

Rare and Interesting 20

Sam Amy presents the latest batch of rare and interesting records

An eclectic mix of findings from the past couple of years has been submitted by regional recorders. The first record of *Bryum sauteri* with sporophytes in Ireland or Britain is particularly notable, found by Melinda Lyons & Declan Doogue in Co. Louth. Howard Matcham made the first record of tubers on *Syntrichia papillosa* in Britain and Ireland, from plants growing on a roadside tree.

There is a particularly large contribution from Matt Sutton, who has found many new records in South Wales, including the nationally rare *Acaulon mediterraneum*, *Cephaloziella integerrima*, *Micromitrium tenerum* and *Philonotis rigida*. Other finds of nationally rare species include new sites for *Crossidium squamiferum* on the Isle of Wight, *Seligeria brevifolia* in the Peak District and *Syntrichia norvegica* in Argyll. *Didymodon acutus* has also been found in new locations both on the Isle of Wight and in Pembrokeshire, which is encouraging given its recent categorisation as Data Deficient (Callaghan, 2023). Nationally rare and scarce species are defined and listed by Pescott (2016), and further details on conservation status pertain to the recent Red List of British Bryophytes (Callaghan, 2023). Unless otherwise stated, the rare or scarce species below are Nationally Scarce and are categorised as of Least Concern.

Epiphyllous bryophytes, relatively rare in our region, are reported new to Worcestershire by Ann Hill, with some beautiful images. As well as *Metzgeria violacea*, these include the

first record of *Orthotrichum pulchellum* growing on leaves rather than the usual twigs or tree trunks. Records describing unusual habitats or substrates have tended to form a smaller part of these 'Rare and Interesting' articles, although it is not clear whether this is because substrate isn't always recorded (over two thirds of records do not have species' habitat information in the BBS database), or because unusual habitats or substrates are particularly rare.

Thank you to all the contributors to this edition of Rare and Interesting, which has had somewhat of a hiatus. I have had to omit some no less valuable finds, and extend my apologies to those whose records are not included. One recorder noted how difficult it is to come up with rare and unusual finds that aren't new vc records (reported separately in the annual Liverwort and Moss Year articles), and perhaps some might like to take this as a challenge for the year ahead!

Altitude

***Bryum pseudotriquetrum*. 92:** Base of concrete trig point, 1309 m alt., Ben Macdui, NN989989, 2020, D.A. Callaghan. Exceeds 1100 m upper limit given by Blockeel *et al.* (2014).

***Entosthodon mouretii*. 6:** On a broken anthill over Carboniferous Limestone exposure in limestone grassland, 250 m alt., Cheddar Head, ST494529, 2021, S.L. Pilkington. Exceeds 150 m upper limit given by Blockeel *et al.* (2014).

***Entosthodon pulchellus*. 33:** Bare soil in the entrance to an active rabbit burrow beside the track, 286 m alt., Cleeve Common, SO987262, 2021, R.V. Lansdown. Exceeds 160 m upper limit given by

Blockeel *et al.* (2014).

***Gymnomitrium brevissimum*. 94:** Soil in area of late snow lie, 1248 m alt., Ben Macdui, NN992993, 2020, D.A. Callaghan. Exceeds 1180 m upper limit given by Blockeel *et al.* (2014).

***Scapania uliginosa*. 94:** Flush in area of late snow lie, 1248 m alt., Ben Macdui, NN992993, 2020, D.A. Callaghan. Exceeds 1150 m upper limit given by Blockeel *et al.* (2014).

***Sphagnum inundatum*. 92:** Flush beside stream, 1104 m alt., Ben Macdui, NH979010, 2020, D.A. Callaghan. Exceeds 930 m upper limit given by Blockeel *et al.* (2014).

Fruiting, gametangia or with gemmae

***Bryum sauteri*. H31:** Growing as scattered shoots on open ground at the edge of a track through the site of a clear-felled conifer plantation, 170 m alt., Mullaghatten, J127102, 2022, M. Lyons & D. Doogue. Characteristic reddish pyriform tubers were borne on subterranean rhizoids, and capsules were also present (Fig. 1). The presence of both tubers and capsules on the same shoots was confirmed by D.T. Holyoak. This is the first record from Ireland of *B. sauteri* with sporophytes and these remain unknown in British plants, although they are known from Norway, central Europe and Africa.

***Diplophyllum albicans*. 27:** Growing on old felled Sweet Chestnut root earth ball with *Pogonatum aloides* and *Calypogeia fissa*, 85 m alt., Great Wood, Felbrigg Hall Estate (National Trust), TG197405, 2023, M. Ghullam. It is very unusual to find fruiting material in Norfolk or Suffolk, and this is the first such record for West Norfolk, from a population which included a few very young plants as well.

***Syntrichia papillosa*. 13:** On a roadside tree, Chichester, SU876041, 2022, H.W. Matcham. With multiple rhizoidal tubers, the first record of these in the BBS database.

***Tortella flavovirens*. 11:** On coastal bank between shingle beach and saltmarsh under partial shade of *Quercus ilex* trees, Gilkicker Point, Gosport, SZ603977, 2023, J.A. Norton. A large colony was found with a few young capsules developing on 23 March. One of only six records of fruiting in the BBS database.



△ Figure 1. Capsule and tuber of *Bryum sauteri*, Mullaghatten, Co. Louth. M. Lyons

Nationally rare or scarce

***Acaulon mediterraneum*. 45:** Open clay patch in grassland, 75 m alt., St David's Airfield, SM787260, 2022, M.D. Sutton. The fourth Pembrokeshire site for this Nationally Rare species, and the first away from coastal cliffs, albeit only a mile inland.

***Aloina rigida*. 29:** Colonist of open chalky soil in scrape constructed in 2020, Little Trees Hill, Magog Down, TL489529, 2021, J. Hughes, det. M.O. Hill. First record in the county since 2006.

***Anomodon longifolius*. 57:** One patch about 20 cm across on rock face in shallow recess under overhanging rocks in limestone woodland, side valley below Griffe Grange, Via Gellia, SK255563, 2021, T.L. Blockeel. A second locality in Derbyshire for this Nationally Rare and Vulnerable moss, first discovered at a different site in the county in 2019. At both localities it occurs in small quantity.

***Bryum torquescens*. 13:** Anthills in chalk grassland, Devil's Dyke, TQ263110, 2022, S. Rubinstein. Only seen in four tetrads in West Sussex.

***Cephaloziella integerrima*. 45:** Open clay patch in grassland, 75 m alt., St David's Airfield, SM797260



△ Figure 2. *Cephaloziella integerrima* habitat, Let Wen Quarry. Pembrokeshire. M.D. Sutton

& SM793261. Disturbed ground on floor of old stone quarry, Middle Mill, Solva, SM804255. Soil crust over boulders in old dolerite quarry, 247 m alt., Let Wen, Crymych, SN175291 (Fig. 2). Limestone surfaced forestry track, 305 m alt., Gwarllwyn Wood, Pentre-Galar, SN175302. Recorded at these locations by M.D. Sutton in 2022, this Nationally Rare and Endangered species is proving to be widely distributed in Pembrokeshire after the first populations were found on the southern limestone on 2019.

***Crossidium squamiferum*. 10:** On landslip below cliffs, Culver Cliff, SZ627855, 2022, J. Warren, conf. S.L. Pilkington. Recorded within about three 1 × 1m grid cells. This is the second Isle of Wight and British record of this Nationally Rare and Critically Endangered species; it was found at St Catherine's Point by Sam Bosanquet in 2013.

***Didymodon acutus*. 10:** Ashley Down chalkpit, SZ572876 & St Catherine's Point, c. SZ494757, 2022, G.R.L. Greiff, conf. S.L. Pilkington. **45:** Disturbed clay ground in old limestone quarry, 25 m alt., Trefloyne Quarry, Penally, SN108001, 2022, M.D. Sutton. There are now three confirmed sites on the Isle of Wight for this Data Deficient species, and at least five Pembrokeshire sites with good populations.

***Didymodon tomaculosus*. 44:** Disturbed damp clay on disused motocross track, St Clears, SN281146, 2022, M.D. Sutton. **45:** Disturbed clay ground in

old limestone quarry, 25 m alt., Trefloyne Quarry, Penally, SN108001, 2022, M.D. Sutton. The second Carmarthenshire and fourth Pembrokeshire records.

***Ditrichum lineare*. 45:** Acidic subsoil on motocross tracks, 186 m alt., Glandy Cross, SN138271, 2022, M.D. Sutton. The third county record, and the lowest altitude.

***Ditrichum pusillum*. 44:** Sandy soil within plastic car-parking mesh, National Botanic Garden of Wales, Llanarthne, SN522182, 2022, M.D. Sutton. **45:** Shale track to quarry, 200 m alt., Glogue Quarry, Crymych, SN220327, 2022, M.D. Sutton. The second Carmarthenshire and fourth Pembrokeshire records of this unobtrusive species.

***Fissidens rivularis*. 45:** Cavity in brickwork, roadbridge over River Alun, Dowrog Common SSSI, St Davids, SM772274, 2022, and on a slate wall by old mill wheel, Afon Piliau, Pen-y-Bryn, SN171425, 2022. The second and third Pembrokeshire records, both by M.D. Sutton.

***Grimmia montana*. 45:** Shale boulder, on coastal slope, Cemaes Head, SN128490, 2023, M.D. Sutton (Fig. 3). The second Pembrokeshire record and first from the north coast. *Campylopus pilifer* grows on the same boulder at both locations.

***Grimmia orbicularis*. 44:** Large concrete block on dune grassland, Laugharne–Pendine Burrows SSSI, SN275072, 2023, M.D. Sutton. The second Carmarthenshire record.

▽ Figure 3. *Grimmia montana*, Cemaes Head, Pembrokeshire. M.D. Sutton



***Micromitrium tenerum*. 45:** Dried out silty-clay pond bed, Dowrog Common SSSI, St Davids, SM776276, 2022, M.D. Sutton. The second county record, and a good, established population (Fig. 4) in contrast with the first record from Wyndrush Pastures SSSI which proved to be a fleeting occurrence of this Nationally Rare and Critically Endangered species.

***Odontoschisma francisci*. 45:** Humid heath, Dowrog Common SSSI, St Davids, SM778272, 2022, M.D. Sutton; Wet heath, Brynberian Moor, Mynydd Preseli SSSI, SN118344, 2022, M.D. Sutton. The third and fourth Pembrokeshire records. **14:** Edge of pond, Bexhill High Woods, TQ714095, 2022, B. Scott. First record near the Sussex coast; all other records in East Sussex are in Ashdown Forest.

***Pallavicinia lyellii*. 11:** In alder carr, Withycombe Shade, New Forest, SU348074, 2020, A. Bolton. Following its initial discovery, subsequent searches revealed *c.* 15–20 colonies, all female, the largest encircling the base of an alder stool. This is the second largest of four extant populations in Hampshire (all in the New Forest) of this widespread, but apparently declining and Endangered species.

***Philonotis rigida*. 45:** Flushed cliff-edge slump, Cemaes head, SN127490, 2023, M.D. Sutton. The small patch here is the second such to be found on the north Pembrokeshire coast of this Nationally

Rare and Vulnerable species; there is an extensive and apparently spreading population near Amroth on the south coast.

***Platydictya jungermannioides*. 45:** Shaded limestone boulders in old quarry, Trefloyne Quarry, Penally, SN108001, 2022, M.D. Sutton. Only recently discovered in Pembrokeshire, there are now four known sites.

***Pottiopsis caespitosa*. 29:** Trampled ground along top of chalk earthwork, Fleam Dyke, TL544545, 2021, N. Jardine & S. Yardy, det. C.D. Preston. The only earlier record from Fleam Dyke was made in just this area in 1984, an example of the habit of this species of recurring at sites after long intervals.

***Pseudoleskeella catenulata*. 98:** On a boulder at the base of south-facing calcareous schist crag, 730 m alt., Coire Garbhach, Beinn an Dothaid, NN334401, 2022, G.P. Rothero. A second recent record for Argyll and a new site for this species.

***Seligeria brevifolia*. 57:** With *Blindiadelphus recurvatus* on moist, slightly base-enriched sandstone on wet grit-shale crag, facing north, Alport Valley, SK120933, 2020, T.L. Blockeel. This is a third locality for Derbyshire, and a further population was found across the county boundary at Crowden Castles, new to vc 58, in 2022. Thus, four of the seven currently recorded British localities for this Nationally Rare and Endangered moss are located in the ‘Dark Peak’ area of the Peak District National Park. At all of these sites its habitat is on weakly base-rich sandstone.

***Sphaerocarpos michelii*. 20:** Compacted gravelly vehicle tracks, Stanborough Lakes, TL229107, J. Reynolds, conf. M.A.S. Burton. Found at the crossing of compacted gravelly vehicle tracks used for car boot sales. The species was recorded at several sites in the Hertford area in the 1840s by W.H. Coleman, but this is only the second site in Hertfordshire since then.

***Syntrichia norvegica*. 98:** On a dry ledge under an overhang on south-facing calcareous schist crag, 720 m alt., Coire Garbhach, Beinn an Dothaid, NN334401, 2022, G.P. Rothero. The second record in Argyll for this Nationally Rare and Critically Endangered species, the other being in Glencoe. A small population in a typical site (Figs 5, 6), very similar to its habitat in its Ben Lawers sites. Occurring with *Syntrichia ruralis* and looking satisfyingly different in the field.

▽ Figure 4. Core area of *Micromitrium tenerum* population in Middle Pond, Dowrog Common, Pembrokeshire. M.D. Sutton





◁▽ Figures 5,6.
Syntrichia norvegica
and habitat (arrowed),
Beinn an Dothaid,
Argyll. G.P. Rothero



Other

***Aloina aloides*. 44:** Disturbed dune grassland, 5 m alt., Laugharne–Pendine Burrows SSSI, SN283071, 2022, M.D. Sutton. **45:** Lime-mortared wall of old slate quarry building, 270 m alt., Rosebush Quarry, SN077299, 2023, M.D. Sutton. Both records were of an unusual form with mucronate leaf apex similar to that of the European species *Aloina obliquifolia* (Fig. 7).

Regionally notable

***Drepanocladus polygamus*. 29:** Calcareous draw-

△ Figure 7. *Aloina aloides*, with leaf apex similar to *A. obliquifolia*, Rosebush Quarry, Pembrokeshire. M.D. Sutton



down zone at edge of flooded reed bed, Kings Dyke N.R., Whittlesey, TL252978, 2022, C.D. Preston, conf. M.O. Hill (Fig. 8). Only the second record from the county since 1960.

***Ephemerum recurvifolium*. 14:** Sandy earth by coast path, Castle Hill, Newhaven, TV439999, 2021, S. Rubinstein. The third record in East Sussex and the only coastal record, found perilously close to the receding cliff edge.

***Lepidozia cupressina*. H20:** A few patches found on north-west facing boulders at the edge of old oak woodland, Great Sugarloaf, Co. Wicklow, O244137, 2023, J. Denyer & R.L. Hodd. Last recorded in Co. Wicklow at Glendalough in 2010, there are no recent records from any other local site, and this species is rare in eastern Ireland.

***Leucodon sciuroides*. 98:** On boulder at base of south-facing calcareous schist crag, 720 m alt., Coire Garbhalach, Beinn an Dothaid, NN334401, 2022, G.P. Rothero. The first record of this species in Argyll for almost 40 years and a third locality.

***Marchantia polymorpha* subsp. *polymorpha*. 14:** Wet woodland, Lewes Railway Lands, TQ420099, 2021, B. Scott and S. Rubinstein. Rare in East Sussex, only recorded in four tetrads.

***Orthocaulis attenuatus*. 27:** On a dead stump in ancient broad-leaved woodland, 25 m alt., Waterloo

△ Figure 8. *Drepanocladus polygamus*, Whittlesey, Cambridgeshire. C.D. Preston





△ Figure 9. Mature Box trees hosting epiphyllic *Metzgeria violacea* (bottom left) and *Orthotrichum pulchellum* (bottom right), Wolverley, Worcestershire. A. Hill

Plantation, Hainford CP, TG217192, 2021, M. Ghullam. Growing here with *Leucobryum glaucum* and *Campylopus flexuosus*, this has been recorded in only a few locations across East Anglia.

***Orthothecium intricatum*. 46:** Small ledges by entrance to mine adit in clear-felled forestry, 310 m alt., Coed Bwlchgwallter, Ysbyty Ystwyth, SN760718, 2022, M.D. Sutton. This is the second Ceredigion record.

***Philonotis fontana*. 14:** Flush in garden, High Beeches Gardens, TQ275308, 2023, BBS field meeting. A large colony covering 4 square metres. Only three other recent records, all for tiny quantities.

***Porella arboris-vitae*. H20:** Abundant on a shady rockface on the north side of the path, west of car park, opposite stream in old oak woodland, Deputy's Pass SAC, Co. Wicklow, T232902, 2023, G. Smith, conf. J. Denyer & D.L. Kelly. This is the fourth record for the vice-county, and the first since 1989.

***Scapania compacta*. 27:** In a dry area of beech woodland, 25 m alt., Blickling Hall Estate, TG177292, 2022, C. Halpin. Found just off the path along the east of the lake, this is only the

fourth recent record for the county.

***Sphenobolus minutus*. 45:** Soil at base of rock in heathy ancient oak wood, 1 m alt., Lawrenny Wood, 2023, SN009066, M.D. Sutton. This is the third Pembrokeshire record, at a low altitude, and highly disjunct from the two northern populations.

Unusual habitat or substrate

***Cryphaea heteromalla*. 28:** On aggregate on top of old brick wall pillar, 65 m alt., Shipdham, TF954072, 2023, M. Ghullam. A very small amount on the first non-epiphytic substrate in Norfolk, growing with *Orthotrichum anomalum*, *Schistidium crassipilum*, *Bryum capillare*, *Grimmia pulvinata* and *Syntrichia montana*. It has also been recorded in non-epiphytic habitats in neighbouring Cambridgeshire since 2018 (Pescott, 2020).

***Metzgeria violacea*. 37:** Locally abundant epiphyll on the adaxial surface of Box leaves, on mature (12–15 m high, c.100 yrs old) plants within a mixed canopy woodland on a north-west facing hill side, Gloucester Coppice, Wolverley, SO833796, 2023, A. Hill (Fig. 9). Very few vascular plants in Britain are able to provide the required continuity of cover and

micro-climate for epiphyllous bryophytes, which are more commonly a feature of tropical regions. There are only a few isolated records of epiphyllous bryophytes at scattered locations in Britain, such as *Metzgeria violacea* in the Chiltern Hills (Porley, 1996) and Hampstead Heath (Duckett, 2008), and these are the first epiphyllous bryophytes recorded in Worcestershire.

***Orthotrichum pulchellum*. 37:** Epiphyll on the leaves of mature Box within a mixed canopy woodland on a north-facing hill side, Gloucester Coppice, Wolverley, SO833796, 2023, A. Hill. Found in the same location as *Metzgeria violacea*, though the *O. pulchellum* was less abundant (Fig. 9). This is the first record in the BBS database of the species growing as an epiphyll.

***Rhynchostegium riparioides*. 39:** Wall top by canal, Loynton Moss, SJ7824, 2020, M.F. Godfrey. A seemingly drier habitat than is usual, at least this far east in the British Isles, being about a metre or so above any water in December.

***Sematophyllum substrumulosum*. 28:** Plantation woodland edge, 8–30 m alt., Ken Hill, TF6735, and Dersingham Common, TF6829, 2022, J. Masson, conf. S.L. Pilkington. Following the first vc record, made by Sharon Pilkington in 2020 at Ken Wood, searches resulted in these two further records, this time on horizontal branches of *Rhododendron* overhanging damp ditch. This differs from the usual recorded substrate of decorticated conifer logs.

Contributors and checkers of records

T.L. Blockeel, A. Bolton, M.A.S. Burton, D.A. Callaghan, J. Denyer, D. Doogue, M. Ghullam, M.F. Godfrey, G.R.L. Greiff, C. Halpin, A. Hill, M.O. Hill, R.L. Hodd, D.T. Holyoak, J. Hughes, N. Jardine, D.L. Kelly, R.V. Lansdown, M. Lyons, H.W. Matcham, J. Masson, J.A. Norton, S.L. Pilkington, C.D. Preston, J. Reynolds, G.P. Rothero, S. Rubinstein, B. Scott, G. Smith, M.D. Sutton, J. Warren, S. Yardy.

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Sam R. Amy

e samamy@ceh.ac.uk

BookReview



The hidden world of mosses

Neil Bell, 2023. 220 pp.

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New bryological books come along so infrequently that the publication of any is a cause for celebration. Usually they are quite academic, and although of great interest to committed bryologists, may not be so appealing to those dipping their toes into the

subject. This book is aimed more at the serious general natural historian, curious to find out a little more about bryophytes, and is such an attractively produced publication that it should entice anyone with more than a passing interest in the subject to investigate further.

Despite the title, the book does include liverworts, with a nod to hornworts. The subject matter covered is wide-ranging, including basic bryophyte biology, ecology and physiology. Current debates around subjects such as evolutionary history and biogeography are also included, as well as topical subjects such as climate change and the ‘temperate rainforests’ of