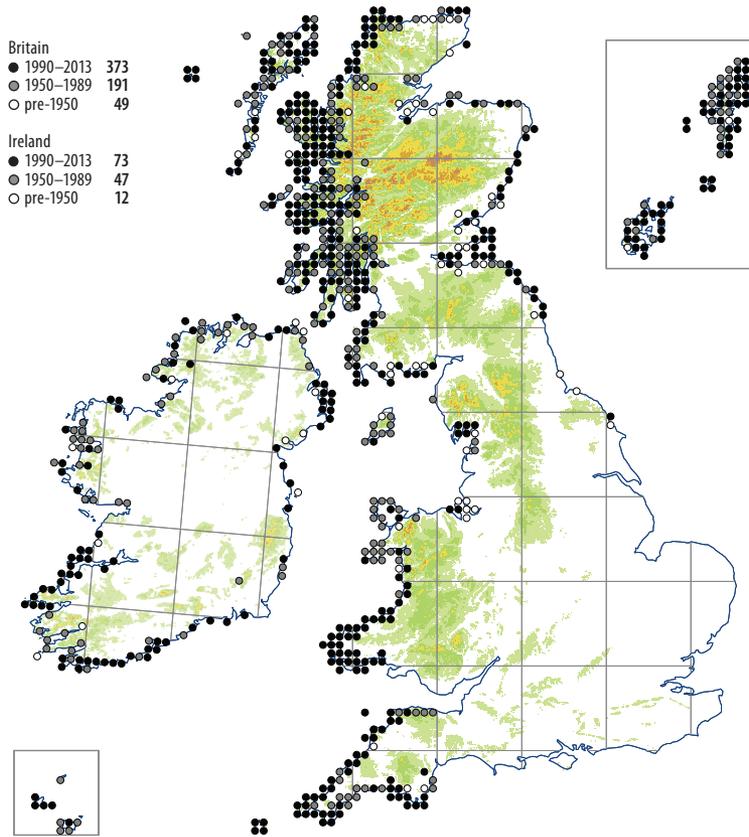


Schistidium maritimum subsp. *maritimum*



This is the most markedly maritime moss in the flora of Britain and Ireland. It is common and locally abundant in dry or periodically moist crevices and ledges of boulders, rocks and sea cliffs above the main *Xanthoria parietina* zone but well within the normal extent of sea spray. The zone occupied varies according to the degree of exposure of the site; it can extend to 245 m on the exposed western sea cliffs of Skye and Achill Island and it reaches 280 m on Hirta. Common associates in exposed situations include *Armeria maritima*, *Sedum anglicum*, *Ulota phyllantha* and *Ramalina* spp., whereas in sheltered areas and crevices they are *Asplenium marinum* and *Trichostomum brachydontium*. It also occurs as a low-growing non-fertile form in closed but grazed upper saltmarsh turf, with *Carex extensa*, *Festuca rubra*, *Glaux maritima*, *Juncus gerardii* and *Plantago maritima*. It is seemingly indifferent to rock type except that it is

very rare on limestone. It is strictly coastal, not normally extending more than 100 m or so inland along streams and inlets, although it can be found a kilometre or more inland on estuaries. Bates (2004) reports that it is able to survive in saline habitats because it possesses cell membranes that are impermeable to external solutes in seawater. However this puts the moss at risk of osmotic water loss and it therefore benefits from the availability of freshwater through rain or seepage. This probably explains why it becomes rare in southern regions and is absent from warmer, drier niches. Altitudinal range: 0–280 m.

Autoicous; capsules are common, mature winter to early spring.

Oceanic Boreo-temperate. Coasts of N and W Europe south to France and east to northern European Russia. Russian Far East, Japan. Aleutian Islands, eastern and western N America, Greenland.

H.J.B. Birks, rev. T.L. Blockeel

