

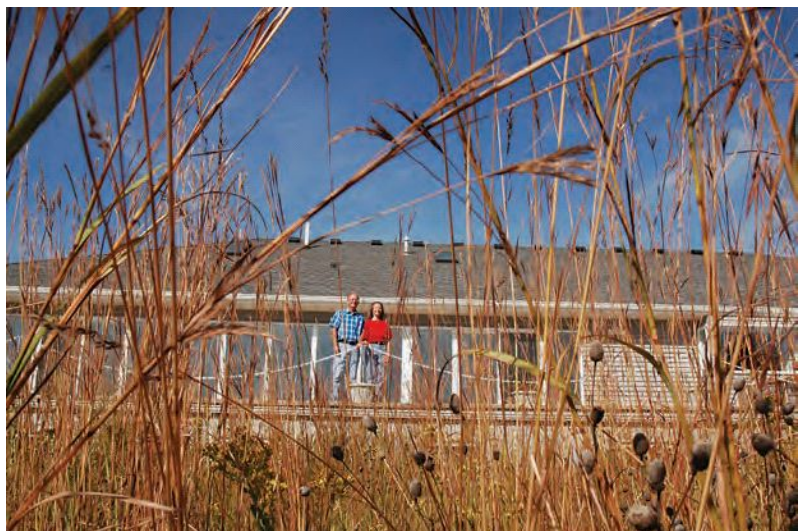
Tallgrass prairie meets Old Man River

The Harthorns cap a riverfront cleanup effort with a healing prairie



Prairie to river: Bryce and Betty Harthorn embrace two great natural resources.

Photos: Rollie Henkes



A mini tallgrass prairie frames the view for Bryce and Betty Harthoorn as they watch life on the Mississippi sail by their house in Princeton, Ia.

Curious boaters pull in for a closer look. What's a prairie doing here?

The Harthoorns might explain that this 40x90-foot strip of prairie is healing an abused earth. They might also share how the prairie stands as the crowning touch of a nearly 10-year environmental cleanup effort that removed the contaminated soil and buried junk from this precious piece of shoreline.

Princeton is a small eastern-Iowa river town lying 7 miles north of Interstate 80. The Harthoorns were driving through the town 11 years ago when they stopped in front of a dilapidated building. Windows were missing; weeds grew where gas pumps once stood. Curious, Bryce walked to the rear of the property, which backed up to the river. There, propped against the side of the building, he found a for-sale sign on a 4x8 sheet of plywood.

Distressed property. The property had seen a succession of owners over the years, from an automobile dealership to a machine shop. Bryce learned that the current owner couldn't find a buyer because of soil-contamination fears from the two underground gasoline tanks. A cleanup would cost thousands



Streetside: The Harthoorn's house replaces a boarded-up garage.

of dollars. But Bryce knew that if he and his wife were ever going to realize their dream of finding an affordable riverfront lot it would have to be distressed property such as this one.

Bryce, who was a senior environmental engineer for Deere & Company, also knew something about environmental cleanup. He helped the owner secure state assistance for a cleanup and at the same time worked out a deal to buy the property. The site monitoring and cleanup began in 1997, with trucks hauling away some 400 cubic yards of contaminated soil. The excavation extended into Princeton's main thoroughfare. Bryce contributed his services as an environmental engineer in overseeing the project, which lasted seven years. He also paid \$2,300 for the initial site assessment.

Bryce and Betty tore down much of the building themselves, using an old dump truck and a tractor with a front-end loader. A local contractor with a backhoe helped them finish the job.

Dumping ground. The Harthoorns saved some of the lumber for the house they were to build on the existing foundation. As long as a barge, the house they built parallels the main

channel that these vessels ply. The excavations for the boat ramp and other landscaping smacked of an archeological dig. The Harthoorns pulled out old truck and tractor tires, half of a manure spreader, the front pedestal of a tractor, part of a cultivator, and other junk that bespoke of an era when regulations allowed the river bank to be used as a dumping ground.

A service road ran along the back of the property, perched above the river on fill. It was smack dab in the middle of the space where the Harthoorns wanted to plant their prairie. Betty had done a prairie planting in the back yard of a friend's home, but now, under the hard-packed gravel road, she faced the worst soil imaginable. "We had no idea what was in that fill," Betty says.

Encouragement. They contacted prairie expert Carl Kurtz, who harvests prairie seed on his farm in central Iowa. Kurtz told them that prairie species adapted to dry sites can grow on very poor soil, and he sent them a sack full of certified local-ecotype seed. (*Editor's note: Kurtz's photographs and writings appear in Naturalist's Notebook, a regular feature in this magazine.*) Bryce scraped the rock and gravel from the road with a rented PTO-powered scarifier. In the spring of 2003 the Harthoorns spread about 2 inches of topsoil and threw out the seed by hand. Soaker hoses on a timer kept the seedbed moist.

Weeds dominated the stand that year and into the next. Following recommendations, Bryce kept the vegetation mowed to about 6 inches to let in light for the prairie seed. He used a heavy-duty string trimmer mounted on two bicycle type wheels, made by DR Power Equipment (www.drpower.com). He says it worked very well for his situation, one reason being, "It didn't throw rocks against his windows."

Bryce stopped mowing after two seasons. At the end of the second year he and Betty watched a "sparse but fairly uniform stand of big bluestem set seed." The Harthoorns continued to burn the prairie every spring, and the prairie filled in, providing the wildlife magnet and visual feast they enjoy today. Up to 40 native species grow in the mini prairie, including big and little bluestem, Indian grass, compass plant, saw-tooth sunflower, showy tick trefoil, rigid goldenrod, evening primrose and purple prairie clover. A Scott County conservation worker told the Harthoorns it was one of the best reconstructions he's seen.

"We think it's wonderful to have a prairie between our home and the river," Betty says. "It makes us feel connected to the land and the river" ~ Roland Farley

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In the end we will conserve only what we love. We will love only what we understand. And we will understand only what we are taught.
~ Baba Dioum