

Recording

Bryophytes report for October to December 2021

An article by John Norton

This article follows hot on the heels of the report in the last issue of *Flora News* and brings things up to date to the end of 2021. Since the last report there have been some more exciting additions to the Hampshire bryophyte list, plus other records of interest to mention and some meetings and field surveys to report on.

Recent records and surveys

Whilst trying to confirm which taxa needed to be bracketed or unbracketed due to the change in date periods (see *Flora News* No. 61, p. 29) I received some recent records of *Plasteurhynchium striatulum* for the Isle of Wight from George Greiff, which I didn't have time to mention in the last report. This species is a creeping pleurocarp of limestone rocks and walls, and is also found on the roots and lower trunks of basic-barked trees. The only previous Isle of Wight record was at Niton in 1964 during the British Bryological Society meeting. It would therefore have become newly bracketed, but George confirmed he had found it at five localities on the Island since around 2017, including Greatwood Copse quarry on Beech root plates, Bonchurch landslip on a wall (with *Cololejeunea rossettiana* and *Lejeunea lamacerina*) and St Olave's church at Gatcombe on a gravestone. In VC11 the last record was in 1958, so it remains bracketed here, but in VC12 Jonathan Sleath recorded it at Old Burghclere Lime Quarry in March 2020. In Britain it is Nationally Scarce, recorded from 81 10 km squares in all date classes.

Near the end of 2021 a paper was published in the *Journal of Bryology* by Des Callaghan on a survey of the Isle of Wight speciality *Philonotis marchica* (Callaghan 2021). He confirmed that it no longer occurs at its only other recorded British site in Yorkshire but is still present at the two Island localities at Shanklin Chine (albeit in 'extremely small quantity') and Lake Cliffs between Shanklin and Sandown. He also cleared up some confusion that George Greiff and I had when we looked at plants at the latter site a few years ago. We thought that these might have been *P. rigida* due to the abundant production of bulbils (small shootlets) in the leaf axils of the sterile shoots, a feature mentioned as being distinctive in this species in Smith's moss Flora, but not noted as occurring in *P. marchica*. However, Callaghan uncovered an old literature reference which also described bulbils in *P. marchica* and described other differences between the two species – so this is clearly what we saw. Sporophytes have apparently never been found in British colonies of *P. marchica*.

Rare and Notable Bryophytes Register for Hampshire

Further to my last report, I am pleased to say I completed work on updating my Rare and Notable Bryophytes Register for Hampshire, co-authored with Fred Rumsey. It was sent to HBIC in November 2021, along with an updated set of Hampshire bryophyte records. The register will be available to download from the Hampshire & Isle of Wight Bryophytes website soon, or please contact me (email: john@jnecology.uk) if you would like a copy. As of the date of writing this report (December 2021) the promised new vice-county census catalogue, which will incorporate the updated nomenclature (see *Flora News* No. 61, p. 31), has not been published.

Hincheslea meeting, October 2021

We held our traditional joint meeting of the BBS Southern Group and the Wessex Bryology Group at the end of October at Hincheslea Bog (SU2700), an under-recorded part of the New Forest. A storm had just blown over when we arrived (and I was surprised to see a Grey Phalarope feeding on a roadside verge near our meeting point), but we ended up with quite a reasonable day weather-wise and bryophyte-wise, with 92 taxa recorded. I haven't had a chance to add a meeting report on the website, but I've compiled a list of records and a species list which I can send to anyone interested. Although we recorded first hectad records for *Dicranella howei*, *Didymodon fallax*, *Pulvigerella lyellii* and *Ulota crispula*, the main highlights were a rich selection of *Sphagnum*-dwelling liverworts, including *Calypogeia sphagnicola*, *Cephalozia connivens* and *Odontoschisma fluitans*, plus 11 *Sphagna* in all, including *Sphagnum teres* and uncommon species such as *Riccardia incurvata*, *Sarmentypnum exannulatum*, *Campylopus brevipilus* and *Thuidium delicatulum*.

A rare liverwort at Black Bush

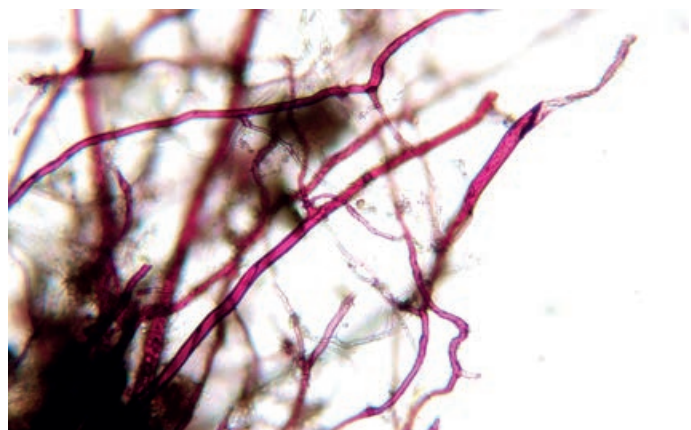
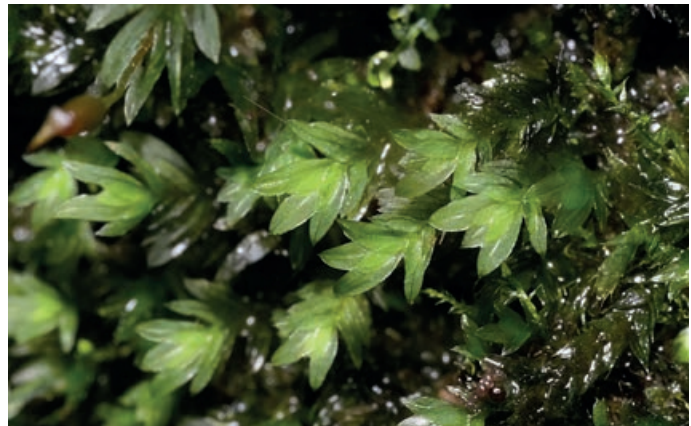
Shortly after the Hincheslea meeting Andrew Branson contacted me to say he had looked for and managed to re-find *Harpalejeunea molleri* at Black Bush in the north-west of the New Forest (SU 252 159). Neil Sanderson had originally found it there in 2008, and it appears that Andrew may have located the same tree (a Pedunculate Oak) that Neil recorded it from. The only other Hampshire record is by Francis Rose in 1978 from Stricknage Wood (SU2612). During a day's walking in the Forest I briefly looked at the Black Bush colony and also noticed that it was also present on an adjacent tree. Although predominantly an oceanic species of rocky habitats in western Ireland, NW Wales and western Scotland, it has also been recorded from a variety of tree species. It is reported to favour mildly basic substrates and can grow in drier and less shaded situations than other similar small liverworts. Potentially, therefore, it could be more widespread in the New Forest and would be worthy of some targeted survey work (it is a very small species and easily overlooked).

In search of *Fissidens*

Last October, whilst compiling the Hampshire records for the updated register and hectad maps, I happened to notice an interesting record of *Fissidens osmundoides* in the recent VC11 data obtained from BRC. This was by Martin Godfrey during the Bryophyte Ecology Group (BRECOCG) meeting in the New Forest in March 2017. Martin had noted it from two of five quadrats he had sampled along the stretch of Dockens Water on the north side of Anses Wood, near Cadman's Pool (SU2212). This was only the second record of the species since Francis Rose recorded it from Wood Crates in 1973. It is mainly a species of ravines and gullies in Wales, northern England and Scotland, so the New Forest record(s) are intriguing. I did some of the recording with Martin during that meeting, but unfortunately I wasn't with him when he looked at Dockens Water. When I contacted him for further details of the record he said he had checked his notebook and assumed the record was correct, but hadn't retained a specimen.

I subsequently visited the location, together with Graeme Smith, on 18 November 2021. We couldn't find *F. osmundoides*, but did notice patches of a dark green *Fissidens* growing in patches just above the water line. These had a distinct pale border to the leaves, so seemed to be *Fissidens bryoides*, a common species. However, this species usually occurs on much drier woodland banks, so I collected a specimen and it was only when looking at this later that the penny dropped that it was *Fissidens bryoides* var. *caespitans*, a distinct taxon, previously known as *F. curnovii*. The water-line habitat is characteristic. I'd only seen this once before in Wales. It is easily recognised by the presence of intensely coloured reddish-violet rhizoids (though rarely brown, like those of var. *bryoides*). This was new to VC11 and Hampshire and has also never been recorded from the Isle of Wight before.

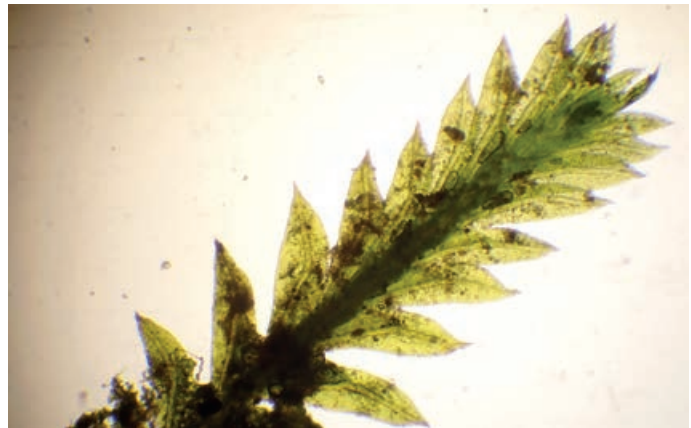
Like *F. osmundoides*, *F. bryoides* var. *caespitans* is largely confined to the west and north of Britain, especially more upland habitats, and apart from an isolated record in North Somerset (VC6) the other nearest records are about 120km away in Devon. It is interesting that the New Forest supports quite a few such 'disjunct' species associated with colder and wetter parts of Britain, and like *F. osmundoides*, some of these have only ever been recorded from a single locality or very few localities, so could potentially be more widespread. Another good example is *Porella cordaeana*, also a species primarily of upland streams, recorded about four times in the Forest. However, there are



Leaves and rhizoids of *Fissidens bryoides* var. *caespitans*, Dockens Water, November 2021. John Norton

a few disjunct upland species that are more widely distributed in the New Forest – two examples being *Bryum alpinum* and *Pohlia drummondii*, which occur on gravel tracks and paths.

I returned to Anses Wood and Dockens Water again in early December, joined this time by Jonathan Sleath and Alan Lewis to search again for *Fissidens osmundoides* and to get a better idea of the distribution of *F. bryoides* var. *caespitans*. There was still no sign of the former, though the stream eastwards of the 2017 record still needs to be looked at. *Fissidens bryoides* var. *caespitans* proved to be present in several spots along a 250 m long section of the stream on the north side of Anses Wood, so is definitely well established there. Not long after we had started hunting, Jonathan was looking intently at a small patch of the stream bank near the north-eastern end of the stream, then announced that he thought he had found *Fissidens celticus*. He showed me a few tiny leaves (barely 4 mm long) on a lump of wet mud taken from the stream bank, and these clearly had the visible kink in the nerve and the sharply pointed leaves characteristic of this species. This was therefore another discovery of a taxon new to VC11 and Hampshire, though one that was not entirely unexpected. This species has a very similar distribution to *Fissidens bryoides* var. *caespitans*, being largely restricted to the western edge of Britain, though also occurs in the gill woodlands of Sussex and Surrey. On the Isle of Wight it is known from Parkhurst Forest and Briddlesford Copse.



***Fissidens celticus* specimen from Dockens Water, December 2021. Alan Lewis**

My plans for the rest of the winter and probably also for next winter are to further explore the New Forest watercourses, which I suspect have been neglected by previous bryologists and which could support further colonies of the above mentioned *Fissidens* species, or other interesting species of predominantly western and northern upland habitats.

Other records

During the November 2021 Dockens Water visit Graeme Smith and I also checked out some rich bryophyte habitat along the gravel track in Anses Wood, where George Greiff and I had recorded probable *Campylopus subulatus* during the 2017 BRECOG meeting. This was a Hampshire debracketer with only one other Jean Paton record (Appleslade Inclosure, SU10, 1958), but on this previous occasion I had collected only a few small shoots and had not submitted it. Graeme and I managed to find a few small patches, enough for me to confirm the identity through leaf sections and to submit as a VC11 voucher, which was accepted.

Jonathan Sleath made a very interesting and exciting discovery in November 2021 during a trip to Chawton Park Wood at Four Marks. Here he found *Antitrichia curtispindula* on a birch log, though only realised what it was when he checked the specimen under the microscope (it is a robust species with characteristic tothing on the hair points). There is only one other historical record in our area for the Isle of Wight (VC10) at Boniface Down, SZ57, by C.J.F. Bunbury in 1853. It is exceedingly rare in the south of England; commoner in NW Wales and the Scottish highlands, but a recent smattering of records in lowland England suggest that it may be starting to recolonise areas where it was probably lost due to historical sulphur pollution.



***Antitrichia curtispindula*, Chawton Park Wood, November 2021. Jonathan Sleath**

I was pleased to find *Leucodon sciuroides* (Squirrel-tail Moss) during a return foray to Bramshaw Wood on 12 December last year. It was growing on twigs of a mossy young Beech tree in the open, which

was overhanging a small watercourse at the edge of a boggy flush. Other associates included *Ulota crispa* s.str., *Pulviger a lyellii*, *Cryphaea heteromalla*, *Frullania dilatata*, *Metzgeria* spp. and a *Hypnum* sp. *Leucodon sciuroides* was last seen in both VC11 and VC12 in 2011. In Britain it is a species of base rich trees, especially Ash, and growing over hard calcareous rocks, mainly in churchyards here in the south. It has declined historically but may be on the increase again. It was recorded fairly widely in Hampshire in the past and may simply be overlooked in places like the New Forest. Another one to keep a look-out for.

The mystery of *Plagiochila spinulosa* in Hampshire

I've been looking into the curious case of *Plagiochila spinulosa* in Hampshire. This species was split into two species by Jean Paton (1977) as *Plagiochila spinulosa* s.str. and *P. killarniensis*, later renamed *P. bifaria*. On the basis of the BRC records I have listed both in the notables register, but Rod Stern only included *P. bifaria* in his VC11 atlas and I wondered whether both entities have definitely been recorded in the county. The records marked as *P. spinulosa* s.str. in the BRC data are by R. Bulley and D. Guym (as separate records but probably relating to same occasion) for SU20 in October 1925, marked as determined M.F.V. Corley, but no other details given. It would be useful to know when Corley looked at them, but unless this happened after Jean Paton's paper there must be a strong possibility that the assignment of the *P. spinulosa* s.str. code is in error, and that the records should have been transferred to '*P. spinulosa* s.lat.' at the time the BRC database was updated to include the new taxon codes. There are two records in the BRC data assigned to *B. bifaria*; the first of these was by Miss C. Lyell from Rufus Stone (SU21) in 1812, confirmed by Jean Paton and listed in her paper. The only other record was by Jeff Bates during a bryophyte meeting at Rufus Stone in 1992, so quite likely from the same area.

In her paper Paton makes no specific mention of the 1925 record of *P. spinulosa*. However, she says '*The records of P. spinulosa from Anglesey (52) and the Channel Islands must be regarded as doubtful. I have checked material of this species from vice-counties 2, 48,64, 70, 97,98, H. 1, 2, 16,20,27,29,35 and 39, but its confirmation from 1,11,74,101–103, H.3 and H.9 would be desirable.*' This seems to infer that she hadn't checked the VC11 specimen of *P. spinulosa*, so had not been able to confirm that it was *P. bifaria*, and thus excluded it from the list of records of the newly described taxon in her paper. However, in her earlier 1962 Flora, reproduced in Stern's atlas, she does list both the 1812 and 1925 records of *P. spinulosa* (i.e. prior to it being split) and gives more information on the 1925 Bulley record. She lists this as being by Pearson in 1902, and the specimen being held at the Kew herbarium, but at the end of the entry she has '(BRIST!)' which I think means she did personally check the specimen, but at Bristol not Kew. Confusingly, the entry in her Flora only gives the location as Rufus Stone, i.e. for both records, whereas on the BRC database the Bulley record is down for SU20 (an adjacent square) with no site given. More research to clarify the records would be useful, though may not ever resolve the issue, since the two species are rather difficult to tell apart in any case. Part of the reason for mentioning this was simply to encourage people to look for *P. spinulosa* agg. in the New Forest so that we can hopefully get some more recent records!

List of new and debracketed records

***Antitrichia curtispindula*, VC12:** On a birch log, Chawton Park Wood, Four Marks, SU 6727 3613, 17 November 2021. J. Sleath, conf. S.L. Pilkington. New to VC12 and Hampshire.

***Campylopus subulatus*, VC11:** In damp acid grassland along north side of gravel track; Anses Wood, New Forest, 18 November 2021. J.A. Norton & G. Smith, conf. S.L. Pilkington. Main associates: *Archidium alternifolium*, *Bryum alpinum*, *Cephalozia* sp. and an unidentified *Lophozia*.

***Fissidens bryoides* var. *caespitans*, VC11:** a few large, horizontal, dark green (wet) patches on vertical sides of stream bank just above water line in moderate shade, Dockens Water, New Forest, between c.SU 2281 1267 and 2287 1270 at NE corner of Anses Wood, 18 November 2021. J.A. Norton & G. Smith, conf. S.L. Pilkington. Also recorded on 4 December 2021 up to 250m west along the stream to SU 2263 1261. New to VC11 and Hampshire.

***Fissidens celticus*, VC11:** near the top of a shaded stream bank, thinly vegetated with other mosses, Dockens Water, New Forest, SU 2284 1267, 4 December 2021. A. Lewis, J. Norton & J. Sleath, conf. S.L. Pilkington.

References

Callaghan, D.A. (2021). Population status and ecology of *Philonotis marchica* (Hedw.) Brid. in Britain, *Journal of Bryology* 43: 242–250.

Paton, J.A. (1977). *Plagiochila killarniensis* Pears. in the British Isles, *Journal of Bryology* 9: 451–459.