GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site **IGH THEME** TOWNLAND(S)

NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER **ITM CO-ORDINATES**

Carrownagappul Bog

IGH7 Quaternary, IGH16 Hydrogeology Springlawn, Gunnode, Carrownagappul, Tully, Ballynalahy, Carrownagannive **Mountbellew Bridge** 32.46 566950E 750000N (centre of bog) 1:50,000 O.S. SHEET NOs. 39, 46 GSI BEDROCK 1:100,000 SHEET NO. 12

Outline Site Description

Carrownagappul Bog comprises an extensive area of peatland in a wide, bowl-shaped, interdrumlin hollow, approximately 2 km north of Mountbellew. The bog contains one of the largest extant areas of uncut high bog surface in County Galway, and is also the most negotiable bog in all of Galway, traversed by a road and track network.

Geological System/Age and Primary Rock Type

Carrownagappul Bog is situated within an area dominated by bedrock of Lower Carboniferous limestone. The bog peat is Quaternary in age, having formed in marshy conditions as an extensive envelope of the landscape since deglaciation, and mostly approximately 7,000-10,000 years ago.

Main Geological or Geomorphological Interest

While today a generally flat and open landscape, the locality of Carrownagappul Bog was covered by bog, marsh, guicksand, and ponds thousands of years ago as the bog formed. The site today comprises a high, domed, raised bog that includes both areas of high bog and cutover bog, and a significant proportion of the bog area is relatively intact.

The bog itself comprises partially decomposed vegetation, which sank into marshland within the wide, wet basin. This material was laid layer upon layer for thousands of years, as the fibrous peat formed and eventually decayed into amorphous organic material over time. The locality was therefore gradually covered by the rising bogland, which formed a dome-shaped, 'raised' bog. Other features of peat interest are included within the site boundary, such as intact and drained peat, peat cut by locals, wetlands, and recovering peat.

Active raised bog comprises areas of high bog that are wet and actively peat-forming, where the percentage cover of Sphagnum bog mosses 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. Carrownagappul is dominated by degraded raised bog though there is a significant area of active raised bog in the central portion of the feature. Owing to this, the bog has been included in the EU Life 'The Living Bog' Project, which is attempting to restore twelve Irish Bogs between the years 2016 and 2020. At Carrownagappul, over 25 kilometres length of drainage channel will be blocked off in this scheme.

Site Importance – County Geological Site; recommended for Geological NHA

Carrownagappul Bog has been designated an SAC and pNHA (site code 001242), owing to its habitat and species diversity and as a portion of the bog area is still 'active' raised bog. As the bog exists due to the geological and hydrogeological process of peat growth, the locality is ranked as a County Geological Site, and should also be designated as a Geological NHA.

Management/promotion issues

Damaging activities associated with land use across Carrownagappul Bog include drainage throughout the site and associated loss of habitat, and damage to the hydrological status of the site.



The main dome of Carrownagappul Bog, classified as 'active raised bog'.



Regenerating bog on the northern flank of the feature.



Some banks of cut peat at the northeastern edge of the bog.



Blocked drains at the western end of the cutover peat.

