

Field Trip to Ecton Copper Mines (Ecton Hill Field Study Association)

Copper has been mined on Ecton Hill since Bronze Age times, one of only two confirmed sites in England. It has been worked extensively from the 17th century, but became the source for massive revenues for the Duke of Devonshire in the late 1700's/ early 1800's producing up to 4000 tonnes of rich ore/ year. Total ore production is estimated at over 100 000 tonnes, mainly of copper. Mining finally finished in 1891. Chatsworth House and the Crescent in Buxton were all financed off the revenues from this single copper mine.

Ecton was in the forefront of developments in mining technology. Including the sinking of the deepest mine shaft in Britain at that time , the reputed first use of explosives in British mines, the building of an early Boulton and Watt steam engine, and the efficient use of water power for mine pumping

The whole area is a SSSI and the Ecton mine itself is an underground SSSI. It is owned by the National Trust and managed by the Ecton Mine Educational Trust, with visits hosted by the Ecton Hill Field Study Association. The rock exposures at nearby Ape's Tor provide outstanding opportunities for the study of geological structures, which can then be seen again underground in Salt's Level

<https://www.ectonhillfsa.org.uk/EctonHill/EctonHill.html>

<http://www.vmine.net/ecton2013/history.asp>

<http://www.vmine.net/ecton2013/documents/REFLECTIONS%20-%20ECTON%20MINE.pdf>

Exact details of the visit remain to be finalised with the tutors, but the notes below are based on my visit last year.

We will be hosted by a number of tutors, depending on the size of the group. Our principle guide will be Tim Coleman, an ex BGS staff member specialising in minerals, who has been a volunteer at Ecton for several years. Activities on the day include the following (none compulsory!)

- A guided walk over the hill taking in local geology and its context, old workings, tips etc
- Informal talks on the history of the mine, geology, mineralisation, Trust's work etc
- A trip underground to visit the Salt Level (helmets/ lamps provided)
- Hands on chemistry related to extraction/ refinement of ores ..(preferably let us know in advance if you wish to do this...)
- Visit to the Ape's Tor roadside exposure (minor but impressive limestone folding)
- Visit to a nearby Quaternary cemented scree (calcrete deposit)

Logistics:

We have to inform EHFA of numbers for the visit so that they can provide the correct number of tutors for the day. If you wish to attend can you let me know by 2nd April.

Contact details barbara0654@live.com

Cost of visit £10/ head

Note – details below are provisional at this point. Final details will be circulated to all those coming on the trip closer to date.

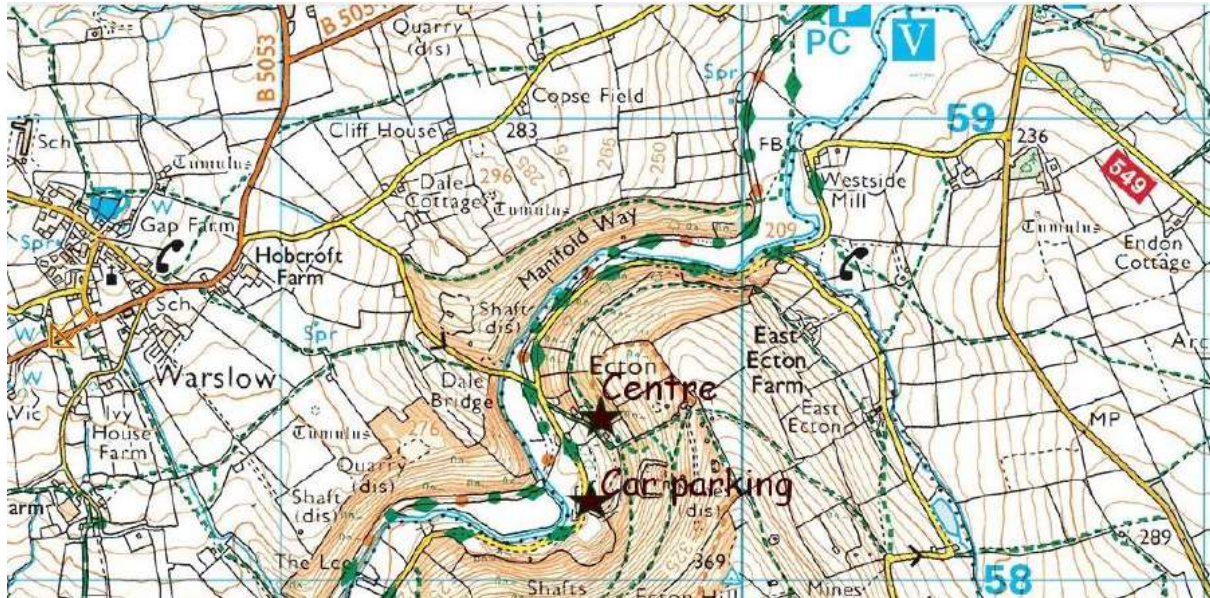
Date: 2nd May 2019

Time: 10.30 (To be confirmed)

Place: Ecton Mine is situated at the head of Manifold Valley about 7 mls east of Leek, north Staffordshire

Grid Ref: SK 096 582

Assemble in the large lay-by alongside the road running through the Manifold Valley, about 150m south of the private track running up to the centre (located on the hillside with only foot access for visitors)



Two warnings apply:

- 1) Sat Navs do not appear to be reliable in the area around the mine**
- 2) On no account should you drive up the private track- there is no room to turn**

Lunch: Bring packed lunch. Beverages will be available (self-service) throughout the day.

Risks/ Safety / Conditions:

Underground visit will be cool, damp (wet?) and a bit “dirty”, so appropriate clothing and sturdy footwear. Note the centre does not provide any specialist protective clothing.

The centre is on a hillside and outdoor visit over the hillside (approx. 2km) involves some very steep gradients on sheep-track type paths, which may be uneven and locally muddy if wet. Anyone not wishing to take part in this element may remain back at the centre. Apes Tor and the scree deposit can be driven to and are by the roadside.

Contacts:

For any more information, please contact : barbara0654@live.com