



**Site Name: Mount Jessop Bog SAC**

**Site Code: 002202**

Mount Jessop Bog SAC occurs within the larger raised bog system that is designated as Mount Jessop Bog NHA (001450). It is situated 5 km south-west of Longford Town in the townland of Mount Jessop, Co. Longford. The site is part of a basin raised bog that includes both areas of high bog and cutover bog. The site is bordered by open high bog on its northern and western sides and by agricultural land on its eastern side and southern side. The underlying geology is carboniferous limestone.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[7120] Degraded Raised Bog [91D0] Bog Woodland*
--

Degraded Raised Bog corresponds to those areas of high bog where the hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration to Active Raised Bog within 30 years.

Bog Woodland develops on wet peaty soils, with a permanently high water level and it is generally dominated by Downy Birch (*Betula pubescens*) or Scots Pine (*Pinus sylvestris*), with the ground layer dominated by bog mosses and other characteristic species. It is a very rare habitat covering less than 150 ha in Ireland.

Mount Jessop Bog SAC consists of 71.91 ha of raised bog (25.7 ha of high bog and 46.21 ha cutover). In the SAC, approximately 31 ha (44%), both high bog and cutover, was afforested with conifer plantations between 1973 and 1975. Only 11% (8.0 ha) remained open high bog. The remainder of the cutover developed either into birch and willow scrub (19.5 ha) or remained open (12.5 ha) and dominated by heath and bog species.

On the remaining area of open high bog much of the vegetation is typical of Midland Raised Bog type, consisting of Heather (*Calluna vulgaris*), Bog Asphodel (*Narthecium ossifragum*), Hare's-tail Cottongrass (*Eriophorum vaginatum*), Cross-leaved Heath (*Erica tetralix*), White Beak-sedge (*Rhynchospora alba*) and bog mosses. There are wet spongy areas with hummock/hollow systems, which are mainly composed of bog mosses such as *Sphagnum capillifolium* and *S. subnitens*, but some small hummocks of

scarce *S. austinii* and *S. fuscum* occur. In places, *Sphagnum* hummocks support the Midland raised bog indicator species Bog Rosemary (*Andromeda polifolia*) and Cranberry (*Vaccinium oxycoccos*). There is also a record of one of the Western raised bog indicators, the liverwort *Pleurozia purpurea*, being present in the NHA suggesting that this bog has transitional features between the two types of raised bog in Ireland. Lodgepole Pine (*Pinus contorta*), which is invading the open bog, is being controlled as part of the restoration plan for the site.

The conifer plantations were all felled by 2012. All of the intensive drainage systems associated with the plantations were blocked by 2013 as part of an EU-funded LIFE project so as to raise the water table and restore Active Raised Bog (ARB) on the site. Prior to the felling, there were relatively few bog species present in the plantations except along fire breaks and at plantation margins. With the clear-felling of conifers and blocking of drains the high bog appears to be re-wetting, water-levels in some areas now remain high throughout the year and limited areas of wet flats and hollows are developing. As a consequence, raised bog vegetation has returned, with Heather and Hare's-tail Cottongrass dominating, while Common Cottongrass (*Eriophorum angustifolium*), Bog Asphodel and White Beak-sedge are locally common and small amounts of Bilberry (*Vaccinium myrtillus*) and Cross-leaved Heath are widespread. Purple Moor-grass (*Molinia caerulea*) and Soft Rush (*Juncus effuses*) are also present. Bog mosses are regenerating, including *Sphagnum papillosum*, *S. capillifolium*, *S. palustre* and *S. subnitens*, with *Sphagnum cuspidatum* and *S. recurvum* in drains. However, the majority of the restored areas have not yet developed vegetation characteristic of the wet bog conditions. Associated with the bog species there is the development of a considerable amount of ruderal vegetation such as Bramble (*Rubus fruticosus*) and willowherbs (*Epilobium* spp.) with conifer and birch regeneration. This situation is expected to improve over time as the bog surface becomes wetter.

Four small areas, covering 1.14 ha in the northern and western sections of the SAC, have been identified by hydrological modelling and ground survey as Degraded Raised Bog (7120) habitat and these are showing significant indications of recovery. The main areas are on the open bog in the west of the formerly afforested area and in the north-west of the clear-fell area. These areas now have standing surface water in the hollows and pools for most of the year and considerable areas of regenerating *Sphagnum* species. It is considered that these areas will support some areas of Active Raised Bog (7110) habitat within 10–20 years and that this habitat will continue to develop and spread over the following decades.

The unafforested cutover bog areas of the site are mainly overgrown with Downy Birch, Gorse (*Ulex europaeus*), and willow (*Salix* spp.) scrub with occasional Lodgepole Pine from adjacent forestry. There is an area of 0.23 ha of wet woodland on cutover bog to the south-east of the site. This contains depressions with pools and tree species such as Alder (*Alnus glutinosa*), Willow and Downy Birch, which has developed into Bog woodland (91D0). Water-levels remain high throughout the year and the bog moss *Sphagnum cuspidatum* dominates the wet hollows. It is anticipated that this habitat will mature and develop further over time as the cutover becomes

wetter. There is also an area of 0.29 ha of very wet clear-fell on cutover adjacent to the Bog Woodland habitat which is expected to develop into that habitat in the medium to long term.

Current landuse on the site consists of conservation management with the removal of conifer plantations and the blocking of drainage associated with these plantations. All the large area planted with coniferous forestry has been clear-felled and drain-blocked as part of the Coillte EU Life Project *Demonstrating Best Practice in Raised Bog Restoration in Ireland* and the control of regeneration of non-native species such as Lodgepole Pine is on-going. There is a small amount of peat-cutting, with its associated risks of drainage and fire in the NHA which, if allowed to continue, could cause some long term problems to the maintenance of the conservation values of the SAC.

Mount Jessop Bog SAC is a site of considerable conservation significance comprising raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. It contains good examples of the Habitats Directive Annex I habitat Degraded Raised Bog (capable of regeneration) which is reverting to the priority Annex 1 habitat Active Raised Bog (7110) and a small area of the Annex 1 priority habitat Bog Woodland which is developing on the cutover. The site already supports a good diversity of raised bog microhabitats, including some hummock/hollow complexes, and rewetted cutover bog. Red Grouse, a bird which is becoming increasingly rare in Ireland, has been recorded at this site, along with the Irish Hare — a Red Data Book species — which increases its overall scientific interest.

Ireland has a high proportion of the total E.U. resource of Atlantic raised bog (over 50%) and so has a special responsibility for its conservation at an international level. The site is being actively managed for conservation as part of the Coillte EU LIFE Project and most of the required major restoration measures have already been carried out. Those measures that remain, or are on-going, will be included in an After LIFE management plan which is being developed by Coillte for the future conservation management of the SAC. The SAC is located within the raised bog Mount Jessop Bog NHA, the conservation management of which should support the redevelopment of Active Raised Bog and Bog Woodland in the SAC. In addition, it is estimated that restoration works carried out on the SAC will benefit the conservation of 2 ha of Active Raised Bog and 0.25 ha of Degraded raised bog in the adjacent area of Mount Jessop Bog NHA (001450).