

# OFFALY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Derrinlough Mushroom Rock</b>		
Other names used for site			
<b>IGH THEME</b>	<b>IGH1 Karst</b>		
<b>TOWNLAND(S)</b>	<b>Derrinlough</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Birr</b>		
<b>SIX INCH MAP NUMBER</b>	<b>30</b>		
<b>ITM CO-ORDINATES</b>	<b>608509E 715093N</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>53</b>	<b>GS1 BEDROCK 1:100,000 Sheet No.</b>	<b>15</b>

## **Outline Site Description**

A Mushroom Rock – isolated upstanding rock in a woodland track beside a Bord na Mona briquette factory.

## **Geological System/Age and Primary Rock Type**

The rock is composed of Carboniferous Limestone but the solutional weathering is post glacial – that is, Holocene in age.

## **Main Geological or Geomorphological Interest**

Derrinlough is one of the relatively numerous examples of mushroom rocks in Offaly compared to most counties in Ireland. Isolated upstanding rocks with undercut lips and shapes sometimes resembling mushrooms are believed to be the result of former temporary lake levels where the undercut section of the rock was submerged below lake water which was acid enough to dissolve the limestone it was in contact with. Such lakes or expanded river basins were common in the period at the end of the Ice Age when extensive meltwaters could be trapped behind temporary dams of glacial till and remaining ice sheets.

An alternative hypothesis for some mushroom rocks is that they were dissolved below a soil or bog deposit which has subsequently either shrunk or been eroded away to reveal the weathered section of the rock. Derrinlough has the characteristics that suggest a water solution is far more likely, with an extensively undercut area that is also of a scalloped appearance from flowing water.

## **Site Importance – County Geological Site**

This is one of the spread of mushroom rocks that is particularly well represented in Offaly on a national basis, and is marking the edge of a large depression now filled with bog. It warrants recognition and protection, and is recommended as a County Geological Site.

## **Management/promotion issues**

Jimmy Shortt, a Supervisor in the briquette factory, and also an active member of the Birr Historical Society, takes an active role in protecting the Derrinlough mushroom rock as it is situated in a busy works environment. He also prevents the weeds from colonising the top of the rock.



The Derrinlough Mushroom Rock is close to the Bord na Mona briquette factory.



Jimmy Shortt keeps the rock free of weeds.



Derrinlough is heavily dissolved underneath.



The Derrinlough stone is adjacent to massive raised bogland, once a lakeland.



