

CLARE - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE**St. Brendan's / Poulmagollum**

Other names used for site

Killeany Valley, St. Brendan's, Poulmagollum, Poulelva, Cullauns 0-3

TOWNLAND(S)

Ballydonohoe, Ballyteige, Ballycastell, Ballyconnoe North, Ballyconnoe South, Ballydonohoe, Ballyinsheen Beg, Ballyinsheen More, Ballyneillan, Caherbarnagh, Caherbullog, Cahercloggaun, Cahermaan, Cahermakerrila, Cooleabeg, Cooleamore, Coolmeen, Cragreagh, Cullaun, Gowlaun, Killeany, Kilmoon East, Kilmoon West, Larheenbeg, Lisdoonvarna, Lisheeneagh, Lislarheenmore, Lismorahaun, Lisdoonvarna

NEAREST TOWN**SIX INCH MAP NUMBER**

4, 5, 8, 9

NATIONAL GRID REFERENCEa) St. Brendan's Well 114600 198400=R14600 98400
b) Poulmagollum E2 115300 205200=M15300 05200
c) Cullaun 0 118100 202400=M18100 02400
d) Cullaun 3 117400 199200=R17400 99200
Centre point: 116000 202500**1:50,000 O.S. SHEET NUMBER**

51 1/2 inch Sheet No. 14

Outline Site Description

The longest, anastomosing, dendritic, complex cave system and associated risings in Ireland, plus other major systems.

Geological System/Age and Primary Rock Type

Cave system developed within Carboniferous Limestone.

Main Geological or Geomorphological Interest

The St. Brendan's - Poulmagollum site includes St. Brendan's Well near Lisdoonvarna, the main rising for a significant area of karstic drainage focused on the Poulmagollum - Poulelva cave system on the eastern side of Slieve Elva, the intermediate Killeany rising and the proven drainage from the Cullaun caves (Cullaun 0-3) on the western side of Poulelva. The rising at Killeany flows as the Owentoberlea and sinks again within a short distance and re-emerges at St. Brendan's Well except when in flood. On these occasions a surface stream may flow in the normally dry valley, although there is a further intermediate rising and sink at Upper St. Brendan's Rising.

The Poulmagollum -Poulelva cave system is Ireland's longest cave system. With approximately 14km total passage, much of which is active streamway, this cave system exhibits many features of interest revealing a complex history of development. The most obvious control is the input of streams sinking at the limestone - shale margin along the break in slope below Slieve Elva. The two major potholes of Poulmagollum and Poulelva themselves probably reflect former major sinks at the shale margin in a preglacial or interglacial period.

The St. Brendan's - Poulmagollum site also includes a number of less developed, simple canyon type and supposedly postglacial streamways in the caves of Cullaun on the east of the site. The drainage from these and from the Poulmagollum master cave runs southwards with the general shallow dip of the limestone strata in the Killeany valley, converging at Killeany from where it continues to St. Brendan's Well, or drains directly to the latter rising. Not all the Cullaun caves drain to St. Brendan's Well; those that drain eastwards to the Fergus River Cave are not included in the site.

This site has a complex history relating to at least one previous glacial advance and retreat. There is major scope for research, both underground and on the surface, of the various phases of development of the karst history of the valley.

Site Importance

The site is of International importance and is proposed for NHA designation under the IGH 1 Karst theme of the GSI's IGH Programme.

Management/promotion issues

Threats to the site include dumping in swallow holes / dolines, agricultural sewage drainage, forestry and urban development. There have been historical access problems to Poulmagollum pothole.



Poulmagollum Pothole.
Photo by G. Ll. Jones.



A stream flowing off the shales, sinks immediately on reaching limestones.
Photo by G. Ll. Jones.

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