

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Burren Hill
Other names used for site	Burren Mountain
IGH THEME	IGH2 Precambrian to Devonian Palaeontology, IGH10 Devonian
TOWNLAND(S)	Burren
NEAREST TOWN/VILLAGE	Castlebar
SIX INCH MAP NUMBER	59; 69
ITM CO-ORDINATES	513370E 799010N
1:50,000 O.S. SHEET NO. 31	GS1 BEDROCK 1:100,000 SHEET NO. 6, 11
GIS Code MO20	

Outline Site Description

A heath-covered mountain (396m) with bare rock outcrops and stream section on south sloping mountain flanks.

Geological System/Age and Primary Rock Type

Plant miospore-bearing Devonian age rocks. Burren Hill bedrock comprises Croaghmoyle Formation (quartz conglomerate) and Birreen Formation (conglomerate and sandstone) of the Islandeady Group.

Main Geological or Geomorphological Interest

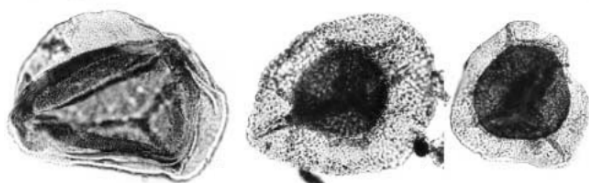
Devonian strata in County Mayo are represented by the Islandeady Group which has yielded plant spores, suggesting that these rocks should be assigned to the Lower Devonian (Siegenian to Emsian), and by the Beltra Group, which has yielded Middle Devonian (Eifelian) spores. The Lower and Middle Devonian strata are considered to be separated by an unconformity. Palynological evidence has yielded an age of c. 390 million years old for the rocks of Burren Hill. The conglomerates of the Croaghmoyle Formation contain chiefly schist fragments that are interpreted to have been derived from the metamorphic Ox Mountains region to the east, with the sediments deposited rapidly on a plain bordering a mountainous area to the northwest and east. The rocks of the overlying (younger) Birreen Formation are interpreted to have originated from the south. The Birreen Formation consists of bedded conglomerates (with igneous pebbles) and red sandstones. Micro plant spores (palynomorphs) identified within the formation have been dated to Middle Devonian (Eifelian).

Site Importance – County Geological Site; may be recommended for Geological NHA

The site is important as it provides an age for the Devonian rocks in NW Ireland and these are thought to be the earliest known mid-Devonian plant remains in Ireland. The site requires designation as a geological NHA.

Management/promotion issues

No immediate threats to this important site are recognised; however any development of wind farms (as is prevalent in the region) should take into consideration the significance of the site. Because the important features at this site are relatively difficult to observe in the field, this site is not suitable for public promotion.



Rhabdosporites species miospores (Devonian)- similar to those identified at site.

