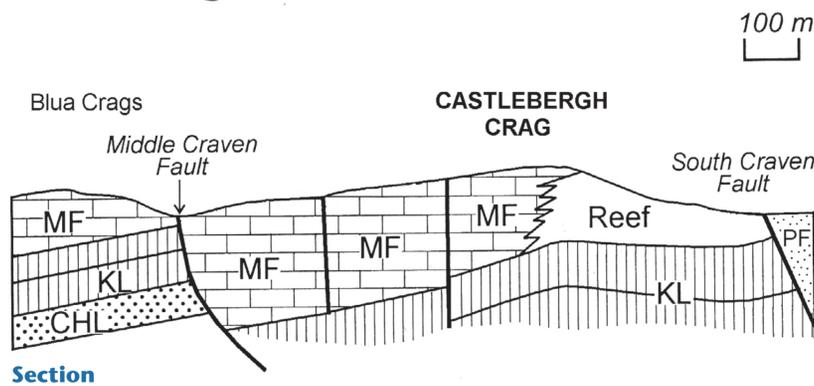


CASTLEBERGH CRAG GEOLOGY

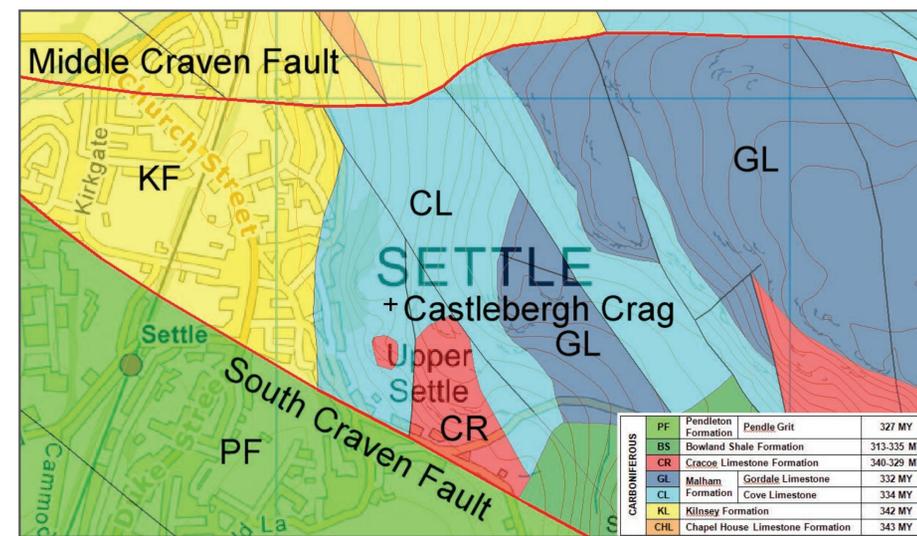


Craven Faults

Towards the end of the Carboniferous, earth-movements on the local Craven Faults affected the Castlebergh Crag area. As the younger carboniferous sandstones of the Millstone Grit to the south of the South Craven Fault were down-faulted, the older limestones to the north were carried to outcrop alongside them.

Glaciation

Taking a giant leap forward in time, on at least two occasions, glaciation has affected the Crag. During the last one, between about 30,000 and 18,000 years ago, ice moved south along the line of the present River Ribble. Since the end of the last ice-age the limestone has weathered forming scree slopes at the base of the cliffs.



Geology bedrock map

How was the crag formed?

The limestone rocks that form the imposing Castlebergh Crag, rising to 200m (650 feet) above sea level, were deposited over 335 million years ago, during the Carboniferous Period, when the area was very near the equator. At that time the Castlebergh Crag area was at the southern edge of a shallow tropical sea, and at the western end of a limestone fringing reef, which stretched east to what is now Grassington. The sea was full of life and as the marine creatures died, the calcium carbonate from their shells and the sea was deposited on the sea bed to form horizontal layers (beds) of limestone. Following the deposition of the Carboniferous limestones at Castlebergh Crag, erosion has removed all the evidence of the deposits of the next 300 million years!



Stories in Stone

This panel was produced as part of Stories in Stone, a scheme of conservation and community projects that has been developed by the Ingleborough Dales Landscape Partnership, led by the Yorkshire Dales Millennium Trust and funded through the National Lottery Heritage Fund.

Ingleborough Gateway Sites

Various sites throughout the Ingleborough area have been chosen as 'Gateway Sites'. These are key locations and arrival points that provide information and guidance to the visitor. Please check our website for more details: www.storiesinstone.org.uk

GEOLOGICAL SETTING	ANCIENT ROOTS				TROPICAL DESERT	TROPICAL SEAS	TROPICAL SWAMPS AND DELTAS				GEOLOGICAL SETTING	TROPICAL DESERT	TROPICAL SEAS	TROPICAL LAND	TROPICAL LAND AND SEAS	TEMPERATE SEAS	TEMPERATE LAND	ICE AGES (ARCTIC)	RECENT (TEMPERATE)			
FEATURE	Ingleton Group and Windermere Supergroup sandstones and mudstones formed in a deep ocean basin				Caledonian mountain building - folding, faulting and intrusion of Wensleydale Granite	Erosion of ancient basement rocks producing an unconformity	Great Scar Limestone Group	Yoredale Group limestones, mudstones and sandstones	Craven Group mudstones and sandstones	Millstone Grit Group sandstones	Pennine Coal Measures Group	Variscan mountain building - folding, faulting and formation of mineral veins	FEATURE	No deposits in this area							Glacial erosion Glacial deposition	Limestone pavements Caves Landslides River terraces Waterfalls Gorges
LATITUDE		60 S	30 S	15 S	0 N							LATITUDE	20 N	40 N	45 N	24	54 N					
AGE	545	495	443	417	354	330						AGE	290	248	205	142	65	24	1.8	0.012		
PERIOD	PRECAMBRIAN	CAMBRIAN	ORDOVICIAN	SILURIAN	DEVONIAN	CARBONIFEROUS						PERIOD	PERMIAN	TRIASSIC	JURASSIC	CRETACEOUS	PALAEOGENE	NEOGENE	QUATERNARY			

Castlebergh Crag timeline



Content for this panel has been kindly supplied to Settle Town Council by Adrian Kidd, North Yorkshire Geology Partnership

Gateway to Ingleborough



Please stay safe on the paths - they may be slippery when wet.



Please keep dogs on leads.



Please use the litter bins provided.