Date Notified: 28th March 1988

File ref: (L) SD 65/2

**County:** Lancashire   **Site Name:** Bowland Fells

**District:** Lancaster, Ribble Valley, Wyre

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

**Local Planning Authority:** Lancaster City Council, Ribble Valley Borough Council, Wyre Borough Council

**National Grid Reference:** SD 620570   **Area:** 15,759.0 (ha) 38,940.5 (ac)

**Ordnance Survey Sheet 1:50,000:** 97, 98, 102, 103   **1:10,000:**
SD 54 NE, NW, SE
SD 55 NE, NW, SE, SW
SD 56 SE, SW
SD 64 NW, SW
SD 65 NE, NW, SE, SW
SD 66 SE, SW
SD 75 NW

**Date Notified (Under 1949 Act):** 1951   **Date of Last Revision:** 1979

**Date Notified (Under 1981 Act):** 1988   **Date of Last Revision:** 1988

**Other Information:**
1. The site includes the former West Bowland Fells and Mallowdale and Bottom Head Fells SSSI.
2. The boundary has been amended by minor deletions and a large extension at this revision.
3. The site is situated within the Forest of Bowland AONB.

**Description and Reasons for Notification:**
This site encompasses the main upland block within the area of Lancashire known as the Forest of Bowland, an outlier of the Pennine Range situated in the north of the county and to the east of the M6 motorway. Most of this land, stretching from Clougha and Whitray Fell in the north to Parlick in the south, is over 250 m OD and rises sharply to a stream – dissected plateau with the highest point being Ward’s Stone at 561 m. The underlying rock is Millstone Grit beneath which lies Carboniferous Limestone.

These extensive upland fells support the largest expanse of blanket bog and heather moorland in Lancashire and provide suitable habitat for a diverse upland breeding bird community which includes three species (hen harrier, merlin and peregrine), which are afforded special protection under the Wildlife and Countryside Act 1981 by virtue of their rarity or vulnerability. Additional interest is provided by the existence of one of the largest lesser black-backed gull colonies in Great Britain, the presence of a number of nationally or locally uncommon plant species and a variety of upland habitats and their associated avifauna.
The most extensive plant communities within the site are dry heather-dominated heathland, generally found on the steeper slopes, and heather *Calluna vulgaris* and cottongrass *Eriophorum vaginatum*-dominated blanket bog which covers the tops of the ridges and shallow slopes.

Within the blanket bog communities bog mosses *Sphagnum* spp. are sparse, due to the effects of past burning practices, although bog rosemary *Andromeda polifolia*, a nationally scarce species, cranberry *Vaccinium oxycoccus*, crowberry *Empetrum nigrum*, and cloudberry *Rubus chamaemorus* are all widely distributed. Some areas of bog have been more heavily burnt and this, perhaps coupled with greater numbers of grazing sheep, has resulted in the loss of heather to give bilberry *Vaccinium myrtillus* and cottongrass bog. In some areas dwarf shrub component has been reduced still further to produce a cottongrass dominated degraded blanket bog community. In places within the site there is active and extensive peat erosion leaving large mounds and hags surrounded by shallow peat and a stony mineral soil.

The extensive areas of *Calluna* heath are generally managed by small patch burning to encourage red grouse. On recently burnt areas, bilberry is quick to recover and is at first dominant over the regenerating heather but the bilberry later becomes less conspicuous as the heather eventually reasserts its dominance. Heavy burning and high levels of sheep grazing have in some areas resulted in the loss of heather and its replacement by a bilberry/wavy hair-grass *Deschampsia flexuosa* community. In other places cowberry *Vaccinium vitis-idaea* has become co-dominant with bilberry, as on the summit plateau of Ward’s Stone where these species are associated with a variety of lichens. Where grazing has been heavier still, the dwarf shrubs are replaced by species-poor acid grassland dominated by mat-grass *Nardus stricta* or, to a lesser extent, heath rush *Juncus squarrosus*, or purple moor-grass *Molinia caerulea*. Despite such modifications, the site is of particular value for the extent of heather moorland still remaining, and represents a good example of a habitat type which has been significantly reduced across upland Britain.

On the lower ground, bracken forms extensive stands in some areas. Dense growth of bracken suppresses the ground flora but where it is less dense bilberry community grows beneath, along with other plant species more usually associated with woodland, such as wood sorrel *Oxalis acetosella* and climbing corydalis *Corydalis claviculata*. Chickweed wintergreen *Trientalis europaea* has also been recorded on the site growing beneath bracken and here is nearly at its southern limit and in its only Lancashire location.

A number of interesting plants grow on the Millstone Grit crags, where they are protected from grazing and burning. These include fir clubmoss *Huperzia selago* and also Scottish filmy-fern *Hymenophyllum wilsonii* and hayscented buckler-fern *Dryopteris aemula* in their only Lancashire sites.

Flushes and springs are not common but provide a habitat for the Lancashire rarities lesser twayblade *Listera cordata*, broad-leaved cottongrass *Eriophorum latifolium* and pale forget-me-not *Myosotis stolonifera* – a nationally scarce species. Tree cover in the form of oak *Quercus petraea* scrub is fragmented and occurs on the steep slopes and in the cloughs, adding to the diversity of habitats within the site. Many of the trees are of great age, supporting a variety of lichens, and the shelter they provide allows the growth of carpets of tall ferns.

The maintenance of heather moorland over much of the site has provided an excellent habitat not only for red grouse for which the moors have primarily been managed, but for other moorland birds requiring the presence of heather for nesting cover and as a source of prey. Of these the hen harrier is the most notable: the Bowland Fells represent the only regularly-used
breeding locality in England and thus supports a very important breeding nucleus for this species which is in decline and increasingly experiencing a reduced success in breeding performance. Other nesting predatory birds (raptors) include merlin (another species suffering a continued decline in numbers), peregrine, short-eared owl, sparrowhawk and kestrel. The open moorland and blanket bog communities support other upland birds such as golden plover, ring ouzel, meadow pipit, skylark, whinchat and wheatear while the damp, rushy lower slopes provide ideal habitat for waders such as redshank, curlew, lapwing, snipe and oystercatcher. The fast-flowing upland streams are the typical habitat for common sandpiper, dipper and grey wagtail while the presence of tree cover adjacent to open moorland is ideal for woodcock, redstart and spotted flycatcher.

Mallowdale and Tarnbrook Fells also support one of the five largest breeding colonies of lesser black-backed gulls in Great Britain which probably contains over 10% of the British and 1% of the European populations.