

# CLARE - COUNTY GEOLOGICAL SITE REPORT

**NAME OF SITE**

**Aillwee Hill**

Other names used for site

**TOWNLAND(S)**

Ballycahill, Lisgoogan. Aillwee, Ballyalaban, Gleninsheen, Glensleade, Berneens, Garracloon, Poulgorm.

**NEAREST TOWN**

Ballyvaughan

**SIX INCH MAP NUMBER**

5, 9

**NATIONAL GRID REFERENCE**

124850 204500 (Centre Of Major Doline) = M 24850 04500

**1:50,000 O.S. SHEET NUMBER**

51

**1/2 inch Sheet No. 14**

**Outline Site Description**

Plateau karst with a wide variety of landforms. Area of dolines, uvalas, dry valleys, gorges, limestone pavement, springs, sinks, fossil caves.

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

Middle and Upper Brigantian (Carboniferous) Limestones.

**Main Geological or Geomorphological Interest**

This site, located on the dip slope of Aillwee Hill in the north-central part of the Burren, contains the densest concentration and best examples of classical karst features in Ireland. These features, including springs, sinks, fossil caves, dry valleys and various enclosed depressions or dolines may have developed since the Pliocene by runoff from the former shale cover which was impermeable and insoluble. Later glacial and periglacial activity further modified these features (Drew 1973). The majority of the features have developed in Middle and Upper Brigantian limestones but the floor of the largest enclosed depressions are in the uppermost beds of the underlying Burren Limestones (Aillwee Member).

A series of discontinuous dry valleys, 20-50m wide and 5-20m deep, dissect the summit and flank areas of Aillwee Hill. The most complete valley is located at Ballymihil. These dry valleys have a general orientation towards the large and deep Glensleade doline (with a floor area of 1.5km<sup>2</sup>) and record the disintegration of a fluvial drainage system into a doline-oriented karstic drainage system. South of the Glensleade doline is the Kilcorney depression, one of three polje features in the central Burren region. Its origin is uncertain. Kilcorney may be genetically connected with the Aillwee landforms and is therefore considered a part of this larger site.

A large complex doline or uvala (smaller depressions within a larger enclosing contour) is situated at the summit of Aillwee Hill. This is the largest and most spectacular such diagnostic karst feature in Ireland. Numerous smaller dolines occur on the summit plateau and several small springs and sinks occur in the valleys and depressions.

Other karstic features in the area include fossil cave systems. The best developed are Maze Holes, a linear network of passages that honeycomb a limestone spur in the summit uvala. These caves, formed when the watertable was some 250m higher than at present, must be of great antiquity. The caves contain a partial fill of sediment. Similar ancient caves are present in the Kilcorney depression and seem to predate the formation of that depression.

**Site Importance**

The site is of National importance and is proposed for NHA designation under the IGH 1 Karst theme of the GSI's IGH Programme. The site is largely within the SAC54 Moneen Mountain.

**Management/promotion issues**

Land reclaimed, new access roads, agricultural buildings on plateau in recent years.

The large enclosed  
doline on the summit  
of Aillwee Hill (D.  
Drew).





Blackhead Or Ballyvaghan Bay  
*Bá Bhaile Uí Bheacháin*

