

## SITE SYNOPSIS

**SITE NAME: CASHELNAVEAN BOG NHA**

**SITE CODE: 000122**

Cashelnavean Bog NHA consists primarily of upland blanket bog and is located in Barnesmore Gap, 8 km south-west of Ballybofey in Co. Donegal. It is situated mostly in the townlands of Cashelnavean and Croaghonagh. The site forms part of the catchment area for the Sruhanderg River that drains into Lough Mourne, east of the site. The lower part of this river divides the bog into northern and southern halves. A second smaller stream drains the northern portion of the bog into Lough Sallagh. Coniferous forestry plantations form most of the boundary on the northern, western and southern parts of the site. The road to Ballybofey forms the boundary along much of the eastern side. Bedrock geology is metamorphic sandstone and the altitude of the site ranges from 180 m to 252 m.

The site consists mainly of upland blanket bog with areas of wet heath, re-vegetated cutover, an infilling lake and wet quaking areas. The heath vegetation is mostly confined to the higher ridge that runs in a north-east/south-west direction along the centre of the site. Flat plateau areas hold deep blanket peat with pool systems while the lower lying area along the western boundary holds quaking areas and an infilling lake.

Characteristic species on the wet plateau areas include White Beak-sedge (*Rhynchospora alba*), Common Cottongrass (*Eriophorum angustifolium*), Cross-leaved Heath (*Erica tetralix*), Purple Moor-grass (*Molinia caerulea*), Bog Asphodel (*Narthecium ossifragum*), Star Sedge (*Carex echinata*) and Deergrass (*Scirpus caespitosus*). The presence of bog mosses accounts for approximately 40 % of ground cover, consisting mainly of *Sphagnum cuspidatum*, *S. auriculatum* and *S. papillosum*, with *S. capillifolium* forming hummocks around the pools. Also common are the Round-leaved Sundew (*Drosera rotundifolia*), Great Sundew (*D. anglica*) and cushions of lichen, *Cladonia portentosa*. Deeper pools contain Bogbean (*Menyanthes trifoliata*), Bog-sedge (*Carex limosa*) and Lesser Bladderwort (*Utricularia minor*).

Occasional isolated hummocks stand up to 1.5 m high, carrying species such as Ling Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*), Purple Moor-grass, Tormentil (*Potentilla erecta*), Heath Bedstraw (*Galium saxatile*), Bilberry (*Vaccinium myrtillus*) and mats of Crowberry (*Empetrum nigrum*). Cushions of the mosses *Racomitrium lanuginosum*, *Hylocomium splendens*, and *Rhytidiadelphus loreus* also occur. The presence of the locally occurring species, Juniper (*Juniperus communis*), in this vegetation, is of significant interest.

Drier land at the higher, rockier altitudes has shallower peat with a vegetation more characteristic of heathland, being dominated by Ling Heather, Bell Heather, Heath Rush (*Juncus squarrosus*), and Purple Moor-grass. The cutover slopes along the main road are wet and are dominated by Bog Myrtle (*Myrica gale*). Bog mosses are

also present (approximately 35 % of ground cover), consisting mainly of *Sphagnum cuspidatum*, *S. subnitens* and *S. papillosum*. In the wetter, low-lying areas along the streams and infilling lake, sedges occur, such as Bottle Sedge (*Carex rostrata*) and Bog-sedge (*Carex limosa*), with Common Reed (*Phragmites australis*), Bog Pondweed (*Potamogeton polygonifolius*) and Black Bog-rush (*Schoenus nigricans*).

Red Grouse, an Irish Red Data Book species occurs on the site. Fox and Snipe also occur.

The site is potentially threatened by the possible expansion of coniferous plantation forestry. A degree of disturbance has also resulted from sheep grazing, both along the eastern slopes and the wetter, western boundary, with bare patches of peat and low peat hags resulting. Both activities can cause drying of the peat and loss of characteristic bog flora.

Cashelnavean Bog NHA is a site of considerable conservation significance. It contains a good example of upland blanket bog. The site is reasonably diverse in terms of species and communities due to local variation rather than large scale diversity. Blanket bog habitat is a globally scarce resource. It is largely confined to coastal regions at temperate latitudes with cool, wet, oceanic climates. North-west Europe contains some of the best-developed areas of blanket bog in the world. The most extensive areas are found in Ireland and Britain. Upland blanket bogs, due to their exposure to severe climatic conditions at high elevations, are particularly vulnerable to erosion by human activities and extensive areas are currently undergoing active erosion due mainly to overgrazing. The current area of intact upland blanket bog in Ireland represents only a fraction of the original resource, due to the combined impacts of afforestation and overgrazing, and intact examples are therefore extremely valuable for nature conservation. Their long-term survival requires sensitive management.