

Chairman's Report for 2022

In the year 2022 steps were taken towards normalisation after the Covid 19 pandemic

Overview

- Visitors resumed underground trips with EMET and EHFSA. As a result, income from visitors fees and donations was received during 2022 although this is still lower than pre-pandemic levels.
- The Trust purchased the Balance Cone Land (Ecton Winch Cone) for £1,000 from Bill Mellor, a local farmer, to enable EMET to apply for a Farming in Protected Landscapes (FiPL) grant to finance a "Feasibility Study for Repair to the Balance Cone at Ecton Copper Mine". The feasibility study is to include wildlife, ecology and archaeology surveys together with a condition assessment and a repair strategy.
- The Trust was awarded a FiPL grant from the Peak District National Park Authority to cover the costs of the feasibility study (Phase 1). Work began in September 2022 after the contract was awarded to the Morton Partnership. Originally all feasibility works were required to be completed by 1st May 2023 but a small extension has been granted to enable some ecology works to be completed beyond this date. The results of Phase 1 will determine whether Phase 2, the repair works, is sanctioned and will decide the scope of Phase 2.
- There were dives by both the BlueROV2 commercial ROV and the UX1-NEO submersible robot during 2022 in the flooded Ecton workings.
- The Trust has had no changes of Trustees during 2022.

Maintenance

Regular maintenance has been carried out at the Ecton Centre including a partial re-roofing of the Centre to stem leaks, tree trimming, work on a water filtration system and repairs to the toilet and washbasin facilities. All measures to make a visit to the Ecton Centre more pleasant.

On the hillside two wooden gates have been replaced and fence post repairs continued. Fence posts around shaft tops have been replaced where emergency repairs have been necessary. More post and fencing replacement is planned.

Balance Cone Project

EMET purchased the Balance Cone land purely to facilitate eligibility for the Trust to apply for a FiPL grant to investigate the structural integrity of the Balance Cone and

to secure the stability of the scheduled monument. This is a unique historic feature in the UK which EMET would like to play a part in preserving. Regular meetings with the Ecton Hill Partnership which includes EHfSA, Peak District National Park Authority, National Trust and Historic England enhance communication and cooperation between these parties with this project.

Submersible Exploration at Ecton

During 2022 there were a total of 6 dives in Ecton Mine using the BlueROV2 commercial ROV in March and September, and three dives of the UX1-NEO submersible robot in March. These greatly extended our knowledge of the mine geometry, archaeology and geology, and in particular proved navigable links between the pumping shaft and the pipe workings, and showed some new leads for future exploration. Discoveries included a ladder still in place at 15m depth in South Winze, with an adjacent miner's inscription from the 18th century, and sufficient geological information to start developing a 3D model of the folding at 50-60m depth.

UNEXMIN Georobotics Ltd (UGR)

EMET holds a 4.3% interest in this Hungarian registered company which is a spinoff startup company from the UNEXMIN Horizon2020 project (2016-2019) in which EMET was a participant. UGR itself was a participant in the follow-on UNEXUP project (2020-2022) as well as the TIMREX Horizon2020 and other funded projects, and continues now as an independent entity, offering commercial services using the UX1-NEO robot and other submersibles. In 2022 UGR carried out a number of commercial and semi-commercial missions as well as research missions within the UNEXUP project. These included:

- 15-18 March: South Crofty Mine, Cornwall. Dive to 300m depth to inspect a pumping station flooded after mine closure in 1998. The dive succeeded but a steel gate prevented access to the pumps.
- 22-23 March: Ecton Mine. Dives in both main shafts and into the pipe workings for comparison with UNEXMIN exploration with the previous UX1-NATA robot.
- 13-27 June: Kobanya flooded cellar complex, Budapest, Hungary. The first fully autonomous dive (without tether).
- 1 August: Hranicka Propast cave, Czechia, with the Czech Speleological Society. Diving to a maximum depth of 450 metres, setting a new world record for depth of flooded natural caves.
- 28 Nov – 1 Dec : Käfersteige fluorspar mine, Pforzheim, Germany. Inspection of flooded 12% decline, and mapping of side tunnels. Horizontal distance 3.5km, maximum dive time 6 hours.

UGR is also a participant in three new Horizon Europe project proposals, and has a number of outstanding proposals for further fully commercial dive projects including three in the UK. There is currently no competition for the technology which it offers.

UGR turnover in 2022 was 259K euros. Estimated profit 78K euros. Final figures for both to be confirmed in April. No dividends were declared in 2022.

Ecton Mine Educational Centre

EMET Trustees are very keen to promote Ecton Mine as an educational site and links with the Institute of Quarrying (IQ) and the National Stone Centre at Wirksworth have been strengthened with talks regarding opportunities for joint centre field trips from both educational establishments and industry. EMET is also very keen to invite industry sponsorship to improve the facilities at the Ecton Centre.

Following a recommendation by the auditors of the EMET accounts in 2021, a valuation was carried out by a local firm of valuers and estate agents of the land and property owned by EMET at the start of 2022. A valuation of £115,000 was quoted. This was prior to the purchase of the Balance Cone Land.

The team of Trustees at EMET is a strong, enthusiastic team complemented by advisers, who are keen to promote the Ecton Mines as a higher profile educational site and site for research.

Financial summary

Income from charitable activities was £8,362 (2021: £Nil). This increased income reflects the return of visitors to the Centre as pandemic restrictions eased through the year, and the commencement of the Balance Cone (FiPL) project at the end of the year, for which an interim payment of £6,192 was received as reimbursement of expenses incurred on the project in the year. Income from normal Trust activities (EHFSA and other visitor income and donations) was £2,170.

The associated expenses were £13,296 (2021: £2,265), comprising £6,192 expended on the Balance Cone project, £3,998 on normal Trust activities and £3,000 loss on revaluation of land and buildings.

The resultant overall loss in the year was £4,766 comprising a loss on revaluation of the land and buildings of £3,000 and a loss on normal Trust activities of £1,766 (£2021: £2,257). The loss on normal Trust activities was comparable to that in 2021, despite the increase in visitor income and donations. This reflects increased expenditure on centre repairs, maintenance and improvements, reinstatement of full insurance cover and legal and professional fees for valuation of the land and buildings.



Andrew C Mann, Chairman

1st April 2023