WATCHING BRIEF AT BROOME MILL, CHURCHILL AND BLAKEDOWN, WORCESTERSHIRE

Simon Woodiwiss

Illustrated by Laura Templeton

2 December 2003

Historic Environment and Archaeology Service,
Worcestershire County Council,
Woodbury,
University College Worcester,
Henwick Grove,
Worcester WR2 6AJ

Project 2451
Report 1204
CAA 506
WSM 33397

u:\u160 acs\u013 archaeology service\03 field section\projects\archives\project numbers\p2451 broome mill 2\report\p2451 broome mill 2 report - final.doc

Watching brief at Broome Mill, Churchill and Blakedown, Worcestershire

Simon Woodiwiss

Background information

Client	Environment Agency
Site address	Broome Mill, Churchill and Blakedown, Worcestershire
National Grid reference	SO 890 788 (Fig 1)
Sites and Monuments Record reference	WSM 33397
Countryside Archaeology Advice reference	CAA 506
Brief	HEAS no date
Project design	HEAS 2003
Project parameters	IFA 1999

Previous archaeological work on the site

A Conservation Statement was prepared for Broome Mill and Cottage Pools (WSM 33398; Watt 2002) as part of the Environment Agency's preparation for a wetland restoration scheme. The Statement consisted of the collection of existing information (maps and documents), a topographic survey, a chronological outline and recommendations regarding the proposed works. The present project results from recommendations relating to ground disturbance associated with the construction of a new dam. The Statement also refers to previous surveys of the site.

Previous archaeological work on associated sites

The mill pond is one of a series between the Clent Hills and River Stour (Watt 2002) and was immediately down stream of Broome Mill itself and was the first of four pools serving Harborough Hall Mill (Watt 2002).

Aims

The aims of the project were to "establish the presence and significance of archaeological deposits and of artefactual and ecofactual assemblages." (HEAS no date).

Methods

General specification for watching briefs	CAS 1995
Sources consulted	Watt 2002
Date(s) of fieldwork	17 October 2003
Area of deposits observed	Indicated on Fig 2
Dimensions of excavated areas observed	
Foundation trench for new dam	length *c* 45m width 3.5-4.m depth 1.5-2m (estimated)

The watching brief related to the observation of groundworks associated with the construction of a new dam for Broome Mill Pool (also known as Long Pool on early maps) just to the east of the original.

Access to or visibility of works

No notice of the intention to start works was given and observation of the excavated areas was undertaken after machine excavation. The exposed sections were sufficiently clean to observe well differentiated archaeological deposits, though any less clear may have not been identified. Water in the base of the trench and the trench's depth prevented safe access to the central part of the trench and observation of its base was not possible. Environmental sampling was not possible. Selected areas totalling 2m² were cleaned by hand.

Statement of confidence

The absence of safe access to the sections prevented taking environmental samples and as attendance was after the main excavation works had been undertaken the collection of stratified artefacts was not possible.

Deposit description

Context	Type Colour Texture	Description	Date	Interpretation	Dimensions
1	Soil Dark brown Sandy	Humic soil	Modern	Topsoil	Depth c 400mm
2	Soil Medium brown Sandy loam	Contains roots, occasional artefacts (not collected but all appeared modern), and large ?freshwater oyster shells	Modern	Silting-up of pool	
3	Soil Light grey mottled Sand	Clean apart from modern roots (no other contents noted)		Redeposited sand, presumably deposited soon after construction	Width c 600mm
4	Cut		Post-medieval or earlier	Construction of pool	Depth 1.5-2m
5	Red Sand	Bedded		Natural	

Discussion

The most significant topographic observation was that the area in the south-western corner of the pool formed a shallow shelf where the pool approached a sluice (Fig2; Plate 3 shows the cut for the deepening of the pool). The leat from the sluice is shown on the 1834 enclosure map (Watt 2002, fig 7) and presumably dates from at least this time. Though the sluice is not specifically indicated until 1889, the structure is likely to be earlier. Watts (2002, 7.4.7) notes that historic maps indicate that the pool changed its length between 1838 and 1889 and suggests this lengthening may be associated with the change in use from industrial to recreational (Watts 2002, 8.0.4). This may, however, equally result from desilting of an originally large pool, rather than an enlargement. There is a considerable gap between the 18th century, or earlier, date for the presumed construction of the pool, and the earliest maps, and it is possible that the maps show the silted remnants of a larger original

pool. The 1834 enclosure map indicates marshy ground at the pool's eastern end, which could result from silting. No evidence for any desilting or recutting of the pool at its western end was observed, unless the mottled sand seen in section (context 3, Plate 3) is the remainder of earlier silt fills of the pool. This silt did not contain any observable organic or humic material and was not sampled.

As part of construction, the vegetation on the eastern side of the existing dam was removed by machine and a large red sandstone block (650x300x350mm) was found. The block was left on the surface and may possibly be reused for future restoration of the adjacent sluice. Whereas the topography and section gives a clear indication of the pool's form, the northern edge was much less distinct, though it will be indicated by the contour at the same height as the sluice. Although environmental samples could not be collected in this instance by far the greater proportion of the pool fills remain preserved and these will contain any environmental indicators referred to by the brief. The assessment of environmental indicators contained in the pool fills could not be determined as originally intended. The project has, however, been able to demonstrate that deposits likely to contain such indicators do exist and appear not to have been affected by any modern disturbance. Watts (2002, 6.0.2) notes water abstraction in the 1980s and this relates to the pools current dry state. The effects of drying out of the deposits on environmental indicators remains unknown, but at least the lower fills appear to have remained waterlogged.

Given that the pool is constructed in permeable sandstone it is perhaps surprising that no impermeable lining appears to be present. The presence of groundwater in the base of the trench does however suggest that the water-table is relatively high and any loss of water, in addition to any through the sluice, was compensated by water supplied by the stream.

The interface between the pool fills and the natural sandstone is distinct. It cannot be certain from the watching brief, how far the base of the stream valley was deepened to form the pool, or whether, more simply, construction consisted of the removal of humic soils and damming of the valley. The water abstraction dating from the 1980s is, however, a new element in the hydrology of the area and this may affect restoration of water levels.

Conclusion

The original intention to sample and assess the pool fills for environmental indicators, where the opportunity was presented by the construction of the dam, could not be realised. Deposits apparently likely to contain such deposits were, however, observed and remain for future assessment. Such assessment is more likely to be successful through a specific programme of sample collection (using coring) as this would enable the whole depth of deposits to be considered. Evidence for the deterioration of environmental indicators due to drying out, would be an additional factor to be considered.

Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

A watching brief was undertaken on behalf of the Environment Agency at Broome Mill, Churchill and Blakedown, Worcestershire (NGR ref SO 890 788; SMR ref WSM 33397). Works associated with the construction of a new dam were observed and details of the topography of the original mill pond recorded.

Archive

Fieldwork progress records AS2	1
Digital photographs	3

Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Marianne Jones (Environment Agency), Jeremy Bretherton (Worcestershire County Council).

Bibliography

CAS 1995 (as amended) *Manual of Service practice: fieldwork recording manual*, County Archaeological Service, Hereford and Worcester County Council, report, **399**

HEAS no date *Requirements for an archaeological watching brief at Broome Mill, Churchill and Blakedown, Worcestershire,* Historic Environment and Archaeology Service, Worcestershire County Council unpublished document

HEAS 2003 *Proposal for an archaeological watching brief at Broome Mill (dam), Churchill and Blakedown, Worcestershire*, Historic Environment and Archaeology Service, Worcestershire County Council, unpublished document dated 6 October 2003, **P2451**

IFA, 1999 *Standard and guidance for an archaeological watching brief,* Institute of Field Archaeologists

Watt, S, 2002 *Broome Mill and Cottage Pools, Churchill and Blakedown, Wyre Forest, Worcestershire: Conservation Statement,* Birmingham University Field Archaeology Unit, **PN 930**

Plate 1 East section, facing north. Area shown in Plate 3

Plate 2 Facing south

Plate 3 Part of east section, showing early fill (grey mottled sand). Natural sandstone has been cut through by trench for new dam to right of photograph, and “shallow shelf” lies just under the topsoil.