SITE SYNOPSIS

SITE NAME: CARNA HEATH AND BOG NHA

SITE CODE: 001241

Carna Heath and Bog NHA is a mosaic of lowland blanket bog and heath habitat situated approximately 1.5 km east of Carna village along the Carna - Kilkieran road in Connemara, Co. Galway. It lies near sea level (altitude 8 m) and is located entirely within the townland of Rusheenamanagh. The northern, western and eastern margins of the site are bounded by a track and a minor road while the southern boundary is marked by the edge of enclosed agricultural land. The bedrock geology in this area is Galway granite.

The site comprises an intricate mosaic of small linear depressions, occupied by blanket bog. Granite outcrops are very frequent and bog development is confined to depressions between these outcrops. The site also contains a lake (Lough Duff), pools, rivers and streams, cutover bog and old walls.

Much of the lowland blanket bog is dominated by Common Cottongrass (*Eriophorum angustifolium*), with Bog Asphodel (*Narthecium ossifragum*), Purple Moor-Grass (*Molinia caerulea*), Cross-leaved Heath (*Erica tetralix*), White-beak Sedge (*Rhynchospora alba*), Round-leaved Sundew (*Drosera rotundifolia*) and bog mosses (*Sphagnum* spp.). Bog mosses reach almost complete cover in the wetter areas. The Royal Fern (*Osmunda regalis*) is found growing in the drains. On the drier rocky outcrops, the vegetation is more dominated by Ling Heather (*Calluna vulgaris*), with Western Gorse (*Ulex gallii*), St. Dabeoc's Heath (*Daboecia cantabrica*), Bell Heather (*Erica cinerea*), Carnation Sedge (*Carex panicea*), Green-ribbed Sedge (*Carex binervis*), Royal Fern, Hard Fern (*Blechnum spicant*), Heath Milkwort (*Polygala serpyllifolia*), Tormentil (*Potentilla erecta*) and Deergrass (*Scirpus cespitosus*). In the lee of large boulders Holly (*Ilex aquifolium*), Bilberry (*Vaccinium myrtillus*), Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus*) also occur.

Lough Duff is surrounded by a quaking raft of vegetation dominated by bog mosses (*Sphagnum* spp.), with Bogbean (*Menyanthes trifoliata*), Marsh St. John's-wort (*Hypericum elodes*) and Royal Fern in the by the lake edge. The lake itself has emergent Pipewort (*Eriocaulon aquaticum*). The heath on the site is noted for the presence of Mackay's Heath (*Erica mackaiana*), an Irish Red Data Book species, which occurs in an area approximately 200 x 100 metres in size. In Ireland, Mackay's Heath is restricted to less than five, 10 km squares.

Former land use is evident from the old peat banks and drains on the site. The stream running from Lough Duff to Lough Sheedagh has recently been mechanically cleared and deepened and there are also some recent excavations within the site, north-east of Lough Duff. Current land use includes grazing by sheep and cattle. There is a small quarrying operation along the eastern margin of the site and dumping of excavated material, as well as of domestic appliances, occurs along the track to the north-east.

There is also burning to clear Western Gorse from the low hills. These activities have resulted in habitat loss and damage to the hydrology of the site, and are a potential threat to its conservation.

Carna Heath and Bog NHA is a site of considerable conservation significance. It comprises a mosaic of heath, lake, pools and streams and supports a good diversity of blanket bog microhabitats, including hummock/hollow complexes, flushes and regenerating cutover. 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.