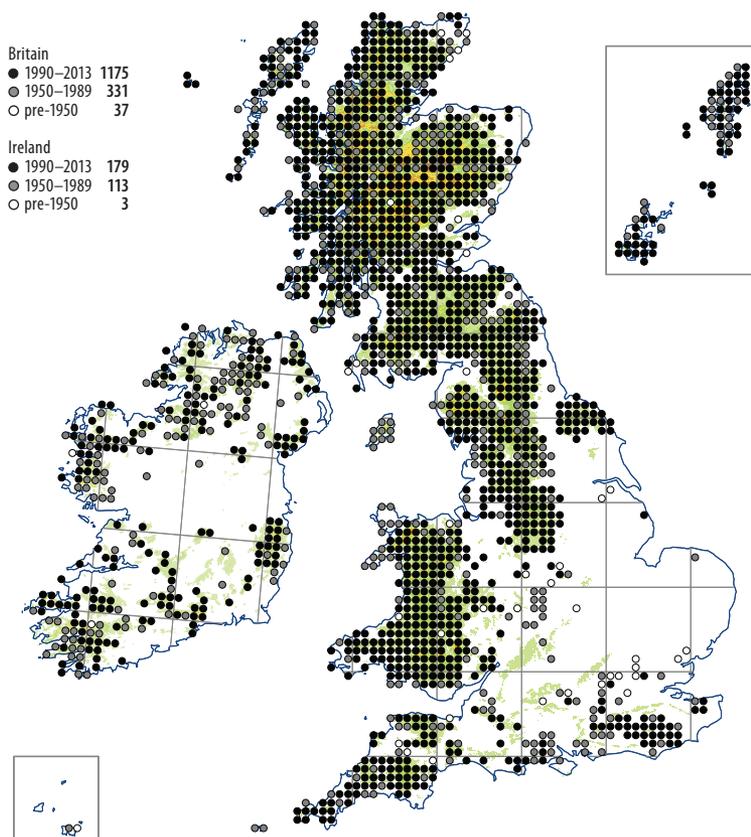


## Scapania undulata



THE most widespread and abundant member of the genus in Britain and Ireland, its occupation of a very diverse range of habitats mirrors its phenotypic plasticity and variability. At lower altitudes it is a plant of constantly or intermittently moist places, especially damp sand, gravel, and boulders by streams, both in open situations and in woodlands; also on moist disturbed soil or gravel in old quarries, by woodland tracks and ditches, in seepages on rock faces and on damp rotten logs in wooded ravines. In the uplands more robust phenotypes are common, particularly in flushes, streams and springs, with *Nardia compressa*, *Scapania uliginosa*, *Philonotis fontana*, *Pohlia wahlenbergii* var. *glacialis*, *Sarmentypnum sarmentosum* and *Scorpidium revolvens*. On wet gravelly ground and streamsides, frequent associates include *Blasia pusilla*, *Marsupella emarginata*, *Scapania subalpina* and *Dichodontium pellucidum*. It is

recorded at depths of 12–15 m in a high-altitude Scottish loch (Light & Lewis Smith, 1976). It is tolerant of heavy metal pollution and plants in streams are known to bioaccumulate metals (McLean & Jones, 1975; Vincent *et al.*, 2001). Although not exclusively calcifuge, it is rarer on basic substrates. Altitudinal range: 0–1150 m.

The last East Anglian record was made in 1966, and the 19th and 20th century loss of heathland populations around London is likely to have continued in other parts of lowland England.

Dioicous; perianths and sporophytes are common; gemmae are very common.

Morphologically variable and potentially confused with many other *Scapania* species, but unlikely to be significantly over-recorded because it is such a common and catholic species.

European Boreo-temperate. Frequent through most of Europe, commoner in the mountains and towards the north and west, rare in the east and Mediterranean region, but south to the Iberian Peninsula, Balkans and Macaronesia, north to Faeroes and Iceland. Turkey, northern and eastern Asia; N Africa; N America, Greenland.

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