#### **LEITRIM - UPLAND KARST AREAS OVERVIEW REPORT**

NAME OF SITE Glenade and Glencar Valleys

Other names used for site

IGH THEME IGH 1 Karst, IGH7 Quaternary

TOWNLAND(S) Gortnacrieve, Corlea, Aghnahaha, Largy, Gorteenaguinnell,

Aghamore, Tawnamachugh, Launtaggart, Creevelea, Magheramore, Corglass, Cloontypruglish, Cleighragh,

Formoyle, Largandoon

NEAREST TOWN Manorhamilton

SIX INCH MAP NUMBER 3, 4, 6, 7

NATIONAL GRID REFERENCE 580000E 846000N (centre of area) 1:50,000 O.S. SHEET NUMBER 16 GSI BEDROCK 1:100,000 SHEET NO. 7

**GIS CODE LM013** 

# **Outline Site Description**

The Glenade and Glencar Valleys are deep and wide glacial valleys, while the uplands flanking the valleys are some of the best areas in Ireland to see upland karst features, including potholes, shafts, caves, enclosed depressions and limestone pavement. The significance of the 'upland karst landscape' is heightened by the number and complexity of karst features in a relatively small area.

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

The valleys have been shaped and moulded during the Quaternary (Ice Age) by glacier ice abrading the mountain tops and flanks. The flanking ridges and valley sides therefore comprise ice-scoured bedrock, which comprises Lower Carboniferous limestones and sandstones (c. 330 Ma).

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

The valleys are wide, deep troughs, over two kilometres wide in places, and the ridges on either side include discrete as well as composite karst features. At the northeastern side of Glenade Valley, Arroo Mountain hosts a wealth of caves and potholes, which indicate extensive karstification of the limestone below, as well as some exposed limestone pavement areas, which are sculpted into linear blocks of limestone.

At the southwestern side of the valley, Largy – Gorteenaguinnell is the most extensive plateau karst doline field in Ireland. Caves at Poll na mBear and Teampall Shetric illustrate extensive karstification here too, and the Glenade Cliffs expose the stratigraphic sequence of limestone bedrock units. Truskmore hosts one of the best examples of a complex of periglacial features in Ireland, and Eagle's Rock and the Peakadaw landslips show that dramatic geological actions did not stop when the ice of the last Ice Age retreated. In Glencar, the Glencar Waterfall is a spectacular feature overtopping the limestone cliffs at the edge of the uplands.

## **Site Importance**

The valleys are set between some of the best upland karst in the country, and individual caves and cliffed rock exposures, as well as towers of free-standing rock and waterfalls, make this a textbook area for the study of karst and glacial and postglacial geomorphology. A number of sites in the region have been classified as County Geological Sites, with some also suggested as Geological NHAs.

#### Management/promotion issues

Access to the uplands is restricted to hillwalkers and climbers, as there is no road access excepting some cul-de-sac trackways onto some of the plateaux. The valley itself is well served by roads and walkways.