SITE SYNOPSIS

SITE NAME: LEANNAN VALLEY

SITE CODE: 001155

Leannan Valley NHA contains woodland, lowland blanket bog and heath and is located south-west of Kilmacrenan town, about 10km north-west of Letterkenny, Co. Donegal. The site is located in the townlands of Keenaghan, Cottian, Cloghroe and Dromore. The bedrock geology in this area is quartzite. The boundary of the site is largely defined by the outline of several large conifer plantations.

The site contains a complex mosaic of habitats, including a significant area of blanket bog and heath, as well as wet and dry, broadleaf, semi-natural woodlands. These habitats are situated at altitudes between 30m and 90m along a series of long ridges on the northern valley-side of the Leannan River. The main area of blanket bog occurs in the river valley. Land adjacent to the river floods frequently and here the vegetation is rush-dominated with some areas of scrub woodland. Areas of woodland, heath, lowland blanket bog and several lakes and ponds occur on the upper slopes of the valley. The lower valley slopes are in agricultural use and many of the fields are improved and re-seeded.

The most frequent habitat is dry, broadleaved semi-natural woodland, mainly of Downy Birch (*Betula pubescens*), Sessile Oak (*Quercus petraea*) and Hazel (*Corylus avellana*). Scrub, dominated by Downy Birch and Willow (*Salix* spp.), spreads out from the edges of the older woodland and wet heath, dominated by Purple Moor-grass (*Molinia caerulea*) and Heather (*Calluna vulgaris*), is also frequent. Holly (*Ilex aquifolium*) is common in the woodland. There are also patches of wet woodland, with Downy Birch, Alder (*Alnus glutinosa*) and willow, as well as a number of small lakes. The composition of the ground flora varies considerably throughout the area and beneath some parts of the woodland the ground flora is very species-rich. These areas often have many mosses, e.g. *Rhytidiadelphus loreus*, *R. triquetrus*, *Thuidium tamariscinum* and *Sphagnum* spp. The flowering plants include Bluebell (*Hyacinthoides non-scripta*), Wood-sorrel (*Oxalis acetosella*), Wood Anemone (*Anemone nemorosa*), Pignut (*Conopodium majus*) and Primrose (*Primula vulgaris*), sometimes with heathland dwarf shrubs, such as Bilberry (*Vaccinium myrtillus*) and Heather, and ferns such as Bracken (*Pteridium aquilinum*) and Hard Fern (*Blechnum spicant*).

The area of blanket bog in the river valley may have developed in a depression in a manner similar to that of a raised bog as it has a slightly domed appearance. It is dominated by Heather with Cross-leaved Heath (*Erica tetralix*), Hare's-tail Cottongrass (*Eriophorum vaginatum*), Common Cottongrass (*Eriophorum angustifolium*) and frequent lichen (*Cladonia portentosa*). There are large hummocks of bog mosses (*Sphagnum capillifolium* and *S. subnitens*) and moss cover is generally high resulting in a soft, spongy bog surface. Bog Asphodel (*Narthecium ossifragum*) occurs in small wet hollows and Deergrass (*Trichophorum cespitosum*) and Tormentil (*Potentilla erecta*) are present. There are some pools infilling with Hare's-tail

Cottongrass and with bog mosses (*Sphagnum cuspidatum* and *S. auriculatum*). *Sphagnum subnitens* occurs on the pool margins. Additional species present on lowland blanket bog elsewhere in the site include Carnation Sedge (*Carex panicea*), and Bog-myrtle (*Myrica gale*), while the bog mosses *Sphagnum cuspidatum* and *S. papillosum*, Bogbean (*Menyanthes trifoliata*) and Round-leaved Sundew (*Drosera rotundifolia*) are present in lawns and around pool margins.

The site contains a diversity of semi-natural habitats suitable for a wide variety of bird and animal species.

Major threats to the survival of the woodland habitats are afforestation, overgrazing and clearance. As the woodland areas border agricultural land they are often accessible to grazing stock and overgrazing and poaching has, in some areas, damaged the ground flora both in terms of vegetation cover and species diversity. Other patches are being cleared to create new grassland or for fuel or fencing material. Blanket bog habitat is potentially threatened by overstocking, drainage, dumping, afforestation and the spread of non-native seedlings from adjoining conifer plantations.

The nature conservation value of Leannan Valley NHA is increased by the diversity of its habitats which range from open water through to species-rich, semi-natural woodland. The site is also a potentially valuable and accessible, educational resource, featuring for example, the various stages of woodland development.

Leannan Valley NHA includes a good example of lowland blanket bog. Blanket bog habitat is a globally scarce resource and is largely confined to coastal regions with cool, wet, oceanic climates at temperate latitudes. North-west Europe contains some of the best-developed areas of blanket bog in the world. Lowland blanket bog comprises less than 3% of the world's peatlands. In Europe this type of blanket bog is restricted to Ireland, Britain, Norway and Iceland. The lowland blanket bog that occurs in Ireland is considered to be an extreme hyperoceanic variant of the habitat type, found nowhere else in the world except on the coastal fringes of north-west Scotland.