Production Activities in the Household Economies of Plantation Slaves: Barbados and Martinique, Mid-1600s to Mid-1800s

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Abstract Formerly British and French colonies, the eastern Caribbean islands of Barbados and Martinique were major players in the early development of European overseas empires dependent on African slave labor and the large-scale production of sugar. Utilizing documentary and archaeological data we discuss and compare the independent production activities or household economies of plantation slaves on these two islands. The household economy was one of the more prominent aspects of plantation slave life throughout the Caribbean, and in this paper we examine the multiple adaptive production strategies slaves employed to ameliorate the poverty of their material and economic lives.

Keywords Slavery · Household economy · Plantations · Barbados · Martinique

Introduction

Countless thousands of captive Africans and their descendants lived and died on Caribbean sugar plantations during the seventeenth, eighteenth, and nineteenth centuries. Sugar plantations and slavery have been the focus of many studies by Caribbean historians and historical anthropologists/archaeologists, but relatively few specifically and exclusively address the cultural or social life of the enslaved and the more mundane aspects of their daily lives. But the enslaved, regardless of the severe restrictions placed on their lives and the impoverished material conditions in which they lived, engaged in behaviors or practices outside of the labor they were compelled to perform for the slave masters. For example, they developed kinship groups and friendship ties, buried their

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dead with their own rituals, engaged in dances and various recreational activities, built their wattle and daub houses, prepared and cooked their foods, manufactured craft items, had their own medical and healing practices, and their spiritual practitioners were influential in their communities. In brief, the enslaved developed their own lifeways/ cultures, influenced by their African pasts and conditions in the New World (including interactions with Native Americans and Europeans) and these lifeways/cultures changed over time.

Utilizing documentary (historical, ethnohistorical) and archaeological data (sometimes informed by our ethnographic research), this paper, which we view as a contribution in historical ethnography (cf. Orser 2010, pp. 113–114), discusses the independent production activities or household economies of plantation slaves on the eastern Caribbean islands of Barbados and Martinique (Fig. 1). By household economy we mean household- or individual-based production activities whose products were consumed by households or individuals and/or traded/sold in the internal markets—a ubiquitous institution in Caribbean slave societies—for the benefit of the household or individual producer.

(Note: We use the term household in the conventional social anthropological sense of a residential unit; that is, a person or persons inhabiting the same dwelling. If the dwelling contains more than one person, the group may or may not be composed of kin. To define or categorize the types of households among enslaved plantation workers in general or on any given plantation would require detailed records and census data which are very difficult to locate; to trace households diachronically from documentary data is even more difficult. Moreover, we cannot be certain how the multi-person household functioned as a unit of production, including its division of labor, in terms of topics we address in this paper.)

For Barbados, by way of example, we have strong data on household size for only six plantations (out of hundreds on the island), all from the very late eighteenth century and first several decades of the nineteenth. The six-plantation group yields an average of about 3.8 persons (range 2.9 to 5.6) per household, a figure that is independently

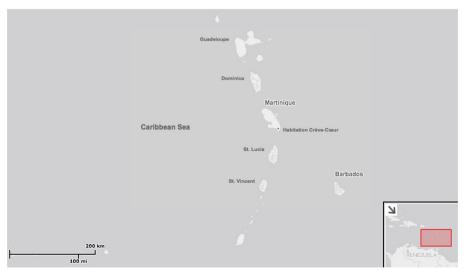


Fig. 1 Barbados, martinique, and habitation crève cœur

supported by an estimate given in the 1820s by a prominent Barbadian planter who reported "an average number of about four persons inhabiting each house" (quoted in Handler 2002, pp. 159nn 73, 74). However, we have little idea how these households were structured in terms of relationships among members.

Higman (1984, p. 222) writes that "generally" in the British West Indies "three to six slaves occupied each house," but the data on which he bases this statement are unclear. Higman (1975, 1977) also discusses the methodological difficulties of defining slave households in the Caribbean from documentary data, and issues related to the "domestic domain" in prehistoric archaeology (which, in certain ways, is broadly analogous to working with data on enslaved peoples) are discussed in C. Robin (2002) and Wilk and Rathje (1982).

Defining a household unit archaeologically for Caribbean slave communities is challenging for various reasons: it is difficult to locate and describe a house (particularly one made of wattle and daub, the ubiquitous house type in early Caribbean slave communities), as well as define the boundaries of the house yard, and how the space within the house yard was used over time. Even with careful analysis of architectural construction and destruction events, stratigraphy, and artifact chronology, archaeologists can rarely identify single households, and often treat occupation loci as amalgamations of multiple households over time, rather than as fixed cultural snapshots (Beaudry 1999; Smith 1992).

The household economy, an aspect of insular internal economies or what the historian Richard Sheridan (1984) has called the "domestic economy," was one of the more prominent aspects of plantation slave life throughout the Caribbean. It provided a measure of freedom from the plantation labor regimen and expanded the choices over their use of time that slaves were usually denied; it also, of course, permitted the acquisition of cash and material goods and foodstuffs that plantations did not provide, or only minimally allocated. Despite the harsh labor demands of plantation labor, during their "free time," usually over the weekends, activities associated with the household economy were of fundamental importance to the enslaved and to the wider plantation society in which they lived, particularly in the provision of foodstuffs to urban or town dwellers. It is to be stressed that although on their days off slaves participated in leisure activities such as visits to friends and kin, group gatherings and dances, much of their time "off" was spent ensuring the well-being of individuals and households, and could hardly be considered labor-free (Munford 1991, 2, p. 559). We thus use the terms "free" and "choice," but acknowledge the severe constraints placed on slaves by the plantation regimen.

This paper examines the multiple adaptive strategies slaves employed to ameliorate the poverty of their material and economic lives. We give particular attention to the range of production activities, including those yielding monetary returns, at the household and community level. Formerly British and French colonies, Barbados and Martinique became highly profitable sugar-producers and were major players in the early development of European overseas empires dependent on African slave labor; they were, in fact, the two most significant colonies for the British and French colonial enterprises in the eastern Caribbean. We focus on the period of intensive sugar production in the British and French West Indies, from the first few decades of the seventeenth century through emancipation in 1834 and 1848, respectively. While the British sugar industry developed slightly earlier than the French, Barbados and Martinique represent principal loci for technological and economic improvements in the large-scale production of sugar, and the consequent dependence on slave labor.

These contrasting islands provide ideal case studies to comparatively examine the household economic activities of enslaved laborers in two prominent early sugar producing colonies. With this comparison, we examine the origins of the peasant and peasant-like adaptations that developed throughout much of the Caribbean after the end of slavery. Despite differences in their colonial regimes, administrative and legal practices, metropolitan cultural and institutional influences, variability in economic development and geographical differences, and enslaved West Africans from diverse backgrounds, the slave communities of Barbados and Martinique shared broad structural characteristics. This comparison demonstrates how plantation slaves formulated broadly similar economic adaptations, laying the foundation for what Mintz (1974, p. 145) refers to as "distinctively Caribbean life-styles" that continued to develop after emancipation.

Students of Caribbean slave life have long accustomed themselves to working with limited information. Although documentary sources for investigating the institution of slavery and the slave society and its political and economic dimensions are abundant, the more mundane aspects of slave sociocultural and domestic life are generally less accessible. For ethnographically useful information i.e., data on everyday lives, one must rely on European sources. The sociocultural data these sources yield, aside from reflecting Eurocentric prejudices and biases, are often very fragmentary, lack detail on a variety of ethnographic topics, and are highly variable in quality—a consistent problem encountered by ethnohistorians in general when dealing with populations marginalized by Europeans or largely ignored in their writings (e.g., DeCorse and Chouin 2003, p. 9; Handler and Lange 1978, pp. 1–4; Kelly 1997; Lightfoot 1995, p. 201).

Studies of household economies in particular, based on documentary data, usually limit themselves to the production and marketing of foodstuffs or subsistence crops while other activities are only occasionally and peripherally mentioned. Despite occasional exceptions (e.g., Berlin and Morgan 1993; Marshall 1993; McDonald 1993), such studies are usually concerned with only one territory. Although we use documentary or literary evidence to a considerable degree, we couple it with available archaeological data. Ideally, archaeological data can provide a more detailed picture of certain aspects of slave life by amplifying the documentary record, as well as providing data not in that record, and even raising new questions that do not emerge from literary sources alone (e.g., Denbow 2003, p. 3; Handler and Lange 1978, pp. 4, 216–219, 227–229).

A research strategy that uses both methodologies has proven "indispensible" in understanding the contact period between Native Americans and Europeans (Wilson and Rogers 1993, p. 6), and studies of plantation slavery in the Caribbean since the early 1970s have demonstrated the utility of this strategy by yielding some of the only available direct and detailed evidence for cultural practices in particular undocumented slave communities (e.g., Armstrong 1990, 1999; Armstrong and Kelly 2000; Delle 2000; Farnsworth 2001; Handler and Lange 1978; Hauser 2008; Haviser 1999; Heath 1999; Higman 1998; Mathewson 1973; Pulsipher 1990; Singleton 2001; Wilkie and Farnsworth 2005).

Over the past several decades historical archaeological studies (also utilizing documentary data) of plantation slavery in the Caribbean have increased in number. These studies have usually tended to focus on the location of slave work and living areas relative to the main house and the industrial areas of the plantation (e.g., Lange and Handler 1985). Although such studies frequently touch on aspects of the slaves' household economy, particularly pottery manufacture and participation in internal markets, other aspects of the household economy, if they are mentioned at all, are only marginally treated (Armstrong 1999, 2003; Armstrong and Fleischman 2002; Armstrong and Hauser 2009; Armstrong and Kelly 2000; Delle 1999; Farnsworth 1999, 2001; Handler and Lange 1978; Haviser 1999; Higman 1998; Lenik 2009; Pulsipher 1991; Schroedl and Ahlman 2002; Singleton 2001; Wilkie and Farnsworth 1999, 2005). In more recent years, historical archaeological research has more directly addressed domestic economies, focusing largely on the marketing of locally produced coarse earthenware pottery within and between islands as well as the material traces of consumption behaviors in slave households and communities (Armstrong 1990; Hauser 2008, 2011; Hauser and Kelly 2011; Gibson 2009; Kelly et al. 2008; Kelly et al. 2008; Reeves 2011; Wilkie and Farnsworth 2005).

While there have been archaeological investigations of plantation life and history in Barbados (e.g., Armstrong 2013; Armstrong and Reilly 2013; Bergman 2013; Farmer 2011; Finch 2013; Finch et al. 2013; Handler and Lange 1978; Handler et al. 1989; Loftfield 1996/97, 2001; Shuler 2005), these investigations have not been specifically directed toward household production activities even though they sometimes have yielded relevant ceramic and other material data. Thus, the Barbados data we use in this paper are largely based on detailed long-term research into the written record (see, for example, Handler 1971a, 1991). Despite its relative richness, however, this record often lacks specificity and comprehensive details on a variety of dimensions of slave life, including the household economy. The research on Martinique, on the other hand, has thus far been based on a less exhaustive review of documentary materials; however, archaeological research in Martinique has specifically focused on the slaves' household economy. By expanding data in the documentary record it provides a more detailed picture in a way that is lacking for Barbados. Thus, in the following pages we incorporate data from the site of Habitation Crève Cœur, an early sugar plantation in Martinique.

Crève Cœur operated as a sugar plantation from the 1760s to the end of the nineteenth century; during this period its enslaved population probably averaged approximately 100 persons. In its general layout, size of its slave population, location of the slave village, stables, and core buildings of plantation operations, Crève Cœur was a fairly typical medium to large sugar plantation. Containing approximately 670 ac (271 ha), the plantation is situated on the southern peninsula of Martinique (see Fig. 1), not far from Marin Cul-de-Sac, an economically active harbor for many years. Over four field seasons (2005, 2007, 2008, 2010), Kenneth Kelly, University of South Carolina, and his team conducted archaeological research at Crève Cœur, oriented to recovering material vestiges of slave life. Excavations took place at six slave occupation loci, identified as terraced platforms on the slopes of the hill ascending behind the main house (Maison de Maître). While particular house constructions were delineated, due to the re-use of platforms and mixing of chronologically distinct deposits, each platform was considered an accumulation of materials from several households. The excavations yielded over 45,000 artifacts, including ceramics, metal, glass, bone, daub, charcoal and stone.

Barbados and Martinique: Sugar Plantations and Slave Labor

The European colonization of Barbados and Martinique began in the first few decades of the seventeenth century. During the early years of settlement, their economies involved the small-scale production of food crops for local consumption and export crops such as tobacco, coffee, and indigo. Profits were generally precarious, farms small, and European indentured servants were a major part of the labor force. The shift from small-scale mixed crop farming to the large-scale commercial production of sugar on plantations began in Barbados in the early 1640s and in the 1660s in Martinique. This shift led to new labor demands, which were filled by an increasing dependence on the transatlantic slave trade and the exploitation of captive Africans and their descendants.

Between the 1680s and 1834, despite fluctuations in ownership and acreage, Barbados contained an average of about 400 medium (defined as having at least one sugar mill) to large plantations within its 166mi² (430 km²). Taken as a whole, Barbadian plantations averaged about 265 ac (107 ha), slightly more than half were between 100 and 300 ac (40-121 ha), and only 6 % were larger than 500 ac (202 ha). From the early 1700s, the island's enslaved population was somewhat over 50,000, by the early nineteenth century it was over 70,000, and at emancipation in 1834 it was around 83,000; the vast majority of these people, perhaps as much as 88 % or more, lived on plantations or smaller farm units (Handler and Lange 1978, pp. 38-39; Handler 2002). By contrast, the land area of Martinique is approximately 436mi² (1,129 km²), and from 1671 (the earliest year for which we have figures) to 1857, its plantations increased from 111 to 498 middle to large sucreries, averaging about 420 ac (170 ha) each, but with some larger than 2,000 ac (809 ha) (Kimber 1988, p. 175; Moreau de Jonnès 1840, p. 231). The enslaved population also increased on Martinique, from around 14,000 in 1,700 to 83,416 in the late eighteenth century, and then decreased to 74,100 at emancipation in 1848, mostly due to manumissions; approximately half of the enslaved were attached to sugar plantations (Kimber 1988, p. 176; Leti 1998, p. 25; Moreau de Jonnès 1840, pp. 17, 231). Although Barbados was less than half the size of Martinique in area, its enslaved population was equal to or larger than Martinique's throughout their periods of slavery.

The differences in the density of plantations and populations between the islands can be largely attributed to their geographic differences. Compared to the mountainous, volcanic terrain of Martinique, which is similar to other islands in the Windward chain of the Lesser Antilles, Barbados is low lying with a gently undulating topography (except for the one-seventh of land area that comprises the hilly and rugged Scotland District) and is largely composed of coral-capped limestone terraces with rich agricultural soils. When first colonized, the island was densely wooded. By the last half of the seventeenth century, however, a good portion of its forest cover had been removed while sugar plantations were assembled, as in Martinique, by joining together smaller holdings. The plantations rapidly spread and consumed most of the island's arable land, including good parts of the Scotland District. On the other hand, in Martinique (as in other Windward islands) with its mountainous topography and thickly forested interiors, sugar plantation development was largely confined to low-lying and more level coastal areas and valleys except for the northern forested mountains which were better suited for crops such as coffee and tobacco (Kimber 1988, p. 175). On both islands plantation slaves lived in small settlements (called the "Negro yard" in Barbados, and "rue cases-nègres" in Martinique). Dwellings were usually arranged in irregular clusters (in Barbados) or scattered on either side of a central road or path (in Martinique), and were located not far from the area containing the slave master's house, the sugar works, stables, and other outbuildings (the "yard" in Barbados; "habitation" in Martinique). Because of topography and size of the islands, the settlements in Barbados were in closer proximity to each other than those in Martinique. Settlements varied in size, but could range from 40 or 50 inhabitants to upwards of 200 to 300, occasionally more, on the largest estates. Reflecting a pattern found on sugar plantations throughout the Americas, these settlements made for relatively compact social units or communities where there was a great deal of physical and social intimacy. Most leisure time as well as the slaves' most important daily social interactions took place in these settlements.

Despite the demands of the plantation labor regimen, enslaved laborers on both islands (as elsewhere in the Caribbean) had some "free" time which they could generally devote to activities of their choice, including those related to their own material interests and economic gain. The duration of this "free" time varied by the season and other factors (e.g., Higman 1984, pp. 186–188), but was usually on the weekends, normally lasting from Saturday afternoon or evening to Sunday night or early Monday morning.

In Barbados and Martinique, as well as in other New World plantation societies, slaves were generally on the job from "sunrise to sunset," although the number of hours doing plantation labor during the day or year could be quite variable (cf. Higman 1984, pp. 186-188; Roberts 2006). In general, the cane harvest, or crop season, demanded longer work hours. By long-honored custom, however, extending deep into European tradition and widespread in the British and French West Indies, plantation field labor was generally not required on Sundays (except for that relating to maintenance of the plantation's livestock and horses), even though plantation managements were far from universal in adhering to this norm. In any case, Barbadian slaves (except for domestics, watchmen, and livestock keepers) were usually left to their own devices on Sunday, and later in the slave period for parts of Saturdays as well. As elsewhere in the West Indies, Sundays were also the main market days though, under pressure from the British government to Christianize the slave population, in 1826 the Barbados legislature passed the "Sunday and Marriage Act" (Barbados 1826b) which effectively banned Sunday markets; for the first time in Barbados history a law specified that slaves were to be released from plantation work on Sundays. The act, however, was not intended to eliminate marketing activities and thus Saturday became the main market day, a custom that has endured to the present day.

Plantations in the French Antilles followed similar labor schedules during the agricultural cycle, but from early in the colonization of Martinique, unlike Protestant Barbados, Sunday was a mandatory "free" day for slaves to attend Mass. Yet, from the seventeenth century, Sunday was also the main market day. In 1685, the French crown established the *Code Noir*, a charter regulating slavery in the colonies, part of which required that slaves were to be relieved of plantation labor on Sundays and Catholic holidays. This decree seems to have been generally followed by Martinique planters, but by the early eighteenth century, these planters increasingly obliged their slaves to grow their own food on Saturdays, thus relieving the planters of the economic burden

of feeding them (Debien 1964, pp. 147–151, 195–200; Labat 1724, 4, p. 190; Munford 1991, 2, p. 543; Tomich 1993, p. 226).

In Barbados, in addition to Sundays and occasional Saturday breaks, plantation field slaves and tradesmen (carpenters, coopers, masons) were generally released from labor on Christian holidays (Christmas day, Good Friday, Easter Monday), and during particularly bad weather or storms. Slaves were also sometimes given a holiday in celebration of the planter's or a family member's birthday; or, particularly toward the end of the slave period, they were relieved of labor for the Harvest Home, celebrating the end of the "crop season." For most of the slave period in Barbados, Christian holidays were not mandated by law, but such was the case in Martinique and other French colonies from an early period (Debien 1974, p. 154; Handler and Frisbie 1972, p. 11; Handler and Lange 1978, pp. 88–89).

Contemporary independent estimates and figures indicate that Barbadian working (i.e., not aged or infirm) adult slaves were generally exempt from plantation work demands for about 54 to 61 days during the year (Barbados Council 1824, pp. 108–09; Dickson 1814, p. 433; Handler and Lange 1978, p. 82; Society for Improvement 1811–16, pp. 13–14), and thus were generally "free" of assigned labor tasks and could pursue activities of their choice. Since Martinique plantation slaves were compelled to grow their own foods on Saturdays, they had approximately 91 "free" days annually (Debien 1974). Activities pursued during this "free" time included tending gardens, collecting firewood and making charcoal, repairing houses, making handicrafts, engaging in food collecting activities, attending the weekend dances that were ubiquitous in Caribbean plantation societies, and marketing and trading. The importance of this "free" time to the enslaved cannot be overstated.

Archaeologically recovered materials offer direct evidence of the economic activities of slaves during their "free" time. At least some of the "luxury" items, i.e., goods not normally allocated by plantations, associated with slave occupations in Martinique may reflect their active role in the island's marketing system. These items were not subsistence materials, and were probably not distributed by plantations unless under special circumstances, such as rewards for good service or conformity to management norms (cf. Handler and Lange 1978, pp. 77-80, 225-226; Orser 1990, p. 116). Excavations at Crève Cœur recovered numerous "luxury" items many of which were probably acquired through trade or purchase (possibly theft and gifting as well) on the internal market. These included umbrella/parasol parts (umbrellas or parasols also may have been "luxury" items in other French colonial contexts; cf. McDonald 1993, p. 294), doll fragments, perfume bottles, coins, metal earrings, rings and pendants, and other items of personal adornment such as buttons and hundreds of Europeanmanufactured glass beads. Glass beads, in particular, were highly marketable and valued by enslaved women who bought and sold them at the markets (D'Orbigny 1841, p. 26; Renouard 1822, p. 247). As is well known, glass beads were prominent trade items during the transatlantic slave trade. Although captive Africans were usually stripped of most of their personal belongings before they boarded the slave ships, some beads found in New World archaeological sites may have come across the Atlantic with their owners, while others may have been distributed to them during the Middle Passage (Handler 2009). Still others were probably acquired in New World settings through marketing or trading activities (or, possibly, theft or plantation "rewards"). It can be noted that glass beads (representing a variety of types) were among the most

common artifacts recovered from a plantation burial ground in Barbados (Handler and Lange 1978, pp. 133–135, 144–150, 222–227).

Farming: Subsistence Crops

By the mid- to late-1700s and early 1800s, the food supplies of British West Indian slaves were acquired through different methods. Broadly speaking, in Jamaica and the Windward Islands, foods were sometimes imported, but slaves relied to a considerable degree on small plots of land by their houses and, more importantly, on their "provision grounds." The "provision grounds" were usually located in unused or marginal plantation lands, sometimes relatively distant from the slave settlement, in which plots were allocated to individuals or households where they were expected to grow their own food. In the Leeward Islands plantations grew foodstuffs, but there was a much greater dependence on imports. This distinction between "home-fed" and "foreign-fed colonies" was made in the early nineteenth century by the abolitionist James Stephen (1824–30, 2, p. 261) in his classic study of British West Indian slavery. Had Martinique been British, Stephen might have characterized it as a "home-fed" colony, but Barbados, as Stephen phrased it, "is of a middle character." In Barbados, slave foods were imported as well as grown on plantation lands, locally called "provision grounds," that is, undivided plantation acreage worked collectively by slave gangs as part of their normal work assignments. It is to be noted that the term "provision ground" had a somewhat different meaning in Barbados than it had in Jamaica and the Windwards.

Despite the occasional consumption of animal products, the slave diet in Barbados as on other sugar islands was overwhelmingly vegetable. It primarily consisted of root crops (collectively referred to as roots or ground provisions), such as sweet potatoes (the most important), yams, and eddoes, as well as corn (primarily Guinea corn [sorghum], secondarily maize [Indian corn]). Corn was the major staple for most of the period of slavery, although around the mid-seventeenth century, it was plantain; plantain acreage decreased over the years but it continued to be grown on some plantations up to the late eighteenth century. (In Martinique, on the other hand, manioc was the main provision crop, with yams, potatoes, and occasionally plantains supplementing manioc as the major staple; maize was not favored and up to modern times, it "has remained a chicken feed" [Debien 1974, p. 186; Kimber 1988, pp. 199-200; Moreau de Jonnès 1817, pp. 83–84].) In Barbados, "ground provisions" and corn were grown on plantation provision grounds or intercropped with growing sugar cane. They were usually distributed weekly- in earlier years on late Saturday afternoons and in later years on Sunday mornings after various chores had been performed, and these rations were fundamental to the slave diet. Ideally salt fish was allocated weekly as well. Although provision grounds yielded a good portion of the plantation slave's diet, a small portion also came from his own gardening efforts on small plots (e.g. Barbados Assembly 1818, p. 42; Barbados Council 1824, p. 93; Clarke 1823, p. 30; Coleridge 1832, pp. 125-126; Gunkel and Handler 1970, pp. 10-11; Handler 1967, p. 290; Jordan 1824, pp. 4, 11; Ligon 1657, pp. 37,114; Nicholls 1790, p. 332; Pinckard 1806, 1, p. 368; Porteus 1807, pp. 195–196).

By the mid-eighteenth century, there were two types of garden plots in Barbados. One was a sub-division in a special field that the plantation set aside specifically for slave use. Individuals or households were allocated small parcels in this special field which was distinguished from other plantation fields where food crops were raised, i.e., the "provision grounds," and was referred to as the "Negro ground," "Negro land," or "Negro garden." The "Negro ground" was situated at the margins of sugar fields or adjacent to the slave settlement but not literally within it. (In other territories "provision grounds" were synonymous with what in Barbados was called the "Negro garden" [cf. Berlin and Morgan 1993, p. 23]). The other type of garden, ubiquitous in New World slave societies, apparently meriting no special local term was around the slave dwellings in the settlements (Handler 2002). On these "small patches of garden," George Pinckard (1806, 1, p. 368), a visiting British naval doctor observed in 1796, "it is common for the slaves to plant fruits and vegetables, and to raise stock. Some of them keep a pig, some a goat, some Guinea fowls, ducks, chickens, pigeons, or the like." These house plots or house gardens were small and hardly sufficient to raise much more than meager supplements to plantation food rations. Yet they were important features of the slaves' household economy.

This gardening system started very early in the history of plantation slavery in Barbados. However, at no time, unlike Martinique and other volcanic islands in the Windwards where arable and accessible land for sugar production was limited (e.g., Marshall 1993), were the enslaved made responsible for the entirety of their sustenance. Planters in these islands concerned with maximizing profits by reducing expenses did not want to sacrifice potentially viable sugar acreage for slave provisioning.

The food crops Barbadian slaves cultivated in their house plots and the "Negro ground" were essentially the same as those grown in plantation provision grounds, sometimes supplemented by other vegetables such as greens, cassava/manioc or pigeon peas, and occasionally a fruit tree or two. By the 1820s and early 1830s gardens may have become more diversified, possibly including such plants as okras, pumpkins, and hot peppers.

Available information is too meager to ascertain how much of the average food crop production was consumed by the producing households and how much was destined for the internal market. As the years progressed, however, it is clear that the sale or barter of produce, occasionally including portions of their weekly plantation rations, on the internal market became a major device by which enslaved Barbadians (as with their brethren on other islands) acquired cash or goods to satisfy a variety of consumption needs, including additional and different foods to diversify their monotonous diets. They "were at liberty" observed Pinckard in 1796 (1806, 1, pp. 369–370), in a comment that could be extended to all "home-fed" colonies, including those claimed by the French, "to take the whole of their own private stock to market, and to procure whatever additional comforts they prefer . . . and the markets of the island depend almost wholly upon this mode of supply." The internal marketing system, in which slaves were major players but which also included white and, increasingly, freedmen hucksters, was a fundamental institution in Barbadian society (Handler 1974, pp. 125– 130; Beckles and Shepherd 1991; cf. Mintz and Hall 1960, the foundational study for this aspect of West Indian slave societies). Moreover, by the first few decades of the 1800s, as we discuss below, Barbadian slaves were actively engaged in growing cash crops that were specifically intended for the external or overseas market.

In contrast to Barbados, plantation slaves in Martinique generally depended much less on plantation rations for their food supplies, especially in the later periods of

slavery. After sugar was introduced by Dutch refugees from Brazil in the midseventeenth century, rations of salt beef, salt fish, and other provisions were common, but some Martinique planters, in order to reduce their expenses, adopted what Jean Baptiste Du Tertre, the French priest and historian, refers to as the "Brazilian" model for slave provisioning. Planters adhering to this system provided a labor-free day, usually Saturday, compelling slaves to grow crops in both provision grounds and house-yard gardens, raise livestock and poultry, and harvest fish and shellfish during this time (Du Tertre 1667-71, 3, pp. 515-516; cf. Tomich 1993). However, in Martinique, unlike Barbados, "provision grounds" were plots of land (locally referred to as place à Nègres [Kimber 1988, p. 174]) on the estate margins, often in the thickly wooded hillsides or mountain slopes, in which the enslaved were compelled to grow most or all of their food. These plots were sometimes a considerable distance from their dwellings. In the late seventeenth and early eighteenth centuries, the Dominican priest Père Labat (1724, 2, p. 62) observed that the slave diet was very poor, rations were sparse, and slaves depended almost solely on produce from their gardens and the animals they raised. In order to remedy this situation, the Code Noir, among provisions for clothing and shelter, also mandated a standardized dietary minimum with weekly rations for slaves in all the French colonies. The Code Noir, as Tomich (1993, p. 224; 362 n10) has explained, "sought to make masters totally responsible for the maintenance of their slaves." With respect to food "the practice of relying on individual slave gardens and free Saturdays in lieu of rations was to be suppressed in favor of regular weekly food allowances of determined composition and quantity."

British West Indian colonies, with their own planter/merchant legislatures, were more autonomous in constructing their own slave codes and in Barbados, in particular, no laws mandated what food rations plantation slaves should receive-each owner decided for himself; even had such laws existed, it is highly unlikely they would have been enforced. Such was, in fact, the case in Martinique. Despite provisions in the Code Noir the provision ground system was too firmly embedded in the social matrix. Although the French government promulgated various ordinances throughout the eighteenth century to reconcile the plantation ration system with the existence of plots in provision grounds, planters rarely adhered to these ordinances (Debien 1964, p. 184; Tomich 1993, p. 225). Despite the efforts of the metropolitan government to limit slave self-provisioning, the efforts were unsuccessful and enslaved laborers were compelled to procure their own food resources during their "free" time (e.g., Thibault de Chanvalon 1763, p. 108). Many Martinique planters allocated some imported rations, such as salt beef and salt cod (salt meat was rarely distributed by Barbadian plantations—fresh meat practically never—but dried salt fish was often given weekly); in fact, salt cod was considered a major provision (Moreau de Jonnès 1817, p. 4). As in earlier periods, the provision ground system (with house yard gardens) and free Saturdays and Sundays was the norm for most slaves in Martinique during the nineteenth century (Tomich 1993, p. 229; 361 n1; Schoelcher 1841). By emancipation in 1848, slave self- provisioning was almost completely substituted for plantation rationing, a system quite different than Barbados; however, on both islands, the internal marketing system was an important element of slave life.

Early accounts of Martinique indicate that in the seventeenth century, slaves were growing peas, potatoes, manioc, yams, various fruit and herbs (e.g., Du Tertre 1667–71, 3, pp. 516–524). By the early eighteenth century, Labat (1724, 2, p. 59) recorded the

cultivation of numerous roots and vegetables in provision grounds, and fruit trees, such as papaya and melon, in house yard gardens, for both household use and domestic sales. As custom compelled the cultivation and marketing of crops early in Martinique's history, by the eighteenth century and until emancipation in 1848 not only the slaves but also the colony as a whole was essentially dependent on slave gardening activities for provisions (e.g., Lavollée 1841; Soleau 1835, p. 93). By emancipation the foundations of a post-emancipation free peasantry had been firmly established (cf. Horowitz 1967; Kimber 1988, p. 220).

Farming: Cash Crops

Not only did slaves on both islands produce subsistence crops for their households and the islands' internal markets, but their production activities also extended to cash crops. These crops were specifically produced for an export market.

The evidence for slave production of cash crops does not become strong in Barbados until the later years of slavery. By the late 1810s and early 1820s, if not earlier, there is clear evidence for the production of cash crops on their small house plots. The Barbados legislature had enacted numerous laws in the seventeenth, eighteenth and early nineteenth centuries circumscribing slave marketing in general and in particular to prevent their selling cash/export crops, such as sugar, cotton, and aloes. These were also plantation crops and were sometimes (or, often, depending on the perspective of the primary source writer) stolen by slaves to sell on their own. These restrictive laws never really succeeded in achieving their aims. Planters commonly complained of theft from plantation stores, and because of legal restrictions imposed on slaves they would usually, clandestinely, sell their goods internally to white (or freedmen who acted as white agents) hucksters or shopkeepers; in the case of cash crops these middle men were essential to the distribution chain leading to exports (e.g., Barbados Assembly 1818, pp. 37, 42; Browne 1926, p. 112; Coleridge 1832, pp. 125-126; Colthurst 1835-38, p. 44; Davy 1854, pp. 90–91; Hovey 1838, pp. 109–110; Jordan 1824, p. 4; Moore 1801, pp. 251-257; Pinfold, C 1762, p. 457; Poyer 1808, pp. 581-583; Schomburgk 1848, pp. 84-85; Society for Improvement 1811-16, pp. 87-88; Thome and Kimball 1838, p. 64).

However, in 1826, clauses in the major "Slave Consolidation Act," the most comprehensive and lengthy slave law in Barbados history, not only contained provisions dealing with slaves who were suspected of having stolen cotton, ginger, aloes, sugar cane "or other staple and export production," it also encouraged "industrious and honest slaves . . . in the cultivation of cotton and aloes." The law removed all legal barriers to the production and marketing of these crops and permitted slaves "the like protection in the cultivation and sale of those articles as at present secured by law to the white and free inhabitants" (Barbados 1826a; cf. Handler 1974, pp. 97–100). The production of minor export crops increased, and by the end of the period of slavery, an island visitor in 1833 generalized, "The negroes, on their own grounds" were cultivating "arrowroot, ginger, cotton, and aloes, for exportation" (Rolph 1836, p. 52); he could have added sugar cane as well. Some of these crops, such as sugar cane and arrowroot (the latter particularly well adapted to independent production by slaves) were to become important to small-scale agriculturalists well beyond the period of slavery (Handler 1965, 1966, 1971b).

We currently have limited, albeit suggestive, documentary evidence for the production of cash crops by Martinique slaves. In the early seventeenth century, Labat (1724, 3, p. 57; 4, p. 190) observed that slaves were growing both cotton and tobacco in their gardens for market sales, and later in the seventeenth century Du Tertre reported that despite a ban on selling sugar dictated by the *Code Noir*, slaves were not only selling sugar but also cotton and spices. An order in January 1734 further prohibited slaves from selling coffee and cotton, but these regulations were poorly enforced and slaves continued to market these crops, albeit in a more clandestine manner (Bergerac 1786, p. 262). Of course, these ordinances and reports of marketing do not necessarily imply that slaves themselves were producing such crops; they could have been taking them from plantation stores and selling them on the market—practices that occurred in Barbados. Presently, we lack direct evidence for the production of cash crops by Martinique slaves in the nineteenth century, but we assume they did, judging by crops produced by the post-emancipation free peasantry (e.g., Kimber 1988).

While tobacco was grown by early European colonists in Martinique, by the end of the seventeenth century it had been supplanted by sugar cane, and enslaved laborers and free blacks became the major producers of the island's tobacco—providing another commodity that could be disposed of (or acquired) in local markets (Renouard 1822, p. 187). Excavations at Crève Cœur yielded over 1,000 fragments of European-manufactured white kaolin tobacco pipes (also a common artifact on Barbados plantations). Tobacco was an important commodity to the enslaved and the presence of pipes suggests its important role in slave culture; the pipes themselves could have been obtained at markets or distributed by the plantations as a reward for good performance or behavior (Debien 1974, pp. 178, 195; Du Tertre, 1667–71, 3, p. 519; Labat 1724, 4, p. 190; Munford 1991, p. 560; Tomich 1993, p. 233; cf. Handler and Lange 1978, passim). As pipes were present in all contexts at Crève Cœur, including those of the late eighteenth century and post-emancipation era, it is clear that tobacco and pipe smoking were important to the slave community, as were tobacco and pipes to the slave communities of Barbados (Handler and Lange 1978, pp. 133–135).

[Note: Tobacco had been a major cash-export crop in Barbados before the "sugar revolution" in the mid-seventeenth century. However, its importance decreased and by the mid-eighteenth century it was planted sparingly and mostly "by the slaves and the poorer sort of white inhabitants, but none for exportation" (Hughes 1750, p. 134). Tobacco was a valued commodity and was sold or exchanged on the internal market; this was also a major way, aside from plantation "rewards," by which slaves acquired European-manufactured kaolin pipes (Handler and Lange 1978, pp. 133–134.)

Poultry and Livestock

An adaptation important to the household economy, existing in all New World slave societies, was the raising and marketing of livestock and poultry. This economic activity, still important for many rural West Indians, is often overlooked in historical studies.

In no British or French Caribbean slave society were slaves protected in the law for property they held, whether that property included objects or goods they manufactured, crops they grew on their patches of land, or the livestock and poultry they raised and marketed. Neither Martinique nor Barbados was an exception to this general rule. In Barbados by long-standing custom, never legally codified until the final decade of the slave period, slaves had the "liberty of raising livestock, and selling it for their own benefit" (Barbados 1790, p. 4). As with vegetable products, animals were considered the slave's personal property, which could be freely disposed of or consumed as he saw fit; moreover, slave-owners were not prone to infringe on this property "right." In Barbados as in Jamaica and elsewhere, "planters recognized the peril of trespassing upon what the slaves conceived as customary rights" (McDonald 1993, p. 16). Barbados's 1826 Slave Consolidation Act for the first time protected these "rights." It stated "By the custom of this island slaves are allowed to possess and enjoy personal property," and the act specified several sanctions against anyone who "shall deprive any slave of any kind of personal property, which he or she shall have honestly acquired" (Barbados 1826a).

Not all slaves who cultivated house plots raised animals, but the ones that did kept one or two pigs and/or sheep or goats, and small numbers of "feathered stock of all kinds" (including, chickens, ducks, guinea fowl, pigeons, and geese); and by the early 1800s, some were keeping "horned cattle" (Barbados Assembly 1818, p. 49). Although some of their animals were probably for household consumption, there is little documentary evidence for this or their consumption of fresh meat in general. Whatever they consumed, it is clear that stock and poultry were primarily valued for market exchanges and as a source of cash. Poultry, in particular, McDonald (1993, p. 282) has observed, was well suited to the slaves' economy "since it demanded little investment of time or effort, required minimal capital outlay, and provided a steady income through marketing both eggs and the birds themselves." Sources that mention animals that slaves raised stress how important their production was to the island's meat supplies. By the early 1700s, and throughout the slave period, this role was firmly entrenched, and slave producers were essential contributors of meat and poultry to the internal market. In the early 1800s a local planter could report "the market is chiefly supplied with these articles by the Negroes" (Barbados Assembly 1818, p. 43; cf. Barbados Council 1824, pp. 91, 107, 113; Bayley 1832, p. 92; Dickson 1814, p. 428; Handler 1967, p. 290; Holder 1788, pp. 21-22; Jordan 1824, p. 3-4; Pinckard 1806, 1, pp. 368-369; 2, pp. 105-106; Poole 1753, p. 215; Society for the Propagation 1827, pp. 216-217).

Documentary sources from the 1600s indicate that Martinique slaves were raising and marketing livestock. In the early eighteenth century, Labat (1724, 2, p. 62) observed they kept poultry and livestock, noting that pigs were common in the slave settlements but were only slaughtered at festivals or holidays; otherwise they were traded or sold at local markets. As in Barbados, poultry was the most common and valuable faunal commodity in Martinique; also as in Barbados, eggs were highly marketable although the household occasionally consumed them (Bergerac 1786, p. 131; Thibault de Chanvalon 1763, p. 131). By the nineteenth century, poultry and livestock, particularly pigs, were prominent features of the slave settlements and remained important commodities in Martinique's internal markets (Debien 1964, 1974, pp. 195–196; D'Orbigny 1841, p. 26; Schoelcher 1841).

Archaeological research at Crève Cœur focused on the recovery and identification of faunal remains in order to explore the slaves' production and consumption activities

(Wallman 2014). Analysis of approximately 12,000 specimens of fauna confirms that livestock and poultry were consumed and bred at the plantation. Sheep and goat were the most common domestic mammals (sheep represented approximately 9 % of the total mammal MNI, goats 9 %, and specimens identified as sheep or goat, 7 %), while pigs also contributed considerably to the diet (21 % of the total mammal MNI). Further the skeletal elements from sheep, goats and pigs, came from the animals' entire carcasses, and cranial elements, in particular, were overrepresented, indicating that they were probably raised on-site, or at least butchered on-site as whole specimens. While documentary evidence indicates that pigs, sheep and goats were often raised for consumption during festivals and holidays, or for sale at the markets (as occurred in Barbados as well), the abundance of such remains at Crève Cœur indicates that these animals were consumed in greater regularity than is suggested by written sources. The high frequency of sheep and goat remains demonstrate the importance of these animals to the slaves' household economy. Beef was also identified (approximately 12 % of the total mammal MNI), but include more axial and limb elements, and fewer cranial and foot remains than expected. Previous zooarchaeological research in the Caribbean (Klippel 2001) demonstrates that this pattern signifies cured barreled beef, imported to the island, that was either distributed as rations, or purchased by the enslaved laborers themselves. As European consumers did not typically prefer these cuts, they were common in shipments of salted, barreled beef from Europe (Ireland, in particular) and North America to the Caribbean (Mandelblatt 2007). Further, cattle raised in Martinique were valued for their work as draft animals and typically were not consumed unless injured or too old to work in the fields or at the sugar mills (Renouard 1822, pp. 153–154). If the beef had come from local cattle, the type of cuts would have been more varied. However, the beef identified at all levels at Crève Coeur was consistent in the type, butchery and size of the cut. That is, the cuts and the butchery patterns are consistent with salted barreled imported salt beef, distributed by the plantation management. In this case, the archaeological record confirms the more general information in the documentary record that beef was distributed to the slave community, but the archaeological evidence suggests that sheep, goats and pigs were much more integral to slave life.

As suggested above, documentary sources indicate that poultry was an extremely valuable resource and commodity in both Barbados and Martinique. For Martinique these sources repeatedly convey that enslaved laborers raised chickens and other fowl in their communities, and that poultry (e.g., chicken and guinea fowl) and eggs were highly marketable goods. Interestingly, however, despite good preservation conditions, use of fine-mesh screens that isolate very small bone specimens, and the recovery of hundreds of eggshell fragments at Crève Cœur, Wallman's (2014) analysis identified few poultry or bird remains. In fact, total bird remains comprise only approximately one percent of the total assemblage. These remains are mostly chicken and guinea fowl, but pigeon/dove was also identified. The scarcity of poultry remains is surprising considering the many references to poultry (volaille) in documentary sources. If fowl and eggs were highly valued during the slave period, then the relative absence of their remains at the site suggests they were traded or otherwise distributed at the markets. These finds also illustrate quite well, as we discussed in the Introduction to this paper, how archaeological research can raise questions and supplement documentary materials.

Collecting Marine and Land Animals

Slaves in Barbados and Martinique fished in surrounding waters and also collected various types of land and sea animals. The large land crabs that abounded, especially near shores, were rarely eaten by whites in Barbados, perhaps more so in Martinique (Kimber 1988, p. 124), but were often collected by slaves who enjoyed them as a delicacy, and their sale at the markets contributed to income. Sea crabs, sea urchins, and lobsters were also collected along the shores, and, depending on the season, sea turtles were hunted by over turning the females as they came ashore to lay their eggs (a Kalinago/Carib-influenced technique). Although Barbados lacked rivers of any consequence, the abundant rivers of Martinique yielded crustaceans, shellfish and fish that were much coveted resources. Using torches, slaves fished in streams and along the coast at night for crabs and small species of fish, such as Balao, a fish still consumed today (Labat 1724, 2, p. 136; Price 1966, p. 1371; Thibault de Chanvalon 1763, p. 108). Torch fishing also took place in Barbados. Lobsters and sea crabs were collected at night among the coastal coral reefs, and torches, made from a local bush, were also used to collect land crabs at night. Based on literary sources, it is difficult to ascertain the importance of marine animals, such as the giant conch and the small octopus, to the slave diet and household economy; however it is highly probable that plantation slaves, especially those who lived in coastal areas, collected some sea life for their own households (Browne 1926, p. 107; Colt 1631, p. 68; Dickson 1814, p. 429; Gunkel and Handler 1970; Hughes 1750, pp. 264–265, 276–277, 309–310; Ligon 1657, pp. 28, 66; Schomburgk 1848, pp. 638–639, 655–658, 679; Sketch of a Voyage 1794, p. 285; Walduck 1710–12).

Moreover, on both islands fishing played some role, its extent unknown, in the household economy of plantation slaves, particularly those who lived near the sea. In Barbados and presumably Martinique as well fresh fish was a highly prized commodity, but supplies were limited by a combination of factors, e.g., preservation and spoilage problems, seasonality of supply, market gluts, transportation to markets and so forth. From the seventeenth century, Barbadian fishermen took a variety of fish from local waters, including the flying fish (*Hirundichthys affinis*), still a popular food in Barbados and a national symbol. In earlier periods, these fish were often taken at night, and as one early nineteenth century visitor reported, "the Negroes take them after the example of the Charaibs [sic] very successfully in the dark; they spread . . . their nets before a light, and disturb the water at a small distance; the fish rising eagerly fly toward the light, and are intercepted by the nets" (quoted in Handler 1970, p. 58). Although fishing techniques varied over the period of slavery, in general fishermen engaged in shoreline fishing by spreading nets on the water's surface, by use of poison, or hand trapping with small "hoop nets"; as time progressed most fish were caught by nets or seines or hook and line from boats.

During the earlier years of the slave period, most Barbadian fishermen were poor whites, indentured or free. As the years progressed, however, although poor whites continued to fish for a living, more slave owners released their slaves for fishing activities and a specialized category of slave fishermen developed. These fishermen usually worked for town dwelling owners, who gained most or their entire livelihood by keeping gangs of fishing slaves. In 1788, the island's governor reported there were "maybe about 500" enslaved fishermen (quoted in Handler 1970, p. 55 n8).

In Martinique, specialized slave fishermen were present from early in the colonial period (Labat 1724, 2, p. 136; Du Tertre 1667–71, 2, p. 525). Richard Price (1966, p. 1364) has suggested that such fishermen were a "privileged slave subgroup within the plantation system, and that their special socioeconomic role permitted a particularly smooth transformation to life as free fishermen." However, a French naturalist who lived in Martinique for a few years at the beginning of the nineteenth century observed that fresh fish were rare at Martinique markets, but "*les familles aisées*" (wealthy families) have slaves that work as fisherman (C. C. Robin 1807, p. 82). In Martinique, then, slave fisherman may not have been a privileged group themselves within the wider slave population, but only certain planters could afford to divert labor to this task.

Because of the economic benefits they brought their owners, enslaved fishermen were frequently highly valued, although limited evidence indicates that they sometimes kept or attempted to keep part of their catch for their own use or sale. In addition, plantation slaves, particularly those who lived close to the sea, also engaged in fishing during their leisure time; this part-time activity also contributed to the household economy.

Crève Cœur is located about a 3/4-mile distance from the bay of Marin Cul-de-Sac (see Fig. 1). Lined with mangrove swamps, the bay contains small coral reef formations, habitats for hundreds of species of fish, mollusks and crustacean. Archaeological evidence suggests that the bay was actively exploited by the slave and postemancipation community, which harvested a diverse range of terrestrial and aquatic species. These include land crab, sea urchin, and nine species of marine and mangrove mollusks. Common shellfish include the West-Indian Topshell (Cittarium pica), Chitons (Acanthopleura granulata and Chiton marmoratus), and mangrove oysters (Crassostrea rhizophorae). Over 2,000 fish specimens were recovered, and they included 28 families that comprised numerous genera and species. These remains provide evidence of diets comprised of a highly diverse number of fish. The ubiquity of fish throughout the site indicates that fish played a significant role in provisioning the Crève Cœur slave community, and also was probably important to the household economy. The most common fish remains were various species of parrotfish (Family Scaridae, 17 % of total fish NISP), grouper (Family Serranidae, 16 %), grunts (Family Humaelidae, 11 %), and snapper (Family Lutianidae, 10 %). These taxa inhabit inshore and reef areas and would have been abundant in the Marin Cul-de-Sac.

These data combined with artifactual evidence, such as small lead net-weights, indicate that the slaves were likely fishing in mangroves and along coasts with small nets. The abundance of locally procured fish identified at Crève Cœur highlights the economic importance of fishing for the slaves, an activity which is often, at best, ambiguously noted in literary accounts of slave life. At present, it is impossible to provide comparable data for any specific Barbados plantation community.

The archaeological recovery of fishing tools, along with the sizable diversity of fish and shellfish indicate that Crève Cœur's inhabitants were actively procuring resources in the surrounding area and consuming fish and shellfish on a regular basis. As a variety of fish remains were recovered in all slave house occupation deposits, the archaeological record challenges the idea that particular slave households, such as specialized fisherman, had differential access to valued resources. As there is some documentary evidence for specialized fisherman on plantations and the exchange of fish at markets (see above), it is likely the enslaved laborers at Crève Cœur exchanged these products at markets with communities further inland or town dwellers. Imported salt fish (notably cod) was an important part of the Martinique slave diet and was called, in fact, "*Le Pain des Negres*," (the bread of the slaves) by colonists (Moreau de Jonnès 1817, p. 4). However, the contribution of salt fish to the diet is difficult to confirm archaeologically as few, if any, skeletal elements survived the overseas shipping. No cod or other non-local fish were identified in the archaeological deposits, although it is likely that the slave community at Crève Cœur depended to some extent on imported salt fish rations.

In addition to livestock, poultry, and sea animals, other animals played a role in the slaves' household economy. These animals were normally not consumed or marketed, but hunting them helped in the acquisition of small amounts of money. In Barbados, parishes paid bounties for the destruction of monkeys, raccoons, and rats that destroyed fruit trees, food crops, poultry, and sugar cane (Anderson 1784–85; Davy 1854, p. 138; Hall 1764, pp. 106, 111-112, 215, 482; Schomburgk 1848, pp. 178, 683). Rats, in particular, "do infinite harm," reported Richard Ligon (1657, p. 88), in the midseventeenth century, "by gnawing the canes," and the "reward laid on them," learned an English visitor a century later, was given "as an encouragement to the Negroes to ensnare them, yet still they greatly abound" (Poole 1753, p. 275; cf. Hughes 1750, p. 66; Hall 1764, pp. 349-350; Schomburgk 1848, p. 178). In Jamaica, bounties paid for the capture of rats were also a source of income. However, documentary evidence indicates that "both before and after 1838 Jamaican plantation workers consumed rats" (Higman 1998, p. 208; cf. McDonald 1993, p. 46). We have no comparable evidence for Barbados, but there is documentary evidence for rat consumption in Martinique (Debien 1974, p. 196) and numerous rat (*Rattus sp.*) remains were identified in the Crève Cœur assemblage. In Martinique, rewards also came from the killing of rats, but to a greater extent it was the *chasseur de serpent*, the snake hunter, who could earn money by killing the venomous Fer-de-lance (Rufz 1859). Analysis of faunal remains at Crève Cœur identified a single Fer-de-lance, but it is difficult to assess if the slave community targeted these snakes (and rats) for subsistence or market exchange. Locally available wild terrestrial fauna, including agouti and opossum (absent in Barbados), were identified at Crève Cœur and were probably consumed as supplements to the normal dietary fare.

Plant Collecting and Crafts

Barbadian slaves, as enslaved people throughout the Caribbean archipelago, exploited the natural environment by collecting cultivated and wild plants, both native and foreign. Twigs, vines, and slender tree branches were used in constructing wattleand-daub houses (the most typical enslaved house type in Barbados, Martinique and other sugar islands); the leaves of palm trees, the plantain, and the sugar cane served for roof thatching. Slaves also occasionally slept on mats or crude mattresses of vegetal matter. Wood, taken from the island's numerous gullies and plantation woodlands, could be carved into household utensils and furniture, such as spoons, stools, and benches. Wood was also collected for fuel, and bundles of firewood and charcoal were sold or traded at markets, particularly to town dwellers. Wood resources were also used to make trays and mortars and pestles; there is also some evidence for carved wooden door locks and matching keys on some dwellings during the eighteenth century. Gourd (Lagenaria siceraria) and calabash (Crescentia cujete), sometimes carved, served for dishes and containers, including drinking cups, and were very common household items. Some musical instruments, such as rattles and drums, were also made from plants, as were fishnets, fish traps and rope made from tree bark and vines. Plants also provided the slender and flexible twigs and fibers for several types of baskets, including the "dung basket," the ubiquitous roughly made shallow circular basket, constructed by interweaving strong but pliable twigs; still used in modern times, it served to carry any number of goods, from stable and cattle pen manure to fruits and vegetables to the markets (for a detailed discussion, see Browne 2011). It might be assumed that enslaved basket makers were also at liberty (after plantation needs were met) to trade or sell their products. Various grasses and vines served as livestock fodder and poultry feed, and slaves also seasonally collected edible fruit from several varieties of noncultivated trees. Leaves and berries from native and non-native wild plants helped to vary their diets and to make fermented drinks, and seeds of one kind or another were made into bead jewelry. Cultivated or wild plants were also ingredients in herbal medicines, and the fruit of the manchineel tree (Hippomane mancinella) and "poison tree" (Sapium hippomane) were used in fish poisons (cf., Handler 1970, 2006a, 2006b; Handler and Bergman 2009; Handler and Frisbie 1972; Handler and Jacoby 1993). Many of these products were either used by households or the individuals who made them, and could be bartered or sold in the markets.

Although we presently lack detailed information, there is suggestive evidence that Martinique slaves also collected wild plants and fruits to supplement their normal diets, for medicinal purposes, and, perhaps, to extract seeds to use as beads. They also collected firewood from the island's ample reserves, produced charcoal, collected manure, and produced crafts such as baskets and pottery (Bergerac 1786, p. 206; Ministère de la Marine 1844, p. 332; C. C. Robin 1807, p. 85; Schoelcher 1841; Tomich 1993, p. 232; cf. Kimber 1988, pp. 187, 189).

Due to the frequent poor preservation of organic materials in tropical environments, any objects fabricated from wood, fibers or plant materials are rarely recovered through archaeology. At Crève Cœur, however, excavations recovered some evidence of craft production. In particular, a perforated pendant carved from the polished bone of a medium to large mammal (likely a cow, pig, sheep, or goat) and a corresponding uncarved "blank" composed of the same polished bone, suggest on-site manufacture of small crafts. Moreover, artifacts such as bone dice, bone handled pocketknives, and a pin case could reflect craft production by Martinique slaves or, based on the recovery of similar items on Dominica and Guadeloupe, might reflect trade among the islands of the Lesser Antilles (T. Romon, pers. comm.; M. Hauser, pers. comm.).

In Barbados, documentary materials and archaeological research have clearly established that enslaved potters manufactured wheel-thrown sugar pots (or molds) and drip jars, made from local clays and fired in simple kilns. The technology was introduced from England in the seventeenth century. There are also some indications that plantation slaves used the wheel to manufacture domestic wares. There is documentary evidence for a small-scale wheel-made pottery industry in Barbados from the nineteenth century, and this industry was still functioning in modern times (Handler 1963a, 1963b). Moreover slight documentary evidence and archaeological research suggest that low-fired non-wheel made domestic earthenware was also used locally.

Whether this earthenware was actually made in Barbados, or imported, waits chemical testing for a definitive answer (Handler 1963a, 1963b; Handler and Lange 1978, pp. 139–144; Handler et al. 1989, p. 93; Farmer 2011; Lange and Carlson 1985, pp. 99–100; Loftfield 1992, 2001, pp. 219–233; also, D. Armstrong, pers. comm.). Some of the craft products that slaves manufactured for their own households or to satisfy their owners' demands could also be exchanged in the markets; with some exceptions, however, the evidence is usually much too sketchy to assess the extent to which craft items were produced for each of these outlets.

As in Barbados, Martinique also had a well-established tradition of locally produced European-influenced wheel-thrown redwares, mass-produced through slave labor (England 1994; Kelly et al. 2008). There is some indication that slaves also produced such pots for their own benefit on their own time (Ministère de la Marine 1844, p. 113). A hand-built pottery tradition practiced by Afro-Caribbean women (Peterson et al. 1999, p. 162) continues today on Martinique. Little is known about this tradition historically, but archaeological research identified hand-made locally produced course earthenware known colloquially as *coco neg*; slaves probably made this earthenware. Similar wares, variously referred to by archaeologists as Yabba-wares, Afro-Caribbean wares, and Criollo wares, are widely distributed in the Caribbean and were often exchanged at internal markets (Hauser 2008; Hauser and Armstrong 1999; Hauser and Handler 2009; Heath 1999; Kelly 2008, 2009; Mathewson 1972, 1973; Meyers 1999; Peterson et al. 1999; see Hauser and DeCorse 2003 for review). Although the French colonial government imposed legal restrictions on inter-island trade from the late seventeenth through most of the eighteenth century, archaeological and chemical analyses of ceramics have revealed that pots from Martinique were probably exported to the neighboring islands of Dominica and Guadeloupe (Hauser and Kelly 2011; Kelly et al. 2008). Of the over 14,000 food-related ceramic sherds (excluding ceramics associated with architecture, tobacco or sugar production) identified at Crève Cœur, approximately 40 % were coco neg, indicating a significant reliance on the local production of these wares for community use and market exchange (Kelly and Wallman, in press).

Conclusions

Despite differing colonial experiences and histories, there were some broad similarities between Barbados and Martinique because of their dependence on the plantation production of sugar and the labor of enslaved Africans. These similarities extended to the household economies of plantation workers and were also shared with other sugar producers in the British and French West Indies.

The major contrast between Barbados and Martinique in the domestic economies of enslaved households probably largely resulted from the islands' geographical differences, which induced differences in their systems of slave provisioning. In Barbados, with its fertile soils and relatively low lying topography, plantations devoted much of their arable land to sugar cane, frequently intercropped with food crops, while some land was set aside for "Negro gardens." With a high population density and with limited land unsuitable for sugar production, planters were reluctant to sacrifice productive sugar cane areas for slave provisioning as well as to release slaves from plantation labor to cultivate their own grounds. Thus, plantation rations, some imported, some locally grown, formed the core of the slave's subsistence in Barbados and slaves were allotted less free time from assigned plantation labor.

In Martinique, on the other hand, with its larger size and mountainous terrain limiting the acreage profitable for sugar production, planters set lands apart for slave provisioning and compelled their slaves to grow their own food. Slaves were allowed Saturdays to labor on their provision grounds and Sundays to market their surplus. In particular, the island's population (including all classes) became almost entirely reliant on the food crops and livestock raised by slaves, and to some extent this dependence on slave produce occurred in Barbados as well.

Regardless of differences between Barbados and Martinique and despite the variability in our data base (more literary and less archaeological for the former) the evidence from both islands shows that the plantation-slave system, by its fundamental requirement that the enslaved labor force be fed, allowed some flexibility and therefore provided the context for other production activities that comprised household economies. Slaves on both islands developed parallel economic practices during slavery that became essential for the transition to life after emancipation, and placed both islands well within the "culture sphere" of what the anthropologist Charles Wagley (1957, pp. 5–12) many years ago called "Plantation America."

The ethnohistorical approach we have employed illuminates the emergence and development of socioeconomic characteristics associated with free non-peasant small-scale producers and peasants after emancipation, and well into modern times. These peasant-like characteristics, what Sidney Mintz (1961) called "proto-peasants," emerged during the period of slavery, included simple technologies, limited capital, small land units, production of foodstuffs for household consumption, and sale within a market economy; in addition, the production of items specifically designed for market exchange and not necessarily for household consumption (for West Indian small scale producers who were not peasants and who had multiple income-producing activities, see Comitas 1964; Handler 1963, 1966). The household economic system we have discussed was not merely a marginal activity in which enslaved plantation workers occasionally participated, it was fundamental to their sociocultural lives as well as to meeting various provisioning needs in the societies in which they lived.

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