SITE SYNOPSIS

Site Name: Cloghernagore Bog and Glenveagh National Park SAC

Site Code: 002047

Cloghernagore Bog and Glenveagh National Park SAC is an exceptionally large inland site located in the centre of north-west Donegal. It includes a rich diversity of habitats and landscape features, including mountains, exposed rock and scree, blanket bogs, dry, wet and alpine heath, upland grassland, wet grassland, rivers, lakes, scrub and woodland. The Gweebarra fault bisects the area forming a long valley, orientated north-east to south-west, in which Lough Barra and Lough Veagh (Beagh) are situated. The area is generally mountainous, taking in most of the Derryveagh and Glendowan ranges and including the two highest mountains in Donegal, Errigal (751 m) and Slieve Snaght (678 m). Towards the centre-west of the site are the fine ice-carved cliffs of the Poisoned Glen and Bingorms, which contrast dramatically with the gently undulating expanses of blanket bog in the south-west and north-east of the site. The underlying rock is predominantly granite, with a few intrusive dykes. However, around Errigal the geology is more complex with bands of schists, quartzite, granodiorite and limestone occurring.

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):

[3110] Oligotrophic Waters containing very few minerals
[3260] Floating River Vegetation
[4010] Wet Heath
[4030] Dry Heath
[4060] Alpine and Subalpine Heaths
[6410] *Molinia* Meadows
[7130] Blanket Bogs (Active)*
[7150] Rhynchosporion Vegetation
[91A0] Old Oak Woodlands

[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
[1106] Atlantic Salmon (*Salmo salar*)
[1355] Otter (*Lutra lutra*)
[1421] Killarney Fern (*Trichomanes speciosum*)

Atlantic blanket bog is the dominant habitat of interest, with much of it being relatively unspoilt. Indeed, the area around Cloghernagore constitutes the most extensive blanket bog system remaining in the north-west of Ireland. Overall, there

are excellent examples of several types of blanket bog including Highland Bog (Cashelnagor and Dunlewy Far), Lowland Bog (Cloghernagore and Glenveagh Bridge), Domed Valley Bog (Derrybeg and Calabber Valley), Headwater Bog (Crockastoller and Carrickatimpan Mountain) and blanket bog apparently in the early stages of formation (Attinadague).

The blanket bog vegetation is relatively uniform and typically dominated by Purple Moor-grass (*Molinia caerulea*), Heather (*Calluna vulgaris*), Black Bog-rush (*Schoenus nigricans*), Deergrass (*Scirpus cespitosus*) and Common Cottongrass (*Eriophorum angustifolium*), with areas of Bog-myrtle (*Myrica gale*) also occurring.

A number of features indicative of well-developed blanket bog are found at the site. The pool systems found are typically colonised by bog moss species such as *Sphagnum auriculatum* and *S. cuspidatum*, Lesser Bladderwort (*Utricularia minor*), Bogbean (*Menyanthes trifoliata*) and sedges (e.g. *Carex panicea* and *C. limosa*), with Great Sundew (*Drosera anglica*) occurring around the margins. Hummocks of *Sphagnum* species (including *S. capillifolium, S. imbricatum* and *S. papillosum*) and other mosses such as *Leucobryum glaucum* and *Racomitrium lanuginosum* are found, as are flushed areas with *Sphagnum* species such as *S. auriculatum* var. *inundatum* and *S. magellanicum*), Common Reed (*Phragmites australis*), rushes (*Juncus acutiflorus* and *J. effusus*) or sedges (*Carex echinata, C. rostrata* and *C. demissa*). There are also quaking flats of mosses (*Campylopus atrovirens, C. brevipilus, Pleurozia purpurea* and *Sphagnum* spp.) with sedges (e.g. *Carex lasiocarpa*), and shallow, infilling lakes with associated *Sphagnum* scraws and sedge swards. The vegetation described for the pool areas and wet quaking flats is representative of Rhynchosporion vegetation.

A number of scarce or only locally-occurring vascular plant species have been recorded from bogs on the site. These include a hybrid Sundew, *Drosera anglica* x *D. rotundifolia* (*Drosera* x *obovata*), Whorled Caraway (*Carum verticillatum*), Bearberry (*Arctostaphyllos uva-ursi*), Cranberry (*Vaccinium oxycoccos*) and, in a gorge, Cowberry (*Vaccinium vitis-idaea*). Lower plants of note include several mosses (*Sphagnum fuscum, S. contortum, S. recurvum* var. *tenue, S. molle, Calliergon stramineum* and *Polytrichum longisetum*) and lichens (*Cladonia parasitica, C. gracilis, C. bellidiflora, C. cervicornis* subsp. *verticillata*, *C. digitata, Peltigera hymenea, Sphaerophorus fragilis, Usnea fragilescens* and *Umbilicaria polyrrhiza*).

Wet heath occurs at this site in an intimate mosaic with blanket bog, and the vegetation of the two habitat types intergrades. This occurs particularly on the lower slopes of hills, where deep lowland blanket peat meets shallower peat on the flanks of hills. Dry heath occurs at this site on slopes above 300 m. Heather and Bell Heather (*Erica cinerea*) are common, while species such as Gorse (*Ulex europaeus*) and Western Gorse (*U. gallii*) are thought to be relatively uncommon. Other species present include Common Bent (*Agrostis capillaris*), Velvet Bent (*A. canina*), Heath-grass (*Danthonia decumbens*) and Sheep's-fescue (*Festuca ovina*).

Subalpine heath is found at this site on very thin, peaty soils with some bare rock evident. The community is typically dominated by Heather and Bilberry (*Vaccinium*

myrtillus). Crowberry (*Empetrum nigrum*) is also found on some of the higher mountain slopes. Other species of note in this habitat are Tormentil (*Potentilla erecta*) and the moss *Racomitrium lanuginosum*. Juniper (*Juniperus communis*) and Bearberry are occasional on mountain summits.

The site includes many rivers and streams, containing, or fringed by plants such as Water Horsetail (*Equisetum fluviatile*), Lesser Spearwort (*Ranunculus flammula*), pondweeds (*Potamogeton natans, P. polygonifolius*), sedges (*Carex* spp.) and rushes (*Juncus* spp). By one river the locally-occurring Lemon-scented Fern (*Oreopteris limbosperma*) is found. In some areas gorges have been cut by streams, and here fragments of deciduous woodland remain. These are characterised by Aspen (*Populus tremula*), Rowan (*Sorbus aucuparia*), oak (*Quercus petraea* and *Q. robur*) and willow (*Salix* spp.).

An area of semi-natural deciduous woodland occurs on the steeply sloping eastern side of Glenveagh. The dominant trees are Sessile Oak (*Quercus petraea*), Downy Birch (*Betula pubescens*) and Rowan, with Hazel (*Corylus avellana*) occurring frequently. Holly (*Ilex aquifolium*) occurs in the understorey. Rhododendron (*Rhododendron ponticum*) has invaded much of the woodland and adjacent hillsides. Other species present include Yew (*Taxus baccata*), Juniper and, near Lough Veagh, the scarce Rock Whitebeam (*Sorbus rupicola*). Within the woodland the lower plant community is well-developed with liverworts, including *Frullania tamarisci*, growing on the tree trunks. This is replaced as an epiphyte in damper areas by Wilson's Filmy-fern (*Hymenophyllum wilsonii*). Of particular note is the presence of the scarcer Tonbridge Filmy-fern (*H. tunbrigense*). The woodlands are also notable for the presence of two rare species of Myxomycete fungus, namely *Licea gloeoderma* and *Physarum vernum*, the former in its only known Irish site.

Molinia meadow at the site is characterised by a co-dominance of Purple Moor-grass, Soft Rush (*Juncus effusus*), Sharp-flowered Rush (*J. acutiflorus*) and Conglomerate Rush (*J. conglomeratus*). The habitat occurs in areas that are subject to occasional flooding. Other species recorded include Water Horsetail, Marsh Speedwell (*Veronica scutellata*), Silverweed (*Potentilla anserina*), Marsh Ragwort (*Senecio aquaticus*), Cuckooflower (*Cardamine pratensis*), Marsh Cinquefoil (*Potentilla palustris*) and Marsh Pennywort (*Hydrocotyle vulgaris*).

There are several large oligotrophic lakes on the site, including Lough Barra, Lough Veagh and Lough Altan. Aquatic plant species found include Water Lobelia (*Lobelia dortmanna*), Shoreweed (*Littorella uniflora*) and Bulbous Rush (*Juncus bulbosus*). Lough Veagh also contains two quillwort species (*Isoetes lacustris* and *I. echinospora*), the latter of which is a locally-occurring species. Some of the smaller lakes also contain the scarce species Pipewort (*Eriocaulon aquaticum*).

Many scarce plants have been recorded from cliffs and gullies, mainly around Slieve Snaght and the Poisoned Glen. These include Brittle Bladder-fern (*Cystopteris fragilis*), Alpine Clubmoss (*Diphasiastrum alpinum*), Stiff Sedge (*Carex bigelowii*), Mountain Sorrel (*Oxyria digyna*) and Irish Spurge (*Euphorbia hyberna*). Purple Saxifrage

(*Saxifraga oppositifolia*) and Alpine Saw-wort (*Saussurea alpina*) have also been recorded from this area, along with a more recent sighting of Killarney Fern (*Trichomanes speciosum*). These are all rare species which are listed in the Irish Red Data Book, the latter also being legally protected under the Flora (Protection) Order, 1999, and listed on Annex II of the E.U. Habitats Directive.

Three other rare Red Data Book plant species have been recorded within the site: Bird Cherry (*Prunus padus*), Small-white Orchid (*Pseudorchis albida*) and Heath Cudweed (*Omalotheca sylvatica*). The two last-named are legally protected under the Flora (Protection) Order, 1999.

The area is also of considerable zoological value. Mammal interest includes the largest herd of Red Deer in Ireland, along with Badgers, Otters, Irish Hares and Stoats.

Lough Veagh contains Arctic Char, a fish species that was once widespread but is now rare in most places. It is listed as vulnerable in the Irish Red Data Book. The Owencarrow and Lackagh River systems support a good population of Atlantic Salmon, a species listed on Annex II of the E.U. Habitats Directive. Brown Trout also occur. Common Lizard has been recorded from the site. The site supports populations of Freshwater Pearl Mussel, a rare species that is listed on Annex II of the E.U. Habitats Directive.

A number of important bird species are represented at this site, with several which are listed in the Red Data Book, and a number listed on Annex I of the E.U. Birds Directive. Those which breed within the area include Red-throated Diver, Golden Plover, Merlin and Peregrine. A small flock of Greenland White-fronted Goose, also listed on Annex I of the E.U. Birds Directive, feed on some of the bogs in winter. The Red Data Book species Goosander and Wood Warbler both breed on the site. Generally, the woodlands are favoured by Siskin, Tree Creepers and Redstarts, while Meadow Pipits, Red Grouse, Ravens, Snipe and Dunlin are among the birds found on the moorland.

One of the major land uses at this site is conservation management. The site contains the whole of the Glenveagh National Park along with two Statutory Nature Reserves, Lough Barra Bog and Meenachullion Bog. Grazing by sheep and deer is common and in a few places the bogs have suffered from over-grazing and poaching. Grazing has also prevented woodland regeneration. Annual deer culls take place to control numbers and the main herd is kept within the confines of the National Park by a 45 km-long deer fence. Invasion by Rhododendron has been a particular problem within the National Park, where it has choked areas of woodland and covered adjacent hillsides. A removal programme is in progress and the threat from this species has been considerably reduced. Peat cutting, both by hand and machine, has caused damage to some bogs in the site. Turbary and afforestation are the main threats to this habitat, with erosion and burning also having an impact.

The site is of great scientific and conservation value, particularly for the large areas of excellent, little-damaged blanket bog it contains, including the largest intact area of blanket bog in north-west Ireland. It also includes good quality examples of semi-natural deciduous woodland, heath, oligotrophic lakes and inland cliffs. The importance of the site is increased by the presence of a wide range of plant and animal species, including many rare or threatened Red Data Book species, and several that are listed on Annex II of the E.U. Habitats Directive or Annex I of the E.U. Birds Directive.