

Recorder for Liverworts, **Sam Bosanquet**, and Recorder for Mosses, **Tom Blockeel**, present their annual reports and new vice-county record lists

# The liverwort year – 2014

A total of 94 liverwort vouchers were confirmed during 2014, and one record was deleted. There were three duplicates – specimens sent in twice for the same vice-county – so the true number of additions and amendments in 2014 was 92. This is a further slight drop compared with 2013 and a major decline in specimens since the Atlas revisions were at their peak in 2011 and 2012. Specimens came from 44 British and Irish vice-counties, 26 of which were represented by single vouchers. A recording weekend in North-east Galway **H17** produced 12 additions and updates, whilst Rory Hodd's efforts over the year in South Kerry **H1** resulted in 6. David Long updated 4 records and added a 5th in Peeblesshire **78**, Liz Kungu sent 4 vouchers from Wigtownshire **74**, and the bryological revival in Glamorgan **41** also produced 4 vouchers, all of them new to the vice-county. Eight vice-counties mustered 3 vouchers.

Liz Kungu was the most prolific liverwort recorder of 2014, contributing 7 vouchers, with Rory Hodd and David Long coming close with 5 each. Their vouchers are among the 50 that have been stored in either the Edinburgh E or Dublin DBN herbaria: this is the first year that the majority of liverwort vouchers are at public herbaria other than BBSUK.

## The liverwort year

2014 was not a particularly memorable year for liverwort recording, with a few notable exceptions. The majority of vouchers represented local or regional rarities rather than national ones, although of course these local rarities make just as much of a contribution to the national picture as the stars. 34 thallose vouchers compared with 60 leafy liverworts was a relatively high proportion, and included a good number of notable species

The number of records reported in 2014 is as follows:

	2014				2013			
	England	Wales	Scotland	Ireland	England	Wales	Scotland	Ireland
New entries	14	8	16	16	21	10	18	18
Debrackets*	11	1	7	17	8	1	9	14
Bracketings†	–	–	1	–	–	–	–	–
Deletions	1	–	–	–	–	–	–	–
<b>Totals</b>	<b>26</b>	<b>9</b>	<b>24</b>	<b>33</b>	<b>29</b>	<b>11</b>	<b>27</b>	<b>32</b>

\*Debrackets are existing vice-county entries for which a post-1960 record has been vouched. †Bracketings are existing entries for which the post-1960 records are unconfirmed or erroneous, but older record(s) are valid.

rather than being dominated by *Conocephalum* and *Marchantia*. The vouchers represented 60 taxa, which is a drop of 20 since 2013.

The recently published Atlas provides strong evidence that some of our liverwort species have spread significantly over recent years. The expanding epiphytes appear to be consolidating their ranges rather than continuing further north-east, and the three vouchers of *Cololejeunea minutissima* and two of *Colura calyptrifolia* (both from **H17**) filled in gaps rather than representing onward spread; no new vice-county records of *Metzgeria consanguinea* were made in 2014. In contrast, the non-native *Lophocolea* species are appearing ever more widely. *Lophocolea bispinosa* from Wigtownshire **74** is a big move south, albeit in a garden, as is the case in Argyll, and further records of that species were made from natural habitats in Glamorgan where it was newly discovered a couple of years ago. *Lophocolea semiteres* was also found in Glamorgan **41**, new for the vice-county, well away from other known Welsh populations, whilst the Scottish and northern English populations get ever closer to merging thanks to a record from Dumfriesshire **72**.

Hornworts clearly had a good year in 2014 in the Scottish Borders, and the mixed populations at Logan Botanic Garden in Wigtownshire **72** sound impressive. Winterbourne Botanic Garden in Edgebaston, provided Warwickshire's **38** first *Phaeoceros carolinianus* and, indeed, Warwickshire's first modern hornwort record. *Sphaerocarpos* also had a good year, and the three vice-county vouchers are the first I have received since starting as Recorder for Liverworts in 2009. The North Essex **19** population was noteworthy for supporting both *S. texanus* and *S. michelii*, whilst the South Devon **3** colony was mixed with the even rarer *Riccia crystallina*. Dawlish Warren has a good history of bryological recording and

this suggests that John Day's *R. crystallina* and *S. michelii* are relatively recent arrivals there, particularly given that they grow by the carpark.

Apparent declines in *Fossombronina foveolata* in south-east England, which contributed to its appearance on the UKBAP list, seem more likely to have been the result of changing recording patterns. The species was updated for both West Sussex **13** and East Sussex **14** during the year. Three new records of *F. incurva* in 2014 included Bill Chisholm's male only collection in North Essex **19**, which was confirmed by DNA barcoding at RBGE. Rotting logs in Cheshire **58** produced both *Riccardia palmata* and *R. latifrons* for Des Callaghan.

Charles Hipkin's voucher of *Jubula hutchinsiae* from Glamorgan **41** appeared after I pointed out that the photographed *Jubula* on the South Wales Bryophyte Blog represented a new county record. Richard Lansdown's updates of *Trichocolea tomentella*, *Tritomaria exsectiformis* and *Lophozia excisa* from West Gloucestershire **34** are but the tip of an iceberg as Richard continues to explore the Forest of Dean, which was last worked by H.H. Knight. Maurice Eakin showed that small vice-county Dublin **H21** continues to support good liverwort habitat, with *Bazzania trilobata* and *Lepidozia reptans* at Howth. The deletion of *Chiloscyphus polyanthos* from Huntingdonshire **31** reflects the improbability of this usually saxicolous species occurring in a county where rocky streams are at a premium.

*Plagiochila bifaria* was updated for North Somerset **6** by Andrew Branson and Sharon Pilkington from impressively close to the species' north-eastern range edge. Updated *Cephalozia macrostachya* var. *macrostachya* from East Sussex **14** and Cheshire **58** were welcome, but *Cephalozia* returned to its typical unpopularity in 2014 after a bumper year in 2013. Two new Irish vice-counties were recorded for *Cladopodiella*

*fluitans*, and Jo Denyer updated *Odontoschisma denudatum* for North-east Galway **H17**. Nick Hodgetts' *Cephaloziella spinigera* from Skye, North Ebudef **104** and Des Callaghan's *C. turneri* from Merionethshire **48** were among the most beautiful finds of the year, as well as being some of the rarest in national terms.

*Hygrobiella laxifolia*, *Anastrepta orcadensis* and *Anastrophyllum minutum* were among David Long's finds in the border counties of Peebleshire **78** and Roxburghshire **80**, and the BBS meeting in the latter gave Gordon Rothero finds of *Eremonotus myriocarpus* and *Scapania cuspiduligera*, two nationally scarce calcicoles. Two further vice-counties were vouched for *A. minutum*, whilst its rarer relative *A. hellerianum* was discovered new to Cardiganshire **46** by Des Callaghan. Anglesey **52** is a very lowland setting in which to find *Lophozia sudetica*, which is largely restricted to our western hills and mountains. Rory Hodd collected both *Scapania aspera* and *Leiocolea bantriensis* in West Cork **H3**, updating the latter for the Bantry area after which it was named. He also provided a suite of specimens of *Marsupella emarginata* var. *aquatica* from the far south-west. Last, but by no means least, was Anthony Gregory's discovery of *Solenostoma caespiticium* in South Lancashire **59**. This is perhaps the rarest of all the liverworts found in 2015, as well as being one of the smallest and most difficult to find.

### New vice-county records and amendments

Vouchers are deposited in the BBS herbarium (BBSUK) unless otherwise stated. Other herbarium abbreviations are **DBN** = National Botanic Garden, Glasnevin, Dublin; **E** = Royal Botanic Garden, Edinburgh.

**1.1. *Anthoceros punctatus*. 74:** on damp

gravel at edge of pond, 28 m alt., Logan Botanic Garden, Walled Garden Bed 07, NX09664257, 2014, EM Kungu (E).

**1.2. *Anthoceros agrestis*. 74:** on topdressing of flowerbed, 30 m alt., Logan Botanic Garden Bed Z95, NX096425, 2014, EM Kungu (E); **79:** On rich loamy soil in stubble field, 120 m alt., North bank of River Tweed opposite Ashiesteel, NT42693580, 2014, DG Long (E); **88:** soil bank in improved pasture, 240 m alt., on minor road opposite Achomer, above Ardtalnaig, NN71183854, 2014, DF Chamberlain & EM Kungu (E).

**2.1. *Phaeoceros laevis*. 74:** on damp gravel at edge of pond, 28 m alt., Logan Botanic Garden, Walled Garden Bed 07, NX09664257, 2014, EM Kungu (E); **83:** on topdressing of flowerbed, Royal Botanic Garden Edinburgh, Bed F15/N, NT24597539, 2014, DF Chamberlain (E).

**2.2. *Phaeoceros carolinianus*. 38:** abundant on bryophyte-covered rocks, Winterbourne Botanic Gardens, Edgebaston, SP0583, 2014, MF Godfrey.

**3.1. *Sphaerocarpos michelii*. 3:** bare soil by car park, Dawlish Warren, SX97897851, 2014, JJ Day.

**3.2. *Sphaerocarpos texanus*. 14:** soil border at foot of SE-facing wall, 25 m alt., Ashburnham Place, TQ69101458, 2014, T Otley 14041001; **19:** scattered across allotments, 35 m alt., Drury Road Allotment Site, Colchester, TL98542417, 2014, P Wilson, *det.* W Chisholm.

**5.1.a. *Marchantia polymorpha* subsp. *polymorpha*. H1:** Submerged in stream/flush, Bank of Derrymore R., Q74590967, 2014, RL Hodd (DBN).

**5.1.b. *Marchantia polymorpha* subsp. *ruderalis*. H1:** On soil in flowerbeds, Dunloe Castle, Beaufort, V884912, 2014, RL Hodd

- (DBN); **H17**: between paving slabs on a driveway of a house, Clydagh, M22044327, 2014, S Pilkington; **H18**: bare soil, The Mall, Birr, N059052, 2013, GF Smith (DBN); **H30**: on gravel of vehicle passing area, 60 m alt., Drumlark, Cavan, H414073, 2014, M Eakin (DBN).
- 9.1. *Conocephalum conicum*. 78**: on rocks beside stream in small wooded ravine, 420 m alt., Black Cleuch, Fruid Water, NT11331573, 2014, DG Long 42869 (E); **99**: on damp rock below alder by small burn, 150 m alt., Auchineden, Auldmurroch Burn, NS515789, 2014, NG Hodgetts 8555; **H17**: bank by small stream in woodland, Clonbrook, M75174047, 2014, JL Denyer (DBN).
- 10.2. *Riccia crystallina*. 3**: bare soil by car park, Dawlish Warren, SX97897851, 2014, JJ Day.
- 10.9. *Riccia glauca*. 79**: On rich loamy soil in stubble field, 120 m alt., North bank of River Tweed opposite Ashiesteel, NT42693580, 2014, DG Long (E).
- 14.2. *Pellia neesiana*. 15**: in bog, 60 m alt., Hothfield Bog, TQ967461, 2014, T Ottley.
- 16.1. *Fossombronia foveolata*. 13**: edges of ditch, 10 m alt., Hurston Warren, TQ07461686, 2014, T Ottley & S Rubinstein; **14**: edge of path across path, 165 m alt., Lavender Platt, Ashdown Forest, TQ403327, 2014, T Ottley.
- 16.4. *Fossombronia pusilla*. 61**: on near vertical side of ditch in woodland, 14 m alt., Wheldrake Wood, SE659466, 2014, TL Blockeel & MP Wilcox 43/556.
- 16.6. *Fossombronia wondraczekii*. 75**: at base of banking at cutting along abandoned railway line, 80 m alt., MOD Beith site, NS34555104, 2014, EM Kungu (E).
- 16.8. *Fossombronia incurva*. 19**: by sandy/loamy track on old gravel extraction site, 20 m alt., Cockaynes Wood, EWT nature reserve, Alresford, Nr Colchester, TM05662174, 2013, W Chisholm, *conf.* DG Long (E), Confirmed by DNA Barcoding; **27**: in heathy area on damp sandy track, 70 m alt., Weybourne Woods, Weybourne, TG12374181, 2014, M Ghullam; **103**: in pots containing soil-based growing medium, 10 m alt., Craignure, Mull, NM715374, 2014, C Austick.
- 20.4. *Metzgeria conjugata*. H4**: On shady calcareous rockface, Nr. R. Lee, UCC Campus, Cork, W6614471392, 2014, RL Hodd (DBN).
- 22.4. *Riccardia palmata*. 58**: decorticated rotten beech trunk at base of steep N-facing woodland, 150 m alt., Alderley Edge, SJ85497811, 2014, DA Callaghan; **59**: on decorticated log in deciduous woodland, 240 m alt., Barrowbridge Clough, Bolton, SD682121, 2014, A Gregory; **H17**: on rotting log in woodland, Knockma Wood NHA, Tuam, M35874893, 2014, RL Hodd, OL Pescott & GF Smith (DBN).
- 22.5. *Riccardia latifrons*. 41**: on *Sphagnum cuspidatum* in bog pool, 220 m alt., Cors Bryn-y-gaer SSSI, SN94500662, 2014, SDS Bosanquet; **58**: decorticated rotten tree trunk in conifer plantation, Delamere Forest, SJ53917079, 2014, DA Callaghan.
- 26.1. *Jubula hutchinsiae*. 41**: wet rock face below small waterfall, near Glyn Neath, SN88650630, 2014, C Hipkin & H Hipkin.
- 28.3. *Cololejeunea minutissima*. 47**: exposed *Salix*, 5 m alt., Cors Dyfi, SN69899787, 2014, SDS Bosanquet; **56**: fallen oak branch, Bestwood Country Park, SK56944710, 2014, C Levey; **76**: on *Alnus* in woodland between carpark and loch, 28 m alt., Lochwinnoch RSPB Reserve, NS35805811, 2014, EM Kungu (E).
- 29.1. *Colura calyptrifolia*. H17**: on gorse in forestry, 120 m alt., Mount Mary, M733574, 2014, MO Hill; **H17**: on hazel, Knockma

- Wood NHA, Tuam, M3548, 2014, OL Pescott.
- 32.1. *Lejeunea cavifolia*. 38:** ash trunk in wet woodland, 121 m alt., Sutton Park, SP10709532, 2014, DA Callaghan.
- 32.2. *Lejeunea lamacerina*. H17:** base of rotting stump, Knockma Wood, Tuam, M35584880, 2014, RL Hodd, O Pescott & GF Smith (DBN).
- 33.1. *Marchesinia mackaii*. H17:** on shaded drystone limestone wall, Clydagh, M22274341, 2014, S Pilkington.
- 37.1. *Trichocolea tomentella*. 34:** stone in very wet woodland between streams, Allen's Grove, nr Lindors Farm, west of St Briavels, SO550047, 2014, RV Lansdown.
- 40.1. *Bazzania trilobata*. H21:** on rock along path under *Rhododendron* scrub at base of escarpment, 90 m alt., Muck Rock, Howth Demesne, O27763826, 2014, M Eakin (DBN).
- 42.1. *Lepidozia reptans*. H21:** on decayed, small tree stump in birch woodland, 150 m alt., Ben of Howth, Howth, O287374, 2014, M Eakin (DBN).
- 42.2. *Lepidozia pearsonii*. 78:** on vertical mossy bank on steep rocky slopes below crags, 615 m alt., Talla Craigs, Talla Water valley, NT15731836, 2014, DG Long (E).
- 44.2. *Lophocolea bispinosa*. 74:** on ground growing over mulch chippings, 30 m alt., Logan Botanic Garden walled garden, NX09644263, 2014, EM Kungu & V Heppel (E).
- 44.3. *Lophocolea heterophylla*. 79:** on log in shady woodland, 180 m alt., The Haining, NT46982805, 2014, DG Long (E).
- 44.4. *Lophocolea semiteres*. 41:** bare ground near path, 50 m alt., Mosshouse, Gnoll Park, SS77559804, 2014, CR Hipkin & H Hipkin; **72:** on ground among short turf grassland, 15 m alt., Jericho Loch, SW bank, NX954826, 2014, EM Kungu (E).
- 45.1. *Chiloscyphus polyanthos*. Delete 31:** records changed to *C. polyanthos sensu lato* because all records seem more likely to refer to *C. pallescens*.
- 48.7. *Plagiochila spinulosa*. H17:** in shade of wall in heath, Gortnalea, M48016622, 2014, RL Hodd & OL Pescott (DBN).
- 48.8. *Plagiochila bifaria*. 6:** one patch on north-east facing vertical limestone cliff, Cheddar Gorge, near Bradley Cross Farm, ST47915336, 2014, A Branson & S Pilkington.
- 52.4.a. *Cephalozia macrostachya* var. *macrostachya*. 14:** through *Sphagnum papillosum* in wet bog, 160 m alt., King's Standing, Ashdown Forest, TQ46772983, 2014, T Ottley 14032101; **58:** amongst moribund *Aulacomnium palustre* in lowland mire, South Moss (Abbots Moss), SJ59366864, 2014, DA Callaghan.
- 52.9. *Cephalozia connivens*. H26:** on old peat face in woodland, Clooncormick, near Hollymount, M251680, 2014, RL Hodd, MO Hill & OL Pescott (DBN); **H30:** on old turf-cutting face in shade under overhanging heather, 50 m alt., Drummany, Belturbet, H413176, 2014, M Eakin (DBN).
- 53.1. *Cladopodiella fluitans*. H17:** in bog pools with *Sphagnum cuspidatum* on high bog, 80 m alt., Shankhill West Bog SAC, M630521, 2014, M Eakin (DBN); **H3:** In wet *Rhynchospora alba* hollow, Derryconnerly, Glengarriff, V90265433, 2014, PM Perrin, det. RL Hodd (DBN).
- 54.1. *Hygrobrella laxifolia*. 80:** on boulder by stream in moorland valley with *Alnus* woodland, 150 m alt., Burn near Hartsgarth Farm, Liddesdale, NY49319246, 2014, DG Long (E).





△Fig. 1: *Leiocolea bantriensis* in *Palustriella* flush, Coomerkane, Glengariff. RL Hodd

**56.2. *Odontoschisma denudatum*. H17:** raised bog, Ballygar Bog, M78245394, 2014, JL Denyer (DBN).

**58.1. *Cephaloziella spinigera*. 104:** creeping through *Sphagnum capillifolium* and *S. molle*, 50 m alt., Shulista, Port Gobhlaig, NG43777589, 2014, NG Hodgetts 8553.

**58.4. *Cephaloziella hampeana*. 38:** amongst *Sphagnum* in acidic lowland mire, 146 m alt., Sutton Park, SP08759686, 2014, DA Callaghan.

**58.11. *Cephaloziella turneri*. 48:** crevice in rockface at base of deep wooded ravine, 50 m alt., Ceunant Llenyrch, SH66203907, 2014, DA Callaghan.

**61.1. *Anastrepta orcadensis*. 78:** on turf N-facing slope in rocky gully, 385 m alt.,

March Sike, Gameshope Valley, NT13311959, 2014, DG Long 42861 (E).

**64.1. *Anastrophyllum minutum*. 45:** on peaty overhangs in steep heath, 290 m alt., Foel Drygarn north, Mynydd Preseli, SN158338, 2014, SDS Bosanquet; **78:** in block scree on steep rocky slopes below crags, 580 m alt., Talla Craigs, Talla Water valley, NT15781836, 2014, DG Long (E); **H1:** On shaded siliceous rockface, 390 m alt., Above L. Callee, Cumeenduff, V8329782528, 2014, RL Hodd (DBN); **H1:** Creeping over calcareous crag, 740 m alt., Above L. Googh, V8383483835, 2014, RL Hodd (DBN).

**64.2. *Anastrophyllum hellerianum*. 46:** trunk of mature oak in steep N-facing woodland, 155 m alt., Cwm Llyfnant, SN71149718, 2014, DA Callaghan.



- 65.1. *Tritomaria exsectiformis*. 34:** dry stone wall, The Tuffs, along the top of the wood, SO546039, 2014, RV Lansdown; **H16:** bare peat in blanket bog, Cornamona, nr Loughaunbeg, Connemara, M0424, 2014, GF Smith (DBN).
- 66.5. *Lophozia sudetica*. 52:** base of north-facing outcrop on edge of lowland fen, 40 m alt., Clegir Mawr, NW of Gwalchmai, SH373777, 2014, TH Blackstock & M Russell; **H1:** On rock on mountain slope, Curaheen Glen, Q770080, 2014, RL Hodd (DBN).
- 66.6. *Lophozia excisa*. 34:** dry stone wall, The Tuffs, near The Nedge, SO553040, 2014, RV Lansdown.
- 69.4. *Scapania cuspiduligera*. 80:** on vertical face of calcareous sandstone boulder, 240 m alt., Black Burn, Newcastleton, NY45638909, 2014, GP Rothero.
- 69.5. *Scapania scandica*. 40:** soil bank beside sheep track in heathland, 290 m alt., Ashes Hollow, The Long Mynd, SO42949307, 2014, DA Callaghan.
- 69.20. *Scapania aspera*. H3:** calcareous cliff ledge, Above Barley Lake, Glengarriff, V87525615, 2014, RL Hodd (DBN); **H17:** limestone pavement, Knockma Wood, Tuam, M36104840, 2014, RL Hodd, O Pescott & GF Smith (DBN).
- 69.21. *Scapania gracilis*. H17:** by wall in heath, Gortnalea, M48016622, 2014, RL Hodd & OL Pescott (DBN).
- 70.2. *Mylia anomala*. 41:** *Sphagnum* hummock in *Eriophorum*-dominated bog, 220 m alt., Cors Bryn-y-gaer SSSI, SN94510660, 2014, SDS Bosanquet; **H1:** In *Sphagnum austinii* hummock, Knockastumpa, Caha Mountains, V79335701, 2014, RL Hodd (DBN).
- 75.3. *Leiocolea bantriensis*. H3:** In *Palustriella* flush, Coomerkane, Glengarriff, V85815347, 2014, RL Hodd & PM Perrin (DBN), Fig. 1; **H27:** Area of fen by lake, Dooaghtry, L74626858, 2014, GP Rothero & RL Hodd (DBN).
- 75.8. *Leiocolea turbinata*. H17:** underhang of earthy bank, Knockma Wood NHA, Tuam, M3548, 2014, OL Pescott.
- 77.1. *Eremonotus myriocarpus*. 80:** on silted face of rock in burn, 220 m alt., Hartsgarth Burn, N of Newcastleton, NY478925, 2014, GP Rothero.
- 79.2. *Nardia scalaris*. H18:** soil bank with *Calluna*, Glendine Gap, Slieve Blooms, S2299, 2013, GF Smith (DBN).
- 80.4. *Solenostoma caespiticium*. 59:** on soft clay-shale soil on west-facing bank of stream in moorland clough, 275 m alt., Noon Hill Slack, Rivington, SD644153, 2014, A Gregory.
- 80.5. *Solenostoma hyalinum*. 84:** clay bank by road, Near Bathgate, NS97, 1903, W Evans.
- 83.1. *Saccogyna viticulosa*. H18:** on rock in river in narrow ravine, Letter, upper valley of Silver River, Slieve Bloom Mountains, N2504, 2013, GF Smith & P Perrin (DBN).
- 86.1.b. *Marsupella emarginata* var. *aquatica*. 78:** on stones at waters edge of moorland loch, 565 m alt., Gameshope Loch, Tweedsmuir Hills, NT13101631, 2013, DG Long 42837 (E); **H1:** on rocks in river, below O'Sullivan's Cascade, Tomies Wood, V91498846, 2013, RL Hodd & JL Denyer (DBN); **H2:** on rocks in stream, Boolteens East, Q79640774, 2014, RL Hodd (DBN); **H2:** on rocks in stream gully, 365 m alt., above head of Gougane Barra, W0689964862, 2014, RL Hodd (DBN).

### Contributors/collectors of records

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