



LIMESTONE

**Where does it come from?**  
 A band of limestone runs across the Brecon Beacons. This rock was formed from the remains of millions of sea creatures which sank to the bottom of a shallow tropical sea over 300 million years ago. Hard to believe but true!  
 We know that limestone has been quarried and burned locally since medieval times as there is a 13th century lime kiln to be seen at Carreg Cennen castle, at the western end of the National Park. Limestone was quarried at sites right across the Brecon Beacons. The stone was blasted with gunpowder, broken up with hammers into fist size pieces then carried away in carts.  
 If you go and explore any of the quarries you will get a taste of the working conditions that the quarrymen experienced.

QUARRIES

Even on a fine day the quarries can be exposed and windswept sites. Try going there in less favourable weather and even with modern warm and waterproof clothing, the conditions are extreme... now imagine the quarrymen working year round in these harsh conditions.  
 There was very little shelter available and very little concept of health and safety. There were often accidents causing injury and death. The men had to walk to work from towns and villages round the area adding to the rigours of a working day.  
**What is it used for?**  
 Much of the lime manufactured in the kilns along the canal was for agricultural use. The first Agricultural Society in Wales was founded in Breconshire in 1755.

VERSATILE PRODUCT

Their job was to promote more efficient practices in agriculture and to provide better quality food for a growing population.  
 Lime, when spread on the land, will neutralise excess acid in the soil and make the land more fertile and productive. Several tons of lime per acre is required so you can imagine that a great deal of lime would be needed by every farmer.  
 The advantages of an area like South Wales where there was plentiful coal and limestone meant that kilns sprang up everywhere. The cheap availability of coal meant that lime was available to all.  
 Lime was used in the making of mortar. Mortar binds bricks or stones together when building. Lime mortar was essential to make strong buildings however it went out of favour when Portland cement came into widespread use in the 19th C.

IN THE LIMELIGHT

Recently the advantages of using lime mortar in older buildings or heritage projects have been recognised. Lime mortar is flexible and permeable and its effectiveness as a building material has been rediscovered. We only have to look at the great numbers of old buildings still standing to realise that lime mortar has strength and durability.  
 Lime has long been used as a whitening product, and when crushed to a fine powder it can be used in the production of paper, toothpaste, paint, adhesive, medical tablets and cleaning products. As it has a high melting point it could be burned to create a bright white light.  
**Lime was used to light theatre performances. It's where we get the expression "in the limelight"**

LIME KILNS TODAY

All the lime kilns you see on your journey have been out of use for many years and are in various states of repair. Only a few of them are so complete that you can figure out how they worked.  
**Who looks after the limekilns?**  
 Many of the kilns along the Monmouthshire & Brecon Canal are owned and cared for by the Canal & River Trust.  
 The Trust is developing projects to conserve and interpret the lime kilns and is recruiting volunteers to be trained in lime mortar techniques.  
 The structures are being restored using the same products and techniques which were employed when the kilns were first created.

A NEW LIFE

We can only imagine what the lime kilns would have looked like in their heyday. Today they are quiet and tranquil, often taken over by nature; in the past they would have been noisy, dirty, dangerous places. Try to imagine them with workers hurrying by with loads of limestone and coal calling out to each other as they get on with their work.  
 Limekilns have also become homes for wildlife. They have proved to make excellent habitats for bats. Adapting recently restored kilns into roosts has attracted rare lesser horse shoe bats.  
 Lime is still widely used but is now produced in huge quantities in dedicated industrial sites which we rarely see or hear of. In the past lime production would have been familiar to many people but now, like many processes it is hidden from view for safety reasons.