

Report on the metalworking residues from
the excavations at Talbot's Tower,
Kilkenny (E3646)

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Introduction

A small amount (720 g) of remnants of metalworking were retrieved during the excavations around Talbot's Tower, Kilkenny city. This report was compiled based on information in the preliminary report on the excavation (Ó Drisceoil 2008), together with supplementary data on the relevant contexts and a document containing revised phasing of the site. The material itself was weighed and visually and microscopically analysed (see Catalogue).

The material

The metalworking residues are exclusively represented by slag. The material is rather undiagnostic, but fits within the wide range of residues known to originate from the smithing of iron. One definite smithing hearth cake (SHC) (019:5), and two probably ones (189:38 and 356:5), represent the accumulation of iron lost from the object with other materials (ash, hearth wall,...). SHC's are regarded as the type artefacts of iron smithing and generally weigh between 200 and 500 g (Crew 1996). Two pieces in the assemblage (019:5 and 170:45) had lime or mortar encrustations which could imply that these were previously incorporated in a stone and mortar construction. Only a few of the specimens gave clues as to the fuel used; charcoal (189:38), coal (019:6) and cokes (019:5) were observed in material from layers younger than 1700 AD.

Chronologically the material ranges from the period before the monastic enclosure (8th to 9th century AD) until beyond the 18th century. Some of the material, especially that found in the more recent contexts, could have been produced substantially earlier.

Conclusions

Due to the limited amount of material, and its wide chronological distribution, it can only be concluded that some type of iron smithing was carried around the Talbot's Tower area at various points in time.

References

- Crew P. 1996 *Bloom refining and smithing slags and other residues*. (=Historical Metallurgy Society. Archaeology, Datasheet 6.
- Ó Drisceoil C. 2008 *The Town Wall at Talbot's Tower, Ormonde Road, Kilkenny city. A Preliminary Report on the Archaeological Excavation 2007*. Unpublished preliminary report, Kilkenny Archaeology.

Catalogue

Find No.	Find No.	Feature type	Date	Weight (g)	Description	Fuel
019	5	Rubble deposit in ditch 008	18 th - 20 th C	114	small SHC, covered on two sides by iron stained lime/mortar	cokes
019	6	Rubble deposit in ditch 008	18 th - 20 th C	16	Small fragment of dark rather dense slag	coal
068	16	Fill of robber pit 024	18 th -19 th C	238	Large fragment of black rather dense slag, irregular shape	None
072	13	Fill of ditch 008	13 th - 16 th C	7	Small piece of rather light dark shiny slag with reddish discoloration on one surface	None
072	14	Fill of ditch 008	13 th - 16 th C	2	Small fragment of brick, vitrified on one side	NA
075	3	Deposit under monastic embankment	pre-8 th - 9 th C	37	Small dense rounded fragment of oxidised slag	None
170	44	Sod	18 th - 20 th C	5	Small, rather light fragment of dark shiny slag with regular quartz-like inclusions	None
170	45	Sod	18 th - 20 th C	5	Small piece of dark grey irregular shaped slag with lime encrustation	None
170	51	Sod	18 th - 20 th C	18	Rather dense fragment of dark slag	None
189	28	Garden mound	18 th - 20 th C	20	Brick fragment	NA
189	38	Garden mound	18 th - 20 th C	145	Fragment of dense dark grey slag with vitrification on one surface	Charcoal
350	3	Fill of ditch 008	15 th - 16 th C	24	Fragment of dark, rather dense slag	None
356	5	Basal fill of ditch 008	13 th - 16 th C	111	Lump of heavily corroded, rather dense slag	None