

GALWAY CITY - COUNTY GEOLOGICAL SITE REPORT

| | |
|-----------------------------------|---|
| NAME OF SITE | Menlough Mushroom Rocks |
| Other names used for site | Menlo Mushroom Stones |
| IGH THEME | IGH1 Karst; |
| TOWNLAND(S) | Menlough |
| NEAREST TOWN/VILLAGE | Mionlach (Menlough) |
| SIX INCH MAP NUMBER | 82 |
| ITM CO-ORDINATES | 528430E 728960N |
| 1:50,000 O.S. SHEET NUMBER | 45 |
| GISCODE | GSI BEDROCK 1:100,000 SHEET NO. 14 GC003 |

Outline Site Description

Mushroom rocks on limestone pavement, with limestone and granite erratic boulders.

Geological System/Age and Primary Rock Type

The local bedrock consists of Lower Carboniferous grey coloured Burren Formation limestone. This type of limestone covers a wide area east and northeast of Galway City. The mushroom rocks are of a similar lithology to the bedrock. The solutional weathering of the limestone boulder is post-glacial, and therefore Holocene in age. Nearby granite erratics originate from the area of Caledonian Galway Granite to the west.

Main Geological or Geomorphological Interest

Isolated upstanding rocks with undercut lips and shapes that exhibit mushroom-shapes are believed to be the result of past temporary lake levels. The lower (and subsequently undercut) section of the limestone rock was submerged in lake water. The water was of sufficient acidity to dissolve the submerged limestone. Such lakes were common in the period at the end of the Ice Age when extensive meltwater was trapped behind temporary dams of glacial till and remaining ice sheets.

The mushroom stones (also known as wave stones) at Menlough are limestone boulders that exhibit signs of water dissolution formed by prolonged partial submergence in standing water. Menlough is one of the rare locations of mushroom rocks in Galway City and county. Whilst not exhibiting the classic 'mushroom' shape found in midland counties such as Offaly and Roscommon, the rocks host features suggestive of solutional weathering. The underside of the 'umbrella-like lid' show signs of water dissolution, with a narrower 'stem' compared to the top section. These boulders may represent former lake surface water levels of Lough Corrib. In his 1937 volume *The Way that I Went*, Robert Lloyd Praeger makes a single note of mushroom rocks while discussing the south end of Lough Corrib, and these rocks are possibly those same features. The south shore of Lough Corrib is about 300m to the north of the rocks.

Site Importance – County Geological Site

Records of mushroom rocks in County Galway are few. Representing the best-known examples of mushroom rocks in the county, these features deserve to be recognised and protected as a County Geological Site. The mushroom rocks occupy an area of limestone pavement, which is a protected habitat under EU Habitats Directive (92/43/EEC). The site is located within the Lough Corrib SAC (000297).

Management/promotion issues

The pavement and mushroom rocks (not immediately discernible from the surrounding rocky ground) require protection and conservation from damage resulting from land 'improvement' or development. The mushroom rock features of geological interest are on private land, and are not of 'classic' mushroom rock morphology such as are found in Co. Clare or east Co. Galway, they are primarily of research interest.



Mushroom rock – part of a drystone wall, partially overgrown by ivy and tree cover.



Underside of wave-worn 'mushroom head'.



Another mushroom rock at site.



Karst limestone and large (2m long) granite erratic at site. Moycullen uplands visible in background (west).

