Excavation of pits containing decorated Neolithic pottery and early lithic material of possible Mesolithic date at Spurryhillock, Stonehaven, Aberdeenshire

Derek Alexander* with contributions by T G Cowie, B Finlayson & C Clarke

ABSTRACT

This report describes a number of pits and a linear feature excavated in advance of road realignment at Spurryhillock, Stonehaven, close to the scheduled cropmark site at Farrochie. The work was commissioned by Grampian Regional Council Roads Department. The remains of a shallow curvilinear ditch and eight pits were recovered in one area which produced evidence for possible Mesolithic and Neolithic activity. In another trench a number of truncated pits with no associated artefacts were recorded.

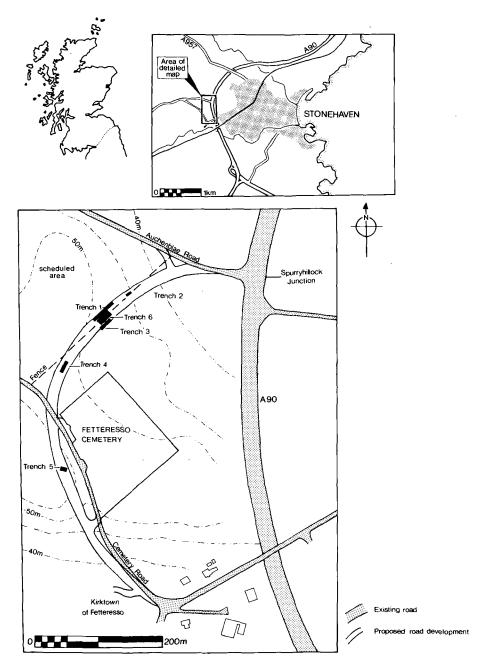
INTRODUCTION

The Centre for Field Archaeology (CFA) was commissioned by the former Grampian Regional Council Roads Department in 1993 to undertake an archaeological evaluation in advance of the realignment of an unclassified road connecting Auchenblae Road and Cemetery Road, west of the Spurryhillock Junction on the A90 Aberdeen–Stonehaven Trunk Road (illus 1, NGR: NO 852 861). This loop road impinged on the south-eastern part of a scheduled cropmark complex which appears to represent the remains of an open settlement thought to be of later prehistoric date (illus 1 & 2). A further cropmark site, a ditched enclosure, was identified on Beattie's Hill by Grampian Regional Council's Archaeology Service but this had been destroyed by previous quarrying.

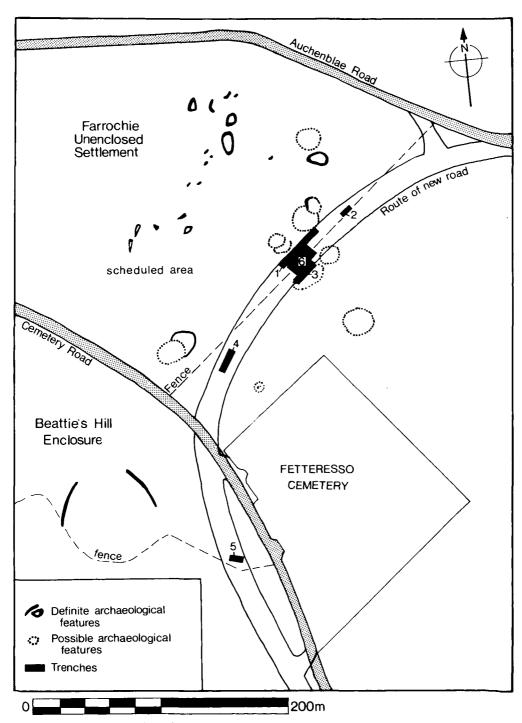
EXCAVATIONS

Six trenches were opened and stripped of topsoil by machine (illus 2). Trenches 1–4 and 6 had deep topsoil (0.3–0.5 m deep) which overlay an interface between the topsoil and the subsoil, mixed by earthworm and root activity. Earthworm activity continued down into the underlying subsoil. The subsoil in these trenches consisted of a fine orange sand. The topsoil was thinner (0.2 m deep) in Trench 5, on Beattie's Hill, and lay directly above a truncated subsoil, which contained pockets of gravel within the orange sand. Archaeological remains were discovered only in Trenches 1, 5 and 6.

^{*} Centre for Field Archaeology, University of Edinburgh, 12 Infirmary Street, Edinburgh EH1 1LT



ILLUS 1 Location plan. (Based on the Ordnance Survey map © Crown Copyright and information from Grampian Regional Council Roads Department)



ILLUS 2 Cropmark sites and trench positions

TRENCHES 1 & 6

Pit with flints and Mesolithic radiocarbon date

A large pit within Trench 6 (illus 3) was 2.3 m long, 1.78 m wide and survived to a depth of 1.35 m. It contained at least 10 clearly identifiable layers of alternating sand and charcoal (illus 4). suggesting that it had been left open for some period of time and had filled up slowly. The lowest charcoal deposit was the thickest and contained large, unabraded lumps of charcoal, implying that it had not been greatly weathered before deposition. The upper charcoal layers were less concentrated and contained smaller pieces of charcoal, perhaps indicating that these were the result of subsequent inwashing. The irregular form of the pit and the gradual accumulation of its upper fills suggest it may have been a natural rather than a man-made feature, possibly a treethrow hole, though its well-defined edges argue against this interpretation. Apart from a single flint blade (SF 15) recovered from the topmost fill, close to the north-eastern side, no other artefacts were found within the pit. However, another two flint blades (SF9 & 12, illus 5) were found in close proximity to the pit in the interface deposit between the topsoil and subsoil.

The chipped stone

B Finlayson

Nine pieces of chipped stone (including two flints from close to Pit 619) were recovered from Trenches 1 and 6. Eight are of flint (illus 5), while the remaining piece, possibly not worked, appears to be of Southern Uplands chert (not illustrated).

The dominant technique employed appears to have been for blade manufacture. Of the eight flint pieces, four are blades (SF 9, SF 11, SF 12 & SF 15). Of the remaining flakes, one (SF 4) may be a blade segment. The possible blade segment (SF 4) appears to be a spall, possibly from a micro-burin type technique. This, combined with the predominance of blades suggests that the material may be Mesolithic in date.

Palaeoenvironmental results

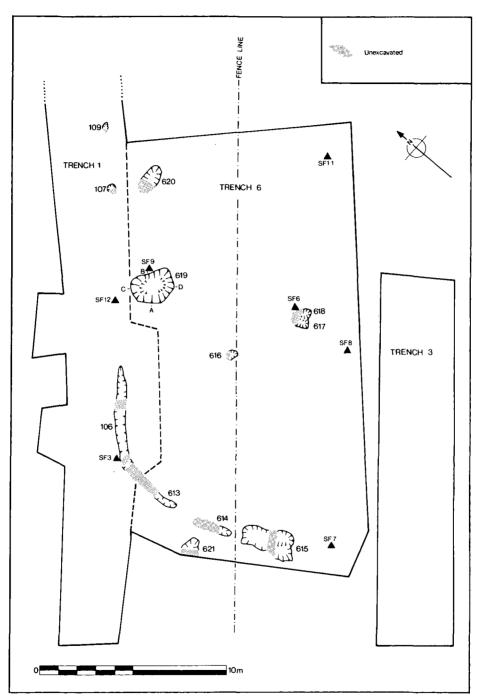
C Clarke

Two samples from the lowest charcoal-rich lens in Pit 619 were processed (Samples 12 & 16). Sample 16 consisted of 44.8 g of charcoal collected during the excavation; Sample 12 consisted of 44.1 g of charcoal recovered from wet sieving. The charcoal in both samples was examined and identified by Anne Crone (AOC (Scotland) Ltd) and found to comprise 100% slow-grown Quercus (oak). Sample 12 was sieved for both charcoal and charred macroplant remains. The vast majority of the flot consisted of charcoal; however, some unidentified small charred macroplant remains were also discovered. To assess the presence and quality of palynomorphs from the pit, two samples were processed and examined but pollen was not found to be abundant in either sample. The samples were therefore considered as palynologically barren and no further work was undertaken.

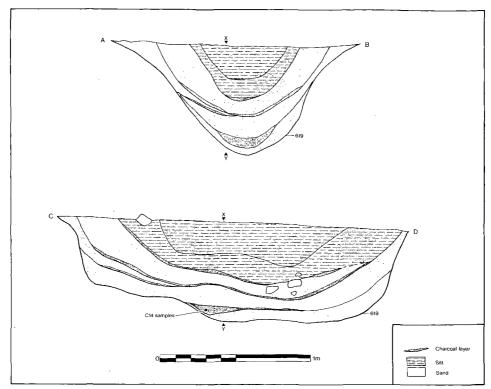
Radiocarbon dates

The two charcoal samples identified above (Samples 12 & 16) were submitted to Beta Analytic Inc, Miami, Florida, for standard radiocarbon dating and produced the following results:

Lab no	Material dated	BP	δ^{13} C‰
Beta-73552	oak charcoal from Pit 619	5860 ± 70	$-25 \\ -25$
Beta-73553	oak charcoal from Pit 619	5700 ± 70	



ILLUS 3 Plan of Trenches 1, 6 & 3



ILLUS 4 Sections of Pit 619

The calibrated results from these samples produced dates of 4720 to 4370 cal BC, and 4910 to 4540 cal BC (two sigma 95% probability, following Stuiver et al 1993). Both dates establish that the lowest charcoal-rich fill of Pit 619 is late Mesolithic in date, even allowing for the possibility that the slow-growing oak could produce an 'old wood' effect and thus give a slightly earlier determination than the date of deposition.

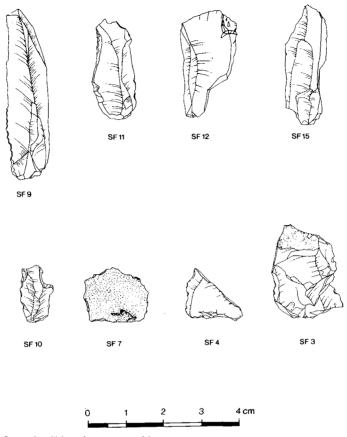
PIT CONTAINING SHERDS OF DECORATED NEOLITHIC POTTERY

Pit 107, with a sandy loam fill, was 0.7 m wide by 0.15 m deep. It was found to contain two sherds of Neolithic pottery (SF 1 & 2). The first of these (SF 1) is a featureless wall sherd and will not be discussed below. A further sherd, broken into several pieces (SF 8) was found during the removal of the interface layer between the topsoil and the subsoil in Trench 6.

The Neolithic pottery sherds

T G Cowie

The rim sherd (illus 6, SF 2) is of particular interest: the upright upper portion or collar, and shallow, flattened form of the lower portion are characteristic of the so-called Unstan bowls, as are the technique and layout of the decoration, which, typically, is restricted to the collar (Henshall 1972, 177–9). While differences in definition exist (cf Kinnes 1985, 23), such bowls form the most distinctive and easily recognizable component of earlier Neolithic ceramic assemblages in Orkney. Some relationship to the Neolithic pottery

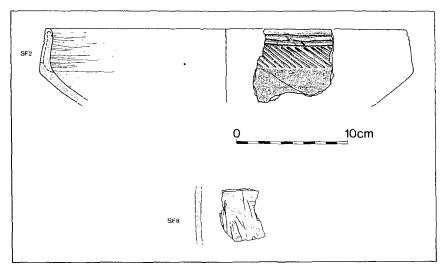


ILLUS 5 Chipped stone assemblage

of the Western Isles is also accepted (McInnes 1969) and this may be clarified in the light of current work on the large domestic assemblage from Eilean Dhomnuill, Loch Olabhat, North Uist (Armit 1992). Radiocarbon dates, presented in summary form by Kinnes (1985), suggest a currency for the Unstan style ranging from at least the mid fourth millennium to the earlier third millennium BC.

Unstan bowls are known in small numbers in north-east Scotland, specifically from Urquhart in Moray and Easterton in Aberdeenshire (Henshall 1983, 30). The presence of distinctive decorated biconical vessels from Balbridie (Ralston 1982, 240–2, illus 1) has led to its inclusion in the list of sites producing pottery in the Unstan style by Kinnes (1985, 48); an ascription confirmed by recent reassessment of the Balbridie assemblage (Cowie 1993, 17–18). The new find from Spurryhillock thus extends the east coast distribution of this distinctive bowl form, and shows at a stroke just how incomplete our picture of Neolithic ceramics in north-east Scotland still remains. While there may well have been an Unstan component (perhaps with a western rather than necessarily a northern background) the background and chronology of decorated Neolithic pottery in the region is far from clear.

The wall sherd recovered from the mixed topsoil/subsoil deposit in Trench 6, merits a brief mention (illus 6, SF 8: joining fragments not illustrated): superficially, the sherd appears to have been decorated with a series of fine incisions, but closer examination of these under the microscope suggests that the markings may be the result of post-depositional damage. This doubt arises partly because the scratches appeared to be soil-free whereas the remainder of the surface of the sherd was covered with a film of soil, and partly because the



ILLUS 6 Neolithic pottery

bases of the incisions appear to be glossy and possibly recently scored. Although the Neolithic date of the sherd is not in doubt, the question of this 'ornamentation' must remain unresolved.

OTHER FEATURES

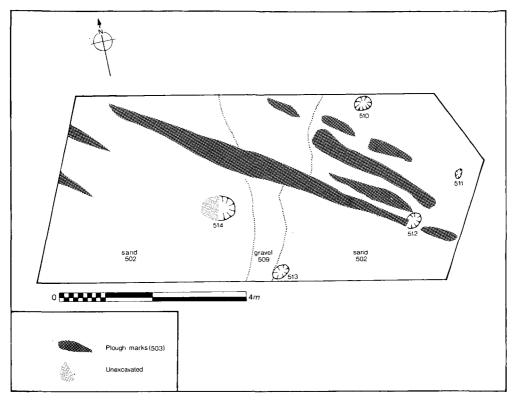
In addition to the pits described above, a number of other features in Trenches 1 & 6 were recorded. These included a small pit (Pit 109: illus 3) containing no artefacts; a curvilinear ditch (Feature 106/613: illus 3) which extended from Trench 1 to Trench 6; a short ditch segment (Feature 614) in Trench 6; and a large modern pit (Feature 615), also in Trench 6. Five small, shallow pits were also examined (Features 616, 617, 618, 620 & 621: illus 3) but without yielding significant information. The only artefacts of note from any of these features were a flint flake (SF 3: illus 5), found by the edge of the longer ditch (Feature 106/613); and two sherds of modern glass from the fill of Pit 615.

TRENCH 5

Trench 5 was positioned in the area to the south-west of Fetteresso Cemetery, above the break of slope, and close to the former site of a cropmark enclosure on Beattie's Hill, which had been previously destroyed by quarrying. This trench measured c 10 m long and 4 m wide (illus 2). Five pits of differing depths, widths and fills were found, although their date and function remain unknown. A small number of charcoal flecks and fragments of burnt bone were recovered from the top of fill (004) in Pit 510 (illus 7). Due to the shallower depth of the topsoil in this trench, the subsoil was scored by modern plough and, possibly, tyre marks.

CONCLUSION

Although there are a number of known Mesolithic sites along Deeside, north of Stonehaven, these consist mostly of lithic scatters which are notoriously difficult to date (Wickham-Jones 1994, 64; Kenney 1993). A habitation site was excavated at Nethermills, Crathes, but remains



ILLUS 7 Plan of Trench 5

unpublished (Kenworthy 1981). Further north in the Ythan valley at Little Gight a small flint assemblage was recovered from field walking and excavation, and certain aspects of the technology are indicative of a Mesolithic date (Baird & Finlayson 1994). The Spurryhillock dates are the first published Mesolithic dates obtained from this part of north-east Scotland. The location of the cropmark site at Spurryhillock on top of a slope above a former marshy area, which may have been a small loch during the later Mesolithic period, would have provided an ideal settlement site for hunter-gatherers. The lithic assemblage, although small, consists mainly of finished blades suggesting that they were used on the site, perhaps for a particular purpose.

The function of the large pit which produced a Mesolithic radiocarbon date remains unclear. The charcoal was unabraded and must have come from a fire or fires in the immediate vicinity. The homogeneity of the charcoal, all oak, suggests that it may be derived from either a single tree or part of a tree, and was not the result of a mixed bonfire. Unfortunately no pollen survived which would give an indication of the constituents of the surrounding mixed woodland at this time, but the identification of oak charcoal corresponds well with the general pollen evidence, which suggests that at c 3000 BC the area lay at the northern limit of a mixed oak/hazel/elm woodland (Tipping 1994, 12, illus 3). It remains impossible to determine whether the oak charcoal represents the remains of a collapsed and burnt structure in the immediate vicinity, fuel from a camp fire, or simply the result of forest clearance. Given the well-defined edges of this feature, it is considered unlikely to have been a tree-fall hole, and the oak, therefore, is unlikely to represent a burnt tree bole. Charcoal from pits at Nethermills was also dominated by oak (Boyd

& Kenworthy 1992, 16) as was the charcoal from Dalladies early long barrow (Piggott 1974) and a Neolithic house at Balbridie (Fairweather & Ralston 1993, 315).

The small assemblage of Neolithic pottery from Spurryhillock is a significant addition to our knowledge of early prehistoric activity in the area and has extended southwards the known distribution of pottery in the Unstan style. The juxtaposition of Mesolithic and early Neolithic cultural material on many sites in Scotland has recently been discussed (Armit & Finlayson 1996). It is suggested that the early Neolithic regional pottery styles could be seen as part of a range of material cultural forms that reflect the piecemeal adoption of elements of the 'Neolithic package' by indigenous hunter-gatherer groups, without necessarily indicating the adoption of farming and permanent settlement at the same time. On the present meagre evidence, it is not clear whether Spurryhillock fits into this explanation also, or whether the early radiocarbon date, possible Mesolithic blades and Unstan bowl sherds simply represent accidental mixing of relics of different and unrelated periods of activity on the same site.

The proximity of the Spurryhillock finds to the scheduled cropmark site consisting of cresentic and oval features at Farrochie and the lack of any evidence for later prehistoric activity is intriguing, and poses questions as to the nature and chronology of the cropmarks, questions which can be answered only by further excavation.

ARCHIVE

A full archive of the project records has been deposited with the National Monuments Record of Scotland; reproducible elements are deposited with the Aberdeenshire Sites and Monuments Record. The finds have been reported in order that the Treasure Trove Advisory Panel can arrange allocation.

ACKNOWLEDGEMENTS

Thanks are due to the former Grampian Regional Council Roads Department for funding the excavation, in particular Allan Wisely and John Adams for their interest in the project. Thanks are due to Ian Shepherd, Regional Archaeologist, and Ian Armit of Historic Scotland for their comments on the field results, as well as to the various specialists for their reports, and to Anne Crone of AOC (Scotland) Ltd for charcoal identification. Kirsty Cameron (CFA) produced the illustrations, apart from illus 7 which was drawn by Alan Braby.

REFERENCES

- Armit, I 1992 'The Hebridean Neolithic' in Sharples, N & Sheridan, A (eds) 1992 Vessels for the Ancestors. Edinburgh.
- Armit, I & Finlayson, B 1996 'The Transition to Agriculture' in Pollard, A & Morrison, A (eds) The Early Prehistory of Scotland, 269-90.
- Baird, D & Finlayson, B 1994 'A Mesolithic and later flint scatter at Little Gight, Grampian Region', Proc Soc Antiq Scot, 124 (1994), 95-101.
- Boyd, W E & Kenworthy, J B 1992 'The use of wood as a natural resource at a Scottish Mesolithic site', Glasgow Archaeol J, 17 (1991–2), 11–23.
- Cowie, T G 1993 'A survey of the Neolithic pottery of eastern and central Scotland', Proc Soc Antiq Scot 123 (1993), 13–41.
- Fairweather, A D & Ralston, I B M 1993 'The Neolithic timber hall at Balbridie, Grampian Region, Scotland: a preliminary note on dating and plant macrofossils', Antiquity, 67 (1993), 313-23.

Henshall, A S 1972 The Chambered Tombs of Scotland, vol 2. Edinburgh.

Scot, 115 (1985), 15-57.

Henshall, A S 1983 'The Neolithic pottery from Easterton of Roseisle, Moray', in O'Connor, A & Clarke, D V (eds) From the Stone Age to the 'Forty-Five: studies presented to R B K Stevenson. Edinburgh,

Kenney, J 1993 The Beginnings of Agriculture in Great Britain: a critical assessment. Unpub PhD, Univ Edinburgh.

Kenworthy, J B 1981 Nethermills Farm, Crathes, Excavations 1978-80, Interim Report. Unpub interim rep. Kinnes, I A 1985 'Circumstance not context: the Neolithic of Scotland as seen from outside', Proc Soc Antiq

McInnes, I J 1969 'A Scottish Neolithic pottery sequence', Scot Archaeol Forum, 1 (1969), 19-30.

Piggott, S 1974 'Excavation of the Dalladies long barrow, Fettercairn, Kincardineshire', Proc Soc Antiq Scot, 104 (1971–2), 23–47.

Ralston, I B M 1982 'A timber hall at Balbridie Farm', Aberdeen Univ Review, 168 (1982), 238–49.

Stuiver, M, Long, A, Kra, R S & Devine, J M 1993 'University of Washington Quaternary Isotope Lab Radiocarbon Calibration Programme, rev. 3.0.3', Radiocarbon, 35 (1) (1993), 215-30.

Tipping, R 1994 'The form and fate of Scotland's woodlands', Proc Soc Antiq Scot, 124 (1994), 1-54. Wickham-Jones, CR 1994 Scotland's First Settlers. London.

This paper is published with the aid of a grant from Historic Scotland