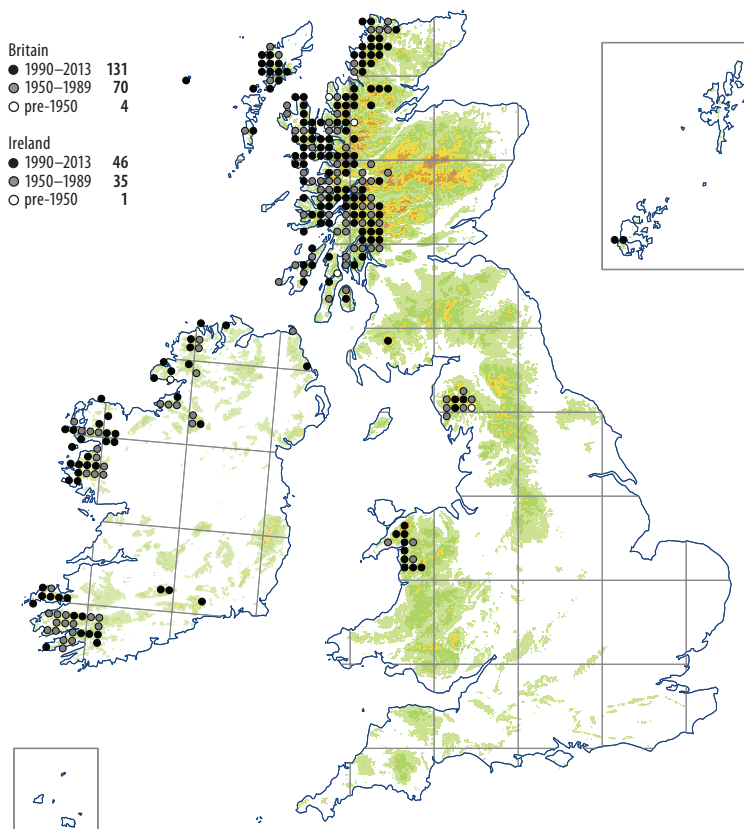


# Herbertus hutchinsiae



Most frequent in oligotrophic dwarf-shrub communities on steep, well-drained, block-strewn slopes in north- or east-facing corries and on shaded acid or mildly basic cliff ledges, where it grows in dense pure cushions or mixed with other large liverworts, including *Anastrepta orcadensis*, *Bazzania tricrenata*, *Plagiochila spinulosa*, *Pleurozia purpurea*, *Scapania gracilis*, and, more rarely, *Mastigophora woodsii* and *Plagiochila carringtonii*. It also occurs in more open habitats such as stable north-facing block screes, and ledges by waterfalls. In western Scotland, it descends to near sea level on ledges in wooded ravines, on boulders and cliffs in rocky birch woods, amongst dwarf shrubs on shaded humus banks, and on steep north- or east-facing slopes. It does not grow in areas of late snow-lie, so there are no localities in the eastern Highlands. Although widely distributed in Britain and Ireland and locally abundant, its distribution at a local

scale is curiously patchy; it is absent from several seemingly suitable hills. Altitudinal range: 15–900 m.

Burning and overgrazing have reduced the abundance of *Herbertus hutchinsiae* in some areas, notably the Twelve Bens of Connemara (Long, 2010). However, its cover is also reduced when grazing by large herbivores is prevented by exclosures (Moore *et al.*, 2014).

Dioicous; only female plants occur in Britain and Ireland; perianths are rare. It can reproduce from vegetative fragments (Flagmeier *et al.*, 2013).

Shetland records resulted from confusion with *H. norenius*; otherwise it is not difficult to identify.

Oceanic Boreal-montane. Outside Britain and Ireland it occurs very rarely in western Norway. It was formerly treated (e.g. by Hill *et al.*, 2008) as a subsp. of *H. aduncus*, along with subsp. *aduncus* (Alaska and British Columbia) and subsp. *tenuis* (eastern N America). Molecular evidence suggests that all three taxa are best treated as species (Bell *et al.*, 2012).

H.J.B. Birks & D.A. Ratcliffe, rev. S.D.S. Bosanquet

