Buckinghamshire ***rediscovered***

Lesley Davies, Buckinghamshire County Council

A site of great geological interest has, quite literally, been unearthed by Buckinghamshire County Council's Countryside Management Service. This service aims to conserve and enhance the natural beauty of the county, whilst making the countryside more accessible and increasing the public's understanding and enjoyment of it.

Coombs Quarry lies on County Council land at Thornborough, in the north of the county, and has been derelict for several decades. The geological interest of the quarry was first noted in the 1860s, during mapping by the Geological Survey. In its active days, limestone was extracted and used for building and for lime burning. Indeed, part of the site's interest includes two lime kilns, long since disused, but with skeletal brick remains. The quarry is just a few yards from the River Ouse, and it is likely that stone was transported away from the site by boat. It has even been suggested that stone from the quarry could have been used in the construction of nearby Thornborough Bridge, one of the last remaining Medieval bridges in the country.

The site has been known to the Countryside Management Service's North Buckinghamshire Project for several years; but when funding was secured from the Countryside Commission last year (1993), they set about the task of rediscovering the past.

The project's initial task was to clear the most easily accessible rock face. Dense woodland and scrub growth were cut back, and fallen soil and debris were removed to expose the rocks beneath. Pupils from the local Wendover House Secondary School volunteered to help with this work. Then, using a tracked excavator, other rock sections around the quarry were slowly revealed.

A cleared rock face at Coombs Quarry. Note the fencing and boardwalk in the foreground.
(Photo by Lesley Davies)

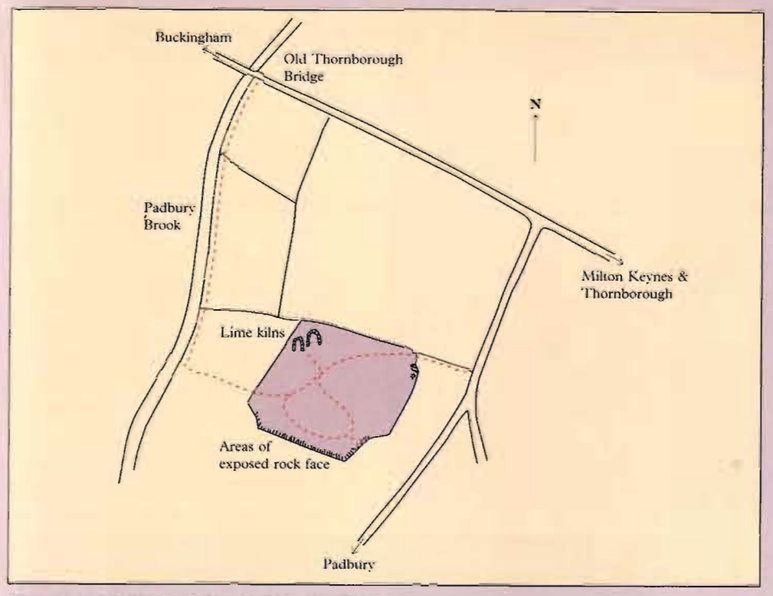
Coombs Quarry now offers one of the only permanent sites in which exposures of the Blisworth Limestone Formation can be viewed in the north of Buckinghamshire. The value of the site has now been officially recognised in its new status as one of the county's Regionally Important Geological/geomorphological Sites (RIGS). The rocks date back to the Bathonian (Middle Jurassic), some 161-166 million years ago. Global sea levels were then high, but fluctuated from time to time, exposing emerged areas to relatively dry conditions. These conditions can be compared to the present day Florida Keys.

The geology can be divided into three formations. Cornbrash overlies Blisworth Clay, which in turn lies above the Blisworth Limestone.

The Blisworth Limestone was the main rock resource at the quarry and, unexpectedly, is thickly developed. It is divided into three members: the Bladon Member (uppermost), a uniform limestone with thin clays; the Ardley Member (middle), a variety of marine limestone with recrystallised coral and marine bivalves; and the Shipton Member (lowermost), which is believed to lie below the lowest strata seen in the cleared face. This is to be the subject of further research.

The Blisworth Clay (Forest Marble equivalent) mainly comprises clays and silts without obvious fossil content. A prominent rootlet bearing layer of marl suggests a period of emergence from the sea and colonisation by land plants. A layer of limestone probably corresponds to that containing the theropod dinosaur footprints found nearby at Thornborough Mill.

The Cornbrash is a brown limestone rubble composed of shell fragments. It is only seen at the top of the section and contains a distinctive and easily recognisable fossil fauna.



Map showing the location of Coombs Quarry.

It is not just the geology that is of interest here. The secondary woodland that has grown up since the workings were abandoned is predominantly hawthorn and ash, and will be managed to promote nature conservation. Although the ground flora is not very varied at present, light can now penetrate in the cleared areas, and the project will monitor changes over the next few years. Much of the recent work has been accompanied by a curious spectator - a resident sparrowhawk - who seems more fascinated than concerned at what is happening.

The lime kilns cannot now be left without attention as the processes of weathering will quickly result in their complete demise. Although the kilns were partly knocked down several years ago, the recent clearance operation has revealed that the brickwork base and front archway of both have survived. They are believed to have operated by placing successive layers of coal and stone inside; this was dug out through the archway when burnt. A programme of restoration is now planned, and will include the partial rebuilding of the brickwork and works to protect the original bricks from further deterioration.

The project now plans to open the site to the general public and to encourage its educational use through on-site interpretation and organised visits. Pathways have been laid throughout the site and a boardwalk constructed to provide safe and easy access to view the rock faces. A circular walk is being developed which will link the quarry to Thornborough Bridge, passing alongside the River Ouse through fine wildflower-rich meadows.

The major works at Coombs Quarry took place during the spring and summer of 1993. The project will continue its management of the site, promoting nature conservation and keeping the exposed rock faces clear of fallen debris. Planned works also include the investigation of a fault line, which will entail further excavations.

The project has been advised by Dr Michael Oates, a member of Council of the Geologists' Association, who lives locally. He believes that the rediscovery and restoration of the locality marks an important step in compiling data from an area in which, otherwise, little is known.

If you would like to visit the quarry and gain an insight into a part of the county which usually lies out of sight, please contact Lesley Davies, North Buckinghamshire Project, Countryside Management Service, Valuation and Estates Department, Buckinghamshire County Council, Aylesbury, Buckinghamshire HP20 1YH. Telephone 0296 395000. ■

Thornborough Bridge - built in Medieval times with stone which could have come from Coombs Quarry.
(Photo by Lesley Davies)