IV. BONES, SEEDS, AND DIET

One of the basic questions historians and anthropologists try to answer about people they study is, what did they eat? Written records can tell us much about diet, but not everything. We know from probate inventories that the farmers of eighteenth-century Delaware grew grain (see Chapter I), and the ceramic vessels tell us that they often ate their grain in the form of porridge or puddings. What else did they eat? The Dawson Family Site yielded more than 6,600 pieces of animal bone, which can be used to learn about the meat in the Dawsons' diet and other aspects of the farm household. To study the plants the Dawsons used, we employed a technique called soil flotation, by means of which we extract small seeds and other plant remains from excavated soil. Through these methods we have added to our knowledge of the Dawsons' lives and to our picture of their farm of 250 years ago.

A. BONES

1. Introduction

Animal bones from archaeological sites can tell us several things about the interactions between people and animals, such as what animals people exploited, and how; which animals people ate and what parts of the animals they ate; and something about how meat was cooked and served. We can also learn how farmers managed their herds and flocks: a herd of cattle raised for dairying, for example, leaves a different pattern of bones than a herd managed primarily for meat. From the kinds of wild animals included in the diet, we can speculate about hunting and fishing practices. We can even learn what kinds of pets people kept.

Analysis of the bones, the faunal assemblage, from the Dawson Site, started with the cleaning and careful examination of the bones. Each bone was identified, when possible, as to the species of animal and the part of the skeleton represented. This information is crucial because it tells us what animals people were raising and exploiting. When possible, we obtained other types of information during the examination, including the age of the animal at death, evidence of butchering, the presence of gnaw marks (rodent, carnivore, and human), and signs of exposure to heat or weathering. This information was eventually entered into an electronic database, and provided the basis for our analysis. A full description of the methods we used is provided in Appendix C.

We did not approach the bones from the Dawson Site in total ignorance, since we already knew something about how other eighteenth-century Delaware farmers managed their animals and the kinds of meat they ate. The bones from other eighteenth-century farm sites, such as the Augustine Creek South Site, the John Powell Plantation, the William Strickland Plantation, the McKean/Cochran Farm, the Benjamin Wynn Farmstead, and the Darrach Store, have all been analyzed (Bedell et al. 1998a, b; Catts et al. 1995; De Cunzo et al. 1992; Grettler et al. 1995, 1996). The collections of bones from these sites have been rather similar, and show a fairly consistent pattern of animal exploitation. Of the domesticated animals found at these sites, cattle and pig are always the most common, but dog, sheep, horse, chicken, and turkey bones are usually present as well. The remains of wild animals were also found at all of these sites, including those of small mammals, birds, turtles, and fish. While the list of wild species varies from site to site, certain animals are common to most of them, including deer, opossum, rabbit, raccoon, squirrel, duck, goose, snapping turtle, and catfish. Wild animals found on a few sites include beaver, chipmunk, mink, muskrat, woodchuck, cod, shad, and a variety of turtles. Study of these sites has shown that most of the meat eaten by eighteenth-century farmers was raised on their farms, especially pork and beef, and that wild food was only a supplement. Small game, such as squirrel, rabbit, and turtle, was apparently more prevalent in the diet than large animals such as deer.

2. Animals in the Records

Information about the animals kept on Delaware farms can also be obtained from written records,

especially probate inventories (see discussion in Chapter III). The inventory takers usually listed all of the large animals on the farm, and sometimes they carefully described each horse and cow listed. During our study of probate inventories from Kent County, we noted every domestic animal that appeared. The results of this study, summarized in Table 20, show that most people in Delaware lived with farm animals. Ownership of horses was particularly common: overall, 87 percent of inventoried households owned at least one, including 71 percent of poorer households. Horses must have been essential for getting around the widely dispersed farms and settlements of thinly populated Kent County. The other common animals were cattle, pigs, sheep, and geese. About 95 percent of households owned at least one farm animal.

Most farmers kept small numbers of the four most common mammals—horses, cattle, sheep, and pigs—generally no more than a dozen sheep and cattle and a couple of dozen pigs. To practice this kind of farming a farm family had to be skilled in many different tasks, including raising, feeding, and caring for their animals, milking cows, churning butter, shearing sheep, and butchering pork, beef, and mutton. A few wealthy farmers had rather large herds of animals: Thomas Ebthorn, who died in 1767, left an estate that included 15 horses, 43 cattle, 44 sheep, and 86 pigs. Thomas Dawson's inventory tells us that at the time of his death he owned two horses and seven cattle, numbers within the normal range, but no sheep or pigs. However, the large number of sheep and pig bones found at the Dawson Family Site suggest that he had owned those animals at one time.

Not a single dog or cat is listed in the probate inventories, which suggests that these animals had little monetary value. Chickens are very rarely noted, although archaeology shows that they were ubiquitous. There is an interesting difference between the frequency of geese and turkeys in the inventories. Ownership of geese was more common among richer farmers, suggesting that geese were something of a luxury; those who owned turkeys were among the poorest farmers.

During the eighteenth century much of the meat people ate was preserved in some way, by pickling, smoking, salting, or drying. While farmers also ate some wild foods, people relied primarily upon their domesticated livestock for meat. Pork lent itself best to preservation. Even today there is a wide variety of preserved pork products, including bacon and ham, available at supermarkets. The inventories show that some

Table 20. Presence of Animals in Kent County Probate Inventories, 1740-1769

	Total Value of Inventory		
	Less than £50	£50 to £225	More than £225
Total # of Cases	49	48	24
Item	**Percent of Households Possessing**		
horses	71.4	95.8	100.0
cattle	63.2	100.0	100.0
pigs	55.1	89.6	95.8
sheep	24.5	79.2	91.7
geese	6.1	14.6	25.0
turkeys	8.2	.	.
	Average Number per Household		
horses	1.6	3.5	6.3
cattle	4.7	9.3	23.1
pigs	12.3	18.9	32.3
sheep	6.1	10.4	30.3

farmers set up in the smoked pork business, and some had as much as 2,000 pounds of "bacon" on hand. Bacon was durable and marketable enough to serve as a form of currency; storekeepers' accounts show that they accepted smoked or salted pork in trade (De Cunzo et al. 1992). Beef and mutton, although they did not keep as well, were also preserved. Beef jerky, potted beef, and smoked beef tongue are a few of the preserved beef foods commonly available in modern times. Mutton, the meat of adult sheep, has fallen out of favor with Americans today, replaced entirely by lamb. However, during the eighteenth century mutton was far more commonly eaten than lamb and was preserved by the same methods used to preserve beef. The Dawson data show what types of meats one household consumed on a regular basis.

3. Bone from the Dawson Family Site

a. The Animals on the Site

At the Dawson Site we found 6,638 pieces of animal bone, almost all of them in the features (Table 21). This number is what archaeologists refer to as the Total Number of Fragments (TNF). The Total Number of Fragments is not a particularly good measure of the amount of bone found on the site, because a bone broken into pieces would be counted as more than an unbroken bone. We therefore prefer to use a number called the Minimum Number of Units (MNU), an estimate of the smallest number of bones (that is, cow femurs or pig's knuckles) that could have produced the fragments found. At the Dawson Site, the 6,638 bone fragments represented at least 1,587 different bones. Most of the bone came from Feature 1, the cellar (Plate 24), and Features 7 and 10, the two largest pits.

Although the bones of both domesticated and wild animals were found, the great majority were from domesticated species. The domesticated animals included horse, cattle, pig, sheep, cat, dog, and chicken, and also one foot bone from a goat (which was unusual for a Delaware site). The dog and cat bones were probably from pets, as these animals were not eaten. It is interesting to note, however, that dogs and cats were not buried in pet

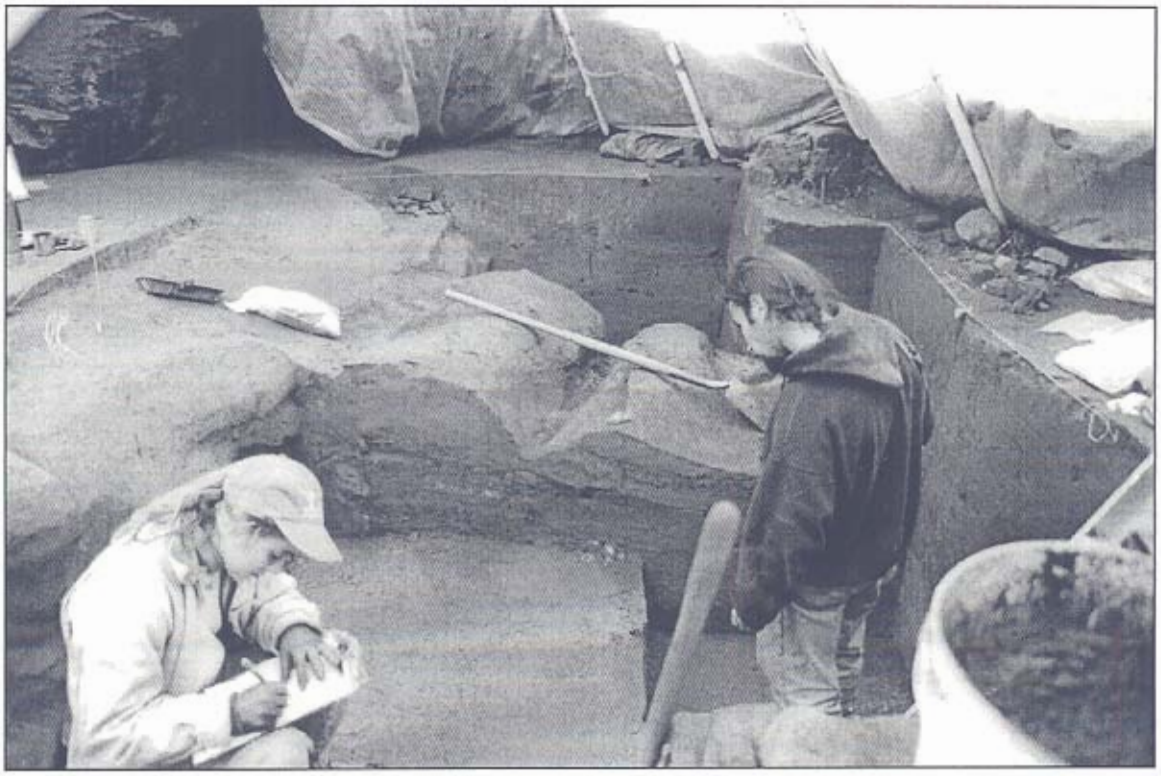

PLATE 24: Excavating the Dawson Cellar

Table 21. Summary of Bone from the Dawson Family Site, by Minimum Number of Units (MNU)

	Feature 1	Feature 7	Feature 9	Feature 10	Feature 13	Feature 25	Other Features	Total
Mammal								
Cat	1	.	.	.	.	.	.	1
Cattle	196	38	14	16	19	4	9	296
Deer	3	.	.	.	.	.	.	3
Dog	1	2	.	.	.	.	.	3
Goat	1	.	.	.	.	.	.	1
Horse	8	.	.	2	.			10
Opossum	5	.	.	.	.	.	.	5
Pig	229	130	27	24	1	11	4	426
Rabbit	17	1	.	.	.	1	1	20
Raccoon	2	.	.	.	.	.	.	2
Rat	1	.	.	.	.	.	.	1
Sheep	48	4	.	3	1	2	1	59
Squirrel, Gray	21	16	.	.	.	.	.	37
Small	39	5	.	1	.	1	.	46
Medium	35	9	.	3	1	.	.	48
Large	21	7	.	2	.	.	2	32
Subtotal	628	212	41	51	22	19	16	989
Bird								
Chicken	39	4	5	2	.	.	1	51
Duck	4	1	.	.	.	.	.	5
Goose	2	.	.	.	.	.	.	2
Pigeon	1	.	.	.	.	.	.	1
Unidentified	37	.	1	1	.	1	3	43
Subtotal	83	5	6	3	.	1	4	102
Fish								
Catfish	2	1	.	1	.	.	.	4
Croaker	1	.	.	.	.	.	.	1
Drum	270	1	.	.	.	.	.	271
Perch	11	.	.	.	.	.	.	11
Striped Bass	.	1	.	.	.	.	.	1
Unidentified	122	36	2	31	.	.	2	193
Subtotal	406	39	2	32	.	.	2	481
Reptile								
Snapping Turtle	1	.	.	1	.	.	.	2
Wood Turtle	.	.	.	1	.	.	.	1
Unidentified Turtle	2	.	2	3	.	1	3	11
Subtotal	3	.	2	5	.	1	3	14
Amphibian								
Unidentified	1	.	.	.	.	.	.	1
Subtotal	1	.	.	.	.	.	.	1
TOTAL	1,121	256	51	91	22	21	25	1,587

graves; people in the eighteenth century were evidently not sentimental about their pets and disposed of their bodies in the trash along with the kitchen scraps and butchery waste. Most of the bones from the site were either cattle or pig, and these two species account for almost all of the meat represented. Since cattle are larger than pigs, each cattle bone represents more meat than each pig bone, and the Dawson bone collection actually reflects more eating of beef than pork. Delaware probate inventories always list more pork than beef, from which some historians have deduced that most of the meat eaten in the eighteenth century was pork (Walsh 1992). Contrary to the written records, Delaware archaeological sites, like the Dawson Family Site, always produce more evidence of beef than pork. This is a case in which the written records are misleading: more pork appears in the records because it preserved better, not because it was eaten more often. Beef was more often eaten fresh, leaving little trace in our documents but plenty of evidence in trash deposits. Sheep bones were also rather common at the Dawson Site. The horse bones from the site showed clear evidence of butchering, indicating that the Dawsons ate horsemeat. However, butchered horse bones have been found on other Delaware sites, and eating horsemeat appears not to have been uncommon (Bedell et al. 1998a). No turkey bones were found at the Dawson Site, which was rather surprising, since they have been found on most other Delaware sites.

The wild animals we identified included birds, mammals, fish, turtles, and one amphibian, probably a frog. The bird species found were duck, goose, and pigeon. Because it is hard to distinguish between wild and domesticated duck and goose unless there is a large sample size, we are not certain that these animals were wild, but tend to think they were. Most of the mammal bones came from small animals, although there were three deer bones. The most common wild animals were squirrel and rabbit, but we also found bones from opossum, raccoon, and rat. Except for rats, whose bones we find because the animals lived in trash heaps, all of these species were eaten. Fish species included catfish, croaker, perch, drum, and striped bass. Most of the fish were identified from skull fragments, which is the most reliable way to identify fish, but in Stratum B of the cellar we found a whole pile of large, thick fish scales that we identified as coming from a drum. Reptile was represented by two turtle species, snapping turtle and wood turtle, which most likely formed part of the diet.

b. Managing the Herds

The management of livestock was geared toward providing the household with the animal products it required, essentially dairy products, meat, and labor. The number of animals kept of each species was determined by what that animal provided, its age, and sometimes its sex. Horses were used primarily for transportation and labor, but also for food. Cattle were kept to provide labor, milk, and meat. Mature cows generally had one calf a year. Unless a male calf was intended for labor as an ox, it would either be sold off or slaughtered at an early age. Bulls or oxen used for labor had a fairly short productive life. Females, kept as milk cows, could be productive for several years, but a farm needed only one or two to supply milk. Pigs were raised primarily for meat. During the eighteenth century sows generally had one litter of six or more piglets a year. The offspring were kept until they were between nine months and 18 months in age, then they were fattened up and slaughtered. The sex of the pigs was not an important consideration. Sheep were raised for wool and meat. Most sheep were kept until about six years of age before being slaughtered; again, sex was not a factor. The large number of bones found at most of the sites that bear gnaw marks made by cats and dogs points to the role of these animals as pest control agents. Chickens, and usually turkeys, were kept for eggs and meat.

Using the ages at death of the animals at the Dawson farm, something can be learned about how one Delaware farmer managed his livestock. We studied the ages at death for cattle, pig, and sheep. First we calculated the Minimum Number of Individuals (MNI), that is, the smallest number of animals that could have produced the bones we found. Studying the ages of animals at death for the collection from the Dawson Site was difficult

because we had found scattered bones rather than whole skeletons. Most of the time, therefore, we were estimating an age from a single bone, such as a tooth or the end of a longbone, and these different bones do not tell us the same things. Some bones, especially whole jaws, are very good indicators of age, while others are much less precise. From some bones we can figure a minimum age for the animal, while from others we can figure a maximum age. Our age estimates must not be made to seem more precise than they are, which is why we have not created a table showing exact ages for all the animals we identified.

The cattle bones on the site came from at least eight animals (an MNI of 8). Working from 143 bones that supplied some age information, we can guess the ages of all eight animals. Two were calves, one less than six months old and the other just about six months old. Four animals were found to be subadults (adolescents): one was aged at one year, one at one and three-quarter years, and two at two and a half years. Two animals were fully adult, that is, more than three and a half years old. Since most of the animals were subadults, the Dawsons were probably maintaining a couple of cattle for milk and labor, keeping the yearly calf for a relatively short period of two years or less, and then slaughtering the animals for meat.

Pig bones were the most common of all bones at the site, and we identified at least 24 different individual pigs (MNI of 24). There were 310 bones that could be aged relatively or whose specific age could be estimated. We had several well-preserved jaws. Almost all the animals were adolescents or young adults, nine months to 18 months in age. There was one young pig less than six months old, one adult aged at two to two and a half years, and a third aged at over three years The remaining 21 individuals ranged in age between nine and 18 months. This concentration of ages is exactly what we expected. The older individuals are most likely sows. The yearly offspring would be raised to a certain age, fattened up, slaughtered, and their meat preserved. It should be noted, however, that there is a range in these ages, and the animals were not all slaughtered in November, or at some other regularly scheduled time, as some books on farm life would have it (Earle 1898; Fletcher 1950). Market conditions, the Dawsons' own need for food, and the availability of fodder for the pigs were probably all factors in determining when a pig was slaughtered. The records of the Dawsons indicate that they, like most poor and ordinary farmers, did not have a smokehouse on their estate. They probably paid to hang their hams and bacon in a richer neighbor's smokehouse.

The Dawson Site sheep bones came from at least four animals (MNI of 4). It was possible to age 25 of the bones. Most of these elements had to be aged in a rough way, without the precision offered by the pig jaws. All that can be said with certainty is that most of the slaughtered sheep were fully adult, more than a year old, although one individual was young. This is in keeping with our belief that sheep were generally slaughtered for food after they reached adulthood.

c. Things Eaten

Learning what people ate is a matter of knowing not only what animals were involved, but what parts of them. We studied the bones from the Dawson Site with an interest in the parts of animals, especially cattle and pigs, that were eaten most often. The way meat was cut up can tell us something about how it was eaten, and about the kinds of meals eighteenth-century people enjoyed. In studying animal bones, we try to separate what we call dietary refuse, that is, bones from the table, from processing or butchery waste, bones that never made it into the house. It should be remembered, however, that some parts of the animal that we might think of as waste were used as food in the eighteenth century. Pigs' feet are always considered dietary refuse and not processing waste because they were, and in many places continue to be, commonly used as food. Animal heads are considered mostly waste by many people today, but in the eighteenth century people ate the brains and tongues of most animals and used the heads and feet of calves to make a gelatinous dish called headcheese.

City butchers in the eighteenth century slaughtered and processed the carcasses of large domesticated mammals such as sheep, pig, and cattle in standard ways similar to those in use today. We do not have any direct written evidence of how farmers butchered their animals, but from archaeological studies we think their technique was similar to that of professional butchers. The carcasses were first cut up into large meat sections known as Butcher Cuts. These large cuts of meat were then cut down into meal-sized pieces commonly known as Meat Cuts. Our study of meat use therefore takes the form of determining which butcher cuts and meat cuts are present among the bones.

Cattle bones were found from most of the parts of the animal, including the head, foot, chuck, round, loin, and prime rib. The collection therefore represents parts of the animal that are to us desirable and valuable and parts that we consider waste, or at least very poor food. This pattern, which has been found at other farm sites, tells us something important about farmers and how they ate. In a city, we can often tell the difference between a wealthy household and a poor one by the bones in their trash. Wealthy townspeople bought and ate only good cuts of meat, while poor people could afford only inferior cuts. Similar patterns have been found on large southern plantations, where planters ate the best meat and left the rest of the animal for their slaves. In the Delaware Valley, and the Northeast generally, farmers tended to eat all parts of the animals they raised. Even quite wealthy farmers ate headcheese and pigs' feet, while bones from top cuts of meat have been found at the farms of poor tenants (Bedell et al. 1998b). The cattle bones from the Dawson Site had been chopped with a cleaver into large chunks of meat suitable for roasting or stewing, not into individual steaks or other small portions. This pattern, of farmers raising their own animals, hacking the meat into large pieces, and eating all the parts of the animals, is highly traditional. The Dawsons ate their beef as had Europeans for centuries. The rather low number of certain bones, especially vertebrae, suggests that the bones we found were primarily household refuse, and that the first slaughtering of the cattle was done elsewhere and those bones disposed of separately.

Bones from all major parts of the pig's body (that is, Butcher Cuts) were found, except the belly (the bones of which are the lower halves of the ribs). Ham cuts were the most common, including butt hams (upper part of the rear leg), picnic hams (upper part of the front leg), shank hams (lower part of the rear leg), and shanks (lower legs). Shanks were used, as they are now, to flavor stews and soups, but the other leg parts were good eating. There was no evidence of a whole leg ham. A single butchered pelvic section found represented the loin from a roast. With heads, feet, hams, and roasts, we again have both the most and the least expensive cuts of the pig, and can assume that the Dawsons ate all the edible parts of their slaughtered hogs. As with the cattle, we found rather few vertebrae, so the pig slaughtering was most likely done elsewhere. The absence of belly is also suggestive. Pork bellies are used to make bacon, which, as we know, was as good as money in eighteenth-century Delaware. It could be that the Dawsons, at least for the months represented in our sample of bones, traded their bacon, the most saleable part of their pigs, at the store and ate what was left.

We found the remains of at least four sheep. The only cranium (skull) found had been cleaved, indicating that it was split open in order to extract the brain. Sheep brains were commonly used in the diet. The loin and bracelet were both represented by vertebrae. The most common bones were from shoulder cuts, including several stew cuts from the shank and a few roasts from the chuck. Leg cuts were the second most frequent, and included several butt end roasts, shank end roasts, and one stew cut from the shank.

Horse bones included teeth, upper forearm, and foot, all of which could have come from one individual. Two of the leg bones showed marks left by a cleaver, so they were clearly butchered. These pieces had also been gnawed by dogs or cats. One shoulder bone (distal scapula) was present but it was too degraded to see whether or not it bore butcher marks.

d. Throwing Away the Trash

Bones also provide evidence about how people threw away their trash. Waste disposal was a simple affair during the eighteenth century. There were no regulations to be followed concerning where and how one could dispose of waste on a farm. In general, people could dispose of their organic trash by dumping it on the surface, burying it, or burning it. Therefore, the three signs looked for in bones are weathering, gnaw marks, and heat exposure. Dumping organic refuse in an open or exposed place invites an infestation of rodents and other undesirable pests. When bone is left exposed, it is weathered by heat, cold, and rain. The effect of constant exposure is that the bone deteriorates rapidly. The cortex, or outer skin, becomes dry and porous and flakes off. Not only rats but also larger animals will come to scavenge the bones. Both rodents and larger carnivores leave easy-to-identify gnaw marks on the surface, and these marks can tell us about the history of the bones after they left the table. Suppose a bone showed large canine marks, but no rat gnaw marks. The canine marks would suggest that the table scraps were fed to dogs, and the lack of rodent marks would suggest that the leftover debris was carefully disposed of when the dogs were finished eating. Burying organic refuse is the best way to prevent an infestation of pests and to control odor. Bone that has been buried has the best chance of survival in the archaeological record. Burning trash is also a good way to keep pests away and to reduce odor and volume. Bone that has been exposed to high temperatures appears either charred or calcined (whitened).

Of the 6,638 total pieces of bone found on the Dawson Site, 29 were organically stained and 41 showed signs of surface exposure. Gnaw marks from both rodents and carnivores were present. There were 36 fragments with incisor teeth marks and 178 with canine teeth marks, probably from dogs or cats. Because these numbers are rather low, we can say that weathering or surface exposure of the bone was not common. Most of the bone on the site was probably buried. However, there was some evidence that trash was also burned, since 578 pieces were charred or calcined. The evidence of the bones contradicts, to some extent, the overall impression we had gained of a messy site with organic waste strewn about in shallow pits. The pits where trash was dumped seem to have been deep enough to protect much of the bone from both rats and rain. Perhaps the Dawsons, in an effort to keep rats and stray dogs away, were more careful with animal waste than with the rest of their trash.

e. Summary and Conclusions

The Dawsons exploited a wide range of both domesticated and wild animals. Domesticated animals included cattle, pig, sheep, goat, dog, cat, and chicken. It was surprising to find goat because this animal is uncommon on colonial Delaware sites and is not listed in the inventories. Domesticated animals were raised primarily to provide food, such as milk, eggs, meat, and fat. They were also kept to provide transportation, labor, and protection. The main sources of meat were cattle and pig. Wild animals included deer, squirrel, opossum, rabbit, raccoon, rat, duck, goose, pigeon, catfish, drum, croaker, perch, striped bass, snapping turtle, and wood turtle. With the exception of rat all of these animals were exploited for food, and some, such as deer, raccoon, and other small mammals, also for their fur.

We studied the Dawsons' livestock management by looking at the ages at death of the cattle, pigs, and sheep. The time at which an animal was slaughtered was typically determined by its age, sometimes its sex, and the purpose for which it was raised. The results of the information on aging showed that most of the cattle were slaughtered between the ages of one year and two and a half years. A few individuals were aged at half a year or less and a few others at more than three and a half years. This information suggests that the Dawsons had a dairy cow and a bull. Each year or so the previous year's calf was slaughtered for meat, so that the animal never reached adulthood. The age-at-death profile for pig showed that most individuals were slaughtered at around nine to 18 months of age. One individual was aged at less than three months and a couple of

others were aged at two years or more. This age profile indicates that the pigs were raised primarily for meat. They were kept just long enough to reach maximum size. They were not slaughtered all at once, however, in a single, annual event, but only as their meat was needed. The low number of older pigs suggests that the same sow was kept for a long period. Most of the sheep were adults, although one was aged at only one to two years. Since the best meat from sheep is obtained by slaughtering the animals as soon as they reach full size, the pattern at the Dawson Site shows that sheep were raised for wool first and meat second.

The distribution of bones from cattle and sheep indicates that the Dawsons ate all the parts of these animals, in the traditional way. They ate both the more valuable cuts, such as loins and hams, and the parts we may consider waste, such as heads and feet. Meat was hacked into large chunks suitable for roasting or stewing, not sawn into individual steaks. Chickens were represented not only by skeletal elements but also by eggshell. Horse and goat most likely were eaten as well, since the bones of both exhibited cut marks and butcher marks. Wild animals were varied but not very common. An almost full range of body parts represented most of the wild bird and mammal species.

The bones from the Dawson Site turned out to be similar in many ways to bones from other sites in Delaware, such as the Augustine Creek South Farm, the Powell Plantation, the Strickland Plantation, the McKean/Cochran Farm, the Wynn Farmstead, and the Darrach Store. At all of these sites the most common meat was beef, followed closely by pork; together these two made up most of the meat in the diet. Beef and pork were supplemented by mutton, chicken, and horse, and by wild foods. Most wild food was in the form of small animals, such as catfish, turtle, and squirrel, that could be easily taken around the farm or in nearby streams. Deer was not common. The large amounts of bone found on these sites, typically thousands of fragments, reminds us that meat was a large part of the eighteenth-century diet. In this, as in other ways, the Dawsons were fairly typical members of their community, and they practiced a culture with roots deep in the European past.

B. SEEDS

To find the remains of plant foods at the Dawson Family Site we used a technique called soil flotation. We took samples, each measuring two liters, from soil layers that appeared to have good organic preservation. This soil was taken to the laboratory of our ethnobotanist, Justine McKnight. The soil flotation technique entails "floating" the soil, that is, pouring it into a tank containing swirling water. In the tank, the organic remains float to the surface of the water and are skimmed off. Any plant remains recovered are identified under a low-power microscope. A full description of the methods and findings of this study are provided in Appendix D.

The plant remains from the Dawson Site recovered during flotation included hickory nut shells, grains of wheat, kernels of corn, fragments of corncobs, pieces of cherry stones, and a peach pit. The largest concentration of plant remains was 120 pieces of burned corncobs found in one sample from the cellar (Feature 1, Stratum D, Unit 167). Because no corn kernels (the edible part) were found in this sample, and because the sample also contained wood charcoal, the pieces probably came from cobs that had been thrown onto the fire as fuel. Corn kernels and wheat remains were also found in the cellar and in Features 7 and 10, the two largest pit features. The pieces of cherry stones could have come from either domesticated, Old World cherries, or the native, wild species. Europeans loved their cultivated cherries, which had been introduced from central Asia, and many were excited when they discovered that cherries grew wild all over eastern North America. However, as one colonist put it, the native cherries were "as wild as the Indians" (Leighton 1986). Wild cherries were used for making wine and jelly, but the Old World species was introduced for eating. There is little mention of cherry trees in the written records from eighteenth-century Delaware, but the trees were so common in England and Germany that some must have been planted.

Peach trees, on the other hand, are commonly attested to in the records, especially in the records of the Orphans' Court. Apples were the most common and important fruit, but peaches were not far behind. A study of Orphans' Court evaluations from the 1760 to 1830 period showed that more than 40 percent of all properties included apple orchards and more than 10 percent had peach orchards (Bedell et al. 1998b:47). Archaeology suggests that the eating of peaches was common, since peaches have also been found on other eighteenth-century sites; one didn't need a whole orchard to eat an occasional peach, just a couple of trees (Bedell et al. 1998a; Catts et al. 1995; Grettler et al. 1996). Other sites have also yielded blueberry and raspberry seeds (Grettler et al. 1995; LeeDecker et al. 1990). The eating of fresh fruit in season must have been one of the highlights of the eighteenth-century diet.

We found very little in the way of plant food remains at the Dawson Site, and, in general, efforts to find plant remains at historic Delaware farm sites have never been particularly successful. However, all the discoveries we have made are important because we have so little archaeological evidence of the plant foods people ate in eighteenth-century America. Like the brightly colored button inlays, the remains of fruit we find provide a splash of color among our collections of bones and earthenwares. They must also have provided splashes of color, and moments of pleasure, to the people who wore the buttons or ate the fruit 250 years ago.