# **TIPPERARY - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Kilcarren-Firville Bog

Other names used for site

IGH THEME IGH7 Quaternary, IGH16 Hydrogeology

TOWNLAND(S) Kilcarren, Dary, Kilregane, Kilfadda, Kilgask, Ballyhaugh,

Lisduff, Abbeville, Derrybreen

NEAREST TOWN/VILLAGE Carrigahorig

SIX INCH MAP NUMBER 4, 7

ITM CO-ORDINATES 593860E 701342N

1:50,000 O.S. SHEET NUMBER 53 GSI BEDROCK 1:100,000 SHEET NO. 15

### **Outline Site Description**

Kilcarren-Firville Bog is an extensive area of raised bog occupying a lowland hollow, approximately 2 km east of Carrigahorig.

## Geological System/Age and Primary Rock Type

The bog is Holocene (Quaternary) in age, and formed in post-glacial marshy conditions, after deglaciation at the end of the last ice age. Kilcarren-Firville Bog is underlain by Lower Carboniferous bedrock lithologies varying from Waulsortian mudbank limestone to marine shelf limestone and shale.

#### **Main Geological or Geomorphological Interest**

Kilcarren-Firville Bog is situated between Carrigahorig and Birr and consists of two raised bog systems (Kilcarren to the west and Firville to the east) bisected by the R438 road. The geomorphology of the site is classed as a ridge-basin type raised bog that originally formed as a single bog. The bog developed as a result of peat accumulations on limestone till subsoil. Limestone till occurs close to the surface of some shallow parts of the bog. Exhibiting a shallow dome shape, Kilcarren-Firville Bog comprises large areas of active raised bog (where peat is actively forming), wet pools and flushes around the main central areas. Areas of degraded bog are found around bog margins where the hydrology has been affected by peat cutting and bog drainage. A natural wetland, Sluggary Pool, with a seasonally fluctuating water level, occupies the northeastern part of the bog. An intact infiltration lagg occurs along parts of the northern boundary, where a high bog transitions to a sandy till ridge.

#### Site Importance - County Geological Site; recommended for Geological NHA

Kilcarren-Firville Bog SAC (000647) is recognised as being of high conservation importance. The SAC occupies an area of c. 28 ha. Active raised bogs are an increasingly rare and threatened feature of the landscape in the Irish central midlands.

#### Management/promotion issues

Peat cutting and the lowering of the water table through drainage can detrimentally affect the condition of the bog. These practices and further land reclamation are the main threats to the site. The R438 road passes through the heart of the bog, however tree cover along the roadside obscures the view of the bog and there are no lay-bys or parking areas. As a result, public promotion is not suitable in the current state. A wooden trackway similar to that at Clara Bog, Co. Offaly would serve to improve public perception of the unique ecology and geomorphology of raised bogs, and the protection afforded to these landscapes and habitats.



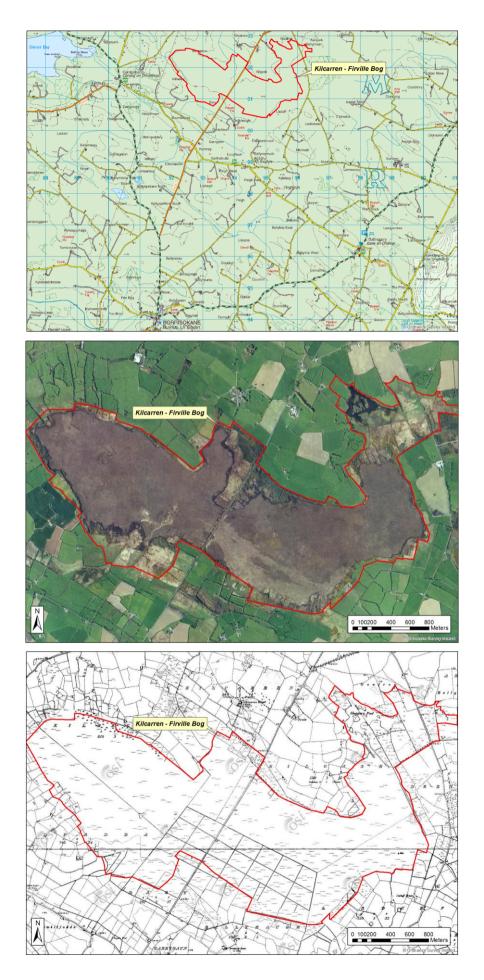
View north over Kilcarren Bog from R438 road.



View southeast across Firville Bog from R438 road.



View west over Sluggary Pool at northeastern part of Firville Bog, viewed from L5043 road.



Gallagher et al. 2019. Geological Survey Ireland.