

## LAOIS - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Carroll's Quarry</b>
<b>Other names used for site</b>	Knockacoller Quarry
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Knockacoller</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Castletown</b>
<b>SIX INCH MAP NUMBER</b>	<b>16</b>
<b>ITM CO-ORDINATES</b>	<b>652950E 698200N</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>54, 55 GSI BEDROCK 1:100,000 SHEET NO. 19</b>

### **Outline Site Description**

A small but prominent, steep-sided limestone hill capped by the ruins of a Norman castle fortress, dating back to the early 12<sup>th</sup> century.

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

Bedrock comprises Lower Carboniferous (Mississippian, Courceyan) fossil-rich Ballysteen Limestone Formation, deposited in open fully marine depositional conditions.

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

The Ballysteen Limestone Formation rocks are typically highly fossiliferous, dark grey, well bedded, muddy limestones, with bands of calcareous shales between the limestone beds. The strata dip gently 5°-15° south, and the quarry faces (east, south, west) exhibit excellent exposures of strata.

This site has hosted a quarry, on the southeast side of Bilberry Hill for at least 170 years. A quarry is illustrated on early on OSI six-inch maps dating from the mid-1800s. Early GSI one inch scale sheets (Sheet 127) from the late 1800's show that the site was recognised as an important fossil locality.

The quarry has produced stone for aggregates, chippings, railway ballast, lime dust, screenings, and drainage stone. Limestones of the Ballysteen Limestone Formation are worked for aggregate in several quarries in the region.

### **Site Importance – County Geological Site**

This County Geological Site is an important representative site exhibiting fresh and extensive exposures of Ballysteen Limestone Formation. The site is adjacent to the NE quarter of Knockacoller Bog SAC (002233).

### **Management/promotion issues**

As a working quarry, the listing as a County Geological Site has no implications for the normal operation of the quarry, subject to standard permissions and conditions under planning and environmental legislation. In the event of any future changes in quarrying operations, it would be desirable to consider retaining representative faces for geological purposes. As an operating quarry, the site is not suitable for any general promotion. Any correspondence can be made to the owner and operators Carroll Quarries, Knockacoller, Castletown, Co. Laois.



Limestone quarry faces at northwest part end of quarry.



South quarry face.

