Meeting Report

BBS Summer meeting 2016

Tyrone 30 July - 6 August

Joanne Denyer reports on last year's Summer Meeting held in Tyrone, Northern Ireland

The first week of the summer meeting (30 July - 6 August) was held in Co. Tyrone VC H36, Northern Ireland. Co. Tyrone was the most under-recorded vice-county remaining in Ireland, having had little attention since the Fitzgeralds recorded in the 1950s. Prior to the 2016 meeting there were a total of



△Above. Raspberries temporarily halted bryology at Knockmany Forest. J. Denyer

4025 records from H36, with c. 60% of these having been made prior to the 1970s and fifteen hectads had less than 50 species recorded. Most of the recent recording had been undertaken by David Holyoak, with some additional records from Richard Weyl, Joanne Denyer and the BBS Antrim meeting in 2012.

The aim of the summer meeting was therefore to record in hectads with few historic records and to update those that had no recent records. The meeting was based in Carrickmore, south of Creggan and just outside Omagh where we hired a self-catering cottage. This was our meeting place each morning and evening microscope work was undertaken at the kitchen table! Eleven people attended for all or part of the meeting, with 8 of these from Ireland, 2 from Scotland and 1 from England. Joanne Denyer had her toddler Molly with her who came out on fieldwork each morning. This wasn't much of a hindrance as the typical bryological pace is rarely faster than a toddler anyway!

Left. Phaeoceros laevis, found by Rory in Parkanaur Forest J. Denyer



△Above. Exploring wet willow woodland by Brantry Lough. ▷Right. Liz recording calcicoles on the limestone cliffs at Benburb, on the northern bank of the River Blackwater. J. Denyer

Saturday 31 July

On our first day we had a relatively large group in the morning with Joanne Denyer, Liz Kungu, Rory Hodd, Lindsay Stronge, Paul Brogan, Jon Yearsley and Molly. The group headed to Knockmany Forest in hectad H55. Here we found a good range of woodland species within forestry and wet willow woodland at the edge of a small lough. The best raspberries of the meeting halted bryology on the way up to lunch at the summit burial chamber! Knockmany proved to be one of the richest sites of the week, with 90 species recorded and the only time we saw Nowellia curvifolia and Riccardia palmata. Other species included Colura calyptrifolia*, Riccardia incurvata*, Weissia controversa var. controversa* and Conocephalum conicum s.str.*.

In the afternoon, Liz, Rory, Lindsay and Paul continued on to Augher to record urban species on walls, the church and river. Fifty-five species were recorded including the only meeting record of *Fissidens crassipes**, found by Rory on rocks just above water level in the River Blackwater. 'Townland treasures' encountered included *Barbula convoluta* var. *convoluta**, *Barbula convoluta* var. *sardoa**, *Syntrichia papillosa** and *Syntrichia latifolia**.

Rory and Liz ended the afternoon in a patch of conifer forestry with some heathland. A total of 175 records of 133 taxa were made in hectad H55, which was a great start to the week.



Monday 1 August

We were a smaller group on Monday, with Jo, Rory and Liz (and Jon and Molly). To start we explored Parkanaur Forest in hectad H76. This was mixed planted woodland with a river and localised areas of wet woodland. Despite the low number of bryologists and relatively unexciting woodland, the group recorded 86 species. This was the only site during the week that the non-native moss Orthodontium lineare was recorded. After this we explored a lough south of Dungannon (Ballysaggart Lough), as there was a historic record for Drepanocladus sendteneri. There was no suitable habitat for this species, but the group recorded a few additional species amongst the copious waterfowl droppings at the lough edge and made a welcome lunch stop (after using bacterial handwash!) overlooking the lough.

As 94 species (and 114 records) had been made in hectad H76, Rory and Liz moved onto H66 in the afternoon. This provided a change



from lowland and urban habitats with a raised bog remnant at Crockbaravalley. Whilst only 38 species were recorded from the site, this included the week's only records for *Riccardia latifrons**, *Sphagnum molle* and *Mylia anomala*. Another nice site in H66 was Glenmore, a small area of wet woodland with a stream. *Orthotrichum lyellii** and *Lejeunea cavifolia** were collected here and 72 species recorded overall. *Amphidium mougeotii* made its only appearance of the trip, demonstrating perhaps the overall dominance of lowland forest and urban habitats in the Co. Tyrone under-recorded hectads. A total of 104 species were recorded from hectad H66, which was a great effort from Rory and Liz.

Tuesday 2 August

On Tuesday, Jo, Rory, Liz and Lindsay were joined by Richard Weyl from the Northern Ireland Environment Agency (NIEA). Richard was a welcome addition to the group for his bryological expertise and knowledge of local sites. We met at Brantry Lough (hectad H75) and explored a large area of wet willow carr and acid woodland by the lough shore. Sixty species were recorded including Leptodictyum riparium*. This was the only site of the week where Metzgeria conjugata and Scapania nemorea were recorded. We then moved on to hectad H85 at Benburb. The only access we could initially find to the river was the southern bank in Co. Armagh, but we later crossed a bridge back into Co. Tyrone and so recorded in both vice-counties. We recorded a total of 93 species, which was only equalled at



⊲Left. Richard examining rocks on the southern bank of River Blackwater, where he found a novel bryophytecollecting vessel (△above). J. Denyer

one other site during the week (also a forested area). On the northern bank the woodland was acidic with limestone cliffs and outcrops. It was a welcome change to record some calcicole species and the only time we saw *Didymodon tophaceus* in the week. Rory and Richard explored the riverbank to add a few wetland species to the list such as *Conocephalum conicum* s.str.* (VC H37). This was the only site during the week for *Hygroamblystegium tenax, Lejeunea lamacerina* and (surprisingly) *Lophocolea heterophylla.*

Rory, Liz and Richard headed back into hectad H75 for what remained of the afternoon. A visit to the very wet and difficult to access Black Lough yielded the only meeting record for *Sphagnum squarrosum* and a few other wetland species. Pluck Bridge added 50 records from urban and riverbank habitats and Rehaghy Mountain a few conifer plantation species. The group worked very hard for the final hectad count for H75 of 100 species and 152 records.

Wednesday 3 August

On Wednesday, Jo, Rory, Liz, Richard and Lindsay, were joined by Tom Blockeel and Caroline Pannell. We headed to Cranny Bog in hectad H46, a c79ha Special Area of Conservation (SAC) protected for its active raised bog. Here we saw 11 species of *Sphagnum*. This included frequent *S. pulchrum** (found by Richard Weyl and the only site for it during the week) and



△From top left clockwise. Jo recording on Cranny Bog. R. Hodd. Testing the firmness of a *Sphagnum austinii* hummock on Cranny Bog. The first encounter of the week with *Sphagnum beothuk*, Cranny Bog. Richard demonstrating *Sphagnum fimbriatum* in the bog woodland at Cranny Bog. J. Denyer

nice hummocks of *S. austinii* and *S. beothuk.* Interestingly *S. beothuk* appears to be more frequent on raised bogs in Ireland and Northern Ireland than *S. fuscum* (Mark Hill, pers. comm.), which means a lot of site records will need updating. It was a great site for demonstrating *Sphagnum* to those not so familiar with this group. Rory found a small amount of *Pleurozia purpurea*^{*} and Tom recorded *Ulota calvescens*^{*} in the marginal bog woodland. A total of 55 species were recorded, a good number considering we only explored a very small part of the site.

This was enough bog for Tom for one day, so we headed off in search of some urban habitats. We found an old cemetery near Fintona with a variety of bryophytes, including *Grimmia trichophylla** on gravestones, the only time we saw this species. A walk from the cemetery, down a very muddy track in the rain, was rewarded by a nice patch of *Phaeoceros laevis* on a field bank.

After a wet lunch in the cars, the group split into two (the first day we had had sufficient numbers to do this). Richard, Caroline and Liz





△From top left clockwise. *Grimmia trichophylla* frequent on gravestones at old cemetery near Fintona. Rory packeting a voucher specimen of *Daltonia splachnoides*. Close up of *D. sphlachnoides*. J. Denyer

recorded 84 species in hectad H36 in urban and woodland habitats at Aghlisk Bridge, Dromore and Greenan Bridge. Greenan Bridge was the only site during the week where Trichocolea tomentella and Hyocomium armoricum were recorded, the latter showing again that 'oceanic' habitats were rare in the recording area. It was also nice to see the pretty Sanionia uncinata. Rory, Tom and Lindsay recorded in more upland habitats in hectad H45. The richest area was Cole Glen forest and local area where 93 species were recorded (joint highest site total of the week). Ditrichum gracile* and Bryoerythrophyllum ferruginascens were found on a base-rich forestry track and the only week records of Dichodontium palustre and Lophozia incisa were made here. A total of 105 species were recorded from this hectad, which was typical of the week's recording (mean of 101 species recorded per hectad).







Thursday 4 August

On Thursday the group (Jo, Rory, Liz and Tom) headed west to Carrickaholten Forest and Lough Mulken in hectad H17. Mike Simms was slightly delayed, but amazingly managed to find the group up a remote track (with limited mobile phone signal) and joined us later! Rory quickly found *Daltonia splachnoides** on willow by the forest track, a species the non-Irish bryologists had been keen to see during the week. It was locally frequent (although typically difficult to photograph) and everyone had a chance to 'get

Left. Tom and Richard examining *Daltonia splachnoides* at Carrickaholten Forest. J. Denyer





⊲Left. Learning how to identify *Pseudoscleropodium purum*! △Above. The group recording in Magherakeel Graveyard. J. Denyer

Friday 5 August

their eye in' for this species. Epiphytes were
plentiful with Ulota calvescens, Colura calyptrifoliaOand Frullania teneriffae amongst others. We only
walked as far as the Lough (adhering to the usual
slow bryological pace!) but recorded 84 species
including Riccardia incurvata* and Campylium
protensum* and the week's only record for
it.
Jungermannia atrovirens.NoWe then headed down the road to Magherakeel
Graveyard, a monastic site with a surprisingly
diverse range of campany (and lass campany)No

Graveyard, a monastic site with a surprisingly diverse range of common (and less common) urban bryophytes. A total of 82 species were recorded from the graveyard and surrounding area, including Tom's finds of *Racomitrium heterostichum**, *Schistidium elegantulum** and *Pellia neesiana** and the week's only records of *Anthoceros punctatus*, *Jungermannia gracillima*, *Lophozia excisa*, *Marsupella emarginata* var. *emarginata* and *Racomitrium fasciculare*.

Liz, Tom, Rory and Richard then moved on to record in H18 in a conifer plantation (Killeter Forest) and at Aghyaran Bridge. Both had reasonable diversity of bryophytes and *Campylopus atrovirens* and *Mylia taylorii* were recorded at Killeter, interestingly the only time they were seen during the week. A total of 132 taxa were recorded from H17 and 104 from H18 - another very productive day of recording. On the last day of recording David Long joined us. Richard knew of a site where Riccia fluitans had been recorded, an uncommon species in Northern Ireland and Ireland. It was needed as a voucher so we headed to the site (Drumash Lough in H35) first to see if we could re-find it. After recording bryophytes in rough ground near where we had parked (where Tom found Pohlia flexuosa), we managed to access the lough through some wet woodland. It proved to be a diverse little site with areas of bog and swamp around the lough shore. It was doubted at first whether the habitat was suitable for Riccia fluitans, as the water was deep and there was no exposed mud at the margins. But Richard was determined to find it and successfully pulled a sample out of some wet rushes much to everyone's surprise (and admiration!). There were a few good patches of it, enough for photographs and a voucher. Our couple of hours spent at the site were repaid with 86 records including Bryum klinggraeffii*, Cephalozia pleniceps* (found by Liz and Vulnerable on the Irish Red List), Riccia fluitans*, Riccardia incurvata, Mylia anomala* and Calypogeia sphagnicola*. The group continued to two more sites in hectad H35: Magheralough Bridge and a small patch of forestry at Edenmore where Tom found Ulota intermedia*.



△Above. Drumash Lough where *Riccia fluitans* was found. J. Denyer

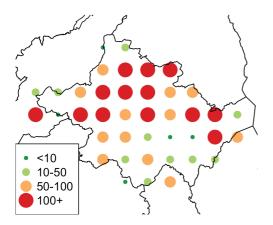
Tom, Richard, Liz and David then continued recording in hectad H47. Stone Bridge over the Strule River yielded 62 species including *Scleropodium cespitans**, *Physcomitrium pyriforme** *Orthotrichum sprucei* and the Irish Red List Near Threatened species *Orthotrichum rivulare**. This was the only site during the week where *Fossombronia pusilla** and *Fissidens pusillus** were recorded. The final site of the week was Tully Bog. This is another SAC protected for its active raised bog habitat. At c36ha, it is only about half the size of Cranny Bog. However a similar number of species were recorded (a total of 57 species including 11 species of *Sphagnum* one of which was *S. beothuk*).

We ended the week with a pleasant meal in the local An Creagán centre where we reflected on an enjoyable and successful week's recording.

<Left. Richard showing the habitat for *Riccia fluitans* at the edge of Drumash Lough. ⊽Below. *Riccia fluitans* J. Denyer





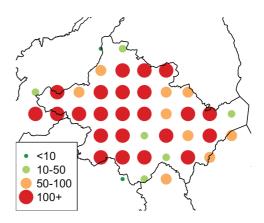


△Above, left. Number of species per hectad pre-meeting.

Summary

Despite being a small group, with usually only one recording group each day, we made a total of 1573 records of c250 taxa from 12 hectads during the meeting. On average, 100 species were recorded in each hectad visited. There were 36 county records (new and debracket): 14 liverwort and 22 moss species. Of the 40 hectads that are located all or partly in Co. Tyrone, 80% now have more than 50 species and 43% have more than 100 species recorded from H36. Those with less than 50 species recorded from H36 are mainly those at the edge of the VC: C30 and C40 in the north-east; H08 in the east; H54 and H65 in the south; and H97 in the east. Hectad H56 (containing Beragh and Sixmilecross) is the only hectad with less than 50 species that is located entirely within VC H36. None of these hectads were visited during the meeting and it is hoped that local bryologists can work to fill in the remaining recording gaps.

The main habitats visited were lowland and this is reflected in the frequency of recorded species: the top 11 recorded species were: *Rhytidiadelphus squarrosus, Brachythecium rutabulum, Calliergonella cuspidata, Kindbergia praelonga, Lophocolea bidentata, Didymodon insulanus, Hypnum cupressiforme, Frullania*



△Above, right. Number of species per hectad post meeting.

dilatata, Ulota phyllantha, Bryum capillare and Cratoneuron filicinum. The least frequently recorded species have been mentioned above in the site accounts. Seven sites had over 80 species recorded; six of these had some woodland (Benburb river and woodland, Cole Glen forest, Knockmany Forest, Parkanaur Forest, Drumash Lough and Carrickaholten Forest), whilst only one (Magharakeel graveyard) was dominated by 'urban' habitats. Surprisingly for Northern Ireland, we only visited three bog sites, two protected for their active raised bog (Cranny and Tully bogs) and one raised bog remnant (Crockbaravalley). Whilst there are still some under-recorded hectads remaining, the meeting has made a large contribution to bryophyte recording in the county.

Thanks to everyone who attended, especially Rory and Liz who stayed the whole week; Jon for babysitting and cooking meals for us at the beginning of the week and for post meeting data analysis; Richard for local site information and the owners of the self-catering cottage who made us so welcome.

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