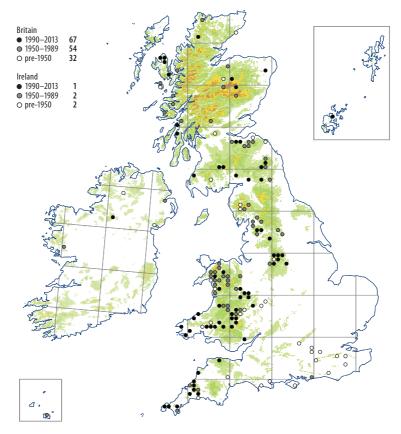
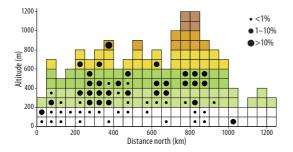
## Philonotis arnellii



Mainly a species of damp ground, growing on slightly acid to slightly basic non-calcareous soil and rock crevices in situations that are not permanently wet but where intermittently flushed or flooded, or where the ground is kept open by slippage. It occurs in a very wide range of habitats, including woodland rides, heathy tracks, earthy banks, streamsides, mud beside reservoirs, floors of quarries, and basic mountain cliffs – it has been found on soil on a limestone ledge in Scotland and on sandstone in a gully in Wales. It is especially characteristic of crumbling earth on roadside or riverside rock faces and rocky banks in light shade, where it typically occurs in rather small quantity. It has been recorded with an extensive variety of common bryophytes, including Calypogeia fissa, Pellia epiphylla, Scapania scandica, Brachythecium rutabulum, Didymodon spp, Fissidens bryoides, Kindbergia praelonga, Mnium hornum,



Pohlia annotina, Rhytidiadelphus squarrosus and Trichodon cylindricus. Its associates in the draw-down zone of reservoirs include Archidium alternifolium, Bryum dichotomum, B. klinggraeffii, B. tenuisetum, Dichodontium palustre, Dicranella staphylina, Drepanocladus aduncus, Ephemerum serratum, Pohlia camptotrachela and Pseudephemerum nitidum. Altitudinal range: 5–710 m.

Dioicous; capsules are very rare. Axillary flagelliform shoots are produced in the leaf axils.

European temperate. Widespread in Europe north to Iceland, S Scandinavia, Arctic Russia and the northern Urals, montane in the south. Macaronesia, N Africa. Turkey, Israel, Iran, Yakutia, NE Asia. Western and eastern N America, Greenland.

M.O. Hill, rev. N.G. Hodgetts