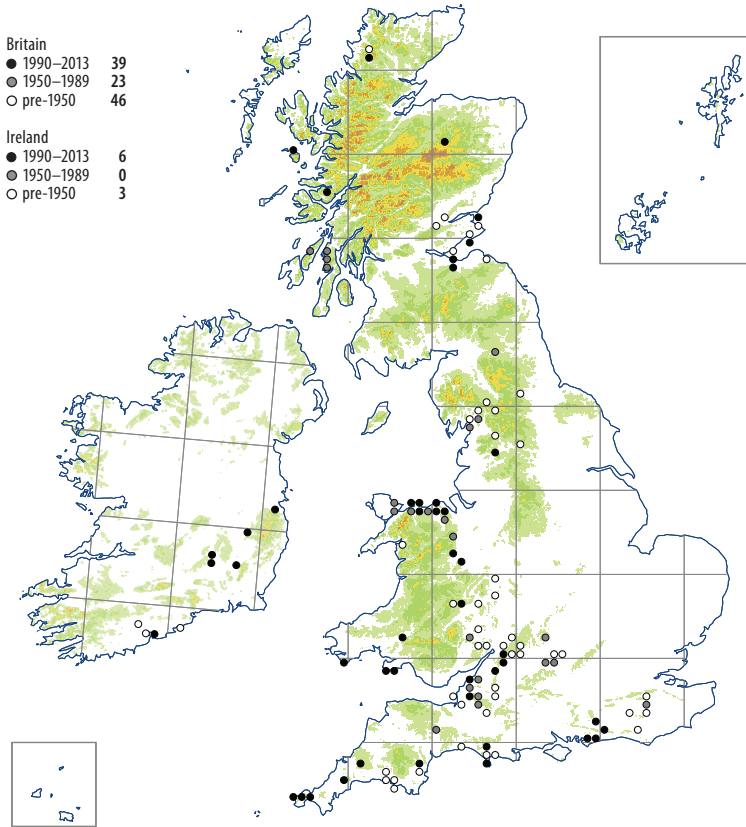


# Grimmia orbicularis



This thermophilous species forms hoary cushions on dry exposed rocks, especially Carboniferous Limestone, and on base-rich igneous rocks such as basalt in the north of Britain. It is typical of sunny rock outcrops on grassy hillsides and on crags. It is also found on stonework (all recent records from Ireland are on masonry), including wall tops and on mortar, on bridges, weathered concrete and walls by the sea and more rarely on Cotswold limestone roof tiles. It may be locally common or abundant and is frequently associated with *Grimmia pulvinata*. Other associates include *Homalothecium sericeum*, *Orthotrichum anomalum*, *Schistidium crassipilum*, *Tortula muralis* and *Trichostomum brachydontium*. It is sometimes associated with rocks suspected to have a high heavy-metal content, for example in N Wales (Hill, 1988). Altitudinal range: 0–390 m.

The large proportion of older records in Britain suggests a declining species, possibly due to the impact of air pollution, a trend also seen in other parts of Europe (Dierßen, 2001). The losses have been offset by some new records, especially in Ireland, reversing the overall trend.

Autoicous; capsules are abundant, mature in spring.

Submediterranean-Subatlantic. A widely distributed species, particularly in the warmer parts of the world. From the Mediterranean region north to the Netherlands, Germany and Poland where it becomes more scattered. Macaronesia, N Africa. Turkey, SW Asia, Caucasus, C Asia including China. Western N America, Mexico, S America (Uruguay). Southern Africa. Australia and New Zealand.

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