NEOLITHIC FINDS AROUND CHELMORTON LOW AND CALTON HILL

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During 1992, Severn Trent Water constructed a pipeline across the Peak District from Bamford to Buxton, and archaeological fieldwork was conducted by the Trent & Peak Archaeological Trust (T&PAT) on various sites along the route (Guilbert and Challis, 1993: 45). One part of the pipeline runs around the western side of Chelmorton Low and Calton Hill, close to an area which is already known for the recovery of prehistoric pottery, flintwork and stone axes (Radley and Plant, 1967). These artefacts include an assemblage from the quarried area on the summit of Calton Hill, collected by C. E. Exley and R. Carr; the 1992 pipeline passes within 250m of that area (Fig 1). Following topsoil-stripping from the *c.*10m wide working-easement for the pipeline-construction, the 1580m stretch between SK10817061 and SK11707185 (Fig 1) was searched for artefacts, resulting in the collection of fifty-four items of worked flint or chert and a single stone axe. These objects were distributed in several discrete groups (Fig 1). Such a small number of artefacts must make any dating tentative. A catalogue is included in T&PAT's archive of the Bamford-Buxton pipeline project, copies of which have been deposited in the Sites & Monuments Records held by Derbyshire County Council and the Peak National Park. A further copy of those parts of the archive relevant to the finds reported here has gone to Sheffield City Museum, together with the artefacts.

The westernmost group, of seven pieces, recovered from a 50m stretch centred around SK10987078, includes a small, chert blade-core which is possibly of Mesolithic origin (Fig 2.*a*). Several of the other items would seem better attributed to a later-Neolithic context, including a scraper made on a large truncated flake of Wolds-type flint (Fig 2.*b*), two broad flakes, and two others with a large butt.

The next group, of six pieces, found over a 100m stretch centred around SK11157089, includes a core and a scraper (Fig 2.*c*) also appropriate to the later-Neolithic period.

These first two groups lay close to the bottom of the north-western scarp of the Carboniferous limestone/basalt of Chelmorton Low, between 370m and 380m O.D. The remaining groups lay below 360m, where removal of the topsoil along the western foot of Calton Hill revealed head derived from the dolerite/lava plug forming that hill. At least two distinct groups were found here, though further sub-division may be recognisable in the plan (Fig 1). The largest group, of twenty-eight pieces, was scattered along a 440m length of the easement, between SK11227109 and SK11367151, with a wide range of Neolithic flint tools represented. These include a flake from a polished implement (Fig 2.*d*); two edge-used flakes (Fig 2.*e,f*); a worn-edge flake (Fig 2.*g*); a large, horseshoe, scraper with worn edge and gloss (Fig 2.*h*); a small scraper (Fig 2.*i*); a retouched fragment which may be part of another scraper (Fig 2.*j*); one certain and two possible wedges (Fig 2.*k*). The faceted butts of two of the scrapers (Fig 2.*h,j*), the broad, plain butts of two flake fragments, and a flake from the manufacture of a shallowly-flaked tool (Fig 2.*l*) are all typical of later-Neolithic assemblages. However, two blade fragments, one with a punctiform, abraded platform, may indicate an earlier component in this group.

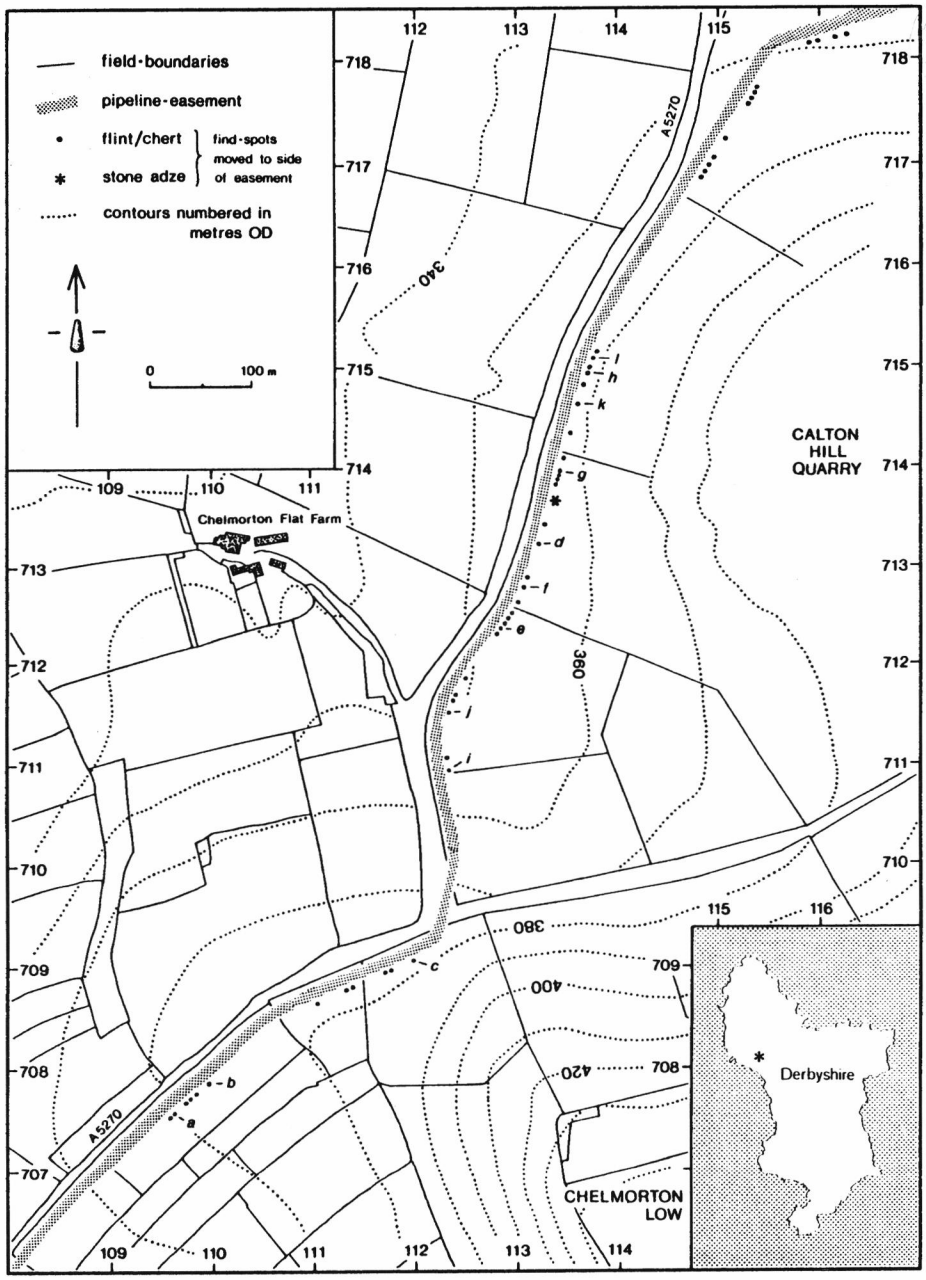

Fig 1 The distribution of prehistoric artefacts found on the Bamford-Buxton water-pipeline adjacent to Chelmorton Low and Calton Hill. Pieces of chert/flint illustrated in Fig 2 are distinguished by letters *a* - *l*. The National Grid is numbered around the border. Scale 1:7500. An asterisk marks the site on the inset map.

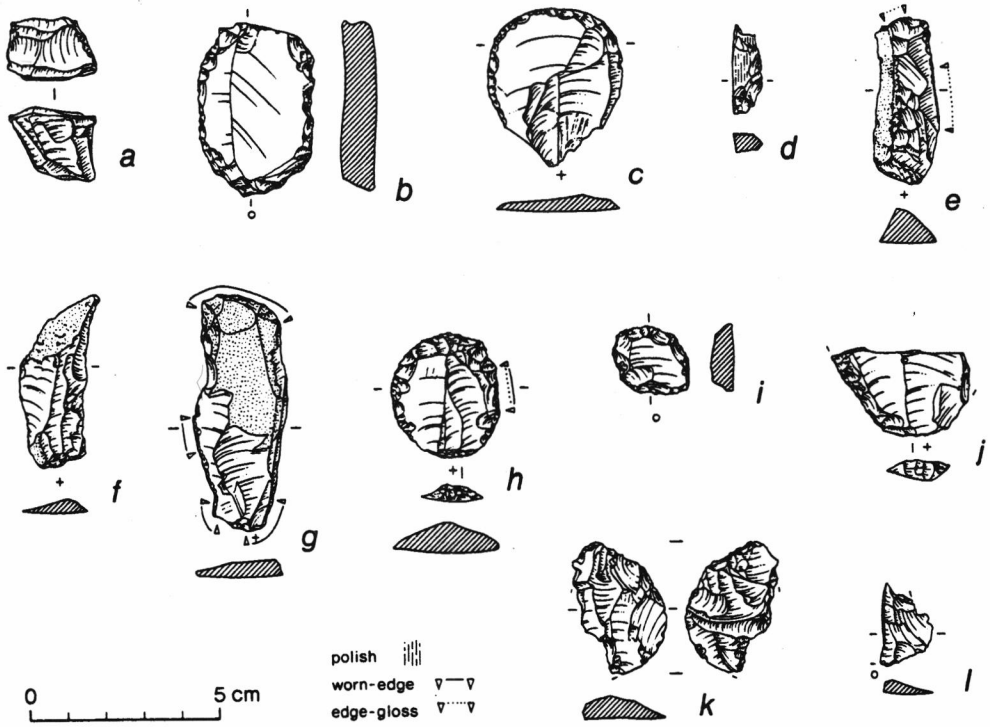

Fig 2 Chert and flint artefacts from the north-western foot of Chelmorton Low (*a* - *c*) and the western foot of Calton Hill (*d* - *l*). An **+** indicates the position of the bulb of percussion; an **o** indicates the proximal end of the flake where the bulb is absent. Scale 1:2.

The final group or groups, of thirteen pieces, lay between SK11477169 and SK11627184. It lacks diagnostic tools but includes several broad flakes and one with a faceted platform, again suggestive of a later-Neolithic date. It also includes two pieces of chert, one being a blade, which would be more fitting to a Mesolithic context.

The axe, found at SK11327137, in the midst of the largest group of flintwork, has an asymmetrical profile, and should perhaps more properly be termed an adze. It is virtually undamaged and, though ground all over, appears to have been polished more selectively, with thorough polishing in evidence only adjacent to the cutting-edge on each side (Fig 3). It has been thin sectioned for the purposes of petrological identification, by R. V. Davis, who describes the rock as 'a highly altered gabbro, fairly typical of Group I, although with more than usual of the hornblende occurring as small branches or feathery aggregates, indicating a source close to the contact of an intrusion, possibly in the Mount's Bay area of Cornwall' (Db287 in the Council for British Archaeology's survey of implement petrology). Products of the Group I factory are concentrated in Southern England, especially the South-East, and this distribution has attracted some comment in relation to the processes of Neolithic trade (Cummins, 1979: 8-12; 1980: 51-2, 57-9). However, they have been found as far north as Northumberland (Cummins and Harding, 1988: 79, fig. 12), and nine others are known from Derbyshire, eight of them scattered across the White Peak, some 450km from their probable rock source (Clough and Cummins, 1988a: 189-92, map 2). The roughly circular cross-section of the Calton Hill implement, and the

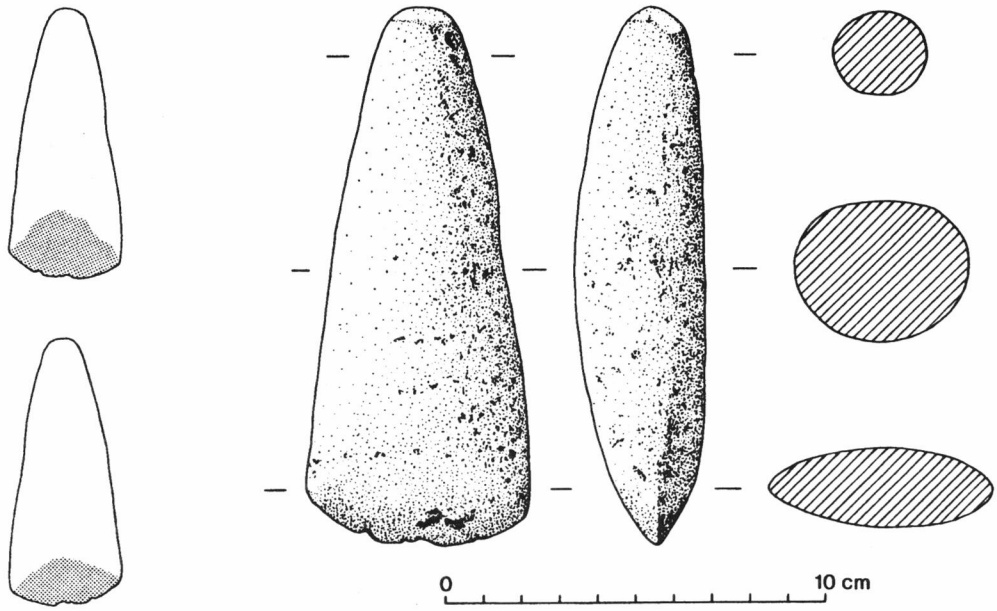

Fig 3 Stone adze (Db287) from the western foot of Calton Hill, at scale 1:2, with smaller outline drawings to the left showing the extent of the most concentrated areas of polish shaded.

manner in which it tapers from a rounded cutting-edge to a narrow, almost pointed, butt, is reminiscent of the 'Bridlington type', represented among implements of Cornish origin found elsewhere in Yorkshire and the Midlands (Manby, 1979: 68; Moore, 1979: 85), including at least two others among the Group I items from the White Peak (Moore and Cummins, 1974: 61, fig. 3, Db30, Db149). It has been suggested that this type may result from local re-working of larger Cornish implements (Cummins and Moore, 1973: 223), though Group I products of similar shape are evidently widespread in Southern England too (Keiller *et al.*, 1941: fig. 1; Stone and Wallis, 1951: fig. 6; Field and Woolley, 1984: fig. 1). The belief that Group I implements reached such distant corners of England as the Peak District late in the Neolithic (Smith, 1979: 17) has recently been challenged (Davis *et al.*, 1988: 19-20), but the pointed butt has been regarded as a late feature in the East Midlands (Moore, 1979: 85), quite in keeping with the character of much of the flintwork found close to our adze.

The artefacts reported previously from Calton Hill include 30 fragments of polished stone axe, one of which was 'sectioned and proved to be Group VI' (Radley and Plant, 1967: 149-50—presumably Db170—Moore and Cummins, 1974: 72), while 27 others were regarded as being probably from a similar source, one was of flint, and the thirtieth was of a dark greenstone, a description which Radley and Plant might well have applied to the adze found in 1992. Finds of Group VI axes, which originate from the Lake District, are far more common than those of any other petrological group in the Peak District (Moore and Cummins, 1974: 61-3, fig. 4), as elsewhere in the East Midlands (Cummins and Moore, 1973: 221, 227; Moore, 1979; Clough and Cummins, 1988b); nevertheless, the petrographic attributions of such a large collection as that from Calton Hill ought to be verified. The Exley part of that collection is in Sheffield City Museum, while the 'accession' listed for Db170 in 1988 (Clough and Cummins, 1988a: 191)

suggests that the Carr part may have gone to Buxton Museum, but no records of it (or of Db170) can be found there.

'Various flint implements and part of a polished stone axehead' are also reported to have been found in this general vicinity during road-building in the 1960s (Lewis, 1964). A closer location than the four-figure National Grid Reference stated in the published note can be determined for these finds from G. D. Lewis's written record (Z27) of May 1965 for Sheffield City Museum, which specifies that the road under construction led to Chelmorton Flat Farm, and thereby allows the find-spot to be calculated as approximately SK111712 (Fig 1). This axe too has yet to be identified petrologically.

The finds recovered along this part of the 1992 pipeline amply demonstrate that prehistoric material, particularly that relating to the later part of the Neolithic, is more extensively distributed in the vicinity of Calton Hill than has hitherto been appreciated. The quantity of artefacts recovered in 1992 does not compare to that collected from the quarried area previously. In addition to the 30 axe-fragments, over 500 pieces of worked flint are listed by Radley and Plant (1967: 149-50). However, the character of these two collections of flintwork does seem to be comparable, especially in the wear noted on the scrapers (Fig 2.*h*; Radley and Plant, 1967: 150). Scrapers are often the most common type of tool in assemblages of this age, and there are 43 among the material from Calton Hill reported by Radley and Plant, making them more numerous than all the other tools in that assemblage put together. The earlier finds from Calton Hill included items collected by two individuals over several years, and, since we do not know either their exact distribution across the quarried area or the degree of selectivity exercised by either collector, it would be inappropriate to compare the composition of that assemblage too closely to that recovered in 1992. In more general terms, it is evident that both the 1992 and the previous collections from this area are similar to others from the White Peak inasmuch as the majority of the retouched tools can be attributed to the later-Neolithic period. Nevertheless, it has been noted above that earlier debitage is present among the 1992 finds, and the mention of blades by Radley and Plant (1967: 150) may lead us to suppose that Mesolithic and earlier-Neolithic pieces occur in such assemblages more frequently than is sometimes recognised.

Wherever the positions of prehistoric artefacts have been recorded with any measure of accuracy in the White Peak, it is characteristic for them to be disposed in groups (e.g. Hart, 1981: fig. 4.6; Garton and Beswick, 1983: fig. 2). Our 1992 finds conformed to just such a pattern, and the same may also have been true of those from the Calton Hill quarry, if we are to judge from the statement that they were 'found on an area 900 by 200 yds, but with a denser area limited to 100 yds square' (Radley and Plant, 1967: 149). Such clustering may be taken to indicate that the artefact-scatters on these sites have not been widely dispersed by agriculture over the millennia and may well in some cases survive largely undisturbed.

In the case of Calton Hill and its environs, these observations should alert us to the need to anticipate any future developments which might threaten the survival of buried archaeological remains hereabouts and to ensure that a more thorough investigation is conducted than seemed justifiable at the time of devising the programme of archaeological fieldwork for the 1992 pipeline.

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REFERENCES

Clough, T. H. McK. and Cummins, W. A. (1979) (eds.) *Stone Axe Studies* (CBA Research Report 23). London.

Clough, T. H. McK. and Cummins, W. A. (1988a) (eds.) *Stone Axe Studies, vol.2* (CBA Research Report 67). London.

Clough, T. H. McK. and Cummins, W. A. (1988b) The petrological identification of stone implements from the East Midlands: third report. In Clough and Cummins (1988a): 45-8.

Cummins, W. A. (1979) Neolithic stone axes: distribution and trade in England and Wales. In Clough and Cummins (1979): 5-12.

Cummins, W. A. (1980) Stone axes as a guide to Neolithic communications and boundaries in England and Wales. *Proceedings of the Prehistoric Society* 46: 45-60.

Cummins, W. A. and Harding, A. F. (1988) The petrological identification of stone implements from north-east England. In Clough and Cummins (1988a): 78-84.

Cummins, W. A. and Moore, C. N. (1973) Petrological identification of stone implements from Lincolnshire, Nottinghamshire and Rutland. *Proceedings of the Prehistoric Society* 39: 219-55.

Davis, R. V., Howard, H. and Smith, I. F. (1988) The petrological identification of stone implements from south-west England. In Clough and Cummins (1988a): 14-20.

Field, D. and Woolley, A. R. (1984) Neolithic and Bronze Age ground stone implements from Surrey: morphology, petrology and distribution. *Surrey Archaeological Collections* 75: 85-109.

Garton, D. and Beswick, P. (1983) The survey and excavation of a Neolithic settlement at Mount Pleasant, Kenslow, 1980-1983. *DAJ* 103: 7-40.

Guilbert, G. and Challis, K. (1993) Excavations across the supposed line of 'The Street' Roman road, south-east of Buxton, 1991. *DAJ* 113: 45-60.

Hart, C. R. (1981) *The North Derbyshire Archaeological Survey to A.D.1500.* Chesterfield.

Keiller, A., Piggott, S. and Wallis, F. S. (1941) First report of the Sub-Committee of the South-Western Group of Museums and Art Galleries on the petrological identification of stone axes. *Proceedings of the Prehistoric Society* 7: 50-72.

Lewis, G. D. (1964) Blackwell. *East Midland Archaeological Bulletin* 7: 2.

Manby, T. G. (1979) Typology, materials, and distribution of flint and stone axes in Yorkshire. In Clough and Cummins (1979): 65-81.

Moore, C. N. (1979) Stone axes from the East Midlands. In Clough and Cummins (1979): 82-6.

Moore, C. N. and Cummins, W. A. (1974) Petrological identification of stone implements from Derbyshire and Leicestershire. *Proceedings of the Prehistoric Society* 40: 59-78.

Radley, J. and Plant, M. (1967) Two Neolithic sites at Taddington. *DAJ* 87:149-54.

Smith, I. F. (1979) The chronology of British stone implements. In Clough and Cummins (1979): 13-22.

Stone, J. F. S. and Wallis, F. S. (1951) Third report of the Sub-Committee of the South-Western Group of Museums and Art Galleries on the petrological identification of stone axes. *Proceedings of the Prehistoric Society* 17: 99-158.

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