carex pauciflora*) flourished in several of the wetter places, and Dwarf Birch (*Betula nana*) appeared in small quantity.

It was a beautifully fine day for exploring this remote expanse of wet moor. Golden Plovers cried to each other, Dunlin trilled and Greenshank called across the mire, and one party enjoyed an excellent view of an Osprey by the side of Loch Shin.

### Monday July 3<sup>rd</sup>

After a day on blanket bog, two parties explored Glen Loth and Glen Sletdale (NC 91), whose slopes lie less than 500 metres above sea-level, and had not previously been examined for bryophytes.

*\*Syntrichia princeps* appeared on earth beneath east-facing crags of an Old Red Sandstone cliff at Creag na Cathaig (NC 9314) on **Beinn Dhorain** (NC 9314 and 9315). *Schistidium*s abounded on the crumbling, base-rich, lower outcrops, and Sam Bosanquet collected two rare species, *\*S.*

*dupretii* and *\*S. pruinatum*. *Dicranella subulata* and *Jungermannia obovata* grew in the gully of a stream, and the base-rich crags held *\*Ditrichum gracile*, *\*Hedwigia stellata*, *Leucodon sciuroides*, *\*Pterogonium gracile*, *\*Conocephalum salebrosum*, *Frullania fragilifolia* and *\*Leiocolea badensis*. *\*Campylium protensum*, *\*Plagiomnium ellipticum*, and *\*Jungermannia exsertifolia* ssp. *cordifolia* grew in flushes below the crags.

This party then descended to **Loth Gorge** SSSI (NC 9410) below the road, and found there *\*Gyroweisia tenuis*, *\*Schistidium rivulare*, *\*Apometzgeria pubescens*, *\*Jungermannia exsertifolia* ssp. *cordifolia*, *\*Metzgeria fruticulosa* and *Porella cor-daeana*.

Zealously attended by midges, another party explored rocks, flushes and spinneys beside the burn in nearby **Glen Sletdale** (NC 9112, 9212 and 9312), finding *Leucodon sciuroides*, *\*Plagiomnium ellipticum*, *Sphagnum fuscum*, *S. magellanicum*, *\*Bazzania trilobata*, *\*Jungermannia exsertifolia* ssp. *cordifolia*, *\*Marchantia polymorpha* ssp. *montivagans* and *Odontoschisma denudatum*. Mark Pool also found *\*Rhynchostegium alopecuroides*.

While all this was going on, John Blackburn and Jo Wilbraham set about Brora's bryoflora, doing sterling work recording bryologically virgin territory around **Brora** (NC 9003) and **Kintradwell** (NC 9107).

Just along the coast, **Crackaig Links** (NC 9710) turned up *Bryum archangelicum* (*B. imbricatum*), *Campyliadelphus chrysophyllus*, *Distichium capillaceum*, *Zygodon stirtonii* and *Scapania aspera*. And further south at **Coul Links** (NH 89) just north of Dornoch, Chris Preston found a colony of *\*Riccia cavernosa* in a dried-up dune slack alongside *Calliargon cordifolium* and terrestrial *Potamogeton gramineus*, with *\*Campylium protensum* nearby.

Another party explored a few hundred yards of **Strath Brora's** (NC 7110) upper reaches, immediately upstream of Braegrudie, where cliffs in a little gorge by the burn attracted greatest interest. *Antitrichia curtipendula*, *Plagiobryum zieri*, *\*Trichostomum tenuirostre*, *Ulota hutchinsiae*, *Leiocolea collaris* (*L. alpestris*) and *Scapania subalpina* numbered among the records.

Later, the same group moved further down the valley, just west of **Balnacoil** (NC 7810), where they found more *Antitrichia*.

### Tuesday July 4<sup>th</sup>

Next day, about half of the members enjoyed a further change of habitat by visiting a rich, old, mixed woodland in the gorge below a forestry plantation at **Raven's Rock** (NC 5001 and 4901), Rosehall, near Altass. A ditch by the lane contained *\*Sphagnum fimbriatum*, but most of our fun came once we had descended to the stream, where varying combinations of humid shade and traces of base-enrichment favoured the liverworts *\*Aphanolejeunea microscopica*, *Cololejeunea calcarea*, *\*Hygrobiella laxifolia* and *Leiocolea collaris* (*L. alpestris*), as well as mosses such as *Anoetangium aestivum*, *Bartramia ithyphylla*, *Didymodon spadiceus* and *Gymnostomum aeruginosum*. Chris Preston found *\*Calypogeia suecica* and *Odontoschisma denudatum* growing on rotting logs, and Jo Wilbraham also found the epiphytes *\*Ptilidium pulcherrimum* and *\*Zygodon conoideus*.

Some members stopped in **Lairg** (NC 5806) on their way back from Raven's Rock - ostensibly to record weeds such as *Bryum algovicum* var. *rutheanum*, *\*B. ruderale* and *Marchantia polymorpha* ssp. *ruderalis* - but in reality to enjoy an ice-cream in the late afternoon's sunshine.

Another group of members drove north in order to explore blanket bog on the SSSI of **Knockfin**

**Heights** (NC 9033, 9133) around Cnoc na Tuathrach, finding *\*Calypogeia sphagnicola* on *Sphagnum*, and *\*Marsupella sphacelata* and *\*Polytrichum commune* var. *perigoniale* on the stony margin of a loch. This *Polytrichum* is probably much overlooked on tracks and other disturbed ground, as it resembles *P. juniperinum* at first glance. The clubmoss *Lycopodium annotinum* added vascular variety.

On the walk up to the Knockfin SSSI from the main road at Bannock Burn they found fruiting *Fontinalis antipyretica* var. *gracilis* (as well as var. *antipyretica*) and *\*Polytrichum strictum* near the lower reaches of the burn. Further upstream (NC 9034), as they approached the SSSI, *\*Platyhypnidium (Rhynchostegium) alopecuroides* grew plentifully on rocks in the gully of the Bannock Burn, and the sides of the gully held *Sphagnum molle*, *S. russowii*, *S. teres*, *Tetradontium brownianum*, *Jungermannia obovata* and *Leiocolea bantriensis*.

A third group of explorers drove up the Altnaharra road out of Lairg, and entered West Sutherland (v.-c. 108) in order to examine the bryoflora of blanket bog near the **Allt Chraigs** (NC 5327). *Cladopodiella fluitans*, *Hygrobiella laxifolia* and *Scapania scandica* grew in the vicinity of the Allt Chraigs. Ground between **Allt Bealach Fhuarain** and **Loch Gaineamhach** (NC 5126, also in v.-c. 108) held *Haplomitrium hookeri*, *Campylopus brevopilus*, *Dicranella rufescens*, *D. subulata*, *Sphagnum fuscum* and *S. magellanicum*, and *S. pulchrum* turned up beside several small pools. A pause beside the road south of **Crask Inn** (NC 5223, back in vc 107) produced *Prilium crista-castrensis*.

### Wednesday July 5<sup>th</sup>

On this day we again split into car-loads of about four in order to record more widely. One party languished in hot sunshine on the blanket bog of **Coir' an Eoin** SSSI (NC 81), where Gordon

Rothero found the rare \**Sphagnum riparium* growing amongst *S. fallax* by the Allt Ach' a' Bhathaich. \**Sphagnum austinii*, *S. compactum*, \**S. fimbriatum*, *S. fuscum*, *S. magellanicum*, *S. tenellum* and *S. teres* also numbered among 17 species of the genus, satisfying all but the most rabid of Sphagnophiles. *Calliergon*s were also to the fore, with *C. cordifolium*, *C. sarmentosum* and *C. stramineum*, and \**Riccardia latifrons* went on the list too.

Nearer the road, John Blackburn and Mary Ghullam examined ground around **Ascoile** (NC 8210), recording a fine range of the usual suspects which included \**Marchantia polymorpha* ssp. *polymorpha*, as well as \**Hygroamblystegium* (*Amblystegium*) *fluviatile* from rocks in the stream.

Meanwhile, another posse investigated the bryological riches of Helmsdale and its environs. The bank of the **River Helmsdale** and nearby woodland (ND 0217 and 0117) yielded *Anomobryum julaceum*, \**Weissia brachycarpa* s.s., and *Jungermannia paroica*.

On higher ground, a small hummock of \**Sphagnum austinii* came to notice on **Creag Thoraraidh** (ND 0318), with *S. magellanicum* nearby. *Poblia camptotrachela* and \**P. drummondii* grew on disturbed soil. *Calypogeia neesiana* and *Scapania umbrosa* added hepatological interest. The harbour in **Helmsdale** town (ND 0315) held \**Physcomitrium pyriforme* but mainly attracted comment for its impoverished bryoflora, and was declared a liverwort-free zone.

A third group headed into West Sutherland (v.c. 108), taking advantage of Loch Choire Estate's kindness in permitting us to drive several miles along their unmetalled but well-maintained track and park at the lodge in order to tackle bryologically neglected ground by **Loch Choire** (NC 6429, 6327 and 6227). \**Polytrichum commune* var. *perigoniale* grew by the track, and other

mosses to go on the list included \**G. lisae* (*G. retracta*) on rocks by the loch, *Isopterygiopsis pulchella*, *Mnium marginatum*, *Racomitrium ellipticum*, *Tetradontium brownianum*, *Ulota hutchinsiae* and *Zygodon conoideus*. *Leptobryum pyriforme* grew on humus overlying an outcrop of sandstone above the track. The assemblage of liverworts indicated some oceanic influence, and included *Bazzania tricrenata*, *Cephalozia lunulifolia*, *Douinia ovata*, *Hygrobiella laxifolia*, *Lepidozia cupressina* and *Plagiochila bifaria* (*P. killarniensis*).

That evening, back in Golspie, a party of twitchers set out to see the rare *Moneses uniflora* (One-flowered Wintergreen) near Loch Fleet, where it grows near plentiful *Goodyera repens*. As with most woodland in the region, *Riccardia palmata* and *Scapania umbrosa* were present on rotting wood.

#### Thursday July 6<sup>th</sup>

Members had been diligently recording all week, so your correspondent promised them a relaxing party-day together on the calcareous Old Red Sandstone of Ben Griam Mor SSSI (NC 8039). However, Gordon Rothero had other ideas, and route-marched us north past our intended hunting-ground to Ben Griam Beag in the much less well recorded hectad immediately to the north. A few idlers rebelled and headed for Griam Mor, but most traipsed dutifully after their new leader, lured by the promise of unknown excitement on a far distant horizon.

Brief pit-stops by the shore of **Loch Druim a' Chliabhain** (NC 8040 and 8140) brought *Haplomitrium hookeri*, \**Odontoschisma elongatum* and \**Pseudobryum cinclidioides* to notice, with *Campylopus brevipilus* on wet moor nearby.

On Ben Griam Beag itself, our recording was somewhat complicated by the proximity of the

vice-comital boundary, which follows one of the numerous gullies or buttresses dissecting the cliff. We're fairly sure we spent most of our time in v.-c. 107 rather than 108. The Old Red Sandstone crags of **Creag na h-Iolaire** (NC 8240 and 8241) face north-west, with bryophytes indicating base-richness in some places, and the local Peregrines worked themselves into a fearsome frame of mind while we searched the cliff, while at lunch-time Judith Allinson entertained us with some tunes on her whistle.

Choice among the mosses were *\*Anomobryum julaceum* var. *concinatum*, *Antitrichia curtispindula*, *Bartramia ithyphylla*, *Cynodontium jeneri*, *\*Dicranum flexicaule*, *Grimmia funalis*, *G. torquata* and *G. trichophylla*, *Isopterygiopsis pulchella*, both varieties of *Isothecium myosuroides*, *Kiaeria blyttii*, *Orthothecium intricatum*, *Orthotrichum rupestre*, *Pohlia cruda*, *Pterigynandrum filiforme*, *Racomitrium ellipticum*, *R. sudeticum*, *\*Schistidium confertum*, *\*S. strictum*, *Trichostomum brachydontium*, *\*T. tenuirostre* and *Zygodon rupestris*. Liverworts on the crags included *Anastrophyllum minutum*, *Barbilophozia hatcheri*, *Douinia ovata*, *Frullania fragilifolia*, *Gymnomitrium obtusum*, *Leiocolea bantriensis*, *\*L. heterocolpos*, *\*Lophozia sudetica*, *\*Marchantia polymorpha* ssp. *polymorpha*, *Porella cordaeana*, *\*Reboulia hemisphaerica* and *Scapania aequiloba*. At the northern end of the crags in West Sutherland (v.-c. 108) we found in addition *Distichium capillaceum*, *Hymenostylium recurvirostrum*, *Hypnum callichroum* and *\*Schistidium strictum*.

Back in East Sutherland, *Cladopodiella fluitans*, *Harpanthus flotovianus* and *\*Odontoschisma elongatum* came to light by a flush on ground below the crags, with *Sphagnum molle* and *S. teres* nearby. *Polytrichum alpinum* and *Tetraplodon mnioides* grew on the moor as well, with *Splachnum sphaericum* in v.-c. 108.

Our colleagues on **Ben Griam Mor** (NC 73 and 83) recorded in addition *\*Polytrichum strictum* and *\*Jungermannia exsertifolia* ssp. *cordifolia*, but found themselves beguiled by an attractive assemblage of pretty flowers on the crags: Mountain Avens (*Dryas octopetala*), Moss Campion (*Silene acaulis*), Purple Mountain Saxifrage (*Saxifraga oppositifolia*), Alpine Bistort (*Polygonum viviparum*), Frog Orchid (*Coeloglossum viride*) and Globe Flower (*Trollius europaeus*).

### Friday July 7<sup>th</sup>

**Ben Hee** in the north-west of the vice-county offered much higher ground than anywhere else explored during the week, and this under-recorded hill beckoned the mountaineers on our last full day, with Niklas Lonnell particularly keen to see some oceanic liverworts. The day's first notable discovery was Sam Bosanquet's *\*Aongstroemia longipes* on damp gravel beside the track above **West Merkland** (NC 3933).

**Coir' a' Chruiteir** (NC 4133) on the west side of Ben Hee provided the first sight of oceanic liverworts, with *Anastrophyllum donnianum*, *Bazzania pearsonii*, *B. tricrenata*, *Herbertus aduncus*, *\*Hygrobiella laxifolia*, *Mastigophora woodsii*, *Plagiochila carringtonii* and *Scapania ornithopodioides* growing on steep rocky slopes or flushed rocks. *Scapania uliginosa* flourished in a spring, and the mosses *Dicranodontium asperulum* and *D. uncinatum* were found among the boulders.

A stiff climb over the bealach, past plentiful *Campylopus gracilis*, led to a series of somewhat base-enriched cliffs above **Loch a' Ghorm-choire** (NC 4333). *Dicranodontium uncinatum* grew where water dripped from above at the western end of the cliffs. After lunch, the bryologists descended to the loch, where Gordon Rothero found *\*Bryum muehlenbeckii* and *\*Odontoschisma elongatum*, while Sam Bosanquet, Des Callaghan

and Niklas Lonnell recorded on the cliffs above, finding *\*Conocephalum salebrosum*, *Gymnomitrium crenulatum* and *Isopterygiopsis pulchella*.

The **Allt a' Ghorm-choire** (NC 4333) harboured a rich community of oceanic liverworts. All the species seen earlier in the day in Coir' a' Chruiteir were found again in greater abundance, plus a patch of *\*Moerckia blyttii* at the bottom of the coire. *Anastrophyllum alpinum* and *Scapania nimbosa* occurred in scree higher up, along with *Herzogiella striatella*, *\*Hylocomium umbratum*, *Hypnum callichroum* and *Kiaeria falcata*. Gordon found a patch of *Isopterygiopsis muelleriana* at the foot of a crag, and *Gymnomitrium concinnum* and *\*Scapania scandica* were also in the coire. *\*Lophozia opacifolia* occurred near the top, along with *Conostomum tetragonum*. *Aulacomnium turgidum* failed to show on the summit ridge, but a little *Marsupella brevissima* (NC 4234, vc 108) turned up by way of compensation.

Less scarce species noted during the day on Ben Hee included *Distichium capillaceum*, *Fontinalis antipyretica* var. *gracilis*, *Orthothecium intricatum*, *\*Racomitrium affine*, and *Cololejeunea calcarea*.

While the mountaineers feasted on Ben Hee's treasures, a second group of bryologists examined another blanket bog – **Skinsdale Peatland** SSSI (NC 7028 and 7027) immediately east of Ben Armine. As before, we took advantage of Loch Choire Estate's kindness in permitting us to drive several miles along their track, and this time parked a couple of miles short of the lodge in order to walk south along an old pony path. *\*Dicranella cerviculata* fruited freely on moist peat beside the path. *\*Sphagnum austinii* was present on the bog, along with *S. russowii*, *S. teres* and the suite of liverworts we had come to expect from the blanket bogs of East Sutherland. At **Gorm-loch Beag** we encountered *\*Odontoschisma elongatum* in a flush, with *Racomitrium ellipticum* and *Grimmia ramon-*

*dii* (*G. curvata*) on rocks at the edge of the loch, along with *\*Pterigynandrum filiforme* var. *majus*. The lower ramparts of **Ben Armine's** eastern flank proved mainly acidic, but one pocket of rock held *Trichostomum brachydontium*. *Kiaeria blyttii* lurked nearby, along with *\*Marsupella emarginata* var. *pearsonii*.

A third party went to **Borrobol Lodge** (NC 8726) in Strath of Kildonan, and walked to **Loch Ascaig** (NC 8525), where *\*Philonotis caespitosa* appeared on a bank of damp clay. *Bartramia ithyphylla*, *Calliergon cordifolium*, *C. sarmentosum*, *C. stramineum*, *\*Dicranella rufescens*, *\*Plagiomnium cuspidatum*, *Pohlia annotina*, *P. bulbifera*, *P. camptotrachela*, *P. cruda*, *Sphagnum compactum*, *\*S. fimbriatum*, *S. tenellum*, *S. teres*, *\*Cephalozia connivens*, *\*Hygrobrella laxifolia*, *Jungermannia paroica* and *Odontoschisma denudatum* went on the list.

A mile or so south of Borrobol Lodge, *\*Ptiledium pulcherrimum* appeared near where Suisgill Burn flows into the River Helmsdale, and *Pohlia camptotrachela*, *\*Schistidium rivulare*, and *Sphagnum teres* occurred a little further south at **Suisgill Lodge** (NC 9023). *\*Calypogeia sphagnicola*, *\*Hygrobrella laxifolia* and *Jungermannia paroica* turned up in the vicinity of Kildonan Burn another couple of miles south along the road at **Baile-an-Or** (NC 9121).

Meanwhile, fearful of being asked to survey yet another bog, other members had accepted an invitation from Morven Murray, East Sutherland's recorder of vascular plants for the Botanical Society of the British Isles, who lives at **Rogart** (NC 7303), and had offered to show members some choice spots in the vicinity of her home village, in return for our records for the Highland Council's "Biodiversity Action Plan". *\*Hedwigia ciliata* and *\*H. stellata* grew by the roadside and river to the north of Rogart crossroads (NC 7302), and

\**Bryum pallescens*, \**B. rubens* and *Syntrichia ruraliformis* appeared near the railway station. A base-rich mire on the hillside (NC 7202) above the village held *Harpanthus flotovianus*, with \**Dicranella rufescens* nearby. And a hazel wood in a little valley at NC 7204 harboured startlingly large quantities of *Antitrichia curtipendula*.

### Saturday July 8<sup>th</sup>

Before leaving East Sutherland, Sam Bosanquet and Chris Preston stopped by a disused quarry near **Marian's Rock** (NC 7401), not far from Rogart, where Sam found the week's rarest plant – \**Grimmia elatior* – not seen in Britain since the 1870s, when it was known from Glen Clova, Angus, further south in eastern Scotland. At its newly discovered site, this very rare moss grows on unshaded, south-facing, igneous rocks with *G. decipiens*, \**G. lisae* and *G. ovalis* (as well as *G. funalis*, *G. pulvinata*, *G. ramondii* and *G. trichophylla*), \**Pterogonium gracile*, \**Schistidium pruinatum* and \**Weissia brachycarpa* var. *obliqua* nearby. This intriguing assemblage of scarce mosses, taken in conjunction with the discovery earlier in the week of *Syntrichia princeps* and the rare *Schistidium dupretii* and *S. pruinatum* on Bheinn Dhorain a few miles north, suggests that the interface between ancient igneous and metamorphic rocks and the Old Red Sandstone of East Sutherland's eastern seaboard merits further bryological exploration.

Our week-long investigation was not only interesting for the rarities discovered, but also further developed our impression of the region's commoner species. Of epiphytes, *Uloa drummondii* appeared frequently, as well as *Orthotrichum pulchellum*, *O. stramineum* and *O. striatum*. *O. rupestre* turned up on rocks on several occasions too, and *Antitrichia curtipendula* was frequent and often luxuriant on both bark and rock; indeed, it was found fruiting at two sites. Many rocks also held *Pterigynandrum filiforme* and *Barbilophozia hatcheri*, and *Grimmia*

*lisae* (*G. retracta*) turned up several times on riparian rocks, often with *G. ramondii*, *Racomitrium ellipticum* and *Uloa hutchinsiae*. *Riccardia palmata*, *Scapania umbrosa* and *Tritomaria exsectiformis* were frequent on rotting logs in humid surroundings, and many wet places harboured *Sphagnum contortum*, *S. russowii*, *S. tenellum* and *S. teres*.

In addition, numerous species vouched for the first time (or for the first time since before 1950) from East Sutherland seemed to be reasonably frequent in their favoured habitat, indicating that v.-c. 107 had indeed been bryologically neglected hitherto. These included the liverworts *Calypogeia arguta*, *Cephalozia connivens*, *Jungermannia exsertifolia* ssp. *cordifolia*, *Kurzia trichoclados*, *Marchantia polymorpha* ssp. *polymorpha*, *Nardia compressa*, and *Scapania compacta*. The same may be said of the mosses *Amblystegium serpens*, *Andreaea rothii*, *A. rupestris*, *Hedwigia stellata*, *Oxyrrhynchium* (*Eurhynchium*) *hians*, *Plagiomnium ellipticum*, *P. rostratum*, *Pohlia drummondii*, *Polytrichum strictum*, *Racomitrium heterostichum*, *Scorpidium* (*Drepanocladus*) *cossonii*, *S. revolvens*, *Sphagnum austinii* (which was previously recorded as *S. imbricatum* s.l.), *S. fimbriatum*, and *Trichostomum tenuirostre*.

On the other hand, a dry summer is not the best season for finding winter-annuals, and we contributed far less to an understanding of East Sutherland's ruderal bryoflora than the agricultural bryologists did during a brief visit to the vice-county in 2005. We found little evidence of the small Pottiaceae in the villages, but they are usually more in evidence during the wetter winter months. However, we would surely have detected the perennial *Rhynchostegiella tenella* if it had been present on mortared walls. Were the walls insufficiently calcareous, or does the climate of East Sutherland not suit this species? Again, while several epiphytic *Orthotrichum* species were notably frequent, \**O. lyellii* was seen only once (on a roadside tree on the drive to Ben Griam Beg).



East Sutherland's climate was evidently too dry for a number of oceanic species. Only in the sheltered gorge at Raven's Rock and in the far west of the vice-county at Loch Choire and on Ben Hee did western species occur in any quantity. Lejeuneaceae were generally rare, as were the oceanic *Plagiochila* species that occur frequently further west. But *Hygrobiella laxifolia* turned up several times on wet rocks by running water, and *Sphagnum girgensohnii* proved to be widespread and frequent, whereas *S. fimbriatum* occurred in smaller quantities.

In our seven-day spree we scurried like ants over hill and dale, visiting 26 hectads, finding about 100 species new to East Sutherland or not vouched from the vice-county since before 1950, and scuttled back each day with little parcels of booty for

assimilation under the microscope. Yet we must surely have unwittingly passed by much else besides, wherefore one wonders what more might be found at greater leisure in East Sutherland.... if only the vice-county possessed even one resident bryologist.

And so our meeting ended, leaving fond memories of high summer in the Highlands, and regrets as Sutherland faded from sight in the rear-view mirror:

*"Are you going away with no word of farewell?  
Will there be not a trace left behind?  
I could have loved you better...."*

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## Summer Field Meeting on Orkney, 8<sup>th</sup>-12<sup>th</sup> July 2006

Gordon P. Rothero

*Stronlonag, Glenmassan, By Doon, Argyll PA23 8RA; GPRothero@aol.com*

### Participants

Mary Ghullam, John Blackburn, Mark Lawley, Ron Porley, Nick Hodgetts, Mark Pool, Sandy Payne, Liz Kungu, Richard Fisk, Ewa Jablonska (Polish student), Gordon Rothero and Rosemary McCance (local secretary). Martin Godfrey joined us for two days and John Crossley and Effy Everiss, two local botanists, came with us on the first Hoy day and John showed us the Glims Moss and Durkadale SSSI.

### Saturday 8<sup>th</sup> July

The vagaries of travel to Orkney and the spread of accommodation in Kirkwall meant that arriv-

als at the initial meeting in the Lynnfield Hotel were spread through the evening but most people made it, eight of us having come on from Golspie. Rosemary ran through the programme and gave the obligatory 'risk assessment', probably the most practical information being that 'time, tide and Orkney ferries wait for no man' - three of the four excursions involved ferries.

### Sunday 9<sup>th</sup> July. Hoy.

The early morning weather was dreich but by the time we reached Stromness for the Hoy ferry the sky was brightening. The crossing to the north end of Hoy takes about half an hour, during which closet twitchers scanned the local bird life and we