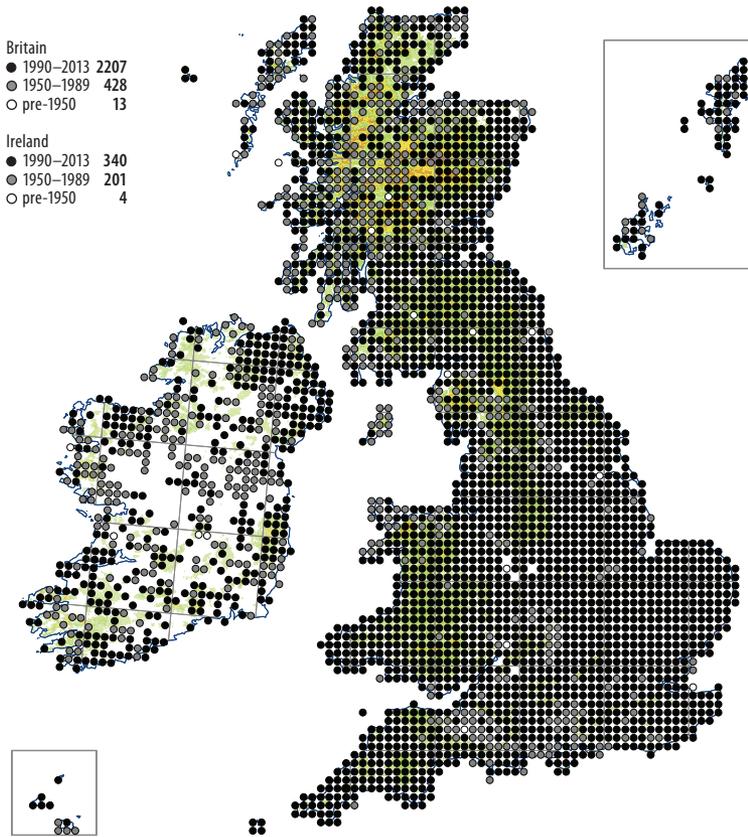


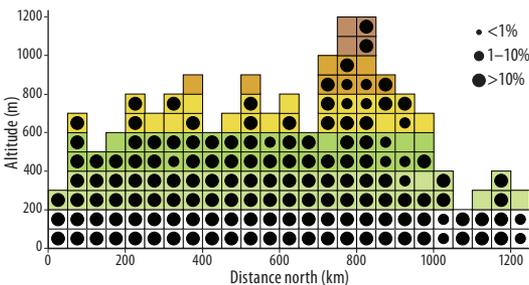
Ceratodon purpureus



A pioneer of open or disturbed, base-poor, usually dry substrates. It is often abundant on peaty or sandy soil in moorlands, heathlands and acid grasslands, on rocky and peaty banks, shingle beaches, leached sand dunes, in sand and gravel pits and on spoil heaps, in arable fields and on railway ballast. It also grows in woodland rides and gardens, on walls and roofs, the flat tops of fence-posts, decaying thatch and wood, and as an epiphyte on bark, especially of elder and willow. Small tufts can turn up on almost any base-poor substrate, from old bracket fungi to decaying boots. *Ceratodon purpureus* responds to nutrient-enrichment, and is often luxuriant on burnt ground and around rabbit warrens. It is pollution-tolerant, extending into the centre of industrial conurbations, and it is a common colonist of old tarmac. Altitudinal range: 0–1340 m.

Although it is still a very common species, the records show a declining trend since 1990 in polluted areas. This may be due in part to the disappearance of once common habitats such as cinder paths, but lower SO₂ levels have probably reduced the extent of suitable habitat, especially on bark and in rural areas with basic soils.

Dioicous; capsules are frequent and locally abundant, mature in spring and early summer. Vegetative reproduction occurs by gemmae both on the protonema around young colonies (Duckett *et al.*, 1998) and on axillary rhizoids (Imura & Kanda, 1986); unspecified gemmae are reported from plants growing on trees in Oxfordshire (Killick *et al.*, 1998). Reports of rhizoidal tubers are probably erroneous. *C. purpureus* was one of the species found by Heinken *et al.* (2001) to be transported in the fur and hooves of deer and wild boar in forests in Germany.



Circumpolar Wide-boreal. Throughout Europe, from the melting glaciers of the Arctic southwards, but absent from some parts of the arid Mediterranean lowlands. Macaronesia and N Africa. Near East. *C. purpureus* in the broad sense (including the tropical *C. stenocarpus* Bruch & Schimp.) has a subcosmopolitan distribution, being common in the temperate zones of both hemispheres, but mostly montane in the tropics.

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