SOME FIELDWORK IN DERBYSHIRE BY TRENT & PEAK ARCHAEOLOGICAL UNIT IN 1998–99

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INTRODUCTION

This compilation of reports by staff of Trent & Peak Archaeological Unit (hereinafter T&PAU), some written in collaboration with colleagues based elsewhere, summarizes some of the fieldwork conducted in 1998 and 1999. The format here follows that of the equivalent reports for 1995–6 (*DAJ* 118, 148): thus, only 'definitive' reports specify the whereabouts of the relevant full report and archive (normally in the Sites & Monuments Record maintained by Derbyshire County Council in Matlock, hereinafter SMR), while it is intended that fuller reports will eventually be published in respect of those sites given only 'interim' treatment here. The reports are arranged in alphabetical order and numbered as in Fig. 1.

REPORTS

1. ASTON-UPON-TRENT, ARGOSY WASHOLME (SK 431291)

D. Garton, L. Elliott and C.R. Salisbury

Regular monitoring of ARC's quarry between Aston and Shardlow (by CRS) resulted in the reporting of a structure of wood and sandstone blocks, some 12m wide by at least 50m long, initially interpreted as a possible training-weir analogous to Medieval and Post-Medieval examples (DAJ 119, 279). Subsequently, a grant to CRS from the Robert Kiln Trust facilitated radiocarbon-dating of a piece of brushwood and the outer rings of a post from this structure. These produced dates of 3060 ± 50 BP (Beta-118363) and 3070 ± 60 BP (Beta-115407) respectively, which, when combined, give a date-range of 1430-1190 cal BC at 2σ (OxCal v2.18 using Stuiver *et al.* 1998). In other words, the linear structure appears to have been built in the Middle Bronze Age.

In 1998, a logboat was recognized by one of the quarrymen (R. Selby) and reported to CRS. It lay at the edge of an area of unquarried deposits incorporating numerous timbers and much silt. Funds were raised from ARC for the excavation of the boat in 1998, with specialist support from English Heritage (EH). Further excavations in 1999, together with conservation of the boat, were funded from the Hanson Environment Fund.

Both ends of the boat were inadvertently broken during quarrying, when all of the stern was lost, and fragments from the bow were dumped on top of the main body of the boat, which remained *in situ*. At least three of these can be fitted together, forming a c. 3.3m length, and retaining an integral cleat between the floor and the angle of the bow (Fig. 2.B). The cleat has become chamfered, probably through wear by rope, most noticeably on its underside. The thickest part of the bow was cored (by J. Hillam, EH) for tree-ring analysis, providing a sequence of some 220 rings, but these cannot be

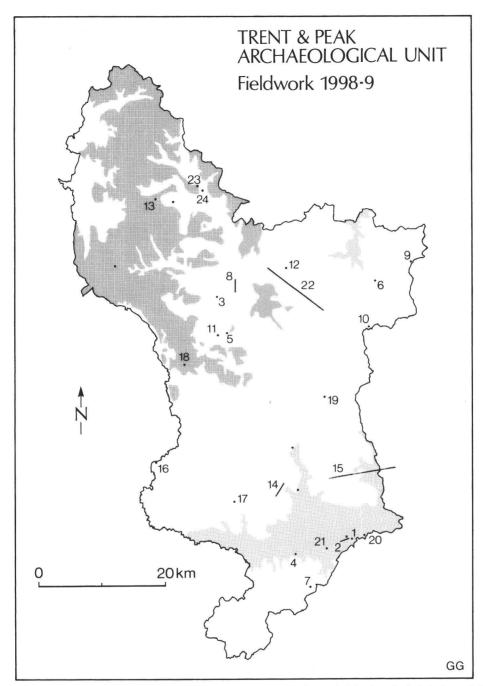


Fig. 1: Derbyshire, with the highest land, over 300m OD in the Peak District, shaded dark, and the lowest, under 60m OD in the Trent and Rother valleys, shaded relatively pale. Each site investigated by T&PAU in 1998–9 is marked by a spot, each pipeline by a bar, numbered in a single series, as follows:

1 Aston-upon-Trent, Argosy Washolme; 2 Aston-upon-Trent; 3 Bakewell; 4 Barrow-upon-Trent, Freak Close & Captain's Pingle; 5 Barton Hill & Stanton Moor; 6 Bolsover Castle; 7 Calke Park; 8 Chatsworth Park; 9 Creswell, Fox Meadow; 10 Hardwick Old Hall; 11 Harthill Moor; 12 Linacre Reservoirs; 13 Mam Tor; 14 Markeaton to Mackworth; 15 Morley to Strelley; 16 Norbury church; 17 Osleston, Hall Farm; 18 Parwich, White Cliffe Common; 19 Pentrich, Bowler's Cottage; 20 Shardlow, Chapel Farm; 21 Swarkestone church; 22 Tupton to Hare Edge; 23 Win Hill; 24 Yorkshire Bridge, Ladybower. Unnumbered spots represent sites where work was undertaken in 1998–9, and which it is hoped to cover in a future volume.

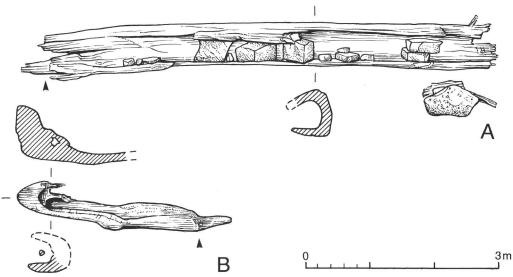


Fig. 2: Argosy Washolme: field-drawings of A — the logboat as it lay on its side in the gravel, and therefore showing the top of the craft, with bow-end to left, and with stone blocks in position, except for one dislodged near stern-end; B — fragmentary bow, showing form and location of cleat. Arrow on A and B indicates probable point where parts joined. Scale 1:60.

Drawn by J. Goddard.

matched to provide a date (information from I. Tyres, EH); it is hoped that this problem will be remedied by radiocarbon-dating. The longest portion of the boat (c. 7.2m) lay on the left, or port, side, and contained five large blocks of Bromsgrove Sandstone (identified by K. Ambrose, Geological Survey), as well as several smaller blocks of the same rock (Fig. 2.A). Nearby, another large block of sandstone lay where it had fallen, having broken away part of the shear (i.e. top edge) of the boat when the gravels supporting it were undercut (bottom right, Fig. 2.A). The hull is U-shaped in cross section, with an internal width of up to 0.45m, and internal depth of 0.45m. The flat bottom is c. 0.14m thick, while the sides thin to c. 0.12m at the shear. All of its surfaces are pitted, presumably caused by pebbles in the surrounding gravels; and no tool-marks could be identified on initial examination in situ. In 1999, all parts of the boat that could be found were transported to York Archaeological Trust's laboratories for conservation, which is expected to take about two years; thereafter it will be moved to Derby Museum for display.

Three oak logs were found jammed behind the bottom of the logboat: one was probably riven, the other two each had a flat, transverse cut at one end. Another log, with similar transverse cut at one end, protruded from an adjacent area of the silty deposits. Investigation of this area revealed nine more oak logs, all lying horizontal and roughly parallel (Fig. 3), within 22m of the boat. These logs were also sampled for treering analysis (by I. Tyres and N. Nayling, EH), but unfortunately none could be dated. At least six of these logs also had a transverse cut at one or both ends, some with evidence for tool-marks made with axe or adze; and at least two also had a complete, tapering perforation cut by axe or adze. Such a hole could have been used when hauling the log.

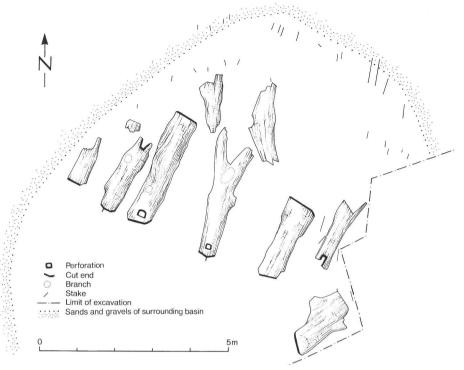


Fig. 3: Argosy Washolme: sketch-plan of logs that overlay a silted brushwood 'mattress', with uppermost part of each stake indicated. Scale 1:100.

*Drawn by J. Goddard.**

though there were no obvious signs of wear to provide confirmation of this idea. Most of the logs came from the knotty crowns of trees, one retaining two of the upper forking branches, and this suggests that they were rejected offcuts. These logs overlay a 'mattress' of brushwood, which occupied a silt-filled basin. Around the edges of the basin, a number of ash stakes, each with a well-formed point, were found lying on the gravel-surface, seemingly positioned deliberately. However, since at least two stakes had the point driven vertically into the gravel, with the upper part bent over, it seems more likely that they had originally stood vertical. If so, the surrounding sediment must have been scoured subsequently, causing the structure to collapse. Four radiocarbon-measurements have been obtained from this brushwood — 3160 ± 60 BP (GU-5811) and 3000 ± 150 BP (GU-5812) — and stakes — 3140 ± 50 BP (GU-5809) and 3190 ± 50 BP (GU-5810). These are not statistically different from those derived from the structure recorded by CRS in 1997, so that the two constructions could easily be of similar age (analysis by P. Marshall, EH). In addition, the structure recorded in 1999 lay on the projected line of that seen in 1997. Hence, although they were constructed differently, they may have been parts of a single causeway, perhaps repaired or rebuilt in one or other area, crossing the wet/boggy ground of the Trent floodplain.

Reference

Stuiver, M. et alii (1998) INTCAL98 radiocarbon age calibration, 24,000–0 cal BP. Radiocarbon 40: 1041–83.

2. **ASTON-UPON-TRENT pipeline** (SK 413295–426299) D. Garton and R. Sussum In 1998, a watching-brief was conducted during pipe-laying for Severn Trent Water, running southwards and westwards along Shardlow Lane, past the junction with Acre Lane, into the village of Aston, and there dividing to extend some way along Weston Road and Derby Road. This c. 2km route passes through an area of gravel-terrace rich in a variety of cropmarks, including, most notably, those of a cursus, several ring-ditches, and a group of small square enclosures (for present purposes, these are best seen in May 1970, fig. 1, which names Acre Lane; while a more recent plot of these cropmarks is in Riley 1987, figs 59 and 60); it also passes close to All Saints church, which incorporates Anglo-Saxon masonry (Pevsner and Williamson 1978, 69). Outside the village, the water-pipe was introduced into an existing pipe by excavating a series of pits (each up to 9×3 m and 1.1-1.5m deep) at irregular intervals; within the village, it was installed in a continuous trench (0.8-1.0m wide and 1.2-1.7m deep). Much of the route was found to be cut into previously disturbed ground. Otherwise, no archaeological features or deposits were observed; but useful details of the stratigraphy of the terrace-deposits were recorded, and these are described in a report deposited with the SMR.

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Pevsner, N. and Williamson, E. (1978) *The Buildings of England: Derbyshire* (2nd edn). Harmondsworth.

Riley, D.N. (1987) Air Photography and Archaeology. London.

3. BAKEWELL (SK 219685 & 2268) D. Garton, A.J. Howard and V. Priest

Following evaluation in 1997 (*DAJ* 119, 279–82), watching-briefs were conducted during contractors' excavations for construction-works on Bakewell Showground, east of the River Wye, and of retail-units and housing on the site of the old cattle-market, west of the river. This 1998 work was undertaken for Derbyshire Dales District Council and Nordeer Ltd.

East of the river (SK 221685–224680), the stratigraphy observed in 1998 matched that reported previously, and it need not be amplified here. West of the river (SK 219685), a group of palaeochannels trends approximately north-west/south-east, following a similar alignment to the modern river, some 40m to its west. At least two of these channels measure only 10–15m across, and are therefore narrower than the present Wye, though this could have resulted from simultaneous use of more than one channel. All of the channels cut at least 1m deep into gravels, and are infilled with silty peat. This was sampled at five locations for palaeo-environmental and chronological evidence, which may give clues to the past character of the river, as either a multi-channel system or a single channel that migrated across the floodplain. These palaeochannels are separated

from the present river by a gravel-ridge, though both are covered by alluvium, up to 1m thick, containing brick and other modern materials in its upper part.

No evidence for structures or buried cultural horizons was recognized, and it would appear that the Medieval town was confined at the east by a marsh, apparently reclaimed quite recently.

Full reports have been deposited in the SMR.

4. BARROW-UPON-TRENT, FLEAK CLOSE (SK 342278) and CAPTAIN'S PINGLE (SK 346279) D. Knight and M. Southgate

Two different sets of cropmarks were excavated prior to gravel-quarrying in 1998–9, both situated on the Floodplain Terrace of the River Trent, and both with funds provided by Lafarge Redland Aggregates Ltd (as part of the same Scheme of Treatment as the 1995 excavation at Fernello Sitch — *DAJ* 118, 156–7).

In 1998, the cropmarks at **Fleak Close**, defining an enclosure and pit-alignment, were investigated. At the site of the enclosure, three main phases of development were defined stratigraphically. Phase 1 comprises features cut by the enclosure-ditches and perhaps belonging to an unenclosed settlement; they include a round-house (adjacent to the southern entrance of the later enclosure) and a scatter of small pits. In Phase 2, the ditch of a sub-rectangular enclosure was recut many times, with a complex entrance at both the south and east; the interior contained three round-houses (two intercutting) and a scatter of pits and post-holes. Phase 3 comprises pits and post-holes which cut the enclosure-ditch; a palisade-trench could have formed part of an enclosure appended to that of Phase 2.

A substantial quantity of pottery, all of the Middle to Late Iron Age, was recovered from features of each phase, together with fired and unfired clay, quernstones, rubbing-stones, and considerable numbers of heat-affected stones, probably connected with cooking. Extensive samples were taken for charred plant-remains. There were few faunal remains, though a dump of antler and bone was recovered from the base of a pit cut into a corner of the silted enclosure-ditch.

The pit-alignment ran north/south, c. 80m to the east of the enclosure. Seventeen of its pits were excavated, most being sub-rectangular in outline. Apart from a scrap of Iron-Age pottery in the upper fill of one pit, no evidence for the date of the alignment was recovered.

In 1999, excavations at **Captain's Pingle** focussed upon a small (c. 0.1ha) subrectangular, single-ditched enclosure. No traces survived of associated buildings, but occupation is implied by the discovery, both inside and outside the enclosure, of several well-preserved hearth-bases, one floored with tegulae. Further evidence for domestic activity is provided by the base of a clay-oven, set in a shallow pit inside the enclosure, while numerous other fragments of oven were found redeposited. Iron-working is indicated by smithing-slag, plano-convex hearth-bottoms, and part of a fired-clay tuyère. Droplets of non-ferrous metal suggest the working of copper-alloy. A large collection of pottery and other artefacts (including objects of iron, copper-alloy and lead, occasional coins, tegulae and other fragmentary tiles and quernstones) derived largely from a layer that sealed many of the Romano-British features and is interpreted as a Romano-British or Medieval ploughsoil. Little bone had survived in the acidic soil, but extensive samples were taken for flotation with a view to elucidating the local agrarian economy.

5. BARTON HILL and STANTON MOOR QUARRIES (SK 2362, 2462 and 2463)

P. Beswick and G. Guilbert

An archaeological appraisal, commissioned by Natural Stone Products Ltd as part of an Environmental Assessment of several quarries in the parishes of Birchover and Stanton, was undertaken in 1998, with the aim of collating information from the SMR with published, documentary and cartographic sources. Site-inspection could not be undertaken until September, when undergrowth was dense, and it could undoubtedly have been more productive if done earlier in the year.

Much of Stanton Moor is protected statutorily as a Scheduled Ancient Monument, largely on account of extensive remains of Bronze-Age burial, ceremonial and settlement features, but also preserving evidence for Medieval, Post-Medieval and more recent activities; and much of this was mapped in the 1980s by the Royal Commission on the



Plate 1: Barton Hill Quarries, Birchover: waste from manufacture of millstones or grindstones, at SK 239623. Scale 1m.

Photograph by G. Guilbert.

Historical Monuments of England (unpublished RCHME report of 1986, in National Monuments Record — SK 26SW12; see also Everson 1989; Hart 1985; Barnatt 1986, 73–9; 1990, 75–9). A part of the scheduled area overlaps that with planning permission for the extraction of rock, and most features recorded there previously could be relocated in 1998 (despite regeneration of vegetation since it was burnt extensively in 1980), while a possible additional cairn was observed at SK 24586325, partly masked by quarry-spoil. One cairn identified by RCHME (at SK 24516307; numbered 208 in their 1986 report) sits atop an old quarry-face, which is actively eroding; this is deserving of preservation, if only by record. However, much of the land with existing permission lies to the west of the protected area, though recent removal of 'overburden' (including all deposits liable to contain archaeological information) around SK 245633 has in part impinged upon scheduled land, and this was apparently done without either consent or archaeological recording.

The disused quarries scattered over Barton Hill and the western flank and southern end of Stanton Moor (where their extent is approximately as stippled in Barnatt and Smith 1997, fig. 16) retain much evidence for historic working-practices, the most obvious being massive spoil-heaps, some revetted, many comprising large blocks of stone with characteristic paired indentations (for lifting via 'dogs', or callipers, on a cranehoist), and some incorporating waste from the edge of circular millstones and/or grindstones that were probably cut out with 20th-century powered machinery (Pl. 1), as well as a few broken examples of those end-products. There are also ruined stone buildings and tanks; masonry bases for cranes and other machinery; trackways and hollow-ways. In New Park Quarry on Stanton Moor, at SK 24356273, close to the 'Cork Stone' (SK 2434262783) and the 'Chair Stone' (SK 2431562727), both of which were known to 18th-century antiquaries (e.g. Rooke 1782, 114; 1789, 208–9 — Cork Stone there called 'Andle Stone'; and the rock-chair is illustrated in ibid., pls XIII.4 and XIV.1 at a time when the quarry under discussion here seems not to have existed) and both happily spared by later quarrymen, three completed millstones/grindstones are stacked, chocked into position and doubtless left ready for collection (Pl. 2). Each is a flat, perforated disc of just under 2.0m diameter; they vary in thickness from 0.25m to 0.35m. Among other dressed stones abandoned nearby, a gate-post lies beneath a fourth disc in the foreground of Pl. 2.

In view of a previous suggestion that no such remains occur here (Tucker 1985, 46, table 5 — though mention of 'grindstones?' in that table causes some ambiguity), the plentiful evidence for the manufacture of millstones and/or grindstones in these quarries, at locations spread over more than 1km, might come as something of a surprise were it not that Farey lists 'Stanton in the Peak N (Moor), near Winster' among 'quarries where grindstones are made' (1811, 435–6), while he also names Stanton Moor for the production of 'freestone' and 'filtering cisterns' (*ibid.*, 421, 434). Moreover, the single symbol for a 'grindstone quarry' hereabouts in a recently published map of their distribution in the Peak District (Barnatt and Smith 1997, fig. 61 — that symbol is conceivably at this site, while no 'millstone quarry' is shown within 6km) seems to leave little doubt as to the dearth of such evidence, or at least of its record, in the area around Stanton Moor. There is often some difficulty in distinguishing between millstones and grindstones (Tucker 1985, 42–3), and the relatively fine-grained sandstones of the Ashover Grit (part of the Namurian, or Millstone Grit, series of rocks), of which the



Plate 2: New Park Quarry, Stanton Moor: abandoned millstones or grindstones in disused quarry, at SK 243627. Scale 1m.

Photograph by G. Guilbert.

hills in this vicinity are largely formed, may imply that discs quarried here were destined for use in rotary sharpening (i.e. as grindstones, and mostly of the 19th century), though their dimensions could equally seem appropriate to edge-runners used for crushing or pulping in the 19th and 20th centuries (*ibid.*, 44–7). In addition, it is noticeable that Farey did not name Stanton Moor among 'the places where Peak millstones were made' (1811, 221), despite classifying the rock here as '1st Grit'.

Crossley (1990, 211; 1991, 132) has remarked upon the 'considerable potential' for study of the archaeology of quarrying, not least on the Derbyshire gritstone; and the superficial recording undertaken in 1998 at Barton Hill and Stanton Moor has shown the desirability of documenting the character of these particular quarries in greater detail, both for its intrinsic interest and in order to devise a strategy for their future management.

A copy of the detailed report, illustrated by a selection of colour slides, has been deposited with Peak District National Park Authority.

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6. **BOLSOVER CASTLE** (SK 471707)

R. Sheppard

A major programme of improvements by English Heritage (EH) in 1998 and 1999 included construction of a new Visitor Centre, conservation and partial rebuilding of the Riding School Range, repair of the Venus Fountain in a recreated 17th-century garden, and restoration of the painted interior of the Little Castle. Associated ground-works included the excavation of trenches for new services, boundaries and drainage. Throughout the scheme, T&PAU was the principal archaeological contractor for excavation and monitoring of the ground-works, acting in collaboration with Addyman & Kay in the archaeological analysis of the Riding School Range.

Evaluation-trenches on the site of the **Visitor Centre** in 1997 failed to find conclusive evidence for Medieval occupation close to the supposed main entrance of the early castle $(DAJ\ 119,\ 282-3)$. In 1998, clearance of $40\times15m$ for the new building provided an opportunity to check this result. Topsoil and some subsoil were removed by machine. This revealed a rectilinear arrangement of substantial post-pits cut into the limestone bedrock (Pl. 3); the largest of these were up to 1.2m wide, with post-positions up to 0.4m in diameter. They probably all belonged to the southern end of a timber structure, its eastern side damaged by a later quarry-pit, while the northern lay outside the excavated area.

Although few in number, potsherds from the post-holes indicate construction in the late-12th/early-13th century or later (these and other potsherds identified by V. Nailor). South of the timber building, a roughly rectangular cess-pit (Pl. 3) produced an assemblage of pottery (including part of a Splashed Ware jug), metal objects, charcoal and animal bone. Although most of the pottery was similar to that from the post-holes, the inclusion of two sherds of Nottingham Wares may indicate a longer date-range, possibly up to 1280, for the cess-pit. The quarry-pit, which was partially excavated, produced rubble of stone, plaster, mortar and brick, as well as potsherds, some consistent with the construction-date of the 17th-century castle, others of the 14th-15th centuries, a period which was otherwise not represented in the excavated area.

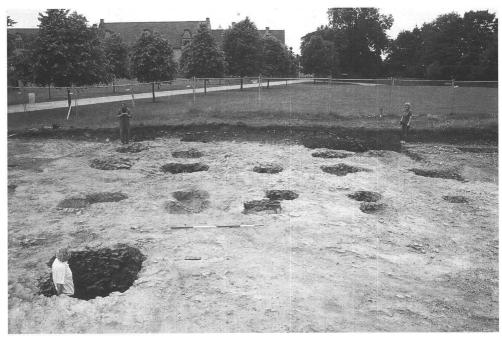


Plate 3: Bolsover Castle: excavation on the site for the Visitor Centre, looking north; the figure in the foreground stands in the cess-pit, the 2m scale lies in front of several rows of post-pits, and the farther figures mark the westernmost and easternmost post-pits.

Photograph by R. Sheppard.

This timber structure is the first Medieval building so far identified at Bolsover Castle. So thorough was the demolition of the inner bailey, in preparation for the construction of the keep-like Little Castle and the walled garden in the early-17th century, that few earlier structures are likely to have survived. Documentary evidence indicates that the castle had long been in ruin by then, its decline perhaps dating from the late-13th century, when only small sums of expenditure are recorded in state papers (Goulding 1936, 8). By the end of the 14th century, the buildings had suffered 'waste and strip', and the castle probably had no military value (Colvin 1963, 573). Construction of the excavated structure in the early-13th century would correspond with a period of major building and repair recorded in Pipe and Close Rolls (*ibid.*, 573); while its short period of use (as is perhaps indicated by the cess-pit finds) might relate to the decline of the castle thereafter.

It was intended that a new drainage-pipe for the Visitor Centre would be installed by drilling beneath the bank of the outer bailey, but this was hampered by unforeseen geological problems, and a deep trench had to be hastily cut into the south side of the bank, resulting in a watching-brief. This showed both that the outer ditch had been severely recut and that a drystone wall had been added to the bank where it faced the town. The top of this wall was later slighted, and the ditch was infilled with material that included fragments of clay-pipes dating to the second half of the 17th century (identified by P. Hammond). The refortification probably dates to the Civil War, as part of William

Cavendish's preparations for defending his home, before its eventual peaceful surrender in 1644 (Goulding 1936, 19); and the disabling of the defences shortly afterwards is consistent with the known policy of the Parliamentary forces to forestall further rebellion following the execution of Charles I.

The **Venus Fountain** is set within the oval Fountain Garden, the area identified as the inner bailey of the Medieval castle (Faulkner 1961, 199). Until 1999, the garden appeared much as it had in Victorian times, with beech and privet hedging, and coniferous trees. It has now been restored as a 17th-century garden of open plan, with the fountain once again forming the intended highlight. The surrounding garden-wall originally provided a high-level walk-way, from which to view the garden and fountain together with the castle's surroundings. Medieval-style battlements that once adorned the wall have been partially reinstated.

Archaeological investigation of the garden began in 1995–6, when Northamptonshire Archaeology could find no evidence for former parterres or flower-beds, leading to the conclusion that the fountain had been largely surrounded by grass, with plants occurring only at the periphery of the garden. The cambered rubble-foundation of a circuit pathway was found and traced, and this has been given a modern surface, overlying and preserving the original foundation. T&PAU provided advice on this aspect of the restoration, and maintained a watching-brief on the subsequent landscaping, resulting in the recording of sections through some paths of the 18th and 19th centuries.

The Venus Fountain consists of a sunken octagonal tank with a tall square pedestal at its centre, all built in stone. Decorated with vermiculated ashlar and adorned with statues, it was surmounted by a marble statue of Venus. Water was fed to the fountain through lead-pipes from the nearby Cistern House, spurting from the torsos and faces of various mythological creatures, and from behind the busts of Caesars set within niches in the surrounding walls. New statues have been sculpted and, with their installation and that of a new water-supply, the fountain has now been fully restored.

Before the central pedestal was dismantled for the introduction of new plastic pipes, the fountain was drawn and photographed by T&PAU, while J. Dobie of EH drew Venus and the surviving fragments of other statues. Subsequently, T&PAU excavated by hand around the tank, revealing that much of the original lead-work had been robbed, so that only the short feeder-pipes to the statues in the tank remained intact (Pl. 4). This may have occurred as early as the Civil War, for a poem by Margaret Cavendish, written on her return to Bolsover in the 1660s, states that 'For those small leaden pipes, which winding lay, Under the ground, the water to convey, Were all cut off . . .' (Fowler 1994, 316). It may be surmised that Cavendish's soldiers, besieged within the castle, took the lead for shot. A lead-pipe was later introduced into the base of the fountain in a failed attempt to restore a water-supply to the main pedestal.

Excavations extending from the fountain to the Cistern House were opened by hand in readiness for the laying of the new pipes. This revealed that garden-soil had been built up in the 17th century, in one spot sealing a corner of an unmortared-rubble foundation, 0.3–0.4m wide, of a stone building, probably Medieval (if so, the first so far identified within the inner bailey, and of differing masonry to those of 17th-century buildings elsewhere within the castle). The pair of original feeder-pipes for the fountain had been removed close to the north side of the garden-wall, where they had passed through it to a small room, perhaps containing a valve. These pipes had been replaced by one that ran

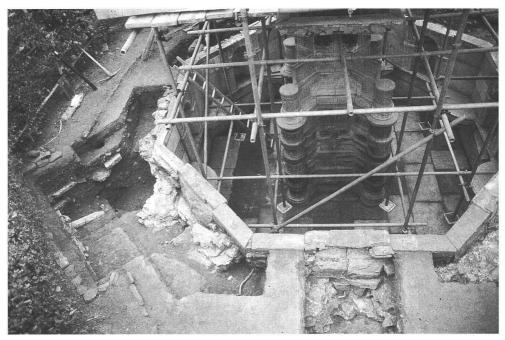


Plate 4: Bolsover Castle: excavation in progress around the tank of the Venus Fountain, showing, at bottom centre, one of the remaining lead-pipes.

Photograph by R. Sheppard.

to the Little Castle, and this is presumed to have occurred in the 19th century. South of the garden-wall, the original pipework was again missing, and the point of exit from the Cistern House is unclear.

The Cistern House still houses the 19th-century cast-iron hand-pump that forced water up from a spring or well located two floors below current ground-level, feeding the lead-pipe to the Little Castle. How the water was raised in the 17th century remains unresolved. The basement of the Cistern House, reached through a door from outside the castle, is of limited floor-area, but may once have housed an upright water-wheel, as suggested by a recess in the north-east wall, its profile curving towards the apex, while steeply-angled slots cut into the adjacent stonework could have held associated timberwork. These details indicate a wheel of 3.6m diameter and up to 0.6m wide, too narrow for a donkey, and perhaps more likely to have been driven by a man or boy, implying its use only intermittently and contrasting with present-day use of the restored Venus Fountain, with an electric pump providing a constant supply of water, so that visitors may always appreciate it in action.

A full report on the excavations of the Venus Fountain and Garden is currently in preparation, and will go to both EH and the SMR; it is intended to publish a fuller account of the Visitor Centre excavation in due course. Thanks are due to A. Arnold, P. Caldwell, S. Malone, G. Richards, K. Roberts, M. Southgate, R. Sussum, D. Walker and A. Ward for help with the fieldwork, and to the staff of Historic Property Renovation Ltd who commissioned the work.

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7. **CALKE PARK** (SK 371224)

G. Guilbert and S. Malone

In 1999, two 5×3 m holes were opened by contractor's machine to receive a septic tank and associated pipe-work, all situated on the approximate line of the former village-street of Calke, within an area that was taken into the Park in the late-18th century. This operation was watched by T&PAU on behalf of the National Trust (NT), leading to the recording of evidence for nothing but drains of the 19th/20th centuries and metalling that was probably no earlier (*cf. DAJ* 118, 155–6, detailing the results of a watching-brief conducted on adjacent land in 1995).

A fuller report has been deposited at NT's East Midlands Regional Office in Clumber Park, Nottinghamshire, and with their Archaeological Sites & Monuments Record in Cirencester, Gloucestershire.

8. CHATSWORTH PARK (SK 2569–2571) G. Guilbert, B. Gilbert and S. Malone

A proposal to renew a sewage-pipe that runs from a pump in the garden of Chatsworth House (SK 25936995), under the River Derwent (which winds from north to south through the Park), past Park House (SK 25306994), and through the north-western portion of the Park to connect with a main under the B6012 road (SK 25067157), led to a variety of exploratory fieldwork during July-August 1998, some conducted archaeologically by T&PAU, some less exactingly by another organization. The engineering project is taking place under the stewardship of Charles Haswell & Partners (CHP), on behalf of Severn Trent Water (STW), with T&PAU on contract to CHP to undertake related archaeological work (funded by STW), to a brief agreed by Peak District National Park Authority (PDNPA).

Assessment of the potential impact of the proposed works has been greatly facilitated by an archaeological survey of Chatsworth, completed by J. Barnatt of PDNPA in 1997, the intention of which was to furnish a comprehensive record and interpretation of superficial features in the Park. Together with the 1998 discoveries explained below, this has made it possible to devise a route for the new pipe which, though largely following that of the existing line (or at least lying adjacent to it), diverges from the latter in two stretches so as to minimize archaeological damage. Foremost of these is an area to the west of the Derwent that is rich in Medieval and Post-Medieval earthworks, including house-platforms, hollow-ways, field-boundaries, lynchets, ridge-and-furrow, and pillow-mounds (the latter lying within the 'cunygre', or rabbit-warren, annotated on William Senior's 1617 map of 'The Mannor of Chatsworth' — reproduced in Thompson 1949, pl. 3; and Brighton 1995, figs 1 and 2; and see *ibid.*, 43); the other lies within the floodplain of the Derwent, where plans and paintings of the 17th and 18th centuries, coupled with localized insights arising out of a series of trial-holes, imply a greater archaeological interest than is evident superficially today.

The course of the existing sewer is not a matter of record; and, being of plastic, the pipe cannot be detected remotely. Close inspection of the general route, in order both to pinpoint the line of the pipe (by GG and BG) and to check its spatial relation to the varied earthworks scattered widely across the parkland (GG), was followed by selective cleaning and recording (GG) of trial-holes (called 01-14 in archive) that had been dug out shortly before by non-archaeological contractors. The trial-holes were intended primarily both to confirm some parts of the course of the existing pipe and to test the nature of the ground for engineering purposes; so far as possible, they were positioned to avoid archaeological features, and it was therefore predictable that little in the way of intelligible archaeological information would be produced (an inevitable corollary of this kind of conservation-conscious project). They have shown that, where the land is elevated and undulating, this part of the Park to the west of the river is underlain by shaly rock interbedded with clays (part of the Ashover Grit, Namurian sequence), and that this is mantled by some depth of alluvium on the flat floodplain. In the former tract, the trial-holes all proved to be devoid of artificial deposits other than those relating to the pipeline; though it is not suggested that the areas sampled in this way are without archaeological interest, for holes of such small size (the largest measured 2.95×0.65 m, the smallest 1.25×0.70 m), especially when excavated without archaeological technique and where much of the ground lay within the backfilled pipe-trench, cannot be regarded as a reliable source of negative information.

In contrast, three of the four trial-holes opened alongside the Derwent encountered recognizable archaeological deposits. East of the river, 01 and 14 lay within c. 20m and c. 40m respectively of the river-bank, and the entire recordable depth of each (0.94m and 1.24m respectively, though a further 0.26m of 01 extended below the water-table) was cut into made ground. This comprises tips of rubble, clay, loam and ashy deposits, found to overlie a wall faced with dressed sandstone in 01 (at SK 2584969784) and an area of sandstone paving in 14 (SK 2587669785). A sherd of stoneware, attributed to the early-18th century by V. Nailor, was found stratified at 0.84m below turf-level in 14, less deep than the paving but not directly relatable to it stratigraphically (the only other artefact recovered from any of the fourteen trial-holes is a sherd of black-glazed earthenware, found among spoil at SK 2554469812). These structural features may well belong to some former arrangement of garden and/or terracing (perhaps 'The Kitchen Gardens' depicted in a plan of 1751 by Samuel Brailsford — reproduced in ibid., fig. 7), buried by 18th-century landscaping (either at the start of that century — Thompson 1949, 85 — or when it was more than half gone — ibid., 90-99; and, in this respect, the evidence recorded in 1998 seems entirely in keeping with comments made recently by Williamson [1998] apropos of 'landscape parks' in general and this part of Chatsworth in particular), and situated near the place where the boundary of 'The Newe Parke' had passed at an earlier stage (as shown by Senior). Another trial-hole, 02, lay 21m from the east bank of the river but 65m farther south from Chatsworth House than the wall in 01 and 80m south-west from the paving in 14; topsoil here sat directly upon riverine alluvium, with no trace of artificial build-up in its 1.7m depth, suggesting that 'the land graded to open up views' in the 18th century did not extend this far south, unless, of course, this area was reduced in level, rather than heightened like that to its north.

West of the river, trial-hole 03, situated 23m from the river-bank and directly opposite 02, uncovered an area of heavy metalling, comprising cobbles among edge-set slabs of

sandstone displaying a well-worn upper surface, some part of which had evidently been removed by the existing pipe-trench. This metalling is embedded in alluvial clay and, although it lies beneath a mere 0.20-0.25m thickness of topsoil, its presence was not obvious superficially, in 1998 anyhow, when it remained difficult to detect even adjacent to 03, despite the observation that a road-line can sometimes 'be seen and followed' hereabouts (Thompson 1949, 25-6). The thinness of overburden in 03 is no great surprise, because this stretch of the river has evidently been controlled in recent centuries (ibid., 23-4, 90), with the result that overbank-flooding, and consequent deposition of silt, will have been minimized on the floodplain; moreover, ridge-and-furrow earthworks are evident, and similarly situated, barely 60m north of 03. The metalling in 03 lies on the projected line of the former main street of Edensor village (itself of Domesday pedigree, but largely re-located during landscaping of the 18th and 19th centuries — *ibid.*, 98, 236-8), suggesting that it belongs to a road which once connected that village with a river-crossing, and thence Holmes Lane, en route for Beeley and East Moor (ibid., 24–5, 236). If so, it seems likely that the predecessor of the two extant bridges, situated some 500m upstream and 1350m downstream of this point, was centred at around SK 25776973 (though 'the spring of the first arch of the former bridge', said to be 'still standing' 50 years ago [ibid., 25–6], can no longer be located). This was a five-arched stone bridge with cutwaters, straddling a weir connected with a mill on the east riverbank, as seen in contemporary illustrations, including the plan of 1751, as well as a wellknown picture of c. 1699 by Jan Kip and Leonard Knyff (1707, pl. 17; reproduced, for example, in Thompson 1949, pl. 16; Bettey 1993, fig. 22; and Brighton 1995, fig. 4), a painting by Tillemans of c. 1720 (reproduced in Thompson 1949, pl. 29), and a painting of the 1740s, in which coach-and-six are approaching the bridge along the road conjectured to have been located by 03 (reproduced in ibid., pl. 30, together with an engraving, pl. 31, derived from it and said to be the work of 'John Smith'; also in Brighton 1995, fig. 6, ascribing the painting to 'Thomas Smith'; and in Lasdun 1991, 56-7, where the painting is in colour, but printed in mirror-image, and attributed to 'T. Smith'). This complex of structures certainly existed early in the 17th century (as witness Senior, though not depicted with detail or accuracy in his map), and may well have had Medieval origins (Brighton 1995, 32), though the stone bridge shown in the pictures just adduced belongs to the 1680s (ibid., 43-4; Thompson 1949, 79-80, 91, 236). Nothing of them is to be seen on the ground today, and it may be that all trace of the piers and abutments of the bridge was deliberately swept away during the modification of the river's course that featured in a grand programme of rebuilding and landscaping, including the construction of new bridges, mill and weir, undertaken in the mid-18th century by James Paine and Lancelot 'Capability' Brown, renowned practitioners employed at the instigation of the fourth Duke of Devonshire (*ibid.*, 89–99).

Given the obvious need to conserve such a significant feature as this road-metal, possibly laid in the Middle Ages, it was determined that some part of its alignment should be charted, and this was attempted by resistivity-survey (conducted by SM). Obligingly, this produced, *inter alia*, a positive linear anomaly which not only traversed much of the 80m length of the 4800m² surveyed but also adhered nicely to the east-south-east/west-north-west line required by a direct course to the south-eastern end of the deserted portion of the village.

Accordingly, the line now proposed for the new pipe-trench crosses the floodplain well to the north of the old, where it should avoid the road-metal altogether, as well as taking the shortest possible route from river-bank to pumping-station on the eastern side of the Derwent, but unavoidably cutting through an area of low ridge-and-furrow to the west of the river.

A more detailed account of the 1998 trial-holes and resistivity-survey (including drawings and photographs of each hole and shade-plots of the survey, as well as 1:2500 and 1:1000 plots of an EDM-survey, in which all fieldwork is located precisely) has been deposited with both PDNPA and the SMR (latter lacks the photographs). It remains to determine the exact course of the existing pipe along the particularly sensitive, 300m stretch of the former village-street running south-east from Park House. Once this has been accomplished, it is anticipated that further archaeological investigation will be directed largely towards excavation in those portions of the Park that are known to contain features of interest and which cannot be entirely avoided by the route recommended for the new pipeline, all to be completed in advance of the constructionworks. Meantime, thanks go to K.R. Smith of PDNPA for the provision of background information.

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9. CRESWELL, FOX MEADOW (SK 531739)

H. Jones and I. Wall

An archaeological watching-brief was carried out in 1999, on behalf of Severn Trent Water, during construction-works associated with the development of a new pumping-station at Crags Cottages (SK 52977407) and excavations for the installation of a pipe around the perimeter of Fox Meadow. The area is prone to flooding by the River Wollen, which runs along the northern side of Fox Meadow before entering the head of the Magnesian Limestone gorge of Creswell Crags.

In 1992, the replacement of a mine-water pipeline between Creswell Colliery and Creswell Crags was the subject of an archaeological watching-brief in Fox Meadow, conducted by IW for Creswell Heritage Trust. A ditch, sealed by colluvium, was identified in the side of the pipe-trench, and a worked wooden stake from low in the fill produced a radiocarbon-date of 770–990 cal AD (1150 \pm 50 BP: GU-3288), suggesting Anglo-Saxon activity.

In 1999, an easement, 12–14m wide, running approximately north/south along either side of Fox Meadow, was stripped of both topsoil and some of the suspected colluvium by machine, operating under continuous archaeological surveillance. Excavation of the pipe-trench within the easement was also watched, but only where colluvium was present

or where features had been revealed by the stripping, though this did not prove productive.

Most of the features were related to Post-Medieval water-supply and management of drainage within Fox Meadow (including infill of former courses of the River Wollen). On the eastern side of Fox Meadow, these post-dated a layer tentatively identified as colluvium, which was removed to reveal features of greater age, including a probable ditch-terminal and a meandering north/south ditch. Excavation of the latter produced pottery and two worked timbers, embedded in the base of the ditch and preserved by water-logging. Both ditches appeared to have been cut from a layer distinguished by the presence of charcoal-fragments, animal bone and potsherds, possibly of late Anglo-Saxon date. The basal fill of the meandering ditch comprised an organic-rich deposit, containing both pollen and plant-macrofossils, the latter including threshed and unthreshed charred grain (bread/club wheat, emmer, barley and oats; identified by C.O. Hunt and G. Rushworth, University of Huddersfield).

On the western edge of Fox Meadow, immediately below modern topsoil, four pits were located close together. The largest, filled with a black, charcoal-rich deposit, contained two fragments of Samian and a sherd of possibly Anglo-Saxon pottery, all from the upper fill. An oval pit was filled with limestone blocks, but lacked artefacts. Two spreads of tabular limestone each covered a small shallow pit, one of which produced two more sherds, possibly Anglo-Saxon.

Strictly, each of these potsherds, from ditch and pits, provides only a *terminus post quem* for the final infilling of the relevant feature, but they represent a valuable addition to the sparse archaeological record for Anglo-Saxon settlement in the region; and this should be enhanced by the excellent quality of preservation of the environmental evidence and its potential for radiocarbon-dating.

10. HARDWICK OLD HALL, WEST LODGE (SK 462636) R. Sheppard

The West Lodge (Pl. 5) is one of two stylistically-similar buildings in the north-east and north-west corners of the courtyard of the Old Hall. Although the Old Hall is known to have been constructed in 1587-97 (Worsley 1998, 7), dating of the lodges, and of a tennis-court in a lower courtyard, has seemed problematic until recently. William Senior's detailed survey of Hardwick in 1609 includes the Old Hall and its surroundings, but structures shown there in the court are not recognisable as the present lodges; furthermore, no lodges or pavilions are mentioned in the attendant description (Fowkes and Potter 1988, 27). A phase of building-work was authorised by William Cavendish, First Earl of Devonshire, in 1619 (Worsley 1998, 33), and, though this might account for the tennis-court, it is now evident from tree-ring dating of the East Lodge that the lodges were built shortly afterwards. The East Lodge was restored in 1978 (as accommodation for staff of English Heritage — EH), but the roof was not repaired and re-leaded until 1999, when its oldest timbers were dated to 1622-47 by Nottingham University Tree-Ring Dating Laboratory (information from EH); it would not be surprising if the West Lodge were contemporaneous. When restored in 1996–7 (by John Cunnington Architects [JCA], to serve as a shop and office), it became clear that the roof of the West Lodge had already been replaced, while the rest of the building was in poor condition. Alterations

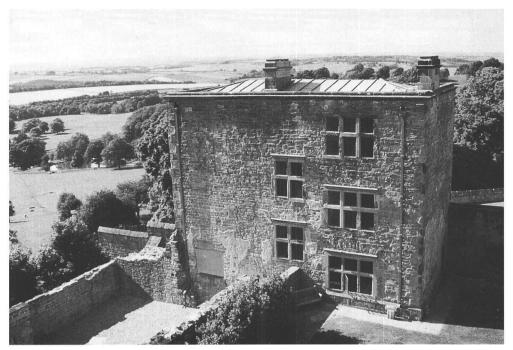


Plate 5: Hardwick Old Hall: southern elevation of the West Lodge, in the north-west corner of the courtyard of the Old Hall, with, at the bottom left, a lower courtyard, once the site of a (real) tennis-court.

Photograph by R. Sheppard.

to a ground-floor room during that work were accompanied by archaeological recording, which has already been reported briefly (*DAJ* 119, 287).

Constructed in coursed rubble of local sandstone, the two lodges were originally plastered and painted white externally, with ashlar dressings left unrendered, as seen in a surviving 17th-century view of the Old Hall (Worsley 1998, 6). Each building was a simple block, 13.7m long, 7.2m wide, and 10.35m high to an upper cornice, above which an open balustrade helped to hide a low-pitched leaded roof. The East Lodge was built with two floors, and the West Lodge with three. Being set beside the drive, the East Lodge may have served as a porter's lodge, while the West Lodge could have provided accommodation, either for staff or for visitors not considered important enough to stay in the Hall itself. The West Lodge has a ground-floor corridor with a central timber staircase providing access to six rooms, each lit by one or two windows and heated by a single fireplace. Such a design could ensure private access to lodgings for separate people, with other domestic facilities perhaps situated outside the building or in the service-end of the nearby Hall. Although the rooms were originally plastered and painted with white distemper (information supplied by EH from a report by Crick Smith Conservation), subsequent decorative schemes differed from room to room, adding to the suspicion that separate apartments once existed. Little in the way of original furnishings survived, and most of the doors and fireplaces had been replaced, prior to restoration.

The Old Hall was superceded as the main domicile by the New Hall, but it continued in use until the mid-18th century, when the east half was reduced to a ruin, and the west was retained for staff-quarters (*ibid.*, 34). By the early-19th century, it was abandoned and deemed unsafe, but the two lodges remained in use, and were subject to some limited improvements — for instance, the two ground-floor rooms of the West Lodge were changed into kitchens. By the late-19th century, both lodges were used as estate-cottages. In the 1920s, the West Lodge became a ticket-office for visitors to the New Hall, and the East Lodge was adapted into a laundry (information supplied by EH from a report by R. Cowell).

The policy adopted by EH for the recent refurbishment of the West Lodge allowed for replacement of only the most damaged external parts, such as window-dressings, and consolidation of the remaining external plaster. Internally, missing panelling, timberwork and lime-ash floors were reinstated, but otherwise the interior was restored to its most recent decorative scheme, with 19th-century fireplaces and doors conserved and left *in situ*.

An archive and report covering the history, structure and conservation of the West Lodge are with EH: a copy has been deposited in the SMR. Thanks are due to E. Appleton and D. Gilbert of T&PAU, and to M. Askey of JCA, for their assistance.

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11. HARTHILL MOOR, WATTSCLIFF QUARRY (SK 222621) P. Beswick

Harthill Moor is well known for its rich array of archaeological remains, some of which survive as upstanding monuments (e.g. Bateman 1848, 126–8; Hart 1981, 75–7, fig. 7.5; Barnatt 1990, 82–3). In 1998, an archaeological appraisal of a part of the Moor, comprising a proposed extension (c. 150 × 40m) to an Ashover Grit quarry, was conducted for Block Stone Ltd. Field-inspection was conducted after a light fall of snow, covering bracken that had been rolled, and improving visibility of earthworks. These include an area of irregular pitting (each pit measuring c. 1 × 2m and over 0.35m deep) and a platform (c. 1.8m across), adjacent to outcrops quarried for wall-stone or larger stone blocks. In the central part, which is stone-free and lacks signs of quarrying, a flattish area (c. 4m across) is bounded by two low banks with protruding stones, which, together with a small stone cairn and a slight terrace, are features reminiscent of the remains of fields and settlement that are usually taken to be prehistoric and/or Romano-British (e.g. Hart 1981, 94–105).

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12. LINACRE RESERVOIRS, BRAMPTON (SK 3372) S. Malone and D. Garton

Archaeological survey of Severn Trent Water's (STW) landholdings around Linacre Reservoirs, started in 1995 (*DAJ* 118, 160), was completed in 1999, when it covered the remaining areas of deciduous woodland, as well as conifer plantations, pasture and arable land, situated to either side of Birley Brook (SK 317728), the Middle Linacre plantations (SK 329724), an area to the south of the Lower Reservoir (SK 337723), and land to the east and north of Kitchenflat Wood (SK 341729). The range of earthworks recorded in 1999 was similar to that of 1995: Q-holes, quarry-hollows, platforms, terraceways, hollow-ways, banks, leats, lynchets and ridge-and-furrow. These are now seen to extend for some 3km along the valley-sides adjacent to the reservoirs. Most seem to relate to past management of the woodland for production of charcoal and white-coal, together with utilization of stream-power. As noted in 1995, the degree of preservation of individual features depends on land-use history, with areas of deciduous woodland providing the best survival.

STW funded the survey, and recommendations have been made to them for management of the woodlands. A copy of the full report has been deposited in the SMR.

13. **MAM TOR** (SK 12778362)

G. Guilbert

Recent volumes of DAJ have included accounts of some artefacts eroded out of the footpath that runs the length of the ridge within the hillfort on Mam Tor (Guilbert 1995; Guilbert and Vince 1996), and these are symptomatic of a problem created by the many thousands of feet that tramp over such popular places in the Peak National Park, as at many other over-visited landscapes in Britain. The efforts of the National Trust (NT), working in tandem with T&PAU, to stem the erosion of this path (by recording and repairing) have met with considerable success during the 1990s, not least in the area surrounding the Ordnance Survey triangulation-pillar on the very summit of the hill, where, following partial excavation in 1993, the surviving portion of a barrow has been protected from further loss by a capping of pitched stone (Pl. 6). Nevertheless, the sheer number of visitors to Mam Tor over the ensuing five years (continuing a trend that has been unabated throughout the past two decades) has inevitably inflicted additional wear upon parts of this important and previously well-preserved monument, including a heavily-used strip of ground curving around the eastern perimeter of the summitcapping, lying beyond but close to the barrow, and extending to within 10m of the spot where sherds of Late-Bronze-Age pottery and a post-hole were recorded in 1989-93 (ibid., 50). It was principally, but not solely, this threat to the obvious archaeological potentialities of the summit-area which led to a further episode of reparation in October 1998, undertaken with Scheduled Monument Consent, the terms of which included provision for an archaeological watching-brief and recording (funded by NT).

For the most part, the 1998 repairs involved the infilling of damaged patches, following EDM-recording of their extent, and followed by EDM-recording of the extent of deposition of soil imported to the site for the purpose. These included the western inturn of the southern entrance of the hillfort, where the earthworks stand directly above a landslip ('Little Mam Tor'), and where erosion was probably initiated by sheep and subsequently exacerbated by the elements; also the removal of fences erected during the 1980s to control the movement of people, especially along the top of the southern

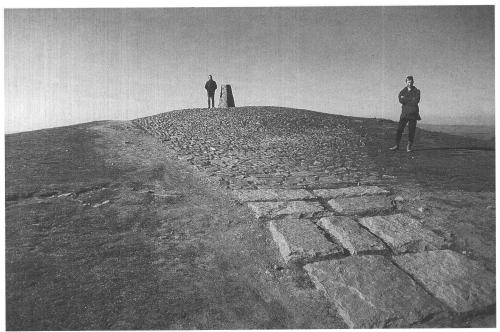


Plate 6: Mam Tor: pitched-stone capping of the summit, approached by paved path in the foreground, as constructed in 1993, looking south-west in April 1995; the far figure stands beside the triangulation-pillar, the near figure on a turfed area that has required no repair; erosion of a strip along the eastern edge of the 1993 metalling has already begun, and stonework of the wall shown in Plate 7 is starting to emerge immediately left of the junction of pitching and paving.

Photograph by G. Guilbert.

rampart, where worn areas had been infilled (with similar recording) in 1994. Only in certain parts of the strip alongside the summit-capping was it necessary for any ground to be dug out in 1998 (by NT employees, with assistance from GG; numbered 09 in the series of areas within the hillfort subjected to intrusive investigation during the 1990s — cf. ibid., 50), so as to prepare an eroding 1.1–1.8m width for the installation of a 38m length of paved path, intended to link other stretches of paving laid in 1993–4. Happily, the most recent erosion there was shown to be confined largely either to topsoil or to patches of ground that are understood to have been repaired with imported materials in the mid-1980s (when detailed records were not maintained); and the one thing of archaeological significance found to be suffering disturbance was the base of a drystone wall, c. 1.0m wide, with rubble-core faced each side by blocks of local sandstone (Pl. 7), aligned north-west/south-east, and passing 16–17m north-east of the triangulation-pillar. The c. 1.5m stretch of wall recorded within 09 is now largely sealed beneath the new paving, the insertion of which required only the uppermost few of the surviving wall-stones to be removed.

Adjacent to the north-west side of 09, another short stretch of this wall was recorded in similar circumstances in 1993, while its line can be traced south-eastwards to the top of the 'Great Mam Tor' landslip, showing at the turf-covered surface as an earthwork of



Plate 7: Mam Tor: base of wall, as revealed during the watching-brief of 1998, looking southeast, with 0.3m scale upon the wall-core, and 1m scale upon the poached surface of the eroding strip of ground that was soon to be paved; stonework in the foreground is part of the summit-capping created in 1993.

Photograph by G. Guilbert.

low relief. This is one of two such banks, both now incomplete and neither exceeding 0.25m in height, which appear to have crossed the ridge, up to 67m apart, one to either side of the summit. Neither bank offers any hint superficially that it overlies stonework, and it now seems probable that this circumstance has resulted from the virtually complete robbing of a pair of walls (there was some slight evidence for robbing in 09).

It may be hazarded that they were dismantled at the time of construction of a ridge-top wall, itself extending from end to end of the hillfort and well beyond, pursuing a line that runs more-or-less perpendicular to the postulated pair of cross-ridge walls, and remaining far more obvious than either of them, both in air-photographs (e.g. Pl. 8; cf., for example, Coombs and Thompson 1979, pl. 1; Megaw 1979, fig. 6.19; Hart 1981, pl. 1; Taylor 1983, fig. 17; Riley 1987, figs 9 and 10; Darvill 1996, pl. 58 — viewing the hilltop from a variety of directions, under various conditions, allowing differing combinations of features to appear) and on the ground today (though progressively reduced by vandals). Dating such structures is difficult, but it can at least be noted that the ridge-top wall existed when Bray prepared the first plan of the hillfort (1783, 203, pl. IV, calling it a 'modern' wall, built as a 'pasture fence'), whereas he depicted no cross-ridge walls. Further consideration of these walls-cum-banks will be more appropriate in the context of an eventual account of the 1993 investigation of the summit-barrow, intended for publication in DAJ.



Plate 8: Mam Tor: air-photograph, high oblique from the south, in evening-sunshine in June 1976, with two black arrows indicating a pair of low earthworks thought to reflect the former positions of cross-ridge walls, and three white arrows indicating the ridge-top wall; erosion was then concentrated around the summit-barrow, showing as a pale patch between the cross-ridge earthworks; the rim of another round barrow, turf-covered, is evident to left of the left-hand white arrow; the large white scar at bottom left is Little Mam Tor landslip, whence the bivallate perimeter-earthworks of the prehistoric hillfort run to the point, at top right, where the inturned north entrance is transected by the ridge-top wall, thence passing down the right-hand side of the picture to meet the top of Great Mam Tor landslip, barely visible in shadow at bottom right.

Photograph by courtesy of the late D.N. Riley.

Copies of detailed records (plans, photographs and a fuller description) compiled during the 1998 watching-brief have been deposited with NT, both at their High Peak Estate Office, Edale End, and in their Archaeological Sites & Monuments Record, held at Cirencester, Gloucestershire. An integrated archive of all T&PAU's activities on Mam Tor will eventually be lodged also with PDNPA. Thanks go to S. Trotter, C. Milner and their colleagues in NT, for ready co-operation in the field, and to S. Malone, for technical assistance with the recording.

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14. MARKEATON STONES to MACKWORTH FIELDS pipeline

(SK 327388-314368)

S. Malone

A pipeline of c. 2.5km length, constructed for Severn Trent Water in 1998, runs from Stones Lane, Markeaton to Radbourne Service Reservoir, near Mackworth. The route crosses Mackworth Brook and passes just east of Mackworth village to cross the A52 and run alongside Radbourne Lane to the reservoir — hence it also crosses the line of the Roman road from Derby to Rocester (at SK 32203773), as well as earthworks associated with the shrunken Medieval village of Mackworth.

Earthworks recorded prior to construction-work include remains of ridge-and-furrow belonging to the open fields of Mackworth, and a more complex area with ridge-and-furrow, lynchets, and a linear hollow flanked by mature trees. The latter may preserve a road-line pre-dating construction of the Derby-Ashbourne turnpike. Only features associated with Post-Medieval fields and later drainage were noted in a watching-brief during stripping of the pipeline-easement. Post-Medieval material, including fragments of porcelain, clay-pipe and glass, was observed in abundance (but not collected), having presumably been brought onto the fields in manuring; no earlier artefacts were found. No surviving features associated with the Roman road were observed, conceivably because of the wet conditions prevailing when this part of the line was stripped, but perhaps because recent cultivation has erased all traces.

A full report has been deposited in the SMR. Thanks go to A. Arnold, D. Baxter and P. Caldwell for assistance with the fieldwork.

15. MORLEY to STRELLEY pipeline (SK 398395–503412)

D. Garton, S. Malone, R. Sheppard, M. Southgate and A. Ward

Fieldwalking along the proposed route of a Severn Trent Water (STW) pipeline to connect the Derwent Valley Aquaduct, at a point to the south of Morley, with the reservoir on Catstone Hill, Strelley (11km to the east, in Nottinghamshire), was restricted to those fields that were in a suitable state of cultivation in December 1998. These were scattered along the route between the National Grid References given above, totalling *c*. 3km of a corridor of 60m width, all searched at 5m intervals. The find-spots of artefacts were recorded individually, producing distribution-plans of flintwork, Romano-British pottery, Medieval pottery, Post-Medieval pottery, and fire-cracked pebbles.

In the Derbyshire portion of the route, two blocks of fields were searched, one on boulder-clay (SK 398395–402392), the other at the junction of Coal Measures and alluvium (SK 453392–464394). The former yielded a sparse scatter of flintwork but a higher density of fire-cracked pebbles (with possible clustering — e.g. at SK 401392 — a spot which was eventually avoided by re-routing part of the pipeline) than any other stretch of the route, while pieces of slag from a bloomery-furnace or hearth-bottom (identified by K. Challis) were localized to the vicinity of SK 401392. In contrast, the

second block produced a scatter of Medieval and Post-Medieval potsherds but no flintwork and virtually no fire-cracked pebbles, though it is unclear whether their absence is real or is merely an effect of the sequence of deposits, some artefacts having perhaps been buried by later alluvium. A concentration of ironstone at SK 463394 may mark a site of former mining.

Prior to topsoil-stripping in 1999, various earthworks situated on and close to the intended pipeline were surveyed using EDM, principally ridge-and-furrow (some straight and some reversed-S in plan), but also some slight banks, lynchets, ponds and quarry-scoops. Where the land had not previously been mined as opencast, topsoil-stripping was watched, but the pace of construction-work was such that subsequent archaeological investigation was confined to specific stretches of the easement where obvious features had emerged. Two culverts were recorded, one (re) using blocks of tooled sandstone (SK 402393), and one built of brick (SK 451353). A single-room building with brick-foundation and coal/cinder floor and pathway, lying adjacent to a reddened patch of ground beside a bell-pit (SK 425395), was associated with abundant 19th-century pottery, as well as some slag and iron artefacts, suggestive of secondary metal-working (perhaps a smithy). Further coal-pits are shown in an adjacent part of the same field on G. Sanderson's 'Map of the Country Twenty Miles Round Mansfield' (1835), but no buildings appear on later Ordnance Survey maps.

A full report on the fieldwalking has been deposited in the SMR (both Derbys and Notts), as, once completed, will that on the EDM-survey, watching-brief and related recording. The artefacts from sites in Derbyshire will be offered to Derby Museum. Thanks go to A. Arnold, D. Gilbert and V. Priest for assistance with the fieldwork, to E. Appleton for cartographic research, and to STW for funding.

16. NORBURY, St MARY & St BARLOK CHURCH (SK 125424)

R. Sheppard and E. Appleton

Rising damp in the north wall of the chancel has been contributing to an algal growth, damaging to Medieval stained glass in the window above (Pevsner 1953, 31, 289). Documentary search uncovered references to problems with water and soil build-up on the north side of the church dating back to the 1830s. A scheme of treatment, devised by Anthony Short & Partners and implemented in 1999, included both investigation of the existing system of drainage and construction of four new pipelines to carry rain and ground-water across the sloping northern part of the churchyard. Trenches for these new drains were excavated by hand, in spits of c. 0.2m thickness.

Various ceramic drains of the 18th to 20th centuries were located, but all were failing. Close to the chancel, at a depth of 0.9m, the surface of a spread of mortar with blocks and fragments of sandstone was exposed; this could date to the suggested rebuilding of the chancel in the 14th century, when fragments of pre-Norman cross-shafts were included in deep foundations (Allen 1903); the cross-shafts were removed during renovations in 1899–1902, and are now inside the church. The churchyard has been disturbed by burials, and no Medieval material was found *in situ* in 1999, but much of the unstratified pottery recovered then dates to the 12th to mid-13th centuries (identified by V. Nailor). Although the present fabric of the church is no earlier than 14th century, a stone carved with 'dog-tooth', found in 1899, is Early English in style, and therefore

consistent with the date of the pottery (Curl 1977, 63). The latter could be associated with a first phase of a stone church, or originate from the adjacent Old Manor, whose occupation may date back to the early-12th century, when Tutbury Priory rented the manor to the Fitzherbert family (Cox 1877, 229). A church at Norbury is mentioned in the Domesday Book, and is probably of Saxon origin (as suggested by the dedication to Barlok, an early British saint), but firm evidence for this remains elusive.

It is intended that the panes of Medieval glass affected by algal growth will be cleaned by conservators from English Heritage; with heating of the chancel, it is hoped that this problem will not recur. The 1999 project was funded by the Parochial Church Council, and a full report has been deposited in the SMR. Thanks are due to C. Baker, D. Gilbert, G. Murray and D. Walker for assistance in the field, and to L. Elliott for advice.

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17. OSLESTON, HALL FARM (SK 248371)

K. Challis and V. Priest

Osleston lies on the north-west side of the valley of Trusely Brook, where Mercia Mudstone gives rise to heavy, poorly-drained, clayey soils. In 1998, T&PAU was commissioned by Richard Robinson & Sons Ltd to undertake an evaluation of a field of c. 0.5ha, situated immediately north-east of Hall Farm, where it is proposed to locate a new agricultural building. Within the field, low irregular earthworks lacking any discernible pattern are perhaps in part due to recent disturbance, though the village of Osleston has declined considerably from its, presumably Medieval, maximum extent, as indicated by well-preserved earthworks to the east of Hall Farm. Two trenches (numbered 01 and 02, both measuring 3×5 m) were excavated, with topsoil of c. 0.3m thickness removed by machine, and all subsequent excavation by hand, in each case.

In trench 01, topsoil overlay a homogeneous, mid-brown, silty clay including pebbles and brick, except for a small area of undisturbed Mercia Mudstone. A 1m-wide cutting through the silty clay demonstrated that it filled a wide and shallow ditch, perhaps a former field-boundary, apparently aligned north-west/south-east, though its edges lay beyond the limits of excavation. This ditch produced four sherds of Medieval pottery (Midland Purple), together with sherds of Post-Medieval, brown-glazed ware.

In trench 02, a number of archaeological features were cut into the Mercia Mudstone, which directly underlay topsoil. Most recent were two parallel gullies running east/west at 1.6m centres; a 1m-wide cutting showed each to be steep-sided, 0.3m wide and 0.4m deep. Their fill of large stones in a clayey matrix contained sherds of Post-Medieval pottery, including 18th-century slipware and brown-glazed ware, and it seems probable that they served as field-drains. These had been cut through an irregular hollow containing dark-brown clay with pebbles, fragments of brick and coal, and sherds of 18th-century brown-glazed and cream wares. This hollow was itself cut across a north/south linear band of dark-brown clay which included irregularly coursed blocks of stone, perhaps forming a wall-foundation (or its robber-trench) for a structure of unknown

plan, whose roughly plastered floor was left *in situ*; sherds of 18th-century slipware lay on the surface of the plaster.

Examination of maps indicates that no buildings have occupied this site since at least 1840, when it was described as an orchard on the Osleston and Thurvaston tithe-map (DRO2360/DL57), suggesting that the structure revealed by excavation had been demolished by then.

A more detailed and illustrated report has been deposited in the SMR, while the artefacts have gone to Derby Museum. Thanks are due to P. Caldwell for assistance with the excavation.

18. PARWICH, WHITE CLIFFE COMMON (SK 171575) G. Guilbert and D. Garton

Despite the endeavours of two previous fieldworkers and their scientific collaborators (Lomas 1962; Makepeace 1997), neither the date nor the purpose of the cluster of small earthen ring-works on Parwich Moor has been satisfactorily resolved. In the hope of dating the construction of one of these rings (and thence, by inference, determining a general chronological setting for the whole group), a 1m-wide trench was opened in 1999 across its bank, so as to obtain samples for measurement of the thermoluminescence (TL) accumulated within the land-surface preserved beneath that bank (funding having been sought from Peak District National Park Authority for the purpose). Although it is not supposed that TL can provide a precise age for the burial of the former topsoil, this method of dating is understood to be capable at least of discriminating between millennia, and thus of distinguishing, say, a prehistoric from a Medieval or Post-Medieval context for the creation of these enigmatic earthworks. It is intended that a full account of the survey of, and excavation into, the chosen ring, plus the TL-results, will be published in a future volume of *DAJ*.

References

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19. **PENTRICH, BOWLER'S COTTAGE** (SK 390524)

R. Sheppard

A building-survey, undertaken for the owner (Ms A. Delin) in 1999, was hampered by modern wall-coverings and by restricted access to the adjoining property, but it did benefit from archival research carried out by the owner (e.g. Pl. 9). Bowler's Cottage is now part of a five-bay range, approximately 20m long by 6m wide, with continuous roof-line and street-frontage (Fig. 4). Originally, it was probably a single unit, with ground-floor of 22m². A single fireplace was positioned off-centre in the south wall, and there was an entrance in the east frontage, opposite that to the street. Such cottages were widespread in the 18th century (Brunskill 1997, 88), but relatively few survive now.

It will be clear from the plan and photograph that bays 1–3 (now forming the 'adjoining property', while bays 4 and 5 are also now in single ownership) present a near-symmetrical, two-storey, east façade, with windows to either side of a central doorway, a typically rural building of the mid-late 18th century, with gable-end stacks and central lobby-entrance. Later designs usually incorporated three elements — the parlour,

Fig. 4: Bowler's Cottage, Pentrich: 1999 ground-plan of the cottage and adjoining property; with plan of cellar to bay 4 inset, beams for first floor in broken outline, and suggested earlier usages of bays 1–5 annotated below each. Scale 1:200.

Drawn by R. Sheppard.



Plate 9: Bowler's Cottage, Pentrich: as it appeared in the 'Derbyshire Advertiser' in c. 1920, with the Cottage forming the projecting right-hand bay.

kitchen/living-room and service-room — and it may be that the latter accounts for bay 4 here, for it seems likely to be secondary infilling, separated from the rest of the building at both floors by a stone wall. This probable service-room has a vaulted cellar (Fig. 4), and a lath-and-plaster staircase provides access to an upper-floor bedroom.

Hence, it appears that two separate structures stood here in the 18th century; as such, they would be two of the oldest properties remaining in the village. The Pentrich Rebellion of 1817, when many of the village's menfolk took part in an armed uprising, resulted in most of the insurgents' homes being demolished in retribution. Before 1817, there were 125 houses; by 1821, there were only 73 (Christian 1992). At that time, the tenancy of this cottage was with William Booth Jun. In 1903, Johnson Bingham Bowler lived there, and it was only shortly before he died in 1951 that Chatsworth Estate improved the two properties and removed the thatched roofing.

A full report has been deposited with the Conservation Officer of the Amber Valley District Council.

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20. SHARDLOW, CHAPEL FARM (SK 450306)

D. Knight and S. Malone

In 1998, several geomagnetic anomalies were recorded by Oxford Archaeotechnics on the site of a proposed marina on the north bank of the Trent & Mersey Canal, and a 10×3 m trench was excavated across one of them by T&PAU. This revealed a sequence of fluvial silts and clays above terrace-gravel, with no trace of archaeological features or deposits. The magnetic anomaly may correlate with a thin deposit of dark bluish-grey clay, shown by auger-holes to lie central to the trench and to overlie gravel.

This work was undertaken on behalf of the landowner, Mr D. Crocker, following a request by Derbyshire County Council for archaeological evaluation prior to determination of a planning application. A full report has been deposited in the SMR. Thanks go to R. Holt and R. Sussum for assistance in the field.

21. SWARKESTONE, St JAMES CHURCH (SK 372286)

L. Elliott

In September 1999, a two-day watching-brief was conducted, on behalf of Rodney Melville & Partners (RMP) and Swarkestone Parochial Church Council, during renewal of sub-ground drainage. There is no record of a church at Swarkestone in Domesday, and the earliest surviving fabric comprises fragments of 12th-century chevron-ornament, re-used in the wall of the north aisle. The existence of additional 12th-century fabric, including an elaborately decorated tympanum, was recorded in the 19th century (Bateman 1848, 231; Cox 1877, 495). However, only the tower and Harpur Chapel of the present church pre-date a rebuilding of the nave and chancel in 1876.

An approximately 59m total length of drainage-trenches, up to 0.5m wide, were excavated by contractor's machine, to depths of 0.2–0.7m. These ran to north and south

of the church, converging at the west, before running below the existing path through the churchyard to the west gate, and into Church Lane. Generally, the drainage-trenches exhibited stratigraphy comprising a brown, humic, sandy-loam topsoil (c. 0.3m thick), above a disturbed, yellow-brown, sandy loam, interpreted as grave-earth.

A number of structural features was observed in the trenches. North-west of the west tower, a c. 1.7m-wide spread of stone was associated with ceramic roof-tile and brick, suggesting that it related to 19th-century construction/demolition, possibly that of 1876. Close to the south-west angle of the tower, a group of angular stones was exposed, the largest being an incomplete block of gritstone ashlar measuring 0.9 × 0.5m; stones of similar size and type are visible in the tower, suggesting that this group forms part of the foundation for the tower's south-west diagonal buttress. Immediately east of the south door of the nave, a c. 2m-wide stone-foundation was exposed in the north-facing section of the trench; this included blocks of up to 0.40×0.38 m, some with diagonal tool-marks. Although this stonework was apparently unmortared, the surrounding soil contained abundant mortar-flecks. This foundation did not extend up to that of the 1876 wall, but was broken at 0.2m from it, as if truncated by the rebuilt nave; hence, it probably corresponds with a substantial buttress against the south wall of the nave, as seen in an illustration of 1822 (Rawlins 1843, 131), and was levelled in 1876. Partially exposed at the junction between the chancel and the earlier Harpur Chapel (c. 1576), a foundation of small angular stones was apparently aligned east/west; this could relate to either the existing or an earlier chancel-wall, but this was impossible to resolve in the confines of the drainage-trench. From the dimensions recorded by Rawlins (Cox 1877, 495), and in the absence of any other remains within the drainage-trenches, the foundations of the nave and chancel prior to 1876 would appear to have either closely followed or lain within the ground-plan of the present church. Haphazardly incorporated within the 19th-century foundations were several stones apparently re-used from the earlier church, including ashlar and chamfered blocks. Concrete foundations were also encountered, most noticeably beneath the vestry.

An intended soakaway, 1.0m square and 1.5m deep, was partly excavated to the east of the chancel, but this was abandoned upon discovery of an unmarked 19th-century grave. It also revealed part of a large pit, dated by pottery to the 18th/19th century, and cut by the grave. The pit may be associated with outbuildings known to have existed nearby until the 1870s.

A range of artefacts was recovered, including a ceramic nibbed roof-tile, lead window-kame, several heat-affected pebbles, and Medieval and Post-Medieval potsherds. A small handle of carved bone, with crudely-incised decoration and attached to the stub of an iron implement, is difficult to date; it is intended that this will be reported more fully in due course.

A full account of the watching-brief has been deposited with the SMR. Thanks go to M. Evans (RMP), and to P.W. Dixon, H. Jones, D. Knight and L. Laing for comments about the artefacts.

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22. TUPTON to HARE EDGE pipeline (SK 390661–302728)

C. Allen, J. Brown, S. Malone and M. Southgate

Severn Trent Water propose to install the so-called 'Hady to Linacre link-main' to the south and west of Chesterfield, following a 15km route which commences at the A61 Derby-Chesterfield road near Tupton, and runs west of Wingerworth, through Walton and Wadshelf, to reach an existing reservoir at Hare Edge. Desk-top assessment and field-inspection of the route, undertaken in April 1998, was followed, in October 1998, by evaluation of selected sites in the vicinities of Wingerworth, Swathwick and Walton.

The assessment identified these as the three main areas of archaeological interest, though a number of other sites will also require close observation during the eventual construction of the pipeline, such as a Conservation Area at Wadshelf, which preserves Medieval strips enclosed by later field-walls. Some sites initially thought to be threatened by the pipeline have already been removed by other means — for example, the remains of a well-documented, coke-fired, iron-making furnace of the late-18th century, situated on Tricket Brook (Riden 1973), have been totally destroyed by open-cast mining.

Near Wingerworth, the site of an early charcoal-fired blast-furnace for iron-smelting lies beside Trickett Brook (SK 379662), with earthworks of a pond, a dam, watercourses, and the probable site of a furnace. Air-photographs show the location of bell-pits for ironstone just to the south-west, and a small metalled roadway leads westwards from the furnace to the nearby Hardwick Woods, suggesting that this may have been a source of wood for charcoal. Estate-records of the Hunloke family, who were involved in iron-making in this area from the 16th century, suggest that this site was in use from about 1600 to 1780. Earlier iron-working took place at a bloomery at Smithy Pond, just to the north; and later smelting was just downstream at the coke-fired furnace mentioned above. Geophysical survey (conducted by A.E. Johnson of Oxford Archaeotechnics, as were others described below) indicates that more remains, probably including outbuildings associated with the furnace, lie to the south-east, and further evaluation will be required to determine their nature and quality of survival. Most excavations on similar sites have concentrated on the furnace, so that information on associated buildings would be of considerable interest.

Swathwick is well documented as the location of Medieval settlement from 1264 to 1540, at which date the Hunlokes acquired much property in Wingerworth and Swathwick, and the importance of Swathwick as a separate entity declined thereafter. There is no map or documentary evidence to assist in establishing the former extent of Swathwick, though ridge-and-furrow survives in many fields around Ivy Farm (SK 363679). Cropmarks indicating a series of rectangular ditched enclosures in a linear arrangement show that the centre of the village once lay close to the present Robincroft Woods, and these features must be earlier than 1758, as the area was covered by woodland between then and 1954. Geophysical survey indicates circular areas of burning close to woodland enclosed by earth and stone banks, and this could be the location of Post-Medieval charcoal-making, as this area too was then part of the Hunloke estate.

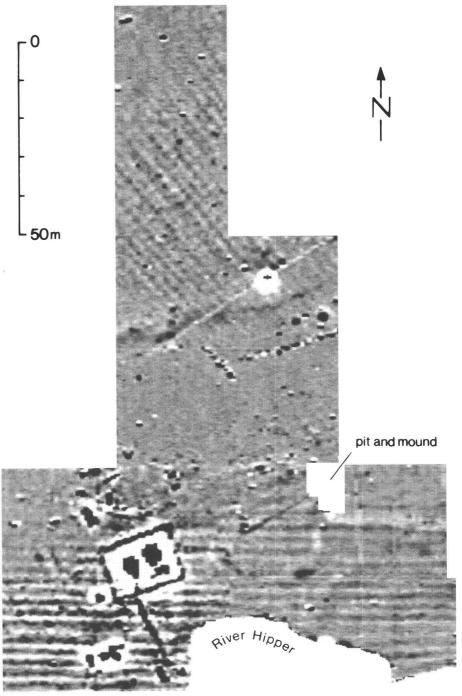


Fig. 5: Bridge Field, near Walton: gradiometer grey-scale plot, showing the remains of a probable lead-mill and associated features, apparently covered by plough-marks; scale 1:1000.

Produced by A.E. Johnson.

Again, further evaluation in the field is needed to establish the nature, extent and survival of any remains of the Medieval village due to be affected by the proposed pipeline.

The River Hipper is well documented as the location of lead-mills in the 16th and 17th centuries, with suitable woodland nearby providing 'white coal' for smelting. Many of these mills were in the hands of the Foljambe family of Walton in the early-17th century (Crossley and Kiernan 1992, 27). Topographical survey of a field just west of Walton and alongside the River Hipper (SK 347696) has located a watercourse, a deep pit, and a building-platform. Geophysical survey of this area has produced remarkable results, revealing building-remains and intensive areas of burning (Fig. 5). These include a rectangular building that appears to contain two hearths, strongly suggestive of a leadmill, with one hearth for ore and the other for slag; to its north, a leat that brought water to the mill from the river, with a possible wheel-pit, kilns, and smaller buildings alongside. Stonework lying close to the river indicates the remains of a bridge, situated in a part of the present larger field that was named 'Bridge Field' in the Brampton tithe-award of 1838, when this and adjacent land was in the hands of the Hayes and Cundy families, from nearby Holymoorside, well known as local millers of lead and corn (Entwistle 1976, 47). In the mid-19th century, several lead-mills in this area were converted into cornmills (Oakley 1959), and a pit and mound to the east of the supposed lead-mill (Fig. 5) may represent this change of use. As the location of many lead-mills are known but few are well preserved, there will need to be further evaluation of the part of this site to be affected by the pipeline, and those parts not directly threatened should receive improved protection.

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23. WIN HILL (SK 194858)

G. Guilbert and P. Caldwell

A scheme by Severn Trent Water to refurbish Ladybower Dam, and the consequent need to win considerable quantities of stone, led to the opening of a large pit on the northeastern flank of Win Hill, resulting in some archaeological fieldwork (for a related project, see Yorkshire Bridge, below). The area designated for this quarry and related works, covering $c.350 \times 250$ m, was visited in September 1998 (by GG), shortly before extraction was scheduled to begin, but rank undergrowth among young conifers prevented close examination of much of the ground, and the only noteworthy features to be observed are a pair of apparent cairns (at SK 19338578), previously identified by W.J. Bevan of Peak District National Park Authority (PDNPA). Since these lay near the south-western corner of the proposed quarry, it proved possible to arrange for their exclusion from the eventual area of extraction, thereby ensuring their preservation, albeit perched upon the precipice.

A watching-brief was maintained (by PC) throughout the 25 days during autumn 1998 when contractors were removing vegetation and topsoil from the 5ha or so of the quarry, but this was executed with such brutal technique (termed 'dig and rip' by those

responsible) as to offer little chance of detecting anything but the most gross of archaeological features. In the event, no features were observed, nor artefacts recovered.

Fuller reports upon both the preliminary inspection and the watching-brief have been lodged with both PDNPA and the SMR.

24. YORKSHIRE BRIDGE, LADYBOWER (SK 199850) G. Guilbert and S. Malone

A parcel of land covering some 7500m² and containing a complex of earthworks, first remarked in the 1990s by W.J. Bevan of Peak District National Park Authority (PDNPA), has been surveyed in anticipation of the possible use of some 70% of it for the storage of materials during works by Severn Trent Water (STW) to reinforce the nearby Ladybower Dam (see Win Hill, above). This land, lying within c. 70m of the River Derwent and the historic Yorkshire Bridge, and little more than 300m south from the foot of the dam, occupies an even gradient of about 1 in 9, sloping down towards the west and the river. It is grass-grown, and had been mown not long before the survey was undertaken in October 1998, so that even gentle earthworks could be seen with reasonable clarity over much of the recorded area. In contrast, the surrounding ground on all bar the southern side carried thick scrub and undergrowth, making it impossible to follow the earthworks beyond the area shown in Fig. 6, though it does seem probable that they are more extensive. To the south of Gypsy Lane (formerly Lydgate Lane and, before that, Yorkshire Bridge Road), which forms the southern boundary of the survey, vague undulations in improved pasture may indicate a continuation of the earthworks, but this falls outside the area relevant to the present inquiry.

As a generality, it may be observed that most of the earthworks reflect activities which involved terracing into the hillside, presumably intended to create levelled emplacements for buildings, etc. They are generally more sharply defined and steeper towards the southern and eastern edges of the surveyed area, where they tend to define linear and rectilinear patches of ground (that nearest the eastern boundary appearing sufficiently extensive to be regarded as a terraced track), than over the north-western portion, where they are less abrupt and more amorphous. It may be that the earthworks towards the north-west have suffered greater disturbance than those towards the south-east, or perhaps that the latter have been eroding less long, though certain indistinct elements even in the south-eastern part could be remnants of a relatively early pattern in a palimpsest (e.g. a low bank running west/east at 40–50m north of Gypsy Lane and broadly parallel to another, equally slight, at c. 73m north from it, possibly with the stub of a third approximately midway between them).

Part of this site is known to have been used in the 1930s and 1940s as a temporary settlement for workers engaged in the construction of Ladybower Dam, and some idea of the extent and character of the wooden structures that stood here at that time can be gained from the 'Provisional Edition' of the Ordnance Survey 1:10560 map (1949), coupled with the incidental background of a photograph taken in 1945 to record the moment when King George VI 'opened' the dam (Hallam 1990, 44). Although neither source affords sufficient detail for close correlation with many of the surveyed earthworks, it is evident, for instance, that the long terrace along the eastern edge of Fig. 6 carried a road then, and that timber buildings lay upslope, as well as downslope, of it. Beyond this, it must suffice here to observe that the fresher-looking scarps seen on

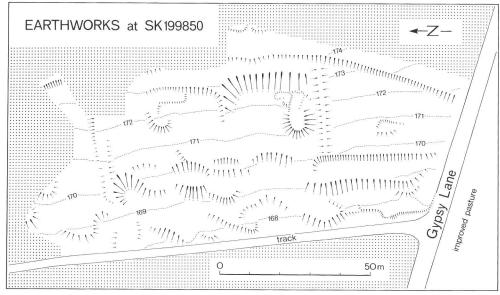


Fig. 6: Yorkshire Bridge, Ladybower: plan of earthworks, represented by hachures, together with simplified contour-lines, at 1.0m vertical interval and numbered in metres above Ordnance Datum; areas where rank vegetation prohibited close examination of the ground in 1998 are stippled. Scale 1:1250.

Drawn by G. Guilbert.

the ground today may well mark 20th-century adaptations of parts of a wider pattern of earlier earthworks, themselves perhaps to be identified tentatively as the remains of a settlement and/or field-system of some antiquity, though it would be hazardous to speculate whether this might have been of prehistoric, Romano-British or later origin (such pre-1949 maps as have been consulted have not proved helpful in this regard). This issue will not be resolved without excavation.

Copies of metrical data recorded by EDM, upon which the contour-lines and manually-recorded hachures of Fig. 6 are based, and a fuller report upon both survey and documentary search have been deposited with STW (who commissioned the survey) and PDNPA (to whom related documentation and photographs have also gone), while the report has also been placed in the SMR.

Reference

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