

## The African Contribution to Rice Cultivation in the Americas

David Eltis, Philip Morgan, and David Richardson

In the last three decades, successive books by Peter H. Wood, Daniel C. Littlefield and Judith A. Carney have progressively made the case that the major export crop of eighteenth-century South Carolina and Georgia was predominantly a creation of Africans. This African contribution to New World agriculture is epitomized by the arresting title of Carney's book: *Black Rice*. A direct role for Africans in American history strikes a chord at a time when the national story is becoming less parochial, and increasingly viewed in an Atlantic or global context. Furthermore, the emphasis on African agency resonates with histories from the bottom up and with subaltern studies in general. That South Carolina's rice industry was not just built on slave labor, but rather on the slaves' agricultural and technological knowledge, is considered an exciting and appealing revelation—an African accomplishment deserving of celebration. In a multicultural world, it is attractive to realize that the black contribution to American life involved not just backbreaking muscle power but expertise and know-how. The development of American rice culture, the claim goes, marked not just the movement of an important crop across the Atlantic but the transfer of an entire cultural system.<sup>1</sup>

Three major elements are involved in the claim that rice was largely an African contribution to the Americas. First, rice culture was indigenous to Africa and of long standing. Perhaps by about 1500 B.C. West Africa was home to the independent domestication of a separate rice species, *Oryza glaberrima*, not to be confused with

*Oryza sativa*, the Asian variety, which was probably introduced by the Portuguese in the early sixteenth century. Long before the arrival of Europeans, West Africans had developed complex systems of mangrove or tidal floodplain, coastal estuarine, and upland rainfed forms of rice cultivation. The area of greatest rice specialization was confined to the Upper Guinea coast—that part of the African littoral stretching from present-day Senegal to Liberia, and encompassing three slave trading regions, Senegambia, the Windward Coast, and Sierra Leone—but rice cultivation also reached into the interior for almost 2000 km to Lake Chad. Second, unlike most plantation crops in the Americas, especially sugar and tobacco, there was never a period when free—or at least non-slave labor—could be induced to produce rice for export. The labor force for rice as one of the New World’s exports was never anything but black, although elsewhere in the world – including areas where rice was an export crop – slave labor was not the norm. Finally, fascinating parallels between rice cultivation in Africa and rice cultivation in the Americas have emerged. From land preparation, through sowing, weeding, irrigating, threshing, milling, winnowing, and cooking, African practices seemingly left a deep imprint on New World ways of growing and processing the crop.<sup>2</sup>

South Carolina (later joined by Georgia and the Cape Fear region of North Carolina) was the primary, but not the only, rice producer in the Americas. As early as the mid-sixteenth century, rice was also being grown in parts of Brazil. By the third quarter of the eighteenth century, northeastern Brazil or its eastern Amazon region (the present states of Amapá, Pará, and Maranhão) had become a significant exporter of rice. By about 1780, Maranhão’s rice production met Portugal’s entire import demand, and production attained its colonial era peak in 1787, albeit at a volume of less than one tenth

of the late colonial South. There were, then, two key nodal points for rice production in the eighteenth-century Americas; and this essay will focus on both of them. In addition, rice production in provision grounds and also as a minor plantation crop occurred in many other parts of the New World--Peru, Mexico, the Guianas, Surinam, Cayenne, El Salvador, Jamaica, and Louisiana. Rice can be grown in many places, and botanical "bioprospectors" experimented with the crop from the central Andes to tidewater Virginia. Surinamese maroons grew rice as their primary food crop (although cassava and plantains were almost as important), and relate stories about female ancestors hiding seed rice in their hair when moving either from Africa to Suriname or from plantation to maroon camp; a rebellion on a Bahian sugar plantation in 1789 involved a demand by predominantly creole slaves that "We shall be able to plant our rice wherever we wish." In short, rice became widely grown throughout the Americas, and in each case the association with black labor is evident. Rice, notes Carney, was "the signature cereal of the African diaspora."<sup>3</sup>

If the association of black labor and rice growing now seems widely accepted, the slave trade connection between the rice growing regions of Africa and the Americas has not been subjected to close analysis. Nevertheless, various claims have been made about such links. Three seem most important. First, and most obvious, Africans from rice-growing areas are said to have been either a significant minority or a majority of those slaves arriving in New World regions that specialized in rice. Planters supposedly expressed preferences for slaves from rice-growing areas, and merchants worked to supply those desires. Second, African agricultural expertise was highly gendered. In some places rice was solely a woman's crop; in others, usually where more elaborate

forms of irrigated rice arose requiring ditching and banking, a complex division of labor between men and women emerged; but everywhere in West Africa women took responsibility for seed selection, sowing, processing, and cooking. Given this female expertise, it is claimed, a higher percentage of women arrived in South Carolina than in the Caribbean. Third, female slaves bound for American rice-growing areas allegedly commanded higher prices than in other plantation economies. In South Carolina, according to Carney, the labor of female slaves “was valued more on a par with that of male bondsmen than in the slave markets of the West Indies.” This essay proposes to explore each of these claims in turn. It will focus most of its attention on the first proposition, and to answer it will not just explore the slave trade data but the ethnography and history of rice versus other kinds of farming in the Upper Guinea Coast region. It will argue that slaves from Upper Guinea were always a small proportion of the transatlantic slave trade and that the huge band of territory from Senegambia to Sierra Leone was far from being a wholly rice-producing region. The other two claims will be explored as fully as the present evidence permits, but that is inevitably somewhat cursorily. Finally, rice production in the lowcountry will be situated in a larger Atlantic context, thereby redressing the balance between African and European input, supply and demand, exploitation and negotiation.<sup>4</sup>

### **Coastal Region of Origin: The Numbers**

A review of the African coastal provenance of slaves arriving into North America lends little support to the idea that rice planters sought slaves from the rice growing regions of Africa. A revised version of the *Transatlantic Slave Data Base* contains records of 293,000 slaves arriving direct from Africa into the territories that became the

United States. Of these, some indication of the African coastal origins exists for 215,306—more than half of the total number of slaves thought to have arrived in mainland North America by this route. Such a proportion lends confidence to our findings. For the purposes of comparison, Senegambia, Sierra Leone, and the Windward Coast can be treated as a single broad African region—Upper Guinea--where rice growing was quite prevalent (although by no means uniformly so), and contrasted with a second, even larger, grouping that includes all other known slave embarkation points in Africa, departure points that collectively were less likely (indeed, rarely) to draw on rice producing areas. As for North American receiving regions, the Chesapeake (Virginia and Maryland) and the lowcountry (South Carolina and Georgia), were by far the most important, although the remaining others--New England, the Mississippi Delta, New York, Pennsylvania, Delaware, New Jersey and Florida--have been assigned to a third group for the sake of comprehensiveness (see Table 1).

[Table 1 about here]

To gauge change over time, the African origins of slaves disembarked in major North American regions have been divided into four periods. The first half of the eighteenth century covers the emergence of a mature slave-cultivated tobacco economy in the Chesapeake and a new and rapidly developing slave-based rice plantation system in South Carolina. Ideally, it would be useful if we could disaggregate this period further, and explore separately the first few decades of the eighteenth century, say to ca. 1720, by which point rice had become the colony's dominant export, but unfortunately the lowcountry slave trade data for these years are too sparse to be meaningfully analyzed. The third quarter of the eighteenth century saw continuing growth of the

Chesapeake tobacco economy together with the emergence of a major indigo export economy in the lowcountry (now including Georgia) which supplemented, but never threatened to replace, the now mature rice economy of the region. After the Revolution, the lowcountry was the only one of these regions to import large numbers of Africans, and it did so in two short flurries, first in the 1780s and then between 1804-07.

In the crucial formative period, prior to 1750, when the foundations of the rice economy were laid in the lowcountry and when rice slaves might have been expected to be in most demand, only about one-fifth of the region's Africans came from Upper Guinea. Four in five of the Africans arriving in the rapidly expanding lowcountry economy came from parts of the continent where rice was not grown. Moreover, during the same period, the tobacco-growing Chesapeake region drew on Upper Guinea to almost exactly the same degree as its lowcountry counterpart, while other North American regions received proportionately the largest share—just over half their slaves from Upper Guinea. In short, parts of North America other than the lowcountry have as good or better claim to be linked to rice-growing areas in Africa. In the first half of the eighteenth century, at least, the relationship between the lowcountry and the rice-growing region of West Africa was weak. Perhaps the origins of South Carolina's risiculture can be traced to Barbados, a cultural hearth for the lowcountry since so many of the early settlers and their slaves came from the island. However, before 1700, only 6 percent of arrivals in Barbados came from Upper Guinea, and many of these were sold on to the Spanish Americas.<sup>5</sup> After allowing for Upper Guinea slaves who grew millet rather than rice and for the number of children in the slave trade to Barbados, perhaps 1 in 100 of

this Barbadian charter generation of slaves would have known anything about rice culture.

For the next half century, the connection became stronger. From 1750 the share of African slaves arriving from Upper Guinea into South Carolina and Georgia shifted sharply upward. In the third quarter of the eighteenth century, nearly three out of every five Africans arriving in the lowcountry came from Upper Guinea. This period also saw an indigo boom in the lowcountry, and many of these Upper Guinea slaves were undoubtedly put to indigo rather than to rice growing; but still many Upper Guinea slaves might have gained some consolation for their fate in being introduced to a crop that was familiar to them. The proportion of Upper Guinea slaves arriving in the lowcountry dropped in the last quarter of the century, but still represented a half of all arrivals. At the same time, Upper Guinea also supplied more Africans to other parts of North America than ever before. Two out of five Africans arriving in the Chesapeake in the third quarter of the eighteenth century were from Upper Guinea; other parts of North America received as large a share of Upper Guinea slaves as did the lowcountry. Indeed in the last quarter of the eighteenth century, Upper Guinea was once again proportionately a greater supplier to regions of the US other than the lowcountry (although the overall numbers were small). In short, in the second half of the eighteenth century, Upper Guinea was a more significant supplier to all North American regions, not just the lowcountry, than it had ever been before.

In the early nineteenth century, when the lowcountry was the only United States region to resort to any great degree to the African slave trade (in one last orgy of slave trading before the ban against the traffic went into effect), it reverted to something akin to

its earlier eighteenth-century past. That is, it received only a minority of its Africans from rice-producing areas. Between 1804 and 1807, less than one in three Africans arriving in the lowcountry came from Upper Guinea. Overall, then, except for the third quarter of the eighteenth century, the lowcountry did not import a majority of its slaves from rice-producing regions. Other regions in what became the United States had stronger claims to be connected to Upper Guinea than did South Carolina and Georgia.

The Caribbean, which of course exported no rice, also had greater connections to Upper Guinea than did the lowcountry. The islands received seven times more Africans from rice-growing areas than did South Carolina and Georgia (see Table 2). In the eighteenth and early nineteenth centuries, the Antilles were easily the most important destination of slaves from Upper Guinea. More significant, the rising importance of Upper Guinea as a source of slaves in the third quarter of the eighteenth century is apparent for both sugar-growing and rice growing regions. Between 1751 and 1775, both the Caribbean and the lowcountry more than doubled the share of their incoming slaves from Upper Guinea. Still, the lowcountry, and the other major North American plantation regions, drew a greater share of their slaves from Upper Guinea than did any other major plantation region of the Americas. Overall, only about one in eight slaves coming into the Caribbean were from Upper Guinea, and the ratios for Jamaica and St Domingue were even lower.<sup>6</sup>

[Table 2 about here]

As these patterns suggest, it is overly simplistic to think that South Carolina planters sought slaves from Upper Guinea in order to develop rice production. Rather, the underlying forces that shaped the Atlantic slave trade and established the major links

between Africa and the Americas came from a far more complex mix of factors than planter preferences for slaves from particular African regions.

Except for a brief period at the very end of the legal trade between 1804 and 1807, North American mainland markets for slaves were always peripheral to the transatlantic slave delivery system. Between 1650 and 1780 they accounted for less than seven percent of the slaves carried across the Atlantic and it is likely that not a single vessel in this era brought slaves to the mainland without first calling at a Caribbean island--usually Barbados or Antigua--to check out alternative marketing prospects. When slave traders planned a transatlantic expedition they had to take into consideration a variety of factors that included trading patterns in Africa, seasonal fluctuations in harvests in both Africa and the Americas, slave resistance patterns, international wars, and credit links between slave trading regions on both sides of the Atlantic.<sup>7</sup>

The main concern of buyers of slaves in the Americas was obtaining a cheap supply of undifferentiated labor for field work, and the preoccupation of transatlantic suppliers was finding a location in Africa where they could obtain large numbers of slaves quickly and at reasonable cost. Buyer preferences for peoples from particular regions in Africa could be exercised only in the very largest markets of the Caribbean--Barbados, Jamaica, St. Domingue--where vessels from all parts of Africa arrived in large numbers, but even here major shifts in the coastal origins of slaves occurred over time in apparent contradiction of whom planters said they wanted to buy. Slave traders could obtain the largest volume of slaves in the shortest period of time on the Slave Coast of the Bight of Benin, the Bight of Biafra, West-Central Africa, and to a lesser extent the Gold Coast, all regions where rice was not a dominant crop. The large slave vessels from these

regions would aim for major markets in the Caribbean first and then move on to the fringe areas if necessary. Even then, it would be well known that only the most prosperous of these secondary markets-- for example, first the York basin and then the Upper James in the Chesapeake, and later Charleston--could absorb large numbers of slaves at one time. Slave trading in Upper Guinea, lying to the north of the major slave provenance zones, required smaller vessels (and a coasting trading strategy) able to supply regions in the Americas that could not easily absorb the numbers per vessel carried from the major markets further south. Before 1750, therefore, a link emerged between secondary markets in Africa and secondary markets in the Americas based on trading conditions in the Old World and the inability of North American mainland planters to compete with the sugar barons of the Caribbean. But such a link applied to both the Chesapeake and the lowcountry and had little to do with the rice-growing skills of the victims of the slave trade.<sup>8</sup>

After 1750, a new, and as yet poorly understood, set of conditions reshaped the supply of slaves, the effect of which was to greatly increase loading times of vessels trading in all major African slave provenance zones.<sup>9</sup> In response, more vessels began to seek slaves in Upper Guinea than hitherto. Minor suppliers during the era when rice cultivation was beginning, Upper Guinea locales now became more important. In fact from the broadest perspective, Senegambia, the Windward Coast and Sierra Leone were important in relative terms only in the third quarter of the eighteenth century when their share of total slave departures from Africa jumped temporarily to 21.8 percent from just 8.7 percent in the previous quarter century (1726-50), before reverting to 12.1 percent after 1775 and less than 10 percent throughout the nineteenth century.<sup>10</sup> From about the

middle of the eighteenth century, major bulking centers emerged on Bance Island and the Isles de Loss and they began to offer loading rates that attracted larger slave vessels. As a result, the number of vessels obtaining slaves in the Gambia and Senegal in the third quarter of the century was nearly three times more than the long term average. This transformation largely explains why the share of slaves from Upper Guinea arriving in South Carolina went from less than one in five before 1750 to nearly three in five after mid century (and to more than two in five in the Chesapeake). That this surge had nothing whatever to do with rice cultivation is suggested by the varied destinations of the majority of slaves from Upper Guinea, most of which were non-rice growing regions of the Americas. Before the nineteenth century when cotton rather than rice was the major export, rice-producing regions of the Americas received only one of five of the slaves leaving the rice producing regions of Africa. As table 2 makes clear sugar growing regions in the Caribbean absorbed more slaves from Upper Guinea than North (and indeed, as argued below, South) American rice-growing regions. The most probable explanation for the new pattern of slave provenance between 1751 and 1775, thus lies in Africa rather than the Americas.

Apart from South Carolina and Georgia, Brazil was the only other colony in the Americas that produced rice efficiently enough to bear the cost of the transatlantic voyage to European markets. Production centered on Maranhão in the north-east, with Pará, also in Amazonia, and Rio de Janeiro and Sao Paulo, both far to the south, playing less important roles. At first sight, Maranhão and Pará offer support for the black rice hypothesis. Indeed, African regional importation into Northeastern Brazil seemingly provides greater evidence for a link between Africa and New World rice production than

does the lowcountry. Maranhão began to export rice in the late 1760s and remained the principal source of exports in the colonial period, while, from the 1760s to about 1810 almost two of every three African slaves brought into Pará and Maranhão came from Upper Guinea (see Table 3). In fact, all but a few hundred embarked in southern rivers of Senegambia at the ports of Cacheu and Bissau. Upper Guinea Africans were negligible among arrivals to all other Brazilian regions. On a cursory glance, then, a reasonable congruence between the growth of rice cultivation and a predominance of Africans from rice-producing regions emerged in Northeastern Brazil.

[Table 3 about here]

Yet, on closer investigation, the link between rice growing in Northeastern Brazil and Upper Guinea proves tenuous. One essential point is that rice played a minor role in what has been termed the “agricultural renaissance” of Brazil in the second half of the eighteenth century. Rice exports were small compared to those from the lowcountry at this time. After expanding rapidly in the 1770s, rice exports from Amazonia plateaued at around 11 million lbs per year after 1785 (see Table 4). By contrast, the lowcountry exported seven times this amount between 1770 and 1774, and, after the Revolutionary War, quickly recovered to similar levels.<sup>11</sup> Rice was not even the major crop of Amazonia. In Pará, cacao was a far more important crop; and in Maranhão it was the explosive growth of cotton between 1760 and 1810 that converted a subsistence economy into one with a significant export sector. Valuations of Brazilian exports survive for the years 1796 and 1806: cotton accounted for 80 and 75 percent respectively of Maranhão’s exports, and cacao for over half the much smaller aggregate of exports from Pará. Rice cannot be disentangled from the category “foodstuffs,” but, if it could, it would not have

represented as much as ten percent of exports from either port. Overall, rice always lagged behind cotton and cacao.<sup>12</sup> Slave arrivals in Amazonia had been only occasional before 1760.<sup>13</sup> The region was highly unusual in the Americas for having a chartered company--the Companhia Geral do Grão Pará e Maranhão—that imported slaves after 1755 as part of an attempt to kick start development in advance of significant commodity exports. In the late 1750s, slave arrivals reached almost one thousand annually, and then rose steadily to nearly 4,000 a year by the early 1800s. They went to work primarily on plantations growing cotton, the first and by far the largest export crop, not rice.<sup>14</sup>

[Table 4 about here]

The majority of those new arrivals certainly came from Senegambia, where some of them would have been familiar with rice cultivation, but the winds, ocean currents, and geography of the Atlantic ensured that Amazonia would always draw heavily on Upper Guinea whatever the nature of the crop. From the late seventeenth century when occasional direct shipments of slaves from Africa began, down to the first export of small amounts of rice in 1767, almost half the slaves coming into Amazonia were from Upper Guinea. A red rice native to Americas was grown in Maranhao in the first half of the eighteenth century (called arroz da terra or arroz vermelha by the Portuguese), but during this period Brazil actually imported rice from South Carolina.<sup>15</sup> The trigger for an export-based risiculture in Maranhao was the Companhia Geral do Grao-Para e Maranhao's introduction of a new strain of rice from South Carolina in the decade after 1755, not the arrival of slaves from Upper Guinea.<sup>16</sup> While the proportion of slaves from Upper Guinea increased initially along with rice exports, this regional share also began to decline quickly as rice exports entered their most expansive phase. In the 1820s only 25 percent

of Amazonia's slaves came from Upper Guinea, and after 1830, only 29 percent of the occasional shipments came from this area.

Rice was too small a crop to have much impact on the overall composition of the flow of slaves into Amazonia, and the patterns of force African migration are best explained by what was happening on the African coast. Amazonia, like South Carolina and Georgia, provided a small and peripheral market for slaves in the Atlantic as a whole. It faced the same tightening of slave supplies as its northern rivals in the 1760s and 1770s, as slave ships along the whole coast endured longer waiting times for their slave complements. Like South Carolina and Georgia, Maranhão and Pará responded to the higher prices induced by these extended waits by resorting to second tier embarkation regions. For all plantation areas in the Americas north of Pernambuco at this time, but especially the marginal ones, regions such as Upper Guinea became more important while Angola and the Bights sent most of their slaves to places such as St. Domingue, Jamaica and Bahia where planters could pay the higher prices. After 1775, the American Revolutionary War in which Portugal was not heavily involved, followed later by the massive St. Domingue slave revolt, removed one or more of the major slave markets and slaving nations from the African Coast. This allowed marginal plantation areas to reenter the prime slave markets in Africa. The continuing decline in the Upper Guinea volume and share of Amazonia's slave arrivals in the nineteenth century has a quite different cause. Beginning with the Anglo-Portuguese treaty of 1810 and greatly extended with a number of other treaties thereafter, the British used their navy to gradually attempt to shut down the slave trade to Brazil. This effort took effect first north of the Equator, especially in Upper Guinea, and while less than wholly successful, it did help move the center of

gravity of the slave trade southwards. In summary, the transatlantic connection between Amazonia and Upper Guinea was forged by geography, subjected to supply conditions in Africa, and broken, or at least seriously attenuated, by British naval and diplomatic action after 1820. There is no evidence that it was shaped by planters looking for slave laborers familiar with rice growing techniques.

In short, a combination of African supply, winds and ocean currents, and strategies of competing European shippers determined the mix of peoples sent to New World destinations. It is not that preferences of the ultimate buyers of human beings in the Americas had no impact on the slave trade--both the seller and the buyer in any market will influence the transaction--but rather that the influence of planters has garnered too much attention from historians of the Americas. Planters in South Carolina, Georgia and Amazonia formed a tiny part of the overall transatlantic market for slaves, even the market in Upper Guinea. It is not even evident that their preferences were for slaves from Upper Guinea. In any event, they were subject to trends beyond their control--in particular, the pattern that saw the rise and then decline of Upper Guinea in the transatlantic slave trade—which affected all buyers. Poorly understood this pattern may be, but what is quite obvious is that it had nothing to do with the putative ability of this region's slaves to grow rice.

### **Coastal Region of Origin: Meaning**

The difficulty of determining the precise background of a slave from the so-called African Rice Coast is illustrated by one person for whom there is considerable information. On April 9, 1756 Caleb Godfrey, captain of the Rhode Island-based slave ship, the *Hare*, left Bance Island, Sierra Leone with a human cargo of eighty-four African

slaves, among whom was a girl aged about ten. Much is known about this girl. She endured a tortuous ten-week Middle Passage to Charleston, during which thirteen of her enslaved compatriots died. Arriving about mid-June, she experienced a two-week quarantine period on Sullivan's Island—typical for slave ships arriving in the South Carolina market. Purchased on June 29 along with four boys and one other girl by Elias Ball II, she ended up on his Comingtee Plantation. Now named Priscilla, she would later marry Jeffrey and have ten children. When she died in 1811, she left thirty grandchildren. Did Priscilla and her other African companions know much about rice farming? Captain Godfrey had spent several months cruising the West African coast in search of slaves. He made the Sierra Leone River his base, but he purchased captives as far north as the Rio Pongo region in what is now the Republic of Guinea. Whether Priscilla was a Temne or Mende girl from Sierra Leone or a Baga or Susu from Guinea cannot be known for sure. Only one of the children bought with Priscilla received an ethnic designation: he was said to be a "Mandingo." That she was just ten years of age, of course, also suggests that her knowledge of whatever agricultural production was predominant among her people would have been limited.<sup>17</sup>

When Priscilla was taken from her homeland, the Upper Guinea Coast was not uniformly committed to rice production. For one thing, although Upper Guinea is conventionally considered as that section of the coast between the Gambia and Cape Mount, Senegambia is usually included (and we have treated it as a rice producing region in our calculations). But, as the first section of the coast reached by Europeans, Senegambia (the region between the Senegal and Gambia Rivers) was primarily a millet-producing region. True, Mandinka practiced a form of paddy rice agriculture along the

Gambia River before the Europeans arrived, but in the Senegal River Valley, those engaged in the slave trade calculated the average subsistence allowance not in rice but in millet (two pounds a day). The ability of this region to export slaves was intimately tied to its capacity to produce millet. William Littleton who traded in the Gambia for eleven years, explained that the typical strategy of ship captains was to try to purchase “all the Grain we can,” and he first singled out “Country Corn” or millet--and then rice. When asked if ships could procure a “sufficient quantity of Guinea corn” for the Middle Passage, he replied, “Seldom a sufficient quantity of that alone.” Similarly, another ship captain who traded in Saint Louis in the 1770s noted that “Those ships going to the West Indies with Slaves were supplied by the Blacks with large quantities of corn [millet], which the Slaves preferred to any other kind of provision.” In 1788, the Company of Senegal even had to ship in rice and flour from France to Saint Louis and Gorée because of a grain shortage in the region.<sup>18</sup>

For another, even in the coastal Guinea-Conakry and Guinea-Bissau parts of the Upper Guinea Coast, which are usually assumed to be predominantly rice-growing, farmers practiced diverse economies, of which rice cultivation was only a part—and often a small part until well into the eighteenth century. For example, the Balanta of Guinea-Bissau, as Walter Hawthorne demonstrates, did not become rice farmers until the late eighteenth century. Previously they cultivated beans, pumpkins, maize and yams. They switched to paddy rice production for a number of reasons: the superior yield of the crop, the access to iron tools needed for ditching and embankment that came via increased transatlantic trade, and the general rise in violence which encouraged a movement into terrain that offered better protection. Ironically, then, the transatlantic

slave trade encouraged and facilitated the Balantas' transformation into rice farmers, but those Balanta shipped to the Americas before about the third quarter of the eighteenth century would have known little about rice cultivation.<sup>19</sup>

Many groups of rice farmers along the Upper Guinea Coast were organized into decentralized (sometimes described as stateless or acephalous) societies, often thought to be particularly vulnerable to predation by centralized, more powerful societies. But, while many rice farmers were swept into slavery, others such as the Diola (or Jola) managed to survive the era's violence largely through their location in inaccessible wetlands. As Robert Baum points out, "the Diola are considered the best wet rice cultivators in West Africa" and the evidence for their long-standing cultivation of rice in the well-watered coastal plain bisected by the Casamance River stretches over two millennia. The Diola even sold rice paddies to ransom relatives who had been captured by slave raiders before they were sold into slavery. The Baga-Sitem in the Rio Nunez region, a sub-group of the Baga peoples who generally inhabited mangrove islands located between Guinea-Bissau and Iles de Los and who were said by one traveler in 1793 to be "very expert in Cultivating rice and in quite a Different manner to any of the Nations on the Windward Coast," were unusual for neither holding slaves nor selling them. The Baga-Sitem and Diola were unlikely, then, to have been major sources of rice expertise in the Americas. Rather, slave raiding forced some decentralized societies to migrate to isolated swamps, where they reorganized their traditional cropping system from yams to irrigated rice. Decentralized societies were not necessarily victims but resisted incursions of powerful state armies by moving into the riverine, marshy, tsetse-fly infested areas of the coast where the inhospitable landscape provided something of a

sanctuary. There, they built defensive households and fortified villages, and armed themselves. It is too simplistic to argue, as Carney does, that rice farmers, especially those along the coast, were particularly vulnerable to European slavers because they were sedentary and because of their proximity to European navigational routes. Neither factor necessarily made them “easy prey.”<sup>20</sup>

Provisioning on slave ships is particularly useful for yielding clues about the agricultural priorities of particular African regions. Part of the strategy of keeping valuable property alive on the transatlantic crossing was to ensure that slaves received food to which they were accustomed. Since so many more Africans were transported from yam-producing areas than from rice-producing areas, root crops undoubtedly fed more slaves on the Middle Passage than did rice. Even in rice-producing areas, other cereals (millet initially, and then maize too in some places) were important sources of provisions on slave ships. For twenty Royal African Company vessels that visited the Gambia and Sierra Leone between 1679 and 1688, the amount of rice and millet carried can be ascertained—and millet was much the most important source of provisions. Twelve of the twenty ships contained both rice and millet, six millet alone, and only two of the twenty just rice. In overall weight, millet formed 70 percent and rice 30 percent of the total provisions on these ships. The per capita amount ranged from about a third to three-quarters of a hundred weight, with the average at half a cwt or about 56 lbs per slave. All the rice on these ships was “clean” (that is, milled), as was almost all the millet: only three ships carried millet in the husk (and always a small proportion of total provisions). From this evidence, women did not mill rice on the Middle Passage; and whatever pounding by mortar and pestle occurred was more likely of millet. Indeed, the

term for domestic female slave in the Senegal River region was *pileuse* or (“pounder of millet”).<sup>21</sup>

For all these reasons, the number and overall share of Africans with rice growing experience must have been far below the number of slaves leaving Upper Guinea as revealed in tables 1 through 3. Indeed, the proportion of Upper Guinea Africans with rice-growing skills were especially minimal during the years that risiculture became established in the lowcountry. “Upper Guinea” and “Rice-growing regions” are far from synonymous.

Mercantile advertising of ships that transported enslaved Africans can also reveal, in a somewhat refracted manner, contemporary perceptions of Africa’s coastal regions. In early South Carolina, merchants usually advertised African shipments as “directly from Africa” or from “the Coast of Africa.” If they were more specific, they might tout the origins as being from, say, Angola, or the Gambia, or the Gold Coast. In 1752 William Stone was the first Charleston merchant to mention the “Grain Coast,” which then became a fairly commonplace way to describe some part of Upper Guinea (“Windward and Grain Coast” was a typical designation). The first explicit association between an African region and the cultivation of rice came six years later. The merchant firm Austin and Laurens described the origins of the slave ship *Betsey* as the “Windward and Rice Coast.” Thereafter “Rice” coast or country gradually supplanted “Grain Coast” (although the latter was still frequent) as a common designation for Upper Guinea locales. Thus in 1760 a merchant firm advertised a ship as having “200 fine Rice Coast Negroes from Sierra Leon”; the following year two ships arrived from “Bance-Island on the Rice-Coast”; in 1769 merchants described Cape Mount on the Windward Coast as “a

rice country” or as the “the centre of a Rice Country”; and two years later, Gambia merited the ubiquitous term, “a rice country.”<sup>22</sup>

Significantly, it was a London merchant involved in the African slave trade, although one interested in settling in the lowcountry, who made one of the earliest and most explicit references to African regional rice cultivation. In 1764 he thought that if slaves were brought to the lowcountry “from the Windward Coast where they cultivate rice they may be soon trained to plantation business.” Of course, he might have meant no more than that a prior agricultural background would be useful for a prospective plantation hand. Yet, notably, he singled out African rice planting as a useful precondition, much like his Charleston counterparts were doing at roughly the same time.<sup>23</sup>

Nevertheless, the most explicit advertisements about African rice-producing origins were post-Revolutionary and smack of enthusiastic—and quite possibly misleading--merchandising. Thus, in 1784 one merchant extravagantly praised a shipment of Africans from the Gambia as “well acquainted with the cultivation of Indigo, Rice, and Tobacco,” while the following year another merchant said that Gambian slaves knew how to cultivate rice and “are naturally industrious,” and yet another described two vessels from the Windward and Gold Coast as containing Africans who “have been accustomed to the planting of rice” or “accustomed to the planting of both rice and corn.” Hyper-advertising seems at work in such claims.<sup>24</sup>

In short, knowledge about the coastal region of origin of African slaves is an extremely imprecise indicator of their knowledge of rice cultivation. Slaves arriving in the Americas from Upper Guinea were more likely to know about risiculture than those

coming from other regions, but on many vessels arriving from Upper Guinea there must have been no one at all with expertise in rice cultivation, especially in the period when the South Carolina business was developing.

### **Gender**

The claim that the lowcountry imported a higher than usual proportion of women is patently false. Before 1776, the male ratio of the lowcountry's incoming Africans was 70 percent, a little higher than the Chesapeake (68 percent) and all other North American regions (69 percent) (see table 5). Furthermore, in an even broader context, the lowcountry imported fewer females than did the Caribbean, where before the 1776 the male ratio was just 62 percent. Moreover, the male ratios of Africans arriving in the lowcountry from Upper Guinea was slightly higher (about 71 percent) than that from all other African regions (about 68 percent) (see table 6). The data on age are somewhat thinner than those for sex, but the breakdown for eighteen separate batches of arrivals before 1776 indicate that one third of the females were classed as girls. In other words only about one in five of the slaves arriving in South Carolina and Charleston were women. In the rest of the Americas at this time, evidence from over 1,200 voyages points to more women (between one in three and one in four) and fewer children. Perhaps some of the girls coming into Charleston and Savannah knew something about growing rice, but if planter preferences had such a strong influence over the demographic structure of the traffic, surely women would have comprised a larger proportion of most shipments.

[Tables 5 and 6 about here]

But do the stated preferences of planters point in a different direction to the patterns of actual arrivals? According to Robert Pringle in 1741 "full Grown Men &

Women [were]most fitt for this market”, though he was prepared to concede in May 1744 that when the prohibition on imports into the colony ended in July 1744 a ‘parcell’ of slaves from the West Indies comprising mainly ‘Boys & Girls of about 15 or 16 years of Age of which 2/3 Boys & 1/3 Girls’ might do very well.<sup>25</sup> This was not the only occasion when slave factors saw opportunities for sales of slaves of this age in South Carolina. In 1756, Henry Laurens noted that ‘tall able young People tempt many of our Folks to buy when they are in no real need of them’ provided they are ‘very good & in full Flesh and is composed of at least 2/3d males’ and he repeated the observation a few months later when urging imports from St Kitts, noting that they must be ‘young robust People’ and that ‘Males sell to much more advantage than the Females.’<sup>26</sup> The last observation reflected a broader preference for males over females what ever the age of imported slaves. Thus in 1755 it was emphasised that in selecting 100 slaves in St Kitts to resell in South Carolina, at least two-thirds ought to be men aged 18-25 and the rest young women aged 14-18.<sup>27</sup> In the following year it was reported that while most of the prime males from a shipload of slaves from Sierra Leone had been sold for very good prices, prime women were proving much harder to sell, “many of them [being] good People but nobody comes near to Ask the price.”<sup>28</sup> In another indication of planters’ preferences for adult males, Laurens observed of a shipment from the Gambia that though they were good slaves, they “were not well assorted, more Women than Men & more Boys & Girls than are usual in Gambia Cargoes.”<sup>29</sup>

Were the planters of Amazonia different from those in the lowcountry on the issue of seeking out an unusual number of female slaves from Senegambia as a way of increasing the skills pool of a labor force part of which was forced to grow rice? The data

on sex ratios are much better for Amazonia than for British North America. Table 7 reveals the male ratios for nearly 13,000 slaves disembarking in Maranhão and Pará in the period when rice was expanding most rapidly. This sample is about 20 percent of the slaves arriving in Amazonia from Africa in these years. It is compared with the equivalent ratios for 435,000 slaves carried across the Atlantic to all parts of the Americas in the same period. The proportion of females disembarked in Amazonia in the second half of the eighteenth century was above the long term average for the transatlantic slave trade in all periods—and was greater than the share into the lowcountry--but for 1760 to 1810 it was no different for Amazonia than for the rest of the Americas, most of which was growing sugar at this time. Moreover, one third of the females on board eighty-five vessels arriving in Para and Maranhao for which data have survived were classed as girls, not women – again, a ratio little different from the rest of the Americas.<sup>30</sup> Amazonian planters thus received no more women than did the rest of the Americas at this period.

[Table 7 about here]

When we turn to the African side, this predominance of males from Upper Guinea arriving in the lowcountry and Amazonia does not correspond to what intensive rice production is thought to have done to gender relations in at least some parts of Africa. Here, too, there is a gap between what historians have imagined must have happened and the patterns revealed by the transatlantic slave trade database. Where paddy rice production took hold in Africa, the main requirement was large amounts of well-organized group labor. Thus, communities engaged in such agriculture came to rely on their strongest members, young males. Agricultural labor in such circumstances, Walter

Hawthorne argues, became “masculinized.” Consequently, Hawthorne argues, the percentage of female slave exports from the coastal zone of Upper Guinea was considerably higher than most parts of Africa. Men were especially valuable in the coastal zone; women and younger children tended to be relatively expendable. But such seems not to have happened among the Africans coming into the lowcountry. Rather its pattern fits more with what James Searing argues happened in Senegambia, namely, women and children generally were in the majority among captives in wars and raids and seemed to have been retained domestically because they were easier to control and would in future reproduce. This local demand for female slaves helps explain why slaves exported from Upper Guinea were predominantly male.<sup>31</sup>

### **Prices**

But once in the rice-growing areas of the Americas, did female slaves command higher prices than in other plantation economies. Is it true, as Carney alleges, that in South Carolina the labor of female slaves “was valued more on a par with male bondsmen than in the slave markets of the West Indies”? Once again there is no evidence to support such a position. South Carolina planters were in fact typical of most purchasers of slaves throughout the eighteenth century Atlantic world. Here, as elsewhere, slave factors almost invariably used prices of prime male prices as the reference point. Moreover, they were sometimes at pains to emphasise the premium on prime male slaves over other slaves, including females. The correspondence of Laurens again provides clear testimony to this. For example, in 1755 he claimed that the difference in price between men and women was ‘never less than £3 sterling per head, sometimes £6’ and went on to note that “young Lads from 13 to 5 Years of age wont bring so much as Men by 5 or £6

sterling.” These claims were echoed in further comments in 1757 when Laurens noted that “generally 5 or £6 sterling per head” separated the prices of men and women.<sup>32</sup>

We have uncovered only two itemised accounts of sales of whole shiploads of slaves arriving in the South Carolina the mid-eighteenth century, one for Sierra Leone, the other for Angola. But in addition to itemized accounts, there are reports of prices of prime male and female slaves sold from at least four other shiploads of slaves.

Combining these sources produces the evidence on prime male and female price differentials shown in the table 8. The table suggests that Laurens’ observations on adult male- female price differentials were broadly accurate, with male prices being typically £5 and £8 sterling higher than females (sterling conversions at rate of £7 currency = £1 sterling). This translates, as column 6 of the table shows, into a prime woman selling on average for only 84.1 percent of a prime man for the six slave vessels for which we have records. Although the number of observations is limited, differentials seem to have borne little relationship to the origins of slaves. The sex-based slave price differential in South Carolina in the mid-eighteenth century was, however, almost identical to the 84 percent ratio found in a very large number of sales in Barbados between 1680 and 1723, when, of course the dominant crop was sugar and no rice was produced.<sup>33</sup> Such a price premium for males in Barbados at that time does not seem to have been significantly different from that found in other colonies at other times. It is little different from male-female differentials reported for the later cotton south as well as for slaves in the Cuban sugar economy in the mid-nineteenth century.<sup>34</sup> Contrary to what Carney claims, therefore, it appears that sex-based slave price differentials in South Carolina at the height of pre-

revolutionary slave inflows, were very similar to those observed for other parts of the slave Americas that produced no rice whatsoever.

(Table 8 about here)

### **Atlantic Context**

Without the capital, entrepreneurship, organizational capacity, and greed of European and European-American merchants and planters, rice would never have been an important crop in the Americas. European planters were avid experimenters. As early as 1704, one South Carolina resident, as Max Edelson notes, recalled seeing “some planters, who were essaying to make rice grow.” Empathy for underrepresented groups is no substitute for historical accuracy. Colonists brought their experience in controlling and channeling water, used in milling and field irrigation to place a distinctive English stamp on their plantation landscape. The use of irrigation reservoirs, for which apparently there are no African precedents, shows that English influences extended well beyond the superficial refinement of essentially African technologies.<sup>35</sup>

Those who argue for an African origin for rice cultivation in the Americas focus almost exclusively on issues of supply and ignore the demand side of the industry. The prices that rice commanded and the marketing process are critical to understanding the rise of the lowcountry rice industry. R. C. Nash incisively demonstrates that the critical determinant of demand was the fate of European harvests, because lowcountry rice’s primary market was among the poorer urban classes of northern Europe. Rice, he pithily notes, was “a poverty crop,” a substitute for bread cereals when bread prices rose. Shipping was also vital, particularly for a bulky commodity such as rice; freight charges per ton in the rice trade, as Russell Menard has shown, dropped significantly over the

course of the eighteenth century—a more impressive reduction of costs than occurred in the sugar or slave trades. Similarly, the marketing of rice was important, as Kenneth Morgan concludes: “flexibility, initiative, and cooperation on the part of merchants, shippers, correspondents, and factors were necessary to cope with elaborate legal practices, complex shipping patterns, rapid price fluctuations, shifting demand, and the varied uses of rice in different markets.” In all of these ways demand, shipping, and marketing were critical to the success of the rice industry.<sup>36</sup>

Yet supply probably was more important than demand, but the key factors were determined much more by whites than by blacks. As Nash shows, both extensive growth—simply putting more land and capital into production—and intensive growth or using resources more efficiently occurred in the lowcountry rice industry. Exports per slave increased as rice planters secured significant productivity gains by increasing the intensity of their slaves’ work effort, by making technical improvements in cultivation (particularly the resort to tidal irrigation) and processing (the greater use of machinery), and by increasing the size of their plantations with consequent returns to scale. Planters dictated these improvements.<sup>37</sup>

The importance of plantation organization to the emergence of rice as a dominant export crop gains special credence if alternatives are considered from an Atlantic perspective. The major demand for exported rice lay in northern Europe, but an important segment of the product went to southern Europe, an area much closer to the rice growing areas of Africa than to South Carolina, and at a time when transportation costs for any product carried across the Atlantic typically comprised at least 50 percent of its final selling price. Labor was always much cheaper in the Old World than the New.

Senegalese gum arabic, a raw material needed in the cloth printing industry, was in high demand in Europe. The English considered the dyewood (called cam-wood from the Timne word for red) of the Sierra Leone region the best in the world. It was the *raison d'être* of the RAC factory in Sherboro, and for the Sierra Leone region as a whole it was probably not overtaken by slaves until at least 1740. If Senegambia was the major West African region where a substantial commodity traffic survived throughout the slave trade era despite the disruptions of the latter, Sierra Leone exhibited an only slightly less pronounced pattern. If all that was necessary for a society to develop a successful export culture was an indigenous technology and abundant labor supply, why did not European merchants--always seeking ways to cut costs--eliminate perhaps two-thirds of their transportation charges and ship rice from the Gambia rather than from South Carolina? Such rice could have been grown on European-run plantations, or by Africans without European input, and shipped back to Europe on the many English vessels that traded directly for camwood between London and the Sherboro River.<sup>38</sup>

The answer, of course, is that before the French invasions in the later nineteenth century, Europeans never had the power to impose their will on the indigenous populations of Africa. As for the absence of the second option--an indigenous African industry rivalling that of gum--a number of possibilities exist. Africans may not have been interested; after all, they produced most of what they needed as it was, and for most of this period Europeans could offer little that was essential to African lives. Of course, an Atlantic trade--in gum and hides and in earlier times gold, as well as slaves--did exist, but none of these required much in the way of European resources. Rice was different. It hinged on an intensely exploitative plantation system that could not exist in Africa. The

American environment especially, we may hypothesize, the capitalistic mentalité of planters, offered something important, indeed essential, to the existence of a rice-based export sector.

One might also use the example of sorghum, about which Africans had much more exclusive knowledge than rice. Surely the reason sorghum did not take off as Atlantic crop had nothing to do with African knowledge and everything to do with Euro-American entrepreneurialism. Sorghum did not command the interest among Euro-Americans that rice did.

In the same way that it is best not to underestimate the Euro-American contribution in shaping the rice industry, African expertise should not be exaggerated as the key bargaining chip in securing supposedly less severe working conditions. Judith Carney poses an apt question: “Why would West African slaves transfer to planters a sophisticated agricultural system, based on the cultivation of rice, that would in turn impose upon them unrelenting toil throughout the year?” Her answer is that knowledge of rice cultivation provided slaves arriving in South Carolina with a crucial negotiating tool, enabling them to bargain for labor arrangements that guaranteed them greater autonomy than any other Southern agricultural environment. From this perspective, task labor introduced a degree of freedom into slavery’s oppression. In her view, slaves traded skills for autonomy. Is this convincing? Why would planters make such a bargain? Why would they secure for all succeeding generations of slaves the protections of a customary labor system?<sup>39</sup>

Does it not make more sense that task labor arose less from an implicit or explicit bargain but rather more organically from a variety of factors such as lower supervisory

costs, some inherent characteristics of the rice crop, and perhaps most of all to the economic rationality of the planters. As Peter Coclanis puts it, “the prominence of the task system in the area was due to, first and foremost, the planters of rice” who “held a near monopoly on state-sanctioned violence . . . and were thus unlikely to respect any traditions inimical to their interests or to be consistently outwitted or outbargained by an outgunned and, apparently, divided slave labor force.” Rice planters no doubt appropriated some knowledge from their slaves, “to which they added insights of their own,” Coclanis notes, “in establishing and legitimating a compensation system that allowed them to produce great quantities of rice with slave labor in a sickly climate, while minimizing their own supervisory and opportunity costs.”<sup>40</sup>

Furthermore, it is probably best not to be too celebratory about the leverage that tasking afforded. Even the task system could not protect Carolina slaves from almost ceaseless labor. Once in the hands of white capitalistic planters, rice culture became increasingly commodified for emerging international markets. Whatever knowledge and creativity Africans brought to lowcountry rice production, the agricultural system was based firmly on their enslavement and exploitation.

## **Conclusion**

In general, then, Africans certainly had a massive impact on the Atlantic world that went far beyond lives of unrelenting labor spent on plantations in the Americas. Like all migrants, both coerced and free, they carried knowledge of how to live, including how to produce, that helped make the societies of the Americas different from those of Europe, and as this knowledge interacted with the New World environment, different from Africa too. In lowcountry rice production, there is no question that some slaves

introduced into the Americas a distinctively African sowing style, pressing a hole with the heel and covering the rice seed with the foot, that they hand processed rice by hand using an African-style mortar and pestle, and that they fanned rice with African-style coiled grass baskets. But a close look at the slave trade from an Atlantic perspective suggests not a shred of hard evidence that the rice culture of South Carolina, Georgia and Amazonia was any more dependent on skills imported from Africa than were its tobacco and sugar counterparts in the Chesapeake and the Caribbean respectively. The transatlantic connections that evolved, the age and sex composition of the slave trade, the broad shifts over time in transatlantic slaving patterns and the structure of slave prices are all largely explained without reference to a supposed desire on the part of rice planters for slaves with rice-growing expertise developed in Africa.

Table 1  
Share of Slaves Arriving in Different Regions of Mainland North America from African  
Regions in which Rice was Grown

	No. of Slaves from Rice- growing Regions	Slaves from Rice- growing regions as % of arrivals from all of Africa
Before 1751		
Chesapeake	8,893	22.5
South Carolina and Georgia	4,756	22.0
All other US regions	4,708	53.7
1751-1775		
Chesapeake	8,444	40.1
South Carolina and Georgia	35,568	58.5
All other US regions	2,088	54.4
1776-1800		
South Carolina and Georgia	6,710	49.1
All other US regions	913	65.0
1801-1825		
South Carolina and Georgia	13,465	31.7
All other US regions	304	14.2

Source: Calculated from *TSDT2*

Table 2  
Slaves from African Rice Regions Entering South Carolina, Georgia and the Caribbean,  
1676-1825

	Before 1751	1751-75	1776-1800	1801-25
SC-Georgia	4,756	35,568	6,710	13,465
Rice slaves as % of all slaves arriving	22.5	58.5	49.1	31.7
Caribbean	77,019	188,541	119,993	36,623
Rice slaves as % of all slaves arriving	10.6	23.6	13.5	16.1

Table 3

Share of Slaves Arriving in Different Regions of Brazil from African Regions in which Rice was Grown

	No. of Slaves from Rice-growing Regions	Slaves from Rice-growing regions as % of arrivals from all of Africa
Before 1751		
Brazil north of Pernambuco	1,607	25.6
All Other Brazilian Regions	5,985	1.2
1751-1775		
Brazil north of Pernambuco	16,708	76.6
All Other Brazilian Regions	448	0.1
1776-1800		
Brazil north of Pernambuco	25,449	66.7
All Other Brazilian Regions	385	0.1
1801-1825		
Brazil north of Pernambuco	16,009	37.1
All Other Brazilian Regions	2,025	0.3
1826-1850		
Brazil north of Pernambuco	1,816	26.3
All Other Brazilian Regions	3,572	0.6

Source: Same as table 1

Table 4

African Origins of Slaves Arriving in North-east Brazil from Africa and Rice Exports from North-east Brazil, prior to 1810.

	Senegambia, Sierra Leone Windward Coast	Gold Coast to South- east Africa	Total slaves of known origin	Column 1/ Column 3	Estimate of Total Slaves Arriving	Annual Rice Exports in millions of lbs
pre1756	2,847	4,194	7,041	0.40		0
1756-60	2,008	1,742	3,750	0.54	4,482	0
1761-65	3,393	3,367	6,760	0.50	7,511	0
1766-70	5,383	0	5,383	1.00	5,981	.1
1771-75	4,812	0	4,812	1.00	5,804	1.8
1776-80	5,168	1,938	7,106	0.73	9,104	5.8
1781-85	4,088	1,204	5,292	0.77	7,663	8.2
1786-90	6,089	3,676	9,765	0.62	11,209	11.1
1791-95	7,421	2,568	9,989	0.74	11,099	-
1796-00	3,889	3,582	7,471	0.52	8,937	11.2
1801-05	6,106	9,088	15,194	0.40	18,257	8.9
1806-10	9,853	3,630	13,483	0.73	14,981	13.5
	61,057	34,989	96,046	0.64	10,5028	-

Sources: Same as table 1. Dauril Alden, supplemented from AHU.

Table 5

Male ratios of Slaves Arriving in the US by Broad Region of Disembarkation before 1776

	Mean	No of vessels	Std. Deviation	No of slaves
Chesapeake	0.683	21	0.169	2,757
S. Carolina and Georgia	0.707	11	0.138	3,392
All other US Regions	0.693	13	0.147	1,249
Total	0.692	45	0.152	7,398

Source: Same as table 1

Table 6

Male ratios of Slaves arriving in South Carolina and Georgia before 1808 by Broad African Region of Embarkation

	No of vessels	Std. Deviation	Mean
Upper Guinea	11	0.140	0.706
All Other African Regions	11	0.094	0.677
All African Regions	22	0.117	0.691

Source: same as table 1

Table 7

Sex Ratios of Slaves Arriving in North East Brazil from Possible Rice Growing Regions in Africa Compared to Sex Ratios Slaves Arriving in All the Americas from All parts of Africa, 1761-1800

	North-East Brazil from Senegambia		All of the Americas from all Parts of Africa	
	Male Ratios	Sample Size (slaves)	Male Ratios	Sample Size (slaves)
1761-65	0.687	2,225	0.625	19,237
1766-70	0.623	2,658	0.613	90,155
1771-75	0.592	3,164	0.612	30,484
1776-80	0.602	2,470	0.634	28,564
1781-85	0.623	1,426	0.626	41,264
1786-90	-	-	0.624	53,601
1791-95	-	-	0.626	120,423
1796-00	0.742	945	0.650	51,107
	0.631	12,888	0.630	434,835

Source: Same as table 1.

Table 8

Prices of Prime Men and Women Slaves Sold from Six Slave Vessels Arriving in Charleston, 1756-84

Name of Vessel (voyageid in TSTD2)	Year	African Origin	Price for Prime Men (Pounds) <sup>1</sup>	Price for Prime Women <sup>1</sup>	Ratio of Women's to Men's price
Orrel (90515)	1755	Gambia	295	255	0.864
Africa (17384)	1756	Calabar	255	210	0.824
Carlisle (75234) <sup>2</sup>	1756	Gambia	255	200	0.784
Hare (36187) <sup>3</sup>	1756	Sierra Leone	255	220	0.863
St. Andrew (77252)	1756	Gambia	235	200	0.851
Comte de Nord <sup>4</sup> (80917)	1784	Angola	69.1	59.3	0.858
All vessels					0.841

Notes:

1. Where slaves prices are reported in bands (eg £280-£300 per male), the mid-point of the band is used.
2. Some slaves from Bance Island.
3. Includes all prices for men individual men and women where these are distinguishable in the accounts.
4. Data are for slaves sold in the first one third of the accounts only, following the method of Galenson, *Traders, Planters and Slaves*, and prices are reported in pounds sterling.

Sources: Comte du Nord from British National Archives, Exchequer, E219/377; all others from *Papers of Henry Laurens*, I, 327; II, 178-9, 246, 256-8, 303, 316.

## Notes

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<sup>1</sup> Peter H. Wood, *Black Majority: Negroes in Colonial South Carolina from 1670 through the Stono Rebellion* (New York, 1974); Daniel C. Littlefield, *Rice and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina* (Baton Rouge, La., 1981); Judith A. Carney, *Black Rice: The African Origins of Rice Cultivation in the Americas* (Cambridge, Mass., 2001). For a recent discussion of the historiographical currents, in which Carney's book is favorably mentioned, see Barry Gewen, "Forget the Founding Fathers," *New York Times Book Review*, June 5, 2005, 30-33, espec. 31.

<sup>2</sup> Carney, *Black Rice*, 38-39, passim.; Walter Hawthorne, *Planting Rice and Harvesting Slaves: Transformations along the Guinea-Bissau Coast, 1400-1900* (Portsmouth, N.H., 2003), 36-9; Roland Portères, "African Cereals: Eleusine, Fonio, Black Fonio, Teff, Brachiaria, Paspalum, Pennisetum, and African Rice," in Jack R. Harlan et al, eds., *Origins of African Plant Domestication* (Paris, 1976), 409-52; A. J. Carpenter, "The History of Rice in Africa" in I. W. Buddenhagen and G. J. Persley, eds., *Rice in Africa* (New York, 1978), 3-10.

<sup>3</sup> Judith A. Carney, "'With Grains in Her Hair': Rice in Colonial Brazil," *Slavery and Abolition*, 25 (2004), 1-27; idem., "Out of Africa: Colonial Rice History in the Black

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Atlantic,” in Londa Schiebinger and Claudia Swan, eds., *Colonial Botany: Science, Commerce, and Politics in the Early Modern World* (Philadelphia, 2005), 204-20 (quote on p. 219); Richard Price, “Subsistence on the Plantation Periphery: Crops, Cooking, and Labour among Eighteenth-Century Suriname Maroons,” in Ira Berlin and Philip D. Morgan, eds., *The Slaves’ Economy: Independent Production by Slaves in the Americas* (London, 1991), 107-27, espec. 109, 117; idem., *First-Time: The Historical Vision of an Afro-American People* (Baltimore, 1983), 89-90, 129-34; Stuart B. Schwartz, *Slaves, Peasants, and Rebels: Reconsidering Brazilian Slavery* (Urbana, Ill., 1996), 54, 62. For other places, see Carney, *Black Rice*, 75-8, Hans Sloane, *The Natural History of Jamaica . . .*, 2 vols. (London, 1725), I, 103; Gwendolyn Midlo Hall, *Africans in Colonial Louisiana: The Development of Afro-Creole Culture in the Eighteenth Century* (Baton Rouge, La., 1992), 10, 59, 122-4, 180. For “bioprospectors,” see Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge, Mass., 2004), although she does not treat rice.

<sup>4</sup> Carney, *Black Rice*, 107 (quote).

<sup>5</sup> Calculated from David Eltis, Stephen Behrendt, David Richardson and Manolo Florentino, *The Transatlantic Slave Trade Database: A Second Edition* (forthcoming) (henceforth referred to as TSDT2). See also Eltis, *Rise of African Slavery in the Americas* (Cambridge, 2000),

<sup>6</sup> Between 1751 and 1775, Jamaica received 38,430 and St. Domingue 20,525 slaves from Upper Guinea (calculated from TSDT2). These numbers represent 18.2

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percent of the slaves arriving in Jamaica and 9.2 percent of the slaves arriving in St. Domingue in this quarter-century.

<sup>7</sup> For two excellent discussions of the forces shaping the direction of and fluctuations in the transatlantic slave trade, see Lorena S. Walsh, “Mercantile Strategies, Credit Networks, and Labor Supply in the Colonial Chesapeake in Trans-Atlantic Perspective,” in David Eltis, Frank Lewis, and Kenneth Sokoloff, eds., *Slavery in the Development of the Americas* (New York, 2004), 89-119 and Stephen D. Behrendt, “Markets, Transaction Cycles and Profits: Merchant Decision-Making in the British Slave Trade,” *William and Mary Quarterly*, 3d Ser., 58 (2001), 171-204.

<sup>8</sup> A greater availability of animal protein in the diet of slaves on the North American mainland, as opposed to the islands was probably more important than rice in building a link between both the Chesapeake and South Carolina in the Americas and Upper Guinea in Africa, given that most of Upper Guinea lay outside tsetse fly zone of sub-Saharan Africa. The Royal African Company’s factors in Kingston noted as they sold on a batch of slaves recently arrived from the Gambia into the intra-American slave trade, that Jamaican planters “have noe esteeme for those sorts of negroes [Gambia] who are used to eat soo much flesh in their own countrey that they seldom proove well under a dyet except it be for house negroes.” (Hender Molesworth, Charles Penhallow, Walter Riding, April 7, 1684 in British National Archives, [henceforth BNA], T70/16, fol 80).

<sup>9</sup> David Eltis and David Richardson, “Productivity in the Transatlantic Slave Trade,” *Explorations in the Economic History*, 32 (1995), 465-84.

<sup>10</sup> Calculated from TSĐT2.

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<sup>11</sup> South Carolina alone exported an average of 41 million lbs annually between 1785 and 1789 (*Historical Statistics of the United States*).

<sup>12</sup> Dauril Alden, "Late Colonial Brazil, 1750-1808," in Leslie Bethell, ed., *The Cambridge History of Latin America*, 6 vols, (Cambridge, 1984-), vol 2 *Colonial Latin America*, 601-60.

<sup>13</sup> See *TSTD2*, which confirms the earlier assessment of Colin M. MacLachlan, "African Slave Trade and Economic Development in Amazonia, 1700-1800," in Robert B. Toplin, ed., *Slavery and Race Relations in Latin America* (Westport, Conn, 1974), 112-45, espec., 115-20.

<sup>14</sup> Alden, "Late Colonial Brazil, 1750-1808," 635-37.

<sup>15</sup> *Ibid*, 639.

<sup>16</sup> Manuel Nunes Dias. Fomento e Mercantilismo: A Companhia Geral do Grao-Para e Maranhao (1755-1778) (Belem: Universidade Federal do Para, 1970), pp. 433-4.

<sup>17</sup> For Priscilla's story, see Edward Ball, *Slaves in the Family* (New York, 1998), 192-5; *National Geographic News*, June 8, 2005; Joseph A. Opala, *The Gullah: Rice, Slavery, and the Sierra Leone Connection* (Freetown, Sierra Leone, 1986), and *The Gullah: Rice, Slavery, and the Sierra Leone – American Connection* (Fort Sumter, S.C., 2000); and <http://www.yale.edu/glc/priscilla>.

<sup>18</sup> James F. Searing, *West African Slavery and Atlantic Commerce: The Senegal River Valley, 1700-1860* (Cambridge, 1993), 50-2, 60-1, 79-87, 119, 134-8, 140; George E. Brooks, *Landlords and Strangers: Ecology, Society, and Trade in Western Africa, 1000-1630* (Boulder, Colo., 1993), 89

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<sup>19</sup> Hawthorne, *Planting Rice and Harvesting Slaves*, 36, 152-4.

<sup>20</sup> Olga F. Linares, "Deferring to Trade in Slaves: The Jola of Casamance, Senegal in Historical Perspective," *History in Africa*, 14 (1987), 113-39, and also see her "From Tidal Swamp to Inland Valley: On the Social Organization of Wet Rice Cultivation among the Diola of Senegal," *Africa*, 51 no. 2 (1981), 557-95; Robert M. Baum, *Shrines of the Slave Trade: Diola Religion and Society in Precolonial Senegambia* (New York, 1999), 28-9, 108-29; Hawthorne, *Planting Rice and Harvesting Slaves*, 96; Walter Rodney, *A History of the Upper Guinea Coast, 1545-1800* (Oxford, 1970), 20-2, 112; Bruce L. Mouser, "Who and Where Were the Baga? European Perceptions from 1793 to 1821," *History in Africa*, 29 (2002), 337-64; Carney, *Black Rice*, 29.

<sup>21</sup> Searing, *West African Slavery and Atlantic Commerce*, 121-2. For the suggestion that women milled rice on the Atlantic crossing, see Carney, *Black Rice*, 142-3, 146-7 and "Out of Africa," in Schiebinger and Swan, eds., *Colonial Botany*, 212-14. For the RAC ships see BNA, T70/938, pp. 15, 101; T70/939, pp 38fr, 106; T70/941, pp. 15b, 32b, 47fr, 53f; T70/942, pp. 61, 61b, 62; T70/943, pp. 8, 20, 35, 53; T70/944, pp. 9, 10, 23; T70/960, p.68. Admittedly, it would be good to have more than 20 cases, but these are more numerous than the few scattered references in Carney: *Black Rice*, 72. In addition to the four references mentioned by Carney (and not all to actual slave shipments), Max Edelson in his forthcoming book mentions the testimony of Capt Robert Heatley who traded slaves from the Gambia during the 1780s and provisioned his slave ships with "Guinea Corn, Rice, and Cuss-Cuss.": Great Britain, Parliament, House of Commons, *Report of the Lords of the Committee of Council . . .* (London, 1789), n.p., image 123, ECCO.

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<sup>22</sup> William Stone, *South Carolina Gazette*, May 11, 1752; Austin and Laurens, *ibid.*, Aug. 11, 1758; Da Costa and Farr, *ibid.*, Oct 18, 1760; News, *ibid.*, Sept. 12, 1761, as cited in Elizabeth Donnan, ed., *Documents Illustrative of the History of the Slave Trade to America*, vol. IV: *The Border Colonies and the Southern Colonies* (Washington, D.C., 1935), 379; Thomas Loughton and Roger Smith, *ibid.*, Mar. 23, 1769; Brewton, Doyley and Brewton, *ibid.*, May 4, 1769; Andrew Lord, *ibid.*, Sept. 5, 1771. For a description of rice growing around Cape Mount in the 1640s, see Paul Richards, “Culture and Community Values in the Selection and Maintenance of African Rice,” in Stephen B. Brush and Doreen Stabinsky, eds., *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights* (Washington, D.C., 1996), 209-29, espec. 213-16.

<sup>23</sup> Sketch of a plan Richard Oswald proposes to follow in settling a plantation in East Florida, May 24, 1764, bundle 517, papers of James Grant of Ballindalloch, Ballindalloch Castle, Scotland.

<sup>24</sup> George Garner, *Gazette of the State of South Carolina*, May 6, 1784; Robert Hazlehurst and Co, *ibid.*, May 30, 1785; A Pleym, *ibid.*, July 7, Aug. 25, 1785.

<sup>25</sup> *Letterbooks of Robert Pringle* 2 vols. ( ), 1: 284; 2: 684.

<sup>26</sup> Philip M. Hamer, George C. Rogers and Peggy J. Wehage (eds.), *The Papers of Henry Laurens*, 16 vols. (1968-), 2: 358, 455.

<sup>27</sup> *Ibid.*, 294-95.

<sup>28</sup> *Ibid.*, 265.

<sup>29</sup> *Ibid.*, 321.

<sup>30</sup> Calculated from *TSTD2*.

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<sup>31</sup> Hawthorne, *Planting Rice and Harvesting Slaves*, 4-15, 121, 137-8, 142, 152, 167-8; Searing, *West African Slavery and Atlantic Commerce*, 53.

<sup>32</sup> *Papers of Henry Laurens*, 2: 294-95, 455.

<sup>33</sup> David Galenson, *Traders, Planters and Slaves: Market Behavior in Early English America* (Cambridge, 1986), p.63.

<sup>34</sup> Robert W. Fogel and Stanley L. Engerman, *Time on the Cross: The Economics of American Negro Slavery*, 2, vols. (Boston, 1974), 1: ; Manuel Moreno Fraginals, Herbert S. Klein and Stanley L. Engerman, *American Historical Review* (1983):

<sup>35</sup> Max Edelson, "From Food to Commodity: The Domestic Origins of Lowcountry Rice Culture" chapter 2 of his forthcoming book, for which we are most grateful to the author for an advance look. This account is the most thorough and persuasive account of the varied origins of rice production in the lowcountry.

<sup>36</sup> R. C. Nash, "South Carolina and the Atlantic Economy in the Late Seventeenth and Eighteenth Centuries," *Economic History Review*, new series, 45 (1992), 677-702, espec. 682; Russell R. Menard, "Transport Costs and Long Range Trade, 1300-1800: Was There a European 'Transport Revolution' in the Early Modern Era?" in James D. Tracy, ed., *The Political Economy of Merchant Empires* (Cambridge, 1991), 268-71; and Kenneth Morgan, "The Organization of the Colonial American Rice Trade," *WMQ*, 3d Ser., 52 (1995), 433-52, espec. 435. See also Peter A. Coclanis, "Distant Thunder: The Creation of a World Market in Rice and the Transformation It Wrought," *American Historical Review*, 98 (1993), 1050-78 for further confirmation on the nature of European demand for rice in this period and also his *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670-1920* (New York, 1989).

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<sup>37</sup> See espec. Nash, "South Carolina and the Atlantic Economy," *Ec. Hist. Rev.*, new series, 45 (1992), 677-702. For more on the South Carolina rice industry, see Henry C. Dethloff, *A History of the American Rice Industry 1685-1985* (College Station, TX, 1988), and James M. Clifton, "The Rice Industry in Colonial America," *Agricultural History*, 55 (1981), 266-83.

<sup>38</sup> For Senegambia's commodity trade throughout the slave trade era see both volumes of Philip Curtin's *Economic change in Precolonial Africa: Senegambia in the Era of the Slave Trade* (Madison, Wisc., 1975). The history of the dyewood trade in the Sierra Leone and Sherboro region has yet to be written, but for camwood's importance see the early T70 volumes which include correspondence from the RAC factor at Bance Island and Sherboro.

<sup>39</sup> Carney, *Black Rice*, 98 (quote), and 99-101.

<sup>40</sup> Peter A. Coclanis, "How the Low Country was Taken to Task: Slave-Labor Organization in Coastal South Carolina and Georgia" in Robert Louis Paquette and Louis Ferleger, eds., *Slavery, Secession, and Southern History* (Charlottesville, Va., 2000), 59-78, which, in addition to crediting rice planters as the primary actors in the origins of the task system, also surveys previous explanations for its development.