**Polytrichastrum alpinum**

*Polytrichum alpinum, Pogonatum alpinum*

Alpine Haircap

**Identification**  
*P. alpinum* is a medium-sized species, with shoots of generally 4–10 cm length, forming open, spreading, prostrate to erect patches and tufts. The shoots are almost invariably branched with narrowly divergent branches. The leaves are up to 1 cm long, straight or somewhat recurved when moist, arising from a brownish-yellow sheathing base, and flatten themselves to the stem on drying. The margins are weakly toothed, with short teeth consisting of 1–3 cells. The 30–40 ridges of tissue overlying the nerve give the leaf a relatively dull, dark, grey-green colour. The inclined capsule is borne terminally on a somewhat wavy seta up to 3 cm long, which is yellowish above, grading to reddish below. It is rather asymmetrical in shape, lacks angles and tapers to its mouth.

**Similar species**  
Non-fertile plants can be distinguished by their habitat (drier, open, upland rocky slopes) as much as by their form. Most likely to be confused with the similarly sized *P. formosum* (p. 320), or even *P. longisetum* (p. 319), small plants of the *Polytrichum commune* agg. (pp. 322–323), or lax examples of *Pogonatum urnigerum* (p. 317). *P. alpinum* differs from *P. urnigerum* in its dark grey-green, not glaucous, longer, proportionately narrower leaves and larger size. The more regularly branched shoots tend to distinguish it from all the other species, although colonies of *P. formosum* may be branched. When the very distinctive, rounded capsules are not present, a cross-section of a leaf will confirm that the apical cells of the ridges of tissue are roughened.

**Habitat**  
A distinctly montane species, absent from lowland Britain. It is locally abundant on grassy/heathy upland slopes, on stony banks, amongst block scree and on cliff ledges. More rarely it grows on dry moorland peat, avoiding wet ground with impeded drainage. It is usually found in exposed acidic places, but can tolerate some base enrichment and shade.

*Photos Ian Atherton (left) & Robert Goodison (right) Text Fred Rumsey*