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Ancient Monuments Laboratory
Report 13/94

ASSESSMENT OF TECHNOLOGICAL
MATERIAL FROM SYREFORD MILL,
GLOUCESTERSHIRE

Catherine Mortimer BTech DPhil

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Summary

Less than 0.5kg of technological debris was available for examination. The material represents low levels of background scatter from ironworking and possibly other high-temperature processes. A single piece of melted copper alloy was also present. Most samples were from fourth-century contexts.

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Assessment of technological material from Syreford Mill, Gloucestershire

Catherine Mortimer

A large Roman settlement at Wycomb (Andoversford) has been investigated at various times during the 19th and 20th centuries. The 1972-75 excavations at Syreford Mill (in the north of the settlement) are being re-evaluated as part of a survey of Roman small towns in the Cotswolds (Timby 1993). Gullies, pits and burials were found in the excavation, which covered c.370 square metres. Finds date from the late Iron Age to the late- or possibly sub-Roman periods. The contexts which yielded the technological samples are mostly dated to the fourth century AD.

Assessment

Technological debris from this site amounted to 328g of various types of material - coal, ironworking slag, copper alloy, fuel ash slag and iron-rich stones (see table). Ironworking slag is very common on Roman and later archaeological sites and the 172g found at Syreford Mill represents a low level of background scatter. Most of the ironworking slag at the site is non-diagnostic and could have come from either ironsmelting or ironsmithing processes; one small piece was noted to be more dense (less vesicular) than the other ironworking slags. Hearths and furnaces were not discovered at the site, so it is likely that the ironworking slags were redeposited here. Fuel ash slag is a pale greygreen, lightweight, highly-vesicular substance, created when silica (*eg* from furnace/hearth walls) is fluxed with alkalis from a fuel (*eg* wood or charcoal), in a number of high-temperature processes including pottery firing, accidental fires *etc.*; the presence of fuel ash slag is therefore not diagnostic of a particular technological process. Coal must have been a common fuel in Gloucestershire. The stones which appear to be very iron-rich (SF189 and SF194) could have been used as ore for smelting, but there was no other evidence of smelting on the site. They did not appear to have been roasted. The copper alloy fragment (SF188) is too small and badly heat-affected to make any suggestions about its original form.

The quantity of material available is very small, so it is difficult to make any significant comments about high-temperature processes at or near the site. Ironworking was carried out near the site, at some time before the 4th century AD. The technological debris does not require any further research to be carried out on it. The material is adequately conserved and stored.

Reference

Timby J 1993. Roman small towns in the Cotswolds Post-Excavation Programme 1993-1994; Notes for Specialists (Cotswold Archaeological Trust)

Syreford Mill, type of material, by weight (in grammes)				
SF	Context	Date	Material	Weight
185	A3	4th C (tpq)	Coal	30
186	B3,Pit II	4th C (tpq)	ND Fe slag	98
187	B4, gully	-	ND Fe slag	18
188	U/S	-	CA blob	16
189	A2/I	4th C onwards	Stone?	38
190	A1, pit on left hand side	?1st C BC/AD	ND Fe slag	4
191	?AIV-V, surface	4th C onwards	Dense Fe slag	24
192	A4X/I	4th C onwards	FAS/cinder	4
193	late destruction layer, F1	*	FAS	6
194	A2X	4th C onwards	Stone	62
113	B3,2 topsoil		ND Fe slag	28
			Total weight	328

* This sample may be from another site on the Andoversford (A40) Bypass.

ND = not detected

CA = copper alloy

FAS = fuel ash slag