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Human remains from Northumberland Bottom, Southfleet, Kent

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1 INTRODUCTION

The skeletons from the Beaker burials were contexts [1070] and [1203]. The juvenile inhumations were [1037], [1069] and [1190] and the cremated bone [316] and [2012]. There was also disarticulated bone in context [565].

2 METHODOLOGY

The state of bone preservation as a consequence of taphonomy was addressed by reference to published guidelines (Buikstra and Ubelaker 1994). The extent of truncation of the skeleton was noted.

The age of immature individuals was estimated using dental development and state of epiphyseal fusion (Bass 1995, Brothwell 1981) and diaphyseal lengths (Sundick 1978, Hoffman 1979, Ferembach, Schwidetzky and Stloukal 1980, Ubelaker 1984, Powers 1988) and of adults: tooth wear stages (Brothwell 1981) and morphology of the pubic symphysis (Brooks and Suchey 1990). Sex was estimated using skull and pelvic dimorphism (Ferembach *et al.*, 1980, Brothwell 1981).

Conventional cranial and post-cranial measurements were taken where possible (Bass 1995, Brothwell 1981)). Non-metric traits were recorded so far as possible (Brothwell 1981). The jaws were examined for non-metric traits, dental hygiene and pathology (Berry 1978, Hillson 1986). Information on general pathology was recorded (Ortner and Putschar 1985. The proceeds of the cremation burials were processed before the osteologist had the opportunity to examine them. They were sieved and separated from residual extraneous matter, chiefly tiny pebbles. Weight, colour and fragmentation patterns were noted and analysed (McKinley 2000; McKinley 2004).

Radiocarbon dating was to be performed at Kiel and stable isotope analysis as appropriate.

3 TAPHONOMY

For all periods the surface of the bone showed cracking of the cortex, with some flaking (preservation category 2). The exception was the (?)Iron Age child [1037], in which the bone had broken up, with much exposure of cancellous bone, i.e. the lowest stage of preservation (Buikstra and Ubelaker 1994, 98). Cremated bone is discussed below.

In general, truncation of the inhumed skeletons was not great. The cremation burials represented rather small samples, though: only 36g and 280g, respectively.

4 RESULTS

4.1 Bronze Age

The Beaker Burials were of two adults, one probably female [1203] and the other possibly male [1070], based on sexual dimorphism of the crania (although the ilia were extant the greater sciatic notch areas were too damaged for the confirmation of sex). Both individuals were fully adult. The only criterion for more precise ageing that could be applied was dental attrition. Observation of the pattern of molar tooth wear placed both individuals within the range 26 to 45 years (Brothwell 1981, 72).

Owing to post mortem damage of the bone few measurements were possible. Thus, it was not possible to calculate stature. However for the woman [1203] the Meric Index was 87.0 and for the man [1070]: 75.1. This is too small a sample to determine whether the man's tendency toward platymeria (flattening of the upper shaft of the femur) was significant, or for comparison with any other population groups.

Systematic recording of non-metric traits was attempted. Unfortunately few such traits could be demonstrated.

Neither individual exhibited skeletal pathology, not even degeneration of the vertebrae and limb joints. Both individuals showed dental caries on first and third molars at the cemento-enamel junction. No X-rays were taken.

4.2 Iron age (?)

The juvenile skeleton was in very poor condition, fragmented and somewhat truncated (c. 20 per cent present). Epiphyseal fusion of cervical neural arches suggested that the child was over the age of three years, yet the surviving jaw sockets confirmed that the first permanent molar had not yet erupted. Thus, the child was no older than five years at the time of death. Nothing more can be said concerning this individual.

4.3 Romano-British

Pits contained juveniles [1037] and [1190]. Dental examination and diaphyseal lengths confirmed that each was consistent with a full-term foetus, hence they probably represent neonatal deaths. There was no sign of any disease, caries included. No X-rays were taken.

The cremation burials had produced rather small samples. However, the smaller sample [316] comprised an immature individual and the other [2012] an adult.
The results are summarised in the table. The disarticulated bone [565] comprised the remains of several individuals (MNI 2).

5 CONCLUSIONS

For this multi-period site the sub-sample sizes are too small for inter-site comparisons and there are limitations upon how they can contribute to the research questions. Here again land-use is the chief category to which the burial information can contribute.

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APPENDIX 1: CATALOGUE

Context 1037

Cut 1038

Skeletal recovery: 75-80%

Present: cranium & mandible; parts of 4 cervical, 5 thoracic and 4 lumbar vertebrae, fragments of ribs and pelvis; both arms, with the exception of left scapula & humerus and hands; legs: femora, fibulae and tarsals only.

Context 1069

Cut 1071

Skeletal recovery: 20-25%

Present: cranium & mandible (in part); one cervical vertebra only, plus both clavicles (broken); calcaneus and fragments of femur shaft.

Context 1070

Cut 1071

Skeletal recovery: 75-80%

Present: cranium & mandible; 8 thoracic and 2 lumbar vertebrae, sacral fragments, part of left ilium, 5 ribs plus fragments; both arms except carpals and some metacarpals; both legs, except phalanges.

Context 1190

Cut 1188

Skeletal recovery: 75%

Present: cranium and mandible; parts of 5 cervical, 8 thoracic and 5 lumbar vertebrae and 19 ribs, fragments of sacrum, right ilium and ischium; arms, except for left humerus & ulna and hands; legs, except for tarsals and phalanges.

Context 1203

Cut 1071

Skeletal recovery: 75-80%

Present: cranium, hyoid & mandible; 4 cervical, 1 thoracic and 1 lumbar vertebra, rib and sacral fragments, both ilia; both arms, except for left hand; both legs, with feet missing, except for a few tarsal fragments.

Context 565

Disarticulated bone

Present: right humerus (epiphyseal line on head; distal damage); 3 ribs (broken); left ilium & ischium (fused, sex indeterminate); right femur (proximal half; possibly male); faunal remains.