# **ROSCOMMON - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE	Killeglan Karst Landscape
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Milltown, Cuilleenoolagh, Cloonacaltry, Skeavally,
	Boleyduff, Tobermacloughlin, Lugboy, Breeole,
	Porteen, Ballyglass
NEAREST TOWN	Ballyforan, Taghmaconnell
SIX INCH MAP NUMBER	47, 48, 50
NATIONAL GRID REFERENCE	188250 243150 (centre of area)
1:50,000 O.S. SHEET NUMBER	47 1/2 inch Sheet No. 12

#### **Outline Site Description**

This site comprises an extensive area of bouldery terrain in southern Roscommon, covering an area of 5 by 2 kilometres, and includes a number of low amplitude, hummocky ridges. Three discrete areas of this topography are defined in close proximity to each other.

### Geological System/Age and Primary Rock Type

The landscape is formed on bedrock which is Lower Carboniferous limestone. The majority of the ridge features, as well as the boulders, are Quaternary in age, having been deposited at the base or edge of the ice sheet moving northwest to southeast during the maximum period of the last Ice Age.

### Main Geological or Geomorphological Interest

This area is unique in lowland Ireland as it expresses what the entire lowland limestone landscape would have looked like before man modified the countrywide, by reclaiming land and building field boundaries.

The area comprises a number of low, quasi-linear and hummocky ridges, which are 2m-10m in amplitude and often long and sinuous. These seem to be minor ribbed moraines. All of these features have been covered by karstified limestone boulders strewn across the ground. The area looks just like an area of karstified bedrock outcrop in many respects, but little outcrop is seen. The abundance of limestone boulders gives the landscape an unusual and rustic feel. The entire area is dry, with no surface drainage features visible. The majority of the area comprises dry grassland or scrub.

## Site Importance – County Geological Site; recommended for Geological NHA

This is the only such area of lowland, boulder-strewn, limestone glacial karst in the country. It is of national importance.

#### Management/promotion issues

This is an excellent site in terms of macro-scale Quaternary geomorphology. The landscape is noteworthy and should be promoted as unique amongst landscape elements within the Roscommon County Development Plan and in Landscape Characterisation. The site should also be designated as an NHA owing to the uniqueness of the natural landscape character.

The site boundary illustrated here delineates the area displaying this geology in 2004 when the aerial photographs of the locality were taken. As land management practices are constantly changing and may have impacted heavily on this vulnerable landscape, in order to delineate the exact remaining area of interest a detailed field survey is required.

Further research and investigation is required to document and understand the full scientific story. Since a windfarm has been granted planning permission in 2012, it is hoped that scientific opportunity created by ground excavations for this will be used and not wasted.



The pristine landscape of limestone boulders on glacial moraine at Killeglan.



The pristine landscape of limestone boulders on glacial moraine at Killeglan, with karstic weathering imitating limestone bedrock.

