

The liverwort year – 2021

Following hot on the heels of the publication of the new checklist (Blockeel *et al.*, 2021a), the new Census Catalogue was also published this year (Blockeel *et al.*, 2021b).

There are two main points to note. Firstly, the nomenclature has been revised extensively to take modern studies into account. Secondly, the cut-off date for bracketing vice-county records has moved from 1960 to 1970. This is therefore the first *Liverwort Year* to be published with the new nomenclature, new census catalogue reference numbers and new cut-off date.

There has been a small increase in specimens processed this year, with 55 in total (Table 1). While specimens from England and Ireland are slightly down, those from Wales are slightly up and Scottish submissions are double those of the previous year. There are no new vouchers from the Channel Islands or the Isle of Man, and no deletions. There are two bracketed entries resulting from literature and herbarium

research. The ‘top contributors’ are Rory Hodd (8, including 2 with Jo Denyer), Tom Blockeel (7, including 1 with Sharon Pilkington), Rory Whytock (6), Nick Hodgetts (5, including 1 with J. Owens, Phil Perrin & Maria Long), George Smith (3) and Matt Sutton (3). While the meeting in North Wales marked a welcome return to something like normality after the last couple of years, it yielded only a small number of NVCRs in an area that is well-recorded.

Orkney has been productive this year. John Crossley’s *Herbertus norenius* on Hoy (Fig. 1) is especially pleasing, and a significant extension of the range of this species southwards. In addition, a weekend bryology session on Papa Westray produced several new vouchers, including *Mesoptychia gillmanii*. Elsewhere in Scotland, it was interesting to find *Barbilophozia kunzeana* in heath, presumably much more akin to its Scandinavian habitat than the flushes where it is normally found in Britain. Rory Whytock has become very good at spotting *Calypogeia*

Table 1. Analysis of amendments to the Census Catalogue for 2021.

	2021				2020			
	England	Wales	Scotland	Ireland	England	Wales	Scotland	Ireland
New entries	6	7	13	9	14	6	9	11
Debrackets*	8	2	4	4	5	2	0	3
Persisting	-	-	-	-	1	-	-	-
Bracketings*	1	-	1	-	-	-	-	-
Deletions	-	-	-	-	-	-	-	-
Totals	15	9	18	13	20	8	9	14

*Debrackets are existing vice-county entries for which a post-1970 record has been vouched. Bracketings are existing entries for which the post-1970 records are unconfirmed, erroneous or older record(s) are known or thought to be valid. Persisting records are those of species confined to a substrate on which they were introduced.



△ Figure 1. *Herbertus norenius*, Hoy, Orkney.
John Crossley

suecica, which is presumably not particularly rare in the ‘wider Cairngorms’ area, with no fewer than three NVCRs. His find of *Scapania gymnostomophila* in vc 94 is also significant, although it is somewhat surprising that it had not been recorded previously from this vice-county. A bit further south, in Perthshire, Rory also had *Scapania curta* in an unremarkable habitat; this species must surely be overlooked on tracksides in Scotland. In central Glasgow, Keith Watson spotted a tiny liverwort on the banks of the River Kelvin that turned out to be the New Zealand native *Tricholepidozia tetradactyla*, which had presumably ‘escaped’ from the nearby Botanic Gardens.

The prize for the most unusual habitat goes

to Brian Sims, who found *Riccia sorocarpa* on the roof of an animal cage in Woburn Safari Park. Which animal was unspecified, but hopefully there was no serious jeopardy involved. *Riccia* is well represented generally in this year’s vouchers, especially from England. Elsewhere in England, Richard Lansdown’s *Sphaerocarpos michelii* from Gloucestershire and Tim Purches’ *Porella cordaeana* from Cornwall are both worthy of attention, and Pete Martin’s *Cephaloziella turneri* on Lundy is somehow satisfying, bridging as it does the populations in south-west England and Wales.

In Wales, *Riccia huebeneriana* and *Lepidozia pearsonii*, both found by Matt Sutton in Pembrokeshire, represent small range extensions south-westwards, while *Fossombronina caespitiformis*, found a couple of years previously in Cardiganshire by Tom Otley, is a welcome

but not unexpected addition. The specimen was revisited following the ‘de-lumping’ of *F. caespitiformis* and *F. husnotii*. Sam Bosanquet’s record of *Schistochilopsis opacifolia* in the Brecon Beacons marks a significant southerly extension of its range.

In Ireland, Rory Hodd and Jo Denyer have made significant contributions, including a new site for *Southbya tophacea*, found below sea level in a disused quarry (Fig. 2), along with *Oleolophozia perssonii*, here at its second Irish site. As usual, Rory has made plenty of other contributions from Ireland, among which *Moerckia hibernica* from The Burren is particularly noteworthy. I was pleased to find a good population of *Reboulia hemisphaerica* in an area of the south-west where it is particularly scarce.

In addition to the listings presented here, it is necessary to note that *Tricholepidozia tetradactyla* has (originally as *Telaranea murphyae*) been recorded in vcs 1, 9 and 11. *T. murphyae* was synonymised with *T. tetradactyla* by Villareal *et al.* (2014), but the transfer of *T. murphyae* records to *T. tetradactyla* was overlooked in the new Census Catalogue. My thanks to Tom Blockeel for pointing this out.

My thanks to everyone who sent in voucher specimens.

New vice-county records and amendments

Vouchers from England and Wales, and most of those from Scotland, are deposited in the BBS herbarium (BBSUK); some vouchers from Scotland are deposited at the Royal Botanic Garden, Edinburgh (E), and these are indicated in the text; those from Ireland are in the National Botanic Garden, Glasnevin, Dublin (DBN).

Hornworts

- 2.1. *Phaeoceros laevis*. 48:** gravelly soil at base of rock cutting near the Hall buildings, 45 m alt., Plas Caerdeon, near Barmouth, SH649181, 17 September 2021, T.L. Blockeel 50/131.



△ Figure 2. Habitat of *Southbya tophacea*, Castlemungret, Co. Limerick. Jo Denyer

Liverworts

- 3.1. *Sphaerocarpos michelii*. 34:** beet field, 95 m alt., near Lyton and Bromsberrow Heath, SO7212031733, 21 January 2021, R.V. Lansdown.
- 5.1a. *Marchantia polymorpha* subsp. *polymorpha*. 48:** south bank of river, 80 m alt., Afon Dysynni, Pont y Garth, Dolgoch, SH635070, 14 September 2021, M.J. Stribley 629.
- 5.1b. *Marchantia polymorpha* subsp. *ruderalis*. 48:** gravelly soil near the Hall buildings, 45 m alt., Plas Caerdeon, near Barmouth, SH649181, 17 September 2021, T.L. Blockeel 50/130.
- 6.1. *Reboulia hemisphaerica*. H2:** old crumbling mortar in roadside stone wall, 5 m alt., Blennerville, Q81661265, 18 September 2021, N.G. Hodgetts 11199.
- 8.1. *Targionia hypophylla*. (11):** New Forest, *c.* 1810–1820, C. Lyell (Rumsey 2021).
- 9.1. *Conocephalum conicum*. 84:** shady river bank under trees, 25 m alt., River Almond above Cramond Bridge, NT177752, 16 May 1988, D.G. Long 15022 (E); **(99):** bank of stream, 150 m alt., Loch Lomond, above Firkin, NN3300, 22 April 1962, A.C. Crundwell, det. D.G. Long (E).
- 10.10. *Riccia subbifurca*. 4:** field of maize stubble, 155 m alt., Hartland, Biteford Cross, SS30031873,

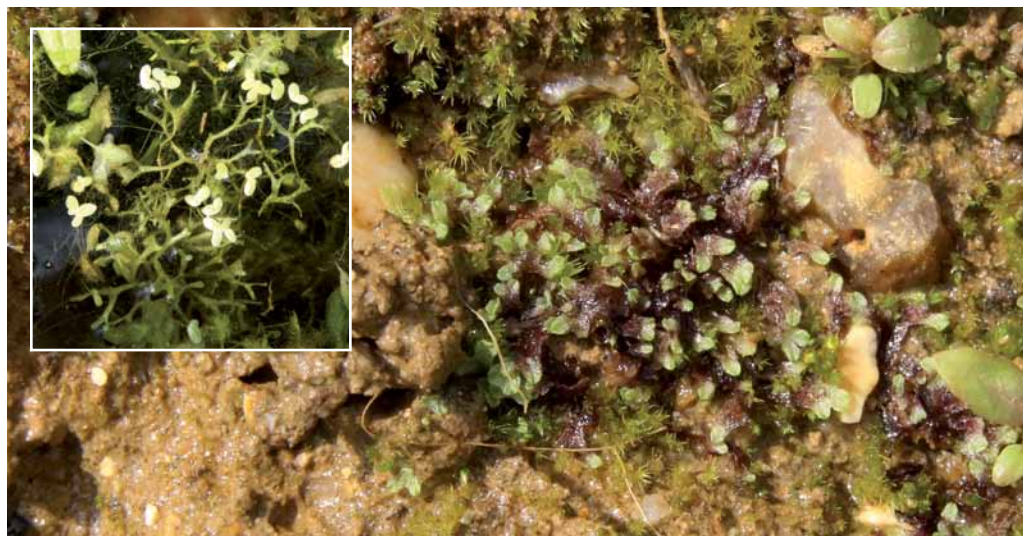


△ Figure 3. Habitat of *Riccia huebeneriana*, Llys-y-Frân Reservoir, Pembrokeshire. *Matt Sutton*

8 October 2005, N.F. Stewart, det. M. Pool; **48**: on woodland path, 40 m alt., Cutiau, SH63331751, 12 September 2021, S.L. Pilkington & T.L. Blockeel.

10.13. *Riccia beyrichiana*. 59: dune slack, 14 m alt., Hillside Golf Course, Birkdale Hills, Sefton Coast SSSI, Southport, SD3162913532, 26 October

▽ Figure 4. Floating (inset) and terrestrial *Riccia rhenana*, Shortwood Pond, Middlesex. *Richard Lansdown*



2016, N. Hunt, det. A. Gregory.

10.3. *Riccia huebeneriana*. 45: silty draw-down zone in reservoir, abundant, 100 m alt., Llys-y-Frân Reservoir, SN02582477, 15 September 2021, M.D. Sutton (Fig. 3).

10.4. *Riccia fluitans*. 64: floating with duckweed in half-shaded ditch, 12 m alt., Askham Bog, near York, SE5706448052, 17 July 2021, T.L. Blockeel & S.J. Heathcote 50/092.

10.5. *Riccia rhenana*. 21: terrestrial form on damp mud beneath willows, 15 m alt., Shortwood Pond, Staines-upon-Thames, TQ04707200, 21 April 2021, R.V. Lansdown & I. Soane (Fig. 4).

10.7. *Riccia sorocarpa*. 30: shallow soil (sand) on animal cage roof, open to full sun, 120 m alt., Woburn Safari Park, SP963342, 14 July 2021, B.G. Sims.

14.3. *Fossombronia caespitiformis*. 46: thin soil over rock on footpath, 100 m alt., Aberporth, SN25425009, 6 January 2019, T.W. Ottley 19010401.

14.5. *Fossombronia pusilla*. 95: arable field, 200 m alt., Nethy Bridge, Coulmakyle, NH998217, 15 July 2021, R.T. Whytock.

14.7. *Fossombronia wondraczekii*. 111: damp peaty soil in flush in coastal heath, 30 m alt., Papa Westray, North Hill, HY500545, 28 August 2021, B. Hamill, det. N.G. Hodgetts.

18.1. *Moerckia hibernica*. H31: calcareous fen, 65 m alt., Dunleer, The Burren, O069860, 25 August

- 2021, R.L. Hodd & S. Spratt.
- 18.1. *Pleurozia purpurea*. H15:** wet blanket bog, 295 m alt., Derrygoolin South, R689926, 15 March 2021, R.L. Hodd.
- 21.1. *Riccardia multifida*. H14:** on *Carex paniculata* in lagg woodland, 100 m alt., Abbeyleix Bog, S4383, 22 March 2021, G.F. Smith 2109035.
- 22.2. *Porella cordaeana*. 2:** fallen branches & rocks by roadside stream, 150 m alt., Callington, E. of Dupath Farm, SX376691, 23 October 2021, T. Purches, det. N.G. Hodgetts.
- 31.2. *Lejeunea lamacerina*. 111:** base of N.-facing sandstone outcrop, shaded by grass, in coastal heath, 30 m alt., Papa Westray, North Hill, HY500545, 28 August 2021, N.G. Hodgetts 11124.
- 34.1. *Prilidium ciliare*. H19:** wet heath, with *Calluna* and *Aulacomnium palustre*, 100 m alt., Kildare, The Curragh, N75681398, 15 October 2021, J. Owens, P.M. Perrin, M. Long & N.G. Hodgetts 11204, det. N.G. Hodgetts.
- 37.3. *Herbertus norenius*. 111:** on steep, open N.E.-facing hillside, in short wind-clipped *Calluna-Racomitrium lanuginosum* heath, locally abundant, 360 m alt., Hoy, Cuilags, HY21050350, 22 February 2021, J. Crossley, det. D.G. Long, conf. D. Bell (E).
- 40.1. *Lepidozia reptans*. H14:** dead wood in lagg woodland, 100 m alt., Abbeyleix Bog, S4383, 22 March 2021, G.F. Smith 2109018.
- 40.2. *Lepidozia pearsonii*. 45:** amongst *Dicranum majus* in N.-facing quarry bank, 450 m alt., Craig y Cwm, SN0964931171, 9 April 2021, M.D. Sutton.
- 42.1. *Tricholepidozia tetradactyla*. Add 1, 9 and 11** (see text above). **77:** shaded clayey banks on steep slope by path, 20 m alt., Glasgow Botanic Gardens, below glasshouses, S. bank of R. Kelvin, NS56786760, 10 October 2021, K.J. Watson, det. N.G. Hodgetts, conf. L. Forrest (E).
- 43.1. *Trichocolea tomentella*. H21:** flush feeding into river, 285 m alt., Cataract of the Rowan Tree, Glenasmole, O116195, 13 April 2021, R.L. Hodd.
- 48.6. *Plagiochila spinulosa*. 73:** S. bank of stream, on stone dyke with *Scapania gracilis* and *Bazzania trilobata*, 100 m alt., Lower Lowran Glen, Loch Ken, NX6474 and sandstone cliff in ravine, 375 m alt., Upper Lowran Glen, Loch Ken, NX64487389, 21 October 2018, E. Kungu (E).
- 48.8. *Plagiochila punctata*. H21:** shady rock face, 360 m alt., Cataract of the Rowan Tree, Glenasmole, O120190, 13 April 2021, R.L. Hodd.
- 53.1. *Southbya tophacea*. H8:** calcareous soil in disused section of quarry, amongst rock, -20 m alt., Irish Cement Quarry, Castlemungret, R5303054586, 3 October 2021, J.L. Denyer & R.L. Hodd, det. N.G. Hodgetts.
- 54.7. *Calypogeia suecica*. 92:** on rotting log in pine woodland, 270 m alt., Mar Lodge Estate, Linn of Dee, NO0630990067, 2 June 2021, R.T. Whytock; **94:** on rotting log in deciduous woodland, 310 m alt., Tomintoul, Poll na Feòla, NJ15441913, 2 June 2021, R.T. Whytock; **95:** on rotting log in mixed broadleaf and conifer woodland, 260 m alt., Beachen Wood, NJ0229127900, 29 April 2021, R.T. Whytock.
- 55.1. *Hygrobiella laxifolia*. 45:** vertical shaded rock face by cascade, 350 m alt., Mynydd Preseli, SN1002231805, 20 November 2021, M.D. Sutton.
- 57.2. *Mesoptychia gillmanii*. 111:** base-rich cattle-grazed mire on shore of freshwater loch, 5 m alt., Papa Westray, Loch of St Tredwell, HY493500, 29 August 2021, B. Hamill, det. N.G. Hodgetts.
- 64.5. *Solenostoma paroicum*. 65:** rock in stream, 220 m alt., Grimes Gill, SE14397878, 24 June 2021, S.V. O'Leary.
- 65.1. *Nardia compressa*. H21:** rocks by river, 280

▽ Figure 5. Habitat of *Nardia compressa*, Cataract of the Rowan Tree, Co. Dublin. Rory Hodd



- m alt., Cataract of the Rowan Tree, Glenasmole, O1176519391, 13 April 2021, R.L. Hodd (Fig. 5).
- 67.3. *Marsupella aquatica*. 88:** on periodically irrigated sloping ledge at base of crag, 810 m alt., Creag an Fhithich, Ben Lawers NNR, NN64054209, 12 April 2021, O. Moore; **104:** in burn on hillside, 130 m alt., Coulmacreggan, Ben Grasco, NG4344, 14 May 2010, N.G. Hodgetts 7728; **H21:** rocks in river, 270 m alt., Cataract of the Rowan Tree, Glenasmole, O11721947, 13 April 2021, R.L. Hodd.
- 71.3. *Cephalozia catenulata*. 88:** sodden and rotting log in damp woodland with N.-facing aspect, 175 m alt., Tay Forest Park opposite Fortingall, S. of R. Lyon, NN75794606, 20 November 2021, O. Moore.
- 71.11. *Cephalozia curvifolia*. 30:** rotten conifer stump, 120 m alt., Mermaid's Pool, Aspley Heath, SP93863473, 21 March 2021, B.G. Sims, conf. A. Harrington.
- 76.3. *Orthocaulis attenuatus*. 1:** on N.-facing vertical face of granite rock, sheltered, 185 m alt., Hannibal's Carn, SW43163638, 30 November 2021, M.J. Stribley.
- 81.2. *Barbilophozia kunzeana*. 105:** steep N.-facing heath under *Calluna*, with *Hylocomium splendens*, *Plagiothecium undulatum*, etc., 50 m alt., Balmacara, Coille Mhor, NG81172979, 18 May 2021, N.G. Hodgetts 11112, conf. T.H. Blackstock.
- 83.11. *Cephaloziella turneri*. 4:** rock face of old quarry, 70 m alt., Lundy, SS1378745059, 23 April 2021, P. Martin.
- 85.1. *Oleolophozia perssonii*. H8:** loose calcareous soil on rock face in disused area of quarry, with *Mesoptychia* sp., -20 m alt., Irish Cement Quarry, Castlemungret, R5252954931, R5251754923, 2 October 2021, J.L. Denyer & R.L. Hodd.
- 87.1a. *Lophozia ventricosa* var. *ventricosa*. 57:** on gritstone boulder, 370 m alt., below Stanage Edge, SK24128404, 17 December 2021, T.L. Blockeel 50/192.
- 90.2. *Schistochilopsis opacifolia*. 42:** sandstone crags, 860 m alt., Brecon Beacons, Corn-du, SO00802135, 21 July 2021, S.D.S. Bosanquet.
- 92.3. *Diplophyllum obtusifolium*. 57:** sandy soil on bank in old quarry, 330 m alt., Wragg's Quarry, Fallinge Edge, nr. Beeley, SK28216633, 19 June 2021, T.L. Blockeel & A.J. Hodgson 50/083.
- 94.2. *Scapania gymnostomophila*. 94:** limestone crag in woodland by river, 310 m alt., Tomintoul, Poll na Feóla, NJ15441913, 2 June 2021, R.T. Whytock.
- 94.5. *Scapania scandica*. 58:** among *Nardia scalaris* on bare gritty soil at edge of unsurfaced stony track on steep slope, 370 m alt., Errwood, Goyt Valley, SK00347482, 1 September 2021, T.L. Blockeel 50/128.
- 94.6. *Scapania curta*. 87:** edge of track, 110 m alt., Glen Falloch, NN3466021528, 11 November 2021, R.T. Whytock.
- 94.12. *Scapania irrigua*. H18:** poor fen on cutover raised bog, 50 m alt., Clara Bog East, N25892948, 19 March 2021, G.F. Smith R00057227b01.

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