Megan Raby, *American Tropics: The Caribbean Roots of Biodiversity Science*. Chapel Hill: University of North Carolina Press, 2017. xiii + 319 pp. (Paper US\$29.95)

In the middle of the nineteenth century, Alfred Russel Wallace called the tropics “a more ancient world” (p. 7). To botanists and zoologists at the turn of the twentieth, long-term observation of the tropics—where the “mother liquor” of all life was found (p. 95)—was the best way to test the evolutionary ideas Wallace had helped birth. As a result, these biologists pushed the United States to establish proprietary research stations in the “American tropics.” The phrase had both geographic and possessive meanings. Tropical biology in the Americas, Megan Raby shows, has always depended on imperial infrastructure and competition, and tropical biologists learned to frame their research in terms that appealed to political and economic power.

The first station, funded by the New York Botanical Garden in Jamaica in the early 1900s, was shuttered when “pure botany” couldn’t attract enough paying researchers. Its successors survived by linking “basic research” with baser interests. They were among the first to argue that political and commercial powers should pony up for pure science because it would result in unknowable future applications. Thus Harvard established a Cuba station on the Soledad plantation of the sugar magnate Edwin Atkins, who had long supported investigations into sugarcane. A research station amid sugar monoculture might seem unpromising for studying primeval flora and fauna, but its patron made expeditions possible across the island. The New York Zoological Society planted its station on disused rubber lands in British Guiana. It helped, in both cases, that the founders could call on family friends like Teddy Roosevelt.

One theme running throughout the book is the awkwardness scientists faced in turning idiosyncratic research sites into “synecdoches” for the whole tropics. Raby’s clearest case is the station established on Barro Colorado Island in the Panama Canal Zone (BCI, now the Smithsonian Tropical Research Institute). The Canal Zone government declared this former hilltop a nature preserve and kicked out Panamanians so that scientists could claim it as a miraculously surviving “sample” of jungle. It survived, in fact, by the grace of the U.S. military and United Fruit, who gave free passage to researchers in tacit exchange for access to botanical expertise. What made places like BCI attractive was their potential for control—over nonhumans but also over non-white and non-male humans.

It was not difficult to square the idea of a primordial tropics with the notion that human beings living there were lazy and undeserving. Scientists easily folded indigenous peoples, and even the descendants of slaves, into concepts like “jungle” or “wilderness.” Raby notes that few Latin Americans visited BCI

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except as labor, and throughout the book, she shows how U.S. scientists saw the tropics mainly as somewhere they might achieve glory—a place to “fili-buster for science” (p. 23)—rather than living places with knowledgeable people. World War II’s strategic need to cooperate with Latin American governments on agricultural matters began to change this. By the 1960s links to U.S. imperial power no longer looked politically attractive, nor did the argument that a station’s research would enable limitless exploitation. Instead, stations scrambled to proclaim that science was neutral and that their goal was “conservation and sustainable use” for all humanity (p. 174).

But the more scientists observed the tropics, the more they discovered that the region was neither as primeval nor as stable as first supposed. And to funders at home, U.S. scientists by the 1960s were no longer claiming the tropics as a mother liquor of life. Rather, the tropics mattered for their sheer density of species—their biodiversity.

Raby begins and ends in the 1980s with the rise of this concept, revealing that biodiversity’s charismatic image—the tropical rainforest—was no accident of marketing. Instead, many of biodiversity’s most visible defenders, including E.O. Wilson, traced their personal conservationism directly to student visits to tropical stations. The intellectual roots of modern ecology lay there too. The discovery that large mammals were vanishing from BCI, for instance, provided data for Wilson to theorize the “island effect” of species disappearance and argue the need for larger nature preserves. Their campaigns for biodiversity sent tropical biologists again into the corridors of power—where, Raby shows, they had been comfortable for a hundred years.

Raby’s actors are mostly U.S. scientists and scientific institutions, which allows her to display a remarkably persuasive genealogy of ideas. But she is perceptive about how ideologies of labor, racism, and gender underlay the tropical research enterprise, even if they aren’t her focus. *American Tropics* is an important contribution to our understanding of science in the Caribbean, and of the way supposedly universal knowledge is always a local hybrid.

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