

REPORT ON THE FAUNAL REMAINS,
GEORGE WASHINGTON BIRTHPLACE EXCAVATIONS, 1977
GEORGE WASHINGTON BIRTHPLACE NATIONAL MONUMENT

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FAUNAL LIST

Horse	<u><i>Equus caballus</i></u>
Cow	<u><i>Bos taurus</i></u>
Sheep/Goat	<u><i>Ovis aries</i></u> / <u><i>Capra hircus</i></u>
Pig	<u><i>Sus scrofa</i></u>
Chicken	<u><i>Gallus gallus</i></u>
Goose (domesticated?)	<u><i>Anseriformes</i></u> sp. cf. <u><i>Anser anser</i></u>
Turkey	<u><i>Meleagris gallopavo</i></u>
Cat	<u><i>Felis familiaris</i></u>
Dog	<u><i>Canis familiaris</i></u>
Rabbit (domesticated?)	cf. <u><i>Oryctolagus cuniculus</i></u>
Mouse	(unidentified species)
Whale (probably Beluga or white whale)	cf. <u><i>Delphinapterus leucas</i></u>
Wild duck (probably Ringneck duck)	cf. <u><i>Aythya collaris</i></u>
Wild bird (unidentified passerine)	<u><i>Passeriformes</i></u> sp.
Sturgeon	<u><i>Acipenser</i></u> sp.
Gar (probably Longnose gar)	<u><i>Lepisosteus</i></u> cf. <u><i>osseus</i></u>
Catfish	<u><i>Ictalurus</i></u> sp. or <u><i>Pylodictis</i></u> sp.
Snapping turtle	<u><i>Chelydra serpentina</i></u>
Frog	<u><i>Rana</i></u> sp.
Crab	(unidentified species)

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Excavations at the Henry Brooks house site and the John Washington house site at George Washington Birthplace National Monument in the spring of 1977 yielded a total of 1224 bone fragments. All bones were washed, numbered, sorted, identified and tallied (see Table 1). However, despite the high total count of bone fragments, detailed levels of faunal analysis could not be undertaken, for the following reasons.

Most assemblages on which detailed faunal analysis has been done were from well-defined areas such as privy pits or trash pits, each of which contained a small number of closed, tightly dated deposits (cf. Burnston, 1975a, 1975b, 1975c, 1975d & 1976). The bones of the 1977 excavations at George Washington Birthplace were collected from a large number of proveniences, which collectively spanned nearly 300 years of occupation. Many of these proveniences were "plow zone" or were otherwise disturbed and/or undatable, and most contained none or only a handful of bone material.

Most assemblages on which detailed faunal analysis has been done contained a relatively high proportion of identifiable bones (usually 75% or more) and a correspondingly low proportion of the meaningless bone fragments that cannot be identified in any more refined sense than simply as "bone". Of the bones from the 1977 excavations at George Washington

Birthplace, nearly 38% were in the totally useless "unidentifiable" category (see Table 1). The relatively high percentage of unidentifiable fragments in this assemblage is a result of the fact that many of the bones were from disturbed proveniences or those acted upon by frost. The high percentage of unidentifiable fragments is also a marker of the less than ideal condition of even the identifiable bones, many of which show signs of weathering or of rodent gnawing damage.

Given the number of proveniences or contexts from which they were excavated, the time span encompassed by those proveniences, the small number of bones from any one provenience, the high percentage of unidentifiable fragments, and the poor condition of all the bones, certain aspects of the faunal analysis were impossible, or at least meaningless.

Some analyses depend on population sample size. These include determination of the sex of animals represented and determination of the presence of sheep versus goat (cf. Lawrence, n.d.) Since significant population samples were available for none of the species present, sex determination was not attempted. Likewise, no attempt was made to determine whether the "sheep/goat" bones were actually sheep, or goat, or both. While it is probable that these bones are from sheep, they have been designated "sheep/goat", as is customary.

The usual form of quantification when faunal analysis is undertaken on closed contexts is in the form of "minimum

numbers". A minimum number is the least number of animals that could have produced a given assemblage of bones. Minimum numbers are usually determined by this analyst for each species for each major bone or portion of the anatomy, e.g. femur, tibia, bones of the pes, as separate categories (cf. Burnston, 1975a, 1975b, 1975c, 1975d. & 1976), utilizing three age categories which will be discussed below. Minimum numbers computed in this fashion allow for discussion of ages at death as well as which parts of the animal are represented, how they might have been used on the site, what may have happened to the other parts of the animal's anatomy, et cetera. Since the bone assemblage from the George Washington Birthplace excavations was the product of many proveniences which span a long period of time and may have no relationship to each other, to compute "minimum numbers of animals" would be meaningless, or worse, misleading.

What follows, then, is a non-quantified, descriptive analysis of animal use at the George Washington Birthplace during the past three hundred years as represented by the bones from the 1977 excavations. Mention will be made in this discussion of three age categories, "mature", "immature" and "very immature". "Mature" means that all epiphyseal fusion had occurred and bone growth had stopped, or in the case of crania and mandibles that all teeth were erupted and occlusal. "Immature" means that epiphyseal fusion was incomplete or had not yet occurred, but that the bone had reached a mature size within reasonable limits

of variation for the species. "Immature" in the case of crania and mandibles means that all permanent teeth were present but not all were erupted or in occlusal position. "Very immature" means that the individual was distinctly undersized as compared with adults of the species, beyond the limits of reasonable individual variation, that there was no epiphyseal fusion whatever, and that in the crania and mandibles the deciduous teeth were still present. These three age categories have been found useful in analyzing historic sites faunal remains since they embody functional distinctions of animal use evident in the terminology of both the historic period and the present, e.g. "veal", "calf" and "beef"; "house lamb", "lamb" and "mutton".

Table 1 summarizes the findings of the faunal identifications in terms of species identified and archaeological provenience. Note that only those proveniences with bone content are listed. The two house sites (the Henry Brooks site encompassing the GW 100 series and the John Washington site the GW 200 series) will be discussed separately, even though there is general similarity in the faunal remains of the two sites.

The Henry Brooks House Site

The Henry Brooks house site excavations yielded 548 pieces of bone, representing 17 species. Cow (Bos taurus) is represented by 81 pieces of bone. Except for three teeth, one mandible fragment, and the 38 small cranial

fragments from GW 107, the cow bones of the Brooks house site are all large pieces of long bones, scapulae, pelvises, ribs and vertebrae. In other words, the cow bone at the Brooks site is predominantly composed of the edible parts of the butchered carcass and represents large joints of meat as opposed to small chops or steaks. One radius is very immature or "veal" while the rest represent animals both "mature" and "immature". The immature animals would be those butchered when they first reached full size, that is, at about 2 to 3 years old, while the other animals might represent draft or milch animals who served other functions for several years before being slaughtered.

The sheep/goats (Ovis aries/Capra hircus) are represented by 26 pieces of bone. Except for two teeth and one hyoid, the sheep/goat bones are those of the butchered carcass: ribs, vertebrae and limb bones. All the sheep/goat bones from the Brooks site are immature or recently mature animals, that is, those of optimal butchering age, and at least some were from a fairly small, slender-legged breed.

The pigs (Sus scrofa) at the Brooks site are represented by 60 pieces of bone, of which 47 are teeth or mandible fragments. The remainder are a scapula fragment and limb bone fragments. Almost all the bones and teeth are from recently matured animals, those of prime butchering age. It should be noted that one large tusk (lower canine) showed evidence of having had its tip broken off before the death of the animal. This tooth also had a cut mark about

two inches below the broken tip.

Chicken (Gallus gallus) is represented by 18 pieces of bone. Six tiny body and wing fragments from the contents of Feature 5 are in poor condition, with gnaw marks. Twelve nearly whole pieces in good condition from the contents of Feature 2 include two crania, three pieces of a mandible, two pieces of sternum and five long bones. Goose (sp. Anatidae) may be either the domesticated species (Anas anas) or a wild migratory form. It is represented by 9 long bone fragments, of which one is a femur fragment and the rest are wing bones. Turkey (Meleagris gallopavo) is represented by only two pieces, a cranial fragment and part of a wing bone.

The domestic cat (Felis familiaris) is represented by one immature bone, a foot bone. The dog (Canis familiaris) is represented by 9 bones from GW 121C, including vertebrae, ribs, and limb bones, all parts of one immature dog. The horse (Equus caballus) is represented by two fragments of one phalanx or foot bone and by one well-worn incisor.

The rabbit represented by one femur fragment is of unknown species, and may be European domesticated rabbit (Oryctolagus cuniculus). The only definitely wild mammal present in the Brooks site faunal remains was one bone from a whale (probably Delphinapterus leucas, the white or Beluga whale). This bone, a cervical vertebral centrum, was at least partially mineralized and had an encrustation of oyster shell. Since the Beluga whale is an arctic species,

and the mineralized condition of this bone suggests that it is from a long-dead animal, no interpretation can be made that live Beluga whale was ever present at this site in the historic period. The presence of this bone fragment in the excavations cannot readily be explained.

Wild duck at the Brooks site is represented by 25 pieces of bone which are tentatively identified as ring-neck duck (Aythya collaris). Of these 25 pieces, 21 are from GW 121K. The remains represent the sternum, long bones and ribs, in other words, carcass parts. There are also 21 pieces from GW 121K which are wild duck bones but which cannot be identified as to species: long bone shaft fragments, rib fragments and foot bones.

There are three species of fish represented. Sturgeon (Acipenser sp.) is represented by 12 pieces of bone, including one vertebra, five cranial bones and six scales. Gar, probably Longnose gar (Lepisosteus sp. cf. osseus), is represented by 21 bones, including 18 cranial bones and 3 scales. Catfish (Ictalurus sp. or Fylodictis sp.) are represented by eight pieces of bone: three cranial bones and five spines. One turtle, a snapping turtle (Chelydra serpentina) is represented by eight pieces of long bones and plastron from two adjacent proveniences, GW 121C and GW 121D. (It should be noted that two bones of gar from GW 121C and GW 121D glue together, as do two bones of turtle from the same contexts. In other words, GW 121C and GW 121D probably represent one deposit.) The Brooks

house site excavations also produced 10 pieces of crab claws (species unknown).

The John Washington House Site

Excavations at the John Washington house site yielded 676 pieces of bone, representing 15 species. Cow (Bos taurus) is represented by 41 bone fragments. Besides the fragments which represent the edible parts of the carcass, in other words the limb bones, pelvis, ribs and vertebrae, there are 9 teeth, 3 cranial fragments and 10 pieces of foot bones. All cow bones are from immature or recently matured animals.

Sheep/goat (Ovis aries/Capra hircus) is represented by 27 pieces of bone. There are five teeth and one cranial fragment and the rest are parts representing the butchered carcass. Except for one very immature metapodial diaphysis fragment, all bones are from recently matured animals. All the bones are from a small, slender breed of animal.

Pig (Sus scrofa) at the John Washington site is represented by 24 pieces of bone, of which 12 are teeth or mandible fragments. Of the 12 postcranial bones, 9 are from GW 201A and represent the vertebrae and long bones of at least two immature or recently matured pigs. None of the tusks show the signs of having been broken in life as was the tusk from the Henry Brooks site excavations.

Chicken (Gallus gallus) at this site is represented

by 210 pieces of bone. Four nearly whole long bones came from GW 201C. GW 204H yielded 180 fragments, mature and immature, representing nearly all parts of chicken anatomy except the cranium. Twenty three mature and immature chicken bones from GW 204J include long bones, foot bones and one cranial fragment.

Goose (Anseriformes sp.) is represented by only five fragments of wing bone. Turkey (Meleagris gallopavo) is represented by only one bone fragment, from a tibiotarsus. The wild duck (probably Aythya collaris, ringneck duck) is also represented by only one bone, a coracoid fragment. There are in addition 13 pieces of songbird (Passeriformes sp.). Passerine bones are difficult to identify at best, but since these thirteen bones are all long bones which have had their ends crushed, no specific identification could be made.

There are no cat or dog bones from the John Washington house site. Horse (Equus caballus) is represented by only two tooth fragments, both molars or premolars and both extremely worn. Of rabbit (possibly Oryctolagus cuniculus, the European domesticated rabbit), there is one bone, a mandible fragment. An unknown species of mouse is represented by eight bones including one mandible, one rib and six long bone fragments.

Three species of fish are present in the faunal remains from these excavations. Sturgeon (Acipenser sp.) is represented by one vertebral fragment and three scales. Gar (Lepisosteus cf. osseus, Longnose gar) is represented

by three cranial bones and 21 of the characteristic scales. Catfish (Ictalurus sp. or Pylodictis sp.) is represented by 60 assorted bones, of which 24 are from GW 203J, 13 from GW 204J and 20 from GW 204L.

One frog (Rana sp.) is represented by four bones, a mandible fragment from GW 204J and three long bone fragments from GW 204L.

Conclusions

The evidence of animal use at the Henry Brooks and John Washington house sites which can be inferred from these faunal remains may be summarized as follows.

The large size of the cow, pig and sheep/goat bone fragments indicates a consistent dietary preference for large roasts and joints as opposed to small steaks and chops. The cow provided the major source of meat. Most cattle were butchered at first maturity. This is the optimal time for butchering if cattle are being raised for the table. However at the Henry Brooks site at least some cattle were butchered when older, suggesting that they served some other function, such as milking or draft, before being eaten. While it is probable that the animals were all locally butchered, the evidence is inconclusive.

Unlike the cattle, the sheep/goats were probably all raised with meat (not some other product, like wool) as the primary goal, since all the bones were of animals of prime

butchering age. And as with the cattle, local butchering is probable, but the evidence is inconclusive.

Of the pig remains, it should be noted that 59 out of 84 pieces of bone (or 70.24%) are teeth or mandible fragments. This pattern suggests that pigs were being butchered locally but that their carcasses were being shipped elsewhere for consumption. Despite the fact that the pig bones well outnumbered the sheep/goat bones, it cannot be determined from the available evidence whether pork or mutton was more important in the local diet. Although pork was undoubtedly eaten locally, the primary function of these pigs was apparently the production of meat for sale. The broken tusk with cut-mark from the Henry Brooks house site marks an effort by the farmer to protect his stock. The tusk would have been cut or broken by him to prevent that pig from injuring the other pigs in the sty.

Smaller domesticated animals supplemented the meat supply. Chicken was undoubtedly eaten, but the turkey, goose and rabbit bones are too few to permit interpretation of the uses of these species. (It must be stated that while the goose, turkey and rabbit bones have been assumed here to be from domesticated animals, they may in fact represent wild forms.) Cat and dog were present, at least at the Henry Brooks site, and horses were present at both sites. These animals probably existed in greater numbers than their bones from these excavations would suggest. Since they weren't eaten, their bones might not commonly have been

disposed of in or around dwelling sites.

Although bones that were definitely from wild animals made up a substantial proportion of the remains (19.69% of the total count, see Table 2), wild animal meat was surprisingly insignificant in the diet. Ringneck duck was probably eaten, as was snapping turtle. Sturgeon, gar and catfish, all freshwater or estuarine species, were utilized. An unidentified species of crab was apparently also consumed. The remaining wild species were probably not eaten. These include the whale discussed previously, the mouse, the frog, and the passerine bird. The condition of the passerine bones, with their ends crushed, suggests some sort of predation, since the action of a predator such as a cat would leave the bones in that state. Several wild animals which might have been expected to be part of the diet are missing, such as deer, squirrel and raccoon. Why wild sources of meat were relatively ignored on a rural site where they might have been expected to be more heavily exploited is unknown. The wild species which were utilized all inhabit the water or the shoreline: duck, turtle, fish and crab.

Further evidence for the diet may be seen in eggshell fragments found at both sites (in GW 121K and GW 208A), and in the oystershell found throughout the excavations.

There are not enough animal bones from dated contexts to permit a discussion of changes in animal use at these two sites over time. It is not impossible that the patterns of bone distribution observed in these remains were merely

caused by accidents of deposition. More intensive excavation of the two house sites, yielding a more complete assemblage of the faunal remains associated with these sites, would render a quantified, more detailed faunal analysis fruitful.

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