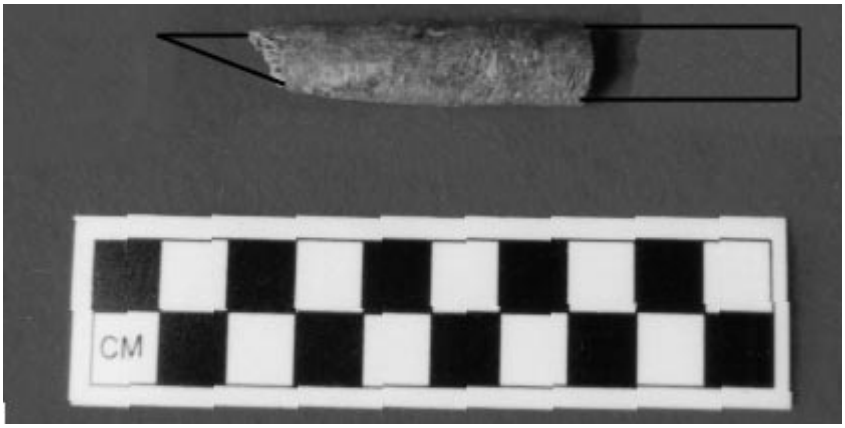
A Probable Native-Made Bone Fishing-Point made from Cattle Metacarpus recovered from Grape Island and its Implications for Contact/ Plantation Period Studies



Abstract

This paper examines a Native- style bone fishing point recovered from intensive survey testing on Grape Island. The point was made from cattle leg bone and was recovered from a midden context yielding one other piece of cattle bone, one piece of European redware and Native pottery and lithics. The recovery of this cattle-bone point, obviously of Native style, is important because it shows the incorporation of European fauna into the seventeenth century Native culture. It is also important because the identification of this point as being derived from cattle bone poses a warning to archaeologists to look closely at the faunal remains recovered from a site. Two cases cited in this paper demonstrate how faunal remains can be used as another way to distinguish between Late Woodland and Contact or Plantation Period sites or features.

Timelines Inc. conducted intensive archaeological survey testing of a portion of Grape Island, one of the islands in the Boston Harbor Islands State Park, in May 1997 (Figure 1). Testing was required prior to the installation of new benches near a stone house foundation and as a result, several features were identified and numerous artifacts recovered. The majority of the artifacts came from several shell-middens encountered in the three test trenches. These middens are believed to date from the Late Archaic to early eighteenth century and represent occupation and utilization of the area by both prehistoric and Contact Period Natives and European settlers. Among the artifacts recovered was a single-barbed bone fishing point. While in and of itself this artifact is not spectacular or especially rare, the fact that it was made from a fragment of European cattle bone and its association predominately with Native lithic artifacts and probable Late Woodland/ Contact period pottery is important. This point was not identified as having been manufactured out of cattle bone when it was initially found and catalogued but during a subsequent analysis of all the faunal remains from the site by the author it was identified as such. This report has three main goals. The first is to place this artifact within a Contact/ Plantation period context as it pertains to the fishing technology of the Native people. The second is to place this artifact within the context of the site itself by investigating the context within which was found as bearing evidence to it being a Native manufactured artifact and not a colonist's attempt at a Native point. The final goal is a reminder to New England archaeologists of how elusive the Contact Period can be and a plea to them to carefully look for Contact period evidence among the faunal remains from a site.

Figure 1. Grape Island in Boston Harbor

Site Context

The bone point recovered from Grape Island was found in Trench 3 which was located approximately 30 meters north of the seawall on the south side of Grape Island approximately 25 meters northwest of an exposed seventeenth to nineteenth century house foundation. This trench was 1.75 meters long and three-quarters of a meter wide. Excavation followed natural stratigraphy in 10-centimeter (cm) levels with all soil being screened through ¼ inch hardware cloth screens (Dudek 2000: 54) (Figure 2). Excavation revealed the following stratigraphy. Level 1, 0-10 cm, a dark grayish brown silty sand with modern shell, recent artifacts including machine-made glass as well as older faunal remains and prehistoric lithics. Level 2, 10-20 cm, a dark grayish brown silty sand with shell midden being encountered as excavation continued artifacts included the same materials as recovered from Level 1 as well as two fragments of Native made grit tempered pottery. Level 3, 20-30 cm, a dark grayish brown silty sand with a moderately dense shell midden being encountered artifacts included one fragment of redware, several fragments of both shell and grit tempered Native-made pottery, one bone fishing point, the only piece of European derived faunal material and one fragment of sturgeon scute. Level 4, 30-50 cm, a mottled brown sandy silt and a high percentage of lithics in Feature 8 a Late Archaic pit, artifacts were recovered from 30-40 cm consisting of lithic and faunal remains. Level 5, 50-64 cm, a yellow brown sandy silt yielding no artifacts. Artifacts were recovered from Feature 8 to a depth of 64 cm below surface (cmbs) consisting of lithic chipping debris one piece of calcined bone and a slight amount of shell (Dudek 2000:56-57).

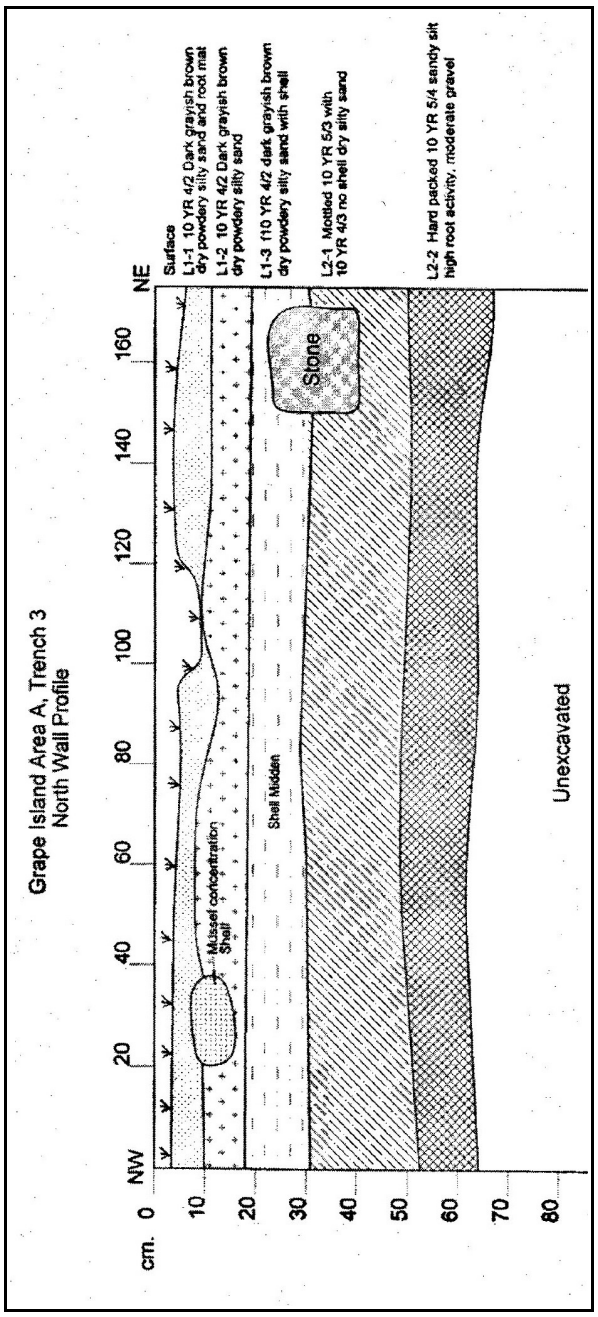


Figure 2. Trench 2 profile

The stratigraphy in this trench can be interpreted as representing an upper layer containing recently derived artifacts, which overlaid an undisturbed shell midden dating from Late Woodland toseventeenth century Contact, and Plantation periods. This shell midden overlaid a possible archaic lithic concentration. The late Dr. Barbara Luedtke tested this area in the 1970s and found a stemmed rhyolite point possibly of a Middle Archaic type in the lower layers of the portion of shell midden she encountered (Luedtke 1975:67). This material may be similar to artifacts recovered during the 1997 testing.

The redware and cattle bone, both having arrived at the site from European settlers, the traditional

Native-shaped bone fishing spear point made from cattle bone as well as the Native pottery were recovered from the same level (20-30 cm) in the shell midden. This indicates that this midden must date to after the European settlement in the area, c. 1628, and may date to the same time as European material recovered from testing elsewhere in this area, c. 1675-1730. The other trenches near the foundation yielded Native pottery, European ceramics and European faunal species. The possibility also exists that the point was made by a European in imitation of a Native bone point during the occupation of the European site.

Fishing Point

The bone point recovered from Grape Island is made from a cattle metacarpus (Figure 3). The metacarpus is the lower front leg bone, analogous to the bones that make up the palm of a human hand. Metapodial bones, the metacarpus and metatarsus, are dense thick bone ideally suited to bone working. The point made from this bone is 5.5 cm long and is broken with one barb present. It is 1.6 cm thick and the curvature of the bone matches exactly that of the cattle bone recovered from the same level. It appears that the people who created this midden, presumably Natives, used a piece of cattle bone as a raw material to make a fishing spear. The cattle right metacarpus mid-section was recovered in six fragments, all of which join together. The complete fragment is 3.5 and 2.9 cm wide at the ends, and 1.6 cm thick at the edge. The width and thickness of this fragment matches one in the author's collection whose complete bone length is 20.1 cm long, being taken from a medium-sized cattle.

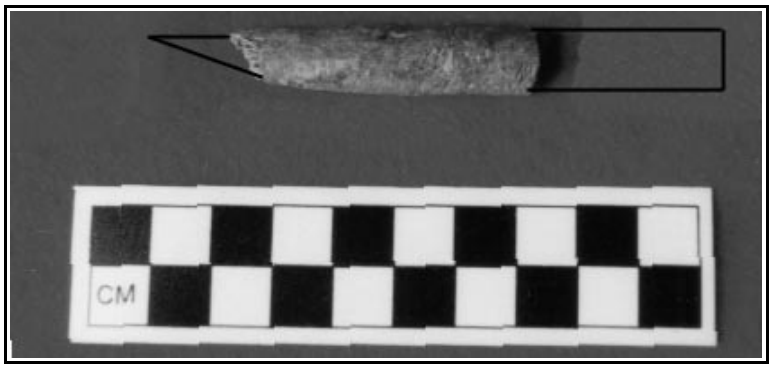


Figure 3. Bone fishing point recovered from Grape Island

Seventeenth Century Fishing

The fish that this point was used to procure was probably sturgeon. The 20-30 cmbs level of Trench 3 was the only context encountered during the testing where sturgeon scutes, the bony plates on the back and head of the sturgeon, were recovered. Both the English and the Natives appreciated these fish, which could attain lengths up to 18 feet. The English favored this fish so well that by 1634 it was noted by William Wood they were "much taken" by the settlers in Massachusetts Bay who pickled them and shipped them as a commodity to England (Wood 1977: 55). Their use in England was both for flesh and also for the production of isinglass, a glue made from their swim bladders (Josselyn 1673: 32). Roger Williams, the religious dissenter who founded Providence Plantation, stated that in the 1640s the kauposh (singular)/ kauposhshauog (plural), translated as 'he who is shut up or protected', abounded in diverse parts of this country and that because the Natives prized it so much they would not furnish the English with many or for such a cheap rate that it would be profitable to begin trading in them (Williams 1971: 100).

Natives had developed two special techniques utilizing specialized tools to catch sturgeons .The first technique involved the use of strong nets made from native fiber-yielding plants like milkweed, dogbane, false nettle or possibly bass wood bark. This net was strung up across the mouth of a river or near a sand bar and caught the sturgeon by the gills. The second technique involved traveling out in a canoe at night to the sand bars in the harbors. Upon reaching the bars, a birch bark torch on the end of a staff was ignited and waved over the surface of the water. It was believed that when the sturgeon saw the light they would swim up and "tumble and play, turning up his white belly" into which a lance or spear was thrust (Wood 1977: 107). This lance or spear was described as a "sharp bearded dart" fastened to a 40-fathom line originally made of bone but after European trading, was made of iron as well (Wood 1977: 107). Fish spears or anneganuhtuk literally 'long spears', were also identified for sturgeon fishing by Roger Williams (1643) and John Josselyn (1672). Josselyn stated that they would hunt for sturgeon at night "striking them with a fisgig, a kind of dart or staff, to the lower end wherof they fasten a sharp jagged bone (since [then] they make them of iron) with a string attached to it, as soon as the fish is struck they pull away the staff, leaving the bony head fastened in the fishes body and the string to the canoe" (Josselyn 1672: 100). The point from the site may have been unfinished and thus lacking the hole for a line or the portion of the shaft where the hole was located may be part that is missing.

Implications for Contact period Studies

The bone point from Grape Island illustrates the need for detailed studies of the faunal assemblages recovered by archaeologists from Late Woodland sites in New England. Grape Island is the second site encountered by the author where the faunal remains have helped identify Contact or early Plantation Period components from areas on the site which otherwise would have been dated to the Late Woodland. Grape Island's bone point is one site and the other is located in Kingston, Massachusetts (Chartier 2001). At this site the fragmentary remains of what appeared to be a complete European rooster was recovered from a small sub-pit within a larger pit. The only artifacts recovered from the feature containing the rooster were a few pieces of shell tempered Native pottery and a few pieces of lithic chipping debris. The rooster remains were initially identified in the field and lab as probably coming from a duck species. It was not until the author undertook complete analysis of the faunal assemblage from this site that the identification of the skeleton as being that of a rooster made. The feature containing the rooster was located in an area away from the other Contact/ Plantation period materials recovered from the site, a situation very similar to that on Grape Island. Without the identification of the rooster, the feature would have been identified as probably dating to the Late Woodland.

Due to the low visibility and apparent high focus of Contact Period sites, extra care should be taken to be sure that no European fauna is present in an assemblage apparently dating from the Late Woodland period. The Late Woodland cannot easily distinguished from the Contact Period if there is an absence of European trade goods. European animal species and their by products offer more possible European trade goods. The remains of these animals at Contact and Plantation period Native sites represent an area of research that has not received a great deal of treatment in the archaeological literature. This is due to the lack of funding for in depth faunal analysis to be done as a result of many of the projects resulting in Late Woodland assemblages have been encountered during the course of cultural resource management surveys.

Conclusion

It is hoped that the cattle-bone point from Grape Island, as well as the rooster recovered from the Tura site, will serve as a cautionary note to archaeologists working in New England to take a careful look at the faunal assemblages recovered from Late Woodland sites. These sites may contain Contact Period/ Plantation Period components hidden within the typical Late Woodland assemblage. Because these sites represent the early stages of acculturation and Native interaction with European livestock, the close study of the faunal remains may offer indications of a seventeenth century component that would be missed if the usual CRM based cursory faunal analysis is carried out.

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