# **CLARE - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Other names used for site TOWNLAND(S) NEAREST TOWN SIX INCH MAP NUMBER NATIONAL GRID REFERENCE 1:50,000 O.S. SHEET NUMBER St. Brendan's Well

St. Brendan's Bridge on Gowlaun Stream

Lisdoonvarna

8

114567 198460 = R 13 98 51 **1/2 inch Sheet No.** 14

### **Outline Site Description**

Stream section exposing lower Clare Shales.

## Geological System/Age and Primary Rock Type

Lower Clare shales, Namurian in age.

## Main Geological or Geomorphological Interest

St. Brendan's Well is located about 1 mile east of Lisdoonvarna along Gowlaun Stream. The lower Clare Shales are exposed in this stream overlying the Carboniferous Limestone. These deep-water marine shales define the base of the Namurian. According to Hodson (1954) one of the more notable features of exposures of the Clare Shales in the Lisdoonvarna area is the reduction of the Phosphate Group (a group consisting of mainly black shales) to a few inches and the occurrence of faunal band rich in goniatites (in particular *Homoceras beyrichianum* group and *Homoceras* aff. *subglobosum*). The site also shows a diverse cephalopod fauna within concretions or nodules at the exposure together with a rich condont fauna. Tanebe *et al.* (1995) have recently used goniatitic material from the area in a study on the early life history of Carboniferous ammonoids, recognising various growth stages including embryonic forms from this area. The area indicates the attenuated nature of the northern Clare Shales, and the junction between the Upper and Lower Carboniferous. It is one of the few places in Ireland in which this horizon is exposed. The risings are the outlet for water from the whole Poulnagollum – Pollelva System and the Cullaun caves on the western Poulacapple ridge.

### Site Importance

The site is of National importance and may be proposed for NHA designation under the IGH 3 Carboniferous-Pliocene Palaeontology theme, IGH 8 Lower Carboniferous theme and IGH 9 Upper Carboniferous and Permian theme of the GSI's IGH Programme. It is also part of a larger site (St. Brendan's – Poulnagollum) under the IGH 1 Karst theme.

### Management/promotion issues

The area is one used by many University and Industrial Field Trips.



# St. Brendan's Well

