8. FEATURE 39

a) *Skeletal Inventory and Condition*

The skull is complete and in excellent condition. The maxilla, nasals, and zygomatic arches are broken off of the cranium, but are present. The mandible is complete. All teeth that were present in the jaws at the time of death were preserved. These include RI^1-RP^2, RM^2, RM^3, LI^1-LP^1, LM^1, M^2, LM^3, RI_1-RP_2, RM_3, LI_1-LP_2, and LM_3. The upper premolars, left canine, and left first molar are represented by roots.

All seven cervical, twelve thoracic, and five lumbar vertebrae are preserved in excellent condition. The bodies of the thoracic and lumbar vertebrae are somewhat fragmentary.

The sacrum is present, though only the portion corresponding to the first sacral vertebra is preserved. The right and left innominates are present, though in both cases the superior pubic ramus and ischiopubic ramus have broken off and are not preserved.

The sternum is represented by a very small fragment and the ribs by fragments of seven right and two left ribs.

The lower limbs are very complete. The femora are in excellent condition with the exception of some erosion of bone on the proximal and distal articular surfaces. The patellae are present but in only fair condition, with the margins of the articular surfaces quite eroded. The tibias are in excellent condition, and the fibulae are present, but broken and missing portions of the articular surfaces. The left foot is represented by all tarsals, all metatarsals, and a fragment of phalanx. The right foot is represented by the talus, calcaneus, three cuneiforms, five metatarsals, and eight phalangeal fragments.

The upper limb is represented by both scapulae and clavicles. The scapulae are fragmentary, with only the medial borders, the glenoid fossae, and portions of the acromial process and the scapular spines preserved. The lateral two thirds of both clavicles are present. Both humeri are in excellent condition, though the right has damage to the lateral portion of the proximal end. The right ulna is complete except for the distal end and some of the outer bone along the shaft. The right radius is complete, in excellent condition. The left ulna and radius are complete except for damage to the distal ends of both bones. All of the right carpals (with the exception of the pisiform) and metacarpals are present as well as eleven phalangeal fragments. The left hand is represented by five metacarpals and seven phalangeal fragments.

b) *General Description and Pathology*

1) Cranium

The skull is large and robust, with marked temporal lines, and a rugose nuchal region with a projection at inion (see Plate 39). The brow ridges are somewhat broken, but where they are visible appear to have been pronounced in the region around glabella. The mastoid processes are large relative to those of other individuals from this sample. There are several extra-sutural bones in the lambdoidal suture and in the region around asterion. There is some mild pitting on the supra-iniac portion of the occipital and on the superior portions of the parietals. No other bony pathology is visible on the cranium. The cranial sutures are closed, but are visible both endocranially and ectocranially.

The maxillary teeth are worn anteriorly so that large areas of dentin are exposed on the occlusal surface of the crowns. The maxillary molars are worn moderately (see Table 7) (see Plate 40). The left canine and all of the maxillary premolars were decayed so that only roots remained at the time of death. The left P^2 and right M^1 were both lost antemortem. There are carious lesions on the interproximal surfaces of the right M^2 and M^3. The left M^2 has a small interproximal carious lesion on the mesial surface and a very large one on the distal surface which has expanded into the crown and root. The left M^3 has a large carious lesion which involved about half of the crown.

The mandibular teeth are worn anteriorly, though not quite as heavily as the maxillary teeth (see Plates 41 and 42). The premolars and molars have the cusps worn off, but none exhibit much dentin exposure. The first and second molars on both sides were lost considerably before the time of death (probably slightly earlier on the left than on the right, given the state of alveolar resorption). The temporomandibular joints appear to be free of arthritic development. The right P_2 is rotated 90 degrees so that its lingual face is turned to where its mesial face would be normally.

Both the mandibular and maxillary anterior teeth (incisors through canines) show several bands of enamel hypoplasia.

2) Vertebral Column

The cervical vertebrae have marginal osteophytes on the anterior and posterior margins of the bodies, resulting in lipping. In addition, there is slight porosity of the vertebral bodies.

The thoracic vertebrae have mild marginal osteophytic development on the anterior and posterior surfaces of the bodies, resulting in lipping. The vertebral bodies exhibit some macroporosity on their articular surfaces. In addition, there are small laminal spurs on their neural arch.

The marginal osteophytic development increases in the lumbar vertebrae. The bodies of the lumbar vertebrae are porous.

3) Pelvis and Sacrum

The sacrum has some lipping on the superior articular facet. The ilia are thick and robust. The ischial tuberosity is large. The acetabula are large and deep. There is no preauricular sulcus. The sciatic notch is narrow and the two sides are asymmetrical, suggesting that this individual was male. There is very slight lipping around the acetabulum.

4) Lower Limb

The femora are well built in the sense that they have thick cortical bone, but the muscle markings such as the linea aspera are not as robust as in others from this sample.

The tibiae are strong. Like the other leg bones, they show no evidence of osteoarthritis or other pathology. Similarly, the bones of the feet show evidence of robusticity and strength. No sign of pathology is visible.

5) Upper Limb

The glenoid fossae of the scapula are smooth articular joints with no sign of pathology. The clavicles are somewhat robust and have no signs of pathology. The humeri have fairly lightly developed deltoid tuberosities, though the one on the right is somewhat more developed than the one on the left. The olecranon fossa is unperforated on both sides.

The radii show no evidence of pathology. The ulnae have very mild osteophytic development around the margin of the trochlear notches. No pathology is evident on the carpals, metacarpals, or phalanges.

c) *Sex*

This individual is a male. This diagnosis is based on the robust cranium, with prominence at inion, large and robust postcranial bones, and male pelvic morphology. Damage to the face makes it impossible to take all of the cranial measurements necessary to classify this specimen as to sex or population affinity using the Giles and Elliot (1962) discriminant functions.

d) *Age*

This individual is clearly an adult, since all epiphyses have fused, all teeth have erupted, and in fact a number of teeth had been lost well in advance of the time of death, and there is some evidence of degenerative disease such as arthritis. However, the cranial sutures have not been obliterated and

the teeth are not heavily worn, so the individual should be considered middle aged (possibly in the 30s or 40s at the time of death).

e) *Stature*

Based on the length of the tibia and femur and using a regression equation derived from white males, the stature of this individual is 163.0 +/- 2.99 cm (64.2 inches). Estimates based on the individual bones (femur, tibia, radius, and humerus) are all within the range given for this estimate.

f) *Population Affinity*

There is a sharp nasal sill on the right side of the nasal aperture and there seems to be one on the left side as well. There may have been a nasal spine. The nasal aperture is narrow. The position of the face relative to the rest of the cranium is impossible to evaluate since it was broken off and many cranial measurements could not be taken. However, those features which are present suggest that this individual was of European ancestry.

g) *Summary*

This individual was a middle-aged male at the time of death. His dental health was poor and he had experienced some form of health stress as a child (as evidenced by bands of enamel hypoplasia). In addition , there was evidence of aging in his postcranial skeleton. He was about 64.2 inches (5 feet, 4 inches) tall.