

The National Trust

PILLAR MINE, ALDERLEY EDGE

Geology

Alderley Edge has a complex Triassic (220 million years ago) sandstone geology and is designated a Site of Special Scientific Interest (SSSI).

Two main categories of heavily mineralised rocks exist:

- Widespread malachite (copper bearing mineral).
- Localised concentrations of galena (lead), silver, arsenic, cobalt, zinc, iron, aluminium, nickel, manganese, sulphur, vanadium, molybdenum, antimony, barium and gold.

Copper mining

The ore of this valuable metal was extracted in Britain from the early Bronze Age (about 2000 BC) until the 20th century. Workings at Engine Vein show evidence for mining throughout this period and provide important information particularly with regard to the Bronze Age and Roman periods.

Ancient mining at Alderley Edge

Numerous mines and evidence relating to an ancient history of mining related activity exists at Alderley edge, but Pillar Mine and Engine Vein at Alderley Edge are possibly the only two places in England where Bronze Age pit workings from 4000 years ago are visible at the surface. At Pillar Mine a wide gash in the rock marks the position of a mineral rich fault and along one side of this small oval hollows are visible in the exposed rock. The marks of stone hammers used by the ancient miners are still evident in places.

Pillar Mine

A wide cave like opening known as Pillar Mine from the rock pillar that once stood within it, leads to a short section of blocked tunnel. The wide arched opening suggests it was worked in the medieval period. We know that other passages running below the area were worked in the 18th and 19th centuries. A series of capped shafts and entrances are visible running along the line of the fault and include a cave like entrance at the top of the slope known as Doc Mine. 19th century maps show a tramway running out of Pillar and Doc mines this was for tubs to be run out of the mines to the edge of the slope to dump mine spoil, the tipping mounds are still visible further down the slope covering deposits of earlier mine spoil.

A wide scree slope of mining debris from many different periods fans out from the fault. Over the years many whole hammer stones and broken fragments have been found in this slope confirming the presence of Bronze Age Miners.

This mine spoil is a vital source of archaeological evidence for early and later mining and because of this the National Trust has closely monitored the rate of local erosion. It is now clear that erosion is accelerating with water run off after heavy rain forming deep gullies in the spoil and starting to wash away the evidence of thousands of years of mining. Recognising the need to

preserve this important resource the National Trust is about to instigate a scheme of erosion control work at Pillar Mine.

Identified Threats

Evidence, conveyed in a report by the University of Manchester's Archaeology Unit following archaeological evaluation excavation at Stormy Point in 2007, has confirmed the existence of significant mining related evidence at the site. Results from research and excavation, undertaken at Engine Vein in 1997 prove that, here also, a significant archaeological resource exists which indicates a mining history going back at least to the Bronze Age.

There are consistencies in evidence already available, which suggest that Pillar Mine is no less significant. At this location, has been the case with both Engine Vein and Stormy Point, material is being removed by rain water and human traffic thus exposing early mining evidence. If we do not act, the mining legacy may be lost before it is fully understood.

Erosion Control

At Pillar Mine, a project, similar to one successfully undertaken in 2007 at Engine Vein, is expected to commence in October 2008. Project is aimed at addressing erosion of surface deposits and surviving historic remains of mining in the area. It is intended to address areas highlighted for their significant archaeological remains and to identify areas at highest risk in order to inform a programme of works designed to alleviate the erosion.

Erosion Control Project

In order to combat erosion of the archaeological deposits and rock features, the following work will be undertaken commencing in October 2008:

- Fencing to control access
- Creation of alternative paths (the route of a public right of way has already, through consultation with the Local Authority, been amended)
- Encouragement of re-vegetation (typically this will involve the introduction of a layer of Hessian mat which will secure an imported layer of organic material, sewn with a woodland grass seed mix
- As a grass sward develops, run-off rate and thus erosion is reduced
- Surfacing of 'desire' routes
- Controlled, formal access to the Mine (booked visits will be available)

The Future

A fixed point photo survey is already underway which monitors changes and developments in the rate of erosion. This will be continued and will ensure that a programme of maintenance and control measures can be implemented to ensure a reduction in erosion and re-vegetation.

Temporary erosion control measures are currently in place at nearby Stormy Point though it is recognised that further work is required at this location, if the conservation of archaeological deposits are to be secured in the long-term.

Further Information

Please contact the National Trust's Cheshire Countryside Office on 01625 584412 or alderleyedge@nationaltrust.org.uk.