Worked bones from the formal Collection: Panela Constrac.

Pore Objects

Although finished bone and antler objects are discussed in detai elsewhere in this report, the West Stow faunal assemblage also provid valuable evidence for bone working at the site. The worked pieces in the faunal sample probably represent incomplete stages in the various bone object manufacturing processes. Bone working may be distinguish from butchery in that butchery entails the dismemberment of and remov of meat from the animal carcass, while bone working involves the inte tional modification of bone for the production of bone tools and other objects. While chop and knife cut marks commonly appear on bone surf as a result of butchery; perforations, incised lines, surface polish, and shave marks are nearly always the results of bone working. Splii and sawing may be involved in both butchery and bone working. Howeve a study of the species/anatomy combinations on which saw and split marks appear may allow us to determine whether these marks are the result of bone working or butchery or both.

The West Stow faunal assemblage produced at least 97 bones and fragments evincing traces of bone working. Of these 80 could be identified to species and included 22 fragments of roe and red deer antle 18 metatarsals of cattle, and 8 sheep/goat metatarsals. Other worked bones include horse metapodials, pig fibulae, sheep/goat tibiac, and sheep horn cores. The frequent use of ungulate metapodials and tibia it to be expected as these bones have "straight shafts, and consequent maximal areas of parallel grain" (Campana 1980) and are therefore identified to bone working. The large number of worked antler fragment (27.5% of the bone objects which were identifiable to species) is less Than 1% of the identifiable bones in the

West Stow faunal assemblage were of deer. The different types of worked bones (deer antlers, cattle metatarsals, etc.) will be discussed in turn.

Deer antlers. Antlers represent the largest single group of worked bone fragments in the West Stow faunal assemblage. Both red and roe deer antler fragments--17 and 5 fragments, respectively—were worked. Of the 22 modified deer antlers, 17 were worked by sawing, including all but one of the red deer antlers. Objects made of sawn antler are common among the West Stow small finds (reference to S. West's text). Moreover, it is significant that, with the exception of a few sawn horn cores, sawing is almost entirely restricted to antler. Almost no sawn bones were recovered from the site, suggesting that sawing was used in bone working but not in butchery. Most of the worked antlers in the faunal sample are sawn red deer antler sections, however two of the roe deer antlers were shaved and three were incised. No finished antler objects were recovered from the faunal sample.

Cattle metatarsals. The second major group of worked bones, cattle metatarsals, were worked using the "groove-and-splinter" technique. The groove-and-splinter technique is a process used to produce long, narrow bone blanks by cutting parallel lengthwise grooves in a long bone shaft and removing the resultant long slices. Seventeen of the 18 worked cattle metatarsals showed incised parallel grooves on at least one face. On the anterior and posterior surfaces of the bone, grooves were cut along the fusion point between the third and fourth metatarsal. Grooves were also incised axially

along the medial and lateral faces. Although the majority of axial incised grooves appear on cattle metatarsals, horse cannon bones were also grooved-and-splintered.

Pig fibulae. Modified pig fibulae are common among the West Stow small finds (reference to S. West's text), and the faunal assemblage produced four more examples. Three are distal portions, two of which show polish along the shaft--possibly from use as pins or needles. The third was perforated near the distal end, as are many of the small finds. The fourth pig fibula is a midshaft fragment and shows marks of shaving, probably from shaving the bone shaft to a point.

Miscellaneous. A variety of other modified bones were recovered including perforated sheep/goat cannon bones and tibiae. These objects are similar to the large numbers of perforated sheep and goat cannon bones seen among the small finds. Several sawn sections of sheep horn core were recovered. These are generally from rams, and may have been discarded when the horn was removed for working. In addition, a number of worked bones were recovered from the site which could not be identified to species. A complete table of bone objects recovered from the faunal sample will be included in my thesis.

## Ref .:

Campana, Douglas V.

An Analysis of the Use-Wear Patterns on Natufian and Protoneolithic Bone Implements. Unpublished Ph.D. Thesis, Columbia University.