



Library

Reinaldo Funes Monzote
From Rainforest to Cane Field
in Cuba: An Environmental History since 1492
Translated by Alex Martin
The University of North Carolina Press
Chapel Hill 2008, pp. xv + 357

Laura Hollsten

Luxuriant natural forests are a valuable resource. Forest histories usually focus on why, by whom and how this resource has been exploited and destroyed. There are many variations on this basic theme and many stories remain as yet untold. The history of Cuban forests is one of the more arresting cases. In *From Rainforest to Cane Field in Cuba*, Reinaldo Funes Monzote, Associate Professor of History at the University of Havana, illustrates how for a period of more than a hundred years forests in Cuba were mainly regarded as a source of wood for the building of sugar mills, firewood to fuel them and organic matter to enrich the soil where sugar cane was grown. Funes investigates the interaction between Cuban forests and sugar's invasion of the Cuban landscape from the early days of colonisation to the 1920s. The book is a revised English translation of the prize-winning Spanish original *De bosque a sabana: azúcar, deforestación y medio ambiente en Cuba, 1492–1926* (2004). Although the environmental degradation caused by sugar plantations has been noted by other Cuban historians, this work is the first to look at Cuban sugar production from the perspective of environmental history.

The common history of Cuban forests and sugar began in the 17th century and reached a culmination of sorts at the time of the sugar

boom stimulated by World War I. By 1926, the forest coverage of the island, which had been almost entirely wooded in 1492, had dropped to 15-20%. Like other sugar-producing islands in the Caribbean, Cuba consumed its forests, resulting in loss of biodiversity and soil exhaustion. In Cuba, however, the process was much faster than elsewhere. Here, sugar production took off at the dawn of the industrial revolution, which makes Cuba one of the most representative cases of early industrial agriculture in the Americas. The author's study of this process draws on a wide array of historical sources, including administrative material, travel accounts and scientific treatises.

Each of the chapters focuses on a distinct period in forest use and exploitation. The spatial frame of reference is based on physico-natural regions, and thus highlights the process whereby sugar cane cultivation gradually expanded into new natural areas as technological advancements increased the production capacity of the mills. In an introductory chapter, using both historical and scientific data, Funes sets out to reconstruct what the island must have looked like at the time of the arrival of the European colonisers, when it was covered with forests and inhabited by the indigenous people of the area. Although the early colonial period is characterised by livestock haciendas, by the early 17th century sugar mills had already been established in the Havana region. Development accelerated following the British occupation of Havana (1762–1763), which sparked a programme of colonial reforms that stimulated sugar production. The great leap forward occurred after the Haitian revolution, when Cuban planters managed to take advantage of the situation and Cuba replaced St. Domingue as the world's largest sugar producer.

Two chapters are devoted to the struggle between the competing interests of shipbuilding and the sugar industry. Havana had a flourishing shipbuilding industry. Its shipyards provided the Spanish Empire with some of its highest quality ships. The acceleration in the felling of valuable trees for the needs of the sugar industry led to a clash between sugar plantation owners and navy civil servants. Simply put, woodlands became ships or sugar ingenios, and more ingenios meant fewer ships. Funes stresses the importance of this conflict for our understanding of the profound change in mentality that occurred at that time, leading to great economic and ecological changes as the plantation economy took off. The conflict between the Havana ingenio owners and the Spanish

royal navy was one between two differing views on the use of natural resources. The navy's view was that the resources belonged to the Crown and should, at least to a certain degree, be used communally. The estate owners, instead, defended their right to use their resources freely according to their best interest. The longstanding battle ended with the royal decree of 1815, which granted the planters the right to clear forests on their land without any consideration for the forests' value to the Crown or the community.

The remaining three chapters analyze the time from 1815 to 1926, a long period characterized by absolute freedom to clear forests. Until the abolition of slavery in 1886, slavery, economic liberalism and the use of mechanical industrial processes were the key factors in sugar production. The expansion of railway networks accelerated the settling of areas further away from the coast. The end of the 19th century saw a concentration and centralisation of the sugar industry, which went hand in hand with the introduction of modern industrial technology. The importance of US markets and investment increased and continued to grow after independence. Large sugar factories, *centrales*, and "colossal ingenios" supplied by gigantic *latifundios*, produced enormous quantities of sugar. By the 1920s, the impact of sugar production on the forests led to growing concern and, eventually, to regulation. A presidential decree of 1926 marked the end of more than a century of free clearing of forests and provides a symbolic ending point for Funes' narrative.

From Rainforest to Cane Field is an impressively researched, carefully crafted and well-written analysis of the interaction between forests and the sugar-making apparatus in Cuba. It is also a powerful reminder of what an unsustainable relationship between nature and society can do to island ecosystems. However, in presenting to the reading public the local debates concerning the use of forests, the book also provides valuable information on conservationist thinking in Cuba. Both navy officials and naturalists such as Ramón de la Sagra and Miguel Rodríguez Ferrer commented on the harmful consequences of deforestation. Funes rightly observes that the individuals who were critical of the overexploitation and destruction of woodlands deserve more attention than they have received so far from historians of Cuba and the Caribbean. This is indeed one of several topics for further research indicated in this remarkable book, another notable one being that of the complex connections between Cuban forests and the emergence of global consumerism.

The book is illustrated with maps and photographs and provides useful tables and a list of plant and animal scientific names, as well as a helpful bibliographic essay. Scholars interested in Caribbean and Latin American environmental history as well as global history will welcome this book, which would also make a useful textbook for students in a range of disciplines from environmental studies to Latin American history.