



*William and Mary Quarterly*, 3d ser., 81, no. 2 (April 2024): 255–306

The Plantation Carbon Complex: Slavery and the Origins of Climate Change in the Early  
Modern British Atlantic

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In recent years, scholars working across the humanities and social sciences have suggested that agricultural land use emissions from early modern enslaved labor plantations may have played an important role in the origins of anthropogenic, or human-induced, climate change. Yet historians of slavery and the early modern Atlantic world have been slow to engage with this argument. Focusing on the major enslaved-grown export commodities of the colonial British Atlantic world, this paper employs a carbon accounting method to test whether enslaved labor plantations and enslaved-grown exports substantially increased agricultural land use emissions in the early modern British Atlantic and how they compared to British fossil fuel emissions—namely, coal burning—in the colonial period. For each of the major types of plantations modeled—tobacco, rice, and sugar—enslaved labor, regardless of crop, decisively increased the amount of carbon any single household could emit. But the wide divergence in emissions between different plantation types and export crops suggests that enslaved labor was only one essential, though not singular, factor shaping the carbon footprint of enslaved-based plantations and enslaved-grown commodities. It was instead the interaction of the multiple factors comprising what we call the *plantation carbon complex*—racial and gender ideologies, crop ecologies, capital requirements, African agricultural knowledge, and enslaved resistance, among other factors—that determined an individual plantation or commodity’s emissions. Nonetheless, the results reveal that the combined emissions of enslaved-grown tobacco, rice, and sugar exports far surpassed not only the emissions of the major non-enslaved-grown agricultural exports of the British Atlantic colonies but also British coal emissions throughout the eighteenth century. The form of enslaved-based racial capitalism represented by colonial British plantations thus marked an important transition in the shift toward a more carbon-intensive global economy.