The New Hork Times https://www.nytimes.com/2022/12/20/books/review/beaverland-leila-philip.html

## From Pest to Ecosystem Engineer: The Beaver Gets a Makeover

"Beaverland," by Leila Philip, offers an appreciative account of the North American rodent, whose habit of taking down trees and causing floods has given it a reputation as a nuisance.



By Jennifer Szalai

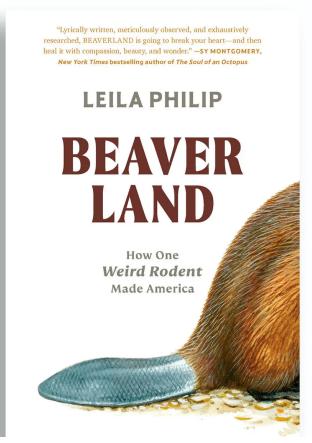
Dec. 20, 2022, 5:00 a.m. ET 4 MIN READ

BEAVERLAND: How One Weird Rodent Made America, by Leila Philip

Despite all its hard work, the species known as Castor canadensis, or the North American beaver, commands too little respect. Commonly depicted as a pest that causes flooding where humans don't want it, the beaver has a squat, rounded physique and herbivorous buck teeth that make it look decidedly less imposing than a wolf or a bald eagle. Even in Canada, where it is the country's official animal, it was derided on the floor of Parliament as a "dentally defective rat."

With "Beaverland: How One Weird Rodent Made America," the writer Leila Philip adds to a genre of pro-beaver literature that turns out to be more populous than most of us may have known. She offers her own "canonical list" of appreciative books that includes "The American Beaver and His Works" (1868), by the anthropologist Lewis Henry Morgan, and "The Romance of the Beaver" (1914), by the naturalist A. Radclyffe Dugmore. A more recent example is the memorably titled "Once They Were Hats," published in 2015 by the Canadian writer Frances Backhouse.

But it was the opening line of Dorothy Richards's "Beaversprite" (1977) that truly drew Philip in, "I'm writing this with a 60-pound beaver on my lap," Richards declared, going on to explain how she created a sanctuary near Little Falls, N.Y., not just around her property but inside her house, living with as many as 14 beavers at a time. The memoir includes a photograph of Richards having lunch with Eager, her favorite, with both of them seated at a cloth-covered table, china plates and all. The first time Richards brought a beaver into her house it dragged the rugs across the floor and pushed the chairs around, rearranging all the furniture in the room.



That beaver was simply doing w as Philip points out, beavers sha landscape. "Beavers," she writes ce for themselves. In this way, cape; they change the onment."

The title "Beaverland" describes

shaped by beavers."

Indigenous people may have hunted beavers for their meat and their fur, but they maintained taboos against overhunting, and some tribes, like the Blackfeet, considered them sacred animals that must never be harmed. The Europeans, however, knew that rich aristocrats back home in drafty stone castles were willing to pay huge sums of money for warm beaver pelts, and so upon their arrival in the New World the fur trade proceeded accordingly — decimating the beaver population nearly to the point of extinction.

Philip traces this history, showing how this global fur trade coincided with what American geomorphologists call "the great drying," the three centuries between 1600 and 1900 when the country's rivers and wetlands shrank and in some cases disappeared. Theodore Roosevelt's conservation efforts revolved around hunting — no wild places meant no wildlife, and no wildlife meant no hunting, which of course he couldn't abide. The connection persists to this day, with hunters and trappers paying for wildlife management with their license fees while taxes on guns and ammunition go to conservation agencies.

"The entire scheme is weirdly American — and deeply counterintuitive to those who don't hunt," Philip writes. It has also been, she adds, "fantastically successful." In 1948, Idaho officials dropped 76 beavers out of planes, in boxes attached to parachutes so that they could go forth and multiply. (The test beaver was named Geronimo.)



Leila Philip, the author of "Beaverland."

Philip introduces us to a number of hunters and fur traders, including a volunteer trapper in Connecticut named Herb, who shows her an area that has been flooded so extensively that the beaver ponds are getting perilously close to the local water reserve. A scene of Herb skinning a beaver gives her a chance to write about the oddities of the creature's anatomy, which includes two dexterous, five-fingered forepaws and two wide, webbed hind feet. The flat slab of its tail serves multiple purposes: as a rudder for steering in the water; as a handy paddle for communication (tail slaps on the surface of a pond); and as a finely calibrated sensor that can detect changes in water pressure, so that a beaver can rush to repair a breach in its dam even if it isn't close enough to hear the faintest trickle.

And those dams are why some landowners — whose worries about flooding and felled trees are often legitimate — will see one and call a trapper. But dams are also why some ecologists insist that beavers may be able to help remedy the effects of climate change. Beavers build dams, which create ponds, which create ecosystems. They move water, and so could help alleviate both droughts and floods. They create "beaver meadows," in which flowing water isn't necessarily visible but is nevertheless there, as if absorbed by a giant sponge.

All of this is inspiring, even if I wished Philip had said more about some of the possible complications in getting the balance right — between welcoming industrious beavers and keeping some of their more invasive activities in check. But she admits that part of what spurred this book was something more immediate — how moved she was to watch a family of beavers go about their lives near her house in Woodstock, Conn.

Unlike Dorothy Richards, Philip doesn't want to sit at a table and eat lunch with them; what heartens her most is to know that the beavers are raising their kits or repairing their dam — in other words, doing their thing. She imagines what happens when one of them swims deeper into the pond, as "the mud-filled water ruffles her mouth while along her back the dark slurry curries her fur."

**BEAVERLAND:** How One Weird Rodent Made America | By Leila Philip | 317 pp. | Twelve | \$30