Provisioning Enslaved Africans in the British West Indies: The Animal Bones from Brimstone Hill Fortress, St. Kitts.

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Provisioning Enslaved Africans in the British West Indies: The Animal Bones from Brimstone Hill Fortress, St. Kitts.

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Abstract: Much of the British West Indies was engaged in sugar monoculture during the 17th, 18th, and 19th centuries. Excavations in late 18th Century enslaved African contexts at Brimstone Hill have produced abundant animal bones indicating slaves were being provisioned from as far away as England, North America, and the North Atlantic. Species identifications, zoogeography, stable carbon isotopes, and vertebrate skeletal part frequencies, are enlisted to assess the extent to which animal protein was imported to sustain the enslaved African labor force.

Introduction

Archaeological investigations on the eastern Caribbean Island of St. Kitts have been initiated to assess the lifeways and role played by enslaved Africans at Brimstone Hill Fortress. The British began building the fortress in 1660 and occupied it nearly continuously until the mid-19th Century. During this time the fortress served as a refuge for surrounding planters and their slaves when the island periodically came under attack by the French and Dutch.

Much of the archaeological fieldwork undertaken by the University of Tennessee has focused on an area just outside of a defensive wall on the west side of the Fortress. According to a 1791 British military engineers map, this was the location of a kitchen, two hospitals, and a craftsmen’s building utilized by slaves and “artificers” (i.e., slave craftsmen).

Artifacts recovered from the area include domestic and military objects of obvious British origin, Afro-Caribbean pottery, large quantities of bone manufacturing
debris discarded by slave craftsmen (reported elsewhere by Klippe and Schroeder 1999),
British manufactured ceramics with cosmograms scratched on their bases (similar designs
are documented in Africa and occur in North American enslaved African contexts
[Ferguson 1992; Schroeder and Ashman in press]) and quantities of domestic food refuse.
Temporally diagnostic artifacts predominantly date to the late 18th and early 19th
centuries.

**Historical Background**

Historic accounts indicate that during the late 17th and 18th centuries raising
sugarcane for export of sugar, molasses and rum was extremely important in the British
West Indies with some islands becoming engaged in sugar monoculture. In his
*Historical Geography of St. Kitts and Nevis*, Merrill (1958:78) noted that “By comparison
with other sugar islands in the West Indies, it would appear that both St. Kitts and, to a
lesser degree, Nevis, were efficient and heavy producers of sugar under slavery. The
main reasons why this was the case were attention to manuring, and intensive cultivation
of the cane land.” Cattle, important as a source of power for turning cane mills, putting
cane carts, manure with which to fertilize cane fields and a source of food, were often
kept penned in small enclosures within the cane fields to make manuring more efficient.
“To crop time the penned cattle were fed cane tops, but at other seasons they were
supplied with grass” (Sheridan 1974:160). The dominance of sugar on St. Kitts during
the late 18th Century is reflected in export records. Between 1771 and 1775, for example,
97% of the value of all exports from the island was from sugar and sugar by products
(Sheridan 1974:160).
Subsistence Under Sugar Monoculture

As early as 1647 Richard Vines wrote of the West Indies in general that “Men are so intent upon planting sugar that they had rather buy food at very dear rates than produce it by labour, so infinite is the profit of sugar works ...” How planters and slaves on St. Kitts and Nevis managed, in particular, can be gleaned in part from 18th Century accounts that indicate an admixture of imported and locally available foodstuffs for both planters and slaves. Some sources (e.g., Higman 1984:217) suggest that St. Kitts was one of the islands where “…rationed allowances supplied the greater part of the slaves’ food…” and salt fish provided the bulk of their protein.

Planters

In 1719 Rev. William Smith, reflecting the planter class, reported on animals raised on Nevis: “Except Irish beef salted, Ham, Bacon, pickled Salmon, Sturgeon, and Oysters we breed our own Provisions, such as Rabbits, Pork, Veal, Mutton, Turkeys, Geese, Ducks, and Fowls, except such as are brought from Boston” (Smith 1745:222). “Our sheep have no wool, but are hairy and smooth-skinned like an English Spaniel, being white and generally speaking all over pretty full of small red or black spots... We have plenty of Goats and I thought their young Kids as nice eating almost as London-House Lamb” (Smith 1745:208,209).
Slaves

Slaves were grudgingly (Edwards 1819) allotted small tracts of poor mountain land and plots in “gutsides” where they were expected to raise crops as well as small livestock (e.g. sheep, goats, pigs) to contribute to their own upkeep. Notwithstanding, meat for slaves was also imported from England and North America. In 1790s slave owners on St. Kitts were required by law (Higman 1984:207 – Leeward Islands slave law) to provide each slave a weekly allotment of one and a quarter pound “…of herring, salted mackerel, or other salt provisions, or double the quantity [2.5 lbs] of fresh fish or other fresh provisions…” (Edwards 1839:178).

Emergency Rations

Government archives in Basseterre also provide some insight into provisioning during times of hostility. In 1733, the Governor General of St. Kitts (William Mathews) urged planters to stock provisions at Brimstone Hill and suggested:

- One barrel of beef for each white man and his family.
- One barrel of beef for every two Negroes that would be brought to the fortress during time of conflict – if “Negro” beef was not provided by their owners, Negroes would not be admitted to the fortress in the event of hostilities.
- Barreled beef should be replenished yearly [due to spoilage].
- Barreled herring should be replenished twice a year.
- And in one instance the archives suggest that old [“expired”] stores be fed to the Negroes.
Military

Historical evidence relating to how the British military organized and maintained enslaved Africans at Brimstone Hill is deficient. The St. Kitts colonial government was responsible for providing labor in construction and maintenance activities at military installations and plantation owners were obliged to provide the necessary slaves (Cox 1984, Goveia 1965). Some sources indicate that the military was then responsible for feeding the slaves (Aspinall 1915:253, Buckley 1979:187).

The Faunal Remains from Brimstone Hill

Faunal remains from the 1996 and 1997 excavation seasons at Brimstone Hill (Site BSH 2) include over 6,000 animal bones of which 20% are identifiable to a taxonomic level below class. Over 80% of the identifiable bones are those of domestic pigs, cattle, sheep and goats. Fish and reptile each constitute an additional seven percent while birds only make up one percent of the assemblage.

Domestic Mammals

Food utility studies conducted on bovids (e.g. Binford 1978, Emerson 1990) show that feet and, to a lesser extent, heads have relatively low nutritional value (low utility) while axial and upper limb portions are much higher in potential human nutrition (high utility). Roughly 50 percent of the bones in the bovid skeleton reflect high utility portions. If meat was transported to Brimstone Hill over long distances one might expect high utility bones to occur in abundance compared to bones of the head and lower legs.
The relatively even proportions of high and low utility caprine bones suggest that sheep and goats were slaughtered at or near Bristlestone Hill and not transported appreciable distances as carcass parts or preserved meat. This contrasts sharply with cattle remains that are 90% high utility.

Bovid skeletal part frequencies remain, then, indicate that sheep and goats were raised locally, but that beef was transported to the island as barreled meat. Stable carbon isotopes in bovid bones confirm these interpretations; sheep and goat remains have $\delta^{13}C$ values consistent with having been raised on St. Kitts, while beef bones have $\delta^{13}C$ values indicating some of the cattle were raised almost exclusively on C3 grasses in a more northern, temperate, climate (reported in detail elsewhere Kippel 2001). According to De Vos (1967:28) such animals produced poor quality barreled beef:

"It appears to me, as soon as the salt touches 'grass-fed beef' it draws back, shrinks into a smaller compass, and changes to a dark color, as if there was not firmness or solidity to resist the action of the salt; and when boiled, especially if salted a long time, will shrink very much, leaving it tasteless, juiceless, without heart or substance, and when cut, of a dark color. 'Stall-fed beef' on the contrary, ... has the appearance (when properly cured) of being firmer, brighter, plumper, or has a swelled look, as if the well-mixed fat protected the lean parts of the flesh."

Pig remains from BSH 2 are predominantly high utility (68 percent) However, their frequencies can not be compared directly with those of bovids because of the large number of low utility bones in the typical said skeleton (i.e. 67 percent). In addition, there is appreciably more nutrition associated with the said head. In fact, during the early 19th Century, inferior; “Prime” and “Cargo” inspection categories of barreled salt pork routinely included the heads and legs of light weight pigs (Berry 1943:233, Walsh 1982: 123) that
"...were used in the southern markets as well as aboard ship" (Berry 1943:233). Clevenst (1923:117) also notes that "Prime" pork was packed for ship use, and for the southern markets whence it was sold to the plantations in the cotton states and the West Indies."

Given the decidedly different anatomical makeup of suids with significant amounts of fat and meat associated with the head, these remains from BSH 2 undoubtedly also reflect transport of an inferior grade pork to Brimstone Hill as barreled pork. The paucity of foot bones, which make up 50 percent of the typical suid skeleton, is especially striking; only three percent of the pig bones from BSH 2 are from feet.

**Fish**

Although fish remains are far fewer in number than domestic mammals, some of their skeletal part frequencies also reflect transport to BSH 2 as preserved meat. Local reef fish (e.g., parrotfish, Scaridae; squirrelfish, Holocentridae; snapper, Lutjanidae; grouper, Serranidae; triggerfish, Balistidae; jack, Carangidae) and pelagic (e.g., needlefish, Belonidae; barracuda; Sphyriidae) fishes are represented primarily by bones of the head and vertebrae. Atlantic cod (Gadus morhua), on the other hand, are dominantly represented by caudal vertebrae. Historic accounts suggest that all but the caudal vertebrae were removed from cod in the process of cleaning, before salting and drying (Knight 1867:88; Gauqu 1908:545). However, archaeologically recovered saliced remains, still in original shipping containers, from a mid-19th Century context in North America, indicate that at least a half dozen, paired, diagnostic, postcranial elements are attached to saliced (Klippe and Falk 2002). Several of these elements were also among the cod remains from Brimstone Hill. This, along with the fact that cod inhabit the cold-temperate waters of the North Atlantic and
are extralimital to the warm tropical waters of the Caribbean, clearly indicates that some of
the fish at BSH 2 were shipped to the Island as a source of protein.

O’Leary (1996:124), has noted that dried cod was highly prized in the antebellum
Gulf Coast region of North America; larger fish were earmarked for that domestice
market “… while small cod were considered suitable for shipment to the West Indies.”

“Refuse” cod that had been “sun burnt,” “salt burnt” or otherwise damaged in processing,
and came to be referred to as “West Indies Cod” was also routinely shipped to the West
Indies as an inexpensive source of protein (Innis 1940:162, Jensen 1972: 93,101). While
it is not possible to determine if cod from BSH 2 represent “refuse” cod, a number of the
caudal vertebrae from the site are from small fish.

Two dominant, and relatively distinct, types of fishing (pot and net) were
undertaken in the waters near Brimstone Hill during the mid 20th Century (Aronoff
1967). These two methods could account for nearly all of the tropical fish remains from

Pot (trap) fishing consisted of setting fish traps around shallow coral reefs and on
the narrow flats that surround St. Kitts. Traps were generally checked from rowboats
every three or four days, the fish removed, and the traps reset. Pot fishing was conducted
by crews of three or four men and reached its height between April and July after which
it began to wane until December when it was discontinued due to rough waters (Aronoff
1967: 41). The second most common taxon (parrotfish) from BSH 2 were almost
certainly taken with traps (Wring and Reitz 1982:25).

A second fishing activity described by Aronoff (1967:41,42) occurs relatively late
in the fishing season. “In August, large schools of garfish visit the waters off Dieppe Bay
and the fishermen, together with some cane workers who come down to the bay after the end of harvest, form crews of four or five men to fish the gar with long seines." (Aronoff 1967:41,42) The fish known locally as gar (or garsfish) are one of the needlefishes (Belonidae) more commonly referred to as trumpfish (Tylodon crocodilus). They are long, cylindrical fish that reach a length of 5 ft. and can weigh over 40 lbs. (Robins et al. 1986:107). They are surface-dwelling (epipelagic) fish that drift and feed at and just below the water surface in offshore as well as in shallow inshore waters (Hunn 1997: 58, McEachran and Peckeln 1998:940, Smith 1997:393). Because they are pelagic, they are almost never taken in fishpots (Aronoff 1967:115).

"The fish travel in large schools and are caught by a long net which requires intimate, synchronized and immediate cooperation among the members of the crew. Typically the boat travels out to selected waters near the village (where the men throw pieces of dry cane trash on the water to attract the fish...) the captain is usually at the tiller while three men row the boat. When the fish are spotted...the captain throws out the first part of the net and the boat makes a sweep around the school of fish. As the men quickly bend their oars, the captain lets out the net and throws rocks into the area not reached in order to prevent an escape and to drive the fish back into the net. When the fish are encircled one man, who stands up in the prow of the boat, picks up the cork line and the captain begins pulling in the heavily weighted net at the other end. During this time one of the crowmen beat the water with his oar in order to frighten the fish into the seine where their slender extended bodies and long beaks become entangled in the netting." (Aronoff 1967:123,124).

With the exception of the final stage of capture this description is similar to "baul-seine" and drag-seine use in taking herring and mackerel from the 16th through the early 18th centuries in the North Atlantic (Earll 1887:450, 463 Goode and Collins 1887:296).
Earll (1887:463) describes the use of haul-seine: "Whenever a school came within a half a mile of land it was at once surrounded by a seine, and lines made fast to either end were taken to the shore, where the hauling was commenced by some twenty-five to thirty men. While the seine was being landed, one boat was usually rowed back and forth across its mouth to prevent the fish from escaping, and wherever they attempted to swim out, oars were thrown into the water to frighten them back."

Hound fish (Belonidae) are still netted in the waters off St. Kitts, but they are considered a rough fish by the island's inhabitants. Robins et al. (1986:105) note that fishes of this family (Belonidae) "... are edible but are seldom consumed by humans."

Summary

The bulk of the enslaved African's protein at Brimstone Hill appears to have been provided by inferior quality, imported, meat: "grass fed" barreled beef and "cargo" or "prime" barreled pork were clearly the most significant. Fish remains include those of imported salmon from the North Atlantic. All three sources of protein were utilized extensively by the British Military (Buckley 1979:182, Hamilton-Dyer 1995:27-32) and if they reflect enslaved African food habits at Brimstone Hill, it appears that slaves were largely provisioned from military stores. Interestingly, the salt herring, shad, and mackerel mentioned specifically as required rations for slaves on plantations during the late 18th century, have not yet been identified from Brimstone. Fresh provisions consist of only a few sheep, goats, eel, fishes and houndfish.
REFERENCES CITED


