TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE

Other names used for site

IGH THEME

Polldonragh and the Bulls Hole of Rocks

Mullinahone Spring, The Bulls Hole

IGH1 Karst, IGH16 Hydrogeology

TOWNLAND(S) Mullinahone NEAREST TOWN/VILLAGE Mullinahone

SIX INCH MAP NUMBER 63

ITM CO-ORDINATES 633620E 639643N (Polldonragh), 633955E 639723N

(the Bulls Hole of Rocks)

1:50,000 O.S. SHEET NUMBER 67 GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

Polldonragh is a roadside spring site, which has an associated cave passage, and the Bulls Hole of Rocks is a nearby swallow hole. All features are situated just south of Mullinahone Village.

Geological System/Age and Primary Rock Type

The spring, cave and swallow hole are of karstic origin, formed in pure bedded limestones of the Ballyadams Formation, which are of Lower Carboniferous (359-323 Ma) age.

Main Geological or Geomorphological Interest

The limestone across a wide area in mid- and south Tipperary comprises well bedded, well-jointed, pale, clean, coarse grained bedrock, with occasional thin shales. A large spring at Polldonragh, set in a small roadside compound just south of Mullinahone, and an adjacent swallow hole at the Bulls Hole of Rocks, forms a window into this underground, karstic network. A cave is also known to occur adjacent to the spring, and may be where the name 'Poll Donragh' originated.

Much of the area around the locality is underlain by karstified, pure bedded limestones. At such karstic spring localities, groundwater will either emerge from the bedrock directly, or will filter through some depth of glacial till deposits, as seems to be the case at Polldonragh. There is little information on the cave, excepting that it was recorded in 1865 as being 'inaccessible', forming a 'shallow sump'.

At the Bulls Hole of Rocks, a stream sinks under a high road bridge, but the stretch of stream channel base where the water disappears is quite extensive, and by no means just at one point locality. Though there are no tracing data available to ultimately confirm this, it is likely that the sinking water at the Bulls Hole of Rocks reappears as the spring rising at Polldonragh.

Site Importance – County Geological Site

This locality is worthy of recognition as a County Geological Site as the adjacent coupling of a swallow hole and spring is quite rare in Tipperary, and the cave adds an extra element of intrigue in what is undoubtedly a highly karstified limestone bedrock environment.

Management/promotion issues

The spring site has its own compound, but the swallow hole and cave are on private land. Being a water source vulnerable to contamination the general promotion of the locality should be regarded with sensitivity. General education about the vulnerability of karst groundwater supplies to pollution from septic tanks and agricultural slurry spills and bad spreading practices is advisable, and a signboard illustrating the hydrogeology of the feature, how it arises and its potential link to the swallow hole, and the potential risks to contamination owing to its nature, would be useful.



Polldonragh spring emerging beside the Mullinahone Wastewater Treatment Works.



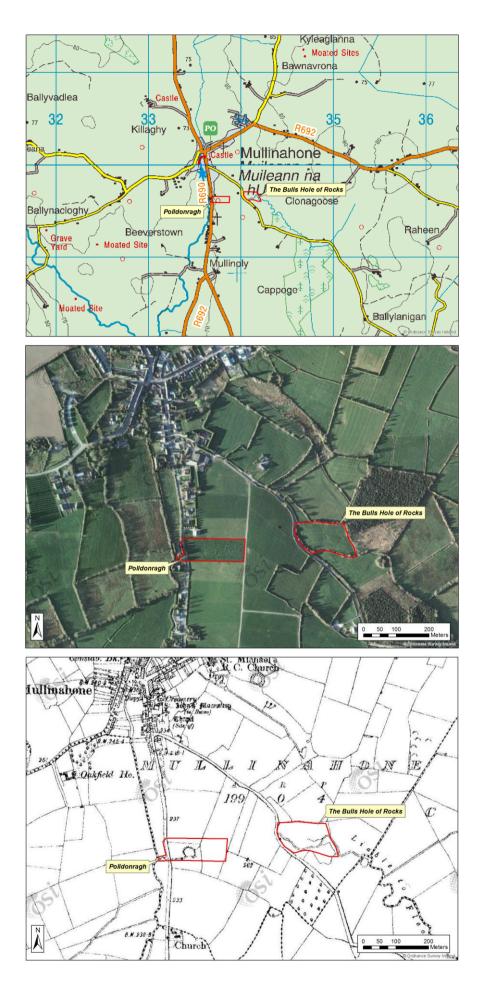
Dry stream bed at the Bulls Hole of Rocks swallow hole.



Spring water joining passing stream at Polldonragh.



Sub-road cavity (possibly into cave system) at Polldonragh.



Gallagher et al. 2019. Geological Survey Ireland.