

# WESTMEATH - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Dún na Sí Amenity and Heritage Park</b>
Other names used for site	Moate Cowpark, The Cow Park
<b>IGH THEME</b>	<b>IGH1 Karst, IGH7 Quaternary, IGH16 Hydrogeology</b>
<b>TOWNLAND(S)</b>	<b>Knockdomny, Tullaghnageeragh</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Moate</b>
<b>SIX INCH MAP NUMBER</b>	<b>30</b>
<b>ITM CO-ORDINATES</b>	<b>617415E 738810N (centre of turlough feature)</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>48 GSI BEDROCK 1:100,000 SHEET NO. 15</b>

## Outline Site Description

This site comprises an established amenity and heritage park at Dún na Sí, wherein a small turlough sits in a marked depression immediately northeast of the town of Moate. This turlough is at the southern end of a series of glacially-deposited hummocks which form the rest of the amenity park, and which themselves lie at the base of Knockdomny Hill.

## Geological System/Age and Primary Rock Type

The bedrock beneath the locality is of Lower Carboniferous limestone, and the hummocks at the base of Knockdomny Hill were deposited during glaciation and deglaciation, about 14,000-16,000 years ago. The turlough feature itself is post-glacial, formed in the last 11,000 years.

## Main Geological or Geomorphological Interest

This small turlough has only been documented recently (2010) in a survey as part of the construction of the park facility, undertaken as part of the application for Planning Permission.

The turlough reflects the interaction of the groundwater table with the land surface, and is a seasonal lake. There is a well-defined estavelle feature at the centre of the turlough, where water emerges as a spring when the basin is beginning to fill, and where it disappears into a swallow hole when the basin is almost fully empty. There is no sign of bedrock outcrop exposed anywhere across the basin.

Trial pitting across the hummocks at the northern end of the park has shown varying depths of glacially-deposited tills and sheets of glaciofluvial sands and gravels, deposited by meltwater. Both sets of sediments exhibit a complex geometry.

## Site Importance – County Geological Site

This turlough is worthy of recognition as a County Geological Site, due to the relative rarity of such features in the county (currently, only two are known).

Turloughs are exceptionally rare east of the Shannon River, in fact, with known examples in Longford, Westmeath, Tipperary and Monaghan only.

## Management/promotion issues

Issues such as encroachment of horses and soil disturbance of the margins of the turlough may cause problems. Any attempts at agricultural, or other, drainage, should be prohibited.



The turlough at Dún na Sí Amenity and Heritage Park, viewed from the northeast (dry, May 2018).



Looking southwards from where the springs emerge to fill the turlough (dry, May 2018).



The turlough partially flooded, August 2010.



One of the signboards in the amenity and heritage park



