

# LAOIS - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Hollymount		
Other names used for site			
<b>IGH THEME</b>	<b>IGH3 Carboniferous to Pliocene Palaeontology, IGH12 Mesozoic and Cenozoic</b>		
<b>TOWNLAND(S)</b>	Hollymount		
<b>NEAREST TOWN/VILLAGE</b>	Carlow		
<b>SIX INCH MAP NUMBER</b>	32		
<b>ITM CO-ORDINATES</b>	669467E 681900N		
<b>1:50,000 O.S. SHEET NUMBER</b>	61	<b>GSi BEDROCK 1:100,000 SHEET NO.</b>	19

## **Outline Site Description**

A number of fields where a borehole was drilled in the early 1970s.

## **Geological System/Age and Primary Rock Type**

The borehole was into Carboniferous Limestone bedrock, but samples from the borehole yielded pollen and spore material that are of Miocene-Pliocene (Neogene) age.

## **Main Geological or Geomorphological Interest**

Samples from the site at Hollymount were extracted from a 46m deep borehole in a Carboniferous limestone region, and studied by a Trinity College Dublin student called Phyllis Burgess in 1973. Pollen and spore samples were located in a 36-44m deep part of the borehole. The assemblage is thought to represent woodland and heathland communities of plants of Miocene-Pliocene (Neogene) age. This deposit is covered by more recent till from the Ice Age. The extent or form of the Neogene deposit is unknown, but is assumed to be preserved in some kind of enclosed depression (doline) within the Carboniferous limestone. The borehole site location was selected based on three wells dug by the Land Commission that intersected clays at different depths. Disturbed samples from these wells indicated the presence of Tertiary clays, and the chosen drilling site was intended to gain a likely maximum depth. Geophysical survey also indicated this location (see map for precise locations).

## **Site Importance – County Geological Site; may be recommended for Geological NHA**

This site is a deposit of Miocene-Pliocene (Neogene) age, which is exceedingly rare in the country as a whole, and it may be recommended for geological NHA status in the future as work on the IGH3 or IGH12 themes is considered in a national framework.

## **Management/promotion issues**

The Hollymount site is unusual in that a single borehole does not really constitute a 'site' but the palaeontological importance and rarity of Hollymount is such that an area around where the borehole was drilled is considered as a site, to allow the possibility of repeating the borehole for research purposes or conducting other research to define or sample the geological interest.



The borehole was drilled on the far margin of the fields here.



An extract from the Geological Survey of Ireland drilling report that shows the location of the borehole, along with the three Land Commission wells that pointed to the presence of the Tertiary aged clays.

