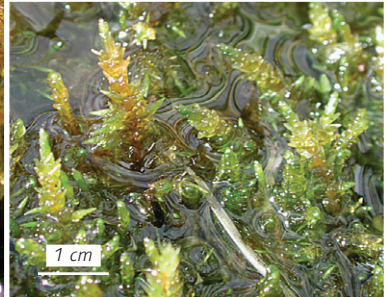
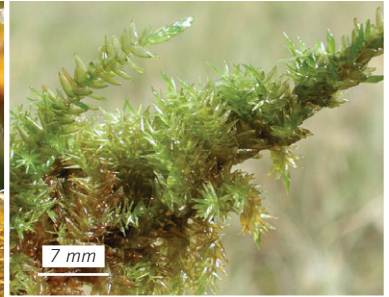
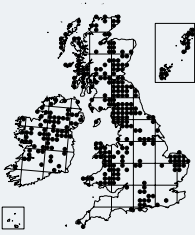


*Calliergon giganteum*

Giant Spear-moss



**Identification** Typical forms of this rather robust moss have distinctive shoots shaped like a Christmas (spruce) tree, i.e. the stems are erect with short side branches spreading in all directions. The shoots may reach 15 cm long or more, and are green or brownish. Stem leaves are 2–3 mm long, triangularly egg-shaped, and blunt at the tip. A rather strong nerve reaches the leaf tip. Stem leaves have large, abruptly differentiated, patches of colourless cells which extend across the whole of the leaf base. These can be seen with a hand lens (but it may be necessary to pull off some of the branches to get a clear view of the leaf base). Branch leaves are smaller and narrower. Capsules are rare.

**Similar species** *C. giganteum* is likely to be confused with few other species because of the distinctive, tree-like shoots, combined with the habitat of wet, calcareous ground. *C. cordifolium* (p. 719) has fewer, but longer branches, lacks the tree-like growth form, and has gradually differentiated patches of cells in the leaf base, which are therefore less conspicuous than in *C. giganteum*. Weakly branched forms may resemble *Calliergonella cuspidata* (p. 797), but are distinguished by the long, single nerve. Also, *Calliergonella cuspidata* has branches all in one plane, so that its shoots are flattened.

**Habitat** *C. giganteum* is uncommon in wet, calcareous fens and flushes, usually with its feet in water.