HOWBURN, NEAR BIGGAR, SOUTH LANARKSHIRE: PRELIMINARY NOTICE OF A SCOTTISH INLAND EARLY HOLOCENE LITHIC ASSEMBLAGE

A. Saville\textsuperscript{7}, T.B. Ballin\textsuperscript{8} & T. Ward\textsuperscript{9}

ABSTRACT

This paper draws preliminary attention to the recent discovery of evidence for early Holocene human presence at Howburn, near Biggar, in the interior of southern Scotland. Implement types invite comparison with so-called Star Carr type Early Mesolithic assemblages of the 10\textsuperscript{th} millennium BP, or possibly with even earlier technological traditions.


Keywords: Scotland, Mesolithic, early Holocene, Lanarkshire, microliths, lithic assemblage

INTRODUCTION

In connection with the fieldwalking campaigns of its ‘Prehistory North of Biggar Project’ the Biggar Museum Archaeology Group (BMAG) investigated an arable field at Howburn Farm, Elsrickle, South Lanarkshire (NT 082 436). The field, at around 265m OD, lies on the lower western flank of Broomy Law some 7km north of the town of Biggar, South Lanarkshire (Figure 1). The field was walked by the BMAG on four occasions between 2003–2005, producing a range of prehistoric lithic artefacts and potsherds, mainly from the upper eastern part of the field close to a spring course. Thousands of lithic artefacts were recovered, with flint, chert, and pitchstone being the most common raw materials. Diagnostic types and attributes suggest that the fieldwalked chert artefacts may largely be Later Mesolithic or earlier in date, the pitchstone mainly Early Neolithic (although one Late Neolithic chisel arrowhead in this material was found), and most of the flint was thought to date primarily to the Late Neolithic or Early Bronze Age periods. These typo-chronological estimates were partly supported by the recovery of diagnostic Neolithic pottery (plain carinated bowl sherds as well as impressed and Beaker sherds and Grooved Ware) in and nearby to the field, as well as by finds of intact and cannibalized polished axeheads of Cumbrian rock.

In 2005 fieldwalking located a previously unnoticed concentration of flint and chert artefacts in an area approximately 40m in diameter at one spot on the eastern side of the field. This concentration, marked especially by a higher presence of artefacts of flint than elsewhere in the field, was assumed to have been brought to the surface because of fresh disturbance by ploughing and an exploratory excavation was undertaken by the BMAG in

\textsuperscript{7} National Museums Scotland, Edinburgh. Email contact: a.saville@nms.ac.uk
\textsuperscript{8} LITHIC RESEARCH, Denny, Stirlingshire. Email contact: lithicresearch@onetel.com
\textsuperscript{9} Biggar Museum Trust, Biggar, South Lanarkshire. Email contact: info@biggararchaeology.org.uk
December 2005 / January 2006 to test for the presence of any remaining archaeological deposits. A grid of 79 metre squares was positioned over the centre of the concentration and the ploughsoil excavated by hand, with finds bulk recorded to separate metre squares. No trace remained of any former land-surface but six small pit-like features were observed in the surface of the underlying boulder clay. The fills of these features were sampled for sieving and flotation, producing charcoal but no diagnostic artefacts. The BMAG intends to submit a sample of charcoal from one of these pit features for radiocarbon dating. This fieldwork by the BMAG was recorded in an interim note and report (Dudds et al. 2006; Ward 2005).

In the course of research by one of us (TBB) into pitchstone artefacts in the collections at Biggar Museum, attention was drawn (by TW) to the Howburn assemblage, and its contrast with other assemblages from the area was noted. Subsequent loan of this assemblage allowed it to be examined more closely and it was at this stage that the unusual and important character of part of the assemblage was recognized. For the purposes of this preliminary report only those lithic artefacts found by excavation or collected from the field surface immediately above the excavated area have been analysed, and these are listed in Table 1. Although several implements are clearly datable to later periods, or in some cases are of dubious age, there is no doubt that most of this part of the Howburn assemblage belongs to a broad-blade tradition, and the nine broad microliths and other diagnostic forms suggest a date towards the beginning of the Mesolithic period if not earlier. Presently it is assumed that probably three-quarters of these lithic artefacts are typologically earlier than the Later Mesolithic.
Table 1: General artefact list

In a Scottish context this makes Howburn exceptional. Few Early Mesolithic broad-blade assemblages are known, and none previously so far from the coast. The best-known examples of Early Mesolithic assemblages are those from Morton Site A, Fife (Coles 1971; Saville 2004a: Fig. 10.16), An Corran, Skye (Saville 2004a: Fig. 10.18), and several
locations on the Hebridean island of Jura (Mercer 1970, 1974, 1980; Saville 2004a: Figs. 10.5 & 10.17). In addition, earlier stray finds of Early Mesolithic type have been made in various places (e.g. Lacaille 1930, 1937, 1938, 1944; also Saville 2004a: Fig. 10.3), embracing types such as broad microliths, broad microburins, and burins. Flint or stone axeheads have still not been proven as part of the Mesolithic tool-kit in Scotland, although it is of interest that one of the few possible Mesolithic stone axehead finds is from the Biggar area (Saville 1994). Antler beam mattocks are likely to have been equivalent tools during the Mesolithic in Scotland (Saville 2003), but none has been dated to before c. 6000 BP (Saville 2004a: Table 10.2).

**GENERAL CHARACTERIZATION**

Summary examination of Table 1 shows, as already indicated, that the assemblage is probably mixed and includes a minor proportion of later finds. These include three narrow microliths, clearly identifiable as Later Mesolithic implements (one is a scalene triangle), and four Levallois-like cores. The low number of microblades — 17 microblades compared to 100 broad blades — indicates that the Later Mesolithic element is negligible (blades are defined as flakes which are more than twice as long as they are wide; microblades are narrower than 8mm; and broad blades are wider than 8mm; cf. Wickham-Jones 1990: 73). Post-glacial Levallois-like cores in Britain are thought to date to the mid-to-late Neolithic period (Saville 1981: 45–48; 2006), but the absolute dating for them is limited and at present it cannot be ruled out that these pieces may be earlier or later.

British Levallois-like cores sometimes feature preparation by fine faceting of the platforms, comparable to the well-known trimming of platform-edges (cf. Ballin forthcoming a). In the Howburn assemblage, 21 flakes and blades with finely faceted platform remnants were identified (Figure 2: 1–2). These pieces are not quite similar to the finely faceted blanks collected from unequivocal British Late Neolithic sites (Ballin forthcoming b; cf. Manby 1974: 83). Instead, they display a marked ‘spur’ at the platform-edge, very similar to the ‘spurs’ produced in connection with the generally later Upper Palaeolithic approach referred to as *talon en éperon* (Barton 1990; Inizan et al. 1992: Fig. 32.7). In short, it is presently not possible to define these pieces, or their parent cores, as early or late elements, though future detailed analysis of this assemblage may permit a more definite attribution. What can be said, however, is that the two faceted butt examples illustrated here (Figure 2: 1–2), which are proximal segments of broad blades, are extremely unlikely in typological terms to be anything later than Early Mesolithic and could well be earlier, although we would hesitate on this basis alone to suggest any linkage with pre-Younger Dryas, Late Magdalenian-type industries (Barton 1992: 190; Jacobi 2004: 16). Whilst there are other analogies which could be drawn between some of the Howburn artefacts, such as the combined scraper/burin (Figure 3: 6), and Late Upper Palaeolithic examples (e.g. at Gough’s Cave, Somerset; Jacobi 2004), our current view is that, taken as a whole, this is not the most satisfactory context for them.

Key indicators from the assemblage for an Early Mesolithic or earlier attribution are the microliths (Figure 2: 3–5), with large, long, broad, and thick obliquely blunted forms, which although fragmentary are clearly not Later Mesolithic types (cf. Saville 2004a: 188), the end of blade scrapers (Figure 3: 7–8), and the composite scraper/burin (Figure 3: 6) with a resharpened overhanging convex distal scraping edge and a proximal burination on a transverse truncation.
The collection’s early element includes the following characteristics:

1. If a small Late Mesolithic sub-assemblage (dominated by chert) is disregarded the early artefacts are dominated by flint examples, with a flint: chert ratio of probably roughly 3:2.

2. The early chert artefacts are generally based on different forms of chert to those preferred by Later Mesolithic knappers. Where the latter favoured grey or black chert varieties, the area’s early inhabitants apparently favoured purple or more ‘flint-like’ varieties.

3. The blanks are broad, stout hard-hammer blades, although the parallel production of flakes took place.

4. The tools include several types recognizable from Clark’s publication of the Star Carr assemblage, such as: a) broad triangular / trapezoidal microliths (Clark 1954: Fig. 35); b) pieces with oblique / curved truncation (Clark 1954: Fig. 38); c) short end-scrapers (Clark 1954: Fig. 40, 118–125), several of which are varieties with two opposed working-edges (Clark 1954: Fig. 40, 116–117); d) blade-scrapers (Clark 1954: Fig. 40, 107–113), several of which are varieties with two opposed working-edges (Clark 1954: Fig. 40, 114–115); e) burins (Clark 1954: Figs. 41–42); and f) short piercers (Clark 1954: Fig. 39, 96).

**Figure 2:** Unretouched proximal blade segments with faceted butts (1–2); microlith fragment, obliquely blunted (3); trapezoidal microlith, obliquely blunted and ‘shouldered’, incomplete; (5) microlith fragment, obliquely blunted (enclumé retouch) with terminal burin-like ‘impact’ fracture. 1, 2, 3 & 5: flint; 4: chert. Scale 1:1. Drawn by Marion O’Neil.

**DISCUSSION**

As indicated by the title of this brief paper, it is not the authors’ intention to discuss the Howburn finds in detail here; this must await analysis and publication of the full assemblage. However, interest in this assemblage forms part of a general research programme by two of us (TBB and AS) aimed at shedding light on aspects of the early colonization of Scotland. This programme has focused particularly on the available scraps of evidence for later Upper Palaeolithic activity (Ballin & Saville 2003; Saville 2004a: 207–210; Saville & Ballin forthcoming), whilst the Early Mesolithic period, in the absence
of new material, has remained ill-defined and elusive (Saville 2004a: 205–207). By contrast, evidence for the Later Mesolithic in Scotland has been accumulating, with increasingly early associated radiocarbon dates, such as from Cramond, Edinburgh (Lawson 2001), and East Barns, East Lothian (Gooder 2003). In fact, the recognition that people with Later Mesolithic industries were established in Scotland, if only perhaps in coastal and estuarine locations, by at least 9200 BP (8400 cal BC; see Saville 2007), raises interesting questions for the chronology and nature of a preceding Scottish Early Mesolithic.

![Figure 3: Composite tool: scraper/burin (6); end scraper (7); double end scraper (8). 6 & 8: flint; 7: chert. Scale 1:1. Drawn by Marion O’Neil.](image)

It would be premature to definitely equate the Howburn assemblage with a particular subset of the Early Mesolithic or even earlier industries identified elsewhere in Britain or Europe but, as the specific artefactual analogies drawn above with Star Carr will have hinted, at the moment a link with the so-called Star Carr type assemblage (Reynier 2005: 18–22) seems possible. The Star Carr type assemblage is the earliest of the English Early Mesolithic assemblages, appearing some time before 9500 BP (Reynier 2005: 68), and post-dating the Terminal Palaeolithic long blade / Ahrensburgian industries which begin around 10,300 BP (Barton 2005: 134; Barton & Roberts 2004: 342). Assuming that it is valid to see the Terminal Palaeolithic, Early Mesolithic, and earliest Later Mesolithic industries as entirely chronologically separate and successive, then the pre-Later Mesolithic element of the Howburn assemblage would seem to point to settlement of the southern Scottish interior around the middle of the 10th millennium BP or earlier, with the corollary that people were by then already adapted to the available Scottish biotopes, including the woodlands of the interior (Edwards 2004; Tipping 2004). The recent recovery of mixed broad blade / narrow blade Mesolithic assemblages from Macharmuir near the modern Aberdeenshire coast (Saville 2004b) and from Chest of Dee in Aberdeenshire’s Cairngorms mountain range (including one broad and one narrow microburin; Ballin 2004), suggests that before the end of the Early Mesolithic period people had effectively penetrated much of the mainland and its interior, following the many rivers well into upland and highland areas, as well as the coasts and near-shore islands. The corollary implication is that this inhabitation must have happened rapidly over a few centuries, although the degree to which such inhabitation in any one locality or
territory was either ‘permanent’ or sporadic in hunter-fisher-gatherer terms can only be speculation. As with any pioneer settlement, however, the matter of provisioning — in terms of raw material for implements — would loom large (Conneller 2007).

Current orthodoxy would doubt the existence of much, if any, human presence in Scotland during the Younger Dryas (Loch Lomond Stadial) cold phase of the 11th millennium BP, with the climatic and biotic potential for sustainable occupation only developing from around 10,200 BP. Exactly what kind of lithic technology we should expect in central southern Scotland in this Terminal or Epi-Palaeolithic period at the end of the 11th millennium BP / beginning of the 10th millennium BP is a matter of debate (Saville 2004a; Ballin & Saville 2003), although it is likely to be different from contemporary technologies in the Vale of Pickering or further south (Conneller 2007), in view of the greater distance from any large-sized raw material with which to produce long blades.

It is highly probable that assemblages like the one from Howburn will occasionally surface by chance in connection with future excavation projects in Scotland, but it is also quite likely that many fieldwalking assemblages, or assemblages excavated by groups like the BMAG, may already include substantial numbers of Early Mesolithic artefacts. This latter hypothesis is obviously testable, and projects could be defined to re-examine these collections. The collections in Biggar Museum alone number several hundred thousand lithic artefacts, most of which have yet to be examined by lithic specialists. Equally there are rich historic surface collections in museums and private hands from the fields along the major Scottish rivers, such as the Clyde, the Tweed, the Tay, and the Dee (e.g. Callander 1927; Lacaille 1937, 1944; Mulholland 1970; Paterson & Lacaille 1936), which would merit re-analysis and re-publication. The re-examination of these collections — including the characterization, cataloguing and assessment of their Early Mesolithic components — would form worthy PhD projects for future students of Scottish archaeology.

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APPENDIX: METRICAL DATA FOR THE ILLUSTRATED ARTEFACTS

Fig. 2, 1: Length 31.1mm; breadth 13.5mm; thickness 3.0mm; weight 1.3g
Fig. 2, 2: Length 28.8mm; breadth 15.6mm; thickness 4.4mm; weight 1.9g
Fig. 2, 3: Length 36.2mm; breadth 16.4mm; thickness 4.0mm; weight 2.0g
Fig. 2, 4: Length 40.6mm; breadth 15.4mm; thickness 4.6mm; weight 3.1g
Fig. 2, 5: Length 25.5mm; breadth 14.9mm; thickness 5.8mm; weight 1.8g
Fig. 2, 6: Length 33.6mm; breadth 20.0mm; thickness 9.9, width of the burin edge 4.5mm; weight 5.6g
Fig. 2, 7: Length 50.1mm; breadth 24.1mm; thickness 8.5mm; weight 12.4g
Fig. 2, 8: Length 39.3mm; breadth 17.9mm; thickness 4.9mm; weight 4.3g

BIBLIOGRAPHY


