

## 2 His Majesty's Island

### The Colonial World of Plantation Jamaica

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Of all the regions around the world that have been at one time or another subject to European colonial rule, none, perhaps, is as diverse in experience and history as the Caribbean. A great archipelago stretching from the south coast of Florida to the east coast of Venezuela, the region has been described as a “continent of islands” (Kurlansky 1993). Comprised of small sand spits, active volcanoes, long white sand beaches, and rugged mountains, over the millennia the Caribbean islands developed geographic, faunal, and botanical diversity that has long inspired the imaginations of visitors (see Figure 2.1).

The human diversity of the modern Caribbean has developed as a consequence of several thousand years of human colonization. Caribbean archaeologists now believe that the indigenous peoples of the Caribbean spread out across the islands in multiple waves of migration, developing complex political and economic relationships within and between islands (e.g., Keegan and Atkinson 2006; Rouse 1992; Wilson 2007). Entering the European imagination in the decades following Columbus's famous landfall in 1492, the Caribbean experienced many waves of European colonial settlement. European adventurers from all of the maritime nations of Western Europe – Spain, Portugal, England, France, Denmark, Holland, Scotland, Ireland, and Sweden – eventually claimed islands for their sovereigns and set out to seek fortunes for themselves. Early on, many of those fortunes were built through the exploitation of local indigenous peoples; by the end of the seventeenth century, those fortunes were nearly uniformly dependent on the exportation of tropical crops including tobacco, cotton, coffee, and above all, sugar (Craton 1997; Dunn 2000; Tomich 1990, 2004; Walvin 1997).

The pursuit of agricultural wealth dramatically changed the demographic, linguistic, social, and cultural landscapes of the Caribbean. When the European colonials began to depend on agricultural exports, they became increasingly dependent on enslaved labor acquired through a massive forced migration of people that has become known to us as the



Figure 2.1. The Caribbean. Image courtesy of Mark W. Hauser

African Slave Trade. Over the 300-year history of this insidious trade, some 10–15 million Africans were taken captive and shipped across the Atlantic to face a life of forced labor (Curtain 1969; Walvin 2008).

The introduction of captive labor into Jamaica played a crucial role in establishing both the social order and settlement pattern of the island. However, the British plantation mode of production was not the first manifestation of colonial rule on the island (Cundall 1911; Padron 2003). In 1509, nearly 150 years prior to the first British settlement of Jamaica, Spanish colonists established settlements on the island. When the British arrived in 1655, Jamaica was already an old colony, and its landscape had been radically transformed to serve the needs of the Spanish colonials who made Jamaica their home. Because landscapes have temporal depth – human landscapes are nearly always built on previously used human landscapes – one needs to understand how the island was transformed by the Spanish before understanding how British plantation landscapes were constructed. In this chapter, I review the settlement patterns created by those Spanish colonists and consider how the introduction of the plantation mode of production changed the island-wide settlement pattern of Jamaica during the eighteenth century. This chapter thus serves to contextualize Jamaican plantation society as it existed at the turn of the nineteenth century through a review of the island's settlement pattern from the initial Spanish colonization of Jamaica through the opening decades of the nineteenth century.

### Private Property and Plantation Settlement

Human settlement patterns are defined both by the ecological realities of a given region and the mode of production operating within that region (Steward 1990). The processes of human settlement are reflexive; the ecological realities of a place will define how that land is used by people, and that use will in turn shape the ecological realities of that land. Human history is filled with examples of how human intervention has changed the productive capacity of landscapes from the dry deserts of Mesopotamia and coastal Peru to the flood plains of the Nile and Yellow Rivers (Adams 1965; Billman 2002; Hassan 1997; Lees 1994; Willey 1953). Agricultural technologies, from the irrigation systems of desert Sumer, to the raised field systems of the Central American rainforests, to the highland terracing structures of the Andes, have provided the material base necessary for the creation of vast and complex human sociopolitical systems (Adams 1965; Demarest 2005; Patterson 1991). Such human intervention can, however, lead to the collapse of the same ecological systems vital to the operation of the agricultural economy. Scholars who examine the collapse of civilizations occasionally point to ecological disasters brought on, for example, by climate change or oscillation resulting in extended periods of drought, the salinization of soils precipitated by over irrigation, or the overuse of friable forest soils, as being the vectors of societal failure (Abrams and Rue 1988; Chapdelaine 2011; Clement and Moseley 1991; Dillehay and Kolata 2004; Kus 1984; Lucero 2002; Mosely 1983; Sandweiss et al. 2009).

Be this as it may, Marxist analyses of settlement patterns contend that, although ecological realities cannot be ignored as variables defining land use, the cultural construction of access to land and other ecological resources (e.g., rivers, aquifers) defines the shape of human settlements and the experiences of people living within them (e.g., Adams 1965; Paynter 1982). As modes of production develop, certain cultural features are created, access to which similarly defines human experience; these include features such as roads, irrigation canals, wells, cultivated fields, bridges, and seaports. When modes of production are designed around the exchange of commodities that can only be produced in specific places (e.g., gold mines, fertile tropical farmland), controlling access to these places can define how labor will be organized, how surplus value will be distributed, and how human settlements will be distributed across the landscape (Mrozowski 1991; Paynter 1985). In the case of colonial Jamaica, by the middle of the eighteenth century, just about every arable piece of land that could produce sugar cane (and many that could not) was defined as the private property of a plantation proprietor (Higman 1988).

The plantation as a unit of space allowed for the expansive ownership of thousands of acres of land by individual landowners who could control access to arable fields and develop land as they saw fit; the resulting spatial patterning of the landscape within plantations defined where enslaved workers lived, and how they would access the productive capacity of the land for their own use.

One of the key concepts explored by Karl Marx in *Capital* is the transformation of what has been alternatively translated as “public” or “collective” property into “private” property (1992). According to Marx, this process was multi-tiered; in some contexts, small producers could claim subdivided parcels of land as their “private” property, and, as owners of their own labor and land, could claim whatever was produced on that land for themselves (see also Engels 2010). As capitalism developed, these smaller parcels of land were consolidated to the point at which agricultural laborers no longer had access to land. According to Marxist thinking, the process by which the resources required to make a living are consolidated into the hands of a relative few, who then use those resources to create commodities for exchange in global markets, is known as capitalization. Marx argued that one of the primary steps to the development of a capitalist mode of production was the capitalization of land. In Marx’s view, the capitalization of land resulted in the consolidation of disbursed small landholdings into “socially concentrated ones, of the pigmy property of the many into the huge property of the few” (1992: 714); this process also involved “the expropriation of the great mass of the people from the soil, from the means of subsistence, and from the means of labor to produce their own subsistence” (1992: 714). These two social structures, the consolidation of privately owned estates and the alienation of people from the ability to independently produce the necessities of life, are hallmarks of capitalist agriculture (Adams 1990; Groover 2003; Headlee 1991; Orser 1999; Sayers 2003). In colonial Jamaica, the process of land capitalization was actualized through the construction of the plantation as a privately owned spatial unit, a spatial form that would come to dominate the island’s landscape by the middle of the eighteenth century (Dunn 2000; Higman 2005). By that time, the dominant labor system in Jamaica was based on the enslavement of laborers from Africa, and the perpetual captivity of their Jamaican-born offspring (Higman 1995; Walvin 2008). The slave system clearly expropriated the great mass of people from the land and from the ability to make an independent living from that land. Indeed, it can be argued that the labor system was based on human capitalization, as people were defined as the private property of colonial Jamaicans, acquired, used, and valued as saleable commodities exchanged on global markets.

In colonial Jamaica, capitalized, privately owned land was valued not for the use value of the products grown on it, but for the value that could be gained either by exchanging mass quantities of agriculture products in global markets, what Marxists refer to as the exchange value of the commodity (Marx 1992: 54ff) or by the exchange of the land itself, a process generally known as land speculation. In systems in which commodities are produced for their exchange value, capitalized land is put under cultivation not to produce food for those who work the land, but to produce saleable commodities whose surplus value is controlled by the landowner. As the Jamaican plantation system developed in the eighteenth century, vast stretches of land were designated, often simply by a patent granted by the crown, as the private property of members of what developed into a very wealthy oligarchy, comprised of a mix of local planters and British speculators. It was they, the planters both in Jamaica and in Great Britain, who would control the surplus value produced on Jamaican land and would restrict the use of patented but undeveloped land, privately held as an exchangeable asset.

This land use system played a central role in the development of the settlement pattern of Jamaica, the use of land across the island, and the development of a rigidly hierarchical social structure based on land ownership. Even contemporary observers, writing decades before Marx, commented on how the process of privatization of large landholdings was affecting the development of Jamaican society. For example, as early as the 1770s, Edward Long recognized that a small landed oligarchy controlled most of the land base of Jamaica. By the middle of the eighteenth century, nearly the entire landmass of Jamaica had been patented. Although most of the best land was under sugar production by Long's day, much of the interior was not cultivated, and could not be so, as it was defined as the private property of the patentees or their descendants, many of whom had little interest in Jamaica as anything other than a place to make investments in land. Long believed this worked to the detriment of the island, as there was limited access to small parcels of land for middle class farmers or planters, without whom, Long thought, Jamaica could not establish a stable class-stratified society (Long 1774).

The monopolization of land by large planters, which Long thought restricted the development of an energetic white middle class, was not the inevitable result of the colonization of Jamaica. Land use patterns could have developed differently, as they had, at least temporarily, in other colonial contexts. For example, in the early seventeenth century, Barbados had been settled largely by former indentured servants, who had received small land grants at the end of their service (Dunn 2000; Watts 1990). The early settlement pattern of colonial Barbados was thus

characterized by small farms, of between five and ten acres in extent, dispersed across the island landscape.

This settlement pattern was short-lived, however. When tobacco and cotton production on small farms proved to be difficult and not particularly profitable, those small holdings were consolidated into a fewer number of larger estates, created by wealthy landowners interested in the large-scale, intensive production of sugar using enslaved African labor (Dunn 2000; Higman 1988; Sheridan 2000). In Marxist terms, the scattered small holdings, which provided subsistence and some exchangeable commodities for small farmers, were consolidated into private property worked on by “social labor” – that is, by labor gangs who produced surplus value for the propertied class, the proprietors. This consolidation of the colony’s arable land base was facilitated by both ecological and cultural realities: Barbados is a relatively flat island composed of deep limestone deposits, with the central highlands reaching no more than 340 meters above sea level. Culturally, the formerly indentured servants who owned the small ten-acre farms knew little about tropical agriculture, and many were more than willing to sell the land for the more immediately useful cash offered to them by the wealthier planters (Dunn 2000; Watts 1990). The example of Barbados, where the consolidation of land into a relatively few large plantations worked by imported slave labor created great wealth for a small number of planters, became the model for British tropical agriculture throughout the West Indies. It was there, with the consolidation of large plantation estates that exploited the labor of hundreds of enslaved workers, that the British plantation mode of production began within the context of a broader and expanding capitalist system, and it was from there that the plantation model would be exported to Jamaica.

The consolidation of plantations on Jamaica took some time, however, and needed to conform to the geologic and cultural features extant at the time of the English conquest. In contrast to Barbados, the topography of which is relatively flat and featureless, Jamaica is a geologically diverse island. The core of the island was formed during the Early Cretaceous Period, about 100 million years ago, through intensive volcanic activity that lasted for some 45 million years. Followed by an equally intense period of tectonic activity, the landmass that would become Jamaica subsided beneath the sea. As the basal igneous and metamorphic stone that resulted from this birth through fire was subducted beneath the sea for tens of millions of years, thick layers of limestone formed on top of the metamorphic and igneous rock that had resulted from the volcanic and tectonic activity of the Cretaceous Period. This resulted from the deposition of the skeletons of mollusks and corals over millions of years; two-thirds of the current surface area of Jamaica is covered by this limestone

formation. Approximately 12 million years ago, what is now the central Caribbean region experienced tectonic uplift, which once again exposed Jamaica as a landmass, featuring high mountain ridges in excess of 2,200 meters above sea level in the eastern part of the island. Over the past 12 million years, the island has experienced a gradual process of erosion, which has formed a landscape characterized by dissected limestone plateaus surrounded by extensive valley basins filled with eroded, and very fertile, terra rossa soils. Outwash resulting from limestone erosion has created a series of alluvial plains, particularly on the south coast of the island. Extensive chemical erosion has worked to create deeply pocked karst formations in the center-west of the island (Porter 1990). The coastline, particularly on the north side of the island, is characterized by a number of small coves and bays, many of which exist at the mouths of northerly flowing rivers that drain the north slope of the both the eastern mountains and central plateaus (see Figure 2.2).

Also in contrast to Barbados, which was not colonized by Europeans prior to the arrival of the British in 1625, Jamaica was a settled Spanish possession as early as the opening decade of the sixteenth century (Padron 2003; Sheridan 2000; Woodward 2011). The landscape of Jamaica was thus already impacted by a century and a half of European colonial settlement. Although the Spanish transformed the landscape in profound ways, their system was not based on the privatization and capitalization of Jamaica's landscape. The Spanish experience did, however, set the stage for the English conquest, colonization, and capitalization of the island of Jamaica.

### The Settlement History of Spanish Jamaica, 1509–1655

Following Columbus's 1492 landfall in the Caribbean, their Catholic Majesties, Ferdinand of Aragon and Isabella of Castille, claimed the islands of the Caribbean archipelago, including Jamaica, as territories of their emergent American empire. The first Spanish attempt to establish a permanent presence on Jamaica occurred on the island's north coast in 1509 (Padron 2003; Woodward 2011). The Spanish were attracted to the north coast not only for its small bays, fresh water rivers, and potentially gold-rich mountainous terrain within just a few kilometers of the shoreline, but by its relative proximity to the established Spanish settlements at Santiago de Cuba and Hispaniola. As was the case with Spanish settlement in the other islands of the Greater Antilles (Cuba, Hispaniola, and Puerto Rico), the first Spanish colonists were hopeful of finding profitable mineral deposits in the Jamaican highlands, and thus exported an early version of mercantilism to the island. In 1509, eighty Spanish colonists under the

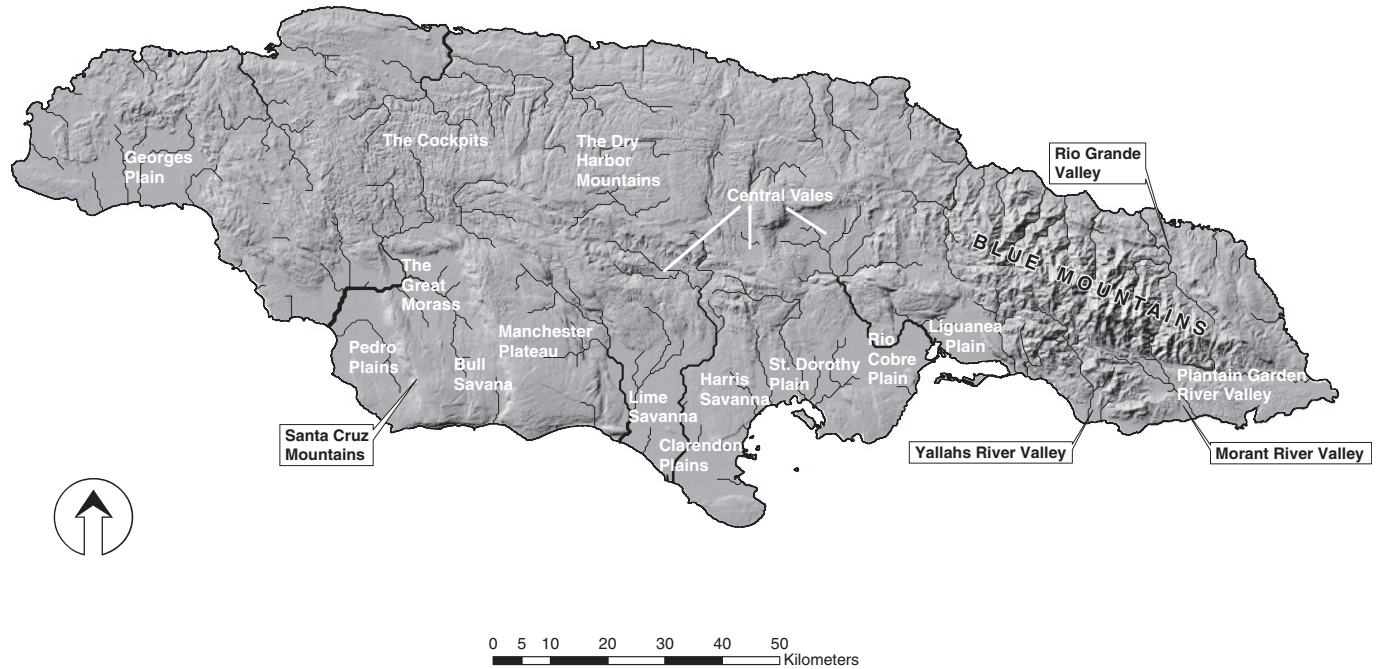


Figure 2.2. Topographic features in Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.





Figure 2.3. Location of Spanish-era sites in Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

leadership of Juan de Esquivel established Jamaica's first European town, Sevilla la Nueva, on the north coast near the modern town of St. Ann's Bay. In the 1510s, under the leadership of Jamaica's second governor, Francisco de Garray, additional settlements were established at Melilla on the north coast and Oristan on the south coast (see Figure 2.3).

Land tenure in Spanish Jamaica was based on Spanish precedents established during the later period of the Iberian reconquest and during the opening decades of Spanish settlement on the American mainland. Spanish colonial policy was based on what was known as the *encomienda* – a system by which land remained in the hands either of the local indigenous population, or in the absence of such a population, the crown. Settlers granted an *encomienda*, known as *encomenderos*, were given the responsibility of “protecting” a specified number of indigenous people, converting them to Christianity, and resettling their lands with Europeans. In return, *encomenderos* were given the right to extract tribute from the indigenous people within their *encomienda*, either in the form of gold or other saleable commodities, or in labor. Thus, in theory, the Spanish settlement system in Jamaica was based on the collective ownership of land through the institution of the Imperial State, and a labor system based on coerced labor extracted as tribute. Neither land nor labor were capitalized, however, as individuals could not legally buy or sell land within their *encomienda*, nor could they buy and sell indigenous people as slaves (Mahoney 2010).

The colonial world of Spanish Jamaica was structured by these systems of land tenure and labor extraction. Jamaica, however, was always a

peripheral colony in the Spanish world. No gold was discovered on the island, and thus emergent capitalism did not develop on Jamaica as it had done in other Spanish colonial contexts. The settlement pattern of the island developed largely in the absence of both direct Imperial control and capitalization. Although a sugar mill was established at Sevilla la Nueva as early as 1520 (Woodward 2011), neither the sugar industry nor the north coast of Jamaica was significantly developed by the Spanish. By 1534, the north coast was largely abandoned when the town of Villa de la Vega, today known as Spanish Town, was established on the island's south coast (Robertson 2005). In 1534, the Spanish inhabitants of Sevilla la Nueva abandoned their town to resettle in Villa de la Vega; it is not known whether the surviving indigenous Taino people who labored for the *encomenderos* accompanied them. From this point forward, most Spanish settlement was concentrated on Jamaica's southern coast (Padron 2003).

The move to the south coast was precipitated by a series of epochal events that unfolded in the 1520s and 1530s. By the early sixteenth century, the relatively modest gold fields of Hispaniola and Puerto Rico had been worked out; as the economy of the Spanish colonies in the West Indies was based primarily on the appropriation of surplus value through mineral extraction within the *encomiendas*, emergent capitalism began to fail. Simultaneously, labor supplies began to dwindle as the indigenous Taino population rapidly declined as a result of overwork, the appropriation of their farm land by the Spanish *encomenderos* and the European settlers they recruited, epidemic disease, and cultural upheaval (Rouse 1992; Wilson 2007). Finally, the conquest of the Aztec and Inca empires opened the Spanish Main for colonization; large *encomiendas* promised great agricultural wealth for Spanish settlers while the lure of mountains of gold and silver from Mexico and Peru drove the expansion of the Spanish Empire in America. As the administrative center of empire shifted from Hispaniola in the Greater Antilles to Cartagena on the coast of mainland South America, the focus of Spanish settlement on Jamaica shifted from the north (facing Cuba and Hispaniola) to the south (facing Cartagena).

Despite this strategic move on the part of the colonists, Jamaica developed into a colonial backwater with a small Spanish population. The primary industry on the island for most of the sixteenth century was based on provisioning passing ships – few of which were Spanish – with meat, water, wood, and other necessary supplies (Padron 2003). As the Spanish crown prohibited trade with any but Spanish vessels, much of the economy of sixteenth-century Jamaica was based on illicit dealings, at least as seen from the perspective of the Spanish crown. However, as few Spanish ships regularly visited Jamaica, the smuggling and contraband

trade with French, English, and Dutch corsairs and privateers was an important source of manufactured and other European goods for the colonists (Cundall 1919; Padron 2003).

The settlement pattern of Spanish Jamaica developed in the context of the island's marginal position in the structure of sixteenth-century Spanish colonialism. There was little attempt to establish an export economy on Jamaica, which developed into little more than a provisioning stop for European adventurers. Furthermore, there was little development of "private" property in the Marxian sense of the term, as the Spanish colonial system in the Caribbean was based on the concept of "encomienda." Legally, this system differed from slavery, as the *encomenderos* could not legally sell the people within their *encomienda*, nor could they legally buy or sell land. Again, in Marxist terms, Spanish Jamaica did not develop through the consolidation of private property, but through the exploitation of labor to extract surplus value from land owned by, in this case, the state. In this way, the labor and settlement systems of Spanish Jamaica were based on what Marx would call a Feudal Mode of Production (Marx 1964).

The settlement pattern of sixteenth-century Jamaica emerged from this system of land tenure and labor exploitation. The principal settlement form in Jamaica at this time was the "hato," a type of free-range ranch on crown land, controlled by an *encomendero*, and worked by a small population of impressed Taino people and a few enslaved Africans (Padron 2003). The names and locations of the principal hatos were recorded through the centuries, although little evidence of them remains on the modern landscape of Jamaica. All of the known hatos were located on the alluvial plains of Jamaica's south coast; the hatos included (from west to east) Cabonico, Savanna la Mar, El Eado, Pereda, Yama, Guatibocoa, Guanaboa, Liguane, Lezama, Ayala, and Morante (see Figure 2.3). The hatos likely included a hacienda for the *encomendero* or manager of the hato, quarters for the laborers, and a series of corrals, butchering stations, and tanneries for the processing of meat and hides (Blome 1672; Bridges 1828; Cundall 1919; Edwards 1798; Gardner 1873; Hakewell 1825; Long 1774; MacGregor 1847; Woodward 2011). It is thought that in the Spanish Caribbean, hatos encompassed range land within an area with a diameter of approximately sixteen to eighteen miles. Each hato was subdivided into smaller ranching settlements known as *estancias*, which were populated by the settlers recruited by the *encomenderos* and their descendants, but – like the hato of which they were a part – were not the private property of the settlers.

Contemporary accounts translated by Irene Wright in the 1910s and 1920s indicate that the cattle on Jamaica were a mix of tame and feral cows

introduced to the island with the coming of the Spanish. When needed, the laborers on the *hatos* and *estancias* would round up cattle for slaughter. It appears that the *hatos* had very loosely defined boundaries. The exact number of cattle controlled by each of the *hatos* is impossible to calculate. It was reported that tens of thousands of cattle were processed during the sixteenth and early seventeenth centuries; Francisco Morales Padron (2003) estimates there were some 40,000 head of cattle grazing on the savannahs of southern Jamaica at the end of the sixteenth century (see also Cundall 1919 and Wright 1930).

The Spanish population of Jamaica likely never numbered more than a few thousand people, and even this figure is likely very liberal. By the end of the sixteenth century, there were somewhere between 100 and 150 Spanish households in Jamaica (Cundall 1919; Robertson 2005), most of which resided in Villa de la Vega. In 1611, the abbot of Jamaica estimated that there were 1,510 people on the entire island of Jamaica, including 523 Spanish men and women, 173 children, 107 free negroes, 74 native Indians, 558 African slaves, and 75 foreigners – likely referring in this latter case to Sephardic Jews (Cundall 1919). By this time, it is likely that the majority of the European-descent population was comprised of island-born Creoles; the *encomenderos* and other settlers becoming increasingly dependent on enslaved African labor as the indigenous population declined. According to Irene Wright's translation of the original Spanish document, the abbot reported that all of the Spaniards were "from only three parentages and are so mixed with one another by marriage that they are all related. This causes many and grave incests to be committed" (Cundall 1919: 34). Because he based his estimates on confessions he had heard, it is possible that the abbot's estimation of the number of Taino people on the island was based solely on household servants and *hato* laborers who had converted to Catholicism; archaeological work conducted by Kofi Agorsah in the early eighteenth-century Maroon site of Nanny Town suggests that a remnant Taino population was likely living in the mountains in the seventeenth century, apart from the colonial sphere of the Spanish at Villa de la Vega (Agorsah 1994; Goucher and Agorsah 2011). Contemporary Spanish accounts corroborate that some small Taino settlements existed in the Blue Mountains in the early seventeenth century (Cundall 1919). Nevertheless, the native population appears to have been very much reduced by the 1610s.

Although the settlement pattern of southern Jamaica was characterized by dispersed pastoral settlements in the *hatos*, the majority of the population lived in Villa de la Vega. Several other smaller towns dotted the Jamaican landscape, including Oristan and Parrattee in the west, the port of Esquivel to the south of Villa de la Vega, and the port of Caguay to its

east; it is unknown how many people lived in these villages, but the numbers were likely very small. It is also likely that there were some small agricultural settlements outside of the hato-dominated savannas. For example, after the English conquest of 1655, the leader of the Spanish resistance was reported to have stayed in a settlement at Santa Cruz; historians writing in the eighteenth century reported that there were remnants of known Spanish settlements at Porus and Green Pond, both located in the interior of the modern parish of Manchester; Padron reports that during a corsair raid, the abbot of Jamaica took refuge on a ranch on Legua Cay, suggesting that smaller ranches (*estancias*) existed either as subdivisions of larger hatos, or as independent settlements. Similarly, when assessing the military strength of the island, the town council (*Cabildo*) of Villa de la Vega reported that it could raise an army of 300 men from the town, accompanied by another 100 drawn from the island's hunters and plainsmen, again suggesting the existence of settlements outside of Villa de la Vega (Padron 2003: 35).

It is also likely that there were some dispersed, and likely impermanent, settlements situated along the north coast. Although the primary focus of settlement was in the south, many small coves and bays on the north coast retain their Spanish place names (e.g., Rio Bueno, Oracabessa, Rio Nuevo). In the early seventeenth century, the Spanish governor of the island, Don Fernando Melgarejo, reported that although there were no settlements on the north coast, nor were there roads connecting the north to the south, the north coast was infested with illicit traders, likely English privateers and French and Dutch corsairs who were raiding Spanish shipping and then bartering their booty to the Spanish settlers of Jamaica for hides and provisions. This illicit trading appears to have been occurring in the several ports identified in the early Spanish correspondence translated by Wright; these ports on the north coast included (from west to east) Rio Bueno, Santa Ana (near the location of the abandoned town of Sevilla la Nueva), Las Chorreras, Rio Nuevo, Ora Cabessa, Melilla/Puerto Maria, Rio Espanol, Guayguata, and Puerto Anton. In the west, the bays of Lucea and Manteca (Montego) may also have been the sites of such illicit activity. Melgarejo apparently tried to curtail this activity, much to the chagrin of Jamaica's residents, who apparently were profiting from such trade; Melgarejo was reportedly afraid for his life at the hands of his subjects, so deep ran their resentment against his suppression of the north coast trade. In 1610, made aware both of Melgarejo's apprehension about maintaining such close ties to English and French privateers and the important role this trade had played in the maintenance of the Spanish colony in Jamaica, King Philip III issued a pardon forgiving the Spanish settlers of Jamaica for their role in this illicit trade (Cundall 1919: 33).

The settlement pattern of Spanish Jamaica can thus be seen as a product of an economic system that had isolated the insular colonists of the Greater Antilles from the rest of the Spanish Empire. Provision ships were rare, and so the colonists engaged in illicit trading with French, English, Dutch, and Portuguese ships along the north coast. It is unclear how many Spanish people lived in the contraband ports, but it is likely that there was some semi-permanent presence along the coast. The majority of people lived in a single substantial town, Villa de la Vega, which boasted several hundred buildings framed on a quadrilateral grid; even the encomenderos of the hatos appear to have spent most of their time in town (Robertson 2005; Padron 2003). As the principal town lay inland on an unnavigable river, the residents were dependent on the port towns of Caguay and Esquivel for the legal importation of European goods. The southern lowland savannas were the locations of herds of thousands of semi-wild cattle managed by enslaved African and impressed Taino people stationed at the hatos. The hatos were isolated by dozens of miles from each other, which maximized the amount of grazing land open for the herds, and likely minimized border conflicts between the hatos. A few small villages dotted the coast, and likely a number of people lived in small settlements on the north coast to facilitate illicit trade with the European privateers.

The relatively light presence of Spanish settlers on Jamaica was well-known to those corsairs who plied the waters of the Caribbean, preying on Spanish shipping and selling their ill-gotten goods to the isolated Creole population of Jamaica. The weak military position of the island, with just a few hundred poorly armed, poorly trained, and poorly provisioned men, left the island vulnerable to invasion, an invasion that came to pass in the year 1655, when the English launched an attack on the island, seizing it for their Lord Protector, Oliver Cromwell.

#### Settlement History of Jamaica, 1655–1690

In 1655, General Robert Venables, veteran of the English Civil War and the Cromwellian invasion of Ireland, accompanied by Admiral William Penn, landed in, and were repulsed from, the island of Hispaniola. Attempting to operationalize Oliver Cromwell's Western Design, which would seize much of Spanish America if successful, Venables and his ragtag force of formerly indentured servants and veterans of Cromwell's New Model Army had embarked from Barbados with the intention of seizing Hispaniola to be the base of command for the Western Design. Suffering a humiliating defeat at the hands of the well-equipped Spanish forces defending Hispaniola, Penn and Venables set sail for Jamaica,

easily defeating the poorly garrisoned and sparsely populated Spanish colony (Dunn 2000; Sheridan 2000).

The terms demanded for the Spanish surrender of Jamaica were harsh. Europe in the mid-seventeenth century was experiencing an increasingly brutal series of religious conflicts, both between and within states. In England, a power struggle had broken out between competing factions. On one side was the monarchy and old aristocracy loyal to the Church of England and their Catholic allies; collectively this faction was known as the Cavaliers. Their antagonists were Puritanical Calvinist commoners, known as Roundheads, who had seized control of the English parliament. The ensuing English Civil War was won by the Roundheads; the aftermath of the war witnessed the beheading of King Charles I, the temporary abolition of the British monarchy, the establishment of a republican "Commonwealth" under the leadership of Oliver Cromwell, and the continued suppression of Catholicism in the English world (Braddick 2009; Purkiss 2007). The 1650s were thus a radically intolerant time. Venables and his veterans of the New Model Army, who hoped to settle on Jamaica, did not want to share the island with the Catholic Spaniards. Although nearly the entire population of the island was composed of Jamaican-born Creoles, the Spanish colonists were ordered to abandon their settlements and were forced to leave the island. Although some fled to the interior to engage in internecine guerilla warfare against the English invaders, Jamaica remained a British colony from the 1655 capitulation of Villa de la Vega to the island's declaration of independence three centuries later in 1962.

Human settlements do not appear randomly on landscapes; in choosing where to establish themselves, human groups consider both ecological and cultural variables in deriving their choices of where to live. When the English conquered Jamaica, it was their intention to establish a permanent colony in the central Caribbean; they were thus influenced by the physical topography of the island as well as the existing cultural landscape conditions of Jamaica when they established their first settlements. When the English arrived, they were confronted by a landscape that had been radically transformed during the Spanish occupation of the island. On the southern savannas, *hatos* and *estancias* had been established. The low-intensity of human settlement had resulted in a pastoral system in which tens of thousands of cows, and a likely equal number of feral hogs, ranged freely, periodically hunted or rounded up by the "hunters and plainsmen" of the country. Several towns and ports had been established, with an infrastructure (e.g., wells, farm fields, roads) capable of supporting several thousand people. Several harbors had been improved on the south coast for regulated trade, and likely a greater number of smaller harbors were

improved on the north coast to facilitate the illicit trade that Governor Melgarejo had tried so hard to suppress. Although the economy of Spanish Jamaica was largely dependent on its pastoral base, several people, particularly in the hato of Liguane, has established small-scale sugar works (Cundall 1919). The first wave of English colonists thus was confronted with a landscape that had already been sculpted by a century and a half of European activity.

One way to consider how the early English colonists settled within this landscape is to model the early English settlement pattern using Geographic Information Systems (GIS) technology. To do so, one needs to establish the location of those mid-seventeenth-century settlements. This task is a bit more difficult than it may sound, particularly because much of seventeenth-century Jamaica was completely transformed in the eighteenth century as the plantation mode of production developed. Two sources of information exist that provide at least a qualitative understanding of how the English settlements were placed on the landscapes: (1) the historic and documentary evidence of English settlement, which sometimes describes where and how the English established their settlements, and (2) the cartographic record of the island.

From the historic record, we know that the first wave of English settlers was a mix of survivors of Venables's expeditionary force, indentured servants recruited on Barbados for the expedition, and small groups of settlers that had failed to establish themselves on other islands (Beckles 1990; Burnard 1996; Robertson 2002). The first years were very difficult on the English colonists, as the invasion force burned the only sizeable town on the island (Villa de la Vega), quickly decimated the cattle herds and cultivated land around Villa de la Vega, and chased the island's only knowledgeable tropical farmers either off of the island or into the wilderness. It has been estimated that the original expeditionary force of 8,200 men was reduced, largely by disease and malnutrition, to a mere 2,200 by 1660 (Dunn 2000: 153). In these same years, some 1,500 small planters were transplanted to Jamaica from Nevis. Of the approximately 12,000 people who settled on Jamaica in the first years of English settlement, fewer than 3,500 remained in 1661, the rest having died from tropical diseases or else abandoned their attempt at establishing themselves in Jamaica (Burnard 1996).

In 1660, the English monarchy was restored with the return of Charles II from exile. The Restoration period (1660–1688) was one of remarkable growth for the English colony of Jamaica. The dominant political figure in Jamaica during the early Restoration period was Sir Thomas Modyford, who served as the royal governor of the colony from 1664 to 1671. Modyford encouraged plantation settlement by convincing the king to



exempt Jamaican planters from paying duty on crops exported back to England, and by issuing liberal land patents to new settlers. Dunn reports that Modyford issued 1,800 patents totaling some 300,000 acres during the 1660s. Many of the patents were relatively small; each new settler was given a land grant of thirty acres for each person he brought to Jamaica. Patents were granted to both small planters who brought their families with them and large entrepreneurs who were able to import dozens or hundreds of enslaved Africans with them; thirty acres would be granted for each slave brought into the island (Dunn 2000:154). During Modyford's term, the consolidation of private property in the form of land and people began to take place; although there were many small farmers on the island at this time, a pattern similar to the early settlement of Barbados, a small class of large planters, holding thousands of acres of the best agricultural land and importing hundreds of slaves, began to form. In the Modyford years, the population of Jamaica increased from a total of 3,470 to approximately 17,000 souls. Significantly, at the end of Modyford's term the enslaved population outnumbered the white population by more than 2,000 people. Modyford's successor, Thomas Lynch, who governed Jamaica on three separate occasions (1663–1664, 1671–1674, and 1682–1684) continued his predecessor's policies of encouraging large plantation settlements. During the time that Modyford and Lynch governed the island, planters from Barbados, Nevis, and Surinam resettled in Jamaica, many with their enslaved workers (Dunn 2000; Sheridan 2000; Watts 1990).

Several maps published during the 1670s provide a fascinating portrait of Jamaica during this period. Of particular note is a 1676 rendering of the island published by John Speed that indicates the location of settlements across the island. At the time this map was published, the dominance of the large sugar planters was not yet assured. The map indicates the locations of some 963 settlements. Many of these were likely the settlements of the small patentees granted land by Modyford. Richard Sheridan has suggested that in the opening decades of the English period in Jamaica, sugar had not yet ascended as the primary crop of the island. Although some large sugar planters (including Modyford and Lynch) were establishing themselves, many more were planting crops that required less capital to start up – such as cacao, indigo, and cotton. Sheridan has demonstrated that cacao was Jamaica's leading export crop until 1670, when a blight destroyed Jamaica's cacao trees (Sheridan 2000: 212). Speed's map likely portrays the areas of the island settled by the small cacao planters.

Even given the limitations of seventeenth-century cartography of a lightly settled island, by transferring the locations identified by Speed

into a modern GIS format, one can begin to model how the original plantation settlement pattern of English Jamaica began. Four variables were considered in this analysis – two physiographic and two cultural. The physiographic variables include distance from the coast as expressed in five-kilometer buffer and elevation above sea level expressed in both 100-meter and 250-meter contour intervals. The cultural variables include intersections with the Spanish *hatos*, and distances from Spanish towns and port settlements. In deriving these cultural variables, *hato* sizes were calculated with both fifteen- and twenty-kilometer diameters (see Figure 2.4). Both of these diameters are significantly smaller than the recorded diameters of *hatos* in Hispaniola; but, given the limited range of savanna land in Jamaica and the relatively poor standing of the Spanish settlers in Jamaica, it is likely that the Jamaica *hatos* were smaller than their counterparts in Hispaniola and Cuba. It should also be noted that the GIS model assumes a circular diameter for the *hatos*. Although it is more likely that the Jamaican *hatos* were of irregular shape, conforming to the topographic realities of the island, the actual shape and extent of these land divisions is not now known. Similarly, the five-kilometer buffers from the known towns and the port locations identified in the documentary record of Jamaica is an arbitrary figure, but one that reflects a distance easy to cross by foot within one hour (see Figure 2.5).

The resulting geographic model of the 1670s settlement pattern of Jamaica suggests that 62 percent of the 953 settlements identified by Speed were located within five kilometers of the coast, and that just less than 80 percent were located within ten kilometers of the coast. The elevation model suggests that 80 percent of the settlements were located between sea level and 250 meters above sea level, with 95 percent of the settlements located below 500 meters. In calculating placement within the Spanish *hatos*, 62 percent of the settlements identified on Speed's map were located within the fifteen-kilometer *hato* radius. Thus, if we assume that the *hatos* were approximately fifteen kilometers in diameter, nearly two-thirds of the first English settlements were located within the Spanish *hatos*; this figure increases to 73 percent if we expand the *hato* diameter to twenty kilometers, but this is likely too large a diameter to have been operationalized on the Jamaican landscape. An additional 9 percent of settlements were located within five kilometers of a port identified in the records of the Spanish settlement, mostly on the island's north coast (see Figures 2.6 and 2.7).

The majority of the first English settlers thus established themselves within a short distance of Jamaica's coast, and in lowland areas of the island previously settled by the Spanish. Transplanted settlers from Nevis established themselves in the eastern part of the island, in the former *hato*

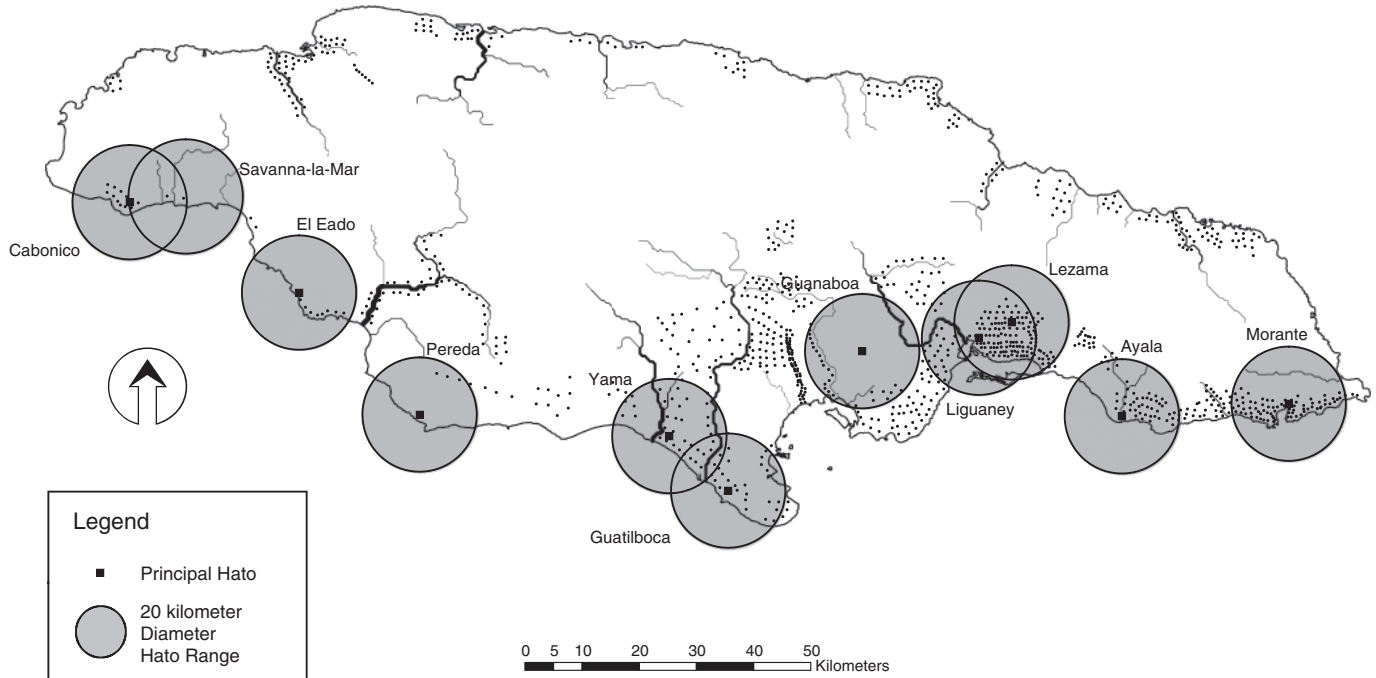


Figure 2.4. GIS model locating plantation sites based on John Speed's 1676 map of Jamaica. The circles indicate 20-km hato diameters. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

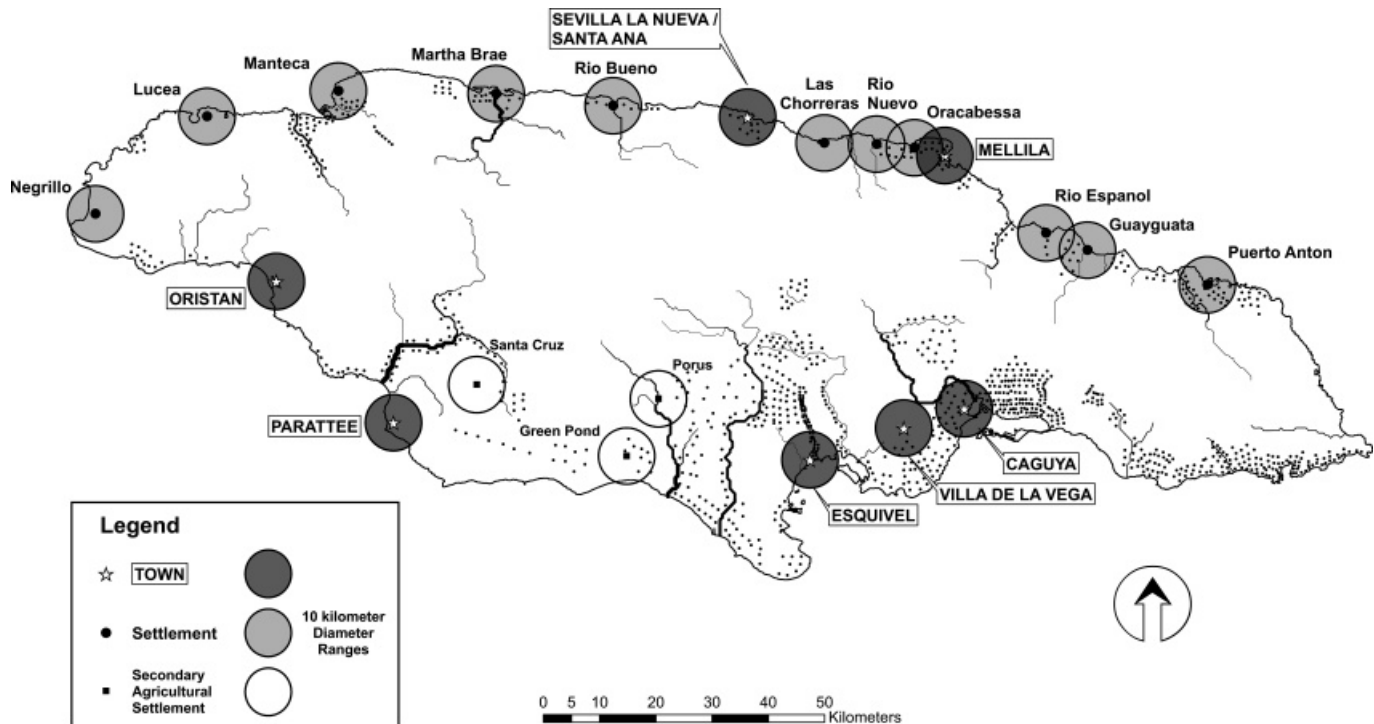


Figure 2.5. GIS model locating plantation sites based on John Speed's 1676 map of Jamaica. The circles indicate 10-km diameters around known Spanish-era towns, port settlements, and secondary agricultural settlements identified in the historic literature. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

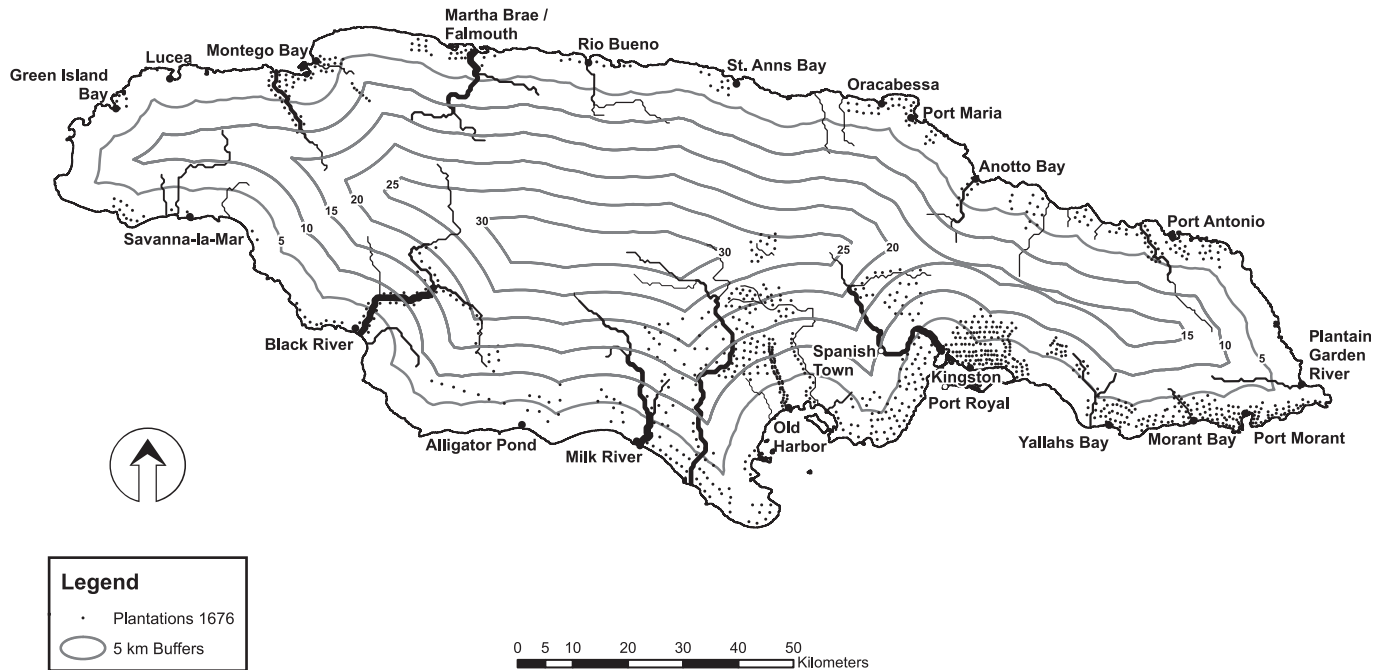


Figure 2.6. GIS model locating plantation sites by distance to coast based on Speed’s 1676 map of Jamaica. The buffer lines represent distance to the coast in 5-km increments. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

of Morante, while the Surinam planters established themselves in southwest, in the old hatos of El Eado, Savanna la Mar, Cabonico, and Pareda. The hatos of Liguane, Lezama, Guanaboa, Ayala, Guatabacoa, and Yama were likely among the first settled and those on what is now known as the Liguane Plain (Liguane and Lezama) were the most densely settled.

#### Settlement History of Jamaica, 1690–1750

A series of unfortunate events that transpired between 1690 and 1695 changed the course of plantation settlement on Jamaica. The years following Modyford's 1671 recall by the king were characterized by insular factionalism. In the 1670s and 1680s, Jamaican society was divided into several interests, including the large planters, the privateers of Port Royal (known as the buccaneers), the small settlers and indentured servants – many of whom were Irish Catholics – and, of course, the enslaved Africans. During the brief ascendancy of Henry Morgan (1674–1675 and 1680–1682) as acting governor and leader of the privateer and small planter party, and that of Governor John Vaughn (1675–1678), the champion of the Irish Catholic indentured servants and small settlers, some of the great planters left Jamaica for England, leaving their estates under the control of agents, later to be known in Jamaica as attorneys; many more joined them to form the culture of absentee proprietors during England's Glorious Revolution of 1688–1689, a conflict that led to the deposing of King James II, and the ascension of his brother-in-law and sister, William and Mary, as monarchs of England (Dunn 2000).

During this flight of the proprietors, it appeared as though much of Jamaica's landscape would remain in the hands of small planters, making short fortunes on sugar, indigo, pimento, and cotton production. However, the cataclysmic earthquake of June 1692, estimated to have been a magnitude of 7.5 on the Richter Scale, caused great damage and loss of life (Kozák and Čermák 2010). It has been estimated that approximately 2,000 people perished from the results of the earthquake and subsequent tsunami (O'Loughlin and Lander 2003; Pawson and Buisseret 2002). The town of Port Royal, which served as the *de facto* capital of the English colony, was destroyed, with some two-thirds of the town's land liquefying and sinking into Kingston Harbor. Most of the houses in the developing town of Kingston and in Spanish Town (the old Villa de la Vega) were destroyed. Many if not most of the small settlements on the island, including the budding sugar plantations, suffered major damage. To make matters worse, the English were at war with the French, who launched a raid on the island in 1694. Although the

attack was repulsed, the French landed in eastern Jamaica, in the old hato of Morante, and destroyed fifty sugar works in the newly established English parishes of St. Thomas in the East and St. David, carrying away between 1,300 and 1,600 slaves from the island (Dunn 2000: 163; Sheridan 2000). Epidemic diseases followed in the wake of these disasters, causing further contraction of the population. Between 1689 and 1700, the white population of the island had decreased from about 10,000 to about 7,000 (Dunn 2000: 164; Roberts 1957: 33).

As the small planters died or left Jamaica in the wake of these disasters, their erstwhile cotton and pimento plantations, provisioning farms and ranches, were consolidated into larger holdings and transformed into sugar plantations. From the turn of the eighteenth century forward, Jamaica would be, primarily, a sugar island, whose economy was based on consolidated private property – capitalized land actualized through the consolidation of the “pigmy properties” of the small-scale farmers into “the socially concentrated, huge property” of the large plantation proprietors.

Between 1700 – when the white population of Jamaica reached its lowest point since the opening years of the English period – and 1740, the white population of Jamaica stabilized. Although still prone to tropical diseases, low birth rates, and high mortality rates, the white population climbed back to 10,000 by 1740 and never again dropped below that level (Roberts 1957; Watts 1990). During this period, larger planters continued to consolidate land holdings, imported an increasing number of enslaved laborers to work their plantations, and invested in both local and regional infrastructure to support the growing sugar trade. Between 1670 and 1754, the percentage of landowners holding in excess of 500 acres had increased from 14 percent to 47 percent. Nevertheless, historian Richard Sheridan has characterized the early part of the eighteenth century as a period of “laggard growth,” characterized by conflicts between planters and merchants, planters and royal officials, planters and the South Sea Company which controlled the African Slave Trade at this time, and planters and their fellow planters (Sheridan 2000: 216–218).

Several maps published in the first half of the eighteenth century reflect the changing structure of the plantation landscape of Jamaica. Among the best of these is one published by Emmanuel Bowen in 1747. Using the same methodology employed when considering the 1676 settlement pattern of the island, plantation points were entered into a GIS file and the settlement pattern was modeled using two variables, distance from the coast in five-kilometer buffers, and elevation above sea level in 250 meter contour intervals. The Bowen map identifies approximately 386 plantation settlements in 1747. Just as Speed’s map may overestimate the

number of settlements in 1676, Bowen's map may underestimate the number in 1747. It is thus prudent, again, to consider percentages of the overall settlements rather than the gross number. Taking this into account, in 1747, 52 percent of identified settlements existed within five kilometers of the coast and 72 percent of the settlements within ten kilometers of the coast. In that year, 88 percent of settlements were located below 250 meters in elevation, and 97 percent were below 500 meters (see Figures 2.7 and 2.8).

The plantation settlement pattern of Jamaica, despite the decrease in the number of settlements identified on the historic maps, thus remained fairly consistent. The great majority of estates were located near the coast and at elevations lower than 250 meters above sea level. This suggests that this period was marked by the consolidation of property into a relatively small number of estates convenient to the coast. If we compare the 1747 percentages of settlements existing within five kilometers from the coast to that of 1676, the spatial data indicates that the highest levels of consolidation were happening in the lowlands. Much of the interior, beyond fifteen kilometers from the coast and higher than 500 meters above sea level, while granted to land owners in patents, remained uncultivated.

#### Settlement History of Jamaica, 1750–1800

If the first half of the eighteenth century can be considered the formative period of the Jamaican plantation mode of production, the second half can be seen as its florescence. The number and size of sugar plantations increased consistently during this period. It is likely that the plantations consumed all of the island's potentially arable land suited for sugar cane production by the end of the eighteenth century. The Jamaica plantations developed what appears to be an optimal economy of scale, as Jamaica produced more efficiently in terms of per capita output than any other plantation colony in the new world, save French St. Domingue, which Jamaica matched (Higman 2005). When the Haitian revolution toppled the plantation society of St. Domingue, Jamaica was left with no serious rival in the Caribbean for several decades.

Within the British West Indies, Jamaica was clearly the lord of the Caribbean. In 1775, Jamaica exported more to its home country than any other Caribbean colony, again excepting only St. Domingue. The value of the exported produce of Jamaica was triple that of Spanish Cuba, approximately double that of French Martinique and Dutch Surinam, and quadruple that of British Barbados. The value of Jamaican exports was nearly equal that to that of the other ten British West Indian colonies combined (Jamaica Almanac 1788: 152).



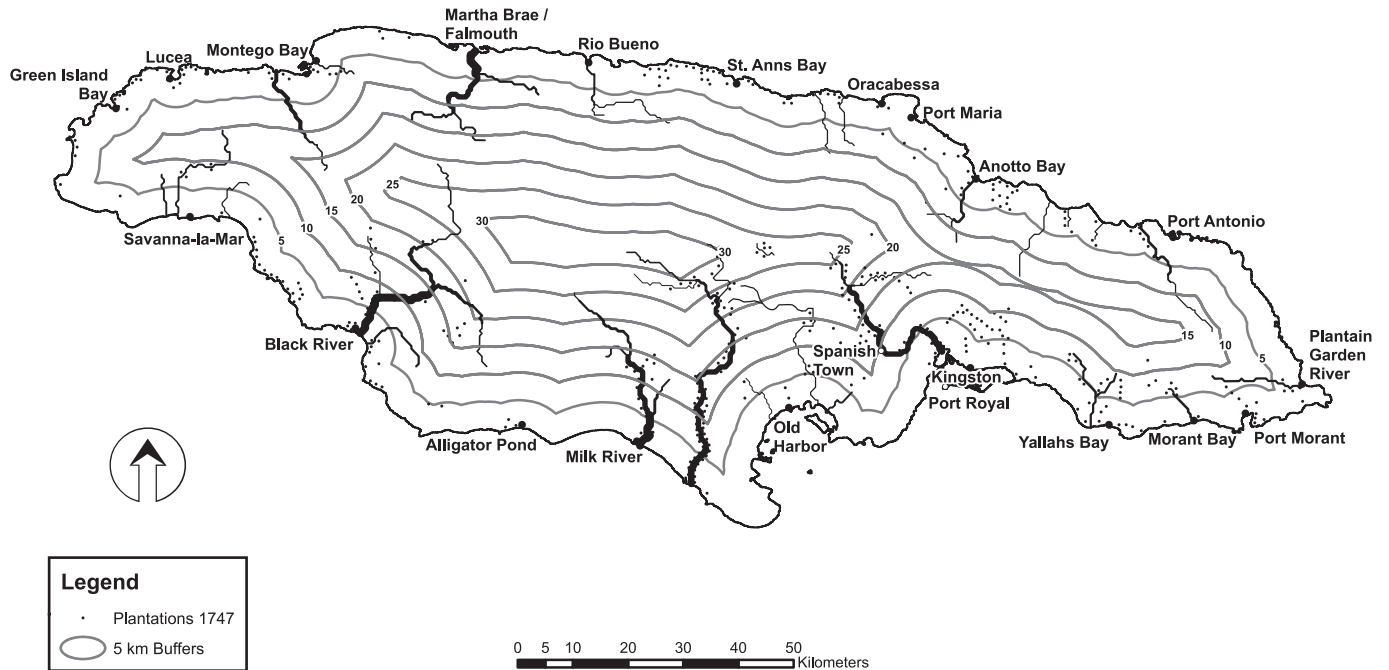


Figure 2.7. Model showing locations of plantations by distance to coast based on Bowen’s 1747 map of Jamaica. The buffer lines represent distance to the coast in 5-km increments. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

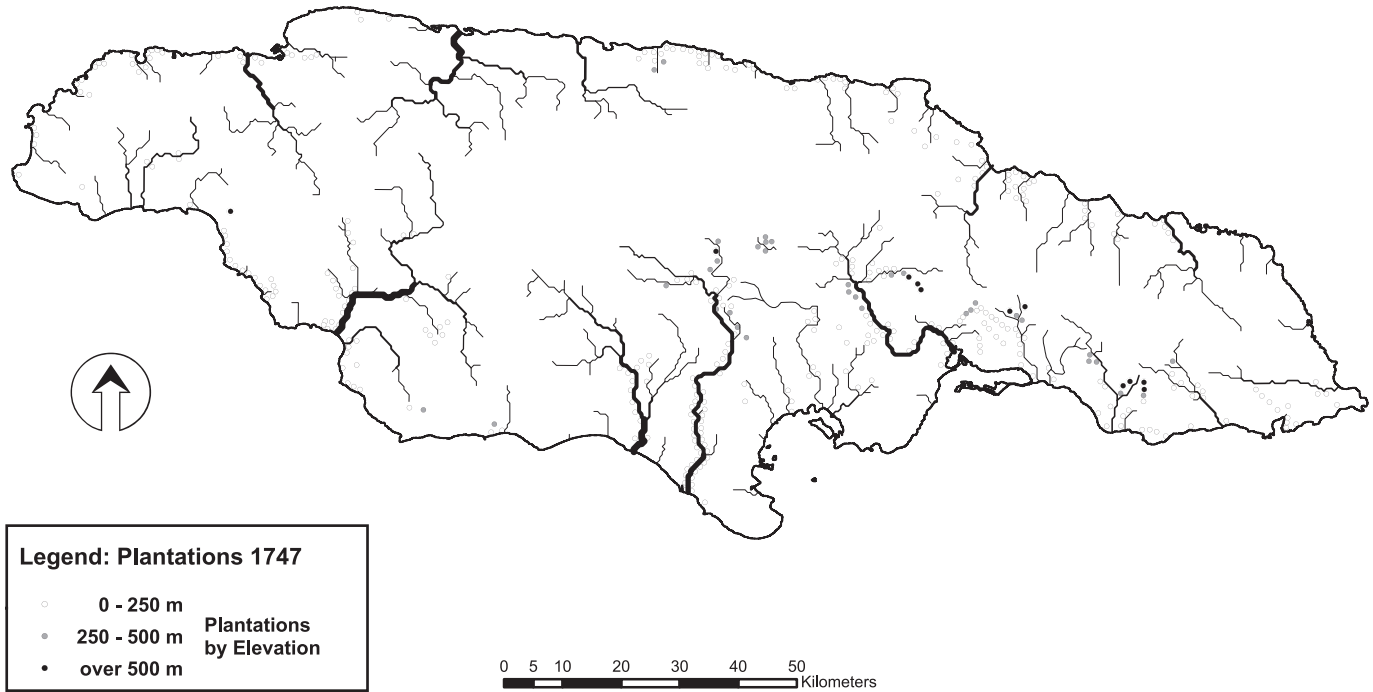


Figure 2.8. Elevation model showing locations of plantations in relation to 100-m contours, based on Bowen's 1747 map. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

The successful capitalization of land and labor in the early eighteenth century precipitated the accumulation of wealth, not only by the planters, but by the merchants and financiers of Jamaica's principle commercial town, Kingston. During the second half of the century, Kingston emerged as a vibrant colonial city. In 1789, Kingston had a population of more than 26,000 people, larger than the city of Boston and nearly equal to that of Philadelphia and New York (Jamaica Almanac 1789: 143). As the commercial center of what would become, by the early 1770s, Britain's wealthiest and most productive American colony (Burnard 2001), Kingston developed as both colonial entrepôt and commercial hub of the colony. Although Spanish Town remained the capital of Jamaica, and was the seat of both the Jamaica Assembly and the governors of the island, the merchants of Kingston commanded great wealth, and the town developed into a cosmopolitan center, attracting even plantation owners as residents. As the eighteenth century progressed, an increasing number of plantation proprietors chose to locate their primary residence in Kingston, becoming increasingly dependent on salaried employees to manage the affairs of their plantations (Burnard 2001; Higman 2005).

Although Kingston was by far the largest and wealthiest of Jamaica's towns, a number of smaller towns developed along Jamaica's coastline during the eighteenth century. These towns were primarily ports for the export of colonial produce. In 1750, the Jamaica Assembly recognized nineteen ports of embarkation in Jamaica, regularly situated along the island's coast line. The Assembly required that a set of standard weights and measures be maintained at each of these ports, and established duties for the use of their harbors. On the north coast, the harbor towns included Lucea, Montego Bay, Martha Brae (known as Falmouth after 1769), Rio Bueno, St. Ann's Bay, Oracabessa, Port Maria, Annotto Bay, and Port Antonio. Eight additional ports of embarkation were established on the south coast, including Kingston, Port Morant, Morant Bay, Yallahs Bay, Old Harbour, Milk River, Black River, and Savanna-la-Mar. Plantain Garden River and Green Island Bay were established on the east and west coasts, respectively. Of these port towns, only Kingston, Montego Bay, Port Antonio, and Savanna-la-Mar were recognized ports of entry for the island (Aikman 1802; Higman 1991).

The relatively large number and wide distribution of ports of embarkation in eighteenth century Jamaica are revelatory of several phenomena. All of the north coast ports were located on harbors or bays identified in the Spanish records of the island, and indeed many retained their Spanish place names (e.g., Rio Bueno, Oracabessa). The location of these ports in the eighteenth century was doubtless the result of a reflexive settlement process. Because ports were established to facilitate

the export of crops from plantations, ports were located near concentrations of settlements. Simultaneously, because plantations need to have access to export facilities, they were settled near the ports. The disbursal of these ports along the north coast allowed for the expansion of plantation settlement on the arable lands of the north coast. Similarly, the ports of embarkation on the south coast were established on the old Spanish *hatos*, and some retained their Spanish place names: Port Morant and Morant Bay (both in the *hato* of Morante), Yallahs Bay in the *hato* of Ayalabs, and Savanna-la-Mar. Milk River was located in the *hato* of Yama, Black River in El Eado, and Kingston in Liguane. Old Harbour was the English place name given to the old Spanish port of Esquivel. Plantain Garden River and Green Island Bay were likely established to encourage plantation settlement in the eastern and western extremes of the island, but neither developed into a significant port (see Higman 1991 for a discussion of early nineteenth century port towns in Jamaica).

During the second half of the eighteenth century, the population of the island was on an upward trend, doubling from about 85,000 people in 1722 to more than 160,000 by 1762 (Roberts 1957: 33); the population doubled again between 1762 and 1817, when the population reached more than 340,000 people. Of course, as the plantation economy took off, an increasing number and percentage of these people were enslaved. Using information gleaned from the Transatlantic Slave Trade Database compiled by David Eltis and Martin Halbert, Audra Diptee (2010) has calculated that, between 1701 and 1750, some 252,000 people were brought to Jamaica to work as enslaved captives on the island. In the second half of the century, despite significant disruption in the colonial trade precipitated by the American Revolution, the number increased to more than 422,000 between 1751 and 1800 (Diptee 2010: 10). Burnard (2001) reports that 92 percent of Jamaica's population was enslaved during these decades, a figure corroborated by the work of Barry Higman (e.g., 1995) and George Roberts (1957), and the self-reported data appearing in the Jamaica Almanac for 1788. Higman (1995: 61) reports that by 1800 there were 328,000 enslaved people living in Jamaica, an enslaved population greater than that of any one of the several states in the United States, and about equal to half the enslaved population of the entire United States, as recorded in the 1790 U.S. Census.

During the great social and economic upheavals that surrounded the American, French, and Haitian revolutions, the economy of Jamaica began to re-diversify. Whereas most of the expansionary efforts of the mid-eighteenth century were focused on the growth of the sugar industry, the revolution in Haiti created a market vacuum for coffee in Europe. As early

as the 1770s, speculators began to acquire land in the mountainous interior of Jamaica, either by buying or by other means acquiring the rights to old, undeveloped patents, or else by patenting mountain land for the first time (Delle 1996, 1998). The late eighteenth century witnessed the first of several boom periods for Jamaican coffee, and a concomitant expansion of plantation settlements into the accessible mountain interior of the parishes of St. Ann, St. Elizabeth, St. George, Port Royal, and St. David.

Several maps produced during the late eighteenth century provide locational data for spatial modeling of this period. A map published in 1775 by Thomas Jeffries identifies the location of approximately 1,020 plantation sites; this may be something of an underestimation as Higman (1988: 10) reports that there were 1,061 sugar estates alone in 1786. Nevertheless, modeling the locations of plantations recorded on the Jeffries map against elevation and distance from the coast provides evidence of settlement trends during this period. In 1775, just more than 50 percent of all estates were located within five kilometers of the coast, and 71 percent were within 10 kilometers (see Figure 2.9). Modeling against 250-meter contours reveals that, in 1775, 78.5 percent of plantations were positioned below 250 meters in elevation; conversely, 21.5 percent were located above 250 meters, with 7.2 percent above 500 meters (see Figure 2.10). A 1798 map published by Bryan Edwards indicates the location of 1295 settlements. Modeling from this map indicates that in 1798 less than 50 percent of Jamaican plantations were located within five kilometers of the coast, and less than 70 percent within ten kilometers (see Figure 2.11). There was a sharp increase in the percentage of sites located above 250 meters in elevation, with just more than 19 percent located between 250 and 500 meters and 6.6 percent between 500 and 750 meters (see Figure 2.12). Movement away from the coast and into the mountainous upland of the island suggests that during the late eighteenth century, the process of land capitalization expanded from the coastal plains and lowland valleys into the highlands. The production of coffee on consolidated plantations was thus able to follow the basic structure established by the sugar plantation complex: most coffee would be produced on large, privately held estates worked by enslaved labor.

#### Settlement History of Jamaica, 1800–1834

The opening decades of the nineteenth century were a time of great transformation in the Caribbean. The plantation economy of the region, and that of Jamaica in particular, began a decline brought on by several

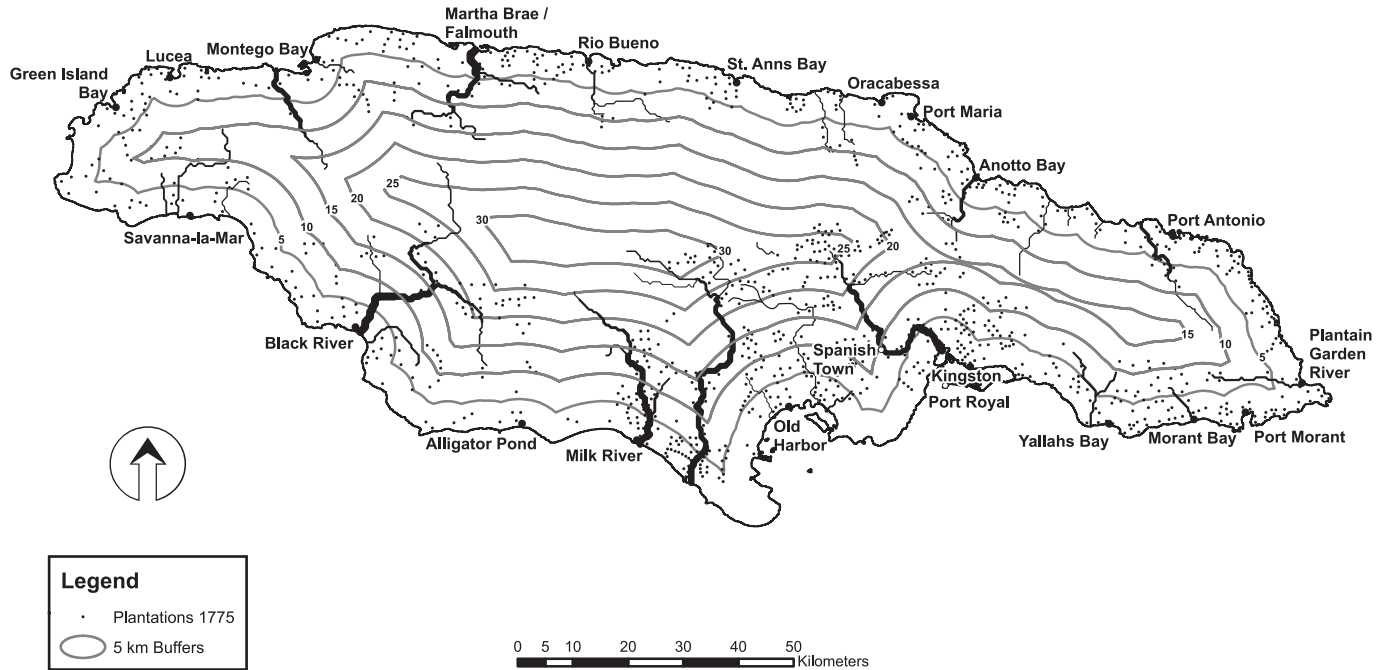


Figure 2.9. Model showing locations of plantations in relation to coast, based on Jeffries's 1775 map of Jamaica. The buffer lines represent distance to the coast in 5-km increments. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

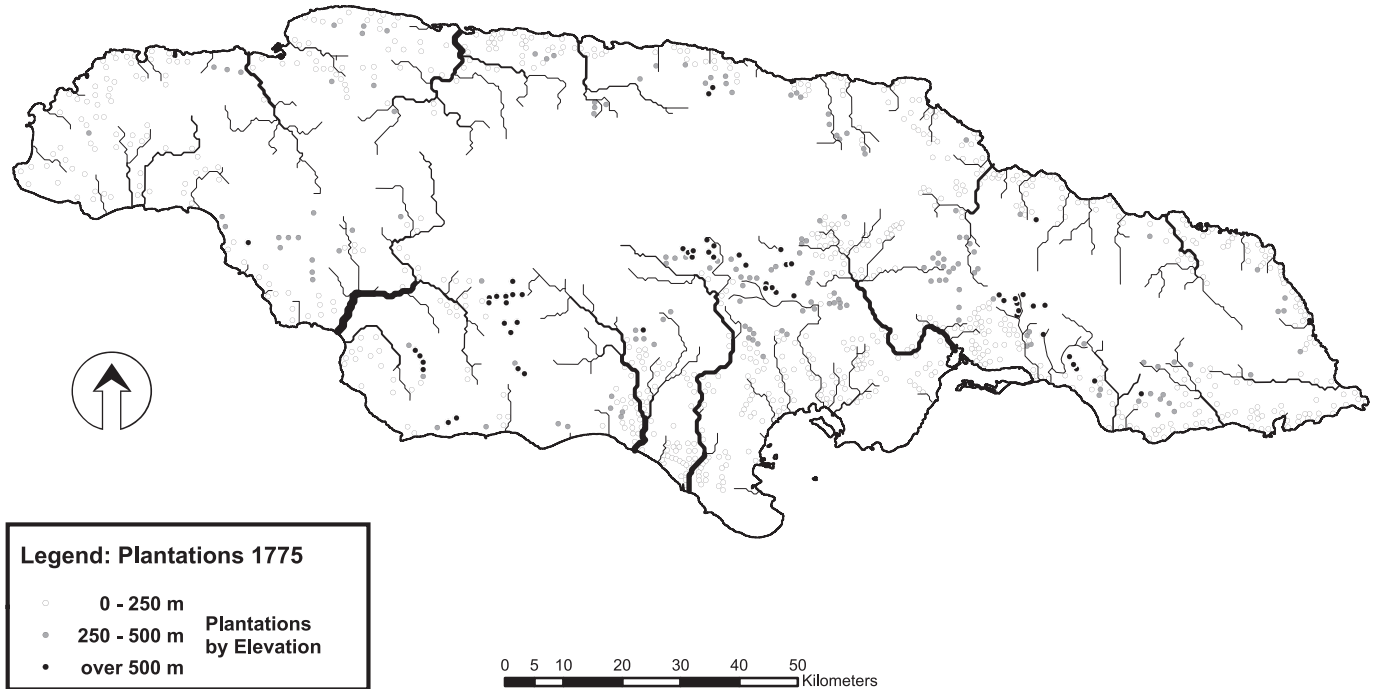


Figure 2.10. Elevation model showing locations of plantations in relation to 100-m contours, based on Jeffries's 1775 map of Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

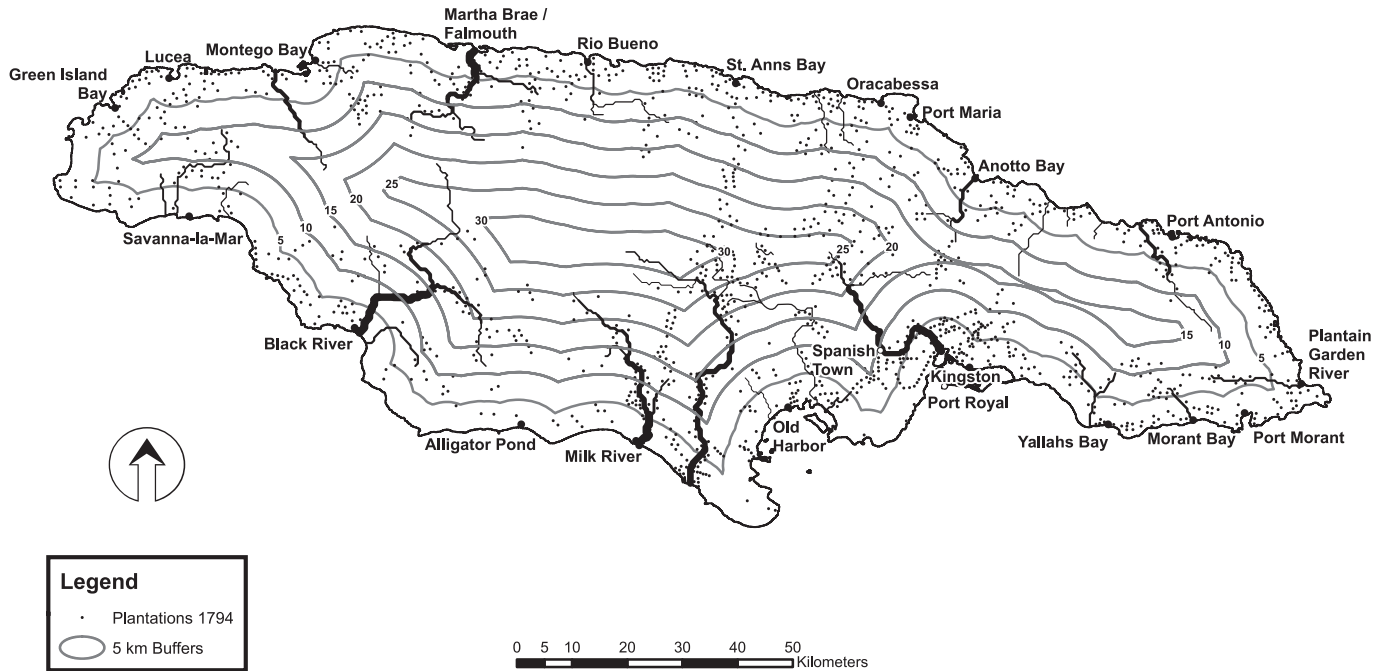


Figure 2.11. Model showing locations of plantations by distance to coast based on Edwards 1798 map of Jamaica. The buffer lines represent distance to the coast in 5-km increments. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.



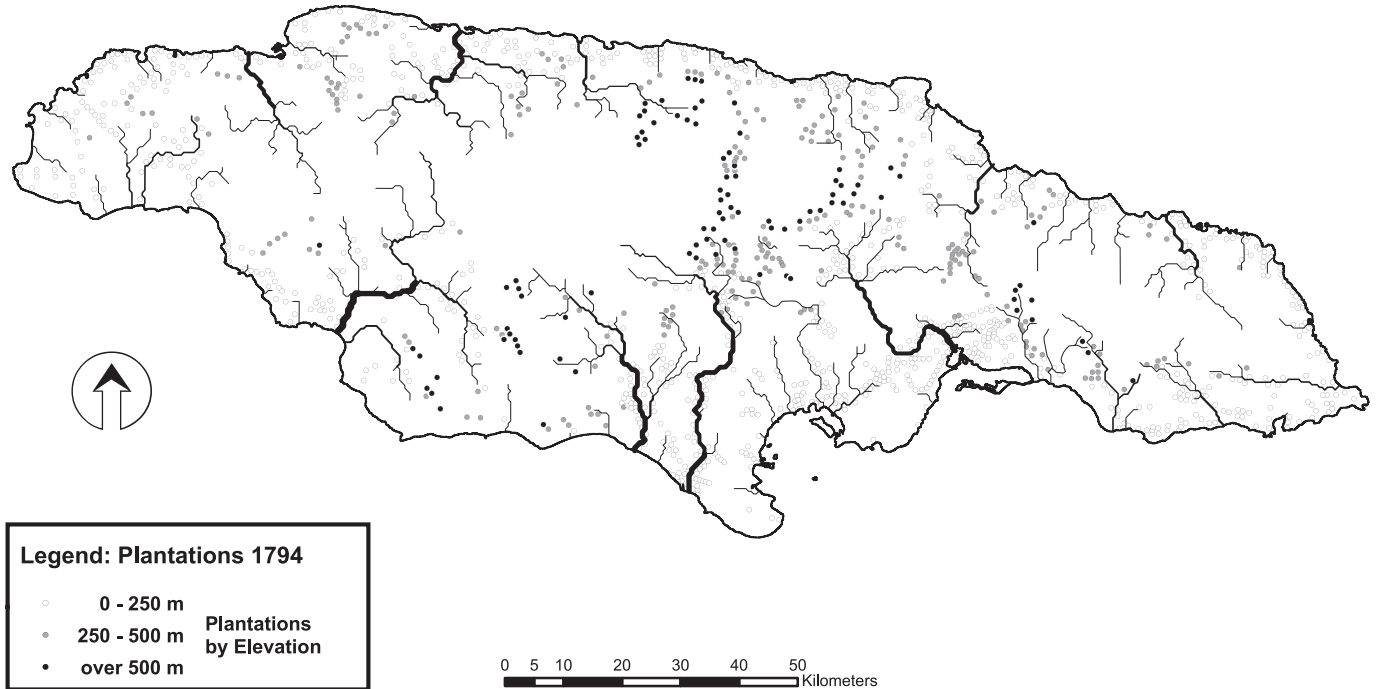


Figure 2.12. Elevation model showing locations of plantations in relation to 100-m contours, based on Edwards 1798 map of Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

coinciding changes in British colonial policy. By the early nineteenth century, European powers began to expand the agricultural economies of newly exploited tropical regions, particularly in the basin of the Indian Ocean. The African Slave Trade, on which the viability of Jamaica's labor system had depended throughout the eighteenth century, was abolished by Parliament in 1807. The curtailing of the trade in human laborers put pressure on the plantation labor system. Despite the fact that hundreds of thousands of African people had been brought to Jamaica to work the plantations, throughout the eighteenth century, Jamaica had experienced an extended period of natural demographic decrease, mitigated only by the incessant re-population of the plantations made possible by the African slave trade. Roberts (1957) calculated that the enslaved population of Jamaica had experienced a very consistent rate of natural decrease throughout the eighteenth century. Between 1722 and 1734, there had been a 3.7 percent natural decrease; the decennial natural decrease of the population hovered between 2 and 3 percent for the rest of the century. These mortality rates were ameliorated only by the continual importation of enslaved laborers, an economy and process that came to a legal end in 1807.

The economy of Jamaica suffered a simultaneous blow during the Napoleonic Wars, particularly after 1806 when Napoleon enforced an embargo on all British imports into Europe. The burgeoning coffee industry was particularly hard hit by the embargo, as much of Jamaica's coffee had been reexported into Europe to take advantage of the market vacuum that had been created when the continent lost its primary source of coffee during the Haitian Revolution. One Jamaica coffee planter, John Mackeson, observed in 1808 that the "present times bear a most gloomy aspect. . . . Numbers in this country must be ruined, many are already so. . . . The present crisis is past all human calculation" (Mackeson mss).

Between 1834 and 1838, the plantation mode of production as it had developed in Jamaica was legislated out of existence with the abolition of slavery in the British West Indies. Although some plantations were able to maintain production using wage labor, many estates, which had relied on a system of credit based on the exchange value of land and slaves as capital assets as well as the approximated value of future commodity production, were unable to maintain the capital flow required to support a regular payroll. Furthermore, many of the previously enslaved laborers had no desire to remain employed on the estates on which they had previously been required to labor, choosing instead to seek their own way on small provisioning farms in the island's interior. In so doing, they abandoned their dependent role in capitalized export production to

instead become subsistence farmers tied to a local subsistence economy, rather than a global economy based on the exportation of agricultural commodities.

A map published in 1814 by John Thomson suggests how the settlement pattern of plantations on the island was shifting during these decades of transition. The number of plantations identified on this map is far fewer than those of the late eighteenth century, likely representing the early stages of plantation abandonment that had already begun by the 1810s (Delle 1996, 1998; Higman 1988). Although this map shows fewer than half the number of estates than were represented on Edwards's 1798 map, GIS modeling against the same two variables (distance to coast and elevation) suggests that an equal percentage of estates were located within five kilometers of the coast – that is, 47.4 percent (614 of 1,295 in 1798; 373 of 787 in 1814). The percentages beyond five kilometers (at five to ten, ten to fifteen, and fifteen to twenty) also remained consistent (see Figure 2.13). However, the percentages of plantations modeled by the 250-meter contours show some change, with more than 75 percent of the 1,814 estates appearing below 250 meters in elevation, and significant drops in the percentages of plantations located between 250 and 500 meters (declining from 19.2 percent to 18.3 percent) and between 500 and 750 meters in elevations (declining from 6.6 percent to 5.9 percent; see Figure 2.14). This indicates that plantations in the higher elevations, those more likely to be coffee estates, were more likely to disappear from the cartographic record than those situated on lower elevations, which were more likely to be sugar estates or cattle pens. Higman graphically illustrates that in the post-emancipation period, coffee plantations were much more likely to be abandoned than were sugar plantations (Higman 1988: 12).

#### Settlement Trends, 1655–1834

Modeling the plantation landscape as we have reveals several diachronic trends about the settlement history of English Jamaica. Having first established themselves in the areas previously cleared by the owners of the Spanish *hatos*, numerous small planters expanded tropical production by organizing small cacao, cotton, and indigo plantations in the coastal lowlands. In the middle decades of the seventeenth century, the landscape of Jamaica was characterized by small plantations, worked by individual families, with perhaps several enslaved or indentured workers, similar to the settlement pattern observed in Barbados half a century before. This settlement pattern was short lived. The availability of large land grants,

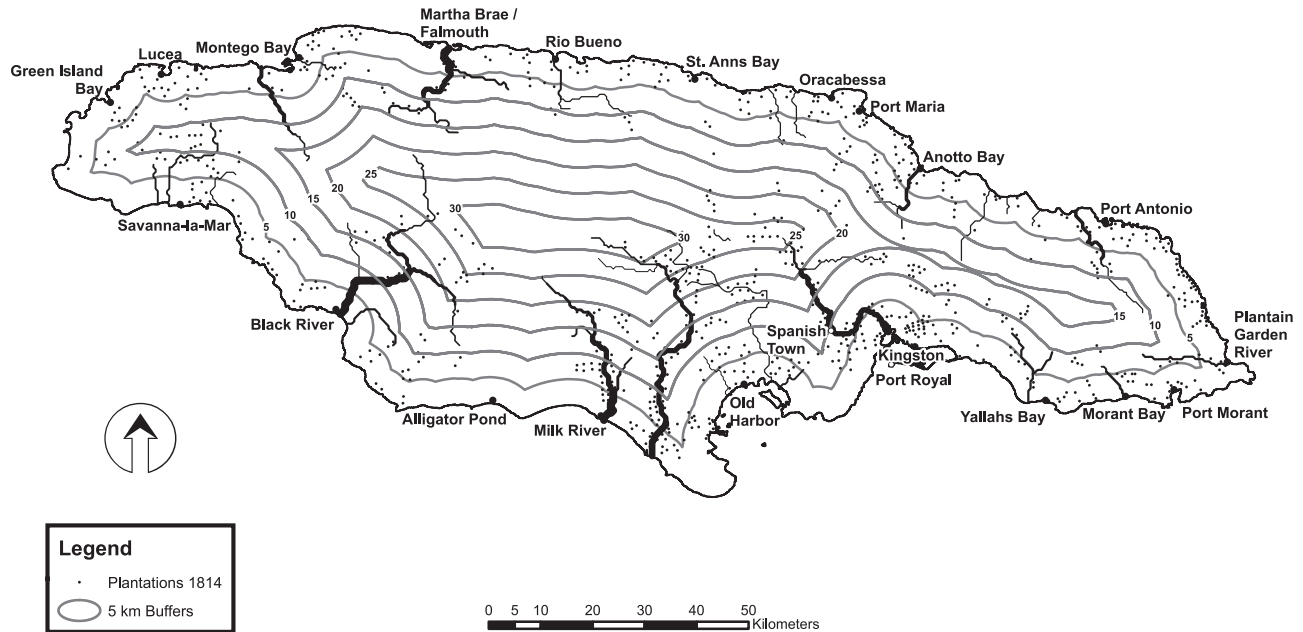


Figure 2.13. GIS model locating plantation sites by distance to coast based on Thomson's 1814 map of Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.



Figure 2.14. Elevation model showing locations of plantations in relation to 100-m contours, based on Thomson's 1814 map of Jamaica. Illustration courtesy of Richard Courtney, Department of Geography, Kutztown University.

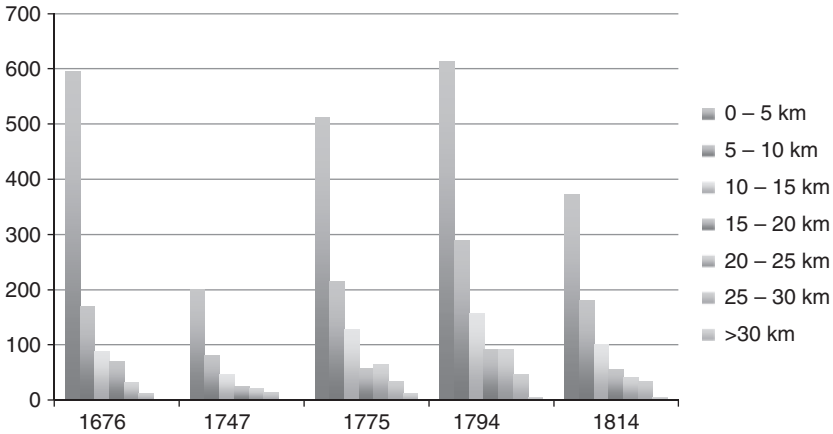


Figure 2.15. Number of plantations by distance from coast, 1676–1814.

the abandonment of small plantations with the deaths of their original owners or by their abandonment of small-scale tropical production, and the introduction of the African slave trade to Jamaica, created the opportunity for wealthy investors to create a sugar monoculture economy based on capitalized land holdings worked by capitalized, enslaved labor. Between the third quarter of the seventeenth century and the second quarter of the eighteenth, the number of plantation settlements contracted as the larger landholders consolidated their estates in the best lowland areas. As this plantation-based settlement pattern expanded throughout the eighteenth century, settlements moved farther from the coast (see Figures 2.15 and 2.16)

As both the number and size of plantations increased in the second half of the eighteenth century, an increasing number and percentage of settlements were established both farther from the coast and at higher elevations. The inland vales in central Jamaica were exploited for sugar, and, in the final quarter of the eighteenth century, coffee was introduced as a secondary crop. Rather than competing for land resources with the sugar estates, coffee was best suited for the highland valleys at higher elevations – areas not well suited for sugar production. By the closing decade of the eighteenth century, more than a quarter of Jamaica's plantations were located at elevations higher than 250 meters above sea level, reflecting both the increased utilization of highland vales for sugar

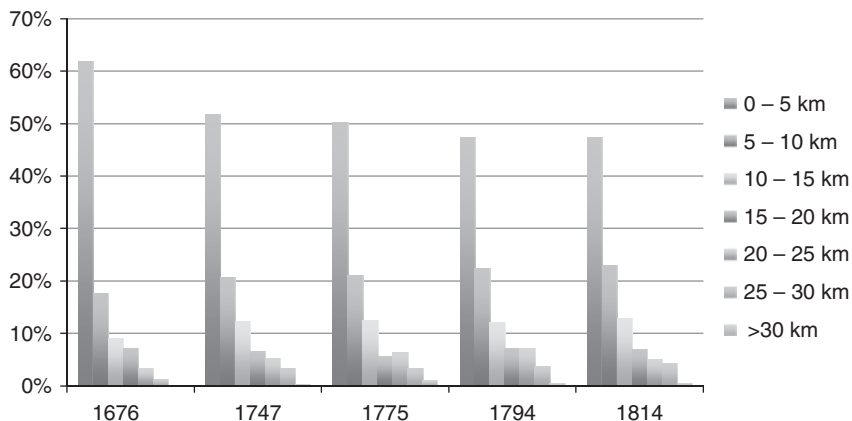


Figure 2.16. Percentage of plantations by distance from coast, 1676–1814.

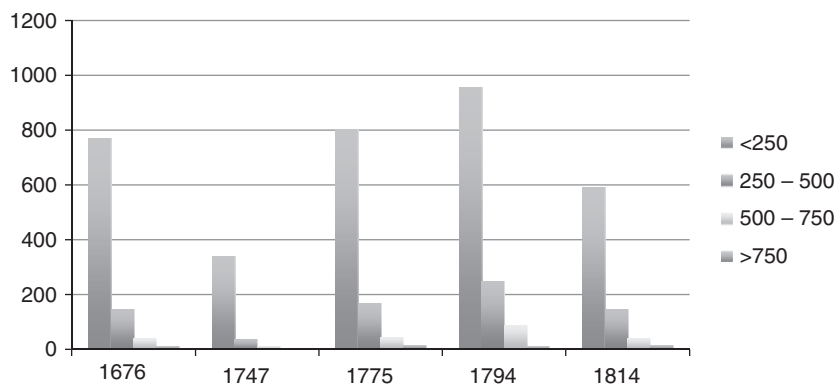


Figure 2.17. Number of plantations by contour elevation, 1676–1814.

production, and the introduction of coffee production into previously undeveloped land.

With the abolition of the slave trade, the expansion of colonial tropical production into the Indian Ocean, and the development of sugar plantations in Cuba and Brazil at a greater economy of scale than was possible in

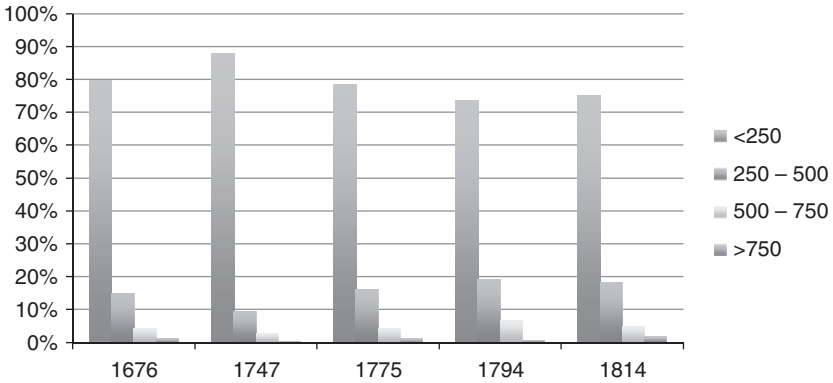


Figure 2.18. Percentage of plantations by contour elevation, 1676–1814.

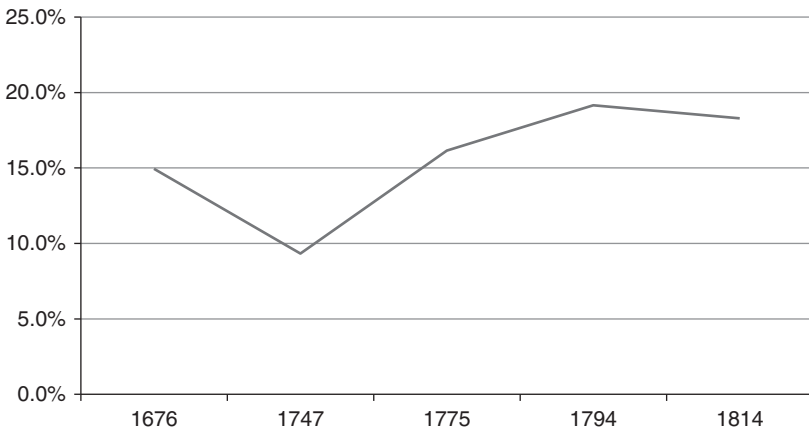


Figure 2.19. Percentage of plantations at 250-m elevation or higher, 1676–1814.

Jamaica, the plantation settlement pattern began to contract. By the 1810s, many of the older coffee plantations were already being abandoned, as were some of the less productive sugar estates. This process would only accelerate following the abolition of slavery between 1834 and 1838 (see Figures 2.18 and 2.19).



### Conclusion: Plantation Settlements and Capitalized Space

At the turn of the seventeenth century, the term “plantation” was synonymous with our modern understanding of the word “colony.” In sixteenth-century Ireland, both the Munster and later Ulster Plantations were colonial enterprises in which English settlers were “planted” in new lands, collectively known as a plantation. In 1620 in New England, religious dissenters established the Plymouth Plantation and later the Rhode Island and Providence Plantations, names referring to the entire colonial settlement rather than a privately owned estate. By the turn of the eighteenth century, the word “plantation” had taken on a different meaning. In the Caribbean and Southeastern North America, the word “plantation” would connote a privately held agricultural estate, consisting of capitalized land and social labor harnessed for the material gain of the owners of the estates, the plantation proprietors.

The semantic shift in the meaning of the word “plantation” derives directly from the colonial experience of those involved in the agricultural commodities markets of the eighteenth century. In the Caribbean, there was a significant shift in the organization of society brought on in large measure by the capitalization of land and labor, and the development of export economies for sugar and coffee. Land in Jamaica was to be privately owned, transferred by sale or inheritance. Because Marxist analysis contends that material realities shape other elements of culture and society, it follows that the consolidation of private land, and thus the exclusion of non-landowners from a key resource required for agricultural production, impacted the development of colonial society in Jamaica. As we have seen, the landscape of the island was reshaped in the eighteenth century as the structures of plantation production were reproduced and spread across the island, through the river valleys and littoral of the coast where sugar production thrived, to the mountain vales and valleys that were well-suited to coffee production.

As we have seen, a review of the settlement history of colonial Jamaica demonstrates that plantation production of both sugar and coffee dominated the island from the early eighteenth century into the opening decades of the nineteenth. What we have not yet considered is the structure of the social world that developed as the plantation mode of production took root and spread throughout the island. To understand how these historical processes shaped Jamaican society, we now turn to a discussion of the concept of “mode of production,” and how Marxist archaeology can use this concept to analyze Jamaica society as it existed at the turn of the nineteenth century.

### **Box 1: The Atlantic Slave Trade**

The rise of the plantation system in the New World was dependent on the importation of enslaved laborers from Africa, a massive forced migration of people that linked the Old World to the New and made vast fortunes for those involved in the buying and selling of human beings. Over the past few decades, several historians of the African Slave Trade have been refining the estimates of the scope of this trans-Atlantic Trade. David Eltis and Martin Halbert of Emory University have spent much of the past two decades refining a database based on primary and published sources of slave trade voyages. Their breathtaking database, available at [www.slavevoyages.org](http://www.slavevoyages.org), is a compilation of data drawn from the records of more than 35,000 slave trading voyages made between the years 1500 and 1867, which they estimate to be about 80 percent of the actual voyages made. Their estimates of the number of Africans taken to the New World are probably the most accurate ever available.

According to their estimates, approximately 12,521,300 Africans embarked on the Middle Passage across the Atlantic; approximately 1 in 5 perished on route, leaving a total of 10,702,700 who survived to be enslaved in the New World. Almost half of these disembarked into Brazil, by far the largest of the slave-holding regions. The British West Indies follows as the second largest receiver of enslaved workers; some 2,318,300 people were landed in the British slave colonies. Just less than half of these were destined for Jamaica (1,019,596), followed in scope by Barbados (493,200), Antigua (138,00), St. Kitts (134,100), Grenada (128,700), Dominica (110,000), British Guiana (72,700), St. Vincent (58,900), Montserrat and Nevis (46,100), and Trinidad and Tobago (44,000); the smaller possessions totaled another 72,100. In contrast, 388,700 enslaved people were landed in all of mainland North America, only a third of the number landed in Jamaica alone.