

Bryophytes of Great Dixter

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Epipterygium tozeri

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Background

Bryophytes (mosses and liverworts) have been recorded in Sussex for well over 200 years, yet large parts of the county still have few or no records. An important round of recording took place in the 1980s, resulting in the publication of the atlas¹, and very intensive recording activity began in the county in 2011. Since 2016 this activity has widened further, with a view to more thoroughly record the bryophyte species in each of the 4km² grid squares.

Such recording is vital as it provides an invaluable picture of the presence and distribution of this important, but often neglected, plant group. The distribution and occurrence can thereby be compared over time, and the data used to inform research on the changing flora of Britain and Ireland, and Europe generally.

The gradual progress of the project can be followed at: <https://sussexbryophytes.wordpress.com/>

Previous records

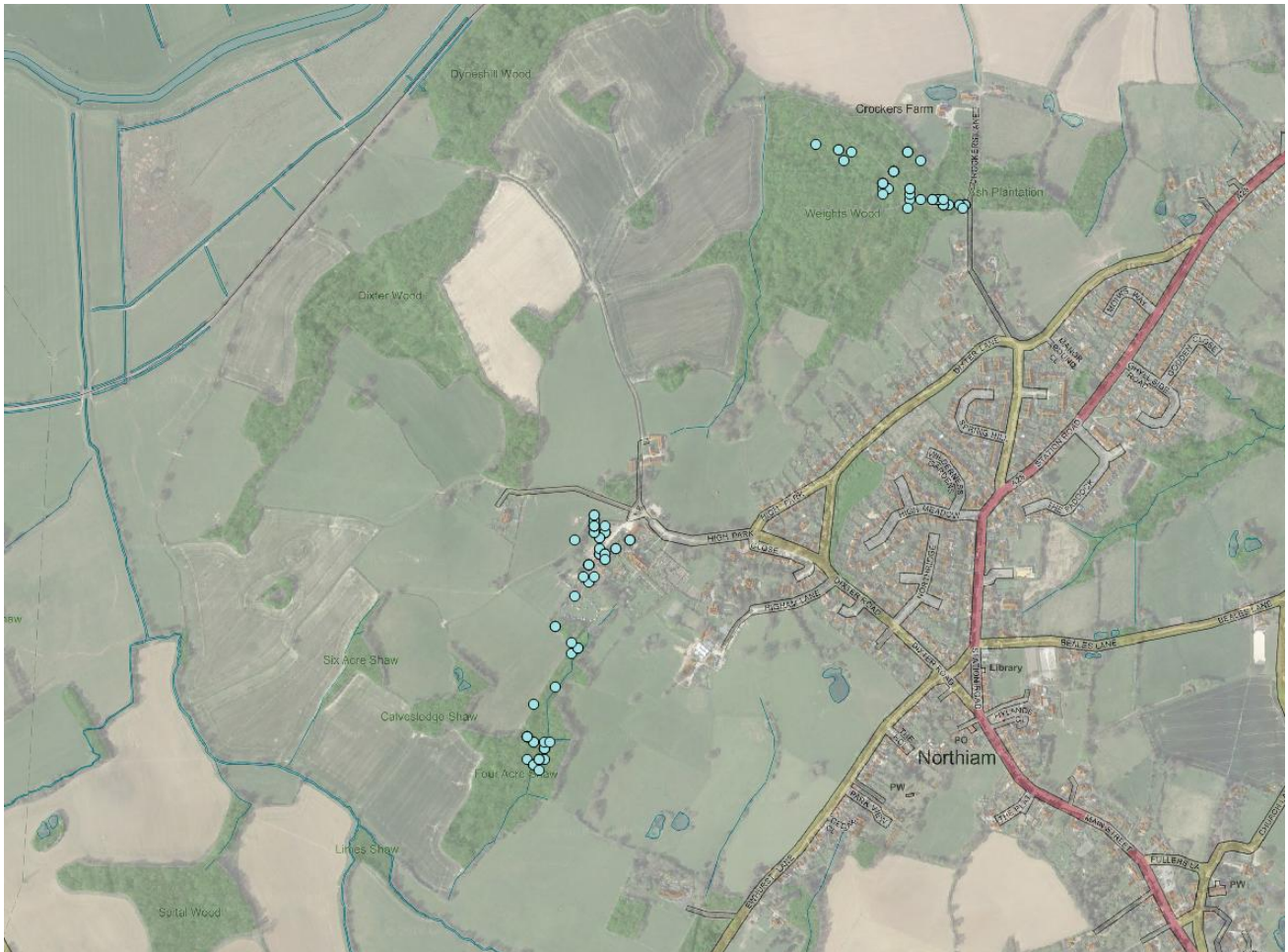
Great Dixter lies mostly in the tetrad TQ82C, with Weights Wood in the adjoining tetrad TQ82H. This area of the county has very few earlier records; the tetrad containing the main part of the estate had never been visited by a bryologist, and only a handful of records existed for Northiam churchyard and Great Goteley Wood in TQ82H.

2018 recording

One visit was made to the site on 14 March 2018 by Sue Rubinstein, Brad Scott, Jacqui Hutson, David Streeter and Luśka Mengham. The map below shows the recording areas within the two parts of the estate.

Further recording near the house and gardens would be desirable, and it would be prudent to investigate the more southerly end of Four Acre Shaw. Similarly, large parts of Weights Wood have not yet been surveyed, and the lower area would be worth visiting.

¹ Rose, F., Stern, R. C., Matcham, H. W., & Coppins, B. J. (1991). *Atlas of Sussex mosses, liverworts and lichens*. Brighton: Booth Museum of Natural History.



Species recorded

The species list below lists the plants observed in the order in which they were first observed in each of the two parts of the estate, with a note on their location. Indications of abundance are for that particular occurrence of the plant.

Species	Locality	Grid Ref	Habitat
Hypnum cupressiforme var. resupinatum	Great Dixter	TQ81902516	On tree in car park; occasional
Cryphaea heteromalla	Great Dixter	TQ81902516	Tree in car park; occasional
Orthotrichum affine	Great Dixter	TQ81902516	Tree in car park; occasional
Cololejeunea minutissima	Great Dixter	TQ81902516	Tree in car park; occasional
Frullania dilatata	Great Dixter	TQ81902516	Tree in car park; occasional
Metzgeria furcata	Great Dixter	TQ81902516	Tree in car park; occasional
Syntrichia laevipila	Great Dixter	TQ81892515	Tree in car park; rare
Ulota bruchii	Great Dixter	TQ81892515	Tree in car park; rare
Didymodon luridus	Great Dixter	TQ81882516	Path by car park; occasional
Barbula unguiculata	Great Dixter	TQ81882516	On path by car park; occasional
Orthotrichum lyellii	Great Dixter	TQ81882517	On Populus nigra hybrid; occasional
Bryum capillare	Great Dixter	TQ81882517	On Populus nigra hybrid; frequent
Zygodon conoideus var. conoideus	Great Dixter	TQ81882517	On Populus nigra hybrid; occasional

Species	Locality	Grid Ref	Habitat
Hypnum andoi	Great Dixter	TQ81882517	On Populus nigra hybrid; frequent
Bryum dichotomum	Great Dixter	TQ81882518	On tarmac by car park; occasional
Bryum argenteum	Great Dixter	TQ81882518	On tarmac by car park; occasional
Radula complanata	Great Dixter	TQ81882517	Tree in car park; occasional
Barbula convoluta var. convoluta	Great Dixter	TQ81882519	On soil in car park; frequent
Funaria hygrometrica	Great Dixter	TQ81882519	On soil in car park; occasional
Brachythecium albicans	Great Dixter	TQ81902517	Grassy edge of car park; occasional
Pseudocrossidium hornschuchianum	Great Dixter	TQ819251	Grassy edge of car park; occasional
Bryum dichotomum	Great Dixter	TQ819251	Grassy edge of car park; occasional
Didymodon insulanus	Great Dixter	TQ81892512	On soil on bank; frequent
Kindbergia praelonga	Great Dixter	TQ81892512	On soil on bank; common
Grimmia pulvinata	Great Dixter	TQ81892512	On roof tiles; common
Syntrichia montana var. montana	Great Dixter	TQ81892512	On outhouse; frequent
Plagiomnium undulatum	Great Dixter	TQ81892513	On soil on bank; occasional
Tortula muralis	Great Dixter	TQ818251	On brick; frequent
Oxyrrhynchium hians	Great Dixter	TQ81872510	In plant pot in nursery; frequent
Leptobryum pyriforme	Great Dixter	TQ81872510	In plant pot in nursery; frequent
Funaria hygrometrica	Great Dixter	TQ81872510	In plant pot in nursery; common
Amblystegium serpens var. serpens	Great Dixter	TQ81872510	In plant pot in nursery; frequent
Marchantia polymorpha subsp. ruderalis	Great Dixter	TQ81872510	In plant pot in nursery; abundant
Lunularia cruciata	Great Dixter	TQ81872510	In plant pot in nursery; common
Dicranoweisia cirrata	Great Dixter	TQ81872507	Old fence post; occasional
Didymodon sinuosus	Great Dixter	TQ81862508	On gravel in nursery; occasional
Bryum ruderale	Great Dixter	TQ818250	In cold frame; occasional
Campylopus introflexus	Great Dixter	TQ81882508	On roof; occasional
Tortula truncata	Great Dixter	TQ81812499	On soil at entrance to field; occasional
Bryum rubens	Great Dixter	TQ81812499	On soil at entrance to field; occasional
Rhytidiadelphus squarrosus	Great Dixter	TQ81772485	In pasture; common
Isothecium myosuroides var. myosuroides	Great Dixter: Four Acre Shaw	TQ81762479	Epiphyte; common
Thamnobryum alopecurum	Great Dixter: Four Acre Shaw	TQ81762479	Epiphyte; frequent
Isothecium alopecuroides	Great Dixter: Four Acre Shaw	TQ81762479	Epiphyte; occasional

Species	Locality	Grid Ref	Habitat
<i>Fissidens taxifolius</i> var. <i>taxifolius</i>	Great Dixter: Four Acre Shaw	TQ81772478	On soil; occasional
<i>Metzgeria furcata</i>	Great Dixter: Four Acre Shaw	TQ81772478	Epiphyte; frequent
<i>Microlejeunea ulicina</i>	Great Dixter: Four Acre Shaw	TQ81762479	Epiphyte; occasional
<i>Brachythecium rutabulum</i>	Great Dixter: Four Acre Shaw	TQ81762479	On fallen log; frequent
<i>Neckera complanata</i>	Great Dixter: Four Acre Shaw	TQ81762475	Epiphyte; occasional
<i>Atrichum undulatum</i> var. <i>undulatum</i>	Great Dixter: Four Acre Shaw	TQ81772474	On damp ground; frequent
<i>Conocephalum conicum</i>	Great Dixter: Four Acre Shaw	TQ81772474	On stream edge; frequent
<i>Pellia epiphylla</i>	Great Dixter: Four Acre Shaw	TQ81772474	On stream edge; common
<i>Mnium hornum</i>	Great Dixter: Four Acre Shaw	TQ81782473	On bank; frequent
<i>Plagiothecium succulentum</i>	Great Dixter: Four Acre Shaw	TQ81792475	On stream edge; occasional
<i>Cephalozia bicuspidata</i>	Great Dixter: Four Acre Shaw	TQ81782475	On vertical sandy bank by stream; common
<i>Calypogeia fissa</i>	Great Dixter: Four Acre Shaw	TQ81782475	On vertical sandy bank by stream; occasional
<i>Diplophyllum albicans</i>	Great Dixter: Four Acre Shaw	TQ81782475	On vertical sandy bank by stream; frequent
<i>Rhizomnium punctatum</i>	Great Dixter: Four Acre Shaw	TQ81782475	On stream edge; occasional
<i>Fissidens bryoides</i> var. <i>bryoides</i>	Great Dixter: Four Acre Shaw	TQ81792477	On stream edge; occasional
<i>Pseudotaxiphyllum elegans</i>	Great Dixter: Four Acre Shaw	TQ81792477	On bank by stream; occasional
<i>Oxyrrhynchium pumilum</i>	Great Dixter: Four Acre Shaw	TQ81792477	On bank by stream; rare
<i>Plagiochila porelloides</i>	Great Dixter: Four Acre Shaw	TQ81792477	On bank by stream; rare
<i>Homalia trichomanoides</i>	Great Dixter: Four Acre Shaw	TQ81792478	Epiphyte; occasional
<i>Plagiothecium nemorale</i>	Great Dixter: Four Acre Shaw	TQ81802478	On stream edge; occasional
<i>Dicranella heteromalla</i>	Great Dixter: Four Acre Shaw	TQ81812488	On bank; frequent
<i>Orthodontium lineare</i>	Great Dixter: Four Acre Shaw	TQ81842494	On stump; occasional
<i>Eurhynchium striatum</i>	Great Dixter: Four Acre Shaw	TQ81852495	Woodland floor; frequent
<i>Cirriphyllum piliferum</i>	Great Dixter: Four Acre Shaw	TQ81852495	Woodland floor; occasional
<i>Lophocolea bidentata</i>	Great Dixter: Four Acre Shaw	TQ81842496	On stump; occasional

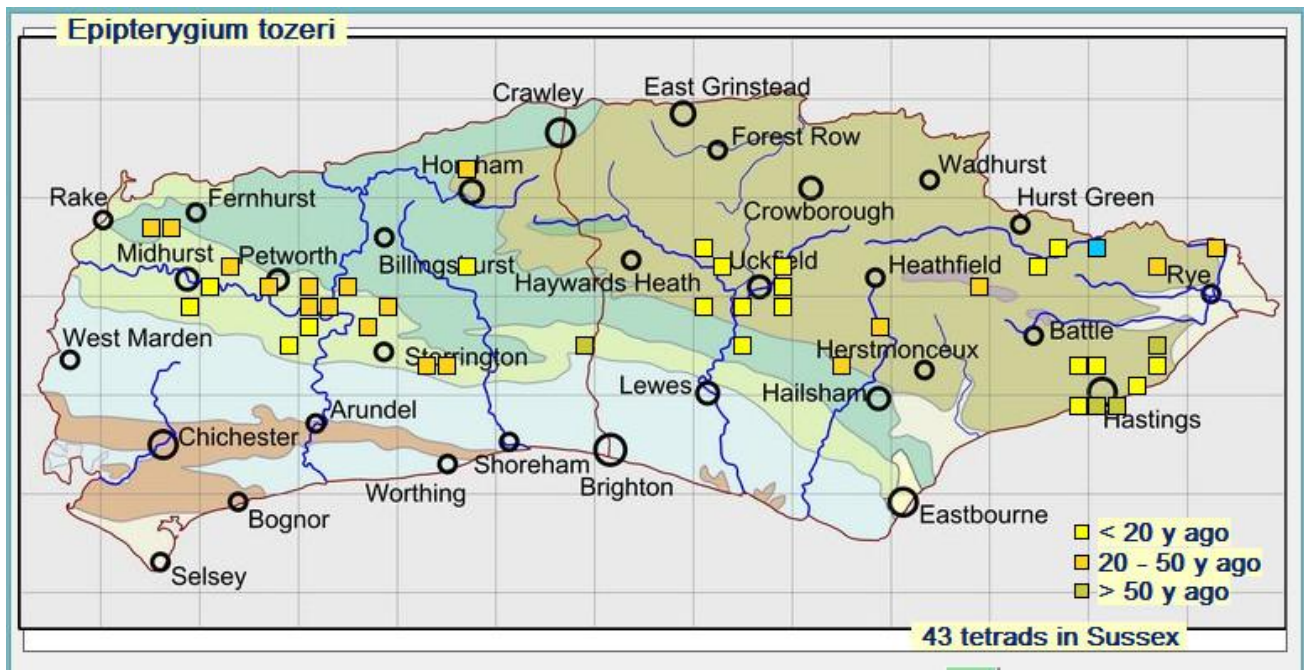
Species	Locality	Grid Ref	Habitat
Dicranoweisia cirrata	Great Dixter	TQ81902512	On wooden bench; occasional
Calliergonella cuspidata	Great Dixter	TQ81902512	In lawn in Yew Garden; occasional
Rhynchostegium confertum	Great Dixter	TQ819251	Base of Yew; occasional
Tortula truncata	Great Dixter	TQ81902511	In grass in Yew Garden; occasional, fruiting
Epipterygium tozeri	Great Dixter	TQ81902512	On soil on lawn border; occasional
Homalothecium sericeum	Great Dixter	TQ81902511	On brickwork; frequent
Didymodon vinealis	Great Dixter	TQ81922513	On mortar on steps; occasional
Bryoerythrophyllum recurvirostrum	Great Dixter	TQ81922513	On damp shady mortar on steps; rare
Syntrichia montana var. montana	Great Dixter	TQ81922513	On mortar on steps; occasional
Ceratodon purpureus	Weights Wood	TQ82552575	On soil by gate; occasional
Mnium hornum	Weights Wood	TQ82552575	On bank; common
Oxyrrhynchium hians	Weights Wood	TQ82552575	On bank; frequent
Kindbergia praelonga	Weights Wood	TQ82552575	On bank; common
Polytrichastrum formosum	Weights Wood	TQ82552575	On bank; common
Brachythecium rutabulum	Weights Wood	TQ82542575	On bank; frequent
Pellia epiphylla	Weights Wood	TQ82542575	On bank; frequent
Didymodon nicholsonii	Weights Wood	TQ82522575	On brick; occasional
Tortula muralis	Weights Wood	TQ82522575	On brick; occasional
Thuidium tamariscinum	Weights Wood	TQ82512575	Damp woodland floor; common
Dicranella heteromalla	Weights Wood	TQ82512575	On bank; frequent
Isothecium myosuroides var. myosuroides	Weights Wood	TQ82512575	Epiphyte; common
Campylopus introflexus	Weights Wood	TQ82512575	On bank; occasional
Calypogeia arguta	Weights Wood	TQ82512575	On bank; frequent
Cephalozia bicuspidata	Weights Wood	TQ82502576	On bank; frequent
Polytrichum juniperinum	Weights Wood	TQ82502576	On bank; occasional
Hypnum jutlandicum	Weights Wood	TQ82512576	On bank; occasional
Orthodontium lineare	Weights Wood	TQ82492576	On stump; frequent
Hypnum cupressiforme var. cupressiforme	Weights Wood	TQ82492576	On stump; frequent
Fissidens viridulus	Weights Wood	TQ82472576	Damp shady bank; occasional
Fissidens taxifolius var. taxifolius	Weights Wood	TQ82452576	On soil; frequent
Pseudotaxiphyllum elegans	Weights Wood	TQ82452577	On bank; occasional
Amblystegium serpens var. serpens	Weights Wood	TQ82402578	
Eurhynchium striatum	Weights Wood	TQ82452578	Woodland floor; frequent
Rhytidiadelphus squarrosus	Weights Wood	TQ82452578	Woodland floor; occasional
Pleuridium acuminatum	Weights Wood	TQ825257	On bank; occasional
Lophocolea bidentata	Weights Wood	TQ82422581	Damp stump by pond; frequent
Radula complanata	Weights Wood	TQ82422581	Epiphyte; frequent
Metzgeria furcata	Weights Wood	TQ82422581	Epiphyte; frequent
Hypnum cupressiforme var.	Weights Wood	TQ82422581	Epiphyte; frequent

Species	Locality	Grid Ref	Habitat
resupinatum			
<i>Cryphaea heteromalla</i>	Weights Wood	TQ82422581	Epiphyte; occasional
<i>Rhizomnium punctatum</i>	Weights Wood	TQ82422581	Damp stump by pond; occasional
<i>Cirriphyllum piliferum</i>	Weights Wood	TQ824258	Woodland floor; occasional
<i>Calliergonella cuspidata</i>	Weights Wood	TQ824258	Woodland floor; occasional
<i>Brachythecium rivulare</i>	Weights Wood	TQ824258	Woodland floor; occasional
<i>Frullania dilatata</i>	Weights Wood	TQ82412578	Epiphyte; frequent
<i>Hypnum andoi</i>	Weights Wood	TQ82402577	Epiphyte; occasional
<i>Tetraphis pellucida</i>	Weights Wood	TQ82402579	Damp stump by stream; rare
<i>Lophocolea heterophylla</i>	Weights Wood	TQ82402579	Damp stump by stream; frequent
<i>Plagiomnium undulatum</i>	Weights Wood	TQ82402579	Damp soil by stream; occasional
<i>Dicranoweisia cirrata</i>	Weights Wood	TQ82402579	Damp stump; occasional
<i>Zygodon conoideus</i> var. <i>conoideus</i>	Weights Wood	TQ824257	On Hornbeam; occasional
<i>Ulota bruchii</i>	Weights Wood	TQ82332583	Epiphyte; occasional
<i>Homalia trichomanoides</i>	Weights Wood	TQ823258	Epiphyte; occasional
<i>Cololejeunea minutissima</i>	Weights Wood	TQ82322585	Epiphyte; occasional
<i>Thamnobryum alopecurum</i>	Weights Wood	TQ82322585	Epiphyte; occasional
<i>Orthotrichum affine</i>	Weights Wood	TQ82282586	Epiphyte; occasional
<i>Plagiothecium succulentum</i>	Weights Wood	TQ82472583	Damp wood; occasional

Discussion

In total, 85 taxa were recorded across the two parts of the estate, which is a good number for a Wealden site, though there are undoubtedly more that could easily be present on the estate, including some common species. The main part of the estate in TQ82C contained 72 taxa, and Weights Wood in TQ82H had 48 recorded in it. Wealden tetrads typically have 60-100 taxa within them, with some areas with very rich and diverse habitats hosting 150 or more. Considering the small proportion of each tetrad that the Great Dixter estates make up, the bryophyte diversity is fairly good, and the species are typical for the Weald. The greater number of species recorded at the main part of the estate compared with Weights Wood is due to the wider range of habitats in the former, which included species of tarmac, roofs and gardens. A few common species were not recorded, which suggests that there is still scope for further surveying on the estate.

A reasonable range of species was recorded in the car park and nursery areas, together with several epiphytes. The ghyll stream in Four Acre Shaw was home to a good range of the species that you would expect to find in such a habitat. The most interesting find was of *Epipterygium tozeri* on the vertical bare soil on one of the lawn borders. In Britain it is mainly in the south-west and in the southern counties.



Distribution of *Epipterygium tozeri* in Sussex

The species in Weights Wood were relatively uniform with some variety in and around the wetter areas and along the ride.

Relatively few ruderal species were found, and the pasture area was very sparse in bryophytes; scrapes, bare soil and nutrient reduction would certainly facilitate the colonisation of other species.

A blog of the visit is available at: <https://sussexbryophytes.wordpress.com/2018/03/16/the-bryophytes-of-great-dexter/>