

A short cist at Grainfoot, Longniddry, East Lothian

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ABSTRACT

Describes the excavation of a Bronze Age cist containing two inhumations and a deposit of pig bones.

INTRODUCTION

The cist was discovered in 1989 during the installation of a swimming pool inside an old outbuilding at Grainfoot at the west end of Main Street, Longniddry (NT 4419 7606, illus 1). The capstone had been removed, and the east end of the cist disturbed before the workman realized that the feature was a grave. Fortunately the damage to the cist and its contents was minimal. The excavation was arranged and sponsored by Historic Scotland.

THE SITE

A pit had been dug into windblown sand and a short cist inserted. The top of its capstone lay immediately under the floor of the present building. The area around the cist was cleared but no other archaeological features were revealed.

CIST

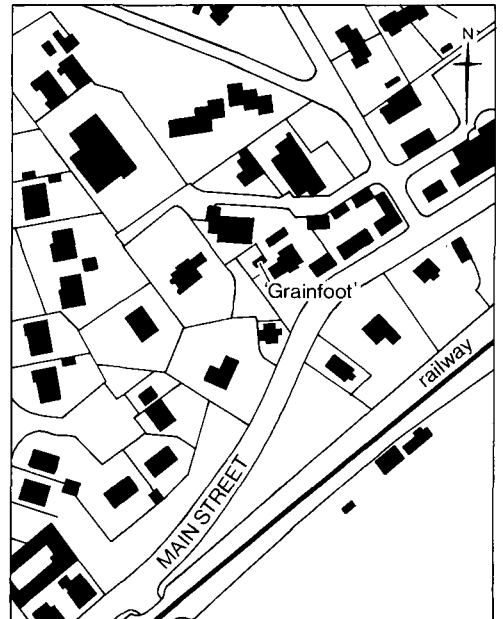
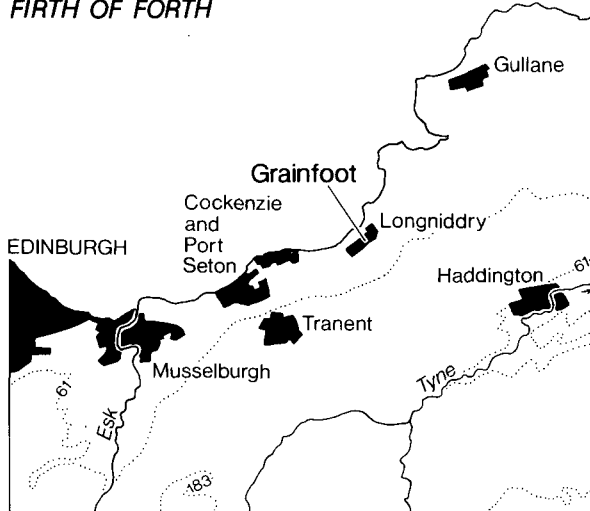
The cist (illus 2), built from red sandstone blocks, comprised four sub-rectangular, flat slabs 0.05–0.15 m thick, which formed a rectangular box 1 × 0.6 m aligned ENE to WSW. The single capstone measured 1.4 × 0.8 m and was 0.05–0.2 m thick. The top of the cist was roughly level but its depth varied from 0.4 to 0.52 m, owing to differences in size of the two side stones. The side stones butted against the end stones of the cist. Gaps in the joints, which resulted from the sub-rectangular shape and the different length of the side stones, were filled with smaller flat stones wedged, vertically, into position. Over the north-east and south-west corners, small flat slabs had probably served the same purpose, sealing gaps between the uneven capstone and the cist.

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GRAINFOOT
LONGNIDDRY
EAST LoTHIAN



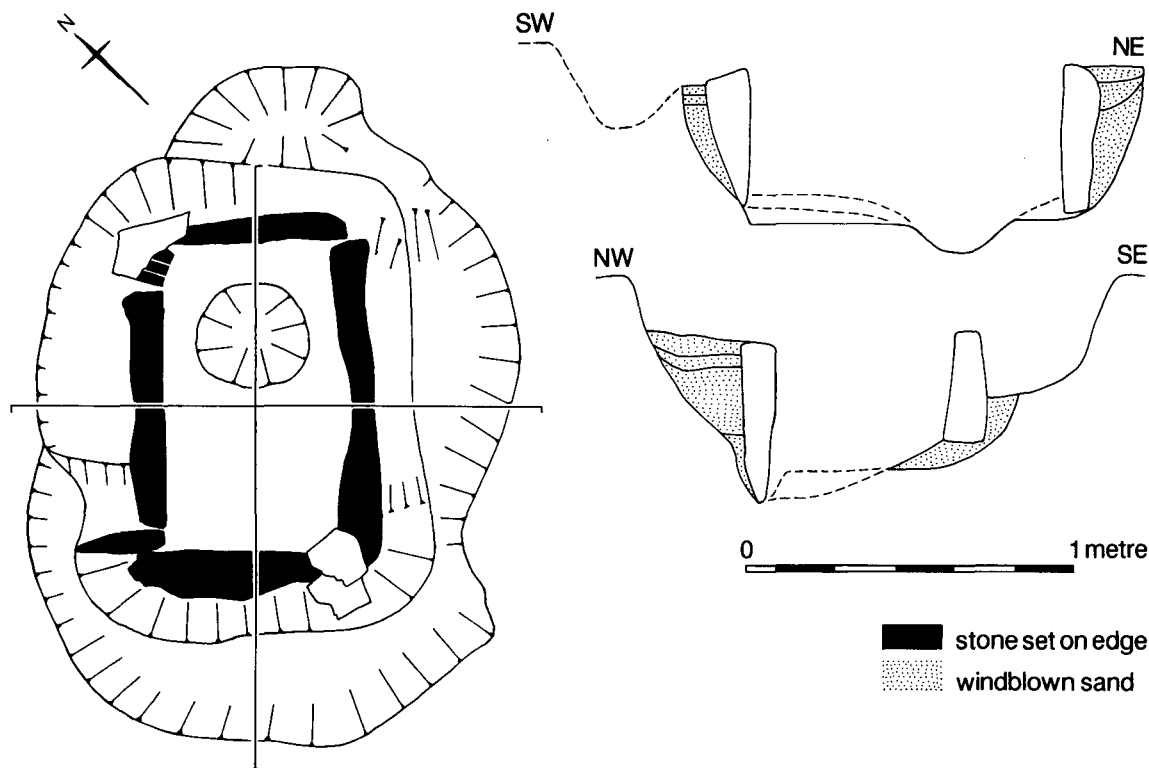
FIRTH OF FORTH



ILLUS 1 Location of Grainfoot excavations

CIST CONTENTS

The cist, which had clearly been disturbed previously (perhaps when the building was constructed in the last century), was filled with a mixed soil containing mortar and wood chips, similar to the deposits found beneath the floor of the building. Most of these deposits had entered the cist some time ago, as demonstrated by a marked difference in fill compactness between recent and previous disturbances. At the base of the cist lay a collection of disarticulated human bones. The skeletal material was incomplete, presumably as a result of the previous disturbance.



ILLUS 2 Plan and sections of the cist

The cist contained the remains of two individuals: an adult male aged 25–40, 5 ft 10 in (1.72 m) in height; and an adult female, aged 45–60, 5 ft 5 in (1.65 m) tall (Lorimer *infra.*). No artefacts were found in the cist but amongst the human bones were a pig humerus, radius and ulna (McCormick *infra.*).

The skeletal material from the cist produced a radiocarbon date of 2930 bp±50 (GU-2762). Using the Belfast calibration curve (Pearson *et al* 1986), there is a 95% probability that the date lies within 1305–940 BC and a 70% probability that it lies between 1255–1065 BC. This places the cist late but comfortably within the existing chronological framework for Scottish short cists.

ANIMAL BONES

Finbar McCormick

A pig humerus, radius and ulna were found among the disturbed human bones in the cist. The pig bones were not radiocarbon dated but they survived in the same condition as the human bones and there is no evidence to suggest that they are of a different date. The bones are those of a semi-mature pig with the proximal humerus and distal radius unfused. The proximal end of the radius was missing. Erosion of the bones precluded measurements.

The three bones were of the left fore limb of a pig. It seems likely that they were in articulation at the time of burial and almost certainly represent the deposition of a joint of

pork with the inhumation. This is not an isolated example of such a practice in Scotland. At Uppermill, Cruden, Aberdeenshire, a cist, discovered in the 19th century, contained the remains of an adult male and a child with an associated Beaker assemblage, and also produced the left humerus and radius of a pig in the same state of fusion as that present in the Grainfoot pig bones (Harman 1977, 90). The deposition of food joints seems occasionally to have formed part of the cremation ritual in Bronze Age Scotland. Burnt sheep bones were found in a cremation pit containing an adult and child at the multiple burial site at Horsbrugh Castle Farm in Peeblesshire (Denston 1974, 57). An Early Iron Age cist at Catch-a-Penny Farm, Burnmouth, Berwickshire, which contained an inhumation with an iron knife and two bronze spoons, also contained the jaws and other bones of a young pig (Craw 1924, 143).

HUMAN BONES (see fiche 1:C1–C7)

Daphne Home Lorimer

The human bones survived in very poor condition. On the basis of the right tibia it could be demonstrated that two individuals were present. The allocation of other bones to the different skeletons could be made with confidence only when two articulating bones, of broken fragments, could be matched. In a few cases bones could be attributed to the skeletons on the basis of size. The age and sex was estimated on the basis of a wide range of characteristics.

Skeleton A is tentatively proposed to be a male (Bass 1987; Krogman & Iscan 1986) with an age of about 35–40 at the time of death (Stewart 1958; Gray 1977). No entire long bones were available but the length of the right humerus was calculated using the formulae of Muller (Krogman & Iscan 1989). A mean height of about 5 ft 10 in (1.77 m) was then obtained by using the formula of Trotter & Gleser (Brothwell 1981). This method, however, compounds the standard error inherent in both formulae.

Osteophytosis was gross on the body of one reconstructed thoracic vertebra and slight on two others. The associated Schmorle's nodes on both superior and inferior surfaces of these vertebrae indicated pressure from herniation of intervertebral discs (Ortner & Putschar 1987). Slight eburnation of the lower end of the right ulna was indicative of osteoarthritis. Possible dental abscesses were seen in the lower right incisors and molars 1 and 2. No non-metrical variations were seen on the extant bones.

Skeleton B was considered to be a female on the basis of the circumference of the tibia at the nutrient foramen (0.80 mm) (Bass 1987) and the length of the talus (49.6 mm) (Steele 1976). The age could not be determined on the basis of the usual methods owing to the paucity of skeletal material. An estimate of 40–50 years upwards, however, was obtained using the formulae devised by Sorg *et al* (1989). These have been deduced on the basis of modern material and their application to fossil material has yet to be assessed. The height of the individual was estimated at 5 ft 5 in (1.65 m). No pathology was noted and the only non-metrical variation appears to be small medial and lateral squatting facets at the lower end of the tibia.

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