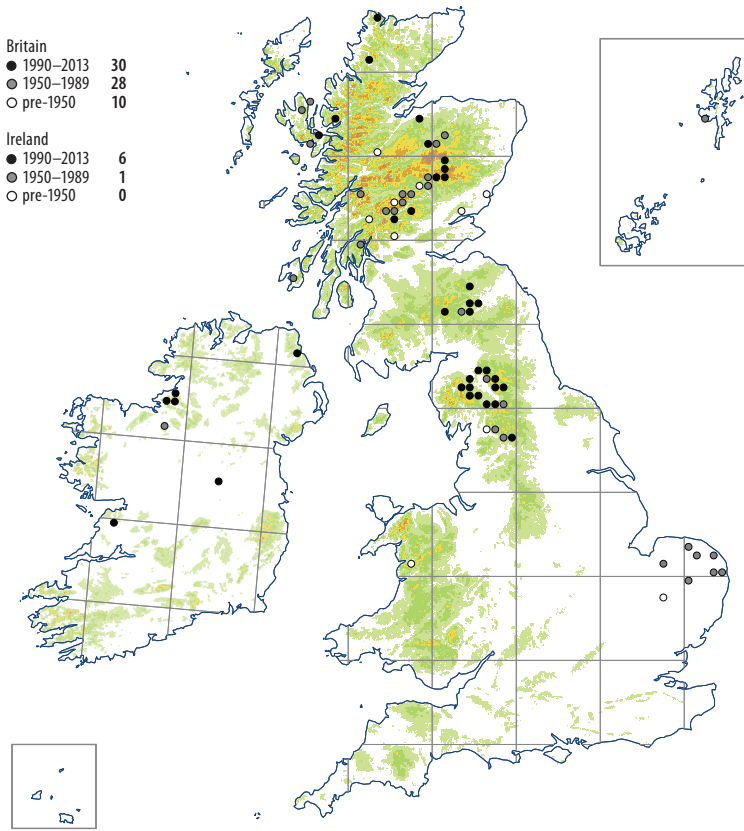


Cinclidium stygium



A rich-fen species of calcareous but nutrient-poor mires, occurring both in lowland calcareous fens and in upland flushes and turfy seepages. It favours low, open lawns, including stony and sedge-rich flushes, but may persist in taller vegetation, for example among bog-bean (*Menyanthes*) in fens. It has also been recorded from loch margins, growing in turf and sometimes extending into *Salix* carr. Many of its sites, especially in the Pennines and in Ireland, are over limestone, but it occurs on many other strata, including mica-schist and basalt, where there is sufficiently basic water. In fens it may be associated with other large mire species, including *Calliergon giganteum*, *Campylium stellatum*, *Scorpidium cossonii* and *S. scorpioides*; in flushes it may also occur with *Preissia quadrata* and *Leiocolea* spp. Altitudinal range: 10–970 m.

It was first found in Britain near Malham Tarn in Yorkshire by John Nowell in 1836, and still occurs there. It is a boreal and low-arctic species that was more widespread in Late Glacial times. Like many other boreal mire species, it is in continuing decline and has been lost from many sites, especially in the lowlands. The last record from Wales was in 1939 and the last from East Anglia in 1994 (although the latter record in hectad TG32 came to light too late to be plotted as post-1990 on the map). Lack of grazing and the growth of rank vegetation may be a problem at some sites, but it can persist among tall vegetation; eutrophication is a more serious threat, and may itself contribute to the growth of coarse competitors.

Synicous; capsules are uncommon, mature in summer.

Circumpolar Boreal-montane. From Iceland, Svalbard and Arctic Russia south to the Alps, Ukraine and Romania. Widespread across Asia, especially in the Arctic and Boreal zones, south to China (Yunnan), Japan. N America south to Wyoming, Greenland. Southernmost S America.

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