SITE SYNOPSIS

Site Name: Black Head-Poulsallagh Complex SAC

Site Code: 000020

The Black Head-Poulsallagh complex encompasses a complete range of rocky Burren habitats from coastal, glacially planed limestone pavements to high level heaths. The Caher River, the only river found in the high Burren, and Fanore dunes, one of the best dune systems in Clare, are included in the site. The shoreline, littoral and sublittoral areas are also interesting because of the rock type, physical exposure, and flora and fauna communities.

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):

[1170] Reefs
[1220] Perennial Vegetation of Stony Banks
[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)
[3260] Floating River Vegetation
[4060] Alpine and Subalpine Heaths
[5130] Juniper Scrub
[6210] Orchid-rich Calcareous Grassland*
[6510] Lowland Hay Meadows
[7220] Petrifying Springs*
[8240] Limestone Pavement*
[8330] Sea Caves
[1395] Petalwort (*Petalophyllum ralfsii*)

The shoreline of this site has the best examples in Ireland of an important biogeographical variation of intertidal reefs extremely exposed to wave action, and these shores have been described as some of the most interesting open coast shores of both Britain and Ireland. The shores are gently sloping, stepped limestone pavements over most of the site, but at Black Head the shore is narrow and very steeply stepped.

There are numerous shallow rockpools on the shore. These frequently support large numbers of the Purple Sea Urchin, *Paracentrotus lividus*, that have burrowed into the limestone so that each urchin sits in a well-defined hollow. The pools also support the Beadlet Anemone *Actina equina*, the top shells *Gibbula magus*, *G. cineraria* and *G. umbilicalis*, and the coralline algae *Corallina officinalis.* A variety of algae may be found in the pools, including the red algae *Chondrus crispus*, *Plocamium cartilagineum*

and *Palmaria palmata,* and the brown algae *Dictyota dichotoma* and *Bifucaria bifurcata* where the pools are deep enough. Of particular ecological importance is that both the Purple Sea Urchin and the brown alga *Bifurcaria bifurcata* are close to the northern limits of their distribution.

Marine caves are a feature of the site and this is probably the best known extensive network of caves that are connected to the sea in Ireland. Their occurrence on a very exposed coast with difficult access gives very limited opportunities for biological survey work. It is known, however, that the caves are well scoured and it can be assumed that they exist in a very natural state.

The limestone pavement includes smooth, blocky and shattered types, and is particularly well represented in the Poulsallagh area. Erratics of Galway granite occur within the site, especially around Black Head. The bare pavement is interspersed with fine examples of species-rich, dry calcareous grassland. Limestone heath is also well developed, particularly on the higher areas to the north and north-east, where Bearberry (*Arctostaphylos uva-ursi*) occurs.

The rare Intermediate Wintergreen (*Pyrola media*) occurs on the high heaths. Other rare plants of limestone heaths are Hoary Rock-rose (*Helianthemum canum*) and Pyramidal Bugle (*Ajuga pyramidalis*), both of which occur in the Poulsallagh area.

The Caher River is a shallow, spring-fed stream approximately 5 km long, which flows underground for some of its course during dry periods. The upper section is heavily shaded by Hazel (*Corylus avellana*) scrub, which in the vicinity of the channel bears a luxuriant lichen flora. The lower section of river is on limestone bedrock and periodically dries out. This part of the river is dominated by mosses and algal crusts, both of which are heavily calcified, and in some places form tufa deposits of considerable thickness.

Fanore dunes, located south of Black Head, are formed over limestone. The bedrock can be seen outcropping in the low-lying areas. As a result, the sand is highly calcareous in nature and the dune vegetation comprises a number of calcicolous (calcium-loving) species. These include Pyramidal Orchid (*Anacamptis pyramidalis*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Squinancywort (*Asperula cynanchica*) and Hairy Rock-cress (*Arabis hirsuta*). The parasitic Dodder (*Cuscuta epithymum*) grows in abundance and the profusion of orchid species including Pyramidal Orchid, Fragrant Orchid (*Gymnadenia conopsea*) and a range of *Dactylorhiza* species is noteworthy. Species recorded from the high dunes include Sea-holly (*Eryngium maritimum*), Sea Spurge (*Euphorbia paralias*) and Marram Grass (*Ammophila arenaria*). A small population of the rare liverwort *Petalophyllum ralfsii,* a species is listed on Annex I of the E.U. Habitats Directive, occurs within a damp, grassy area of the dunes.

A superb and extensive example of a highly exposed vegetated shingle bank occurs at Poulsallagh, with substrate ranging from large limestone boulders to pebbles. Species present include Thrift (*Armeria maritima*), Common Scurvygrass (*Cochlearia*

officinalis), Sea Samphire (*Crithmum maritimum*), Red Fescue (*Festuca rubra*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Sea Plantain (*Plantago maritima*), Buck's-horn Plantain (*Plantago coronopus*) and Sea Mayweed (*Matricaria maritima*). The population of Sea Samphire is considered the best in the region. Lichen cover is particularly well developed.

The northern part of Black Head hosts approximately 25 breeding pairs of Black Guillemot while up to 15 Black-throated Divers winter there (this species is listed in Annex I of the E.U. Birds Directive).

Most of the terrestrial part of the site is grazed by cattle and sheep, particularly in winter, and by goats throughout the year, sometimes resulting in over-grazing. Scrub clearance and intensification of agriculture has caused damage to parts of the site and is a threat to the water quality of the Caher River. Some agriculturally improved areas in the Caher River catchment have been included within the site for hydrological reasons. Leisure activities, including the construction of a caravan park, in the Fanore area has led to erosion and a deterioration of the quality of the dune area.

Due to the presence of fine examples of Burren habitats, the site is of international scientific interest. The limestone pavement and heath and the marine component are particularly noteworthy, while the plant communities contain a high density of rare and interesting species.