

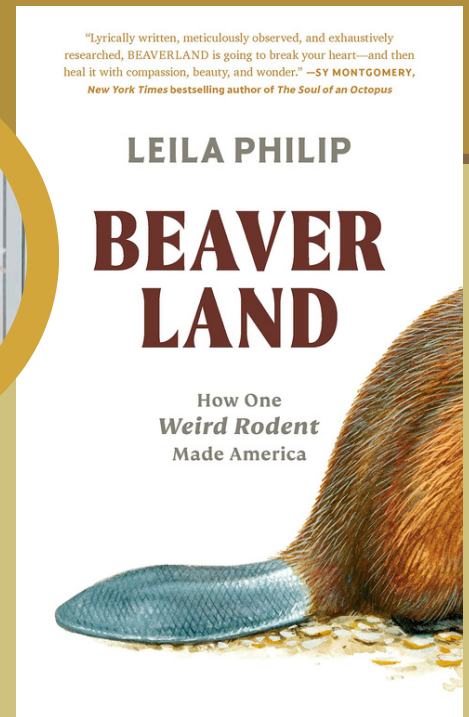
An Interview with Author Leila Philip

The New York Times Editors' Choice,
NPR Science Friday Book Club Selection

**"I think there is an element of
the sacred in the beaver, if
only in its deep weirdness."
—Leila Philip**



*Beaverland:
How One
Weird Rodent Made
America,*
Leila Philip,
Twelve, 2022,
336 pages



***Beaverland* is full of delightfully weird and wonderful characters, places, and revelations. Are there people, places, or revelations from your research that continue to capture your imagination? Or what's the craziest thing you did while researching *Beaverland*?**

I love this question because when I head out on a book like this it is not just that I head out on physical journeys to new places that may require physical rigor, (and in this case waders!), but it also requires journeys of the mind and heart. By that I mean, when I worked on *Beaverland*, and I spent six years researching this book before I felt I was done, it required me to become increasingly open and ready to where the research and the journey of understanding was leading me. And that meant going to some uncomfortable places as well as to some wonderful, stunning, and amazing ones. Revelations can be heady, but they can also be humbling! Especially when you realize that much of what you need to understand has been right there all along literally under your feet. I mean I wrote an entire book about a rodent that lived several hundred feet from my house.

When I first told potential publishers the title of my book, many of them winced. A rodent? A weird rodent? Beavers are an animal that for centuries we have over-exploited then ignored. Plus, beavers may be amazing animals, one of the only monogamous rodents who raise their young attentively for two years, but they live in swamps which we have historically despised and eradicated. For far too long we have considered beavers pelts then pests. Beavers made America, but this idea never took hold I think because the idea that a small swamp creature of 30–50 pounds or so, that works so quietly had actually made America did not fit our big colonizing spirit. From 1600 to 1900 the country was at work building an empire. An eagle or a bison -- large powerful creatures -- seemed better suited for the nation's idea of itself so these animals came to represent the American spirit. But in fact, beavers did make America, which is of course what I have so much fun researching then writing about in *Beaverland*. Their pelts

Author photo: John Earle/Hachette
Unless noted otherwise, all other photos courtesy of Leila Philip



Photo credit: Sharon Brown

made the first economies of this country, and their ponds, wetlands, and damming complexes shaped the river system that shaped the land of North America. For millennia beavers have helped manage the river systems that pulsed the river system that shaped the land of North America. For millennia beavers have helped manage the river systems that pulsed water throughout the continent. To imagine beaverland you have to imagine back when up to 400 million beavers filled every watershed and the river systems fanned out through the land, pulsing water as a great circulatory system. When colonization and the fur trade that it brought on (1600 - 1900) finally wiped them out, we initiated what scientists now call the "great drying" a period of environmental devastation that has left lasting impacts on us today as we face climate change.

Our American culture tends to describe moments of awe as being something big and loud - but in fact, moments of awe in my experience come rather quietly, more as a feeling of stillness and powerful calm, not at all as something flashy and loud. Whether this feeling is brought on by other people or in the natural world, for me I might describe it as a moment that shifts me out of myself and connects me to something much larger that I hadn't been in touch with just moments before. I experienced so many moments of wonder and awe at my local beaver pond. What before I had thought of as a messy swamp, I began to see for what it truly was, a biodiversity hub as miraculous and full of life as a coral reef.

During the many journeys I write about in this book I met many amazing people and had lots of mentors. Ironically, one of the first was a fur trapper named Herb Sobanski, whom I write about. It was Herb's great love for the woods and wetlands around Northeastern Connecticut and Hartford and in his way for beavers, that helped open my eyes ironically to a lot of ways I needed to widen my journey of understanding about beavers and about the environment in general.

What was one of the craziest things I did? I still remember how scary it was to walk into a room full of fur trappers for the first time. I literally sat in my car for about twenty minutes wondering what I was doing there. I was a college professor and drove a Subaru and it was 2016 a moment of divisive politics in our country. The parking lot was full of trucks and most were plastered with stickers promoting guns. But I steeled myself and reminded myself that as a journalist I wasn't there to judge, but to learn. And in my small town, fur trappers were actively trapping beavers and seemed to know more about them and be thinking about them more than anyone else. If I wanted to learn about them, I needed to speak to them. The room that day was filled with men dressed in camo and ball caps. Everyone was staring at me and no one smiled in greeting. I was a stranger and they didn't know if I came with good intentions or not. But I went over to a table and started looking at the display of coyote furs and started asking questions about the furs and before long my curiosity and my sincere interest to learn convinced the people I was talking to that I was there to learn. I learned a great deal that day. The men I spoke to were eager to share with me what they were passionate about, the animals, their experiences and their expertise. It took time to establish trust, but I discovered that when it came to an interest in beavers, and the environment, I had a lot more in common with the fur trappers than I had previously understood.

One person whom I wrote about in the book that I still think about a lot is Dorothy Burney Richards, the “beaver lady” who created a sanctuary in Little Falls, NY. I think of her because I am monitoring a beaver site now and it has left me thinking about the role of the citizen scientist. Dorothy Richards made incredible contributions to our understanding of beavers that were ignored in her time and I plan to write more about her.

I am also interested in the beaver-bison relationship out in arid plains landscapes such as modern-day Montana. Organizations like Indigenous Led are working to restore bison herds to restore the complexity and health of native grasslands as well as to restore an essential aspect of Indigenous cultural practices. Beavers play a large role in the bison plains ecology and the native peoples who have always lived throughout North America, such as the Blackfeet have always understood the importance of the beaver in the water cycle and thus to their importance to the bison.



***Beaverland* is a genre-bending science book, as it provides a fascinating perspective on American history, popular culture, environment, and climate. We get the feeling this was a fun book to write. How did writing within all these genres feed your curiosity, or take you beyond your initial concept for the book?**

I had so much fun writing *Beaverland*. Thank you for mentioning the topic of structure. I worked hard on the structure which is intentional for aesthetic and intellectual reasons. First it is designed to work in a circular pattern rather than along a usual chronological timeline. We begin at the beaver pond and circle back to that place. The book moves out deliberately from this place in the East and as much as possible travels through time, moving in this place past to present to past to present in a cyclic way. I also break the rules a bit and write from the point of view of a beaver at one point in time. That was actually a challenge to get right, but fun!

Another point I would like to make is about the opening. I begin with the story of Great Beaver for a lot of reasons. First it is a wonderful and important story, one of the oldest of this continent. But I also, thought a lot about the position of the expert in this book and wanted to shake up a bit the usual norms of environmental discourse which have tended to position the expert prominently (usually the Western scientist, and usually white and male) first, then counterpoint with alternative perspectives. Instead, I open *Beaverland* with the story of Great Beaver, which is an Indigenous Story from the eastern Woodlands that contains important Indigenous Ecological Knowledge about the beaver. As the book goes on, it describes the many ways that contemporary science is looping back to and connecting with Indigenous Science to create better understandings about the true impact and thus role and value of beavers to the larger ecology of flora and fauna as well as to a healthy river ecology.

We urgently need to re-set our relationship to the natural world, but it is something we can do, all of us, because it begins by just looking at where we are. (If you are lucky and you have a beaver pond nearby, which you might well do, well, that helps, because as I would discover, beaver ponds are bio-diversity hubs.). Once you start observing the natural world, it is impossible to maintain the fiction that you are more important, and not within something much larger than yourself and the wonder of this takes hold, and an order asserts itself and you understand that you are part of something. Then decisions and actions can stem from that understanding. It was a long journey for me to get to that realization.

Not only is *Beaverland* a terrific read, but you've created a thoughtful and engaging epilogue and sources section to help curious readers learn more. How did your thinking evolve about the structure of *Beaverland*, and how did it lead you to create these extra bridges for the reader, like "The Story of the Book?" Were there fits and starts in the development of this book?



Drone shot of Beaver Pond, October 2023

Overview of the beaver damming complex at Rocky Hill, Woodstock, CT

Credit: Deb Eccleston

The Story of the Book has a kind of funny origin. To be honest. I was about 50,000 words over the word count. I had so much more I wanted to include in the book, some really important material and stories but the book could not go longer. So, I decided I'd write a "Story of the Book" as a kind of artful (and maybe sneaky) way of including a lot of what I wanted to include.

I thought of it as my Christmas morning gift for any reader who really liked the book. The book ended, but then there was more!

On a more serious note, I felt it was important to list the growing canon of literature on beavers and writing on beavers. I wanted my book to be the kind of book you keep on the shelf as a reference as well as a good read.

What's the latest new thing you learned about beavers that was exciting to you? Have you found new beaver advocates, projects, or stories you'd like to share?

The latest thing I have learned about beavers that is exciting comes from the site I am monitoring here in Woodstock, Ct. I have been watching the beavers build a new pond since December. But what has been amazing is that they did not build a dam to stop of an existing current of water, they moved to an apparently dry area – what looked like a dried-out swamp – and built a dam there. Within 14 weeks they had ponded over two million gallons of water by enabling subsurface water to collect and rise to surface. This is critical in light of the Supreme Court decision last May, the Sackett decision, which removed Federal protection for intermittent streams like this. The beavers literally enabled a hidden section of stream system to become reconnected. In this section I was watching beavers do what river

scientists now understand their true role to be – part of the river's larger ecology – they help manage not just the visible waters, but all the water we cannot see – which are a vital part of the river system. This flow of underground water is part of the *hyporheic zone*, a web of transport that moves all kinds of life throughout ecosystem. So, beavers now are understood to have a much more profound role as agents of change on the larger eco system than previously thought.

Tell us a story about your life as a reader. Do you have authors that are always on your "must buy" or "must read" list?

I read everything. I love to read poetry when I am actively working on a new piece of writing as it just fills my word bank. A favorite poet of mine is Wislawa Szymborska. Right now I am traveling, so I just finished reading a short book, Jeannette Haien's gorgeous novella *The All of It*. This past summer I re-read Annie Proulx's epic about early North America, *Barkskins*. That book still haunts me.



You were engaged in research for a very long time with *Beaverland*, and you've written about beavers from just about every view and vantage point, including the knowledge fur trappers have added to our understanding of beavers. What surprised you most about your engagement with fur trappers?

What surprised me most about my engagement with the fur trappers that I wrote about was that so many of them talked openly and emphatically about how they felt that for them trapping gave them a spiritual connection to the woods and to the animals. Only after I had spent time with them on traplines did I begin to understand this. To trap an animal you spend hours and days walking through its habitat, studying what it has

been doing, where it lives, what it eats, where it lives. A trapper has to learn to look for minute signs in the woods that indicate that the animal has passed through and that creates a kind of intimacy. When Herb would pull a beaver from his trap, he was always solemn and for him skinning it was almost reverential. He took hours to do it and said it was his way of honoring the animal. His shelves were lined with books about Native American culture and history.

You quote filmmaker Sarah Koenigsberg, "Beavers are hope," and you make the case that as a keystone species, beavers can help with almost every environmental challenge we face, including fire, flood, and drought. You've called beavers "one of the best environmental comeback stories." What are some of the most promising efforts to support beavers and their effect on the environment, and how can readers help?

One of the main things I wanted to share with readers was not only the many ways beavers helped make America but the new role they have to play helping us face our environmental future. They truly are a North American Climate Action Plan. The wetlands, ponds, and damming complexes that beavers create help us mitigate some of our biggest environmental problems -- flooding, wildfire, biodiversity, drought. Beavers manage, slow, and cleanse our water because they create wetlands which are called

the “kidneys” of the river system because they literally cleanse the water of sediment and pollutants like nitrogen and phosphorus. New studies have begun to assign an economic value to the ecosystem services of beaver and the numbers are staggering. The University of Helsinki calculated in 2020 that current populations of beavers were contributing over 500 million dollars annually to the economies of the Northern Hemisphere. A 2020 study from the University of Milwaukee calculated beavers in the upper watershed of the Milwaukee River could create stormwater storage of 1.7 trillion gallons annually within 25 years. In other words, as towns, cities, and landowners are realizing that they can save money harnessing beavers to create wildfire resiliency and flood damage mitigation, not to mention drought resiliency, the light bulb is going on. Efforts to return beavers to watersheds are increasing throughout North America as well as in Europe and Great Britain.

Social change happens when it reaches a tipping point. We are at a moment when polling has shown that Americans no longer deny climate change (only 8% of Americans are climate change deniers). That is real change! But we tend not to discuss the topic because we fear controversy. This is a mistake. What I have recently learned by attending a recent climate summit where I listened to people who study social change discuss the problem of global inertia surrounding policies to address climate change was that one of the best things we can do is talk about climate change, take actions, however small, to address it in our own life and talk about what we have done. Why? Because talking about climate change helps create social pressure for change.

One concrete thing we all can do is find out about the river system where you live by going to the EPA website *How's My Waterway* (mywaterway.epa.gov), which will tell you what watershed you live in and the condition of its waters. Then do what you can on a local, state, and national level to help protect it. You can start by contacting your local conservation commission and watershed protection group. If you are lucky, you might discover that you already have some beavers living nearby.



Leila Philip monitoring beavers, April 2023, Woodstock, CT
Photo Credit: Carla Rhodes

When we do something, however small, we not only feel better, we do make a difference. In many instances towns and cities remove beavers that could be allowed to remain simply because they do not have updated information on non-lethal coexistence strategies like pond levelers. In *Beaverland*, I write about a group in Martinez, CA which worked to save their beavers. Now they not only can sit in their local Starbucks downtown and watch beavers and other wildlife on their creek, but they have developed an annual beaver festival that draws hundreds of people to Martinez every summer.

Are you working on a new writing project?

A main take away in *Beaverland* is trying to show readers how beavers and what they do are part of a healthy river ecology. I am at work on a book now about rivers and wetlands. Maybe no surprise there!

**An edited version of this interview appeared in the Winter 2023-2024 issue
of Nature Book Guide, naturebookguide.com**

For more beaver updates and news, Leila Philip invites readers to follow her on social media as [@theleilaphilip](https://twitter.com/theleilaphilip)