6 Discussion by O Lelong

This section first sets the lithic scatters in the context of other scatters in the region. It then summarizes the project's findings and draws attention to the questions raised and the patterns identified in the prehistoric landscape as a result.

6.1 The lithic scatters in context by C Barrowman

Information contained in the Scottish Lithic Scatters Database (Barrowman 2000b; Barrowman & Stuart forthcoming) was used to set the lithic scatters recorded on the Carmichael Estate (Section 5.2.1) in the context of other scatters in the vicinity.

The fertile soils of South Lanarkshire have produced a large number of lithic scatters. Many of these were discovered in the first part of the 21st century, with some findings in the 1960s, but the majority were recorded more recently by the Lanark and District Archaeological Society. The highest concentration of scatters in the area lies in an amorphous strip approximately 10 miles wide, running from the southern slopes of the Pentland Hills in the north to the Southern Uplands in the south. The area upon which the following discussion focuses lies on the western edge of this concentration (covered by National Grid squares NS 93 and 94).

Twenty-five scatters, five of which are single, isolated finds, were recorded (as of 1999) in the Scottish Lithic Scatters Database for this area. The majority of these scatters are small (consisting of between two and 49 lithics) and discrete.

Chert dominates these scatters, with flint also present in smaller quantities; one pitchstone piece came from Annieston (NGR NS 992 375) to the south-east of the Pettinain Uplands. Investigation of sand and gravel workings at Annieston by M Brown in 1988 revealed this small scatter, which included a barbed and tanged arrowhead, worked flint and chert flakes and Neolithic pottery sherds. This may represent the remains of a later prehistoric settlement, although the site was too disturbed to characterize with confidence.

Chert flakes and cores were also recovered from Broadfield Farm (NS 990 335) by H M and D MacFadzean in 1984, along the River Clyde to the south-east of Tinto Hill. A few metres away a scatter of small worked flakes of chert and flint were recorded by the same field walkers, again from sand and gravel workings (NS 987 334). Further south along the river at Lamington, quartzite and flint debris were recorded by Archer and Brown in 1988; these remains have been described as Neolithic (NS 977 307).

Closer to Blackshouse Burn, a small scatter of chert flakes was found on Cairngryffe Hill during field walking over land ploughed for forestry (NS 943 417) in 1989 by P and J Taylor. No period has been assigned to these lithics, although it is assumed they indicate working in the immediate area.

Diagnostic tools such as scrapers have been recorded in three previous instances: one at Law Farm (NS 98 38 found by W A Munro in 1962) to the south-east of the Pettinain Uplands, and two in the immediate vicinity at Thankerton (NS 9804 3820 found by M Brown in 1988, and NS 982 377 found by H MacFadzean in 1984). The first three artefacts may belong to the same scatter and appear in the Database as isolated finds only because of their separate dates of discovery. In many cases, only diagnostic lithics have been recorded by field walkers, although other less obviously worked pieces may have been present.

Several additional scatters have been recorded as entries in *Discovery and Excavation in Scotland* since the completion of the Scottish Lithic Scatters Database in 1999. Among them are a cluster of lithics on Brownsbank Farm, near Biggar, which included pitchstone and flakes of type VI axes along with early Neolithic pottery (Ward 2001). Another scatter was discovered more recently at The Sills in Pettinain parish; this consisted of a small but dense cluster of struck chert, flint and pitchstone, thought perhaps to indicate a knapping site (Fawell 2002).

Although the scatters described above constitute only a small proportion of those known in the area, the overall distribution of the remaining ones suggests that they were discovered through field walking the arable stretches along the River Clyde, from Castledykes to the north-west of Blackshouse Burn (NS 92 44), through Bagmoors to the east (NS 95 43) and following the river's course as it winds around the Pettinain Uplands southward to Thankerton (NS 97 37), Annieston (NS 99 37), Broadfield (NS 99 33) and to the south of Tinto Hill as far as Lamington (NS 97 31).

It is assumed that some bias has resulted from selective field walking of ploughed areas, and that this pattern does not reflect the true distribution of prehistoric activity. Certainly the majority of the scatters have been recovered from arable fields, with only one fifth coming from forestry ploughing and upland areas. This bias toward finds on arable lands prevails throughout Scotland and is inherent in the nature of scatters, as they are most commonly created by ploughing.

It must also be noted that a scatter found and recorded by any field walker almost certainly does not fully represent the actual lithic contents of a field. Lithic scatters consist of material which has been disturbed and moved by the plough. These disturbed lithics may indicate the locations of *in situ* concentrations, as in Field M at Carmichael, but this can only be proved through further work such as geophysical survey and ultimately excavation.

Nevertheless, surface scatters are relatively good indicators of the spread of past human activity across the landscape. The simplest of activities, such as knapping a core, will leave a material mark, although it may have lasted no more than a few minutes. The larger scale examination of the landscape around the Blackshouse Burn monuments has revealed traces of such events in greater and lesser concentrations, and those in Field M at Carmichael have been shown to be related to surviving archaeological features in and on the subsoil. As such, the work has expanded our understanding of the archaeological resource in the Upper Clyde Valley.

6.2 The upland monument surveys

The topographic and geophysical surveys of the upland monuments have raised certain interpretations and questions that could be tested through future investigation, in addition to creating a digital record of the remains and their topographic settings.

In particular, the Blackshouse Burn monument geophysical survey revealed evidence for an entrance to the smaller enclosure and a linear feature linking it to the larger one; however, both of these anomalies could have been created by plough disturbance, as they run in the same direction as plough marks to the west. The resistivity survey also confirmed the staggered nature of the large enclosure's terminals at its western entrance and revealed a possible stone-edged pond and a curvilinear feature in the interior. The magnetic survey recorded a string of dipolar anomalies that may indicate the former presence of a screen that would have exaggerated the angle of the entrance and channelled movement southwards into the enclosure. The possible interpretations raised by these results could be tested through excavation in future.

The results of the Chester Hill survey recorded the extent of former planting on the monument and the form and condition of the earthworks, while the geophysical surveys revealed further details of the curvilinear depression concentric with most of the monument's inner bank. This was interpreted either as a series of contiguous quarry scoops or as an internal ditch. Because the anomaly continues across the western entrance and is interrupted on the south, it has been suggested that the bank was originally broken on the south and that the western entrance is not original. Alternatively, it is possible that the possible internal ditch or series of quarry scoops is a later feature, relating to refurbishment or augmentation of the inner bank. The geophysical surveys at Chester Hill also revealed what may be the traces of internal structures, although any archaeological deposits associated with them may be severely compromised by tree roots.

Chester Hill has been interpreted as a fort (RCAHMS 1978, 97, no 224), presumably because of its hilltop position and its double banks and medial ditch. While in area it is within the range of the other 27 monuments interpreted by the Royal Commission as forts in South Lanarkshire, only three including Chester Hill are circular.

In its form and dimensions, Chester Hill is very similar to the monument at Craigie Burn, Libberton (RCAHMS 1978, 97, no 291 and plate 15A), about 4 km to the north-east, which was subject to geophysical survey under the auspices of the Upper Clyde Valley Landscape Project (Hanson & Sharpe in prep; Sharpe forthcoming). While not set on a hilltop, the earthwork does occupy a plateau overlooking the River Clyde (L Sharpe, pers comm). Craigie Burn has been interpreted as a henge, although some doubt about its classification is reflected in the CANMORE entry for the site (NMRS NS94SE19).

While these similarities do not necessarily mean that Chester Hill is a henge or Craigie Burn a hillfort, they do highlight the coarse resolution of some of our archaeological categories and the need for more informed interpretation of monuments in the region. The results of field walking on the lower slopes of Chester Hill recovered quantities of mixed earlier prehistoric material which may have moved downslope from their original place of deposition, perhaps on the summit of the hill. It is possible that either the present monument or a predecessor formed part of the early prehistoric ritual complex on the Pettinain Uplands.

The survey of the archaeological remains on Cairngryffe Hill recorded a coherent settlement of likely prehistoric date, consisting of hut circles and associated field systems, that may be contemporary with some of the later burial cairns on the uplands. It also recorded the presence of post-medieval sheep management features and associated cart trackways, overlain on the prehistoric landscape. The Swaites Hill survey also recorded prehistoric agricultural settlement remains, as well as what may be a ring cairn on its summit.

The surveys also recorded several potential and active management problems. At Chester Hill, sheep and cattle entering the enclosure and sheltering under the trees are severely eroding the banks in several places; rabbit burrows are also causing damage to the banks and interior. At Blackshouse Burn, the use of heavy vehicles across the large enclosure's bank was also damaging it at the time of survey, although the same route appeared to be used consistently and so the damage was not widespread. The western edge of the monument on the summit of Swaites Hill was also being encroached upon by a well-used farm track. Of all these fragments of prehistoric landscape, some statutory protection through scheduling is extended to the Blackshouse Burn enclosures (SAM 4063), the nearby enclosure of Meadowflatts (SAM 4068) and the summit of Chester Hill (SAM 2598), as of January 2004.

6.3 Prehistoric activity on the lower slopes and in the valleys

The field walking programme in the valleys to the south and west of the Pettinain Uplands identified several significant clusters of lithic material.

Lithics indicating activity in the early Mesolithic were sparse but nevertheless significant. A diffuse scatter of material from this period was found in the small valley to the west of the Pettinain Uplands (Field D), which is transected by the Blackshouse Burn.

Lithics dating from the late Mesolithic found elsewhere in the survey area could be contemporary with the phases of pre-monument activity around Blackshouse Burn, identified through pollen analysis of the upland peat deposits. That activity perhaps involved hunting and vegetation clearance (Ramsay 1998).

The most significant cluster, at Carmichael (Field M), indicated both tool production and use. Trial trenching over the scatter revealed a late Mesolithic knapping floor. A nearby hearth scoop and a line of post holes, possible evidence of a windbreak or cooking frame, could be associated with the knapping floor. These could be the remnants of a camp site.

At Garvald Burn in Tweeddale, excavation over a lithic scatter revealed a knapping floor, a hearth and several post and stake holes (Barrowman 2000a; Barrowman forthcoming). Although the lithics suggested a late Mesolithic date for the knapping floor, charcoal from the hearth yielded four radiocarbon dates centred on the mid 4th millennium BC (eg GU 10415: 3940–3630 cal BC at 95.4% probability).

Within the survey area, evidence of late Mesolithic to early Neolithic tool production was also recovered from the field to the south of Chester Hill (Field N). The tiny pitchstone flake found in the valley transected by the Blackshouse Burn (Field D) shows that there was some kind of exchange or contact between people here and on the Island of Arran, most likely in the early Neolithic.

Lithics from the late Neolithic to early Bronze Age were found in more abundance: at the edge of the uplands adjacent to the Blackshouse Burn monuments (Fields A/B); in the valley to the west of the monuments (Field D), where a zone of tool or blank production and a zone of tool use and/or discard were identified; on the lower southern slopes of Chester Hill (Fields G and H), where the tools found might have moved downslope from their place of deposition; and in the valley of the Glade Burn (Field K), as evidence of late Neolithic tool production.

At Carmichael (Field M), the dense late Mesolithic cluster associated with the knapping floor also contained lithics indicating tool production and use in the late Neolithic to early Bronze Age, although at a lower level of intensity.

The field walking demonstrated that the early and late Mesolithic material was concentrated in the valley bottoms, while the late Neolithic to early Bronze Age lithics were also found on the lower slopes and at the edge of the uplands. Although the sample size was small, this suggests that the late Neolithic saw more sustained activity on the slopes and onto the uplands. That activity involved both tool production and use, perhaps relating to permanent or seasonal settlements.

Trial trenching corroborated the evidence of the late Neolithic to early Bronze Age lithics at Carmichael (Field M), yielding a sherd of late Neolithic Impressed Ware and one of Beaker. The two ditch terminals discovered could belong to a ring-ditch, perhaps indicating the presence of a ceremonial or burial enclosure at the site in the Bronze Age, with which the Beaker sherd may have been associated. It is also possible that the line of post holes was associated with the putative ring-ditch rather than with the hearth scoop.

The evidence from Carmichael does suggest that the same place was a focus for activity over several millennia, in the late Mesolithic, late Neolithic and early Bronze Age. The later phases of activity here would have been contemporary with the construction and use of the ceremonial monuments on the uplands, particularly those at Blackshouse Burn and Cloburn Quarry.