Information Sheet 3C: Quarrying - Aggregate

Meldon Quarry (SX 570925)

The origins of Meldon Quarry were founded on the building of the London and South Western Railway line. In 1874 the construction of a single track railway along the northern edge of the moor had forged its way to Meldon at over 300 m above sea level. A major rock cutting was required before the line could span the West Okement gorge via the proposed viaduct, and its excavation revealed hard metamorphic rock known as hornfels (see Information Sheet IC). The railway engineers soon realised that this rock would be ideally suited for use as ballast for railway construction and maintenance. In 1897 the new quarry began to supply this material and has continued to do so up to the present day.

General view of the workings of Meldon Quarry from the south-west (Photo: Kevin Page 2005)

The northern part of Meldon Quarry is located within the north western side of the medieval Okehampton Deer Park and expansion of the quarry in the 1970s resulted in the loss of one of the area’s deserted medieval settlements. Before the expansion took place, however, the site was excavated and revealed a period of habitation from at least the 12th century to the mid 15th century. The settlement had begun with a timber building which was later replaced by stone and over time had expanded to include three or possibly four longhouse type buildings with several ancillary structures, enclosures and cattle pens.

In its early days, Meldon Quarry was the major employer in the Okehampton area and a terrace of cottages was built between 1895 and 1906 to provide accommodation for the quarry workers and their families. These were demolished in 1994 when they were deemed to be unstable, and the area was landscaped.

Purpose-built facilities, including railway sidings, mean that immediately after processing, ballast is loaded into trucks for direct rail delivery to the part of the railway network where it is to be used. Remarkably, the production level in 1907 obtained through the hard, manual labour of over 100 men using basic blasting practices, was the same as that at the end of the twentieth century achieved using the latest technology - i.e. around 100,000 tons per annum (representing about 76% of the requirement for railways at that time).
The ‘Railway Quarry’, as it is often known, now covers 93 hectares (230 acres) and is not generally accessible for health and safety reasons. Nevertheless, parts of the operation including the railway sidings, can be viewed from the cycle pathway. Some of the original buildings still exist but many have been replaced by later structures or have been removed as new areas are taken under the extraction process. During the Second World War it was feared that the quarry could be a likely target, so two air raid shelters were excavated into the rock face.

By the end of the 20th century it was estimated that there were at least 300 million tons of aggregate in reserve at Meldon and up to six trains a day were being loaded and dispatched directly from the quarry - transportation by road is strictly controlled through planning and environmental restrictions. Although the quarry now also supplies aggregates for building purposes, surfacing needs and roadworks, ballast is still a major product and Meldon hornfels have proved ideal for use as trackbed material for the latest breed of high speed trains!

Authors: J. Marchand & R.E.Page 2006