# WESTMEATH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER Loughandonning Mushroom Rock

IGH1 Karst Loughandonning Athlone 29 605500E 740730N (centre of field hosting rock) 47 GSI BEDROCK 1:100,000 SHEET NO. 15

## **Outline Site Description**

An isolated, highly sculpted, limestone mushroom rock, situated within a pasture field.

## Geological System/Age and Primary Rock Type

The bedrock itself is Carboniferous limestone, from around 330 million years ago, but the solutional weathering that has sculpted the rock is a post-glacial or Holocene process (*i.e.* in the last 10,000 years).

## Main Geological or Geomorphological Interest

The occurrence of mushroom rocks is nationally a rare phenomenon, and is concentrated in Counties Clare, Offaly, Roscommon and Westmeath. In low-lying areas, often on the margins of current lakes, these rocks are mostly thought to have been partially submerged in former lakes, and dissolved away below water, leaving caps. The lakes were possibly short lived glacial meltwaters impounded by moraines and eskers and remnant ice which were drained or lowered over time in changing conditions, leaving undercut rocks exposed and dry. The transient nature and continual changeover of water would have been required to keep the lake body from becoming saturated with bicarbonate and unable to further dissolve the limestone. Some examples are thought to have been partially buried in acid bog or soils which have since shrunk away with drying out or drainage, exposing the sculpted shapes.

Not many of the known mushroom rocks have a full mushroom shape, and many are undercut and sculpted in various shapes. Loughandonning is one of the most oddly shaped examples, and has been extensively dissolved

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

This site has previously been recommended for geological NHA designation to the National Parks and Wildlife Service under the IGH1 Karst Theme Report, as a nationally important example of the mushroom rocks in the country as a whole.

#### Management/promotion issues

The site is private farmland and is not accessible without permission. It can however, be easily seen from the small road which has a restricted height short underpass beneath the railway line.



Loughandonning Mushroom Rock, viewed from the east.



Loughandonning Mushroom Rock, viewed from the north.



Meehan et al. 2019. Geological Survey Ireland.