

## LAOIS - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Arless Quarry</b>		
Other names used for site	Arless Contact, Arless, Arles Quarry		
<b>IGH THEME</b>	<b>IGH8 Lower Carboniferous</b>		
<b>TOWNLAND(S)</b>	<b>Ballynagall</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Ballickmoyler</b>		
<b>SIX INCH MAP NUMBER</b>	<b>32</b>		
<b>ITM CO-ORDINATES</b>	<b>666480E 682575N (centre of quarry)</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>61</b>	<b>GSI Bedrock 1:100,000 Sheet No.</b>	<b>16</b>

### **Outline Site Description**

A small, disused quarry with a restricted area of bedrock outcrop.

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

The quarry is excavated into bedrock where the contact between the Upper Carboniferous (Namurian) age shale of the Luggacurren Shale Formation and the Lower Carboniferous limestone of the Clogrenan Formation can be seen. The Upper Carboniferous shale overlies the limestone in the quarry, and is stratigraphically younger in age.

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

The quarry itself is a nice feature, at the base of the slope scarp at the eastern end of the Castlecomer Plateau, and picked out by mature whitethorn trees. The quarry has not been used for some time, and the faces are somewhat overgrown by the surrounding trees.

This is a good site for observing two rock types separated within the stratigraphic column as they are of two different ages, but the younger bedrock sits on top of the older bedrock here in a small, disused quarry outcrop within a restricted area only a few metres across.

The shale at the top of the rock face is black and massive, while the underlying grey limestone is grey and karstified, with fissures enlarged by dissolution of the rock. Both the colour and structure of the two rock types therefore differ in an easily observable manner.

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

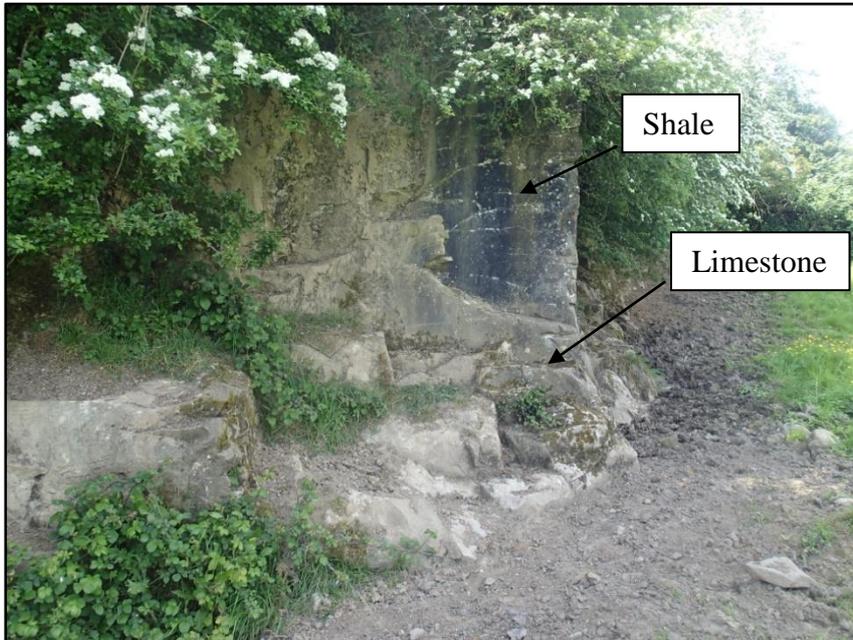
This is a good representative site for a significant part of Laois' geology and the contact between the bedrocks of two ages is not well displayed in many localities.

### **Management/promotion issues**

The inclusion of this quarry as a County Geological Site has absolutely no implications for the normal permitted operation of the land around the quarry. It is hoped that the owner will continue to allow specialist research visits by geological groups by arrangement. It is not suited to general promotion as the quarry is on private land. Health and safety rules must be followed by any geologists visiting with the permission of the owner.



Arless Quarry, looking east.



Looking northwards across the outcrop; the contrast between the black, massive shale and the underlying bedded limestone is clearly seen.



A view of the limited extent of bedrock outcrop at Arless Quarry.



Solutionally enlarged fissures in the limestone at the base of the exposure.

