## Exploring the Home Waters Patricia Chargot, April 2017

"I went to the river for medicine, and found it where it found me." -- From "Learning to love, notes on praying a river" by John Daniel, in "A Sense of Wonder, the World's Best Writers on the Sacred, the Profane, & the Ordinary"

The Huron River is a mystery even to most of us who live in its varied, seven-county watershed.

We've barely explored it. I hadn't until last spring, when I became a HRWC volunteer, wrestled into my first pair of chest-high waders, and set off on a dozen field trips to take flow measurements and collect water samples in the river and its major tributaries.



At the time, I could name only one creek -- Traver,

the creek closest to my home -- and I had no idea where it originated, meandered or emptied into the Lake Erie-bound Huron. I had not yet started to daydream about hiking the river's full, 130-mile length and every creek within its watershed, a pipedream to be sure. But then I had not yet met HRWC volunteer extraordinaire Ron Fadoir, who has walked or waded thousands of miles of Southeast Michigan's three river systems -- the Huron, the Rouge and the Clinton -- which I find astounding.

I envy Ron's grasp of our watery geography and the wealth of images he must carry in his head, like someone who has walked across Paris north to south and east to west, then tackled the side streets -- more than once. My only claim to fame is once circumnavigating little heart-shaped Lake St. Clair, exploring every natural, historic and cultural landmark along the way -- in a car, for a newspaper story.

The Huron River System's greatest mystery is its presence, which is mostly hidden from view, all-but-forgotten 400 years after French explorers began roaming the Great Lakes Region, whose waterways were the first highways, the main navigation routes of those great birch bark canoe builders, the Anishinaabe.

I had glimpsed the Huron here and there in my 25 years in Ann Arbor and was always gladdened. I still love to look down at the river and the lush parks below

from the Broadway Street Bridge; to gaze dreamily at the river's wider, untamed expanses west of Ann Arbor on my way home from Chicago aboard the Amtrak train; to walk along the river in Gallup Park.

I'd canoed the 3.7-mile stretch of river between the Argo Canoe Livery and Gallup several times; spun through The Cascades in an inner tube like a kid on a carnival tea cup ride, and once paddled the 5.7-miles between Barton Park and Gallup, enchanted by the wealth of waterfowl and stacked rock sculptures.

I'd written a book's-worth of stories about the Huron's attractions, including the nine Huron-Clinton Metroparks that the river bisects, stringing them together like beads on a necklace. I'd even sought out the Huron's swampy headwaters and murky mouth.

But that's nothing, really. And so last April 12, I set off on my first HRWC water monitoring trip to a site on Millers Creek, whose creek-shed, one of the Huron system's smallest but also its steepest, drains only 2.4 square miles.

The HRWC monitors 41 sites in Washtenaw, Wayne and Livingston counties. The Millers site -- MH08B in HWRC parlance – is on the west side of Huron Parkway, and I was astonished to find it there. The parkway is a major connector between Plymouth and Washtenaw Avenue, and I felt I knew it well. But I had no clue that you can walk to a creek from the student parking lot of Huron High School – and I'd jogged on the school's outdoor track for years.

The day was clear and bright, and sun hip-hopped on the water's surface as we practiced the protocols for how to collect water samples, read water levels, and use a suitcase full of unfamiliar equipment to measure temperature, conductivity, pH, and dissolved oxygen and solids.

For a biologist wannabe who bailed on majoring in biology because she couldn't pith a frog brain, I was thrilled to be "doing science" again. But my favorite part of the outing was non-intellectual: I just liked being in the creek.

Another team member, Wally, an ecologist, spotted a little fish swimming upstream in the clear water. It was gone in a flash, like a shooting star, and seemed as much a harbinger of spring as a red-winged blackbird.

We go out with a team leader and two or three other volunteers. Most are students or retirees. One was a U-M junior from New Mexico, majoring in cello and ecology. Another, a retired engineer, had done tai chi for 30 years. My guess is that we're all hooked on the simple pleasure of wading into flowing water.

Upstream of MHO8B, between Hubbard Road and Glazier Way, is a half-mile ribbon of creek that drops more than 70 feet. Millers' average gradient is 52 feet per mile, compared to only 10-15 feet per mile for other Huron tributaries, according to a

creek profile. I haven't walked the drop yet, but HRWC aquatic ecologist Paul Steen assured me I could do it "very easily."

"There's a walking path that runs along the creek and along Huron Parkway," Paul wrote in an email. "Though honestly, you wouldn't think it is that steep if you walked it, Huron Parkway definitely has a slope, but it is not dramatic. It is tiring to ride a bike up, though."

Paul also has walked in the creek between Hubbard and Glazier. It's "not very hard, either, though you would need some tall boots," he said.

I've amassed a pile of Huron puzzle pieces since that first trip to Millers. At Boyden Creek, near Zeeb Road and Huron River Drive, in Dexter, Larry, the team leader and a retired chemist, pointed out a rusty crayfish, an invasive species. It looked like a mini-lobster and took off like a turbo-charged car. I had no idea a crustacean could move that fast. Later, I learned that crayfish have both walking and swimming legs. Our presence had triggered the rusty's "escape reaction," causing it to bolt by curling and uncurling its abdomen.

Another day at Millers MH08B, Pablo, the team leader and a PhD chemistry student from Guatemala, spotted a two-inch rusty hatchling. I would have missed it, and had to look hard to find it in the camouflage of submerged plant debris. Another young volunteer, Jackie, who works with a U-M program aimed at making businesses more Earth-friendly, said she was once "nearly swarmed" by crayfish at Boyden. She made it sound like a crustacean frat party – rowdy and boisterous; now that's a party I'd like to crash.

At South Honey Creek, near Wagner Road and Huron River Drive, in Ann Arbor, I sloshed through shallow, muddy water to the creek's wide, sliding, T-shaped meet-up with the Huron, feeling like an explorer, like I was 10 again!

Millers, Boyden and South Honey are all branches of the Middle Huron. On the Lower Huron, in a quiet park in Van Buren Township, Willow Run Creek was much muddier. "A lot of sediment has washed down," explained Stevi Kosloskey, the team leader and the HRWC field trip coordinator. Yellow and white wildflowers poked up through the weedy, tangled creek bank.

At a Silver Creek site lower on the Huron, off Gibraltar Road in Flat Rock, the weeds were so high that Karen, a volunteer, had to fight her way down to the milky brown water.

"A lot of these (downriver) creeks are so sediment-y – that's the nature of this area," said Ron, the team leader and an environmental planner for the Oakland County Water Resources Commission.

The water was low, "but when it rains it will go from six inches (deep) to eight feet, probably," he said.

A mayfly landed on my clipboard as I recorded Karen's readings. "I saw a big frog!" she yelled. Overhead a frisky pair of dragonflies courted.

Wayne County's southeast corner, bordered by the Detroit River and Lake Erie, is part of the Lake Erie floodplain, "an area that is really unique, very unlike the Detroit area," Ron said.

It looked like a Midwest version of the Florida Keys – low, flat and marshy. Phragmites were everywhere -- miles and miles of towering grasses, an impenetrable monoculture of invaders.

At a Smith Creek site, in Flat Rock, I sank so deeply into mud -- in a mere foot of water -- I couldn't proceed. Karen told me to lift my toes inside my waders to break the suction, and it worked.

A cracked, sun-bleached Frisbee littered the bank. But a short Frisbee throw away stood the Flat Rock Historical Museum, a 19<sup>th</sup> Century house, stable, general store, and elegant two-story hotel with two covered verandas. The hotel turned out to be an old stagecoach stop, and the mercantile is said to have had the first public telephone between Detroit and Toledo.

I digress, but it's hard not to -- exploring the watershed has been an adventure. It's hard to pick a favorite outing, but I guess it would be a trip in mid-August to North Honey Creek, on the Upper Huron, off McGregor Road in Pinckney.

The creek was narrow and waist-deep, and the grassy bank was shaded. Lowering myself into fast-flowing water on a sweltering day brought on a summer reverie. I wished I could have stayed longer and hope to revisit. But you can't step into the same creek twice, to borrow from Heraclitus. Next time could be a completely different experience.

"See all those (tree) roots down there (in the water)? Those are usually exposed," said Bill, the team leader and a retired engineer.

HRWC staff members and volunteers like Bill, Larry and Ron inspire me. So does the HRWC's pastel-colored, poster-size Huron River Watershed Map. All those major tributaries — 24 in all! All those squiggly branches and mini-branches!

The map is like an anatomical drawing of the cardiovascular system of large portions of Washtenaw, Oakland, Livingston, and Wayne Counties, with dips into Monroe, Ingham and Jackson Counties.

Describing the system as a series of arteries, veins and capillaries is poeticizing hydrology, I know. But Canada's Sahtuto'ine indigenous people wouldn't think so.

To the Sahtuto'ine, who live on the shores of Great Bear Lake in the Northwest Territories, the lake is a living thing, with a "water-heart." According to legend, a Sahtuto'ine fisherman discovered the heart when he lost a hook, changed into a fish, and swam down in the lake to find it. When he found the heart, he knew the lake was alive. Some Sahtuto'ine today still believe the story, which recently was recounted in a New York Times:

"There, at the bottom, he saw a gigantic beating heart. All the species of fish – trout, whitefish, pickerel, herring, suckers – faced the heart, surrounding and protecting it."

I like to think that if the Huron River System has a water-heart, it lies at the bottom of Lake Erie, protected by many of the same species. I'd add perch, smelt, bass, and sturgeon to the list of sentinels.

The Huron fills me with wonder, and I've started to do some exploring on my own. But I'm no swimmer, and curiosity has been known to get me into trouble, so I plan to take Ron's advice and "never wade into a creek unless you know what's there." I once strayed into quicksand on a North Sea beach, and I have no intention of being swallowed whole in mud like a villain in a "Tarzan" movie.

Recently, I was poring over a map of Millers Creek and noticed that its East Branch originates north of Plymouth Road and west of Green Road, a skip from my house. How could I not know that? Where could the source possibly be?

The creek is there, all right, exposed for about 150 yards on the west side of Concordia University's North Building, off Green Road. It's so narrow you can't even see it until you reach it. It's a slash in the soggy grass, ranging from a mere six inches to two feet wide. There's a patch of wetland, with cattails and a few scrub trees; a long jumper could clear it.

The baby creek creeps through a chute of barrier rocks, enters two mini-pipes, flows under a driveway, surfaces in more cattails, disappears under another drive, spills into a larger wetland, and finally disappears under Plymouth Road to join Millers West Branch, wherever that is; I haven't looked yet.

Creek hunting is more fun that geocaching, I think. Maybe the HRWC should start hiding caches with logbooks and trinkets and create a new family geography game!

The start of Millers East Branch is a little melody of aliveness in an area overwhelmed by bricks, concrete, storage lockers, and stores. It's as much a part of the cityscape as Subway, Sweetwaters and Fifth Third Bank, all of which I patronize.

But it doesn't delight me to think of those places. The baby creek does.

Getting to know the Huron has made me feel connected in a new way to my city, county and region -- and the connection is no illusion.

"When you start with watersheds, you start with the Continental Divide," Laura Rubin, the HRWC's executive director, told me in a 2015 interview.

From the divide, at the crest of the Rocky Mountains, "everything drains to the Atlantic," she said. "Then we're in the Great Lakes watershed. Then we're in the Lake Erie watershed, then the Huron River watershed, and then in whatever tributary watershed you're in.

"Our office, on the west side of Ann Arbor, is in the Allen Creek watershed. And you can even break the creeks into branches," each with its own mini-watershed.

All that water, wending its way downward like a raindrop on a windshield, instinctively seeking the lowest places, the paths of least resistance – it's a powerful, even spiritual image, a lesson in how to live, to "go with flow."

The river system is an artwork, and it's our job to bring it to life, to make it visible and real, so it can nourish and comfort us, whatever else is going on. It's our job to love and protect it unabashedly, without reserve, like the Sahtuto'ine love and protect Great Bear Lake – and to share that ardor with others, which is the HRWC's mission.

So Happy Earth Day to everyone at the HRWC for all the good work they have done for so many years and continue to do every day. I'm about to sign up for 10 more field trips -- and I may add a few more. We'll see. I think I'll just go with the flow.

—Patricia Chargot