The 2022 Repair Project in Pictures - Before and After Repair

Background to the Repair Project

The dam which holds back the reservoir of water necessary for the blast furnace iron casting prosses has two sluices, one at the northern end which controls the flow of water to the furnace site and one at the southern end through which excess water from the pond is discharged.

Over time both these sluices have gradually failed to function correctly, allowing flood water during heavy rain to pour over and around the northern sluice and then over the archaeological remains of the furnace causing severe damage.

The southern sluice was leaning outwards and in danger of collapse and was only discharging a little of the excess water from the pond.

A major repair has now been carried out to repair both sluices so they once again function correctly as originally intended. The visible remains of the furnace site have also been cleared of debris and the stonework consolidated.



Aerial View of Furnace Site

The remains of the actual furnace were excavated in 1989 and 1992. Following the Repair Project 2022, it is hoped the furnace will be revealed at a later date and a covered area provided for visiting groups as well as pathways for safe access between the two spillways for visitors.

- See 1. http://www.fernhurstfurnace.co.uk/history.html for excavation details.
 - 2. Book: Fernhurst Furnace and other industrial sites in the western Weald, Chichester District Archaeology 2, by John Magilton and other contributors. Available from the FFPG.

The Problem



↑ Flood water overflowing and around the northern sluice which feeds the furnace workings.



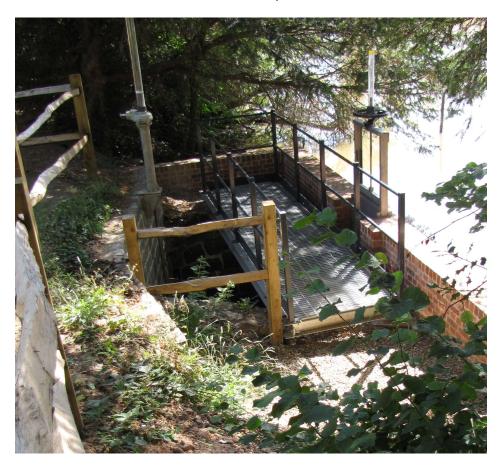
↑ Floodwater damaging the archaeological remains of the furnace site.

The black tubing is a temporary addition to help divert floodwater over the site.

The Repair of the Northern Sluice (which supplies water to the furnace site)



↑ Before repair



↑ After repair – With new sluice gates fitted to control the water flow.

The Repair of the Southern Sluice (which allows excess water in pond to be discharged)



↑ Before repair – The sluice in the dam wall leaning outwards and in danger of collapse



↑ After repair – completely rebuilt

Repair of the visible remains of the furance working area



↑ Before repair



↑ After repair

Walls to the wheels pits re-instated and all walls capped. The damaged section of the tail race has also been rebuilt using only stone and bricks recovered from the stream bed downstream.

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