SITE SYNOPSIS

Site Name: Kilcarren-Firville Bog SAC

Site Code: 000647

Kilcarren-Firville Bog is situated approximately 2 km east of the village of Carrigahorig in north Co. Tipperary. It is a lowland raised bog complex which extends about 4.5 km from east to west and is bisected by a road. It contains a large area of uncut high bog.

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):

[7110] Raised Bog (Active)*
[7120] Degraded Raised Bog
[7150] Rhynchosporion Vegetation

Active raised bog comprises areas of high bog that are wet and actively peat-forming, where the percentage cover of bog mosses (*Sphagnum* spp.) is high, and where some or all of the following features occur: hummocks, pools, wet flats, *Sphagnum* lawns, flushes and soaks. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration. The Rhynchosporion habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (*Rhynchospora alba*) and/or Brown Beak-sedge (*R. fusca*), and at least some of the following associated species, Bog Asphodel (*Narthecium ossifragum*), sundews (*Drosera* spp.), Deergrass (*Scirpus cespitosus*) and Carnation Sedge (*Carex panicea*).

The site contains substantial areas of active raised bog, which are largely confined to the wetter, more central areas of high bog. The vegetation here is typical of midland raised bogs, with Heather (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*), Common Cottongrass (*Eriophorum angustifolium*), Deergrass, Carnation Sedge, Bog Asphodel and bog mosses all being common. The active bog, and to a lesser extent the degraded areas, support occasional pool areas and quaking lawns dominated by Rhynchosporion vegetation. Typical species of the habitat are the bog moss *S. cuspidatum*, Bogbean (*Menyanthes trifoliata*), White Beak-sedge, Common Cottongrass, and Great Sundew (*Drosera anglica*). The cover of *Sphagnum cuspidatum* typically exceeds 50% in these areas.

The degraded raised bog tends to occur along the high bog margins where the peat has been subject to drying out. Degraded surfaces are usually dominated by a rather species-poor flora in which Heather, Bog Asphodel, Cottongrasses (*E. vaginatum* and

E. angustifolium), Deergrass and Cross-leaved Heath are typically frequent. *Sphagnum* cover is low and permanent pool areas are rare. Localised flushes support Downy Birch (*Betula pubescens*) and Scots Pine (*Pinus sylvestris*).

The uncut high bog is surrounded by a large cutover area which is still subject to varying degrees of peat-cutting. The cutover bog is frequently dominated by Purple Moor-grass (*Molinia caerulea*), and Bog-myrtle (*Myrica gale*) is locally abundant. Birch woodland with some Holly (*Ilex aquifolium*) and willow (*Salix* spp.) is widespread in most cutover areas, and Scots Pine is common in a few locations. These scrub areas provide habitat for a population of the nationally rare shrub Alder Buckthorn (*Frangula alnus*). Some of the cutover has been reclaimed for grassland.

Peripheral areas at Kilcarren-Firville Bog have been extensively damaged by peat cutting, drainage and land reclamation. The structure of the high bog has been detrimentally affected by drainage effects over a long period of time through a lowering of the water table. This can lead to the decline in abundance of plant species of wet bog conditions. Without restoration works, further drying out of the bog surface is likely to occur and further peat cutting remains a threat.

Kilcarren-Firville Bog is of high conservation importance as it contains good examples of the priority Annex I habitat active raised bog and the non-priority habitats degraded raised bog and depressions on peat substrates (Rhynchosporion). The quality of these habitats is good, although the overall system has been detrimentally affected by drainage effects over a long period of time.