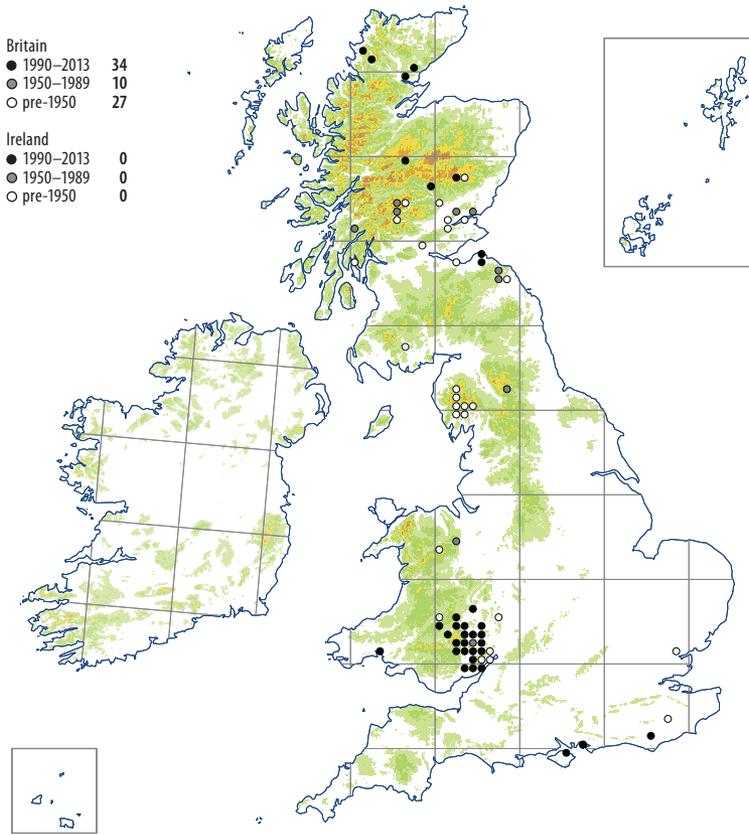


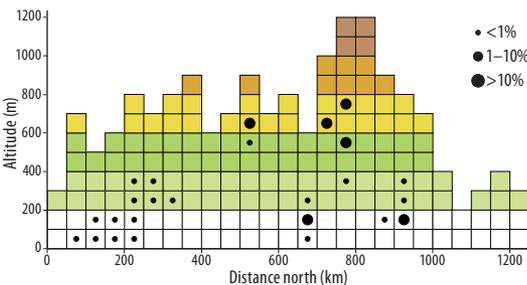
Grimmia ovalis



This species forms cushions on usually dry, ultra-basic to neutral igneous rocks, especially basalt and dolerite but also on gneiss, normally with exposed south-facing aspects. In the north of Britain it occurs on crags, on outcrops at and near hilltops, in disused quarries, in block scree and boulder fields, on slabs by rivers and on lake margins, and more rarely on vertical cliffs with some water seepage (in Scandinavia it grows most abundantly on rock over which water trickles). Associated species include *Antitrichia curtipendula*, *Bryoerythrophyllum ferruginascens*, *Hedwigia integrifolia*, *Homalothecium sericeum* and *Orthotrichum rupestre*. However, its stronghold in Britain, in the Welsh Marches, is provided by south-facing Old Red Sandstone roof tiles, particularly on churches and old farm buildings, growing with *Grimmia laevigata*, *Hedwigia ciliata* and *Syntrichia montana*. Its few occurrences in

southern England are also from roof tiles. Altitudinal range: 10–500 m.

In the 1991–1994 Atlas, it was suggested that *G. ovalis* was decreasing; this is possibly so in some parts of Britain, as in the English Lake District, but it could simply be due to lack of recent field work. Dierßen (2001) has linked a decline in Europe to atmospheric pollution. However, since the early 2000s it has become apparent that the British stronghold of *G. ovalis* is on roof tiles in the Welsh Marches, particularly in Herefordshire (Sleath, 2001) and Monmouthshire, where it is often present in some abundance. However, even in this stronghold the species is likely to have declined substantially in recent years as many buildings have been re-roofed with unsuitable slate or artificial tiles, and others have had their tiles cleaned and replaced (Bosanquet, 2003a). The apparent increasing trend might mask a real decline.



Dioicous; capsules are rare, mature in spring.

Circumpolar Boreo-temperate. In Europe widely distributed throughout the montane regions, from Fennoscandia to the Iberian Peninsula, the Mediterranean hills and mountains, east to the Balkans and European Russia. Macaronesia, N Africa, SW Asia, Georgia to Kazakhstan and Kyrgyzstan, Himalaya, S Siberia, Russian Far East. N America, C America (Guatemala). E Africa. New Zealand, as *G. wilsonii* Greven (Maier, 2010).

A.J.E. Smith, rev. R.D. Porley