Bronze Age burials at Gairneybank, Kinross-shire

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ABSTRACT

Rescue excavation in 1970 resulted in the recording of three cist burials, one associated with a bowl and a flat riveted knife-dagger and another with an accompanying Food Vessel. Two other finds, a Beaker and a Food Vessel, have been rescued from the same area and clearly represent further burial deposits in a small cemetery of early second millennium BC date.

INTRODUCTION

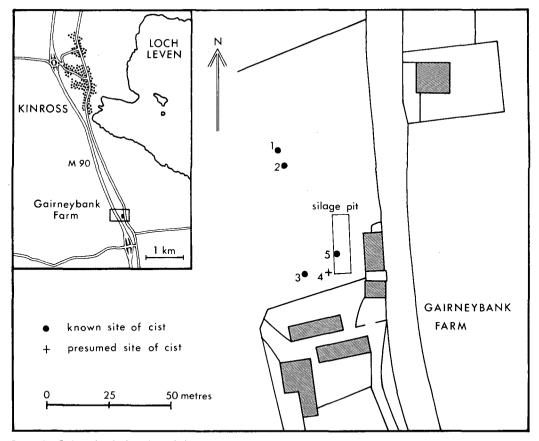
In October 1970 three cists were revealed during earth-moving operations connected with the construction of the M90 motorway on the farm of Gairneybank, Kinross-shire, about 3 km south of Kinross, now in the Perth & Kinross District of Tayside Region (NGR: NT 127 988); the then National Museum of Antiquities of Scotland was informed of the discovery and a small rescue excavation was immediately undertaken. The cists, which were disposed in an approximately straight line at distances of 18 m, 60 m and 66 m respectively north of the farm (illus 1), had been inserted into a low natural gravel ridge. After the initial discovery, the drivers of the earth-moving machines remembered that two areas of unusually large stones had been encountered between Cists 2 and 3, and it is possible that these represented the remains of further cists; it is equally possible, however, that the stones were of natural origin. Several days after the excavation of the first three cists, the bulldozers disturbed, and subsequently destroyed, a fourth, situated 8 m east of Cist 3, but a substantial part of a Beaker was rescued. This cist (4 on illus 1) was constructed of four slabs and a capstone and had been filled with gravel; no skeletal evidence was recovered but the Beaker is described below. Also included in this report is a description of a Food Vessel which was found in another cist situated 14 m north-east of Cist 3 and some 8 m north of the approximate position of Cist 4; this cist (5 on illus 1) was found during the construction of a silage pit about 1960, and the vessel is now in Kirkcaldy Museum. The finds made in 1970 have been deposited in the Royal Museum of Scotland.

DESCRIPTION OF CIST BURIALS 1-3 (illus 2)

Cist 1 measured 1×0.6 m, with its long axis aligned approximately ENE and WSW, and had been set up in a pit dug into the natural gravel (illus 2). The sides were sandstone slabs and

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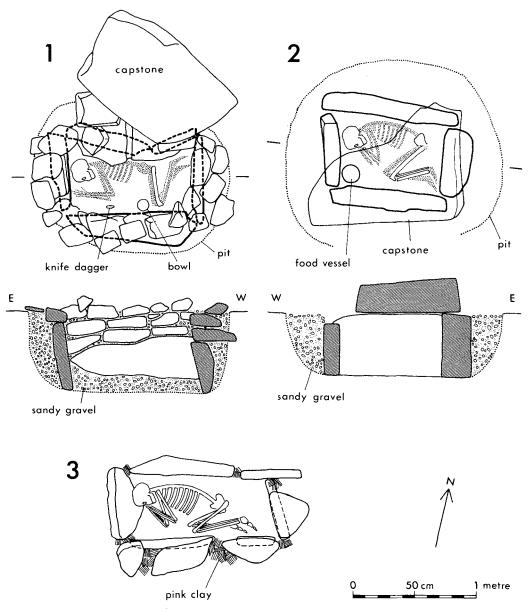
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ILLUS 1 Gairneybank: location of cists

their height had been increased by the use of up to three courses of dry-stone walling. The capstone, which measured 1.3×0.9 m and up to 0.25 m in thickness, had been dislodged by the heavy machinery and this in turn caused the displacement of the two stones on the south side. This cist contained an inhumation burial, lying on its side facing south, with its arms and legs bent, accompanied by a bronze knife-dagger and a small pottery bowl (finds cat. nos 1–2, illus 3-4); the skeletal remains, described in full in the microfiche report (see D A Lunt & A Young, fiche 1: B1-B8), were very poorly preserved but two teeth suggest a person aged about 32 at time of death. This dental evidence provides the only indication of the age of the individual in Cist 1, whereas, in Cists 2 and 3, estimations of age were forthcoming from both bones and teeth, with approximate corroboration. A radiocarbon date of 1520 bc±80 (GU-1118) has been obtained from analysis of the collagen of the bone. The edge of the pit appeared to be level with the tops of the slabs of the cist; the capstone would therefore have been above ground-level at the time of burial and must originally have been covered by a barrow, but no trace of this is visible on the relevant air photographs. On the south side of the cist, the position from which the capstone had been removed was clearly visible; there was a distinct setting of small stones placed round the mouth of the cist.

Cist 2, aligned approximately east and west and constructed of four massive sandstone slabs, measured 0.8×0.55 m and 0.5 m in depth (illus 2). Part of the capstone had been hit by



ILLUS 2 Gairneybank: plans of cists

a bulldozer and the stone itself had been levered out of position; it was a substantial slab of sandstone measuring 1.25×0.9 m and up to 0.3 m in thickness. The cist contained the crouched inhumation burial of a person aged between 18 and 25 lying with its back to the north side of the cist (report on microfiche); a complete Food Vessel had been placed to the left of the skull (cat. no 3, illus 3). The skeleton was best preserved where it had not been covered by any of the sand that had filtered into the cist. The knees survived, but the feet, thigh and pelvic area in the east half of the cist were partly surrounded by sand and had been destroyed. The

pelvic area, back-bone and skull were indicated only by a dark brown stain. A radiocarbon date of $1525 \text{ bc} \pm 70 \text{ (GU-}1119)$ was obtained by analysis of the collagen of the bone. At the edge of the cist there was a patch of charcoal which had been cut through when the cist was built. As the original ground surface is represented by this level, the capstone would have protruded above ground-level if it had not been covered by a barrow.

Cist 3 had been less carefully built than the other two, and several of the slabs had been disturbed in the course of the discovery (illus 2); it was aligned ENE and WSW and measured 1.1×0.5 m. Each side was composed of two slabs and there were single end-slabs. The cist was about 0.4 m in depth and on the south side and east end the height was made up by a number of flat slabs round the edge of the cist. The interstices between the slabs had been luted with pink clay, and the capstone, which had been removed before the excavation, had also been sealed by clay. There was no sign of the pit in which the cist had presumably been constructed. The cist contained an unaccompanied inhumation, possibly of a young man aged about 21 years, lying with its back to the north side of the cist and with the head to the west (report on microfiche). The lower end of the right humerus, the right radius and ulna, probably from a pig, suggest that a substantial joint of pork accompanied the burial. Although there were no grave goods, in view of the proximity of the other two burials a radiocarbon date was obtained by analysis of collagen from the bones in order to ascertain the possible contemporaneity of the group; the resultant date is $1625 \text{ bc} \pm 70 \text{ (GU-1120)}$.

Pig bones have been recorded with burials of all periods: early examples include the pig phalanges found in a cist in front of the chambered cairn at Dalineun, Lorn, Argyll (Ritchie 1972, 52); Cist 1, Aberdour Road, Dunfermline (Close-Brooks et al 1972, 123, 132), where at least four fore limbs from three animals were represented; and a cist at Muirhall, Perthshire (Discovery Excav Scot 1970, 36; MS in NMRS) in which a radius and ulna and the distal end of the humerus were present. The recent excavation of a short cist at Grainfoot, East Lothian, revealed the disturbed remains of two human burials as well as the humerus, radius and ulna of the left fore limb of a pig, 'almost certainly . . . the deposition of a joint of pork with the inhumation'. Radiocarbon dates indicate that the date of this burial lies between 1305 and 940 BC (Discovery Excav Scot 1990, 30), while the presence of pig bones in the grave from Burnmouth, Berwickshire, suggests that the practice continued at least into the Iron Age (Craw 1924, 143–4).

ARTEFACTS

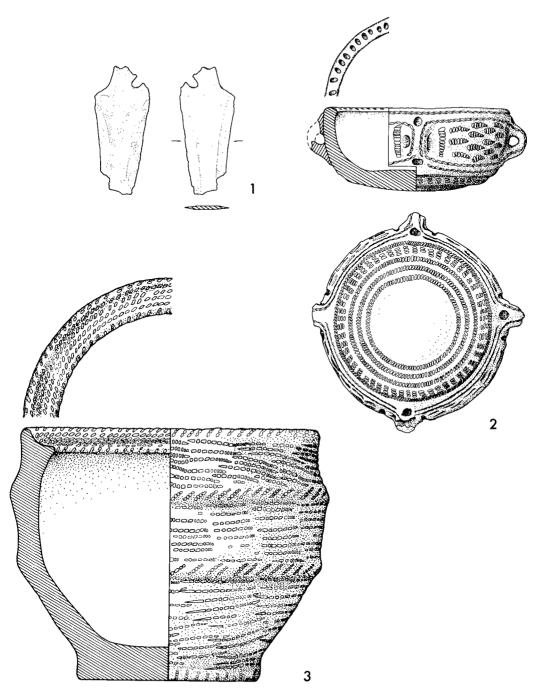
CATALOGUE (illus 3–6)

Cist 1

1 Bronze knife-dagger, missing much of butt and tip of blade; out of what originally would have been an arrangement of three rivet-holes, one is fairly well preserved, but the remaining two are represented only by vestiges of their original rims, visible within the otherwise damaged edges of the butt; omega-shaped hilt-mark, clearer on one face than the other; W-shaped mark possibly left by sheath visible on one face (see illus 4); wide edge bevels at each side of the blade expanding in width towards tip; dark green patina with some pitting and considerable corrosion (the drawing shows the object shortly after discovery, since which time the most vulnerable corroded edges have suffered some further attrition).

Present L 67 mm; max W 28.5 mm

National Museums of Scotland (NMS) cat no: EQ 796

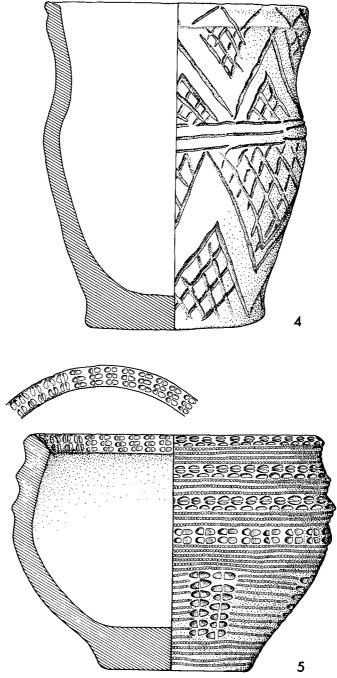


ILLUS 3 Gairneybank: 1–2: knife-dagger and bowl from Cist 1; 3: food vessel from Cist 2



ILLUS 4 Gairneybank: knife-dagger from Cist 1. The possible W-shaped sheath-mark is visible just above the museum catalogue number

2 Small bowl; body cracked but almost intact apart from one flaking patch; two of the lugs damaged and incomplete; basic form open and unshouldered with four small lugs, horizontally perforated and set approximately equidistantly around the sides; flattened, slightly sagging base. Well made; exterior light brown (7.5 YR 6/4) or greyish-brown (10 YR 5/2) with a few light orange patches; interior grey (10 YR 5/1). Decoration carefully executed; the flattened rim has a line of close-set bird-bone impressions; a horizontal line of impressed twisted cord encircles the vessel immediately below the rim; below this, further lines of impressed twisted cord run between and over the handles, so as to



ILLUS 5 Gairneybank: 4: beaker from Cist 4; 5: food vessel from Cist 5





ILLUS 6 Gairneybank: the bowl from Cist 1

form approximately oval panels; the panels are filled with maggot impressions applied horizontally except by the handles, which are flanked by vertical maggot impressions; there is an impressed dot at the top and bottom of each handle, apart from one which lacks the dot at the bottom; the base has a central reserved space, surrounded by four concentric circles of continuous whipped cord impressions, with a circle of vertical maggot impressions between the two outer circles.

H 44 mm; Dia (rim) 96 mm NMS cat no: EO 795

Cist 2

Food vessel: tripartite vase; cracked but almost intact, missing only tiny fragments of rim and part of edge of foot; the rim has a deep internal bevel with a stepped profile; two moulded ridges encircle the body; well-defined stand foot. Hard fabric with profuse grey-brown stone grits visible particularly on internal surface; external surface pinkish-grey and very pale brown (7.5 YR 6/2 & 10 YR 7/4), internal surface light grey (10 YR 7/2). Around the internal bevel of the rim, four lines of twisted cord impressions, apparently worn or smudged, and on the inner edge of the bevel a series of oblique impressions applied with comb or cord; exterior decorated all over, mostly with impressions of a rectangular-toothed comb; on the outer edge of rim and on the two ridges, short oblique impressions, probably all of whipped cord (but on rim possibly applied with toothed comb); similar short impressions, arranged vertically, encircle the foot of the vessel; all over the rest of the body, the decoration is composed of toothed comb impressions made up of short lengths up to 35–40 mm long: on the neck, these form oblique lines; in the central zone, horizontal lines; and on the lower body, rather more random horizontal or oblique lines.

H 132 mm; Dia (rim) 156 mm; Dia (base) 94 mm

NMS cat no: EQ 797

Cist 4

4 Beaker; restored from sherds; the rim has a slight internal bevel; encircling the upper part of the neck, 12 mm below the lip, is a low moulded cordon; concave neck, comparatively straight lower body; the rather uneven base has a slightly projecting foot. Hard fabric; reddish-brown exterior (5 YR 5/3), dark grey interior (5 YR 4/1). The decoration is all boldly incised: a zigzag line encircles the narrow space between rim and cordon; below this the ornament comprises two main registers separated by three horizontal lines encircling the shoulder, the horizontal lines themselves being made up of a series of short strokes; the patterns in both the upper and lower portions of the vessel are very similar, in each case being composed of a series of alternate pendant and upright triangles filled with cross-hatching and separated by reserved zigzag. In the upper register, however, the reserved space is itself bisected by an incised zigzag line.

H 170 mm; Dia (rim) 138 mm; Dia (base) 94 mm

NMS cat no: EQ 798

Cist 5

5 Food vessel: globular bowl; complete, wanting only a small area of the external surface of the base, and in generally sound condition apart from a number of cracks, and some wear of the lower body surfaces and basal angle. The rim is bevelled both internally and externally; the upper portion of the vessel is divided into concave zones by a pair of horizontal mouldings, while the lower body curves convexly to the base from the rounded shoulder; hard, profusely gritted fabric; external surface smoothed but grits prominent in interior; external surfaces light brownish-grey/grey (10 YR 6/2 and 10 YR 5/1), internal surface light grey (10 YR 7/2). The decoration includes comb and bone-end impressions, and roughly D-shaped impressions applied with some form of spatulate tool. Internal bevel: around most of its circumference, three rows of bone-end impressions applied horizontally, but in one arc there are a number of somewhat smudged vertical impressions probably applied with a different tool; on the external bevel and on the upper edges of the two moulded ridges there are three rows of horizontal D-shaped impressions, while there are a further two rows around the shoulder (giving the impression in places of poor-quality false-relief); the spaces between these sets of jabbed impressions are occupied by continuous horizontal lines composed of toothed-comb impressions

arranged in a set of four in the neck and in two sets of three on the lower edges of the ridges; immediately below the shoulder and immediately above the base there are respectively six and five horizontal lines of combed impressions; the space between these sets of continuous lines is occupied by a panelled arrangement of sets of horizontal comb impressions alternating with double columns of jabbed impressions.

H 123 mm; Dia (rim) 150 mm; Dia (base) 78 mm

Kirkcaldy Museum acc no: 1960.16

DISCUSSION OF ARTEFACTS

Metalwork

The blade from Cist 1 is an example of the category of small riveted blades known as flat riveted knife-daggers, a term enshrined by usage in archaeological literature rather than necessarily a true reflection of their function. They are somewhat arbitrarily distinguished from daggers by their small size, and generally by their straight or slightly curved hilt-marks (Gerloff 1975, 159). The Gairneybank example, however, joins the few British examples of flat riveted knife-daggers with *omega hilt-marks* (*ibid* 166–7, cat nos 296–302, but see also 285 and 295). In particular, mention may be made of the somewhat larger knife-dagger found with a male inhumation at Kirkcaldy, Fife (Childe 1944, 112–14; Henshall 1968, 186–9; Gerloff 1975, cat no 296), and the more fragmentary blade, probably also with an omega hilt-mark, found in a large cist at Barnhill, Broughty Ferry, Angus, together with two decorated sheet-gold discs (Hutcheson 1887; Gerloff 1975, cat no 285).

Attention may also be drawn here to the W-shaped mark visible on one face of the knife-dagger (see illus 4), tentatively interpreted as a mark left by a sheath although no traces of organic materials survive. If correctly identified, the arrangement may be contrasted with the traces of the hide-covered wooden sheath associated with the dagger from Gilchorn, Angus, where the outline of the upper edge of the sheath appears to have *complemented* the omega-shaped recess at the base of the hilt (Henshall 1968, 178, fig 44).

In reviewing the dating evidence for knife-daggers of the type being discussed, Gerloff concluded that it seemed unlikely that they could be earlier than Wessex culture burials, and that among those, the type occurred with both the Armorico-British and Camerton-Snowshill series graves (Gerloff 1975, 167–8). The radiocarbon date of 1520 bc±80 (GU-1118) from Gairneybank Cist 1, therefore, is in keeping with the conventional date range for the rich series of Wessex graves as a whole.

The knife-dagger throws no light on the possible sex of the inhumation which it accompanied as the type has been found with both male and female burials.

Pottery

Beaker

The beaker from Cist 4 is an example of Clarke's Final Southern (S4) group (1970, 234–44) or Lanting & van der Waals' Step 6/7 (1972, 40–1), although these terms must be seen as a convenient descriptive shorthand rather than a reflection of the vessel's chronological status, particularly in the light of the range of radiocarbon dates obtained by the British Museum from skeletal material associated with beakers (Kinnes et al 1991). While it remains a possibility, there is no reason for presupposing that the Gairneybank beaker represents the earliest vessel among the group from the cist cemetery, as radiocarbon dates demonstrate

considerable overlap in the currency of funerary ceramics (cf Ritchie & Ritchie 1981, 66-7).

Comparable vessels from Fife and beyond have been listed fully by Ian Shepherd in his discussion of the finds from the cemetery at Barns Farm, Dalgety Bay (in Watkins 1982, 103–4). In the present context, brief mention need be made only of the main recurrent features of such beakers: these include the presence of a cordon below the rim (or 'collar' as at Balbirnie (Ritchie 1974, 18)), generally slack form, and carelessly applied incised decoration. The concentration of such beakers in Fife – in several instances associated with comparatively rich dagger graves – has been noted by several writers (eg Clarke 1970, 240–1).

Bowl from Cist 1

The fine bowl from Cist 1 is unmatched in detail among the corpus of funerary pottery from Scotland (illus 3 & 6). While its diminutive size might at first sight invite comparison with accessory (or 'pygmy') vessels, neither the open bowl form nor the decorative scheme of the Gairneybank vessel find comparison among the published material from Scotland (eg Scott 1951, 79–82), with the possible exception of a fine specimen associated with a Collared Urn from Balnakettle, near Fettercairn, Kincardineshire (Donations: *Proc Soc Antiq Scot*, 106, (1974–5), 229). This vessel itself has a decorative scheme without close comparison among the accessory cup series, for – most unusually – the ornament is made up of whipped cord impressions, and, like Gairneybank, includes an arrangement of concentric circles to emphasize the base (illus 7).

Instead, the details of the layout and techniques of decoration of the Gairneybank bowl suggest that its affinities lie rather with Food Vessels. In particular, the concentric decoration on the convex surface of the base, presumably designed to be seen from below or when tilted, recalls the ornate decoration on the base of some Food Vessels – particularly of bowl form (eg Kilmartin Glebe Cairn, Argyll: Clarke, D V et al., 1985, 192, pl 5.27) – and the provision of lugs as an aid to the display of the vessel should not be overlooked in this respect (although whether or not the lugs could have supported the weight of larger vessels is doubtful). The use of a variety of impressed cord techniques is common among Food Vessels while the incorporation of the handles into a decorative scheme composed of oval panels is again reminiscent of the arrangement of the ornament on many Food Vessels with stops or lugs. Nevertheless, the form of the vessel is without close parallel among Scottish earlier Bronze Age pottery, and it is necessary to look further afield for possible parallels.

Dr Alison Sheridan (pers comm) has pointed out that the basic shape of the Gairneybank vessel superficially resembles a somewhat flattened and truncated 'Irish bowl', particularly of the simple smooth-profiled type, and while bowls of this form with lugs are not known, some of the simple bowls from Ireland do have basal decoration (eg Loughloughan, Co Antrim, with concentric grooves: Buick 1902, 165–6).

Attention may also be drawn to the relatively rare, simple, round-bodied, footed (or polypod) bowls with Food Vessel characteristics known from eastern England (Manby 1971, 276–7: especially class 1A). Although somewhat larger and differing in details, the open bowl forms (if one discounts their feet) and the combination of impressed and whipped cord techniques bear some comparison with the Gairneybank vessel: in particular, mention may be made of vessels from Yorkshire such as that from Amotherby (Kinnes & Longworth 1985, cat no UN 112) or Pule Hill (Manby 1971, 275, fig 1.3).

It may be observed that accessory vessels, in particular, often show a marked individuality of form and decoration, and it may be that the Gairneybank bowl was simply a





ILLUS 7 Accessory vessel from Balnakettle Farm, Fettercairn, Kincardineshire

one-off local product, with individual features and of unusual quality – akin to a modern 'studio-piece'. However, its unusual features raise other possibilities: one is that this may be a prestige vessel imported from another region, such as eastern England; that pottery vessels may have figured in exchanges with communities of the east coast of England would not be unlikely, with the distribution of jet necklaces in Angus, Tayside and Fife perhaps providing the most telling evidence of such contacts. Another possibility is that this particular form of vessel may have had a wider currency in contemporary society, but may not as a rule have been consigned to the grave and may thus simply be under-represented in the archaeological record.

Food vessels

The two food vessels from the site require little comment: both are of forms well known among the inventory of food vessels from east/central Scotland, and while precise parallels have not been found for the schemes of ornament, the range of decorative techniques and the manner of their application can be readily matched elsewhere. A number of the other examples of food vessels from Fife have been listed by Shepherd in the report on the pottery from Barns Farm already cited (in Watkins 1982, 99, 106, 110).

The radiocarbon assays obtained from Gairneybank were among the first such dates to be obtained for burials associated with food vessels discovered in Scotland, but as yet they have unfortunately been augmented by only a small number of additional determinations. The opportunity has therefore been taken to tabulate those from east/central Scotland (see appendix).

In summary, Gairneybank forms an important addition to the many small cemeteries recorded from eastern Scotland; its significance is enhanced by an unusual variety of funerary deposits and by the associated radiocarbon dates.

APPENDIX

LIST OF RADIOCARBON DATES ASSOCIATED WITH FOOD VESSEL BURIALS FROM EAST/CENTRAL SCOTLAND

compiled by Alison Sheridan & Trevor Cowie

Reswallie Mains, Rescobie, Angus (cist)	1210 bc±70	N-1238	Discovery Excav Scot 1967, 3; Coutts 1971, 51
Aberdour Road, Dunfermline Fife (cist 3)	1631 bc±40	SRR-292	Close-Brooks et al, 1972, 135
Gairneybank, Kinross (cist 2)	1525 bc±70	GU-1119	see present paper

North Mains, Strathallan, Perthshire (henge: cist burial B)	1540 bc±65	GU-1381	Barclay 1983, 136
Almondbank, Perthshire (cist II)	1606 bc±80	SRR-590	Discovery Excav Scot 1975, 40

The following date provides a terminus post quem for the construction of a cist containing sherds of a food vessel:

Loanleven	$1460 \text{ bc} \pm 50$	GU-2542	Discovery Excav
Perthshire			Scot 1988, 28;
(cist 2)			Lowe forthcoming

The following date can safely be discounted, as being 'impossible . . . to accommodate for a cist with a Food Vessel'

Barns Farm	2746 bc±85	SRR-700	Watkins 1982, 52, 137
Dalgety, Fife			
(cist 1)			

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