

Key 2b continued

Table 5 Go7 – Purple moor-grass and rush pastures – BAP habitat

Soils and topography	Wildflower indicator species	Species abundance threshold	Typical grasses (do not count as indicator species)
Pastures dominated by purple moor-grass or jointed rushes on poorly draining, neutral or mildly acidic soils of the lowlands and upland fringe. Associated with springs, seepage lines and slopes surrounding waterlogged depressions and hollows. Usually grazed but some sites may be cut for hay.	bog asphodel, bog-mosses, bog pimpernel, bugle, common valerian, cross-leaved heath, devil's-bit scabious, globeflower, greater burnet, greater bird's-foot-trefoil, hemp agrimony, jointed rushes, lesser spearwort, lesser water-parsnip, lousewort, marsh/fen bedstraw, marsh cinquefoil, marsh hawk's-beard, marsh marigold, marsh pennywort, marsh valerian, marsh violet, meadow rue, meadow thistle, meadowsweet, orchids, ragged robin, rough hawkbit, saw-wort, sneezewort, tormentil, water avens, water mint, whorled caraway, wild angelica, small blue-green sedges (glaucous, common, carnation)	At least two frequent and two occasional in the sward, or, where purple moor-grass is frequent, at least one frequent and three occasional. If either three indicator species are occasional or four are present (but not limited to field corners or edges), then record this as Go7 in condition C. Record as failing condition 5 in the notes column.	creeping bent crested dog's-tail floating sweet-grass marsh foxtail purple moor-grass red fescue sweet vernal grass Yorkshire-fog

Note: It can be difficult to separate this habitat from other fen habitats. In Go7 – Purple moor-grass and rush pastures – BAP habitat, grasses generally make a greater contribution to the sward than in other fen habitats and there is usually a history of management as grazed pasture. Swards dominated by tall herbs such as meadowsweet and yellow iris and/or tall tussocky sedges should be considered as fen. More open valley mire habitats with low cover of grasses and characterised by bog-mosses, dwarf shrubs, cotton grasses, small sedges and sundews should similarly be considered as fen, or, if on unenclosed moorland, as the FEP feature Mo8 – Upland flushes, fens and swamps – BAP habitat. Go7 can occur on the upland fringes and above the Moorland Line, but should not be confused with species-poor, rush-dominated flushes or rush pastures, which lack most of the wildflower indicator species.

Key 2b continued

Table 6 Go8 – Upland calcareous grassland – BAP habitat

Soils and topography	Wildflower indicator species	Species abundance threshold	Typical grasses (do not count as indicator species)
Calcareous soils over Carboniferous limestone in enclosed upland areas , generally above 300m. Large-scale enclosures in the Pennines of North Yorkshire, Durham and Cumbria.	bird's-eye primrose, bird's-foot-trefoil, carline thistle, common butterwort, common rock-rose, dropworts, devil's-bit scabious, eyebrights, fairy flax, gentians, grass of Parnassus, harebell, hoary rock-rose, hoary whitlowgrass, horseshoe vetch, lesser club-moss, mossy saxifrage, mountain everlasting, mouse-ear hawkweed, rough hawkbit, salad burnet, small scabious, squinancywort, wild thyme, yellow saxifrage, small sedges (spring, flea, glaucous, carnation)	At least one frequent and three occasional in the sward. If either three indicator species are occasional or four are present (but not limited to field corners or edges), then record this as Go8 in condition C. Record as failing condition 5 in the notes column.	blue moor-grass common bent crested hair-grass meadow oat-grass red fescue sheep's fescue sweet vernal grass quaking-grass

Note: In the upland fringe, some enclosed swards on south-facing valley sides, particularly on deeper soils, may have many of the indicators of Go6 – Lowland meadows – BAP habitat and Go4 – Lowland calcareous grassland – BAP habitat, and may be considered as examples of the latter.

Key 2b continued

Table 7 G09 – Upland hay meadows – BAP habitat

Soils and topography	Wildflower indicator species	Species abundance threshold	Typical grasses (do not count as indicator species)
Free-draining or moist neutral soils in the North Pennine and Cumbrian uplands, largely cut for hay.	bird's-foot-trefoil, black knapweed, bugle, burnet saxifrage, common bistort, devil's-bit scabious, globeflower, eyebrights , great burnet , hawkbits, lady's-mantles , marsh marigold, marsh valerian, meadow vetchling, meadowsweet, melancholy thistle, orchids, pignut , ragged robin, saw-wort, sneezewort, tormentil, water avens, wood anemone, wood crane's-bill, yellow rattle, small blue-green sedges (glaucous, common, carnation)	At least two frequent and two occasional in the sward, or, for wet meadows, at least one frequent and three occasional. If three indicator species are at least occasional or four are present (but not limited to field edges or corners), then record as G09 in condition C. Record as failing condition 5 in the notes column.	cock's-foot common bent crested dog's-tail red fescue rough-stalked meadow-grass soft brome sweet vernal grass Yorkshire-fog

Note: Many indicators are common to both upland and lowland neutral grassland, and the two types can occur in the same geographical area. In the absence of strict upland hay meadow indicators, a high frequency of those species in bold would indicate G09 – Upland hay meadows – BAP habitat.

Key 2b continued
Table 8 G10 – Calaminarian grassland

Soils and topography	Wildflower indicator species	Species abundance threshold	Typical grasses (do not count as indicator species)
Gravels and spoil from mineral extraction and ultrabasic exposures.	alpine penny-cress mountain pansy Pyrenean scurvygrass sea campion spring sandwort thrift	Any indicators, singly or together, at least occasional in the sward. If none of these species is found then record as G10 in condition C. Record as failing condition 5 in the notes column.	common bent red fescue sheep's fescue sweet vernal grass

Note: G10 is generally associated with lead mine spoil and outcropping mineral veins in the upland fringes of northern and western England, and with river gravels arising from mining activity. Mineral veins are largely found within the Carboniferous limestones of the North Pennines and Yorkshire Dales, Derbyshire, Cornwall and the Mendips. Serpentine soils rich in metals such as nickel and chromium will support similar vegetation.