
11 GENERAL DISCUSSION AND CONCLUSIONS,

by S Anderson

11.1 Introduction, by R Strachan

The evidence produced by the evaluation illustrated the survival of sites of differing periods to varying extents. It revealed information on the land use of this area from prehistory to the present day, both in terms of positive and negative archaeological evidence. The evidence appears to show a preference for early settlement on sands and gravel terraces by the River Esk, with much less settlement on the hard, compact clays to the east. However, the eastern half of the route has been subject to intense exploitation in terms of industrial extraction of coal and lime, industrial processing and modern farming techniques that may have truncated settlement evidence. It is therefore difficult to state how biased the archaeological record is, and whether the evidence demonstrates a preference for settlement on more forgiving subsoils such as sand and gravels or is just a result of selective evidence survival.

11.2 The prehistoric landscape

11.2.1 Neolithic and Bronze Age evidence

The earliest features identified on the route of the bypass were two pits which contained the sherds of a single, probably early, Neolithic pottery vessel. They were found on the site of the Roman temporary camp at Smeaton; other pits at this location could not be dated but may have been contemporary. Isolated pits of Neolithic date are a common finding in lowland eastern Scotland (Barclay 2003), although they were relatively infrequent within this transect.

Three re-cut features adjacent to the ring-grooves site contained a large assemblage of chipped stone, broadly dated to the late Neolithic or Bronze Age, which was not thought to have been re-deposited from surrounding soil. A heavily abraded sherd of handmade pottery was also recovered, unfortunately undatable.

On the opposite side of the valley at Newfarm, prehistoric finds were collected from four cut features and other contexts. Neolithic and Bronze Age lithics were recovered, mostly from unstratified contexts. Fragments of cannel coal objects may belong to the same period. One feature there contained an assemblage of Neolithic Impressed Ware pottery, and other undiagnostic prehistoric pottery was recovered from two other features. Although limited, this finds assemblage and the presence of pits does provide some evidence for settlement of Late Neolithic/Early Bronze Age date in this area.

A 'background scatter' of chipped stone flakes and

tools was seen in several areas, suggesting that the landscape was far from empty in this early period.

11.2.2 Later prehistoric sites

The three larger prehistoric sites excavated during this project were located to the west of the River Esk, in the area around Castlesteads, on gently sloping land with an underlying sand and gravel subsoil. Although dating evidence was generally lacking, parallels suggest that the main features would fit most readily into the first millennium BC.

The ring-groove structures are assumed to belong to an unenclosed settlement – no enclosure ditch or palisade trench was identified within the excavated area, nor in the evaluation trench to the west of the structures, and nothing is visible on aerial photographs. Other apparently unenclosed settlements containing structures of similar type have recently been excavated to the south of Newfarm (Thornbank, Rees 2002), some 2km further south at Eskbank (Lamb's Nursery, Cook 2000), and approximately 3.5km to the north at Inveresk (Neighbour 2007), but ring-groove structures also occur in small enclosed sites such as those at Fishers Road, Port Seton (Adams & Philip 2000) and St Germain's (Alexander & Watkins 1998), although these cover a wide date range.

About 150m to the east of the ring-grooves site, a large area of stone paving was uncovered, perhaps 14m in diameter, although the full extent was not exposed and later truncation had occurred. Unfortunately the only dating evidence for the paving is a fragment of saddle quern which could have been reused at any period from prehistory onwards. This feature has parallels in other slightly hollowed or 'sunken-floored' features, lined with flags or cobbles, which have been identified on Iron Age sites in the region and further afield. An example at Brixwold (Crone & O'Sullivan 1997, fig. 7) was oval, less than half the size of Castlesteads, lined with cobbles and appeared to contain a central hearth. An oval 'floored scoop' at Ironshill, Angus (Pollock 1997, 354) was closer in length to the Castlesteads example, floored with small pebbles and repair patches of larger stones (including a saddle quern) and, despite a lack of any post-holes in the excavated area, was interpreted as the possible remains of a ring-ditch house. An oval, cobbled, 'sunken-floored structure' at Fishers Road East, Port Seton (Haselgrove & McCullagh 2000, 20), measuring 11 × 5.3m, had a shallow slot containing packing stones for small posts which may have supported a roof; it was suggested that the processing of animal carcasses or drying

of skins could be possible functions, but that the feature most likely served some specialist function which was invisible in the archaeological record. The authors commented that it is 'best regarded either as a relative of the ubiquitous scoops and working hollows frequently encountered on Iron Age sites or as a variant on the regional tradition of scooped circular buildings with stone floors' (Adams & Philip 2000, 124). The same observation can reasonably be applied to the Castlesteads feature, although it is a fairly simple construction and a later date cannot be ruled out.

These structures, whether closely contemporary with each other or not, are likely to have formed part of a landscape which, over the course of the millennium, became more structured and controlled. The pollen evidence indicates that there was an expansion of cultivation in southern Scotland around 500 BC (Tipping 1994, 33) and this ties in with aerial survey, which suggests that 'evidence for an ordered and complex system of land division in south-east Scotland is considerable' (Brown 2000). Certainly the dates obtained from the Langside pit alignment suggest that it was extant at around this time. Such structured landscapes are not confined to the lowlands of Scotland, occurring for example in the north-east of England, on the Yorkshire wolds and in the fens of East Anglia. While acknowledging the regional differences, overall their complexity is thought to have increased as the first millennium BC progressed (Gosden 1997). Analysis of the dyke systems in the Yorkshire wolds has suggested that boundaries there probably had the expected functional uses – such as separating the herds of different communities or demarcating different areas of land use – but also had a broader significance, proving a social and symbolic aspect to the landscape, a sense of community identity, control of rights of access to and use of the land, and a feeling of stability (Bevan 1997). The presence of probable rights of way, in the form of trackways delineated by boundaries, also implies that some people may have been denied access to enclosed parts of the landscape. Pit alignments at Maxey in Cambridgeshire are thought to have been constructed in relation to other places, such as earlier ceremonial monuments, and Taylor (1997) points out that viewed from these places, an alignment would have appeared as a single linear boundary, the elements of which would not be individually discernible. In terms of function, it may be significant that pits of this type would form a barrier to cattle, but would be less impenetrable to sheep and humans. The large gaps within the short stretch of alignment at Langside would not fit with this theory, unless these areas represented passage-ways or 'gates' within the wider system. The theories of Rylatt and Bevan (2007), that such pits may be more a conceptual than a physical boundary, may be more relevant here.

A considerable amount of archaeological effort, in terms of aerial reconnaissance and interpretation, field survey and excavation has gone into the study

of the later prehistoric landscape in this broad area of the Esk Valley to the north of Dalkeith in recent years. It has indicated the remnants of a substantial system of pit alignments and several enclosed and unenclosed settlements (Halliday 1982; Brown 2002). In terms of the future, as Gosden has suggested, 'more needs to be done in relating the broader land boundaries to the topography, and in looking at the size and shape of fields and enclosures over time' (Gosden 1997, 305). It will also be important to obtain closer dates for settlements of this period, in order to provide a much tighter chronological framework for the development of the landscape and patterns of land use and settlement in this period (cf Haselgrove et al 2001, 31).

11.3 Roman temporary camp

The excavation at Smeaton Roman camp provided information on the character of the western perimeter ditch of the Roman camp. The ditch appears to have been cut and then allowed to silt up naturally, with no recorded evidence for re-cutting that might provide evidence of a secondary reoccupation of the camp. Evidence in the form of pottery has now tentatively suggested that the camp may be related to the Antonine occupation. It was not possible unambiguously to link any of the archaeological features identified within or adjacent to the camp with its occupation, although it was demonstrated that some of those features were variously of prehistoric, Early Historic, medieval or later and modern origin. The lack of archaeological evidence for intensive or even patterned internal activity associated with the occupation of the camp is naturally disappointing, but may be at least partly the result of truncation caused by post-Roman cultivation regimes.

11.4 Early Historic and medieval evidence

The only confirmed evidence for Early Historic activity found during this project was the probable corn-drying kiln of mid first millennium AD date located just to the west of the Roman camp at Smeaton. A similar feature, though without any evidence for burning, was located just to the north and may belong to the same period, as discussed above (Section 7.8.4). The Early Historic cemetery site of Thornybank, however, lay very close to the road corridor, and was extensively investigated in advance of realigning a gas main to permit the construction of the bypass (Rees 2002). Its northern limit was defined by the excavation and shown to be outside the road corridor.

Small quantities of medieval pottery were recovered from topsoil during fieldwalking, from the upper fills of some of the prehistoric features and from the upper layers of the Roman camp perimeter ditch. They are likely to be related to manuring

activity and demonstrate that the land continued in agricultural use during this period.

Lines of pits which appear to respect the line of the western Roman ditch at Smeaton could well belong to this broad period of activity, although none produced any dating evidence and they could be of any date from the Roman period onwards.

11.5 *The post-medieval landscape*

Study of the documentary evidence was carried out as part of the 2006 excavations to provide a historical background to the Salter's Road area of Newfarm and the Smeaton brick and tile works. This has shown that the 18th- and 19th-century landscape in this part of Midlothian was intimately connected with the large-scale improvements, garden design and industrial entrepreneurship of the local aristocracy, most notably the Duke of Buccleuch.

The parkland associated with the 18th-century Dalkeith House was not directly investigated as part of this project, but parts of the surrounding walls affected by the road construction were recorded. The study revealed areas of patched and rebuilt walling showing continued maintenance since their original construction. An ornamental seating area was uncovered, which would have provided panoramic views across the park. Management of livestock was provided by the wall itself, but also by structures such as the Castlesteads Plantation boundary, which was shown to be similar to a ha-ha in construction.

An association between the possible soakaway which cut the stone-paved area at Castlesteads and the formal gardens at Castlesteads House has been suggested. However, the plan of 1753 shows that the house and gardens were located further to the north than the present house and, based on the position of the river, the stone-paved area lay close to or within a trackway which separated the Castlesteads estate from 'Edmundstoun Ground' to the south. It could well have been a post-medieval drainage feature, but is unlikely to be directly associated with the formal gardens and perhaps had an agricultural function. The original Castlesteads was marked on a map of 1828 (Sharp, Greenwood & Fowler 1828), as was the new building, but by the Ordnance Survey map of 1854 the former was just a clump of trees, and the latter was marked as Castle Steads.

A ditch identified at the ring-grooves site may be part of a field boundary of post-medieval date. The line of the present boundary appears to have been established at some point in the early 19th century, based on map evidence, and this may well be the original ditch delineating an area of woodland to the west.

Traces of rig and furrow were identified at both the pit alignment site and the Roman camp. At the pit alignment it was clear that the furrows ran on a different axis, respecting the present land divisions rather than the earlier ones. Conversely, at the

Roman camp, it appeared that the perimeter ditch remained as a hollow when the furrows were cut, and that it had continued in use as a boundary for many centuries. The continued use of Roman ditches within late and post-medieval field systems has been demonstrated at other sites, and lines of trees shown on 18th- and 19th-century maps of the area suggest that this phenomenon may also have occurred at Smeaton.

A small building excavated at Newfarm was shown to have two phases of construction. Historical evidence suggests that it was probably inhabited by a string of workers providing labour for agricultural or industrial concerns in the vicinity. Nearby was a large boundary ditch which contained finds contemporary with the occupation of the building.

Nineteenth-century industry around Smeaton and Fordel Mains was represented on the bypass route by Smeaton brick and tile works and Fuffet coal pit. Neither site was well documented at the time of excavation and work as part of this project has shown that archaeological investigation can add significantly to our knowledge of sites like these. Their presence illustrates that the land use in the area, although still largely agricultural in nature, now included small-scale extractive and manufacturing industries, most of which declined within a relatively short period of their establishment.

Post-medieval pottery, glass and clay pipe fragments were recovered from several areas along the route of the bypass during the evaluation. Like the medieval wares, these are most likely a background scatter related to manuring.

11.6 *Conclusions*

Fieldwork along the proposed route of the Dalkeith Northern Bypass has provided us with a sample of the historic environment in this part of Midlothian, albeit in a narrow and not necessarily representative transect which was chosen through mitigation to avoid as much potential archaeology as possible. It has shown that there was activity in the area from the Neolithic period onwards. The greatest concentration of remains was to the west side of the River Esk, where there appears to have been intensive activity during the first millennium BC, including establishment of enclosed and unenclosed settlements and organisation of the landscape for agricultural – and possibly less prosaic – purposes. Onto this structured landscape, the Roman army imposed a large camp on a new alignment. Although temporary in nature, it was to determine the orientation of field boundaries in the immediate area for many centuries to come. Despite this, knowledge of the site had been lost by the 19th century and it does not appear on any maps. By this time the largely agricultural and estate-managed landscape was developing to incorporate new industries, still largely under the control of the local landlords,

generally small-scale and ultimately doomed to failure. By the 20th century, the area was once again predominantly arable and pastoral land, thus allowing the discovery of prehistoric and

Roman remains through aerial photography and, subsequently, furthering our knowledge of archaeology in Midlothian through these and other recent excavations.