

A beaver champion in VA, and the need for more like her



CHESAPEAKE BORN

By Tom Horton

It was a teachable moment I'd rather not have had. I took a van full of Salisbury University students 130 miles to Baltimore to show how a colony of beavers had wrought their ecological magic.

Damming and ponding, slowing the flow of a degraded Chesapeake Bay tributary, settling out sediment, filtering pollution, the beavers were thriving in the heart of a heavily paved, suburbanized watershed.

"God's own engineers," a farmer friend called the bucktoothed rodents. Rivalled only by humans in their ability to transform landscapes, beavers dominated the hydrology of North America for millennia. They assured clear, clean water, resilience against flood and drought, and habitat for an array of wetland creatures from frogs to migratory waterfowl.

But on this day, the dam was deteriorating, the beaver lodge decaying. No fresh chews in the streamside forest. What had happened?

It was a Sunday, but on the way home I Googled "trappers near me" and called a number that popped up. The trapper answered, and before I could finish my question: "Yep, I know exactly where you mean," he said, "took six beavers out last month." Nearby landowners, concerned about their trees, had hired him.

The trapper was just doing his job. But what if his job could include educating landowners about the benefits of beavers and showing them ways to coexist that in the long run might be cheaper than trapping?

Which brings me to Alison Zak, a Northern Virginia resident who operates, all by herself, the Human-Beaver Coexistence Fund, worthy of your interest and support. We need more like her in the Bay watershed



Alison Zak examines an abandoned beaver lodge in the upper reaches of the Magothy River in Anne Arundel County, MD. (Dave Harp)

facilitating beavers, the most charismatic link to water quality I know of.

"You can't conserve wildlife without understanding and working with the people who will interact with that wildlife," Zak said.

As she's talking, we're knee deep in the chilly swamp headwaters of Maryland's Magothy River, a Bay tributary where she showed locals how to chew-proof an assortment of streamside maples, oaks and gums they didn't want taken down by beavers.

An anthropologist by training, Zak, a Florida native, was living not so long ago on Sulawesi Island in Indonesia, studying seven endangered species of macaque monkeys. Having decided against years' more research for a Ph.D., she migrated to environmental education work in Virginia's Fauquier County.

There, she encountered wild beavers for the first time and became fascinated — or, she admits, "obsessed" with the animal. Landowners began to seek her advice on their beaver interactions.

"Most didn't know much about them. They just knew this animal had shown up and [was] changing their property ... flooding, chewing ... that's what beavers do."

In 2021, she founded the Human-Beaver effort, working on coexistence projects from West Virginia to the Magothy — "anywhere

I can reasonably drive."

She is close to becoming a bona fide "beaver professional," a certification offered by the Beaver Institute in Southampton, MA. Tuition is \$2,500 and requires roughly 60 hours of online coursework, plus completion of four field projects.

These mostly work on the flooding issues that result when beavers impound water, which they do for their own safety, avoiding predators in the depths of their pond. In more than 90% of cases, Zak said, there are viable nonlethal solutions.

Easily maintained low-tech "flow devices," for instance, can keep water deep enough for the beavers while preventing flooding. Where beavers block road culverts, a common issue, the solution is either flow devices or "beaver dam analogs" — human-made dams that encourage the rodents to relocate their own dams away from the culvert.

Engaging landowners and highway departments (for culverts) depends a lot on education, Zak said. "Because beavers are just now slowly rebounding after being gone so long [trapped out of the Chesapeake by mid-1700s], there's a sort of ecological amnesia ... A true beaver wetland to most of us looks like chaos. Single-channel streams spreading out to multiple channels, dead and dying trees, unruly vegetation."

Her work usually begins with relationship building, understanding the landowners' values and points of view. As for trappers, "I don't vilify them," she said. "They know a lot about beavers."

She hopes to go full time with coexistence work in another year. In the meantime, she's coordinating events for a local bookstore and writing a book, *Wild Acana*, about connecting with nature through yoga.

"We're on the right trajectory. Beaver consciousness is growing. There are several good books out there," she said, referring to Ben Goldfarb's *Eager — the Surprising Secret Life of Beavers and Why They Matter* (2018) and Leila Philip's more recent *Beaverland — How One Weird Rodent Made America* (2022).

She says real promise lies in working with trappers, who are frequently a landowner's go-to when beavers arrive. "How can we make it lucrative for them to offer non-lethal solutions?"

Promise also lies with highway departments who must deal (often harshly) with beavers blocking highway culverts. In both instances, coexistence is a cheaper solution than constantly trapping or tearing out dams every year.

Where we wade in the upper Magothy exemplifies the need for a more comprehensive approach. The beaver dam there gets torn down every spring by fisheries biologists, worried that threatened yellow perch can't migrate farther upstream to spawn.

A simple solution, Zak thinks, would be to induce the beavers to dam outside a concrete culvert there, allowing easier dam bypass for the perch.

The Beaver Institute has trained more than 80 people nationwide to do what Zak does and is looking for more recruits.

So how about this as a new Bay restoration goal: at least one trained beaver problem-solver in every government environmental and transportation agency, as well as every environmental nonprofit? ■

Tom Horton has written about the Chesapeake Bay for more than 40 years, including eight books. He lives in Salisbury, where he is also a professor of Environmental Studies at Salisbury University.