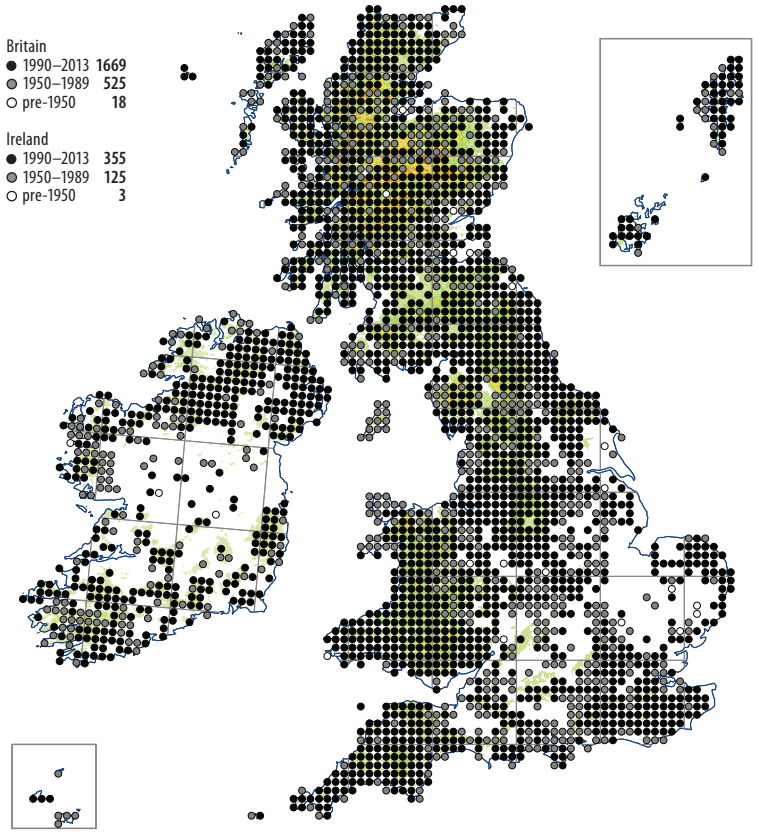
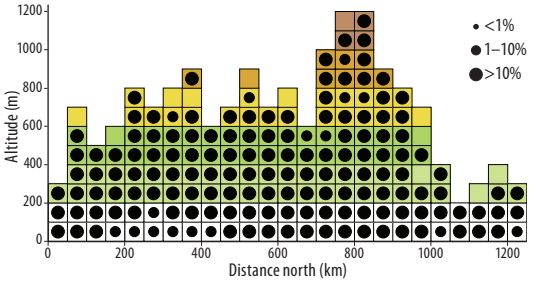
Pellia epiphylla



A calcifuge forming extensive sheets on moist or wet soil and acid rock outcrops, particularly on base-poor, somewhat peaty ground, although not usually directly on peat. It grows on the banks of streams, rivers and ditches, but is also common on the ground in woods and in open wetlands. Large patches often occur on lane banks in the north and west, particularly on acid clay and leached loams. Regular associates include *Calypogeia arguta*, *C. fissa*, *Cephalozia bicuspidata*, *Dicranella heteromalla*, *Fissidens bryoides* and *Hyocomium armoricum*. Altitudinal range: 5–900 m.

There has been a declining trend in records of *P. epiphylla* both in upland and lowland regions of Britain since the 1980s. It is possible that this decline in records results from an increased reluctance to assign non-fertile populations of *Pellia* to species, but the decline is not as distinct in the other two *Pellia* species and it is therefore more likely to be genuine.



Monoicous and nearly always fertile; sporophytes are common, February to May. Without special means of asexual reproduction.

Some populations on peaty loch margins in Scotland have been separated as *Pellia borealis*. These are morphologically indistinguishable from *P. epiphylla* but are cytologically distinct, being diploid rather than haploid. There is strong chromosomal evidence (Newton, 1986) to suggest that *Pellia epiphylla* and *P. borealis* are genetically isolated, and have been so for a considerable period. Biochemical studies (Odrzykoski *et al.*, 1996) indicate that *P. borealis* arose as a hybrid between two sibling species in the genetically diverse *P. epiphylla* complex.

Circumpolar Boreo-temperate. Widespread in temperate Europe, Asia and N America, south to the N African mountains, Himalaya and Texas.

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