CAVAN - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Cuilcagh Mountain**
Other names used for site	
IGH THEME	**IGH9 Upper Carboniferous to Permian** **IGH8 Lower Carboniferous; IGH7 Quaternary**
TOWNLAND(S)	**Garvagh, Edenmore, Legnagrow, Legglass, Eshveagh, Ardvagh, Tullycrafton, Dunmakeever, Commas, Bursan, Bellavally Lower, Legnadirk, Aghnacollia, Altbrean, Tullydermot, Binkeeragh, Aghaboy, Moneydoo or Tonycrom, Alteen,**
NEAREST TOWN/VILLAGE	**Swanlinbar, Blacklion**
SIX INCH MAP NUMBER	**4, 6, 7**
ITM CO-ORDINATES	**612600E 826700N**
1:50,000 O.S. SHEET NUMBER	**26** **GSI 1:100,000 BEDROCK Sheet No. 7**

Outline Site Description
This mountain is a long plateau-like ridge of sandstone and shale upland that straddles the boundary between counties Cavan and Fermanagh.

Geological System/Age and Primary Rock Type
All of the bedrock is Carboniferous in age and is part of the Leitrim Group, which underlies much of Leitrim, Sligo and northern Roscommon, and extends into Fermanagh. The oldest part of the Leitrim Group is Dinantian in age and includes the Meenymore Formation, the Glenade Sandstone Formation, the Bellavally Formation and Carraun Shale Formation. Overlying these are the younger, Namurian formations of the Leitrim Group, including the Dergvone Shale Formation, the Briscloonagh Sandstone Formation, the Gowlaun Shale Formation and the Lackagh Sandstone Formation, which caps the mountain.

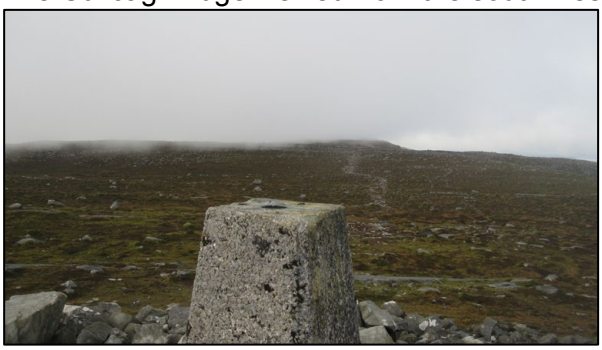
Main Geological or Geomorphological Interest
The mountain comprises a thick succession of Carboniferous Dinantian and Namurian rocks. The sequence as a whole represents an episode of delta formation as falling sea levels saw Namurian sands begin to fill the shallow limestone seas of the Dinantian. This episode of delta formation started in the northern part of Ireland and spread southward. The Meenymore Formation represents a very shallow sea, which locally dried up enough to form evaporate minerals such as gypsum. The shale formations are the ‘background’ deposition of muddy sediments from rivers entering the marine seas, from the north. Occasionally rapid deposition was accompanied by ironstone formation in the same rocks to the west. The sandstones mark major episodes of deltaic advance southwards. To the west in Leitrim and Roscommon, swamps sometimes formed on top of the deltas and left coal deposits, but not in Cuilcagh.

Evidence from the coals and fossil spores indicate that all these rocks were once buried under other rocks several kilometres thick, but these have since been eroded away. The Lackagh Sandstone Formation on the top of Cuilcagh forms a hard resistant cap that has prevented the erosion that has reduced adjacent areas to a much lower height. A corrie has been etched into the mountain along its eastern flank.

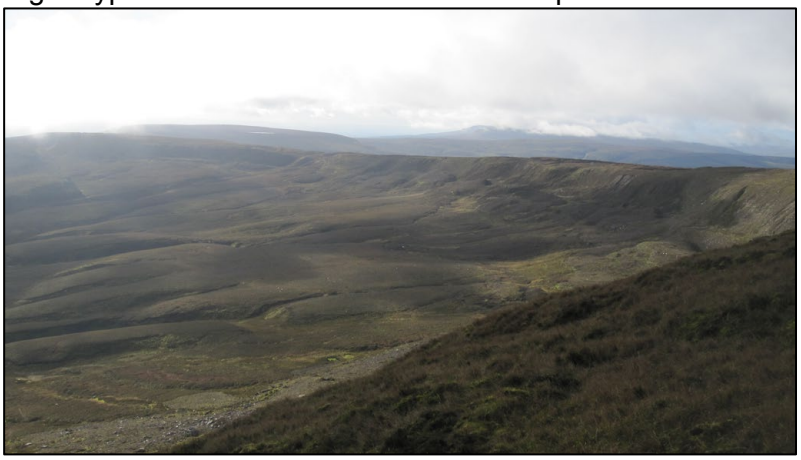
Site Importance – County Geological Site; may be recommended for Geological NHA
The site is one of the best representations of the Carboniferous Leitrim Group within the region.

Management/promotion issues
Continued co-operation with Fermanagh District Council, especially through the Marble Arch Caves Global Geopark, is the best option for promotional efforts.

The Cuilcagh ridge viewed from the south west, showing the sandstone escarpment.

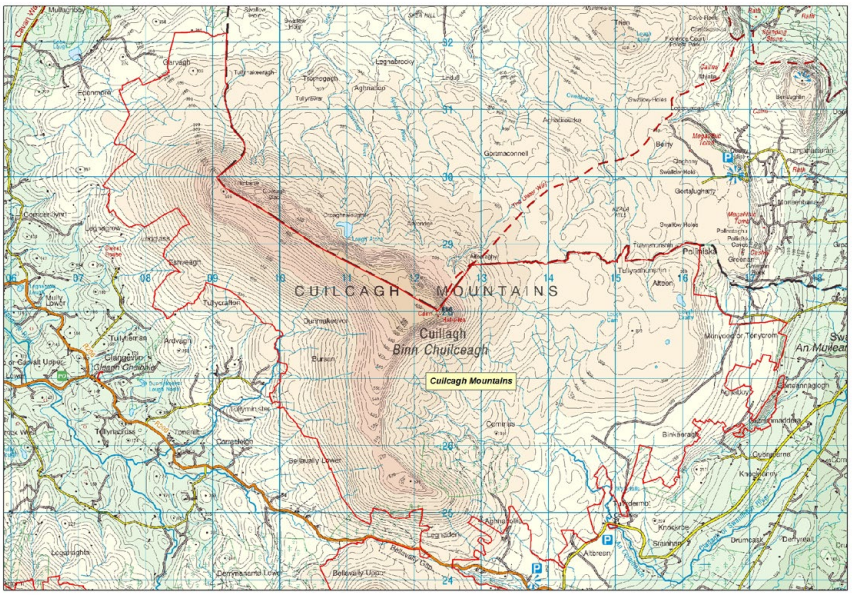


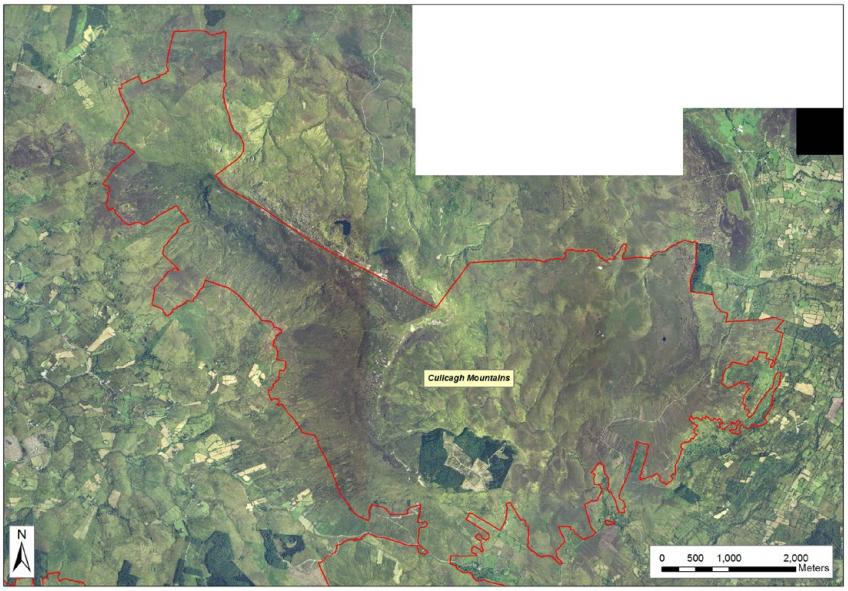
Left: The summit plateau looking northwest
Right: typical Gowlaun Shale Formation exposure near the summit.



The large corrie to the south of the summit of Cuilcagh.

Cuilcagh Mountain viewed from the fence along the Cavan – Fermanagh border on the northeast side, showing the steep northern face compared to gentler southern slopes.


CUILCAGH MOUNTAINS
Cuilcagh
Binn Chuilceagh
Cuilcagh Mountains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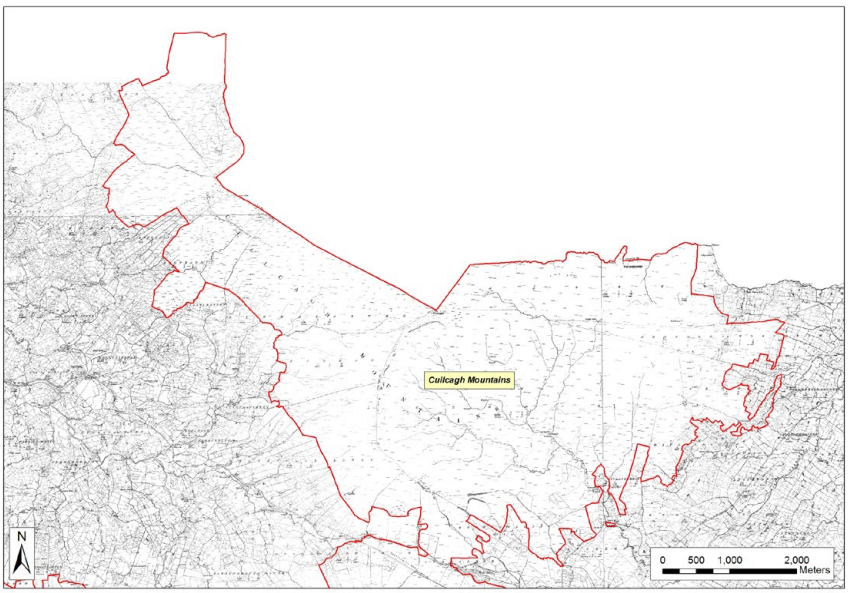
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