LEITRIM - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER 25 GISCODE LM029 The Doons

IGH1 Karst Sramore, Fawnlion, Carrickfad, Doonkelly Dromahair 10 578700E 837800N (centre of northwestern wing) GSI BEDROCK 1:100,000 SHEET NO. 7

Outline Site Description

A group of isolated, steep sided limestone hills north of Doon Lough.

Geological System/Age and Primary Rock Type

The rocks of these isolated hills are Carboniferous Limestone and mapped as part of the Dartry Limestone Formation, of Mississippian (Lower Carboniferous) age.

Main Geological or Geomorphological Interest

The Doons are isolated, steep-sided limestone hills that are interpreted as relict, glacially-modified tower karst. They are considered to be the best example of a group of such hills in Ireland, with better exposure and less blanketing glacial sediments than in some other comparable sites. Originally, prior to glacial modification, they may have been similar to the classic tower karst of the Guilin area in China.

Whilst the western tower of the main pair is heavily forested by Coillte, and surface features are currently obscured, the open grazing of the eastern tower has revealed features on the flat hilltop that have been interpreted by archaeologists as a hillfort. The isolation on top of this tower, and wide views, would have made the site a very secure position for historical defence purposes.

Whilst other hills in the vicinity are possibly reflecting variations in the nature of the limestone, it is apparent from natural exposures that the Doons are composed of relatively ordinary, bedded Dartry Limestone Formation, and not the massive carbonate mudbanks which form some of the surrounding hills. The massive nature of carbonate mudbanks tends to make them more resistant to erosion, and consequently isolated hills in other parts of the country are often found to be mudbank limestones. The Doons requires alternative geomorphological explanation, with relict, glacially modified tower karst the best model.

Site Importance - County Geological Site; recommended for Geological NHA

As they are considered to be the best example of a group of such relict tower karst hills in Ireland, they are of national importance and have been previously proposed to the National Parks and Wildlife Service for designation as a Geological NHA. In the absence of progress with Geological NHA designation, the inclusion of The Doons as a County Geological Site is important.

Management/promotion issues

The site is all either private farmland or Coillte forestry, and is not accessible without landowner permission. Given the dramatic nature of the cliffs and towers, they are actually best viewed from nearby on adjacent roads, or walking routes across nearby hilltops.



The two main towers at the Doons viewed from the south.



The view from below of the eastern of the two main towers.

