

Appendix IV

**ANALYSIS OF THE FAUNAL REMAINS
FROM THE STANTON HOTEL:
FINAL REPORT**

by

David T. Clark, Ph.D.
Zooarcheology Research Facility
Department of Anthropology
The Catholic University of America

The faunal remains from excavations at the Stanton Hotel consisted of 1342 bone and 2 shell specimens. This assemblage was analyzed by "Group" proveniences and they are discussed in detail below. The distribution of faunal remains is listed in Table 13. The results of the analysis are presented, first, with general comments followed by a detailed discussion of each species. The discussions refer to numbered data tables at the end of the report (Tables 14-22). Reference is also made to illustrations at the end of the report.

Methods

The faunal assemblage was first sorted into identifiable and unidentifiable fragments and, then, the identifiable fragments were grouped by species and detailed observations were made of each fragment. All the materials were placed in clear plastic bags with identification and provenience labels and sealed. Next, the data from the labels was recorded on data sheets and tabulated. Consequently, a final report was prepared.

Identification of the faunal materials was aided by the use of a skeleton comparative collection of modern animals housed in the Archeology Laboratory, Department of Anthropology, Catholic University.

Also, a collection of commercially sawed bone sections, etc., from modern "supermarket meats" as well as an extensive assemblage of bone elements from modern farm butchering was used to classify and describe symmetrically sawed bone elements from the Stanton Hotel assemblages. In many cases, concentrations of symmetrically sawed bone elements of large domestic species were more common after the 1850's in historic faunal assemblages I have studied from the Middle Atlantic region. This is certainly linked to the development of more efficient commercial butchering techniques.

Maturation data used for computing "age at death" was recorded where possible. However, since the assemblages were highly fragmented and useable joint ends and teeth were often broken and deteriorated, maturation data was scarce. Also, for the preceding reasons, measurements on the bones were impossible in most cases and thus, sex and age data were minimal.

Terminology

A number of terms used in the text refer to skeletal elements and technology and are explained in this section. Most of these are references to species discussions and the data on Tables 14-22.

Although scientific names are used in the text and on charts, the common names for all animals are used in the discussion sections. Consequently, the reader becomes familiar with the taxonomic names along with the common names.

The tables include the genus or class group names for animals such as Bos = cow or Aves = birds. They are listed horizontally. The rest of the faunal data is listed

vertically, such as skeletal elements, number of specimens (elements, fragments), maturation data, etc. (Tables 14-22). The tables include a listing for provenience (Prov.) and modifications (Mod = Cut and Sawed) vs. totals.

Unidentifiable bones are grouped in categories. They include large mammals referring to pig and cow sized animals; medium mammals = fox sized animals; small mammals = mouse to squirrel sized animals.

Cut and sawed bones are common in the assemblage, especially sawed elements. Cut or axed vertebrae are often identified as "split". That is, during the initial butchering of the animal, a common technique is to split the vertebrae column (backbone) down the middle from top to bottom. This process separated the carcass in two equal halves. The result is that the vertebrae are, also, split in two and are commonly found in the refuse faunal assemblage.

Sawed bones are a common occurrence in the assemblage. Frequently, sawed specimens exhibit a high degree of symmetry as far as sawing technology is concerned. In many assemblages, sawed elements are very common and reference is often made to symmetrically sawed bone which refers to systematic butchering technology on a professional or commercial level. A good example of this level of technology is the abundance of symmetrically sawed sections representing "specialty" meat portions. Sawed bone sections consist of thick or thin, cross-cut sections usually from the shafts of legbones (femur, tibia, humerus), ribs, and innominates (pelvis). This type of sawing represents systematic butchering of entire animals such as cows, sheep and, especially, pigs. For assemblages I have analyzed from sites in the Middle Atlantic region, this type of technology is more common after the mid-1800's.

Limitations of Research

This assemblage represents many smaller assemblages of material. Unfortunately, small assemblages yield less information, in general. Also, most of the assemblages were in very fragmented condition which decreases the identification of species and thus decreases the amount of information recoverable.

There was a suspicious absence of small animal bones. Considering that some fish and rodent bones were recovered, I expected more of this size material. Absence of small bones, scales, etc., was most likely due to sampling limitations, size of screen mesh, etc. Unfortunately, this constitutes a loss of valuable information and presents an incomplete picture of the faunal assemblage from the site.

Other problems focus on the interpretation of the faunal remains, specifically. With smaller samples, there is always a limited variety of skeletal elements represented in the assemblages. Furthermore, historic faunal assemblages are frequently but not always represented by food refuse in the form of individual meat portions. Rarely, especially in urban contexts, does an assemblage contain the complete remains of butchered animals which is more characteristic of assemblages from more rural contexts like farmsteads, plantations, etc., thus, an important consideration is the number, distribution, and type of meat portions

represented in an assemblage especially since most of the faunal remains represent food refuse.

Burnt and incinerated bone specimens were exceedingly rare in all the assemblages. This suggests that meats were often prepared by methods other than exposure to direct heat or the bone was removed and discarded prior to cooking. Such methods included pickling (salting), smoking, and cooking in liquid (boiling, stewing, etc.).

Provenience Group Results

Group 31

Group 31 consisted of 128 bone fragments of which 60% were indeterminable large mammal bone fragments (Table 14). The common species were Cow (Bos taurus), Pig (Sus scrofa), and Sheep (Ovis aries). Bird remains, especially chicken (Gallus gallus domesticus), were also common. The only other identified species was Cat (Felis domesticus). The material was well preserved but highly fragmented.

Bos taurus (Cow)

Cow remains (11) were common and consisted of fore and hindleg elements, ribs and vertebrae (Table 14). The fore and hindleg elements were from meaty elements of the body including foreshank and rump. The vertebrae, extremities and ribs represent less meaty portions such as neck, short plate rib, and short loin.

Some specimens were symmetrically sawed including ribs, vertebrae and a femur (upper leg). Of particular interest were sawed caudal (tail) vertebrae which are rare in most assemblages. This specimen was probably associated with a rump roast. The evidence indicates systematic professional or commercial butchering where entire carcasses were butchered in a variety of specialty meat portions. This type of butchering is more common after the 1850's.

Sus scrofa (Pig)

Pig remains (9) were represented by fore and hindleg fragments (Table 14). Generally, these elements are associated with meaty portions including "picnic" shoulder, hock and "shank half" ham cuts (Figure 56). Interestingly enough, the tibia (lower leg), representing the shank ham portion, was symmetrically sawed and, generally, I have found that systematically sawed pig remains are rare in assemblages dating prior to the 1850's from historic faunal assemblages in this area. The maturation data indicate that hogs were killed or slaughtered before 1 year of age.

Ovis aries (Sheep)

Sheep remains were less common than pig or cow and consisted of shoulder, innominate (pelvis) and, especially, hindlimb fragments (Table 14). Most of these fragments are associated with meaty cuts, especially, "leg of lamb" portions (Figure

57). Of special interest is a sawed femur (upper leg) section which represents a "shank half", leg slice or chop. This type of specialty portion is associated with systematic commercial butchering, generally, more common after the 1850's. This data coincides with that from the sawed pig and cow bone assemblages. Although maturation data were limited, sheep were less than 1.8 years old at death.

Felis domesticus (Cat)

One element was identified as domestic cat (Table 14). Cat remains are very common in historic refuse deposits and were pets and/or stray scavengers.

Gallus gallus domesticus (Chicken)

Chicken remains (11) were common and represented mostly, wing, leg and thigh meat portions.

Group 32

Group 32 yielded 281 bone fragments. However, this total is misleading since 226 bones were attributed to one, near complete, domestic cat skeleton (Table 15). Excluding the cat remains, indeterminable large mammal remains constituted 51% of the assemblage. The most common remains were those of cow, pig, sheep and chicken (Table 15). The assemblage was in good condition although very fragmented. However, deterioration of bone surfaces was minimal.

Bos taurus (Cow)

Cow elements (4) included rib and femur (upper leg) fragments and most were sawed. The femur pieces were symmetrically sawed sections representing rump roast or steaks. This type of systematic sawing is indicative of commercial or professional butchering technology, generally, dating to the mid-1800's or later.

Sus scrofa (Pig)

Only one pig bone fragment was identified. It was a tibia (lower leg) shaft fragment from a "shank half" ham. Data from this element suggest the hog was less than 2 years old at death.

Ovis aries (Sheep)

Three fragments of sheep bone were identified consisting of foreleg, shoulder and innominate (pelvis) elements, all representing meaty portions of the body. The foreleg remains were from foreshank portions. The shoulder and innominate pieces were symmetrically sawed sections from a blade roast or chop and a "butt half" leg slice or chop, respectively (Figure 57). The symmetrically sawed bone sections noted previously, are "specialty" portions usually associated with professional or commercial butchering technology dating later than the 1850's.

Felis domesticus (Cat)

A near complete skeleton of one domestic cat was identified in this assemblage. This material consisted of 226 fragments representing all the major elements of the skeleton except for a few innominate fragments. Cats are very common in historic deposits and were probably pets and/or scavengers.

Rattus sp. (Rat)

Rat remains were scarce in all the assemblages from Stanton Hotel. Only 2 hind foot fragments were identified in this material. Obviously, the faunal deposits must have been sufficiently protected from rat populations in sealed refuse features. This also suggests the refuse was deposited quickly before rat scavenging occurred. This is especially significant since only 2 bone fragments in all the assemblages exhibited rodent gnawing marks.

Gallus gallus domesticus

Chicken remains (4) included wing and breast portions.

Group 33

The faunal assemblage from Group 33 was small, consisting of only 17 fragments of which 10 (65%) were indeterminable large mammal remains (Table 16). Domestic cat bones were the most common material identified (4). This material was in good condition with many large fragments. Bone surface deterioration was minimal.

Bos taurus (Cow)

Cow remains included only one patella (knee) element which is usually removed from the carcass during the initial butchering process.

Sus scrofa (Pig)

Pig remains included a single femur (upper leg) shaft fragment from a "butt half" ham portion (Table 16).

Felis domesticus (Cat)

This material included 2 foreleg and 2 pelvis fragments (Table 16). All the elements represented immature animals. Domestic cats are common in historic faunal assemblages and represent pets and/or scavengers.

Group 34

The remains from Group 34 included 87 bone fragments and most were unidentifiable large mammal remains (71) which constituted 82% of the total assemblage (Table 17). Cow and pig were the only species identified. The material

was in good physical condition but consisted of many small indeterminable fragments.

Bos taurus

Cow remains (6) consisted of leg, rib and vertebrae fragments (Table 17). Two of the specimens were sawed and another cut. Most of these specimens represented meaty portions of the body. This material included a symmetrically sawed tibia (lower leg) shaft of a hind shank roast, a split lower (lumbar) vertebrae from a sirloin or short loin roast and one upper foreleg (humerus) shaft fragment from a shoulder roast. One rib was, also, sawed and probably represented a "short rib" portion (Figure 55). The symmetrically sawed bones represent systematic professional/commercial butchering.

Sus scrofa (Pig)

Pig bones were relatively common (8) and none of the elements were cut or sawed (Table 17). Most of the bones were shoulder, fore and hind leg fragments from a "Boston butt", picnic shoulder and "butt and shank" hams (Figure 56).

The only other material was indeterminable large mammal remains and 2 bird bone fragments.

Group 35

The faunal remains from Group 35 included 381 fragments and this was the largest assemblage from the Stanton Hotel collection. However, 203 (53%) fragments were indeterminable large mammal bones. Overall, this group exhibited the widest range of species including cow, pig, sheep, cat, chicken, 3 species of turtle, and catfish (Table 18). The most common remains were those of cow (19), pig (10), cat (36) and chicken (86). The material was in good physical condition but there were many smaller, unidentifiable fragments.

Bos taurus (Cow)

Cow remains were very common (19) and at least 3 individuals were represented. Most of this assemblage consisted of vertebrae, innominate (pelvis) and upper hindleg fragments (Table 18). The high number of vertebrae and innominate specimens was surprising since they are usually less common compared to fore and hindlimb bone fragments.

There were numerous symmetrically sawed bone sections and most represented better quality meats. All the innominate specimens were sawed sections from sirloin steaks or thin-cut roasts (Figure 55). Sawed femur sections (upper leg) were also very common and represented round steaks or thin-cut roasts (Figure 55). Also, a symmetrically sawed foreleg (humerus) section was identified, probably from a "rolled shoulder" roast and a rib section from a short rib portion. The symmetrically sawed cow remains from Group 35 represented the greatest variety of specialty meat

portions from the entire Stanton Hotel assemblage. This type of systematic professional/commercial butchering was very common after the 1850's.

Sus scrofa (Pig)

Pig remains (10) consisted of foreleg, shoulder and hindleg fragments (Table 18). The foreleg remains were from leg "hocks" and the shoulder bone represented a picnic shoulder roast. The hindlimb fragments were from "shank half" hams. One specimen was a thin, symmetrically sawed bone section from a shank half ham "slice" (Figure 56). Once again, this type of specialized butchering technology, especially sawed pig bones, was more common by the 1850's. A number of manible teeth were also identified (Table 18). They were probably from hog "jowl" meat portions (Figure 56). This is a portion found around the jaw and is a very grainy, poorer quality meat. The maturation data from both tooth wear and bone fusion, indicated that one individual was less than 2 years old at death while another was less than 1 year old.

Ovis aries (Sheep)

Sheep bones (6) were mostly hindleg fragments from "leg of lamb" portions (Table 18). Specifically, 3 fragments were symmetrically sawed sections from the femur (upper leg) shaft and represented leg slices which constituted higher quality meats. Two unsawed fragments of the tibia (lower leg) were shank "leg of lamb" portions (Figure 57). One shoulder fragment was from a blade roast (Table 18). The incidence of symmetrically sawed elements coincides with that of cow and pig and, again, indicates butchering technology common after 1850. The maturation data from sheep remains indicated that at least one individual was less than 1.8 years old at death.

In overview, the large domestic animal remains from Group 35 exhibited some important characteristics. Hind leg bones from meaty, better quality meat portions were very common. Cow remains also included high quality portions from the sirloins (Figure 55). Symmetrically sawed bone pieces were abundant and represented a wide variety of specialty meat portions.

Indeterminable Large Mammal Remains

As noted above, unidentified large mammal remains were common and this material probably represents large domestic mammals. Interestingly, many symmetrically sawed fragments of leg and innominate bones were identified in this collection which supports the evidence from cow, pig and sheep remains.

Felis domesticus (Cat)

This material (36) included 1 adult cat and many fragments from a fetal individual (Table 18). As mentioned elsewhere, cat remains are common in historic refuse material and represent either pets and/or scavengers.

Gallus gallus domesticus (Chicken)

Chicken remains were more common in the Group 35 assemblage than any other and represented a wide variety of meat portions including wings, backs, breasts, thighs, and legs (Table 18). In addition, there were many vertebrae, leg extremity and cranial fragments, undoubtedly from the processing of whole chicken carcasses.

Turtles

Eastern Box turtle (Terrapene carolina) and Pond Slider turtle (Chrysemys scripta) remains were identified in the assemblage (Table 18). Box turtles are common terrestrial species and were frequently eaten. Pond Sliders are aquatic turtles commonly found in shallow streams, slow moving areas in a river, swamps and ponds. They prefer areas of dense vegetation and, usually, soft, sandy bottom environments. There was no conclusive evidence that Pond Sliders were eaten.

Pisces (Fish)

One pectoral spine from a catfish (Ictalurus sp.) was identified. Catfish are a popular food fish and their bones are frequently recovered from historic refuse deposits. Pectoral spines are commonly identified because they are dense skeletal elements and are not easily broken into small pieces.

Group 36

The number of faunal remains from Group 36 was very small (15), which always presents interpretive problems. Cow and pig were the only species identified in the assemblage (Table 19). The material was in good physical condition and consisted of mostly large, identifiable fragments.

Bos taurus

Cow bones (5) included mostly fore and hindleg fragments (Table 19). The foreleg remains were from a shoulder roast and one specimen was symmetrically sawed. The hindleg fragment was a symmetrically sawed femur (upper leg) section from a round steak or roast (Figure 55).

Sus scrofa (Pig)

Pig remains (5) consisted of foreleg, vertebrae, and mandibular (jaw) teeth. This material represented picnic shoulder, neck, and, possibly, "jowl" meat portions (Figure 56). As such, these all represented poorer quality meats.

Group 37

The bone remains from Group 37 totaled 86 fragments and 59 or 69% were indeterminable large mammal bone fragments. The most common species were cow and pig. The assemblage was very fragmented but otherwise in good physical condition.

Bos taurus (Cow)

Cow bones (10) included mostly, foreleg and teeth fragments (Table 20). The foreleg remains were ulna fragments (lower leg) from foreshank meat portions (Figure 55). Tooth and manible fragments are not prime meat portions and, thus, may be refuse from the initial butchering of the animal.

Sus scrofa (Pig)

Pig refuse (9) consisted of foreleg, hindleg and tooth fragments (Table 20). Three individuals were represented based on size and maturation data. The foreleg fragments were from 2 picnic shoulder and 1 "hock" portion. The hindleg bones were from shank and "butt half" hams. The teeth were probably from "jowl" cuts or refuse from the initial butchering of the carcass. Maturation data suggest that at least 2 individuals were less than 1 year old at death.

Ovis aries (Sheep)

Sheep bones (3) included only foreleg fragments from foreshank and rolled shoulder cuts.

Felis domesticus (Cat)

Domestic cat refuse included an immature (fetal) maxillary skull fragments. Cats were common as pets and/or scavengers.

Gallus gallus domesticus

Chickens were represented by 3 bone fragments from wing and leg portions.

Turtle

One Eastern Box turtle bone fragment (Terrapene carolina) was identified. This species is common terrestrial turtle and is often used as a food source.

Group 38

The assemblage from Group 38 consisted of 39 fragments of which 20 (51%) were indeterminable large mammal bones. Cow, pig, sheep and oysters were identified in this small collection. The assemblage was very fragmented but otherwise in good condition.

Bos taurus (Cow)

Cow remains (7) consisted of foreleg, vertebrae and innominate fragments (Table 21) representing shoulder, one chuck, short loin, sirloin and rump meats (Figure 55). One innominate fragment was a symmetrically sawed bone section from a roast or steak (Figure 55).

Sus scrofa (Pig)

Pig remains were common (7) and represented foreleg, pelvis and hindleg bone fragments (Table 21). Two upper leg bones were from picnic shoulder cuts and one innominate (pelvis) represented a "butt half" ham. The hindleg material consisted of 2 symmetrically sawed tibia (lower leg) shaft fragments from a "butt half" and a "shank half" ham (Figure 56). As mentioned elsewhere, symmetrically sawed pig elements are rare prior to the 1850's.

Ovis aries (Sheep)

Sheep elements (3) included vertebrae and hindlimb remains from "rack of lamb" and shank half "leg of lamb" cuts (Figure 57).

Crassostrea virginica (American Oyster)

This is the only assemblage with oyster remains although only 2 fragments were identified (Table 21).

Feature 99

The faunal remains from Feature 99 consisted of 295 fragments and 215 (73%) were indeterminable large mammal bone fragments. The most common species identified were cow and pig (Table 22). The assemblage was in good physical condition although highly fragmented.

Bos taurus (Cow)

Cow remains were more common (34) than any other species. This material exhibits a wide range of skeletal elements including all major parts of the skeleton except innominate (pelvis) and, perhaps, cranial fragments (Table 22). The element distribution was significantly different than those in the other assemblages. In addition to food remains, much of this material may represent refuse from initial cow butcherings. At least 4 individuals were represented in the assemblages.

The most common materials were forelimb, vertebrae, hindlimb and tooth fragments (Table 22) representing both poor and better quality meat portions. The forelimb bones represented a variety of meats including foreshank and shank knuckle cuts from the lower foreleg (Figure 55). The upper foreleg remains were from shoulder and chuck portions. The foreleg extremities (toes, etc.) are probably refuse from initial butchering since they are not often used as food. The vertebrae remains included neck cuts, standing rib roasts, and short loin cuts. The hindleg remains were from rump and hindshank roast cuts. The hindlimb extremities (toes, etc.) most likely constitute refuse from initial butcherings since they are rarely eaten. There were numerous tooth and a horn core fragments which, undoubtedly, represents initial butchering refuse since there is very little useable meat associated with these elements.

It was interesting that none of the elements were sawed suggesting, perhaps, this assemblage dates to an earlier period than many of the others with symmetrically sawed remains. The maturation data indicate that most individuals were at least 3.5-4 years at death which was considerably older than cows from the other assemblages where the average age at death was 2-3 years.

Sus scrofa (Pig)

Pig remains were also common (22) and included mostly innominate (pelvis), fore and hindleg fragments and a variety of teeth (Table 22). Most of these elements were from meaty portions. The innominate and hindleg remains were from "butt" and "shank half" ham portions. The forelimb elements were from picnic shoulder cuts (Figure 56). The tooth and cranial fragments were probably refuse from initial butchering but the mandibular teeth might be refuse from "jowl" cuts (Figure 56). It should be noted that sawed remains were absent in this assemblage which is consistent with the evidence for cow remains. The maturation data suggest hogs were less than 1 year old at death.

Ovis aries (Sheep)

Sheep remains (9) were less common than those of cow or pig (Table 22). Hind and foreleg fragments were most common, representing shank half "leg of lamb" and foreshank cuts, respectively. The remains of a "blade" shoulder roast was also recorded (Figure 57). Maturation data indicated at least 2 sheep were more than 1.8 years old at death.

Equus caballus (Horse)

This was the only assemblage with identifiable horse remains, although only a single mandibular molar was recorded.

Rattus rattus (Black rat)

Rat remains (4) were scarce in this assemblage and absent from most others. Rats are common scavengers of refuse deposits. The fact that rat remains were very rare in all assemblages indicates the refuse was inaccessible by rat populations due to adverse soil characteristics or rapid burial in sealed features.

Aves (Birds)

Bird refuse was rare (Table 22). Chicken remains included only 3 fragments from a wing, back and leg portion. This is the only assemblage with identified turkey (Meleagris gallopavo) remains but only 4 fragments were identified, from breast and thigh cuts.

Pisces (Fish)

Fish remains were scarce and, again, included one catfish pectoral spine. As mentioned elsewhere, catfish are a common food source.

Overview: Feature 99

There were some significant differences between the Feature 99 assemblage and all others. This assemblage yielded the widest range of species compared to the others. The cow assemblage included most major elements of the skeleton and, thus, represented not only food refuse but also refuse from initial cow butcherings. Sawed bone elements were absent in the cow, pig, and sheep assemblages. This suggests the assemblage might date to an earlier period than those with large numbers of symmetrically sawed remains. This was the only assemblage with identified horse remains, although only one molar tooth was recorded. This was also the only material with identified turkey bones, although, in general, bird remains were scarce.

Results of Analysis and Conclusions

The total assemblage from Stanton Hotel included 1342 bone and 2 shell fragments (Table 13). This material was in good physical condition but highly fragmented which significantly limits overall interpretations.

With the exception of the two shell fragments, the entire assemblage consisted of vertebrate remains (Table 13). Most of this material included large mammal remains and 52% (684) of the entire assemblage was indeterminable large mammal bone fragments. The most common identifiable mammal remains were those of cow, pig and sheep. Cow and pig bones were much more common than those of sheep. Other than mammal, chicken bones were represented in every assemblage, especially in the Group 35 assemblage (Table 13). Wild animal remains were very scarce in all of the assemblages. Large (deer) and medium (fox) sized wild animals were not identified in any assemblage.

The assemblages from Group 35 and Feature 99 exhibited the greatest diversity of species (Table 13). In addition to the common domestic species notes above, both assemblages yielded remains of turtle and fish (catfish). Also, horse and turkey remains were identified from Feature 99 (Tables 13, 18 and 22).

Rat remains were rare and were found only in the assemblages from Group 32 and Feature 99 (Table 13) suggesting that the refuse deposits were well protected from burrowing, rodent scavengers. Only 2 bones exhibited rodent gnawing from the entire assemblage - one from Feature 99 and the other from Group 35. Also, evidence of carnivore scavenging was completely absent. This suggests that the refuse was covered or sealed soon after deposition.

Distribution of Skeletal Elements

Post-cranial remains were, by far, the most common fragments in the entire assemblage and dominated the remains of each group (Tables 13-22). Teeth were the most common cranial elements, probably due to their dense, resistant construction. The distribution of post-cranial elements varied per species. The most common cow elements were foreleg, hindleg and vertebrae fragments. The most common pig

remains were hindleg and foreleg elements including extremities such as footbones (metacarpals/metatarsals). Conversely, the most common sheep remains were, usually, hindleg elements. Regardless of the variability between the domestic species, most of the elements represented meaty portions of the body. Common cow meat portions were shoulder, short loin, sirloin, rump, round and shank cuts. Pig meat portions were hocks, picnic shoulders and hams. For sheep, common cuts were from the hindleg and, to a lesser extent, shanks and shoulders (Figures 55-57).

The most common chicken portions were wings, legs and thighs. Whole butchered carcasses were recorded in the assemblage from Group 35.

Cut and Sawed Remains

Many of the assemblages exhibited sawed bone elements except Feature 99. Cut specimens were scarce in all the assemblages.

The greatest variety of sawed specimens was recorded in the assemblage from Group 35 which included sawed specimens of cow, pig and sheep. Generally, high numbers of symmetrically sawed bones are common by the mid-1800's and later. This represents systematic professional/commercial butchering technology. Of the 3 major domestic mammals, fewer pig elements were sawed in most of the assemblages.

Maturation

Maturation data was recorded, where possible, for the large domestic mammal species. There were significant differences between these species. In general, cows died at 2-3 years of age, pigs were less than 1 year old at death and sheep were 2.8 years or older at death. The cow remains from Feature 99 were 3.5 and 4 years old at death. Cows are often butchered at a later age compared to pigs or sheep since their growth rate is, generally, slower. Pigs and sheep develop faster and are butchered at younger ages. The maturation evidence for hogs agrees with recent research from family, community and commercial hog butchering practices. It is common practice to butcher pigs before 1 year of age unless the animals are used as breeding stock. As is the case with many species, depending on growth rate, the older the animal the tougher the meat.

Tables

The following is an explanation of the symbols and abbreviations used in the data tables. The specimens listed on the tables are all fragments unless stated otherwise.

The tables are organized by element and species. The complete scientific name for each species is used in the text only. General animal listings are as follows:

- unidentifiable large mammal = cow or deer size,
- unidentifiable medium mammal = fox or raccoon size,
- unidentifiable small mammal = mouse or squirrel size,
- Aves = birds,

- Small Aves = small bird (robin or sparrow size),
- Large Aves = large bird (turkey size).

Terms referring to the orientation of limb elements include: proximal - the end nearest the trunk or head and distal - the end farthest from the trunk or head. The designation of "lt." = a left element and "rt." = a right element.

Table 13: Species Distribution, Whole Site

Species	Rising Common Name		Son Tavern, 7 NC-E-63, Faunal Analysis: Species Distribution									
	Group 31		Group 32		Group 33		Group 34		Group 35		Group 36	
	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI
Bos taurus -	11	1	4	1	1	1	6	1	19	3		
Sus scrofa -	9	1	1	1	1	1	8	1	10	2		
Ovis arles -	5	2	3	1					6	3		
Equus caballus -												
large mammal	77		28		10		71		203			
Felis domesticus -	1	1	236	1	4	1			2	1		
Felis d., fetal -									34	1		
Rattus sp. -			2	1					3			
small mammal												
Gallus gallus -	11	2	4	1					86	6		
Meleagr's gallopavo -												
Turkey	15		3		1		2		3			
Aves -									14	2		
turtle									1	1		
Ictalurus sp. -												
Catfish												
Pisces -												
Total	129	7	281	6	17	3	87	2	381	19		

Species	Rising Common Name		Son Tavern, 7 NC-E-63, Faunal Analysis: Species Distribution									
	Group 36		Group 37		Group 38		Feb. 99		Total		Group 39	
	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI	Elements	MNI
Bos taurus -	5	2	10	1	7	1	34	4	97	15		
Sus scrofa -	5	1	9	3	7	2	22	2	72	14		
Ovis arles -			3	2	3	1	9	2	29	11		
Equus caballus -							1	1	1	1		
large mammal	14		59		20		215		697	0		
Felis domesticus -			1	1					244	5		
Felis d., fetal -									34	1		
Rattus sp. -									6	3		
small mammal									4	0		
Gallus gallus -			3	1			3	1	107	11		
Meleagr's gallopavo -							4	1	4	1		
Turkey	4						1		29	0		
Aves -			1	1					15	3		
turtle												
Ictalurus sp. -									2	2		
Catfish												
Pisces -												
Total	28	3	86	9	37	4	295	14	1341	67		

Table 14

Rising Son Tavern, 7NC-E-63, Provenience Group 31, Midden West of Upper Foundation

Species Element	Bos Comments	Sus Comments	Ovis Comments	Large Mammal Comments	Felis Comments	Gallus Comments	Aves
Maxilla -teeth	1 premolar						
Mandible -teeth		1 canine 1 incisor					
Vertebrae- Cervical	2 (1 cut)						
Thoracic	1	1 imm.					2
Sacrum							
Caudal	1 sawed					1	
Rib	1 prox.,imm. 1 shaft			2 cut 3			
Inominate- Illium			1				
Scapula			1			1 coracoid	
Humerus-shaft -distal		2 immature					
Radius-shaft -proximal	1					1 rt.	
Ulna-shaft		1			1 lt.		
Carpal	1					2	
Femur-shaft -proximal	1 rt.,sawed		1 rt.			2 lt.	
-distal			1 sawed				
Tibia-shaft -distal		1 sawed					
Metatarsal		1 immature	1 immature				
Phatange	1	1				3	
Unident. Frags. -long bone				66			13
-vertebral				6			
Total	11	9	5	77	1	10	15
MNI	1	1	2		1	2	

Table 15

Rising Son Tavern, 7NC-E-63, Provenience Group 32, Cinders Midden West of Upper Foundation

Element	Species	Comments	Sus	Comments	Ovis	Comments	I.g. Mammal	Felis	Comments	Rattus	Gallus	Comments	Aves
Cranium	Bos							15 (cpl.skel.)					
Maxilla								4					
-teeth													
Mandible									2 ll.&rt.				
Vertebrae-													
Cervical								8					
Thoracic								16					
Lumbar								21					
Sacrum								1					
Caudal								9					
Rib		1 prox.,sawed					7	52				1 furculum	
		1 shaft											
Inominate-													
Hlum									1 sawed				
Scapula									1 sawed				
Humerus-shaft									2 ll.&rt.				
Radius-shaft									2 ll.&rt.				
Ulna-shaft									2 lt.&rt.			2	
Metacarpals									2 ll.&rt.			1 rt.	
Carpal								24					
Femur-shaft								11					
-distal									2 lt.&rt.				
Tibia-shaft													
Fibula-shaft									2 ll.&rt.				
Metatarsal									19			2	
Tarsals									6				
Calcaneus									2				
Astragalus									2				
Phalange									15				
Unident. Frags.									15				3
-long bone									19				
-long bone sawed									1				
-vertebral									1				
Total		4	1	1	3	28	236	2	4	2	1	1	3
MNI		1	1	1	1	1	1	1	1	1	1	1	1

Table 16

Rising Son Tavern, 7NC-E-63, Provenience Group 33, Lower Structure Interior

Species Element	Bos	Sus	Large Mammal	Felis	Aves
	Comments	Comments	Comments	Comments	Comments
Rib			3		
Inominate-iliium				1 lt., imm.	
Acetabulum				1 imm.	
Radius-shaft				1 rt., imm.	
Ulna-shaft				1 rt., imm.	
Femur-shaft		1 rt.			
Patella	1 Lt.				
Unident. Frags.					
-long bone			6		1
-vertebral			1 trans.proc.		
Total	1	1	10	4	1
MNI	1	1		1	

Table 17

Rising Son Tavern, 7NC-E-63, Provenience Group 34, Lowest Midden West of the Lower Foundation

Species Element	Bos	Comments	Sus	Comments	Large Mammal	Comments	Aves
Cranium							
Maxilla				1			
-teeth							
Mandible							
-teeth							
Vertebrae-							
Cervical							
Thoracic				2			
Lumbar		1 cut					
Sacrum							
Caudal							
Rib.		2		1		4	
		1 sawed					
Inominate-							
Ilium							
Acetabulum							
Scapula				1			
Humerus-shaft		1					
-distal				1			
Radius-shaft							
-proximal							
Ulna-shaft							
Metacarpals							
Carpal							
Femur-shaft				1 rt.			
-proximal							
-distal							
Tibia-shaft		1 sawed		1			
-distal							
Fibula-shaft							
Patella							
Metatarsal							
Tarsals							
Calcaneus							
Astragalus							
Phalange							
Unident. Frags.							
-long bone						63	2
-long bone sawed						3	
-vertebral						1	
-rib							
Total	6		8			71	2
MNI	1		1				

Table 18

Rising Sun Tavern, 7NC-E 63, Provenience Group 35, Upper Middle West of the Lower Foundation

Element	Species	Comments	Sus	Ovis	Mammal	Felis, felid	Canis	Aves	Terrapene	Pseudomys	Turite	Ichneumon
Cranium							1					
Maxilla												
teeth												
Mandible												
Inclisor		1 Inclisor										
pre-molar			3									
molar			1									
Vertebrae-												
Cervical		1 atlas										
Thoracic		2 (1 imm.)										
Sacrum		1 sawed										
Caudal				42 (1 sawed)		6			7	2		
Rib		1 sawed										
Carpus												
Sternum												
Inominate												
Ilium		2 sawed										
Ischium		1 sawed										
Pectoral Spine												
Scapula			1									
Coracoid												
Humerus-shaft												
Radius-shaft												
Ulna-shaft												
Metacarpals												
Metacarpals		1 imm.										
Femur-shaft		1 sawed										
Proximal		2 (1 sawed, 1 imm.)										
Distal		2 (1 sawed)										
Tibia-shaft		1 sawed										
Fibula-shaft		1 rt., 1 imm.										
Metatarsals												
Tarsals												
Calcaneus												
Astragalus												
Phalange												
Unident. Fragm.		1 cut										
long bone				142								
long bone sawed				5								
vertebral				13								
Total		19	10	6	2	34	3	7	3	5	1	1
MNI		3	2	3	1	1	6	1	1	1	1	1

Table 19

Rising Son Tavern, 7NC-E-63, Provenience Group 36,
Fence Line West of the Lower Foundation

Species	Bos	Comments	Sus	Aves
Element				
Mandible				
-incisor		1 imm.		2
-premolar				1
Vertebrae-				
Cervical				1
Humerus-shaft				
-distal		1 rt.		1
Ulna-shaft				
-proximal		1 lt.,sawed		
Femur-shaft				
-distal		1 sawed		
Phalange		1		
Unident. Frags.				
-long bone				11
-long bone sawed				3
Total		5		19
MNI		2		1

Table 20

Rising Son Tavern, 7NC-E-63, Provenience Group 37, Screened Fill, West of the Upper Foundation

Species	Bos Comments	Sus Comments	Ovis Comments	Large Mammal	Felis	Comments	Gallus	Terrapene
Element								
Maxilla						1 lt., imm.		
-teeth	1 molar							
Mandible	4 rt							
-Incisor		2						
-premolar	1	1						
Vertebrae-								
Cervical	1							
Rib					2			
Carapace								1
Humerus-shaft			1					
Radius-shaft		3 imm. (2rt., 1lt.)	2 lt.					1
-proximal								
Ulna-shaft	1 rt.	1						
-distal	1 rt., imm.							
Metacarpal	1							
Tibia-shaft		1						1
Fibula-shaft		1						1
Tarsometatarsal								
Unident. Frags.								
-long bone						50		
-long bone sawed						4		
-vertebral						3		
Total	10	9	3	59	1	3		1
MNI	1	3	2		1		1	1

Table 21

Rising Sun Tavern, 7NC-E-63, Provenience Group 38, Unscreened Fill and Surface Collectio

Species Element	Bos	Comments	Sus	Comments	Ovis	Comments	Large Mammal	Crassostrea
Maxilla								
-molar			1					
Mandible								
-molar			1					
Vertebrae-								
Thoracic	3				1			
Lumbar	1	cut						
Rib							12	
Inominate-								
Acetabulum	1	sawed	1					
Humerus-shaft			2	lt.&rt.				
-distal	1							
Femur-shaft								
-distal			1	sawed				
Tibia-shaft			1	lt.,sawed				
-distal					1	rt.		
Metatarsal					1			
Phalange	1							
Unident. Frags.								2
-long bone							6	
-vertebral							2	
Total	7		7		3		20	2
MNI	1		2		1			1

Table 22

Rising Sun Tavern, ZNC E.63, Feature 99

Species Element	Comments	Sus	Comments	Ovis	Comments	Equus	Comments	Large Mammal	Comments	Reptiles	Comments	Small Mammal	Canis	Meleagris	Aves	Ichtiurus
1		2							5		1 il.					
-skifer									1							
Maxilla		2														
-Incisor		1														
-molar			1													
Mandible		3														
-Incisor		2 imm.														
-molar		1 mature		1	1 mature											
Vertebrae-																
Cervical																
Thoracic																
Lumbar																
Sacrum																
Caudal									33							
Rib									1 lool		1 n.				2	
-cul																
Sternum																
Innominate-																
Ilium		1														1
Acetabulum		2														
Pectoral Spine									2				1			
Scapula																
-right					1											
-left																
Coracoid																
Humerus-shaft																
-proximal																
-distal		1 n., mature														
Radius-shaft		2 imm.														
Ulna-shaft		3 il. & r.														
-distal																
Metacarpals		1 n., mature														
Carpal		3 (1 cul)													2	
Femur-shaft		1 mature, cul										1 mature				
-distal		1 n., mature														
Tibia-shaft		1 il.														
-proximal																
-distal																
Fibula-shaft		1														
-distal																
Metatarsal		1 mature														
Tarsometatarsal		2 imm.													1	
Phalange		2 (il. & r.)														
Unident. Fraga.																
-long bone									156							
-long bone sawed									2							
-long bone cut									1							
-vertebral									14							
Total									215							
MNI									4							

Figure 55

Bos taurus (Cow) Meat Portions.

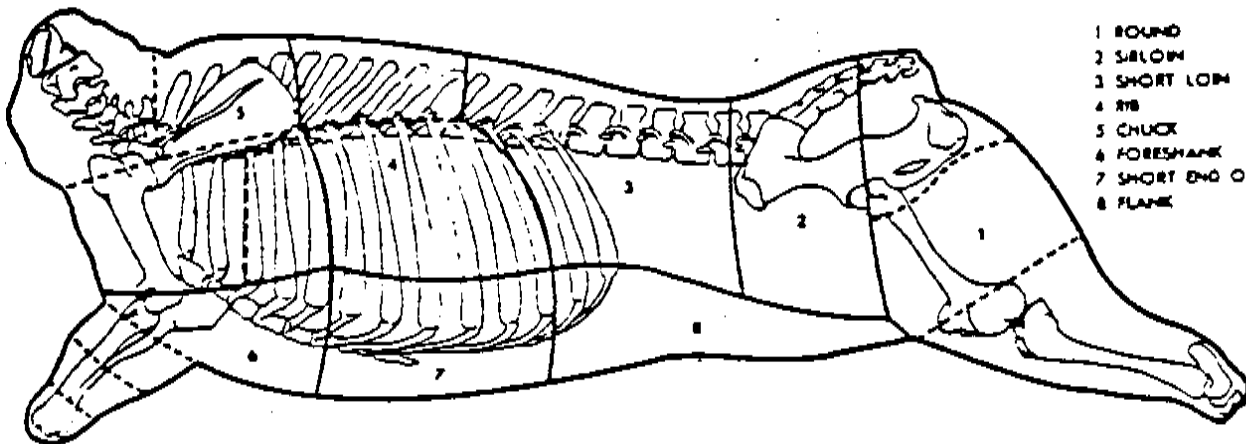
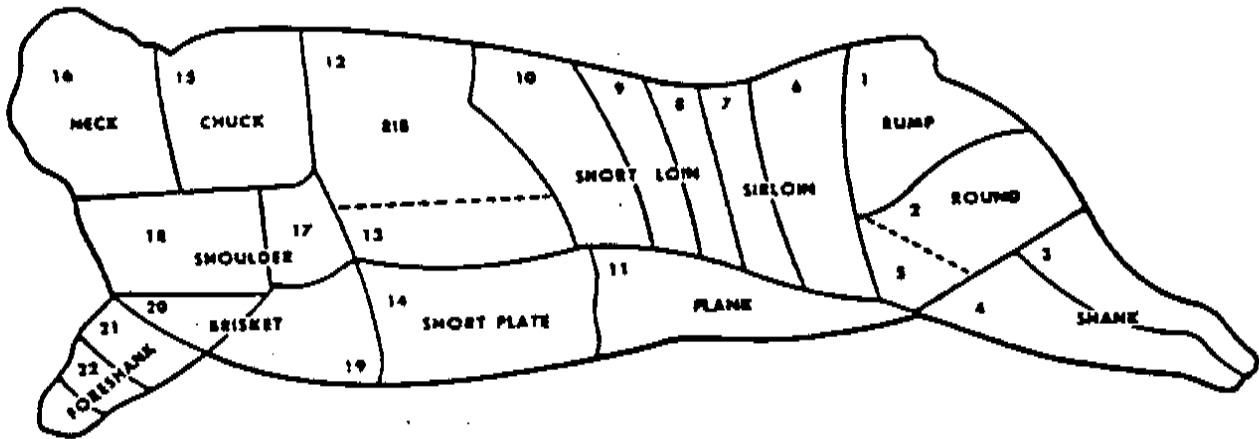
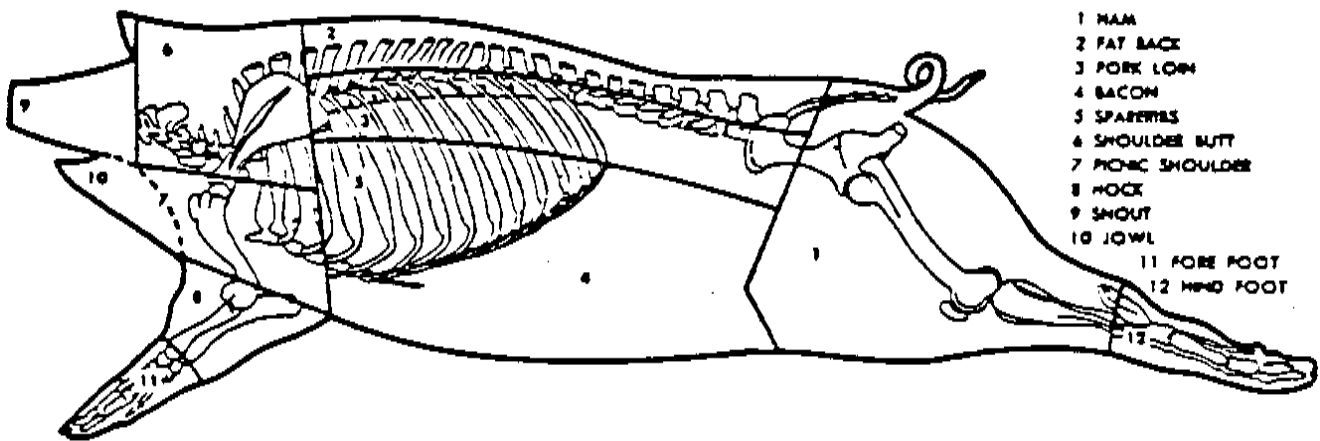
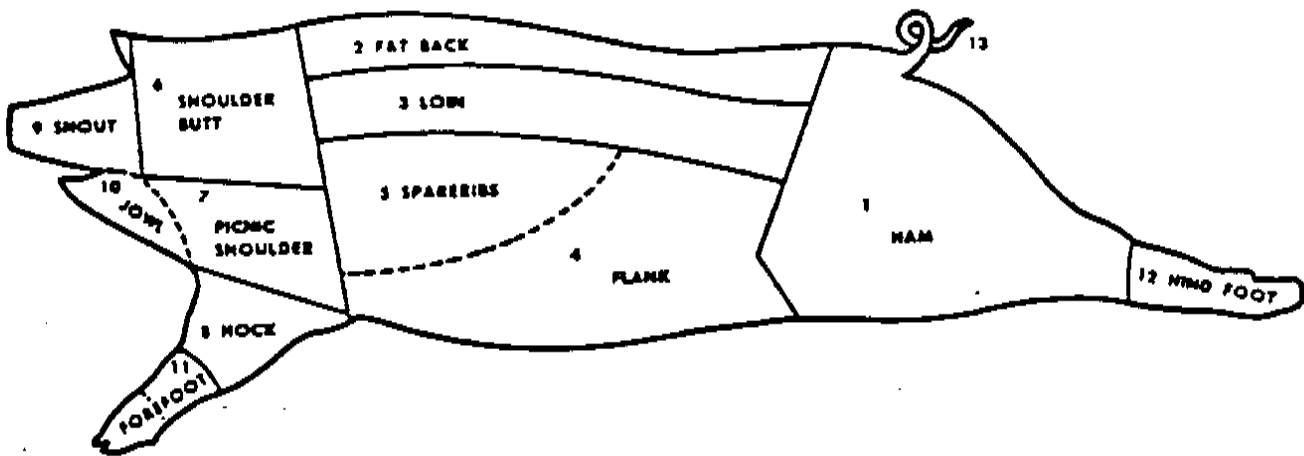


Figure 56

Sus scrofa (Pig) Meat Portions.



- 1 HAM
- 2 FAT BACK
- 3 PORK LOIN
- 4 BACON
- 5 SPAREBILLS
- 6 SHOULDER BUTT
- 7 PICNIC SHOULDER
- 8 HOCK
- 9 SNOUT
- 10 JOWL
- 11 FORE FOOT
- 12 HIND FOOT

Figure 57
Ovis aries (Sheep) Meat Portions.

