The liverwort year – 2019

described 2018 as 'relatively quiet', and 2019 has been even quieter, with a total of 46 voucher specimens processed (albeit four of them collected in 2018), and no bracketings or deletions, to which should be added the published report of Tricholepidozia lindenbergii new to Europe. England and Scotland were both well down compared with last year, while the totals for Wales and Ireland were up (Table 1). There were no new vouchers from the Channel Islands or the Isle of Man. This makes the third consecutive year of increase in Ireland. As pointed out last year, the annual totals will probably increase again when the cutoff date for recent/old records is moved forward. Nevertheless, there may be other factors at work too. While Facebook and i-Record provide evidence of plenty of interest in bryophytes from new and inexperienced recorders, perhaps some of the older and more practiced bryologists are recording less. The decrease (as I perceive it anyway) in paid fieldwork may also be playing a part. Matt Sutton was the most prolific contributor, with 6 vouchers, followed by joint efforts by him and Tom Ottley with 4, Rory Hodd with 4, and Tom Blockeel and Rory Whytock, who each had 3.

Although quantity may have been low, quality has been quite high, with a cluster of rare *Cephaloziella* records in Pembrokeshire being particularly impressive. In a return to normality, records of leafy liverworts (33) have outnumbered thallose ones and hornworts (14).

The highlight of the year in England has to be Ant Gregory's record of *Scapania ornithopodioides* on Helvellyn, 60 years after it was last seen there by the late Derek Ratcliffe. It makes one wonder how many more stands of it – and other things – might be lurking undetected in the Lake District, part of the UK that has been grievously underworked in recent decades; there are several other pre-1960 records of *S. ornithopodioides* further west in the Lakes.

The AGM field meeting in Leicestershire was

The number of records reported in 2016 is as follows:

	2019					2018				
	England	Wales	Scotland	Ireland	Isle of Man	England	Wales	Scotland	Ireland	Isle of Man
New entries	6	13	5	10	-	19	7	24	6	3
Debrackets*	7	-	2	4	_	3	1	5	2	1
Bracketings*	-	_	-	_	_	-	_	-	_	_
Deletions	-	-	-	-	-	-	_	-	_	-
Totals	13	13	7	14	0	22	8	29	8	4

^{*}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.

enlivened by the luxuriant stand of Anthoceros agrestis, found by Des Callaghan and Chris Preston (among others) in a barley field in Charnwood Forest. Jo Parmenter and Mary Ghullam made the welcome addition of Reboulia hemisphaerica to the flora of West Norfolk (and to that 100 km² square). Steven Heathcote had Riccia cavernosa and Riccardia incurvata from North Lincolnshire, another large underrecorded area. Sharon Pilkington recorded Phaeoceros laevis (Fig. 1) from a streambank in South Somerset, and Ricciocarpos natans from rhynes (West Country drainage ditches - a new one on me!) in North Somerset. Staying in Somerset, Fred Rumsey found the Australasian liverwort Heteroscyphus fissistipus growing at the base of a tree fern in a kitchen garden. This is the first time this species has been recorded (outside greenhouses) in Britain, having hitherto been known only from a garden in south-west Ireland. The specimen has immature female inflorescences.

In a very thin year for Scotland, Tristan ap

Rheinallt's voucher of *Cephaloziella spinigera* from a bog in the Outer Hebrides stood out, although this very inconspicuous plant is presumably under-recorded, at least in western Scotland. *Ptilidium pulcherrimum*, recorded on a log in Argyll by Gordon Rothero, is rather rare in western Scotland, while *Porella obtusata*, recorded on a basalt ledge near Tillicoultry in Perthshire by David Long, is mainly coastal and western. Chris Preston's record of *Fossombronia pusilla* from a stubble field in Orkney marks a new northerly extension for this species.

At least Rory Whytock has been busy on his home patch in Ayrshire. He found *Harpalejeunea molleri* in a humid ravine and *Scapania lingulata* on a reservoir margin, the latter a first for southwest Scotland. He also had *Fossombronia incurva sens. str.* in a sand quarry. Herbarium material of *F. incurva* is currently under review, as it seems that most British material is referable to *F. fleischeri*, so Rory's find was very welcome.

Wales was more productive, thanks almost entirely to the team effort of Matt Sutton and

▷ Fig. 1. Male and female plants of *Phaeoceros laevis*, Aisholt Common. Sharon Pilkington.



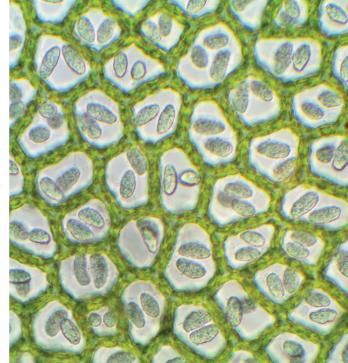


Tom Ottley, who have been very active in the south-west. Matt managed to find Cephaloziella integerrima and two sites for C. dentata (Figs 2, 3), both new to Wales, as well as C. rubella. C. dentata was previously thought to be confined to similar habitats in Cornwall, but it is hardly surprising that such a tiny plant has not been found elsewhere before. Still in Pembrokeshire. Matt also had Harpalejeunea molleri on a streamside boulder, while Tom had Cephalozia catenulata on a log near Devil's Bridge in Cardiganshire. The two of them teamed up to contribute Cephaloziella calyculata and Scapania lingulata from cliffs and slopes near Llangrannog, Nardia geoscyphus by the Afon Drywi (Fig. 4), and Frullania microphylla from cliffs at Gilfachyr-Halen, all also in Cardiganshire. Finally they found Leiocolea badensis in maritime turf in both vice-counties.

Also in Wales, Tim Blackstock and Malcolm Watling and colleagues published on the occurrence of *Tricholepidozia lindenbergii* in the FossilPlants Botanical Garden in Llanberis

△Figs 2-3. Habitat (Fig. 2) and gemmae (Fig. 3) of *Cephaloziella dentata*, Linney Down. Matt Sutton.

∇Fig. 4. Oil bodies of *Nardia geoscyphus*, Afon Drywi. Tom Ottley.



(Blackstock *et al.*, 2019). This is a New Zealand endemic which has apparently been imported on a tree fern, and may have the capacity to spread, as it produces sporophytes. This is the first time it has been recorded, as a naturalised plant, in Europe.

This year Ireland produced more new vice-county records than anywhere else. A brief survey in Northern Ireland by Nick Hodgetts yielded Cephalozia loitlesbergeri in a bog in Co. Antrim and Adelanthus decipiens on basalt boulders at Binevenagh in Co. Londonderry, the latter last seen in this vice-county by J.W. Fitzgerald in 1959. The BBS meeting in the Wicklow mountains was productive, with Rory Hodd finding Lophozia opacifolia and Sphenolobopsis pearsonii on Lugnaquilla, and Gordon Rothero finding Lophocolea semiteres at only its second Irish locality – but no doubt more will follow now it has arrived. David Long had Riccia subbifurca on a forestry track.

Other interesting vouchers from Ireland included Diane Dobson's *Jubula hutchinsiae* from Co. Tipperary and Rory Hodd's *Drepanolejeunea hamatifolia* from Co. Tyrone – both always pleasing finds. Philip Perrin had *Colura calyptrifolia* on gorse on Howth – about as far east as it is possible to go in Ireland.

Many thanks to all the bryologists who sent in vouchers.

Vouchers for English and Welsh vice-counties and the Isle of Man are deposited in the BBS herbarium (BBSUK); those from Scotland are divided between BBSUK and the Royal Botanic Garden, Edinburgh (E); and those from Ireland are in the National Botanic Garden, Glasnevin, Dublin (DBN).

1.2. *Anthoceros agrestis.* **55**: barley standing crop, 230 m alt., Warren Hills, Charnwood Forest, SK45771501, 2019, D.A. Callaghan

& C.D. Preston.

- **2.1.** *Phaeoceros laevis.* **5**: on banks of small stream, 210 m alt., Aisholt Common, ST17883488, 2019, S.L. Pilkington & A. Branson.
- **5.1a.** *Marchantia polymorpha* subsp. *polymorpha*. **H14**: wet peat, *Carex paniculata* fen woodland, 100 m alt., Abbeyleix Bog, S4383, 2019, W. Crowley & G.F. Smith.
- **7.1.** *Reboulia hemisphaerica.* **28**: steep west-facing grassy bank by road, with *Amblystegium serpens* & *Didymodon insulanus*, 65 m alt., Fulmodeston, TF99253077, 2019, J. Parmenter & M. Ghullam.
- **9.1.** *Conocephalum conicum.* **4**: on shaded mud on bank by dried-out pond, 20 m alt., Gauter Pool, Worthygate Wood, Buck's Mills, SS36622367, 2019, T.L. Blockeel 48/181.
- **9.2.** Conocephalum salebrosum. **32**: tuferous seepage at base of shaded urban stone wall (with lime mortar) adjoining church, 100 m alt., Cottingham, Water Lane, SP8462889986, 2019, J.J. Graham.
- **10.1.** *Riccia cavernosa.* **54**: pond mud exposed by low water, Wrawby Moor, TA0303110920, 2019, S.J. Heathcote.
- **10.10.** *Riccia subbifurca.* **H20**: forestry track: on damp open gravelly area, 270 m alt., Ballygobban Forest, NW of Aughrim, T05158531, 2019, D.G. Long.
- **11.1.** *Ricciocarpos natans.* **6**: abundant in several rhynes, 10 m alt., Nailsea Moor, ST44506993, 2019, S.L. Pilkington.
- **16.4.** *Fossombronia pusilla.* **111**: at edge of large stubble field (spring barley) sloping down to sea, 20 m alt., Bu of Cairston, Stromness, HY27170972, 2018, C.D. Preston.
- **16.8.** *Fossombronia incurva.* **75**: damp sand, 5 m alt., Ardeer Sand Quarry, NS2841, 2019, R.T. Whytock.
- 20.4. Metzgeria conjugata. H38: in damp

- crevice on cliff, 555 m alt., Slieve Muck, Mourne, J28362540, 2019, R.L. Hodd.
- **22.3.** *Riccardia incurvata.* **54**: on a sandy ditch bank by a woodland track, 20 m alt., Scotton Common, Roses Plantation, SK8761799680, 2019, S.J. Heathcote.
- **22.5.** *Riccardia latifrons.* **H30**: restored cutover bog, 110 m alt., Killyconny Bog, N6782, 2018, G.F. Smith & W. Crowley.
- 23.4. Porella obtusata. 4: rock outcrop on clifftop, 80 m alt., Hartland, Milford Common, SS22632323, 2019, D. Newman; 87: steep-sided stream valley; on basalt ledge, 210 m alt., Daiglen Burn about Tillicoultry, NS91169832, 2018, D.G. Long 45833.
- **25.3a.** *Frullania microphylla* var. *microphylla*. **46**: on smooth rock face towards lowest end of gully down cliffs, 10 m alt., Gilfach-yr-Halen, SN43236122, 2019, T.W. Ottley & M.D. Sutton.
- **26.1.** *Jubula hutchinsiae.* **H10**: (no habitat specified), 210 m alt., Doonane River, R813643, 2019, D. Dobson.
- **29.1.** *Colura calyptrifolia.* **H21**: on *Ulex* stem, 150 m alt., North of Ben, Howth, O2856837869, 2019, P.M. Perrin, det. R.L. Hodd
- **30.1.** *Drepanolejeunea hamatifolia.* **H36**: on tree near river, 155 m alt., Alderwood Glen, H49114599, 2019, R.L. Hodd.
- **31.1.** Harpalejeunea molleri. **45**: boulder face by stream, lightly wooded with willow, 230 m alt., Afon Tewgyll, SN137314, 2019, M.D. Sutton; **75**: on rock in humid ravine, 200 m alt., Changue, Fairy Knowe Waterfalls, NX2950092433, 2019, R.T. Whytock.
- **32.1.** *Lejeunea cavifolia.* H13: on silt amongst moss cushions on boulder on western bank of river (north of bridge), 50 m alt., Mountain River, Brook Lodge Bridge, NE of Borris, S7442351014, 2019, J.L. Denyer.

- **35.2.** *Ptilidium pulcherrimum.* **98**: on log in old clearfell on bank above burn, 200 m alt., Upper Strathlachlan River, Leacach, Cowal, NS05819641, 2019, G.P. Rothero 2019003.
- 43A.1. *Tricholepidozia lindenbergii.* 49: on decorticated log and on *Cyathea* tree fern trunk, FossilPlants Botanical Garden, Llanberis, SH5760, 2017, MC Watling, 2018, T.H. Blackstock (Blackstock *et al.* 2019).
- **44.4.** *Lophocolea semiteres.* **H20**: on damp gravel in parking area by road, 425 m alt., Duff Hill, by military road below, O10920698, 2019, G.P. Rothero 2019052.
- **45.1.** *Chiloscyphus polyanthos.* **56**: on large stone by stream, 115 m alt., Dovedale Wood, Hardwick Hall, SK46566297, 2019, T.L. Blockeel 48/378.
- **46.1.** *Heteroscyphus fissistipus.* **6**: at base of trunk of *Dicksonia antarctica* and spreading onto surrounding soil, in tropical bed in kitchen garden, 60 m alt., Tyntesfield, ST50597118, 2019, F.J. Rumsey.
- **49.1.** *Adelanthus decipiens.* **H40**: on shaded face of basalt boulder on steep NW-facing slope below cliffs, 270 m alt., Binevenagh, C68853113, 2019, N.G. Hodgetts.
- **52.3.** *Cephalozia catenulata.* **46**: abundant on a log by a side-stream, 110 m alt., Devil's Bridge, SN73967721, 2019, T.W. Ottley 19051301.
- **52.8.** *Cephalozia loitlesbergeri*. **H39**: creeping through *Sphagnum medium*, 30 m alt., Garry Bog, C93463015, 2019, N.G. Hodgetts.
- **58.1.** *Cephaloziella dentata.* **45**: soil gap in short cliff-edge turf, 40 m alt., Stackpole Head, SR99579428; and bare hollows in damp heath, 35 m alt., Linney Down, Castlemartin Range West, SR88399673, 2019, M.D. Sutton.
- **58.3.** *Cephaloziella rubella.* **45**: dragline across heath, 45 m alt., Castlemartin Range West, SR91279528, 2019, M.D. Sutton.

- 58.10. Cephaloziella spinigera. 110: Sphagnum-dominated blanket mire, 66 m alt., Lewis, Druim Linuisg, nr. Loch Orasaigh, NB39552816, 2019, T. ap Rheinallt.
- **58.12.** *Cephaloziella integerrima.* **45**: sparsely vegetated damp clay in dragline gully and elsewhere in heath, 45 m alt., Castlemartin Range West, SR913953 etc, 2019, M.D. Sutton.
- **58.13.** *Cephaloziella calyculata.* **46**: thin soil over rocks on steep grassy slope, 20 m alt., Llangrannog, SN31465526, 2019, T.W. Ottley & M.D. Sutton.
- **63.1.** *Sphenolobopsis pearsonii.* **H20**: on vertical face in block scree, 620 m alt., Lugnaquilla, South Prison, T0354991293, 2019, R.L. Hodd.
- **66.12.** *Lophozia opacifolia.* **H20**: on soil on grassy montane slope, 725 m alt., Lugnaquilla, North Prison, T0241192027, 2019, R.L. Hodd.
- **69.7.** *Scapania lingulata.* **46**: on fine gravel soil between rocks on steep slope on sea cliffs, 20 m alt., Llangrannog, SN31465527, 2019, T.W. Ottley & M.D. Sutton; **75**: reservoir margin, 215 m alt., Loch Doon, NS4700, 2018, R.T. Whytock, conf. D.G. Long.
- **69.22.** *Scapania ornithopodioides.* **69**: on side of block in area of block scree on NE-facing hillside, with *Racomitrium lanuginosum* and *Hypnum jutlandicum*, 800 m alt., Helvellyn, Tarn Corrie, NY3415, 2019, A. Gregory.
- 75.7. Leiocolea badensis. 45: short turf in dune hollow, 40 m alt., Stackpole Warren, SR98369444, 2019, M.D. Sutton; 46: gravelly flush on grassy slope above sea, 10 m alt., Mwnt, SN19345182, 2019, T.W. Ottley; H21: soil in crevice of old wall in woodland, 200 m alt., Massy's Wood, O1277324068, 2019, J.L. Denyer.
- 79.3. Nardia geoscyphus. 46: on bare soil on

- sloping heathery cliff, 25 m alt., Afon Drywi, SN42856088, 2019, T.W. Ottley & M.D. Sutton
- **80.7.** *Solenostoma obovatum.* **58**: on wet shale on stream bank, 390 m alt., W bank of Salter's Brook, Woodhead Pass, SE13660021, 2019, T.L. Blockeel 48/379.

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Reference

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