

# Cumbria GeoConservation

Cumbria GeoConservation is a voluntary geological conservation group working to record and look after important geological sites.



<http://cumbriarigs.co.uk>

## WHITE SCAR, WHITBARROW LGS 7/002

Whitbarrow is an isolated fault-controlled Carboniferous limestone block resting unconformably on late Silurian tubidite deposits. During early Dinantian times (354 Ma) the South Cumbria area was situated about ten degrees south of the equator when a shallow sea basin formed between the Laurentian continent to the north and microcontinent of Armorica to the south.



White Scar



The top portion of White Scar exposes Urswick Limestone. There are two scales of depositional cycles in the Urswick Limestone Formation, major and minor carbonate cycles. The major cycles originate from steady subsidence whereas the minor cycles are glacio-eustatically controlled cycles superimposed on the major cycles.

Park Limestone Formation is of Holkerian age. The limestone sediment was deposited in shallow water. The facies is approximately 125 metres thick and comprises structure-less apparently unbedded, bioclastic and peloidal grainstone. Bioclasts are generally randomly oriented and thus contribute to the poor bedding that is typical of the formation.

Dalton Limestone Formation is of Arundian age. It consists of bituminous dark grey well-bedded bioclastic packstones with some wackstones. Shale partings occur in the middle part of the sequence. The formation was deposited on a gently sloping ramp below storm wave base, perhaps at depths below 100m.

Up to the 1950's White Scar was quarried for Pleistocene periglacial scree, It was used for road base and road making. The cemented scree is now limited to isolated patches on the rock face.



A number of small faults are exposed in the scar, they are stained red by hematite.

White Scar Quarry is located on the southeastern end of Whitbarrow. To access the site, leave the A590 at grid reference SD 466850 and proceed to Raven's Lodge Farm, a car park is available 100 metres north of the farm.

