

# WEXFORD - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Blackstairs Mountain</b>
Other names used for site	<i>An Staighre Dubh</i> , Caher Roes Den (site locality),
<b>IGH THEME</b>	<b>IGH7 Quaternary</b>
<b>TOWNLAND(S)</b>	<b>Bantry Commons</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Bunclody</b>
<b>SIX INCH MAP NUMBER</b>	<b>18</b>
<b>ITM CO-ORDINATES</b>	<b>680100E 643930N (main tor features)</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>68 GSI BEDROCK 1:100,000 SHEET NO. 19</b>

## Outline Site Description

Blackstairs Mountain is the second highest mountain within the Blackstairs range, rising to a summit at 735m above sea level. The site itself includes a number of tors and surrounding blockfields along the southern should ridge of the mountain.

## Geological System/Age and Primary Rock Type

The rock comprising the western side of the mountain, as well as the tor and blockfield features which comprise the site, is Devonian (419-359 Ma) granite. The granite is part of the Leinster Batholith, the plutons that comprises the various granite varieties of south Leinster. Much of the eastern side of the mountain is much older, comprising Ordovician Metasediments.

The form of the mountain was shaped within the Quaternary (Ice Age) Period, with much of the *in situ* weathering of the bedrock having occurred since then, during post-glacial or Holocene times.

## Main Geological or Geomorphological Interest

The ridge along the southern shoulder of Blackstair Mountain has a number of well formed 'tors', which are outcrops of granite eroded by wind action since the Ice Age. From a distance, these rocky features resemble man-made structures. However, the granite outcrops are natural, formed by differential weathering of granite bedrock, and mass wasting and removal of the weathered material.

Weathering along horizontal and near-vertical joints has created the characteristic granite tor shape. Some of the tors have formed from roche moutonnee features, themselves moulded and shaped by ice during glaciations.

Surrounding these features, the mountain has been strewn with granite boulders which form an extensive blockfield. This blockfield itself is the result of physical weathering of the granite, and mass movement of the boulders downslope, soon after the ice vacated the locality at the end of the last glaciation. The fact that the outcrops have been ice moulded shows that this portion of the mountain (at an elevation of approx. 550m above sea level) was completely covered by ice during the last glacial maximum.

## Site Importance - County Geological Site

The mountain is somewhat unique in the variety of tor forms which lie side by side in a relatively small area. The blockfields are no less impressive.

## Management/promotion issues

The mountain ridge is a popular route for hill walkers. An information board along the walking route near the tors, detailing the unusual geology would prove a worthy addition to the site, explaining the formation of the features. The site is already within an SAC and proposed NHA (000770, Blackstairs Mountains) for biodiversity reasons and the unusual geodiversity of the locality should be highlighted in any promotion of this.



View north along the ridge, across a number of the outcropping tors.



Detail of one of the tors, showing differential weathering along fractures in the granite.



View southwards across part of the blockfield.



Outcrop (tor formed from a roche moutonnee) among the blockfield.



