

## CORK - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Owentaraglin River</b>		
Other names used for site	Araglen River, <i>Abhainn Airglinn</i>		
<b>IGH THEME</b>	<b>IGH14 Fluvial and Lacustrine Geomorphology</b>		
<b>TOWNLAND(S)</b>	<b>Kishkeam Lower, Knocksvoreen, Knockeenacurrig West, Knockeendallane, Doonasleen North, Dromskarragh More, , Doonasleen South, Urraghillmore West, , Doonasleen East, Ummeraboy East, Islandbrack, Glantane More, Knockduff Upper, Knockageeha West, Knockduff Lower, Derragh, Ahane Upper, Mullaghroe North, Mullaghroe South, Knockane, Lislehane, Knockeenageeragh, Euglaune, Lisnaboy Lower, Lyredaowen, Ahane Lower</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Kishkeam, Cullen</b>		
<b>SIX INCH MAP NUMBER</b>	<b>21, 29, 30</b>		
<b>ITM CO-ORDINATES</b>	<b>522600E 599590N (centre of site)</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>72, 79</b>	<b>GSI BEDROCK 1:100,000 SHEET NO.</b>	<b>21</b>
<b>GIS CODE</b>	<b>CK070</b>		

### **Outline Site Description**

The site comprises a number of tight meanders along the course of the Owentaraglin River, south of Kishkeam.

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

The river valley and the channel pattern within, including the meanders, are of Holocene Age, but the river exploits a subglacially-eroded meltwater channel which is of Pleistocene age.

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

Meanders are bends in a sinuous river, and are formed when the moving water in a stream erodes the outer banks, widening the valley, while the inner part of the river then has less energy and deposits what sediment it is carrying. The result is a snaking form as the stream meanders back and forth across its down-valley axis.

The Owentaraglin River, a tributary of the River Blackwater, exhibits approximately 150 meanders along an 11 kilometre stretch between Kishkeam and Lyredaowen Townlands; such a concentration of meanders is highly unusual in the upland rivers of Cork, and indeed in Ireland.

The river also exhibits a number of classic landforms associated with meandering along this stretch, including point bars, slip off slopes, river cut cliffs, incised meanders, abandoned meanders and scroll bars, as well as a wide and level floodplain. Interestingly, no ox-bow lakes are seen to have formed; these are usually the classic feature of tightly meandering rivers. There are some crescent-shaped depressions closer to the middle portion of the site, around Urraghillmore West, that may be infilled ox-bows.

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

This site is unusual in that few mountain rivers in County Cork have meandering stretches, except in their lower reaches as the gradient flattens on the lowlands. The sheer number and concentration of tight meanders of this stretch of channel are especially noteworthy.

### **Management/promotion issues**

The meanders are visible from the local 'L' roads that follow either side of the valley, but a superb view is had from Kishkeam Village itself, looking down-valley. This is an excellent teaching site for secondary level Geography students, and the formation of the meanders in the context of the Holocene/Quaternary history of the area could be promoted *via* an appropriately located information panel at Kishkeam.



The meandering Owentaraglin River at Doonasleen North.



Point bar with sediment being deposited, Ahane Upper.



High ridges flanking the channel at Urraghillmore West.



View of some of the meanders, looking south from Kishkeam Bridge.



