



Postcode for this site is
NE34 7AB

Public Transport

There is a regular bus service along Lizard Lane. Traveline North East can provide further information on 0870 608 2608.



Art in the Quarry

As well as the weird and wonderful rock formations at Marsden Old Quarry LNR there are a series of not so natural creations. Three large limestone sculptures - an abstract owl, a lizard and an armchair. These are the work of Artist 'Ant' Bryant who hails from Marsden. The public art project was backed by neighbouring Marsden Quarry operator, Owen Pugh

Aggregates who donated 20 tonnes of limestone for the sculptures. The initiative was supported by the Limestone Landscapes Partnership and is just one of the ways in which the Partnership is working to promote and conserve the landscapes, wildlife and rich heritage of the Magnesian Limestone Plateau.

Electronic versions of this leaflet

Further copies of this and other leaflets can be downloaded from:
www.limestonelandscapes.info/Pages/KingdomofQuarries.aspx



South Tyneside Council

For more information or to report any issues please contact South Tyneside's Countryside Team on tel: 0191 424 7423, or email: countryside@southtyneside.gov.uk



This project has been co-ordinated by Groundwork NE & Cumbria; Changing Places Changing Lives - one green step at a time.

Find out more at www.groundwork.org.uk/northeast or follow us on Facebook and Twitter

Marsden Old Quarry Local Nature Reserve

A disused quarry providing a haven for wildlife and a site of geological importance.



Supported by
The National Lottery
through the Heritage Lottery Fund



**Limestone
Landscapes**



Welcome to Marsden Old Quarry Local Nature Reserve

This disused quarry site provides an ideal place to explore the internationally important Magnesian Limestone and the fascinating landscape that has developed from it.

The Magnesian Limestone

Marsden Old Quarry lies on a long thin band of Magnesian Limestone that stretches from South Shields to Nottingham. Never more than a few miles wide, this strip was laid down 260 million years ago, in the Permian Period. The exposed limestone you see in the quarry today formed as horizontal beds on the floor of a shallow inland sea, known as the Zechstein Sea. These are thought to have developed from the recrystallization of the original limestone

The Concretionary Limestone (one of the divisions within the Magnesian Limestone) is found here at Marsden. A fantastic array of unusual structures, known as concretions, can be found within the quarry face. These are thought to have developed from the recrystallization of the original limestone.

Look out for the 'cannonballs' in particular, which range from a couple of millimetres up to 20cm across. Also found here Spherulitic concretions where Calcite crystals radiate out from a central point. These concretions are unrivalled anywhere else in the UK and Western Europe.

Cannonballs



Calcite Spherulitic Concretions



The chemical composition of Magnesian Limestone creates perfect conditions for a variety of special habitats to flourish

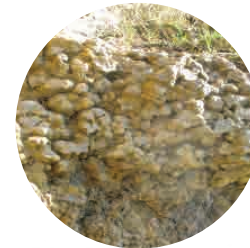
The site is criss-crossed by footpaths and bridleways. Most are steep in short sections and only Quarry Lane, which forms part of the Linnet Way, is surfaced with rolled stone.

6. A painting of a white horse has been here since at least 1887. Its origins are unknown. Stories include the commemoration of a local hunter who was found dead nearby with his white horse, the tale of a retired Colonel's stolen horse or the tribute to Lady Williamson who liked riding on the beach but disappeared one day.



The White Horse Inn

5. In 2005, a hectare of top-soil and turf was stripped off part of the site and seeded to extend the area of Magnesian Limestone grassland. The photo shows part of the area in 2009.



1. A layer of small cannonball concretions can be seen near the base of the quarry face.

P Parking is available on the street nearby.

2. A small path up to the ledge enables you to examine the upper part of the face closely. Careful examination reveals dramatic Spherulitic crystal concretions.



3. The grassland developed on a thin soil overlying the rock of the quarry floor since its closure, is a feast of colour in the summer with a Magnesian Limestone flora.



4. Massive beds (layers) of Magnesian Limestone can be seen in the face of the main quarry. These alternate with softer, orange-brown thinner beds of limestone and dolomitic limestone. Large 'cannonballs' can be seen about half way up the face.



Marsden Old Quarry is a good example of how geology and wildlife interact. The chemical composition of Magnesian Limestone creates perfect conditions for a special habitat to flourish

A Unique Site for Wildlife

These include the unique group of wildflowers and grasses known as Magnesian Limestone grassland, one of the UK's rarest habitat types.

Thin soils in the quarry prevent nutrient loving plants from taking hold. Common rock-rose, blue moor-grass, rough hawkbit and carline thistle grow on the cliff tops, whilst wild thyme, lady's bedstraw and kidney-vetch can be found elsewhere in the nature reserve.

Over 18 species of bird breed in the quarry, including little owl, kestrel and skylark. Migratory birds can also be found here at certain times, often having been blown off course by autumnal winds. Common visitors include redstarts - easily identified by their flickering red-orange tails, and ring ouzel.

Quarrying at Marsden

Quarrying here started in the 18th century and several separate small limestone quarries are shown in the area on Ordnance Survey maps dated 1855-1895. By 1898 workings had expanded into the main quarry and the site had a limekiln and railway access. Expansion continued until around the First World War but by the late 1930's, quarrying here had ended.

It is likely that the stone taken from Marsden Old Quarry was used for building and to produce quicklime for use on farmland. Stone similar to that seen in the quarry today can be found in Marsden Hall, nearby farm buildings and boundary walls.

Blue moor grass flowers early spring.



Autumn gentian flowers from July to October.



Carline thistle flowers from July to September.



Common rock-rose provides plenty of nectar for various bees and is also the foodplant of several species of butterfly.

The common blue butterfly is a species whose caterpillar feeds on the bird's-foot trefoil plant.



Redstarts get their name from their flickering fiery-red tail. Look for them from April to September.

