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Zooarchaeological Analysis of a Free African Community: Gracia Real de Santa Teresa de Mose

ABSTRACT

Vertebrate remains from Gracia Real de Santa Teresa de Mose, near St. Augustine, Florida, provide a unique opportunity to examine African foodways at what may have been the first legally sanctioned, free, African town within the boundaries of what today is the United States of America. The collection contained 28,592 bones and an estimated 281 individuals. When data from Mose are compared to those from the nearby Nombre de Dios Native American village, it is clear that the refuse from Mose contained a higher percentage of domestic animals than did Native American refuse, although the subsistence strategies practiced by each group were similar in other respects. Compared to residents of St. Augustine, the people at Mose may have used less domestic meat. Slaves on coastal plantations later had greater access to domestic meat than did the residents of Mose and St. Augustine. These data suggest a high degree of self-sufficiency at Mose.

Introduction

Many studies of early Africans in the Americas focus on the lives of slaves. It is important to learn about African life where the greatest freedom to express cultural continuity and/or change may have existed, outside the constraints imposed by slavery. While studies of the processes by which African heritages were transplanted, replaced, or reinterpreted in the Americas can be accomplished within the context of studies of slavery, free Africans may have enjoyed better opportunities for cultural exchange with other Americans and unhindered development of African cultural traditions than did slaves. Unfortunately, there have been few archaeological studies of free Africans, and quantified studies of their use of animals are particularly rare. Archaeological research at Gracia Real de Santa Teresa de Mose (hereafter referred to as Mose), near St. Augustine, Florida, provides a unique opportunity to examine African foodways at what may have been the first legally sanctioned, free, African community within the borders of the present-day United States of America (Landers 1990a, 1990b; Landers and Deagan 1993).

Mose provides an opportunity to do three things: examine animal use by free Africans, explore the lives of Africans in a Spanish context, and study African animal use in the early 18th century. Very little is known about the archaeological manifestations of free Africans; published studies offer few quantified details, especially for remains associated with animal use (Bullen and Bullen 1945; Deetz 1977; Baker 1980; Bower and Rushing 1980; Steinen 1987). The excavated materials from Mose provide a unique opportunity to study the use of animals by these people. However, the Mose materials provide more than just an opportunity to explore animal use by Africans living as free men and women. It is commonplace to think of Africans in North America primarily as slaves within British or American society. (North America will be used henceforth to refer to those lands north of Mexico). Yet the free residents of Mose operated within a Spanish sphere of influence. Thirdly, Mose was founded in 1738 by the Spanish crown, which means that some, if not most, residents of Mose were born in Africa (Jane Landers 1992, pers. comm.) and may have spent only a few years as slaves in British or other Spanish colonies. Although it is not possible to state precisely how many residents of Mose were African-born, a very large percentage probably were. To emphasize this point, the common term "African-American" will not be used in this article. The Mose data, therefore, address many important gaps in present knowledge of African life in North America. Before presenting the faunal data from Mose, a brief history of the community will be provided and animal use by other ethnic groups in the area will be summarized. First, however, the environmental setting will be described.

Description of the Environmental Setting

There is a fundamental relationship between the subsistence strategy of a community and the natural

Historical Archaeology, 1994, 28(1):23–40.
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setting in which the community operates. Therefore, it is important to control environmental variables when making comparisons of animal use among ethnic groups. The biotopes of St. Augustine have been described extensively elsewhere (Reitz and Scarry 1985), but will be briefly presented here. The residents of Mose and St. Augustine had ready access to the same catchment area (Figure 1; Johnson et al. 1974). Both were founded at the edge of the Atlantic coastal plain, a low, flat region of well-drained, gently rolling hills and poorly drained flatwoods (Shelford 1974:76). Biotopes accessible from both towns included communities of plants and animals adapted to a humid, subtropical climate with mild winters, hot summers, high rainfall, and frequent ground fires. Mose, St. Augustine, and nearby Native American missions were all located on the mainland overlooking a complex estuarine setting. They were buffered from the Atlantic Ocean by a northern spit of mainland known today as Vilano Beach and to the south by a barrier island known as Anastasia Island.

Resources of two major marine habitats were accessible to all ethnic groups clustered near St. Augustine (Dahlberg 1975:4–10). One of these habitats is the broad, shallow continental shelf offshore of Anastasia Island and the other is the inshore zone. Inshore beaches are found on the seaward side of Anastasia and Vilano Beach. Estuarine mud flats, oyster bars, salt marshes, and a maze of tidal creeks lie between these islands and the mainland. This estuary is subject to regular tidal fluctuation via the Matanzas River and the inlet between Vilano Beach and Anastasia Island. Mose is located on one of the small tidal creeks flowing into the North River, which joins the Matanzas River to form St. Augustine's harbor. St. Augustine is located just west of the inlet, with the Castillo de San Marcos at the north end of the town providing protection to the harbor and its entrance.

There are differences in the animals associated with these habitats. Adults of tropical marine species are found in the deeper waters of the continental shelf edge several kilometers offshore. In some species, only young are typically found in the estuary, which serves as a nursery, while large adults less tolerant of unstable and low-salinity waters may enter the estuary only to spawn, or not at all. For example, sea basses, jacks, snappers, puffers, and porcupinefishes are sometimes taken from within the estuary, although adults of these species are usually available only offshore. More common in the estuary are sharks, rays, sea catfishes, toadfishes, killifishes, sheepsheads, drums, mullets, and flounders. Among the most significant estuarine resources are members of the drum family, including silver perches, seatrouts, spots, kingfishes, croakers, black drums, red drums, and star drums.

Gracia Real de Santa Teresa de Mose

The colonial history of Spanish Florida is usually divided into three parts. The First Spanish period began in 1565 with the establishment of St. Augustine as one of two towns in a much larger territory. This period ended in 1763, when Spanish Florida was ceded to Britain. The British period lasted from 1763 to 1783, when Britain returned peninsular Florida to Spanish goverance. Spain lost Florida a second time in 1821 when Florida became a territory of the United States of America.

Mose and its militia played an important part in the political struggle during the last part of the First Spanish period. Fort Mose was established in 1738 as part of St. Augustine's defensive system and as a residence for Africans who had fled northern British colonies (Landers 1990a, 1990b). During the early 18th century, Spain's claim to what eventually became Georgia was increasingly challenged by British colonists in the Carolinas. A Spanish Royal decree offered freedom and sanctuary to all African fugitives who reached Spanish Florida, if they converted to Catholicism. The men who became free by this means formed the African militia unit that served at Fort Mose and actively participated in the defense of Spanish Florida.

The fort was not occupied continuously. Fort Mose was abandoned and burned in 1740 as a consequence of General James Oglethorpe's attack on St. Augustine. The fort was reoccupied in 1752 but abandoned once again at the end of the First Spanish period, in 1763. Although the fort was

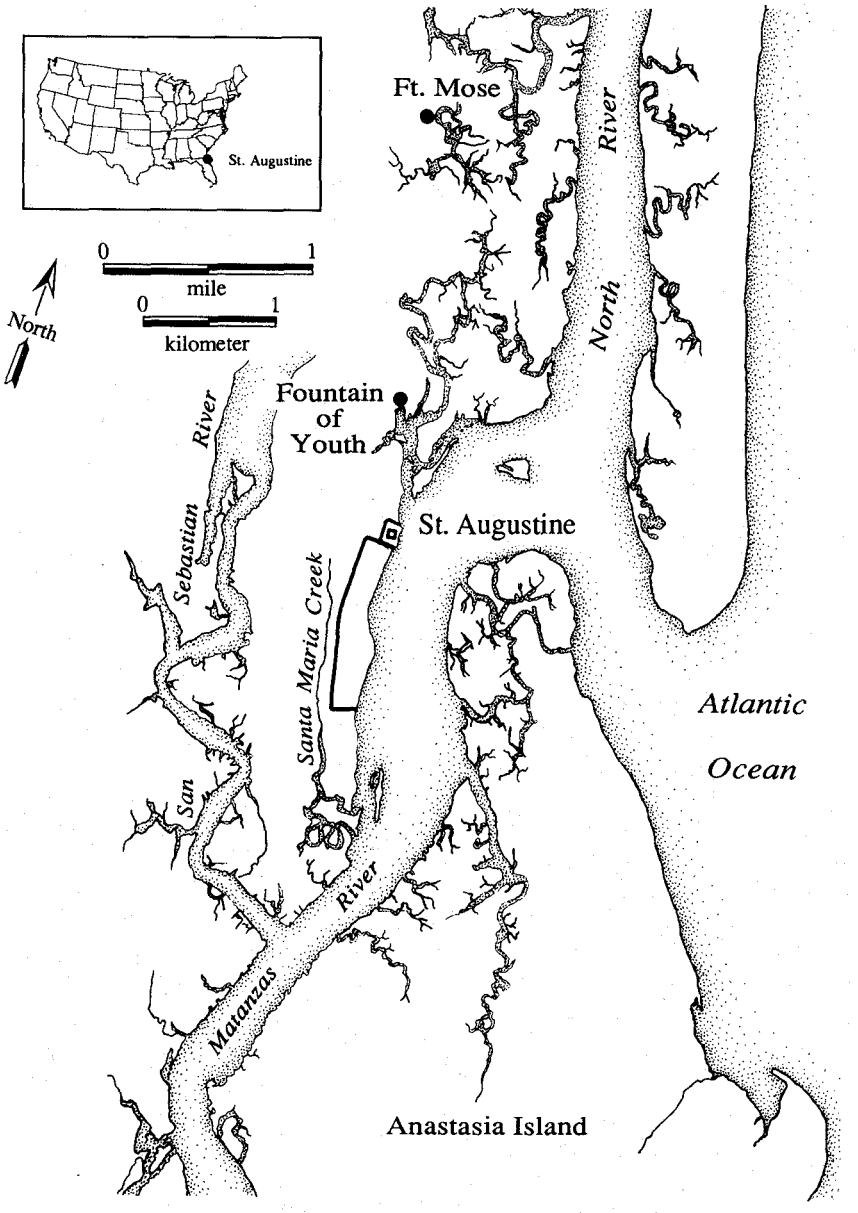

FIGURE 1. Map showing location of St. Augustine, Fountain of Youth (Nombre de Dios Mission), and Fort Mose.

also used during the British and Second Spanish periods, all of the faunal materials reported here are from the free African occupation of the First Spanish period. Most are from the second Mose occupation, between 1752 and 1763. Although there was a larger community, it has not been located. All of the faunal data reported here are from the vicinity of the fort.

A detailed description of Mose and its history is available elsewhere (Landers 1990a, 1990b). Although the number of people living at Mose varied, the community was never large. For example, in 1759 there were 67 men, women, and children at Mose (Landers 1990b:27). A wide range of cultures was represented in the community. Africans were primarily Congos, Carabalis, and Mandingos, but some Minas, Gambas, Lecumis, Sambas, Gangas, Araras, and Guineans also lived there (Landers 1990b). Some of the residents of Mose were mulattos and Native Americans, and some had lived in Spanish colonies in the Caribbean or South America (Deagan 1983:34; Landers 1990b). New dietary preferences, food preparation techniques, farming, herding, and foraging traditions were probably synthesized at Mose from these varied cultural traditions although no details are known of these aspects of life in the community. In addition to military duties, Africans at Mose farmed their own lands and probably also tended livestock, hunted, trapped, and fished. Some members of the community worked on Spanish farms and ranches, engaged in craft production, served as translators, and provided labor and other services to the larger community.

Details of economic life in St. Augustine and Mose are unknown. It is not possible at the present time to discuss the production and distribution of domestic foods in Spanish Florida or how Africans participated in this system. An important aspect of the economy of Spanish Florida was the Crown's subsidy, *situado*, which supported many members of the colony in part from 1578 until 1763 (Deagan 1983:34–37). Residents of Mose were on the subsidy list (Landers 1990b:18). The subsidy included such items as religious and governmental paraphernalia, fabrics, shoes, tools and utensils, china, weapons, furniture, flour, rice, salt, salted meat and fish, tallow, wine, and oil (Deagan 1983:36). These were available for soldiers, religious and government officials, pensioners, converts, and others on the subsidy list and might be purchased with their pay, which arrived on the same ships. After 1740, the subsidy was provided by the Havana Company, and after 1750 some part of the subsidy was obtained under contract with English traders in New York and Charleston (TePaske 1964:105; Harman 1969:80). The subsidy was frequently several years overdue and distinctions among delivery of the subsidy, private trade, and privateering often unclear (TePaske 1964:100; Harman 1969).

Although many townspeople benefited from the subsidy, Spanish Floridans probably did not rely upon it for food, but instead achieved self-sufficiency in the 16th century and remained self-sufficient throughout the First Spanish period (Reitz and Cumbaa 1983; Reitz and Scarry 1985; Reitz 1992). Although some meat was available from rations, distribution of this meat must have been erratic and the amount issued too limited for most households to depend upon on a daily basis. Since meats acquired from the subsidy probably were salted or smoked, they may be invisible in the archaeological record and their contribution to the diet impossible to evaluate using archaeological techniques. It is assumed that the faunal remains found at Spanish Florida sites primarily represent locally raised or captured animals. People could also have obtained meat from vendors, or perhaps even from a slaughterhouse or market, but cash was chronically short in Spanish Florida so most payments were probably either in credit or in kind. Reciprocal obligations probably constituted an important informal distribution network with goods and services exchanged within kin groups or through the Spanish mechanism of godparenthood (*compadrazgo*). Some of the people at Mose had spouses who were Native Americans, or free and slave women from St. Augustine (Landers 1990b: 23–25). Goods might have come to Mose through these relationships. It is not known what percentage of food an average household, a specific household, or the community at Mose acquired from any of these sources.

Most households probably obtained some foods through their own efforts. Householders could tend fields, plant gardens, and raise livestock within the town or on lands allotted to them just outside (Boniface 1971:134–138; Bushnell 1978:20). It is not known if this was a common practice for most households or whether only some households farmed or raised livestock. It is assumed that indi-

vidual householders also fished and hunted, at least occasionally. Others engaged in commercial activities related to subsistence, such as grinding corn, hunting, making nets, building boats, making charcoal, hauling firewood, tanning leather, herding animals, and running taverns. Some may have specialized in these pursuits, but historical accounts do not clarify the extent to which individuals or ethnic groups engaged in these activities. Two or three men from Mose did participate in an annual spring roundup of horses and cattle (Scardaville and Belmonte 1979), and it was hoped that the lands around Mose could be cultivated to provide food for St. Augustine (Landers 1990b: 18). While such commercial activities might constitute a household's entire income, it is assumed that they were generally a supplement to it.

It is likely that there were many variations on this general pattern, making it difficult to characterize the exact extent of these activities. For example, factors such as the official duties, health, or skills of household members might limit the amount of time spent on farming, herding, or fishing, and the success of these efforts. In these cases more foods might be purchased from vendors. If the household was too busy—or incompetent—to fish and garden as well as too poor to buy food, charity might have been required. Wealthy households probably could afford to purchase more meat than could less affluent households or they might have hired the services of hunters, herders, and fishermen more frequently. While it is important to distinguish between hiring a hunter/fisherman and sending a household member fishing when considering the relationship between socioeconomic status and subsistence efforts, in both cases the foods acquired are considered evidence of household-level dietary self-sufficiency in contrast to dependency on subsidy rations. There is undoubtedly an African component to such activities in the faunal record of Spanish Florida, but this aspect is not clear.

Animal Use by Other Ethnic Groups in the St. Augustine Area

Mose was occupied by Africans living within a Spanish province. Although Spain claimed a much larger territory as part of Spanish Florida, after the missions were destroyed in 1704 Spanish Florida was largely confined to the vicinity of St. Augustine. Between 1702 and 1763, the population around St. Augustine increased from approximately 1,000 people to 3,104 (Dunkle 1958:7; Deagan 1983:30). Although most of these were Spaniards, St. Augustine was home to other ethnic groups, including Native Americans and Africans. Spaniards were generally subdivided into two groups based on place of birth (Deagan 1983:30). People born in Spain or the Canary Islands who immigrated to the New World were known as *peninsulares*. People born of Spanish parents in this hemisphere were known as *criollos*. Throughout the New World *criollos* generally held less prestigious social and political positions than did *peninsulares*. In fact, *criollos* were considered mentally and physically inferior to *peninsulares* due to the harsh tropical climate in which *criollos* were born and lived. Since *criollos* constituted about 70 percent of the 18th-century population in St. Augustine, considerable tension existed between them and *peninsulares* (Deagan 1983:30). These antagonisms were probably increased by the fact that many of the *peninsulare* "elite" were actually from the ranks of the Spanish urban poor (Deagan 1983:30–31).

Native Americans moved to St. Augustine from throughout southeastern North America after the town was founded in 1565. Timucuans were the original Native American residents of the St. Augustine area, but they were soon joined by Guale from the Georgia and Carolina coasts, by Apalachee from west Florida, and by a number of other southeastern Native American groups. The migration of Native Americans to St. Augustine accelerated in the late 17th century as first the northern and then the western mission chain collapsed under British attack. By the time Mose was founded, there may have been as many as 1,350 Native Americans of diverse cultural backgrounds living in villages near St. Augustine (Benavides 1738).

Mestizos and Africans formed additional segments of the 18th-century St. Augustine community. *Mestizos* were people of mixed Spanish and

TABLE 1
FAUNA FROM NOMBRE DE DIOS

Categories	MNI N	MNI %	Biomass kg	Biomass %
Domestic Mammals	—	—	—	—
Domestic Birds	—	—	—	—
Wild Mammals	16	5.0	1.14	8.3
Wild Birds	3	0.9	0.118	0.9
Turtles	11	3.4	0.91	6.7
Sharks, Rays, and Fishes	283	87.9	11.360	83.0
Commensal Taxa	9	2.8	0.152	1.1
Total	322	100.0	13.680	100.0

Note. Data from Reitz (1985).

TABLE 2
FAUNA FROM 18TH-CENTURY SPANISH ST. AUGUSTINE

Categories	MNI N	MNI %	Biomass kg	Biomass %
Domestic Mammals	78	10.8	284.60	79.4
Domestic Birds	34	4.7	3.62	1.0
Wild Mammals	52	7.2	36.99	10.3
Wild Birds	45	6.2	1.815	0.5
Turtles and Alligators	48	6.7	8.350	2.3
Sharks, Rays, and Fishes	429	59.4	20.968	5.9
Commensal Taxa	36	5.0	2.166	0.6
Total	722	100.0	358.509	100.0

Note. Data from Reitz and Cumbaa (1983).

Native American ancestry. Traditionally they occupied an inferior social position relative to *criollos* and *peninsulares,* but they also served in the garrison and comprised about 11 percent of the population (Deagan 1983:34). Including the free blacks at Mose, Africans comprised an additional 13 percent of the St. Augustine community. About a quarter of these Africans were free (Dunkle 1958:7; Deagan 1983:32). The complex relationships between Spaniards and Africans in Spanish Florida have been extensively studied by Jane Landers (1990a, 1990b; cf. Deagan 1983:31–34).

With the exception of Africans, differences among these ethnic groups have been studied using vertebrate remains from archaeological sites. Evidence of Native American subsistence was excavated from the Nombre de Dios mission village, also known as the Fountain of Youth Park, under the direction of Kathleen A. Deagan (Reitz 1985, 1991a; Hales and Reitz 1992). The mission, about 1 km north of St. Augustine, was founded in the late 16th century (Figure 1). Only the late 17th- and early 18th-century deposits are summarized here (Reitz 1985) and in Table 1. For a discussion of the 16th- and early 17th-century materials see Hales and Reitz (1992) and Reitz (1991a). Fish and other estuarine resources were of primary importance to Native Americans at the Nombre de Dios mission, and European domestic animals were apparently not used at all (Table 1). The only wild terrestrial mammals found in the faunal assemblage were rabbits, squirrels, raccoons, and deer. These constituted 5 percent of the estimated individuals and 8 percent of the biomass estimated using allometric relationships. No gopher tortoises or turkeys were identified. With the exception of a hawk, all other vertebrate animals recovered from the mission were from the estuary. Sharks, rays, and bony fishes contributed 88 percent of the individuals and 83 percent of the biomass. Sea catfishes contributed 20 percent of the individuals, drums 43 percent, and mullets 6 percent. Small fish contributed 8 percent of the individuals. Since small fish are generally under-recovered when a 1/4-in. mesh is used during excavation, it is unclear whether this percentage of small fishes accurately reflects the size of fishes used by mission Native Americans. No domestic pigs, cows, sheep, goats, or chickens were recovered from the Nombre de Dios village.

The Nombre de Dios data contrast with those from nearby St. Augustine. The 18th-century St. Augustine data are summarized from six assemblages associated with *peninsulare, criollo,* and *mestizo* households (Reitz and Cumbaa 1983). With few exceptions, the St. Augustine collections contained the same taxa found in the Nombre de Dios collection (Table 2). The exceptions, however, are significant, especially since they include European domestic animals. Domestic mammals identified included pigs, cows, and caprines (sheep

and/or goats). These contributed 11 percent of the individuals and 79 percent of the biomass. Domestic birds included geese, chickens, and rock doves. These domestic birds contributed 5 percent of the individuals, although only 1 percent of the biomass. Wild mammals and wild birds contributed 13 percent of the individuals and 11 percent of the biomass. Turtles and alligators contributed an additional 7 percent of the individuals and 2 percent of the biomass. Sharks, rays, and fishes, however, contributed most of the individuals at 59 percent, although only 6 percent of the biomass.

The St. Augustine samples suggest a uniform Spanish subsistence pattern, one distinct from the Native American subsistence activities represented by the Nombre de Dios collection but including many of the same species (Reitz and Cumbaa 1983; Reitz 1985, 1991a; Reitz and Scarry 1985). The data currently available indicate that domestic animals played a far more significant role in the diet of people living in St. Augustine than they did in the Native American diet. However, they also suggest that extensive modifications were made in the Spanish diet, with estuarine and wild terrestrial animal resources contributing frequently to the Spanish cuisine.

In spite of a general uniformity among the St. Augustine collections, there were some interesting differences attributable to ethnicity, financial means, and social standing in the community (Reitz and Cumbaa 1983). For example, in the vertebrate assemblage from the *mestizo* Maria de la Cruz household (SA 16–23), 83 percent of the individuals were wild animals, while 79 percent of the individuals in the Spanish diet were wild. Yet deer constituted only 1 percent of the individuals in the *mestizo* collection, which contained animals largely of estuarine origin. This contrasts sharply with 18th-century *criollo* and *peninsulare* samples, in which deer averaged 4 percent of the individuals (Reitz and Cumbaa 1983). *Mestizo* households may have used fewer deer and domestic animals because these were costly to acquire both in terms of time and money. Instead, *mestizos* may have followed a Native American strategy in which estuarine resources figured prominently. Significantly, however, the *mestizo* household had access to more domestic meat than did Native Americans living at the Nombre de Dios village, which indicates that the household could draw upon both the Native American and Hispanic components of the economy, as well as upon its own efforts.

There were also differences among the Spanish collections that probably reflected status in the Hispanic community (Reitz and Cumbaa 1983). Samples from the only *peninsulare* sample (SA 34–2) and from a wealthy, influential *criollo* household (SA 36–4) provide evidence that wealth and status in the community is reflected in faunal remains. Collections from these two sites included the smallest percentages of fish in the samples studied. This did not mean that they also had the highest percentages of domestic animals. Higher diversity and higher equitability characterized the samples from these two affluent households, reflecting use of a wider range of wild and domestic fauna than the less affluent *criollo* households. Deer contributed 11 percent of the biomass estimated for these upper-status collections, while deer contributed between 7 percent and 1 percent of the biomass in the other Spanish collections. The two upper-status assemblages were the only Spanish ones to include turkey. It is possible that these collections contain a more diverse collection of wild animals than did the other Spanish collections because the households could afford the services of hunters and fishers while the less wealthy *criollo* households could not (Reitz and Cumbaa 1983). It has been suggested that consumption of a highly diverse array of foods is characteristic of wealthy/influential households (Reitz and Cumbaa 1983; Reitz 1987a, 1987b).

The other *criollo* households (SA 7–4, SA 7–6, SA 13–5) relied more extensively on domestic meat sources than did *mestizo* (SA 16–23) or upper-status Spanish (SA 34–2, SA 36–4) households (Reitz and Cumbaa 1983). This may indicate that because of their military and civic duties they could not take the time to hunt or fish for themselves or they did not have the financial resources to hire others to hunt and fish for them. They may have been more dependent upon the annual subsidy than the other St. Augustine households. Preference seems an unlikely explanation for the dif-

ferences in the amount of domestic meat estimated for faunal samples from wealthy and less affluent households. It is more reasonable to expect that most *criollos* and *peninsulares* would have preferred meats from European, domestic sources as a way to demonstrate ethnic and status identity, in contrast to native food sources. Wealthy households, however, could also afford to make use of a variety of food sources.

Until now, discussions of subsistence strategies by ethnic groups in St. Augustine could not include Africans. Although data from other ethnic groups suggested that African animal use might be distinctive, it was not possible to include such data in discussions of animal use in the area. With recent excavations at Mose, free African access to domestic European livestock and the extent to which they made use of estuarine resources can now be studied. The social standing of the Mose community was below that of Spaniards, but like *peninsulares, criollos,* and Native Americans, they had access to the subsidy. They may not have had the wealth of upper-status Spanish households to hire hunters and fishers, but like Native Americans they may have had time and opportunity to exploit wild resources for themselves to supplement the subsidy. They may also have had the opportunity to raise their own livestock. For these reasons it was anticipated that animal use among free Africans would be more similar to that of people living in St. Augustine than to that of Native Americans living at Nombre de Dios.

Methods

Field work at Mose (8SJ40) was conducted in 1987 and 1988 under the direction of Kathleen A. Deagan of The Florida Museum of Natural History. Faunal materials were recovered using stacked ¼-in.- and 1/16-in.-mesh screens. While this recovery technique is the best for assessing relative dietary importance of vertebrates, it poses a problem for purposes of this comparison since faunal remains from St. Augustine and late 17th- and early 18th-century Nombre de Dios were collected with a 1/4-in.-mesh screen. Hence, screen size could be a bias in this study, with fish more common in the Mose collection due to the smaller-mesh screen used during excavation. Ninety-two faunal samples from closed-context zones, pits, and postmolds were studied. These materials are from the fort rather than from the village since no evidence for the village has been found either at the site or on maps. Although originally on dry land surrounded by fields, the Mose area today is almost completely inundated by tidal creeks. The reader is referred to Deagan (1983:54–61) for an extensive discussion of field logistics and nomenclature in the St. Augustine area and to Landers and Deagan (1993) for a discussion of field work at Mose.

The vertebrate materials recovered were examined using zooarchaeological methods described elsewhere (Reitz and Scarry 1985). Identifications were made using the comparative skeletal collection of the Zooarchaeological Laboratory, University of Georgia, with the number of fragments (NISP) and weight recorded for each taxon. Minimum Numbers of Individuals (MNI) were estimated from paired elements, size, and age of the identified taxa. In the case of sea catfishes (Ariidae, *Arius felis, Bagre marinus*), the MNI was estimated for the family; in the case of seatrout (*Cynoscion* spp., *C. nebulosus*), the MNI was estimated for the genus. In both cases there was clear evidence at the higher taxonomic level for more individuals than could be estimated at the lower taxonomic level. The MNI for the lower taxonomic level is provided in parentheses in the species list. In estimating MNI, faunal materials recovered from the site were grouped into a single analytical unit since the occupation span was relatively brief. Biomass was estimated using the relationship between body weight and skeletal weight described by the allometric equation: $Y = aX^b$ (Simpson et al. 1960:397; Wing and Brown 1979; Reitz and Cordier 1983; Reitz et al. 1987). The allometric formulae used in this study are provided in Table 3.

There are two primary benefits to using allometric estimates of biomass. One of these is that a uniform technique can be applied to a wide range of vertebrate and invertebrate classes, some of

TABLE 3
REGRESSION FORMULAE USED

Taxon	N	Slope	Y-Intercept	r^2
Mammal	97	0.90	1.12	0.94
Bird	307	0.91	1.04	0.97
Turtle	26	0.67	0.51	0.55
Snake	26	1.01	1.17	0.97
Chondrichthyes	17	0.86	1.68	0.85
Osteichthyes	393	0.81	0.90	0.80
Non-Perciformes	119	0.79	0.85	0.88
Siluriformes	36	0.95	1.15	0.87
Perciformes	274	0.83	0.93	0.76
Carangidae	17	0.88	1.23	0.86
Sparidae	22	0.92	0.96	0.98
Sciaenidae	99	0.74	0.81	0.73
Pleuronectiformes	21	0.89	1.09	0.95

Note. The allometric formula is $Y = aX^b$, where Y is biomass, X is bone weight, and a and b are appropriately scaled constants. When log Y is plotted against log X, the formula defines a line with slope equal to b and y-intercept equal to log a. The values here were derived from a linear regression of log Y against log X. N is the number of observations used in the regression and r^2 is the proportion of total variance explained by the regression model (Reitz and Cordier 1983; Reitz et al. 1987).

which grow throughout life and therefore have no "average" weight. The other is that this technique makes no assumption that the entire animal was used at the site. This method estimates dietary contribution based solely on the amount of bone actually present in the archaeological samples studied. This approach is especially appropriate to the study of faunal remains where redistribution of meats, including sale of meats via vendors or other commercial avenues, might have occurred.

To summarize the data, the species list (Table 4) was reduced to categories based on vertebrate class and husbandry practices (Table 5). Domestic mammals include pigs (*Sus scrofa*) and cows (*Bos taurus*); all other mammals are considered wild or commensal. The only domestic birds were chickens (*Gallus gallus*); all other birds are considered wild. Commensal taxa include shrew (*Blarina brevicauda*), rats and mice (*Peromyscus* spp., *Rattus* spp., *Sigmodon hispidus*), dog (*Canis familiaris*), cat (*Felis domesticus*), anoles (*Anolis* spp.), snakes (*Nerodia* spp., Viperidae), and amphibians (Anura, Caudata). While these commensal animals might have been consumed, they are also common around human residences either as pets or because they are attracted to the disturbed habitats created by human activity. To facilitate comparison of the percentage of MNI summarized in Table 5 with percentages of biomass, only biomass data for those taxa for which MNI was estimated are included in Table 5.

Results

The vertebrate assemblage from Mose is large. As is usual for St. Augustine, the bone was in outstanding condition. This situation is probably related to the presence of a large quantity of mollusc fragments which preserve bone in most historic deposits at St. Augustine. Molluscs are usually not studied in St. Augustine collections because they were used both for food and for the construction material known as "tabby." No satisfactory approach has been developed which would distinguish between shells used for tabby and shells used for food, if such a distinction did in fact exist.

The Mose vertebrate collection contained 28,592 bones and the remains of an estimated 281 individuals (Table 4); hence, it is considered a reliable indicator of subsistence activities at Mose. Analysis of these materials suggests that domestic animals were not frequently consumed (few individuals are represented), but that beef was an important resource (it contributed a high percentage of the biomass when consumed). Domestic mammals were exclusively pig (*Sus scrofa*) and cow (*Bos taurus*). They contributed an estimated 1 percent of the individuals, although 51 percent of the biomass among the taxa for which MNI was estimated had a domestic source (Table 5). The domestic mammals are represented by a single pig, which was probably a sub-adult at death, one cow less than 18 months of age at death, and a second adult cow. Although cow individuals were somewhat more common than pigs, beef was far more common than pork. Domestic birds were represented by a single chicken (*Gallus gallus*). It is possible that most domestic meats were obtained

TABLE 4
MOSE: SPECIES LIST

Species	NISP	MNI N	MNI %	Weight gm	Biomass kg
UID Mammal	394	—	—	186.850	2.9130
UID Small Mammal	1	—	—	0.100	0.0033
UID Large Mammal	1	—	—	2.500	0.0600
Didelphis virginianus (Opossum)	1	1	0.36	0.300	0.0089
Blarina brevicauda (Short-tailed shrew)	1	1	0.36	0.010	0.0004
Sylvilagus spp. (Rabbit)	11	1	0.36	0.370	0.0107
UID Rodent	46	—	—	1.466	0.0371
Sciurus spp. (Squirrel)	1	1	0.36	0.005	0.0002
Muridae (Old and New World mice)	2	—	—	0.010	0.0004
Peromyscus spp. (New World mouse)	3	1	0.36	0.105	0.0035
Rattus spp. (Old World rat)	2	1	0.36	0.020	0.0008
cf. *Sigmodon hispidus* (possible Hispid cotton rat)	1	—	—	0.010	0.0004
Sigmodon hispidus (Hispid cotton rat)	27	3	1.1	0.445	0.0127
Carnivora	3	—	—	0.050	0.0018
Canis familiaris (Dog)	2	1	0.36	0.300	0.0089
Procyon lotor (Raccoon)	3	1	0.36	0.100	0.0033
Mustela vison (Mink)	2	1	0.36	0.770	0.0208
Felis domesticus (Cat)	7	1	0.36	2.500	0.0600
Artiodactyla	3	—	—	6.880	0.1492
Sus scrofa (Pig)	3	1	0.36	6.000	0.1319
Odocoileus virginianus (Deer)	5	1	0.36	36.200	0.6650
Bos taurus (Cow)	8	2	0.71	324.460	4.7868
UID Bird	72	—	—	11.006	0.1811
Phalacrocorax auritus (Double-crested cormorant)	1	1	0.36	0.200	0.0047
Casmerodius albus (Great egret)	2	1	0.36	1.100	0.0223
Anatidae (Duck family)	4	1	0.36	0.600	0.0128
Gallus gallus (Chicken)	1	1	0.36	2.100	0.0401
Rallidae (Rail family)	2	—	—	0.600	0.0128
Gallinula chloropus (Common gallinule)	1	1	0.36	0.700	0.0148
Chadriiformes (Plover family)	1	1	0.36	0.300	0.0068
Zenaida macroura (Mourning dove)	1	1	0.36	0.030	0.0008
UID Turtle	384	—	—	59.350	0.4877
Emydidae (Pond turtle family)	9	—	—	6.000	0.1050
Deirochelys reticularia (Chicken turtle)	1	1	0.36	4.400	0.0853
Malaclemys terrapin (Diamondback terrapin)	6	2	0.71	5.100	0.0942
Squamata (Lizards and Snakes)	25	—	—	0.295	—
UID Lizard	21	—	—	0.175	—
Anolis spp. (Anole)	58	14	4.98	0.475	—
UID Snake	51	—	—	4.081	0.0571
Colubridae (Non-poisonous snakes)	28	—	—	1.290	0.0179
Nerodia spp. (Water snake)	1	1	0.36	0.200	0.0027
Viperidae (Poisonous snakes)	2	1	0.36	0.300	0.0041
Anura (Frog/Toads)	10	1	0.36	0.202	—
Caudata (Salamanders)	113	1	0.36	0.554	—
Chondrichthyes (Cartilaginous fishes)	167	—	—	19.320	1.6068
Odontaspis taurus (Sand tiger shark)	1	1	0.36	0.100	0.0174
Carcharhinidae (Requiem shark family)	4	—	—	0.130	0.0218
Carcharhinus spp. (Requiem shark)	43	1	0.36	2.400	0.2673
Sphyrnidae (Hammerhead shark family)	1	1	0.36	0.500	0.0694
Rajiformes (Skates and Rays)	116	—	—	13.135	1.1531

(continued)

TABLE 4 (Continued)
MOSE: SPECIES LIST

Species	NISP	MNI N	MNI %	Weight gm	Biomass kg
Dasyatidae (Stingray family)	1	1	0.36	0.010	0.0024
UID Fish	24,872	—	—	406.050	3.8278
Lepisosteus spp. (Gar)	3	1	0.36	1.310	0.0374
Elops saurus (Ladyfish)	19	1	0.36	0.121	0.0057
Clupeidae (Herring family)	35	11	3.91	0.350	0.0132
Siluriformes (Catfishes)	33	—	—	1.690	0.0328
Ariidae (Sea catfishes)	286	34	12.10	27.890	0.4712
Arius felis (Hardhead catfish)	327	(4)	—	24.665	0.4193
Bagre marinus (Gafftopsail catfish)	67	(2)	—	5.385	0.0988
Opsanus tau (Oyster toadfish)	1	1	0.36	0.010	0.0008
Fundulus spp. (Killifish)	67	2	0.71	0.390	0.0144
Pomatomus saltatrix (Bluefish)	1	1	0.36	0.100	0.0041
Carangidae (Jack family)	3	—	—	0.015	0.0010
Chloroscombrus chrysurus (Atlantic bumper)	5	2	0.71	0.070	0.0037
Sparidae (Porgy family)	114	—	—	2.831	0.0413
cf. *Archosargus probatocephalus* (possible Sheepshead)	1	—	—	0.300	0.0052
Archosargus probatocephalus (Sheepshead)	92	9	3.20	21.415	0.2656
Lagodon rhomboides (Pinfish)	2	1	0.36	0.150	0.0028
Sciaenidae (Drum family)	51	—	—	2.615	0.0792
Bairdiella chrysoura (Silver perch)	48	17	6.05	2.730	0.0818
Cynoscion spp. (Seatrout)	34	19	6.76	8.670	0.1924
Cynoscion nebulosus (Spotted seatrout)	5	(2)	—	1.340	0.4830
Leiostomus xanthurus (Spot)	39	17	6.05	0.795	0.0328
Menticirrhus spp. (Kingfish)	4	3	1.07	0.230	0.0131
Micropogonias undulatus (Atlantic croaker)	416	91	32.38	126.350	1.3969
Pogonias cromis (Black drum)	54	3	1.07	12.660	0.2546
Sciaenops ocellatus (Red drum)	8	2	0.71	5.800	0.1429
Stellifer lanceolatus (Star drum)	2	2	0.71	0.110	0.0076
Mugil spp. (Mullet)	245	10	3.56	11.445	0.2083
Trichiurus lepturus (Atlantic cutlassfish)	4	1	0.36	0.700	0.0205
Peprilus spp. (Butterfish)	1	1	0.36	0.010	0.0006
Triglidae (Searobin family)	1	1	0.36	0.030	0.0015
Paralichthys spp. (Flounder)	98	2	0.71	7.326	0.1548
UID Vertebrate	—	—	—	1,011.160	—
Total	28,592	281	100.16	2,388.817	21.4826

without bones, via the subsidy or a market, or that bones from domestic animals were discarded beyond the excavated area of Mose. However, the data currently available support the interpretation that beef and pork were not as frequently consumed at Mose as in St. Augustine.

Wild terrestrial animals, wild birds, and turtles contributed an estimated 5 percent of the individuals and 9 percent of the biomass (Table 5). The primary contributor of biomass in this group was deer (*Odocoileus virginianus*). Although a single deer individual was identified in the collection, it contributed 7 percent of the biomass among the taxa for which MNI was estimated (Table 5). The deer was probably an adult when it died. A variety of wild birds were identified, but birds contributed 2 percent of the individuals and less than 1 percent of the biomass. Chicken turtle (*Deirochelys reticularia*) and diamondback terrapin (*Malaclemys terrapin*) were identified. Although common in

TABLE 5
MOSE: SUMMARY OF FAUNA

Categories	MNI N	MNI %	Biomass kg	Biomass %
Domestic Mammals	3	1.1	4.9187	50.8
Domestic Birds	1	0.4	0.0401	0.4
Wild Mammals	6	2.1	0.7089	7.3
Wild Birds	6	2.1	0.0622	0.6
Turtles	3	1.1	0.1795	1.9
Sharks, Rays, and Fishes	236	84.0	3.6832	38.0
Commensal Taxa	26	9.2	0.0931	1.0
Total	281	100.0	9.6857	100.0

TABLE 6
MOSE: ELEMENTS IDENTIFIED (NISP)

Elements	Pig	Deer	Cow
Head	2	1	4
Vertebra/Rib	—	—	—
Forequarter	—	—	—
Forefeet	—	1	2
Feet	—	1	1
Hindfeet	1	—	—
Hindquarter	—	2	1
Total NISP	3	5	8

Spanish assemblages, no gopher tortoises were identified in the Mose collection.

The dominant group in terms of individuals consisted of sharks, rays, and bony fishes. These animals contributed an estimated 84 percent of the individuals and 38 percent of the biomass among the taxa for which MNI was estimated (Table 5). The dominant taxa were sea catfishes (Ariidae) and drums (*Bairdiella chrysoura, Cynoscion* spp., *Leiostomus xanthurus, Menticirrhus* spp., *Micropogonias undulatus, Pogonias cromis, Sciaenops ocellatus,* and *Stellifer lanceolatus*). Sea catfishes contributed 12 percent of the individuals while drums contributed 55 percent of the individuals and 22 percent of the biomass among those taxa for which MNI was estimated (Table 5). One drum, the Atlantic croaker (*Micropogonias undulatus*), contributed an estimated 33 percent of the individuals in the collection. Herrings (Clupeidae) contributed an estimated 4 percent of the individuals, sheepshead (*Archosargus probatocephalus*) an estimated 3 percent of the individuals, and mullets (*Mugil* spp.) an estimated 4 percent of the individuals. Many of these fish were either from small taxa or small individuals of fishes that grow to larger sizes. Small fishes included ladyfishes (*Elops saurus*), herrings (Clupeidae), killifishes (*Fundulus* spp.), pinfishes (*Lagodon rhomboides*), silver perches (*Bairdiella chrysoura*), star drums (*Stellifer lanceolatus*), mullets (*Mugil* spp.), and butterfishes (*Peprilus* spp.). All individuals are estuarine and inshore fishes. As with St. Augustine and Nombre de Dios, no evidence exists for use of the offshore region from Mose.

Commensal taxa were also present in the Mose collection (Table 5). These included one Old World rat (*Rattus* sp.) and several Hispid cotton rats (*Sigmodon hispidus*). An adult dog (*Canis familiaris*), an adult cat (*Felis domesticus*), and 14 anole (*Anolis* spp.) individuals were identified. Larger members of the anole family are consumed elsewhere, but the small size of these lizards makes that seem unlikely in this case, although certainly not impossible.

Only 16 pig, deer, and cow bones were identified in the sample (Table 6), less than 1 percent of the bone fragments; hence, it is difficult to draw any conclusions about butchering strategies. In terms of elements identified, there is insufficient evidence to argue that these bones were present at Mose from locally butchered animals or that they arrived as cuts of meat from elsewhere. High numbers of vertebrae, ribs, and elements from the upper parts of each leg are often assumed to represent use of expensive meats commercially purchased. Bones from these portions are rare in the Mose assemblage. Bones from the skull and lower legs, such as teeth, carpals, tarsals, metacarpals, and phalanges, are often associated with purchase of meats of low commercial value. Only three bones, two from the deer and one from a cow, were from portions which contain larger quantities of meat (hindquarter), which suggests both limited access to domestic meat as well as access only to the less desirable cuts. On the other hand, this same pat-

tern could be interpreted as evidence of on-site butchery of locally raised animals. This interpretation draws support from the observation that some of the deer and cattle elements are present in the sample in similar percentages. If the deer is interpreted as a locally acquired animal, then so too should the cow. From such a small sample, none of these possibilities can be eliminated or advocated.

Discussion

It is assumed in the following discussion that access to domestic meat, especially to beef and probably to mutton and pork, would have been the preferred condition in the St. Augustine area. The reasons for this assumption are several. First, protein sources providing large quantities of fat, such as beef and pork, are often preferred over sources that are less fatty, such as fish and poultry (Jochim 1976:19–20). One need only think of the anguish felt by colleagues advised to adopt a fat-free diet to grasp the importance of fatty meats. A second reason that protein sources such as pork and beef might have been considered more prestigious is that these were foreign, almost exotic, resources. Although less exotic in the 18th century than in the 16th century (Reitz 1992), cattle and pigs are found more commonly in contexts associated with Spaniards than in those associated with Native Americans and therefore may have represented a rare commodity most frequently associated with the ruling group. Rare and exotic foods are also usually prestigious and preferred (Jochim 1976: 20–21). The third reason, at least for Spaniards, is that beef, pork, and mutton may have been more closely linked with concepts of the traditional Iberian diet. This is a difficult conclusion to draw from the available documentary evidence and has been discussed at length elsewhere (Reitz and Scarry 1985:33–35). While most Spaniards probably did not eat large quantities of domestic meats back in Spain, homesick *peninsulares* and aspiring *criollos* need only to have thought that such foods were typical of proper Spaniards to have placed higher value on them than they would have on such indigenous foods as catfish and shark. This emphasis says little about the nutritional value of a meat source but a great deal about its social value.

Africans at Mose could have valued beef, pork, and mutton because they preferred fatty meats to lean, because these meats were exotic sources associated with the Spanish ruling class, or because they reminded Africans of diets they had enjoyed in Africa. On the other hand, the residents of Mose might have avoided any or all of these meats to conform to privately-held Islamic or other religious taboos or to distance themselves from Europeans. It seems likely that Africans living at Mose were always conscious of Spanish ambivalence towards them and may have tried especially hard to practice behaviors considered appropriate by Spaniards, at least in public. (A Franciscan priest lived at Mose with these new Catholic converts [Landers 1990b].) It is not known which of these possibilities might apply; however, the preference of humans for fatty meats is widespread and probably prevailed in some form at Mose.

The vertebrate remains from Mose suggest a strategy that was neither similar to that of Native Americans at Nombre de Dios nor to that of the people in St. Augustine itself. If access to domestic meat was the preferred condition, then the low percentage of domestic animals in the Mose collection suggests that Mose's residents experienced restricted access to a desired food source. While St. Augustinians had less access to meat from domestic sources than they preferred, they apparently had greater access to beef, pork, and poultry than did Africans living at Mose (Tables 2, 5). At the same time, people at Mose may have had greater access to these meat sources than did Native Americans at Nombre de Dios (Tables 1, 5). Although half of the biomass at Mose was from domestic sources, none of the meat consumed at the Nombre de Dios mission village was from European domestic sources. If use of domestic animals is a symbol of relative standing in the community, then the free Africans of Mose stood somewhere between the residents of St. Augustine and the Native Americans living near the Nombre de Dios mission.

This contrast may reflect the difference in recovery methods between the 1/16-in. screened

Mose collection and the 1/4-in. screened Nombre de Dios and St. Augustine collections. While this possibility cannot be ruled out, it is significant that the mission collection, which was recovered with 1/4-in. mesh, has even more fish and fewer domestic mammals than does the Mose collection.

It is difficult to isolate characteristics in the Mose collection that reflect an African heritage. Instead, it appears that African traditions of meat acquisition were replaced in large part by Native American traditions. Several characteristics are found in the Mose collection to suggest this interpretation. These characteristics include the absence of gopher tortoises and reduced quantities of domestic livestock. Although gopher tortoises are not abundant in Spanish collections, they are always present. They are rarely found in Native American samples. Domestic livestock are also rare in Native American deposits (Reitz 1991b).

More interesting, however, is the abundance of fish in the Mose collection. While beaches and the estuary had many resources to offer which were not exploited by Native Americans, Africans at Mose did not use these resources either. Instead, the use of estuarine resources at Mose appears in every respect identical to that at the Nombre de Dios mission village. Particularly striking are the almost identical percentages of Atlantic croaker and the presence of small fishes such as fingerling mullets in both the Nombre de Dios and Mose collections. Mullets in St. Augustine are large and common, probably reflecting use of a cast net in deeper waters (Reitz 1985, 1991a; Reitz and Scarry 1985:81–82). Mullets in the Nombre de Dios and Mose samples are small and less common, suggesting use of basketry scoops, weirs, or some handline fishing among vegetation along the water's edge rather than using cast nets.

It is possible that identical faunal assemblages would be produced by both African and Native American fishing techniques, but this seems very unlikely. Many Africans came to the Americas with fishing traditions of their own (Wood 1974: 122–123), and some of these may have come to Mose. However, for a fishing technique to be successful, it must be adapted to the habits and habitats of local species. Such strategies are developed through years of experience in local settings. Native Americans had long made use of estuarine mammals, reptiles, and fishes. Their techniques for exploiting these animals undoubtedly were more appropriate in this setting than were African methods developed for other animals in other environments. By the time Mose was established, there had been more than a century of syncretism among European, Native American, and African fishing traditions in Florida. The residents of Mose may have been receptive to the idea that the nearby estuary could be the primary source of meat because of their African experiences; however, it seems more likely that what to fish for, where to fish, when to fish, and what devices to use were learned from more experienced Floridians. In fact, to the extent that the men of Mose were busy with military duties, some of the animals recovered from Mose may have been acquired by their Native American wives. The types of animals used at Mose probably reflect adaptation to the local environment and acculturation to the multiethnic community in which these new Floridians found themselves. However, some African fishing traditions probably were practiced, although they are not obvious in the archaeological record. Furthermore, African traditions might have found expression in styles of food preparation and consumption beyond the scope of this study.

Although the faunal data from this period do not suggest a diet limited in calories at St. Augustine or neighboring communities, officials of the colonial government complained frequently and forcefully about food shortages in the town (TePaske 1964:83). This discontent was probably more a strategy on the part of government officials to acquire additional support from Spain than an accurate statement of dietary stress in the community (Reitz 1992). It may be true, however, that the Spanish community did not have sufficent domestic livestock to supply itself in what it deemed an adequate manner as well as the many ethnic groups which clustered around St. Augustine for protection from British raids. Under such conditions Spaniards might have taken care of their own needs first and those of others last. In that case, people at Mose had greater access to domestic live-

stock than did mission villagers; but neither group used as much domestic meat as did people living in St. Augustine.

A survey of free African subsistence using zooarchaeological data would not be complete without reference to animal use by slaves. Such a comparison is hampered by lack of information from early 18th-century plantation sites. Almost a hundred years passed between the establishment of Mose and most of the Georgia sea island plantations. In the intervening years a number of technological, economic, political, and social changes occurred that significantly altered the lives of all Americans. While animal bones from the roughly contemporaneous Carolinian Yaughan and Curriboo Plantations have been identified, these samples were very small (NISP = 492, MNI = 16) and in poor condition due to acidity and exposure (Reitz and Wood 1980). In spite of temporal differences, comparison of the Mose data with those from late 18th- and 19th-century contexts on sea island plantations is more informative (Reitz et al. 1985). These plantations were located along the fringe of the Atlantic coastal plain in territory previously occupied by Spanish forts and missions. The resource base at these plantations was similar to that at St. Augustine. Faunal remains were recovered using 1/4-in. mesh (Reitz et al. 1985; Reitz 1987a).

Study of these samples suggests that slaves had a diet containing a high percentage of domestic meat sources but that widespread use of wild foods occurred on plantations of various sizes all along the coast. Domestic taxa constituted 24 percent of the individuals in estuarine coastal slave deposits (Table 7; Reitz 1987a). (Biomass was not calculated since bone weight was not reported for many of these collections.) All of the samples showed reliance upon two domestic species: pigs and cattle. Although pig individuals were occasionally more common than cow individuals, beef was always more common than pork in those slave deposits for which it was possible to estimate the biomass relationship (Reitz 1987a). Caprines (sheep and/or goats) have been identified in deposits associated with both slaves and planters, but they are generally rare and are more common in 17th-century collections from sites further north

TABLE 7
FAUNA FROM SLAVE DEPOSITS ON GEORGIA PLANTATIONS

Categories	MNI N	MNI %
Domestic Mammals	89	20.5
Domestic Birds	13	3.0
Wild Mammals	107	24.7
Wild Birds	9	2.1
Turtles and Alligators	45	10.4
Sharks, Rays, and Fishes	159	36.6
Commensal Taxa	12	2.8
Total	434	100.1

Note. Data from Reitz (1987a).

(Miller 1984; Reitz et al. 1985; Reitz 1987a, 1987b). Chickens were the primary domestic bird identified in these slave collections. While chickens do not appear to have contributed much meat to the diet, they may have been important for eggs or as a product easily bartered or sold. Slaves on 19th-century plantations may have had more frequent access to pork, beef, and mutton than did most of the people living near St. Augustine 50 or more years earlier (Tables 1, 2, 5, 7).

It appears that wild species generally contributed more individuals to the diet of slaves on coastal plantations than did domestic taxa, although the reverse may have been true for caloric contributions. The most common taxa were estuarine fishes, although deer, small mammals, alligators, and turtles were extensively used. The fishes found in slave deposits are primarily those found in collections from St. Augustine, Mose, and Nombre de Dios. It is not known to what extent these wild foods were provided to slaves as part of their rations by the plantation or procured by slaves for themselves. The proportions may have varied from plantation to plantation, but these locally available foods probably became part of the slave diet through both avenues.

Whether the subsistence data from Mose represent choice or necessity cannot be determined from these data; however, what is suggested is a strong degree of self-sufficiency by residents of Mose and

on plantations. Mose would not have been dependent upon Spanish administrators for the subsistence strategy suggested by these data. If it could be demonstrated that the domestic livestock represented at Mose came from African herds rather than Spanish ones, then the degree of self-suffiency would be further enhanced. It also would be possible to demonstrate that this strategy was based on choice if these findings could be compared to data for free Africans living in St. Augustine, but unfortunately this analysis cannot be done at this time. Archaeological evidence indicates that Mose's residents focused on animals that were locally available, taking advantage of fishes in the nearby estuary. Many of the wild species used could be captured with minimal expenditure of effort or time using devices such as nets, weirs, or traps. While these may represent African traditions of fishing, hunting, and animal husbandry, the similarity of resources present in vertebrate assemblages from Mose, Nombre de Dios, and St. Augustine suggests that similar methods were often used at all three locations, and these techniques were ones developed in the St. Augustine area to most efficiently exploit local resources.

Although the animals and the ways they were captured were mostly North American, the manner in which the people of Mose prepared and served these foods may have followed African cultural traditions. Daily tasks may have been performed by each ethnic group in accordance with traditional beliefs, values, and customs not readily identified in faunal assemblages. The schedule of food consumption, the identities of people eating together, the spices used, the types of foods eaten together, and many other aspects of food consumption possibly might have been African in nature. Unfortunately, neither the historical record nor the vertebrate faunal remains from Mose provide information about these aspects of animal use.

Much more work needs to be done with faunal remains from all kinds of sites associated with Africans; however, the experience of Africans in North America was not a homogeneous one. It would be hard to argue from these data that the diet of free Africans at Mose was better or worse than that either of slaves several decades later on coastal plantations or of Spanish St. Augustinians. It was clearly different. Determining whether this difference should be attributed to limited contributions made by Spanish and plantation administrators to their charges, to restricted participation of Africans in the lives of the European communities with which they were associated, or to the expression of subsistence choices by Africans requires additional research. It is clear, however, that to a large degree the resources used by Native Americans, Africans, and Spaniards reflected the local setting rather than previous ethnic traditions.

Conclusion

Vertebrate remains from Mose provide a unique opportunity to examine African foodways at what may have been the first free African community in the United States. When data from Mose are compared to those from the nearby Native American village associated with the mission of Nombre de Dios, it is clear that Africans at Mose had access to more domestic meat than did Native Americans, although the subsistence strategy practiced by both groups was similar in other respects. Compared to residents of St. Augustine, however, the occupants of Mose used less domestic meat. Slaves on coastal plantations had greater access to domestic meat than did the free residents of Mose. These data suggest a high degree of self-sufficiency at Mose.

ACKNOWLEDGMENTS

I would like to express my appreciation to Jack Williams for his permission to excavate the site of Fort Mose. I am also grateful to Kathleen A. Deagan and John Marron for the opportunity to examine the Mose faunal materials as well as to Jane Landers, Theresa A. Singleton, and Elizabeth S. Wing for fruitful discussions about these data. I appreciate the assistance of Gwyneth Duncan, David Varricchio, Timothy Young, and Meg Kollock with this analysis. Special thanks are due to Representative Bill Clark of Ft. Lauderdale, whose efforts convinced the Florida legislature to fund archaeological and historical research on the Mose site. Fund-

ing for this work was provided by a grant from the State of Florida to The Florida Museum of Natural History.

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