

ARTS

How Beavers Shaped America, from Capitalism to Climate Change

The sweeping influence of one weird rodent, an ecological thriller, tender essays on deep-sea creatures, and more books out this month

By Amy Brady on December 1, 2022



Credit: London Ladd



NONFICTION

A BUSY HISTORY

Beaverland: How One Weird Rodent Made America

by Leila Philip

Twelve, 2022 (\$30)

Beavers, you may have noticed, are having a moment. These tireless engineers build woody dams that form ponds, which in turn filter out water pollution, sequester carbon, furnish wildlife habitat and avert drought. The *Los Angeles Times* recently called the beaver a “superhero,” and the *New York Times* has deemed them “furry weapons of climate resilience.” Wetlands with beavers are so good at fighting megafires that some researchers have urged the U.S. Forest Service to switch mammal mascots from Smokey Bear to Smokey Beaver.

In truth, western science is merely relearning what North America’s Indigenous peoples have known for millennia. The Blackfeet so venerated beavers’ water-creating abilities that they forbade killing them, and some Algonquian tribes consider the Great Beaver responsible for molding the Connecticut River Valley. Beavers fascinate people not only because of their landscaping skills but because of their anatomical oddities—their scaly tails, burnt-orange teeth, webbed hind feet and dexterous hands. “[T]here is an element of the sacred in the beaver, if only in its deep weirdness ...” writes Leila Philip in her engaging new book, *Beaverland*. “Is it any surprise that beavers have fired the human imagination in every continent that they are found?”

As Philip reveals, humankind and castorkind have always been intimately acquainted. Medieval Europeans prized beavers’ fatty tail meat as “forest cod,” and some Indigenous tribes fashioned their teeth into dice and used their scapulae as digging tools. Especially coveted were “castor sacs,” the scent glands with which beavers mark their territories (and which Aesop confused for testicles in one of his fables). The Romans believed castoreum capable of curing ailments from constipation to gout, and the substance still scents perfumes and occasionally flavors some foods today, although its culinary use has dwindled dramatically in recent decades. “If you like raspberry, strawberry, or vanilla ice cream and vanilla pudding,” Philip notes, you may have eaten beaver castoreum.

Of course, the most valuable beaver-based commodities were their pelts. *Beaverland’s* subtitle, *How One Weird Rodent Made America*, is no exaggeration. The industrial fur trade drove westward colonization, hurled tribes into centuries of resource war, and lined the pockets of John Jacob Astor, the country’s first multimillionaire, who parlayed pelts into a New York real estate empire. By destroying beaver ponds and wetlands, the fur trade also distorted ecosystems. “Before 1600, all of the continent from west to east, save a few desert sections, had stretched out as one great Beaverland,” Philip writes—a lush, wet world whose

waterways were “diffuse, messy, spread out, flexible at times, and most of all incredibly dynamic ... hydrating everything like a great wand of moving water.”

Although *Beaverland* may never fully return to its former grandeur, the rodents have made a remarkable recovery. Philip’s odyssey takes her to many sites integral to their comeback, such as the farmhouse in upstate New York where conservationist Dorothy Richards once kept colonies of semidomestic beavers. (They sometimes chewed the legs off mahogany dressers.) She also visits a forest in New Hampshire where contemporary scientists are studying the hydrology of rebuilt beaver meadows: “giant underground sponges that can soak up and hold large stores of water,” thus saving watersheds from drought.

Philip spends a lot of time with contemporary fur trappers. Pelts rarely fetch more than \$20 these days, but some trappers still make a half-decent living killing beavers at the behest of agencies and landowners, who fret that expanding ponds will damage roads and private property. Philip admirably negotiates these complex interactions: she’s respectful of trappers’ hard-won knowledge of beaver behavior yet rightly skeptical about whether lethal control is the best way to solve conflicts (although she could have more forcefully refuted the self-serving claim that we need trappers to prevent beaver populations from running amok). Rather than resorting to traps, it’s better to use “pond levelers”—pipe systems that partially drain impoundments, thereby balancing human needs with rodents’ instincts.

Among the challenges of writing about beavers is that they’re seemingly linked to *everything*—the rise of capitalism, the transformation of American landscapes and the fight against climate change, to name a few enormous themes. “Beavers,” Philip admits, “were leading me astray.” Indeed, we’re treated to lengthy digressions about coyote ecology, the history of New England’s stone walls and a documentary about naked mole rats.

Perhaps it’s only fitting that a book about beavers sometimes spills beyond its banks. Beavers, after all, are some of *Animalia*’s most unruly members: they compel rivers to overflow, transform single-channel streams into braided ones and ingeniously sabotage our precious infrastructure. It’s long past time that we again learn to embrace their glorious chaos.

Near *Beaverland*’s end, Philip travels to Maryland, where a stream restorationist named Scott McGill collaborates with beavers to capture pollutants that would otherwise flow into Chesapeake Bay. “To build a stormwater management pond with that kind of water retention would cost one to two million dollars,” McGill says, nodding to a beaver compound. The rodents, of course, built it for free.—*Ben Goldfarb*

Ben Goldfarb is a journalist and author of *Eager: The Surprising, Secret Life of Beavers and Why They Matter*, winner of the 2019 PEN/ E. O. Wilson Literary Science Writing Award.

FICTION

DRUMBEAT OF CLIMATE CHAOS

Building tension but lacking empathy

Expect Me Tomorrow

by Christopher Priest

Mobius, 2022 (\$26.99)

Acclaimed science-fiction writer Christopher Priest has a long history of creating high-concept thrillers, including *The Separation*, *The Islanders* and the World Fantasy Award-winning *The Prestige*. His ambitious new epic, *Expect Me Tomorrow*, foretells our climate future by following three interconnected lives that span both generations and continents. There's glaciologist Adler Beck, who struggles to study the shifts in Earth's climate amid increasingly debilitating seizurelike events in the late 1800s; a petty thief known as John Smith, who was arrested in 1877 for defrauding women; and former police profiler Charles Ramsey, who has an experimental chip implanted in his brain in the year 2050.

Priest is an expert at seamlessly adjusting his writing style to meet the topic. Beck's sections, for instance, have the sensibility and linguistic creativity of a Charles Dickens novel, whereas Ramsey's sections exhibit the paranoia and tension of a sci-fi thriller. Binding these various narrative threads together is a gripping mystery about the characters' shared histories and the ever present (and growing) danger of a changing climate.

Although the approaching ecological catastrophe serves as a steady drumbeat throughout the novel, it most often remains strangely distant from the lives of the characters. Readers learn about future water wars, refugee crises and worsening storm cells primarily through passing conversations and news reports. Rarely do they experience the ways climate change is felt in the lives of the characters, beyond a train delay caused by rail lines warping in the heat. Ultimately this disconnect prompts questions about the purpose of eco-fiction in our modern era. Is the goal simply to assert the existence of our world's most pressing problem, or does the genre bear responsibility to build empathy for the people who will suffer the most from this coming disaster? The novel certainly informs—Priest offers pages of scientific explanations of glaciology and the Year Without a Summer in 1816—but it doesn't develop an emotional core.

Without attention to the true human cost of the events Priest portrays, *Expect Me Tomorrow* too often finds itself in danger of using climate change merely as a plot hook—despite how compelling it is to read.—*Michael Welch*

IN BRIEF

How Far the Light Reaches: A Life in Ten Sea Creatures

by Sabrina Imbler

Little, Brown, 2022 (\$27)

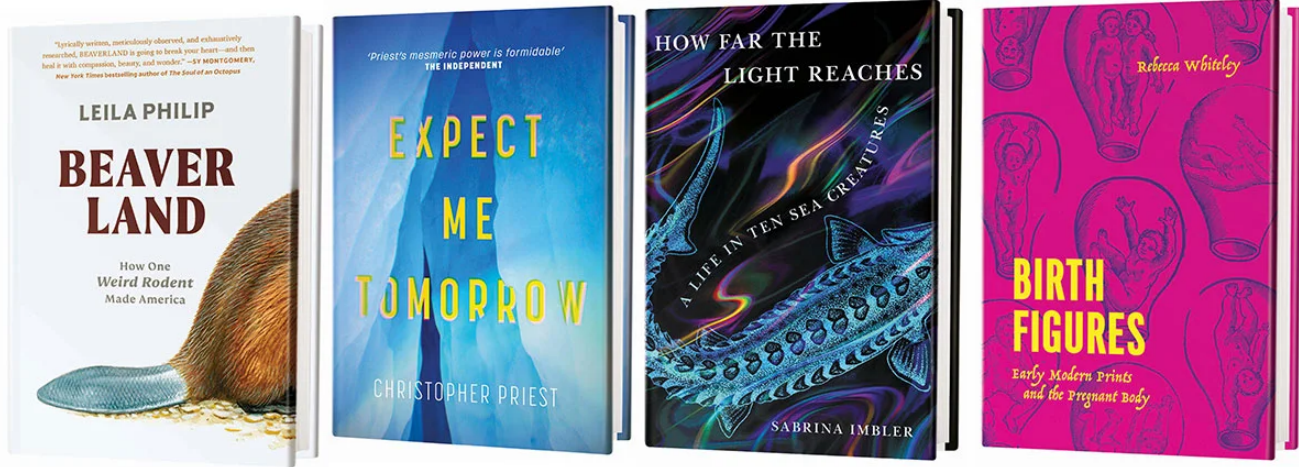
Journalist Sabrina Imbler’s latest book mingles memoir and marine biology in a tender, lucid look at the author’s life refracted through the deep sea. Their essays’ mesmerizing descriptions of the often mysterious lives of aquatic animals also serve as portals of inquiry into Imbler’s life on land. The purple octopus’s maternal sacrifice, the yeti crab’s vibrant but transient seafloor communities and the cuttlefish’s continual transformations are not forced anthropomorphic metaphors but starting points for a visceral exploration of Imbler’s family, sexuality, gender, race and relationships. These graceful cross-species analyses illuminate the joys and responsibilities we have as “creatures with a complex brain.”—*Dana Dunham*

Birth Figures: Early Modern Prints and the Pregnant Body

by Rebecca Whiteley

University of Chicago Press, 2022 (\$49)

In this fascinating porthole into English pregnancy culture in the 16th to 18th centuries, cherubic representations of fetuses in transparent wombs greet bewildered readers who, like me, had never heard of “birth figures” before encountering medical historian Rebecca Whiteley’s book—part anthropological analysis, part scientific critique. These formulaic illustrations appeared in midwife manuals—and as Whiteley tells it, they were woefully inaccurate depictions of anatomy and conveyed baffling assumptions about female autonomy. By recasting birth figures as evolving feminist iconography, Whiteley places these artifacts in the context of contemporary debates over reproductive rights.—*Maddie Bender*



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