Recording

Bryophytes Report for 2020–21

An article by John Norton

Meetings, website update and Notable bryophytes register

My last report was in January 2020 (*Flora News* 58) and of course shortly after that the coronavirus pandemic struck and so bryophyte recording was severely impacted during the following winter. We did, however, manage to hold a joint meeting of the Southern and Wessex groups in the Bramshaw Wood area of the New Forest on 25 October 2020, where we were limited to two parties of six socially-distanced bryologists recording two separate areas. We crossed paths at the end of the day to look at Sharon Pilkington's recently discovered

The newly discovered site of *Sphagnum pulchrum* in the New Forest and close-up of the orange-coloured heads (mixed with dark heads of *S. medium*). *John Norton*

colony of *Sphagnum pulchrum* in a mire to the north of the wood, the first record for Hampshire, which was only a stone's throw from the Wiltshire border. It was also nice to see *Hypnum imponens* there.

Even though restrictions were less severe by early spring this year, I was too busy to organise any meetings and didn't do any bryologising myself apart from limited recording in my local area of Gosport. Instead, I used my free time to update my Hampshire & Isle of Wight Bryophytes website (*www.jnecology.uk/bryophytes/index.html*). This now includes detailed accounts of bryophytes in VC10 and VC11, illustrated with photographs of species and habitats. I will add an account for VC12 in due course and I hope to develop the site further in the future. The accounts also went up on the new BBS website (*www.britishbryologicalsociety.org.uk*) which was launched in March after a complete redesign. On my website I also updated the Isle of Wight 5km square maps to include all the records collected by George Greiff and myself up to September 2019 and recompiled the Hampshire hectad maps, though these are still based on old data.

The website work meant that I had to delay finalising my Hampshire Rare and Notable Bryophytes Register that I mentioned in *Flora News* 58. However, I have finally completed this and have published Issue 2, which by the time you read this should be downloadable from the website. It now incorporates name changes given in the new checklist of British and Irish bryophytes (Blockeel et al. 2021; *see next article below*) and the recently published European Red List statuses (Hodgetts et al. 2019).

This coming winter I will be concentrating on continuing to sort out a backlog of records for submission to the BBS and updating the Hampshire hectad maps, so unfortunately I have decided not to organise any further official field meetings, though I may still invite people along to one or two informal surveys. There is, however, the usual joint New Forest meeting with the Wessex Bryology Group, which will be held at Hincheslea Bog on Sunday 31st October. Further details are on the website. Please contact me if you are interested in going, as places are limited.

New Vice-county Census Catalogue and change of bracketing date

Following the publication of the new British and Irish checklist, a new Vice-county Census Catalogue (VCCC) will also be published shortly (probably at the end of this year) incorporating records up to 2020. This implements a change in the cut-off date that taxa become 'bracketed' from 1960 to 1970, or 50 years before the date the catalogue was compiled ('bracketed' taxa are those not recorded since those dates). All new vice-county records and all new records of previously bracketed taxa require vouchers to be sent to the national recorders (currently Nick Hodgetts for liverworts and Sharon Pilkington for mosses). If confirmed these are then sent on to the national BBS herbarium at Cardiff (BBSUK). For further information see: *www.britishbryologicalsociety.org.uk/recording/submitting-new-vice-county-records*. The change in bracketing date means that any taxon last recorded between 1960 and 1969 but not since becomes bracketed in the new VCCC. The following taxa will therefore become bracketed on the new census catalogue (if anyone has definitely recorded any of these, please contact me).

VC10: *Dialytrichia mucronata, Encalypta vulgaris, Entosthodon obtusus, Leptodontium gemmascens, Scapania undulata, Thuidium assimile, Tortella inflexa, Tortula lindbergii (T. lanceola), Weissia brachycarpa* var. *brachycarpa, Weissia controversa* var. *crispata*.

VC11: *Drepanocladus sendtneri, Leptodontium flexifolium, Lophozia bicrenata, Marchantia polymorpha* subsp. *polymorpha, Nardia geoscyphus, Neckera pumila, Philonotis caespitosa, Tortula lindbergii (T. lanceola), Tortula subulata.*

VC12: *Bryum algovicum, Campylostelium saxicola, Cladopodiella francisci, Dicranella cerviculata, Entosthodon mouretii, Entosthodon obtusus, Fossombronia foveolata, Physcomitrium patens (Aphanorrhegma patens), Racomitrium lanuginosum, Scleropodium touretii, Seligeria recurvata, Sphagnum subsecundum*.

New vice-county records and other noteworthy records

This round-up covers the period January 2020 to September 2021. As mentioned above one of the most exciting discoveries was of a population of *Sphagnum pulchrum* in the north-west of the New Forest by Sharon Pilkington during her reconnaissance visit for the Bramshaw meeting in June 2020. Although well known in Dorset this species had never been found in Hampshire previously, despite the New Forest mires being well covered by bryologists in the past.

Another important discovery was made by Alison Bolton during a botanical outing to Withycombe Shade (SU 348 074) on 8 September 2020. This is an area of wet alder carr lying along a stretch of the Beaulieu River to the west of Decoy Pond Farm. Here she found a sizeable population of the European Red List Vulnerable liverwort *Pallavicinia lyellii*. This species was the subject of a Hampshire-wide survey in 2019 by bryologist Des Callaghan, who confirmed it is still doing well at Cadnam Common, but was only present in small quantity at two other New Forest sites, Matley Wood (which is only 1.5km to the west of Withycombe Shade) and Wood Crates. During subsequent visits Alison counted about 15 colonies, mostly around tree bases (and I saw at least eight colonies during a brief look; the largest almost completely encircling the base of one tree). All the plants were female.

Colony of *Pallavicinia lyelli* at Withycombe Shade, New Forest and close-up of female thalli. *John Norton*

This is probably now the second largest population of *Pallavicinia lyellii* in southern England.

During a tour of the western Isle of Wight in December 2020 George Greiff found *Didymodon acutus* at Lynch Lane chalkpit which was confirmed as being the 'true' species, as distinct from *D. icmadophilus*. Since the recent revision of these taxa this is only the third fully verified UK record (it is also confirmed from Portsdown Hill in VC11). During the same outing he also found *Acaulon muticum*, a tiny ephemeral of disturbed acidic soils which appears in late autumn and winter. These were the first records since 1926, so a debracketer. Earlier, in July, George had also discovered a large population of the ephemeral wetland species *Physcomitrium patens (Aphanorrhegma patens)* on a reservoir next to Northpark Copse, where there were possibly 'millions' of plants on drying mud.

In January 2021 Jonathan Sleath spotted a small colony of *Grimmia orbicularis* just around the corner from his home, which was new for VC11 and Hampshire. Alerted to this I was pleased to spot a patch of this moss on a church wall at Elson in Gosport a few weeks later, growing amongst the usual *G. pulvinata*. It still remains to be found in VC12 and the Isle of Wight (where incidentally Jonathan previously recorded the only record of *Grimmia ovalis* for our three vice-counties in 2002).

Jonathan also had a specimen of *Dicranella howei* confirmed from a disused quarry at Hursley, VC11 and Magdalen Hill Down, VC12 in March 2021. This Mediterranean taxon had long been known in the UK, but it has only recently been formally added to the British and Irish list following the publication of the new checklist and a review of its status in the November 2020 issue of *Field Bryology* (Blockeel 2020). This concluded that it is probably widespread in England and Wales and could occur in Ireland. I know that George Greiff previously had a specimen identified as *D. howei* from the Isle of Wight but a voucher has not yet been formally submitted for VC10.

The county's small band of bryologists have also been finding more of the recently increasing species which, however, are still very under-recorded in Hampshire. Jonathan Sleath found *Sematophyllum substrumulosum* in Peak Copse, Basingstoke on 2 January 2020, which was new for VC12 and he also found it in VC11 in the Winchester area, in March 2020 (the third record for the vice-county). Another good discovery around the same time was his record of *Platygyrium repens* in VC12, the

***Didymodon acutus*, Lynch Lane chalkpit, Isle of Wight.** *George Greiff*

***Grimmia orbicularis* on a wall top in Winchester; first Hampshire record.** *Jonathan Sleath*

***Dicranella howei* on chalk.** *Jonathan Sleath*

second for the vice-county. These are both epiphytes and probably increasing in the county, but there is still only one old record for *Platygyrium* in VC11.

Graeme Smith, who is based in Ringwood, found new sites for the thallose liverwort *Reboulia hemisphaerica* on a road bank at Hightown and the moss *Bartramia pomiformis* at Rockford Common (February and March 2021). Both are scarce in the county and have very few recent records, though *Reboulia* still seems to be doing well on lane banks in the Blashford Lakes area just north of Ringwood.

Full details of the new VC records are as follows:

Acaulon muticum, VC10: Tennyson Down and Golden Hill Fort, 21 December 2020, G. Greiff. Conf. S.L. Pilkington. VC10 debracketer (first post-1960 record); the previous record was for Freshwater in 1926.

Dicranella howei, VC11: disused chalk quarry, Bunstead Lane, Hursley, SU 4362 2552, 1 March 2021. J. Sleath, conf. S.L. Pilkington. VC12: chalky bank under trees, Magdalen Hill Down, Winchester, SU 5013 2928, 12 March 2021. J. Sleath, conf. S.L. Pilkington.

Didymodon acutus, VC10: Lynch Lane Chalkpit, SZ 4229 8438, 21 December 2020. G.R.L. Greiff, conf. T.L. Blockeel.

Grimmia orbicularis, VC11: on a weathered concrete coping stone of brick pillar, Kingsgate street, Winchester, SU 4766 2892, 29 January 2021. J. Sleath, conf. S.L. Pilkington.

Hennediella macrophylla, VC12: trampled soil under trees, Water Lane, Winchester, SU 4863 2943, 9 March 2021. J. Sleath, conf. S.L. Pilkington.

Physcomitrium patens (Aphanorrhegma patens), VC10: Northpark Copse, SZ 436 886, 14 July 2020, on bare mud of seasonally flooded reservoir. Conf. S.L. Pilkington.

Sematophyllum substrumulosum, VC12: Peak Copse, Basingstoke, SU 5910 4743, 2 January 2020. J. Sleath, conf. S.L. Pilkington.

Sphagnum pulchrum, VC11: At upper end of gently sloping grazed mire in patches spread over a c.100 m x 100m area, Nomansland, New Forest SU 262 174, 27 June 2020. S.L. Pilkington.

References

References are included at the end of the next article.

Recent name changes to bryophytes in Hampshire and the Isle of Wight

An article by John Norton

For many years recorders have used a standard list of names of bryophytes in Britain and Ireland, based on those published in the old Vice-county Census Catalogue (Hill et al. 2008). Although minor updates were distributed by BBS over the years only recently has it been fully updated to take account of the numerous recent changes in taxonomy and nomenclature. The new 2020 checklist (Blockeel et al. 2021) includes around 170 name changes, many of which result from recent molecular sequencing work and morphological studies. There have been several lumps and splits to create new species or subspecies and many species have been moved into new genera for which new names have therefore been coined. In addition, there have been some small alterations in spellings and authority names to satisfy international code. Several newly recorded species have also been added to the British and Irish list in recent years and are therefore included on the checklist for the first time.

The nomenclature of the new checklist follows the recently published European Red List (Hodgetts et al. 2019), with a few differences, the main one being that the authors sensibly chose to put all *Bryum* species under one roof, instead of dividing into various disparate genera. Table 1 lists the 63 taxa recorded from Hampshire and the Isle of Wight for which there has been change of name since the 2008 checklist or its recent unpublished revisions. The taxa comprise one newly added species to the British and Irish list (*Dicranella howei*); 14 species affected by nomenclatural changes (e.g. a change back to an older valid genus or species name); seven taxa which are promoted in rank to full species; 25 taxa affected by taxonomic splits where a new genus name has been coined and 16 taxa subject to other taxonomic changes (mostly where the taxon has been moved to a different existing genus). Further notes on some of the changes are given below.

Table 1. Name changes of bryophytes recorded from Hampshire and the Isle of Wight

Old name	New name	Note
Anastrophyllum minutum	*Sphenolobus minutus*	
Aphanorrhegma patens	*Physcomitrium patens*	
Barbilophozia attenuata	*Orthocaulis attenuates*	
Barbula convoluta	*Streblotrichum convolutum* var. *convolutum*	
Barbula convoluta var. *sardoa*	*Streblotrichum convolutum* var. *commutatum*	
Campyliadelphus chrysophyllus	*Campylium chrysophyllum*	
Campyliadelphus elodes	*Kandaea elodes*	
Campylophyllum calcareum	*Campylophyllopsis calcarea*	
Cladopodiella fluitans	*Odontoschisma fluitans*	
Cladopodiella francisci	*Odontoschisma francisci*	
Cololejeunea minutissima	*Myriocoleopsis minutissima*	
	Dicranella howei	1
Ditrichum flexicaule	*Flexitrichum flexicaule*	
Ditrichum gracile	*Flexitrichum gracile*	
Ephemerum minutissimum	*Ephemerum serratum*	2
Ephemerum serratum	*Ephemerum stoloniferum*	2
Ephemerum sessile	*Ephemerum crassinervium* subsp. *sessile*	
Gymnocolea inflata	*Gymnocolea inflata* subsp. *inflata*	3
Heterocladium heteropterum var. *flaccidum*	*Heterocladium flaccidum*	
Leiocolea badensis	*Mesoptychia badensis*	
Leiocolea turbinata	*Mesoptychia turbinata*	
Leptodon smithii	*Neckera smithii*	
Leptophascum leptophyllum	*Chenia leptophylla*	4
Lophozia bicrenata	*Isopaches bicrenatus*	
Lophozia capitata	*Heterogemma capitata*	
Lophozia herzogiana	*Protolophozia herzogiana*	
Lophozia incisa	*Schistochilopsis incisa*	
Lophozia perssonii	*Oleolophozia perssonii*	
Nowellia curvifolia	*Cephalozia curvifolia*	
Orthotrichum affine	*Lewinskya affinis*	
Orthotrichum lyellii	*Pulvigera lyellii*	
Orthotrichum striatum	*Lewinskya striata*	
Oxyrrhynchium pumilum	*Microeurhynchium pumilum*	
Phascum cuspidatum	*Tortula acaulon*	
Phascum cuspidatum var. *papillosum*	*Tortula acaulon* var. *papillosa*	
Phascum cuspidatum var. *piliferum*	*Tortula acaulon* var. *pilifera*	
Philonotis arnellii	*Philonotis capillaris*	
Platyhypnidium riparioides	*Rhynchostegium riparioides*	
Pleurochaete squarrosa	*Tortella squarrosa*	
Polytrichastrum formosum	*Polytrichum formosum*	
Polytrichastrum longisetum	*Polytrichum longisetum*	
Polytrichum commune var. *perigoniale*	*Polytrichum perigoniale*	
Preissia quadrata	*Marchantia quadrata*	
Pseudocalliergon lycopodioides	*Drepanocladus lycopodioides*	
Pterogonium gracile	*Nogopterium gracile*	
Rhytidiadelphus triquetrus	*Hylocomiadelphus triquetrus*	
Seligeria recurvata	*Blindiadelphus recurvatus*	
Solenostoma caespiticium	*Endogemma caespiticia*	
Sphaerocarpos texanus	*Sphaerocarpos europaeus*	5
Sphagnum capillifolium subsp. *capillifolium*	*Sphagnum capillifolium*	6
Sphagnum capillifolium subsp. *rubellum*	*Sphagnum rubellum*	6
Sphagnum denticulatum	*Sphagnum auriculatum*	7
Sphagnum magellanicum	*Sphagnum medium*	8
Syntrichia ruralis var. *ruraliformis*	*Syntrichia ruraliformis*	
Telaranea murphyae	*Tricholepidozia tetradactyla*	
Tortula lanceola	*Tortula lindbergii*	
Tortula modica	*Tortula caucasica*	
	Ulota crispula	9
	Ulota intermedia	9

Old name	New name	Note
Ulota phyllantha	*Plenogemma phyllantha*	
Weissia longifolia var. *angustifolia*	*Weissia angustifolia*	
Zygodon forsteri	*Codonoblepharon forsteri*	
Zygodon viridissimus var. *stirtonii*	*Zygodon stirtonii*	

Notes

1. Plants matching the Mediterranean taxon *Dicranella howei* had been recorded widely in the UK for several years but it is now formally added to the British list. For an account of its identification (with respect to the similar *D. varia*) see Blockeel (2020). It was confirmed from VC11 and VC12 in 2021.
2. It has been shown that *Ephemerum serratum* is the correct name for *E. minutissimum*, so *E. serratum* itself takes the earliest published name of *E. stoloniferum*. No doubt this will lead to confusion while the old names and new names are used together!
3. *Gymnocolea inflata* subsp. *acutiloba* has been published, though its taxonomic status is unclear according to the authors of the checklist; however, this has meant that *Gymnocolea inflata* subsp. *inflata* has been added for recording purposes.
4. *Leptophascum leptophyllum* has apparently reverted to an older name of *Chenia leptophylla*. This of course is the species thought to be new to science when discovered during a BBS meeting on the Isle of Wight in 1964, when originally named *Tortula vectensis* (see www.jnecology.uk/bryophytes/isleofwightvc10.html).
5. The north American species *Sphaerocarpos texanus* has now been shown to be distinctly different from specimens from Europe; therefore the European entity takes the earliest published name of *S. europaeus*.
6. *Sphagnum capillifolium* subsp. *capillifolium* and *S. capillifolium* subsp. *rubellum* are now treated as full species (a long overdue change).
7. *Sphagnum auriculatum* is an old name for *S. denticulatum*; the checklist does not give the reason for the change back to this name.
8. A 2018 study showed that the type material of *Sphagnum magellanicum* from South America was different from European material, which actually consisted of two entities, subsequently named *S. divinum* and *S. medium*. So far all plants checked in Hampshire have been *S. medium*, and it is likely that *S. divinum* has a more northerly distribution in the UK.
9. *Ulota crispula* and *U. intermedia* were added as new species after *Ulota crispa* was split into three species. *S. crispa* becomes *S. crispa* 'sensu strictissimo' (in the strictest sense), but inevitably many records will still have to go down as *S. crispa* s.lat.

References

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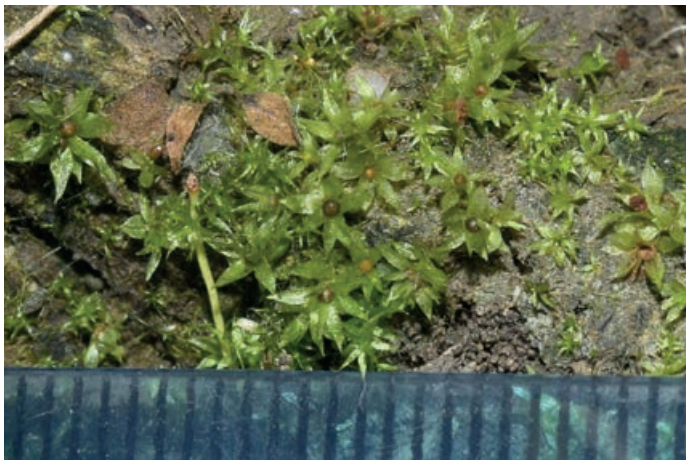

***Aphanorrhegma patens* – now *Physcomitrium patens*.**
John Norton