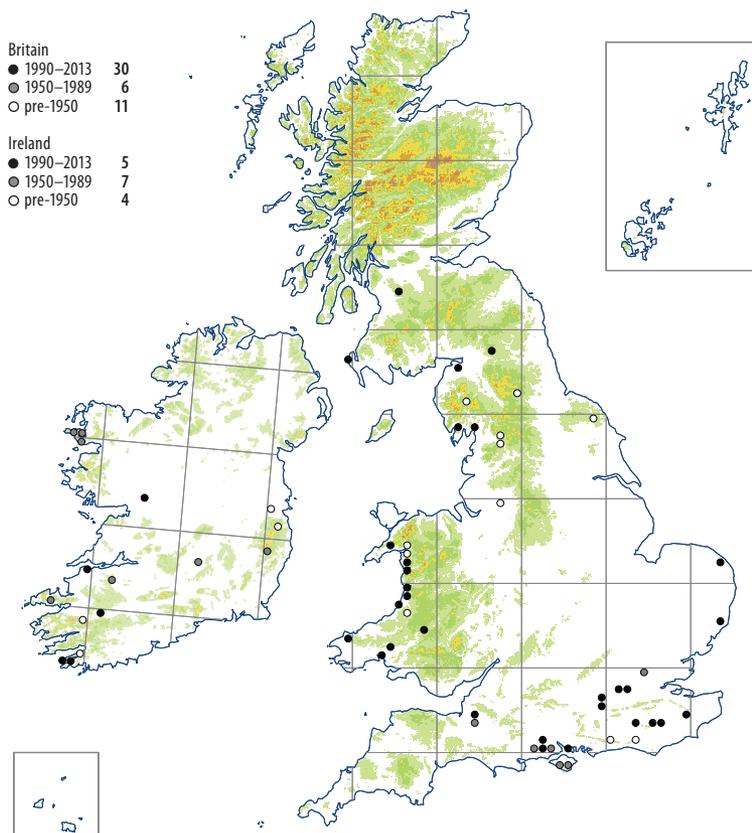


Pallavicinia lyellii



A species with two distinct habitats in Britain and Ireland. In SE England it grows on moist, shaded sandstone rocks, associated with *Calyptogeia* spp., *Conocephalum conicum*, *Kurzia sylvatica*, *Pellia epiphylla* and *Tetraphis pellucida*, and on sandy or peaty streambanks in woodland. Elsewhere it is found among tussocky *Molinia* in the lagg zone of bogs, extending on to the bog dome in cuttings and ditches; there is also a single record from tussocks of *Carex paniculata* (Turner, 2002). Most of these bog sites are deeply shaded and have sparse associates, such as *Calyptogeia muelleriana*, *Cephalozia bicuspidata* and species of *Campylopus* and *Sphagnum*. Mowing of tussocky *Molinia* has been found to cause substantial declines in *Pallavicinia* (Bosanquet, 2012c). Altitudinal range: 0–475 m.

Declines have been noted at a number of English sites, some of which have lost *Pallavicinia* entirely. Some Irish populations are believed to have been lost to coniferisation of bog land (Lockhart *et al.*, 2012), although recent finds of small colonies in remnant patches of *Molinia* within plantations suggests a degree of resilience. Better understanding of the habitat of this species since the 1991–1994 Atlas has revealed the first Scottish colonies and at least 11 new sites in Wales.

Diocious; sporophytes are rare, May. Some colonies are unisexual. Specialised methods of vegetative dispersal are absent.

At Silwood Park, Berkshire, Bates (1993b) showed that growth of *Pallavicinia* was restricted to the summer months whereas the accompanying *Pellia epiphylla* grew throughout the year. However, *Pallavicinia* was able to persist in the mixed colony by exploiting drier microhabitats.

Suboceanic Southern-temperate. Widely distributed in Europe from southern Scandinavia to the Azores. Asia; eastern N America; Caribbean; S America; Africa; Oceania. Notably rarer in Britain than in other parts of its world range. In eastern N America it is a common plant of wet hollows in woodlands.

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