## Calliergonella cuspidata Pointed Spear-moss

Key 339, 344, 355



Identification One of our commonest and most recognizable mosses. It is medium-sized and grows mixed with other bryophytes, or it forms green, yellow-green or occasionally orangebrown patches. Shoots are commonly 3-8 cm long, but sometimes more. The main stem is usually erect and has side branches that are more or less pinnately arranged. the whole shoot having a flattened appearance. The most distinctive field character is the shape of the shoot and branch tips: the leaves are closely rolled-up to form a smooth needle-like or spear-like point. Stem leaves are usually 2–2.5 mm long, narrowly egg-shaped, never curved, bluntly rounded at the tip, and with a short, double nerve. They have a strongly differentiated, colourless patch of cells in the basal corners. Branch leaves are smaller, but otherwise similar to the stem leaves.

Similar species Few other mosses combine the pointed shoot tip and pinnate branching with the lack of a nerve. Pleurozium schreberi (p. 815) is similar, but differs in its red stems (most conspicuous when moist). C. cuspidata may have reddish stems, but has colourless rather than the opaque patches of cells found at the base of the leaf in P. schreberi. Also, the shoot tip is rarely so finely pointed as in C. cuspidata. Calliergon cordifolium (p. 719) and weak forms of C. giganteum (p. 718) can be distinguished immediately by the leaves with a long single nerve. Warnstorfia sarmentosa (p. 715) nearly always develops red colours and the leaves have a single nerve. Entodon concinnus (p. 774) has stouter branches and a bluntly pointed shoot tip, and the patches of cells at the leaf base are much less distinct. It is often tinged golden brown, whereas most forms of *C. cuspidata* are pale green with rather translucent leaves.

Habitat C. cuspidata is common in moist, base-rich habitats, such as marshes, mires and flushes, in grassland, and among rocks. On some soils, for example clay, it frequently occurs in lawns. It also occurs in relatively dry places in calcareous habitats, such as chalk and limestone grassland.