Andreaea rupestris
Black Rock-moss

Identification
A small moss with stems to 3 cm, but usually shorter, forming greenish-brown to red-brown cushions or spreading patches. These become blacker as the shoots dry out. The leaves are usually less than 1 mm long, closely appress and overlap each other when dry, and often point in one direction when moist, but this can vary and occasionally shoots have leaves which are reflexed. The leaves lack a nerve and are usually widest below the middle, tapering to a blunt tip.

Similar species
A. alpina (p. 311) is a larger species whose leaves are widest at or above the middle. Confusion is likely with the other common Andreaea, A. rothii (p. 314) which has a somewhat similar habit, but normally has leaves which curve to one side when both moist and dry, and the leaves in A. rothii have a nerve which is usually visible with a hand lens. A. mutabilis (p. 313) is very similar, but differs from A. rupestris in having more distant leaves that lack a clasping base, a yellow leaf base, and in being redder (especially its male inflorescences). Two other rare Andreaea species are very similar to A. rupestris: A. alpestris (Smith, p. 108) and A. sinuosa (Smith, p. 110). Both these species are mainly confined to ground where snow lies late in the year, and they can only be distinguished microscopically. A. megistospora (Smith, p. 114) can only reliably be determined by measuring the size of the spores. It has the habit and habitat of A. rupestris, often occurring on large exposed boulders, but like A. rothii its leaves are nerved.

Habitat
A. rupestris occurs on acidic to mildly base-rich rocks in the upland parts of Britain. It generally occurs in drier sites than other Andreaea species and can be common and locally abundant on boulders both in scree and on more open slopes from sea level to the tops of mountains.