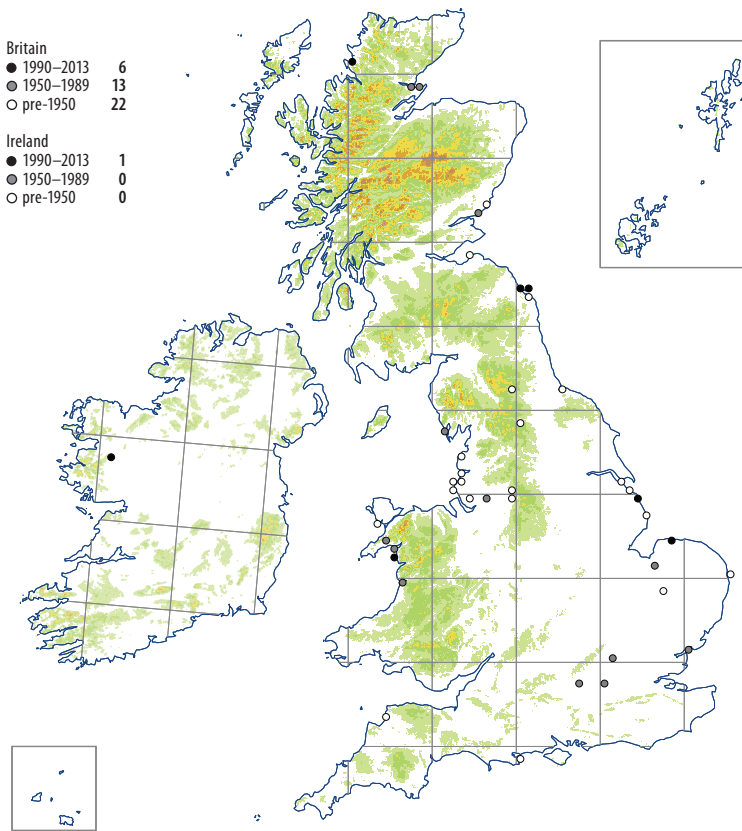


Bryum knowltonii



A rare moss that grows in unshaded basic places, often in coastal localities. Recent records are from open foredune slacks, the sandy uppermost edges of saltmarshes, and limestone boulders in the inundation zone of an Irish lake. There are also a few records from habitats created or disturbed by human activity, e.g. in gravel/sand pits, quarries and on railway ballast. Altitudinal range: 0–65 m.

Synocous; capsules are common, mature in late spring and in autumn. Bulbils, axillary gemmae and tubers are absent; protonemal gemmae are produced in culture (Pressel *et al.*, 2007).

The status of *B. knowltonii* as a distinct species is supported by molecular data (Bell *et al.*, 2013).

Targeted surveys of coastal *Bryum* in England, Wales and Ireland from 1999–2009 produced very few new records of *B. knowltonii* and failed to re-find it at several of the old sites. Hence there is evidence that it has declined, probably from habitat loss. However, it is likely that some of the old records represented only temporary occurrences as a casual in disturbed habitats.

European Boreal-Montane. Widespread in N Europe from Iceland and Svalbard southwards to N France, Germany and Switzerland. Known elsewhere in Siberia, Himalaya, the Russian Far East, Greenland, Alaska and Canada.

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