

# Smardale Gill Local Geological Site Limestone, limekilns and wild flowers

## What you can see here

- Large disused limestone quarry and limekilns, part of Smardale Gill National Nature Reserve
- Lovely views and rich industrial heritage and wildlife

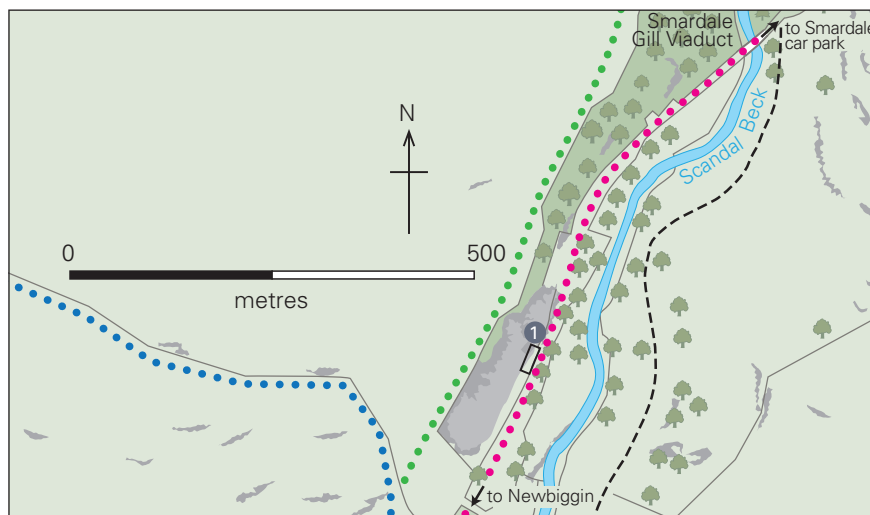
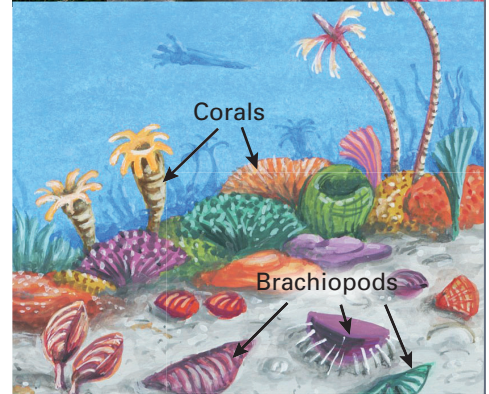
- Parking at Smardale car park (Cumbria Wildlife Trust)
- Footpaths from Smardale car park and Newbiggin-on-Lune. The site is beside a good footpath along the old railway line
- Take care near the rock faces, steep slopes and limekilns



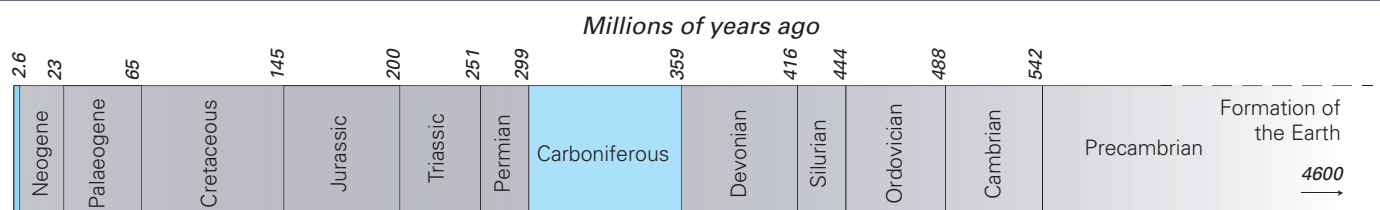
This large disused **quarry** in Smardale Gill is a superb place to see the local limestone and natural and industrial features linked to the geology. The quarry and **limekilns** lie beside the old Stainmore railway, now a footpath. Between 1861 and 1962 the line linked north-west and north-east England. Limestone from the quarry was burnt in the kilns and the resulting lime loaded on to trains.

The quarry is in the **Ashfell Limestone Formation**, part of the **Great Scar Limestone Group** which formed in the early **Carboniferous Period** when northern England was covered in shallow **tropical seas**. Limy mud on the sea floor hardened into layers (beds) of limestone. Some beds are rich in **fossils** of corals and brachiopod shells.

Today, the quarry is an important **limestone grassland habitat** where orchids and other rare plants thrive. The wild flowers attract **butterflies**, including the northern brown argus and Scotch argus for which Smardale Gill is well known.



- Public right of way
- Coast to Coast Walk
- Permitted footpath
- Path on Access Land
- ① Limekilns beside old limestone quarry
- Images
- One of the two limekilns, with the old limestone quarry beyond
- A fossil-rich layer in limestone beds close to the footpath
- A Carboniferous sea full of animals now preserved as fossils



Quaternary (a series of glaciations and warmer intervals, up to present day)

In this geological timeline the coloured intervals indicate periods represented by rocks and features at this site



Maps by M Byron: © Crown copyright 2021  
Ordnance Survey. Media 061/21.  
Photos & illustration: © E Pickett.