Appendix C

Field Analysis of Human Burials Identified at 38Yk533
by
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On November 20, 2010, I traveled to Rock Hill, South Carolina to examine human remains encountered during excavations at 38YK533 during the spring of 2010. The remains were located in three separate features, as well as from a fourth context where they were not recognized during excavation and were recovered during screen sorting. With the exception of the remains found in the screen, all remains were fragmentary and were left within their original contexts. All observations are based on the burials as they were cleaned for observation. In all cases, there are likely far more elements than recorded, but excavation occurred only as far as would enable leaving the burials intact and in position. Reburial ceremonies took place later that day when the remains were taken in their original contexts to a different locality. Reburial was supervised by Catawba officials. The burials are described separately below.

Feature 20

Feature 20 consisted of cranial fragments and dental fragments from two mandibular molars. These were found in the process of screen sorting; no observable elements were found *in situ*. No age or sex estimation was possible.

Feature 43

The burial in Feature 43 was an individual flexed on its right side. The individual was a young adult (probably 20-30) of unknown sex, with age based on the presence of a slightly worn third molar. The skeletal elements present included a fragmentary cranium, left mandibular permanent molars 1-3, and left maxillary permanent molars 1-3, the neck and distal condyle of a femur, and several other unidentifiable long bones.

Feature 45

The burial in Feature 45 was that of a gracile male adult, with no further age estimation possible. The adult age was based on the presence of erupted third molars. The sex estimate was based on cranial features that were more male than female in robusticity. The individual was buried in flexed position on their left side. The burial included a cluster of artifacts (i.e., a carved stone tobacco pipe, a deer antler, and worked bone fragments) that probably constituted a bundle of personal items. Skeletal elements present included a cranium, mandible, and the diaphyses of the right and left clavicles, humerii, ulnae, femora, and tibiae. The right radius diaphysis was present, and likely the left was present although not apparent. The dentition included two worn maxillary molars, one maxillary or mandibular molar, one mandibular molar root, and broken premolar, probably mandibular. I assume these were likely from the right side of the dentition, although all were too fragmentary to ascertain side, and the teeth appeared to have been slightly disturbed prior to excavation, probably through root, rodent, or earth settling activity. Two skeletal measurements (estimated in both cases) were taken: maximum length of the cranium (180 mm) and maximum length of the right femur (480 mm). The femur measurement yields a stature estimate of 67.3-72.9

inches (5.6-6.0 feet) using the formulae utilized by Fordisc 2.0 (Ousley and Jantz 1996).

Feature 62

Two subadult individuals were included in Feature 62. The remains consisted of two crania that were located adjacent to each other, at least one mandible, and at least one long bone.

The dentition of individual one included deciduous maxillary first and second molars (side unknown) and deciduous mandibular first and second molars (side unknown). While these were clearly in articulated position, neither the mandible or maxilla was preserved enough for observation. There was also an unerupted maxillary permanent first molar with only the crown developed. All deciduous teeth were largely unworn. The developmental sequence of the teeth allowed an age estimate of 3-4 years of age (Ubelaker 1999).

The dentition of individual two included a left deciduous canine, left maxillary first and second molars, and left deciduous mandibular canine, first and second molars. The mandibular and maxillary molars were clearly articulated in fairly well-preserved bone. There was also an unerupted maxillary permanent left first molar with only the crown developed. All deciduous teeth were largely unworn. The developmental sequence of the teeth allowed an age estimate of 3-4 years of age.

The development of the deciduous and permanent teeth indicates these two individuals were of identical or nearly identical ages. No observations were made that would permit assessing whether they were related or not. The grave also included one very badly preserved long bone; this fragment could not be confidently identified as to element or assigned to individual.

References Cited

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1996 FORDISC: Forensic Analysis Software. University of Tennessee, Knoxville..

Ubelaker, Douglas H.
1999 Human Skeletal Remains (Third Edition). Taraxacum Press, Washington.