Report 1743

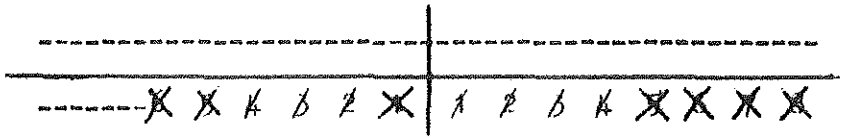
POXWELL Human Bone Report — Justine Bayley

Six skeletons were examined, three adults and three infants. The skeleton from burial I (POX 68 VII ④) was brittle and fragmentary but fairly complete while that from burial II (POX 68 I ⑥) was more solid, although both showed some erosion, especially at the articulations. The remains from burial III (POX 68 III ②) were far from complete, with only a few bones surviving. None of the infant skeletons were complete and most of the bones were eroded, especially at the ends.

Burial I POX 68 VII④

The remains are those of a woman. It is not possible to age the skeleton precisely but the state of the dentition indicates a mature adult.

The skull vault was reconstructed (see table for measurements). Two wormian bones were present, one in the lamboid suture and one at lambda which had fused. The maxilla was missing but the mandible, which showed slight torus mandibularis, was present giving a dental formula :-



X = ante-mortem loss
/ = post-mortem loss
---- = area missing

One premolar tooth with interproximal neck caries was also present. It had a medium deposit of calculus.

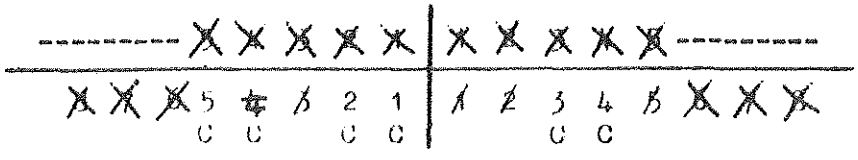
The long bones were also measured (see table) and an estimated maximum stature of 157 cm. (approx. 5'2") was obtained using the regression equations of Trotter and Gleser for American white females.

Some slight evidence of degenerative joint disease (previously known as osteo-arthritis) is visible on the cervical and lumbar vertebrae, the articulation of one of the inferior articular processes of the fifth lumbar vertebra with the sacrum being particularly porous. Some of the ribs are also slightly affected as are some of the metacarpals. Very slight changes are also visible at knee and elbow joints.

Burial II POX 68 I⑥

These remains are also those of a mature woman. Measurements of the skull and long bones appear in the table. The estimated maximum stature was 153 cm. (approx. 5'0") from the formulae of Trotter and Gleser.

No abnormalities were observed on the skull. The dental formula is reproduced below, although the assignation of the teeth is only tentative as considerable alveolar bone recession (probably due to severe peridontal disease) combined with post-mortem erosion left very little of the tooth sockets extant.



/ = post-mortem loss ---- = area missing C = caries
X = ante-mortem loss ⊕ = tooth but no socket

The caries in $\overline{7}$ was on the mesial side of the crown, but that on all the other teeth was really erosion of the dentine of the root, probably due to exposure brought about by the alveolar bone recession. There were slight calculus deposits on most of the teeth.

Degenerative joint disease was evident on many of the vertebrae, being slight in the cervical and mid-thoracic regions and a little more severe on the lumbar vertebrae where the anterior edges of the vertebral bodies had begun to collapse. It was also slightly present on the proximal ends of the radii, some of the ribs and a few of the phalanges of the hands.

Burial III POX 68 III (2)

Only a few bones from the upper half of this burial had survived. From these it was impossible to either sex or age the remains, although they appear to have been part of a mature individual. Part of the left side of the mandible was present with sockets for the first and second premolars and the first molar. The second molar had been lost ante-mortem. There was slight "arthritic" lipping on the neural arches of some of the vertebrae.

POX 68 I (3)

These remains were of an infant, probably newborn. Only the long bones of the lower limbs, half the pelvis, two arm bones and a metapodial were present. The ends of the bones were considerably eroded so only one measurement could be made.

Left femur (max. length) 76mm. (?)

POX 68 I (6)

These remains were also probably of a newborn infant. One ulna and a phalanx were present together with some ribs and about six vertebrae. A few pieces of skull, some of them showing the unfused sutures, were also present.

POX 68 XIII (3)

This infant was probably also newborn. Pieces of several long bones were present but were fragmentary and eroded, especially at the ends, so only one measurement was made.

Left tibia (max. length) 67mm. (?)

Table of measurements from Burials I and II.

Skull measurements (mm.)	Burial I	Burial II
Max. length (L)	176	188
Max. parietal breadth (B)	132(?)	137(?)
Min. frontal breadth (B')	93.7	94.3
Basio-bregmatic height (H')	-	136
Basion-nasion (LB)	-	103
Frontal arc (S_1)	120	132
Parietal arc (S_2)	119	132
Occinital arc (S_3)	-	117
Frontal chord (S'_1)	104.8	116.2
Parietal chord (S'_2)	108.8	116.2
Occinital chord (S'_3)	-	99.6
Biasterionic breadth (BiB)	-	111.2
Foraminal length (FL)	-	37.8
Foraminal breadth (FB)	-	29.3
Foramen mentalia breadth (ZZ)	43.3	-
Coronoid height (CH)	-	54.8(?)
Ramus breadth (RB)	-	28.0(?)

Long bone measurements (mm.)	Left	Right	Left	Right
Femur				
Max. length (Fe L_1)	411	414	-	400
Min. antero-post. diam. (Fe D_1)	22.4	23.6	23.7	23.5
Transverse diam. (Fe D_2)	34.8	34.6	32.8	33.2
Tibia				
Max. length (Ti L_1)	332	330	318	317
Max. antero-post. diam. (Ti D_1)	35.0	34.8	27.8	28.0
Transverse diam. (Ti D_2)	19.7	19.4	19.0	21.0
Humerus				
Max. length (Hu L_1)	293(?)	-	286	294
Max. diam. (Hu D_1)	20.7	-	18.9	20.5
Min. diam. (Hu D_2)	15.9	-	15.7	17.2
Radius				
Max. length (Ra L_1)	-	220(?)	-	211(?)
Ulna				
Max. length (Ul L_1)	-	245(?)	228	232