

REPORT

Prehistoric mining at Ecton

Ecton Hill, in Staffordshire, is well known for the copper-rich mineralisation in its Carboniferous limestone. The site has long been recognised as a centre for post-medieval mining, but recent explorations have revealed an even longer history of working. An antler tool has been discovered, and has been radiocarbon dated to 1880-1630 BC. The antler was found in Dutchman Mine about 11 metres below the ground surface, in what may be a prehistoric working but which is more probably later, the antler tool having been displaced by post-medieval mining. It does however confirm that there was Bronze Age mining on the hill. The antler tool and its context are described in full in a paper in *Mining History*, the Bulletin of the Peak District Mines Historical Society.

Two areas of probably surface and underground workings have now been tentatively identified on Ecton Hill. One is around the top workings of Dutchman Mine on the high northern spur of the hill, while the other is a little further south on the hilltop. The date of the antler tool is consistent with the majority of other radiocarbon-dated prehistoric copper mines in Britain, which concentrate in the first half of the second millennium BC. These largely occur in Wales and Ireland, but also include the mines at Alderley Edge in Cheshire.

The limestones of Ecton Hill are extensively folded and faulted. Mineralisation at and near surface around the prehistoric mines appears to have been mainly in the form of thin mineralised deposits in the bedding planes of the steeply dipping limestone. Westwards from these areas of mineralised beds there are east-west trending veins; these are recognisable at the surface by the lines of small mined hollows and hillocks, and are seen underground in the workings above Dutchman Level. The bedded zones and the veins seem to have been equally poor in mineral, and the main concentration of ore was in the Ecton Pipe, a huge pipe deposit that was exploited at depth in the 18th century; it is not yet clear if the pipe was mined in prehistory.

Many thanks to Geoff Cox for permission to investigate the Ecton mines, and to those who have helped underground. Note that none of the Ecton workings should be entered without the owner's consent; parts are dangerous, and uncontrolled digging above or below ground could deplete the archaeological resource of the site.

*John Barnatt
Peak District National Park Authority*