

# CAVAN - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Western Cuilcagh (OVERVIEW)</b>
Other names used for site	Shannon System
<b>IGH THEME</b>	<b>IGH1 Karst, IGH8 Lower Carboniferous</b>
<b>TOWNLAND(S)</b>	<b>Numerous</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Blacklion, Glangevlin, Dowra</b>
<b>SIX INCH MAP NUMBER</b>	<b>1,2,3,4</b>
<b>ITM CO-ORDINATES</b>	<b>605775E 835600N (centre of area)</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>26 GSI BEDROCK 1:100,000 SHEET NO. 7</b>

## **Outline Site Description**

This site is an extensive area of upland karst on the western slopes of Cuilcagh Mountain, extending southwards from near Blacklion and Loughan on the shores of Lough Macnean Upper to the Burren Forest and further south to the western Cuilcagh slopes.

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

The rocks are primarily Lower Carboniferous limestone of the Dartry Limestone Formation, and comprise mostly the carbonate mudbank facies termed the Knockmore Limestone Member.

## **Main Geological or Geomorphological Interest**

This site is an extensive area of upland karst with glacially modified karst, pre- and post-glacial karst, a karst watershed divided by a Tertiary igneous intrusive dyke, abundant surface and underground karstification, and complex hydrological catchments.

Many of the surface features that can be seen and visited are described separately as specific subsites, effectively as highlights, such as Shannon Pot, Burren Forest, Corratirrim, Garvagh Lough, Legeelan Quarry, Pollnaowen, Pollnagossan, Tullydermot Falls and White Father's Cave. The unifying characteristic of the Western Cuilcagh site is the subterranean drainage. Sinks in the upland area have been dye traced to springs and risings in the lowland parts of the site.

Other parts are highly significant yet not visible. The Cuilcagh Dyke, for example is a long intrusion running across the site. It is exposed in Fermanagh, but not seen in Cavan. It plays a very strong role as an impermeable barrier in separating water catchments, dividing karstic flows. The source of the River Shannon was traditionally known as Shannon Pot, but investigations by cavers have shown that big cave systems such as Shannon Cave and a variety of sinks all feed into it and the source of the river is actually high up on the flanks of Cuilcagh Mountain.

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

The site as whole contains an enormous wealth of karstic landscapes and features. It has already been proposed as a geological NHA to NPWS by the GSI, but has not yet been designated. It is important to note that it complements the geological heritage designations of very similar outstanding geology as Areas of Special Scientific Interest (ASSI) in adjoining areas of County Fermanagh.

## **Management/promotion issues**

Most issues relating to these sites can best be addressed and developed within the framework of the Geopark. In society as a whole the understanding of groundwater, and its vulnerability to pollution, especially in karstic areas, is very poor. The Western Cuilcagh site, through the Geopark, offers many opportunities to raise awareness of the hidden geology of groundwater.

