

## **GALWAY - COUNTY GEOLOGICAL SITE REPORT**

<b>NAME OF SITE</b>	<b>Hill 707</b>
Other names used for site	Unnamed hill 707 feet high southeast of Loughrea, Knockash
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Knockash</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Loughrea</b>
<b>SIX INCH MAP NUMBER</b>	<b>115</b>
<b>ITM CO-ORDINATES</b>	<b>564000E 711575N (summit)</b>
<b>1:50,000 O.S. SHEET No. 52</b>	<b>GSI BEDROCK 1: 100,000 SHEET NO. 15</b>

### **Outline Site Description**

The summit area of an isolated hill, with small rock exposures, extending over an area of about 500 m (east-west) and 1000 m (north south), largely north and east of the hill summit.

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

The hill is composed of Waulsortian carbonate mudbanks, a widespread complex of the Midlands succession of Carboniferous Limestone.

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

An unusually well-exposed aggregate of small Waulsortian banks and the enveloping cherty limestones lying near the local base of the Waulsortian Complex. This site illustrates (1) many features of bank growth-forms and aggregation patterns, (2) progradation of bank margins, (3) lateral passages from bank beds to coeval off-bank beds, and (4) well-developed transitional facies at the base of the buildups (including toe-bank facies). Petrographic studies of (3) and (4) have been published. The site is very important in helping to understand how Waulsortian banks formed and how the Irish Waulsortian Complex developed.

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

Given that the site is very important in helping to understand how Waulsortian banks formed and how the Irish Waulsortian Complex developed, and is regarded as of international importance by specialists in this Carboniferous geological story, it deserves to be recognised and protected as a geological NHA.

### **Management/promotion issues**

The hill is private farmland and should not be accessed without seeking landowner permission. It is probably not suitable for promotion to the general public as it is not accessible, nor easy to explain simply.



View of Hill 707 from the southwest.



The summit exposures of Hill 707.



Some exposures on the northwestern side.



Limestone pavement on the east side.



Westward dipping flank beds on the summit.



