

## Introduction

### *In Land of Cypress and Pine*

The basis for this book began twenty years ago when I enrolled in the College of Charleston's summer archaeological field school. After spending the first half of the semester honing our technique by digging five-foot by five-foot units, identifying soil stratigraphy, and collecting artifacts at the Charleston Museum's Stono Plantation, the archaeologists reoriented us students to a new site. For the remainder of the field school we investigated Willtown Bluff on the Edisto River, an early eighteenth-century township surrounded by plantations. My interest in inland rice cultivation grew from our work at the James Stobo site, a 1710 plantation located on the edge of the Willtown township and one mile from the tidal river. For three archaeological seasons between 1997 and 1999, I participated in excavations of the Stobo Plantation house foundation located on a hardwood knoll surrounded by a sea of low-lying cypress wetlands. During this time, I had a unique opportunity to walk off the dry terra firma and explore miles of inland rice embankments sprawling to the east and to the south of the house site. Major embankments traverse the wetlands on magnetic north/south and east/west axes, intersected by smaller check banks and drainage canals as far as the eye can see under the dense cypress and hardwood canopy.<sup>1</sup>

I was in awe of the expanse of Stobo's former inland rice fields and the tremendous amount of earth that enslaved laborers had moved to cultivate the grain. I also began to realize how this particular site was not

<sup>1</sup> Martha Zierden, Suzanne Linder, and Ronald Anthony, *Willtown: An Archaeological and Historical Perspective*, The Charleston Museum Archaeological Contributions 27 (Columbia: South Carolina Department of Archives and History, 1999).

thoroughly accounted for in the South Carolina rice historiography. Historical interpretations of inland fields note that the fields were simple in design and small in nature. As a result, I was not prepared to make sense of a site of this magnitude. I was also surprised by the sophistication of the water control techniques that Stobo's slaves utilized. Older historiography did not take into account the extensive canal networks used to channel water to and from the crop. Rather, historians had assumed that fields simply filled with impounded water that was then released downstream. At Stobo Plantation, slaves used a reservoir – or reserve – of impounded water to irrigate adjoining rice fields, which were embanked to retain water throughout the late spring and summer growing cycle. While noting the difference between text and landscape, I interpreted the Stobo site as exceptional, a high-water mark of this particular cultivation method.<sup>2</sup>

My curiosity about inland rice cultivation increased when I had the opportunity in 2005 to walk the most recent Francis Marion National Forest land purchase. The Charleywood tract, an eighteenth-century inland rice plantation, borders a tributary of the Wando River, which is also an arm of the Charleston Harbor. The plantation's rice fields provided a stark contrast to the Stobo site. While Stobo's fields followed the course of an inland small-stream floodplain and were irrigated by an

<sup>2</sup> Earlier histories note that inland cultivation was the first economically successful rice plantation. These interpretations also describe a single method of inland rice cultivation. See: Lewis Cecil Gray, *History of Agriculture in the Southern United States to 1860*, 2 vols (Washington, D.C.: Carnegie Institution of Washington, 1933; reprint, Gloucester, MA: Peter Smith, 1958), I: 280–284; Duncan Clinch Heyward, *Seed from Madagascar* (Chapel Hill: University of North Carolina Press, 1937; reprint, Columbia: University of South Carolina, 1993), 11–16; Converse D. Clowse, *Economic Beginnings in Colonial South Carolina, 1670–1730* (Columbia: University of South Carolina, 1971), 122–133; James M. Clifton, ed, *Life and Labor on Argyle Island: Letters and Documents of a Savannah River Rice Plantation, 1833–1867* (Savannah, GA: Beehive Press, 1978), ix–xi; Sam B. Hilliard, “Antebellum Tidewater Rice Culture in South Carolina and Georgia,” in *European Settlement and Development in North America: Essays on Geographical Change in Honour and Memory of Andrew Hill Clark*, ed. James R. Gibson (Toronto: University of Toronto Press, 1978), 98–100; Peter A. Coclanis, *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670–1920* (New York: Oxford University Press, 1989), 44–45, 61–63, 96–98. Small scale inland rice cultivation continued beyond the traditional Lowcountry rice zone during the post-bellum period, documented in Amelia Wallace Vernon, *African Americans at Mars Bluff, South Carolina* (Baton Rouge: Louisiana State University Press, 1993), 73–128, and Peter A. Coclanis and J.C. Marlow, “Inland Rice Production in the South Atlantic States: A Picture in Black and White (African Americans in Southern Agriculture: 1877–1945),” *Agricultural History* 72 (Spring 1998): 197–212.

adjoining reservoir, the Charleywood fields spread over an expansive tidal riverbank and resembled the great “hydraulic machines” that made rice planters so wealthy. After a century and a half of agricultural abandonment, Guerin Creek’s daily ebb and flow of brackish water inundated the impounded fields and caused the landscape to revert back to a spartina cordgrass ecosystem. How could scholars associate Charleywood with inland cultivation when its rice fields lie beside a tidal river? With no freshwater reservoir in sight of the former rice fields, I learned that Charleywood cultivators had to transport water two miles through canals to reach its agricultural destination. The rice fields looked like the fields bordering any of the tidal rivers throughout the South Carolina Lowcountry. Embankments surrounded the fields in a uniform and geometric manner and canals divided the fields to draw water onto and off the plants. Yet, this was classed as inland rice production because of the planter’s dependence on reservoirs. With the overall popularity of tidal cultivation, nineteenth-century observers originally defined inland rice not by the distance from the ocean, but by the distance from tidal rivers. While this definition describes a majority of inland plantations, as this book points out, it is not always the case. I would define this cultivation strategy primarily by its dependence on the downward flow of water – from the water source, through the rice fields, and out to a tributary or river. Through my observations at Stobo and Charleywood plantations, and among many other inland field systems during this period, I realized that the story of inland rice cultivation was much more complex and varied than historians had previously realized.

Reservoir-irrigated rice cultivation was the first successful type of plantation agriculture developed in South Carolina and it served as the foundation for the South Carolina colonial economy. But despite its significance, Lowcountry inland rice cultivation has had an elusive history. Unlike the visible tidal rice embankments still standing along South Carolina tidal rivers, remnant inland fields are harder to find and many presently lie in overgrown wooded watersheds. The lack of cultivation has transformed the once carefully managed fields into second- or third-growth forests and wetlands, some of which are protected as conservation lands today in ways that have obscured these past histories of human land use. The sparseness of primary records also has deterred historians from fully examining the impact that this early plantation complex had on Lowcountry history, as few plantation journals and ledger books survive from the colonial period that speak of inland rice culture. When tidal rice irrigation took hold in the mid-eighteenth century, most planters began

focusing their slave labor and documentation on this new technology because of the efficiency in irrigation and higher yields. Yet, inland cultivation continued in the antebellum period, as evidence from nineteenth-century plats and journals make clear. Far from being a primitive early approach to rice growing, inland cultivation has a history that parallels and interweaves with that of tidal cultivation.

This book argues the importance of how planters both adapted to and altered their environment by planting rice in South Carolina's inland swamps during the colonial and antebellum periods. It shows how attention to the environment leads to a historical analysis of the Lowcountry cultivators and the land. I ask why people chose to pursue such a labor-intensive crop, and how aspiring planters viewed the blank Lowcountry canvas and implemented their technological understanding of the world in constructing irrigation systems and agricultural fields. Inland cultivation began as a simple process for growing rice by taking advantage of suitable sites. As demand for the crop and land values increased, planters needed larger harvests and so spent more energy expanding old inland fields and crafting new inland rice environments. The need to adapt to the diverse landscapes of the South Carolina Lower Coastal Plain prompted planters to make each tract unique in order to maximize available land for rice cultivation. Their enslaved cultivators worked within the limitations of this environment to manage water flow and lessen the impact of storms, flooding, and drought, but as time went by they also transformed these environments in increasingly sophisticated ways.

The second theme of this book emphasizes the broader significance of inland rice, as one cannot understand how Lowcountry rice culture (and the broader understanding of the plantation economy) developed without appreciating its origins in inland planting. This argument provides a significant story about slave labor systems in the Americas. When experimenting initially with rice cultivation, colonists used African slaves to plant seeds in a variety of microenvironments. Reacting to the opportunities of the global economy, inland planters used enslaved labor continually to clear more land and expand the crop's output, just as tobacco planters in the Chesapeake set slaves there to clear new land. This practice encouraged the ever-expanding slave trade in South Carolina and the diaspora of Africans through the New World. Ways of mobilizing labor by task instead of by gang also took shape on inland rice plantations. The task system that developed in the Lowcountry is found nowhere else in American history. The ecological foundations of inland rice plantations are the keys to understanding the emergence of a

highly intricate labor and environmental management system in the dense South Carolina woodland watersheds.<sup>3</sup>

By the first decade of the eighteenth century, rice had become South Carolina's most successful commodity, partially due to the conducive southeastern geography. Freshwater wetlands ideal for this cultivation were nestled in tributaries and swamps several miles away from the South Carolina coast. Geographer Judith Carney describes these wetlands as "an array of microenvironments which include valley bottoms, low-lying depressions, and areas of moisture holding clay." The inland terrain challenged planters to recognize what features would successfully sustain rice. Once they identified these features, planters used enslaved Africans to revamp these available natural features for cash crop production. From hardwood depressions down to the cypress riverbanks, various ecosystems within the Lowcountry were modified for inland swamp plantations. The critical requirement for widespread cultivation was active water flow through these landforms.<sup>4</sup>

For the purposes of this book, the South Carolina Lowcountry begins at the coastline of the Lower Coastal Plain and extends approximately fifty miles inland. From a geological perspective, the Lowcountry boundary extends to the Surry Scarp. From a political perspective, the boundary was the inland survey line of the eighteenth-century Anglican parishes. Whether a coincidence or reflective of how geological formations had an effect on political boundaries, both lines of demarcation line up to approximately the same distance from the coastline. I identify the Lowcountry as a proper region similar to the South, so in this case I capitalize the term.<sup>5</sup>

<sup>3</sup> Philip D. Morgan, "Work and Culture: The Task System and the World of Lowcountry Blacks, 1700 to 1800," *William and Mary Quarterly*, 3rd ser., 39 (October 1982): 563–599; Peter A. Coclanis, "How the Lowcountry Was Taken to Task: Slave-Labor Organization in Coastal South Carolina and Georgia," in *Slavery, Secession, and Southern History*, eds. Robert Louis Paquette and Louis Ferleger (Charlottesville: University Press of Virginia, 2000), 59–78.

<sup>4</sup> Judith Carney, *Black Rice: The African Origins of Rice Cultivation in the Americas* (Cambridge, MA: Harvard University Press, 2001), 58; Hilliard, "Antebellum Tidewater Rice Culture," 97; S. Max Edelson, "Clearing Swamps, Harvesting Forests: Trees and the Making of a Plantation Landscape in the Colonial South Carolina Lowcountry," *Agricultural History* 81 (Summer 2007): 390–393.

<sup>5</sup> Charles F. Kovacik and John J. Winberry, *South Carolina: The Making of a Landscape* (Boulder: Westview Press, 1987; reprint, Columbia: University of South Carolina Press, 1989), 20–21; Donald J. Colquhoun, *Terrace Sediment Complexes in Central South Carolina* (Columbia: University of South Carolina, 1965), 21–23, 26.

Inland rice cultivation depended upon the simple principle that water flows from high ground to low ground. Water dispersed from rainstorms and springs flowed downhill, of course, while watersheds pulled this resource into creeks and streams. Inland planters found land in the Lowcountry that was level enough for rice cultivation, yet with a sufficient angle of two to three percent grade to allow drainage. Inland rice fields soon took shape throughout the South Carolina Coastal Plain, mostly in areas that were naturally suited to them. The physiographical coastal plain is generally downward sloping from the edge of the North American tectonic plate, the “fall line,” to the Atlantic Ocean shoreline. The Lowcountry topography provided ideal situations for inland rice cultivation. As the Atlantic Ocean’s shoreline alternately encroached and retreated during the Pleistocene epoch (approximately 2 million to 10,000 years ago), barrier island chains and corresponding tidal flats formed over the millennia to create terraces and scarps. Similar to modern barrier island systems, prehistoric terraces consisted of sand and shells, while the backside of these ridgelines consisted of clay loam from former tidal marshes and lagoons. Scarps serve as physical lines of demarcation – a transition – between the terraces, forming either from erosion of the receding coastline or during the depositional stage of former barrier islands.<sup>6</sup> Water’s movement through these sedimentary deposits shaped the land, forming knolls, ridges, and troughs between four and forty feet in elevation, which became critical features to rice plantations and the people who lived on them. Islands of “high pine land” lying just a few feet within and around plantation swamps provided sites for buildings and grazing fields, while creeks flowing around these landforms provided the water sources and floodplains needed for cultivating rice. The early agricultural practices were of necessity diverse, as planters adapted their economic activities to the various microenvironments located on their property. Rather than altering their environments extensively, early inland rice planters used the environments that they found.<sup>7</sup>

<sup>6</sup> Donald J. Colquhoun, *Geomorphology of the Lower Coastal Plain of South Carolina* (Columbia: Division of Geology, 1969), 23, 6; David R. Soller and Hugh H. Mills, “Surficial Geology and Geomorphology,” in *The Geology of the Carolinas: Carolina Geological Society Fiftieth Anniversary Volume*, eds. J.W. Horton, Jr. and V.A. Zullo (Knoxville: University of Tennessee Press, 1991), 290–291.

<sup>7</sup> Kovacik and Winberry, *South Carolina*, 20–21.

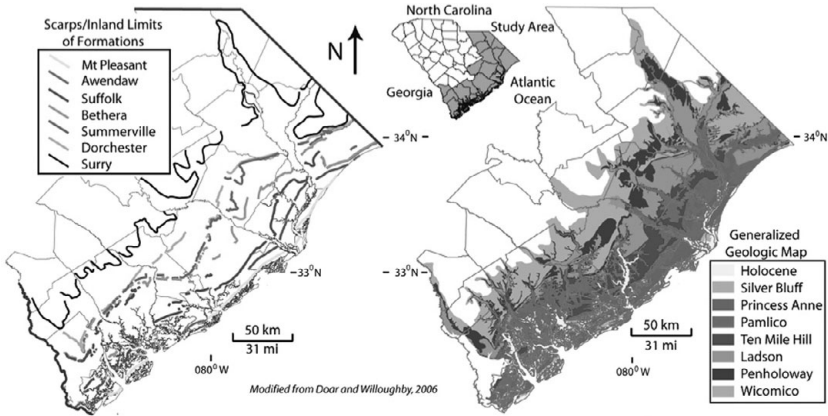


FIGURE 1.1 Generalized scarp and geology maps of the South Carolina Coastal Plain.

Image in William Richardson Doar, III, “The Geologic Implications of the Factors that Affected Relative Sea-Level Positions in South Carolina during the Pleistocene and the Associated Preserved High-stand Deposits” (Ph.D. diss., University of South Carolina, 2014), 58

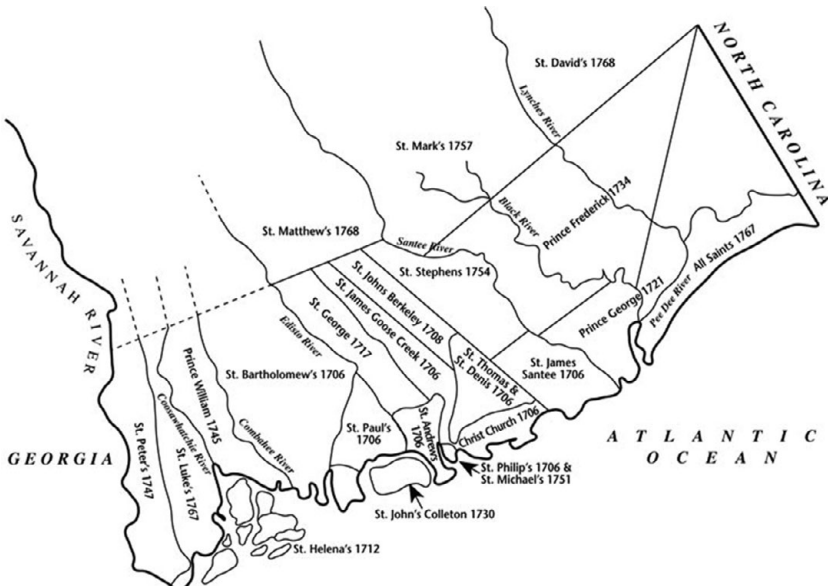


FIGURE 1.2 The South Carolina Lowcountry represented in Anglican parishes, ca.1768. Dates indicate when parishes were founded.

Image from the South Carolina Department of Archives and History. <http://archivesindex.sc.gov/guide/CountyRecords/parishes.htm> (accessed April 5, 2019)

It is this struggle with the natural world that defined inland rice planters and dictated their agricultural decisions. Origins of these tensions appear in the Chapter 2, which discusses early rice cultivation strategies in South Carolina from the grain's approximate introduction in 1685 to the end of the proprietary period in 1729. During this time, colonists transformed the grain from one of several experimental commercial ventures into the central cash crop of early colonial South Carolina. Domestic and international demand for rice motivated colonists to seek out the best methods to grow and process ever-greater quantities of this non-native crop. Planter dependence on enslaved labor to clear land, create field infrastructure, and sow and harvest the crop, increased. In this chapter, I discuss the dynamic relationship of rice farming with topography and culture. European colonists began experimenting with rice cultivation alongside that of wheat and barley. At the same time, Africans knowledgeable about growing rice made it thrive in wetland areas and it provided the necessity of subsistence gardens. By the turn of the eighteenth century, these two cultural interpretations of rice farming merged to produce grain on small-stream floodplains. At the heart of this chapter is an analysis of how both free and enslaved people used various topographies to cultivate a particular grain and the lasting results that evolved from the early plantation landscape.

Chapter 3 discusses the dramatic transformation of inland rice cultivation between 1730 and the end of the American Revolution which coincided with the appearance of tidal irrigation. A combination of the reopening of the colonial land office and the relatively stable price of exported rice created a surge in land acquisitions that moved further into the South Carolina frontier. Spurred on by the land boom, planters moved rice cultivation from small-stream floodplains down to broad inland basins. Their shift in topographical focus required planters to construct more intricate canal and embankment systems to move larger volumes of water on and off the rice fields. In order to build elaborate infrastructures on these low-lying wetlands, planters had to invest in additional enslaved labor. Planters forced slaves to dig out tremendous amounts of earth to create channels for water and use the soil to build networks of dams and embankments. I argue the dramatic change in inland rice cultivation was modeled on planters' development of tidal irrigation along the Lowcountry rivers throughout the mid-eighteenth century. Both the evolving inland system and emerging tidal system required more extensive labor forces than before to create precisely leveled fields, massive embankments, and extensive canals. Creating a



more extensive irrigation and drainage network called for a sophisticated understanding of hydrology and soils. With the intense development of rice fields in the Lowcountry basins, inland planters also encountered new problems. Malaria, declining soil fertility, pests, freshets and droughts all documented how the natural environment and the built environment could work at cross-purposes. Solutions to these conflicts were not in place when the American Revolutionary War put a temporary halt to rice output. The majority of planters abandoned rice cultivation during the Revolution and inland plantations were left in disrepair.

The latter chapters in this book detail the evolution of inland rice plantations from the end of the American Revolution until the Civil War. Chapter 4 highlights the collective effort of four rice plantations on the Wando River headwaters in Charleston County that enabled the owners to cultivate the crop up to the start of the Civil War. Current historiography discounts the role of inland rice cultivation in the antebellum period and focuses on the dominant tidal system. This chapter explains how inland cultivation maintained an important presence in the Lowcountry landscape. Indeed, contrary to inland rice's reputation as primitive, inland planters actively contributed to emerging trends in the scientific management of cash crops. To illustrate the complex role that inland rice plantations played in contrast to the predominant tidal system, this chapter provides a microanalysis of these four inland plantations – Charleywood, Fairlawn, Clayfield, and Wythewood – from 1783 to 1860. The owners of these tracts aggressively annexed surrounding plantations, intensified water management through canalization, and maintained a substantial enslaved labor population to carry out these tasks. Highlighting these four plantations, this chapter traces the evolution of inland rice culture and describes how it resembled and then diverged from tidal cultivation practices. Most inland planters, realizing the limitations of their soil fertility and of reliable impounded water, made adjustments in sowing techniques and flood schedules to increase irrigation efficiency. Having limited natural resources required inland planters to give additional attention to subtle changes in weather and environment. By 1840, these four plantations had been acquired by a new generation of planter entrepreneurs who sought to capitalize on their prior successes and diversify their rice holdings. However, these new planters had difficulty balancing the impounded water with successful cultivation as they watched their investments decline in rice output and property value before succumbing to total disruption from the Civil War.

In contrast to the fourth chapter's focus on the large antebellum inland rice planters, Chapter 5 explains how aspiring planters used inland rice plantations as a way of entering the planter aristocracy before the Civil War. Land values, as they relate to shifts in technology and agricultural output, paved the way for an emerging upper middle class to enter into the planter elite. During the antebellum period, most productive rice lands were beyond the means of professionals and merchants striving to enter into the upper echelons of society. When put up for sale, tidal rice plantations received a premium price, and the most desired lands stayed in families through inheritance or marriage. Land, and rice production, was a means to reflect one's status and define one's title in the rigid Lowcountry social hierarchy. Inland rice plantations, on the other hand, were more affordable and did become available to people aspiring to obtain rice planter status, although attempting this mode of social elevation came with monetary and emotional costs. Planters still had to populate their fields with a labor force, often in limited numbers, while the inland environment made difficult any attempts to plant the grain.

Chapter 6 documents inland cultivation strategies during the final two decades of the antebellum period. Using as a model the Biggin Basin, located at the headwaters of the Cooper River, this chapter discusses how a community of former inland rice planters revitalized the practice to supplement cotton production as a way to counter the fluctuating market. Revival of inland rice was a consequence of agricultural reform that took hold in select planter circles in the mid-nineteenth century. Lowcountry planters were part of this larger population having received the message through agricultural journals, scientific books, and agricultural societies. Promoters of agricultural reform called for a modern and scientific practice of agriculture to maintain soil fertility and crop output, halt westward migration, and curb the loss of status and political power by the South Atlantic states. Despite the lukewarm reception given to scientific agriculture in the Lowcountry, Biggin Basin planters began practicing conservation methods and expanding their operations. In this uncertain time, inland rice cultivation became a symbol of success and represented the very cash crop that brought wealth and status to this region a century earlier. Yet, for much of inland rice production on the eve of the Civil War, the realities of the market, labor requirements, and environmental limitations discouraged many from considering inland rice as a viable alternative to their more familiar cotton crop. By 1860, Biggin Basin planters abandoned any possibility of agricultural diversity by focusing on cotton production.

Ultimately, the story of inland rice cultivation in the South Carolina Lowcountry reflects the changing role of land use in relation to technology and culture. Inland rice cultivation took hold as the premier method of producing early colonial South Carolina's cash crop, and it evolved with further developments in land alteration and water management. However, when disease and agricultural disasters started to reveal the shortcomings of this built environment, and when the law turned against them, planters relegated inland rice cultivation to a secondary status. After the Revolution, those planters who endorsed its use defined inland rice cultivation in new ways. For some planters, inland rice was a legacy of agriculture initiated by their ancestors, but outdated for the times. Other planters practiced this older mode of rice cultivation out of desperation to achieve social or economic stability: for example, rice became a mode with which to improve their economic stability during fluxes in the long-staple cotton market. As shown in Chapter 7, to formerly enslaved peoples whose ancestors had worked the inland rice plantations for almost two centuries and also maintained small fields for themselves, this type of cultivation represented both oppression and subsistence. Inland rice cultivation represents a model of human interaction with the land. This book examines the agricultural practice to show how exchange and interconnection between people and their environment created both intentional and unforeseen effects.