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THE REWOVEN SAVANNA

At Snyder Heritage near Elkhart in central Iowa, the oak savanna is making a comeback. (Photo by Brian Abeling)

ON THE COVER

Students enjoy spring underneath the Iowa State University Campanile. See ISU-related articles on pages 44 and 56. (Photo by Brian Abeling)

THE IOWAN

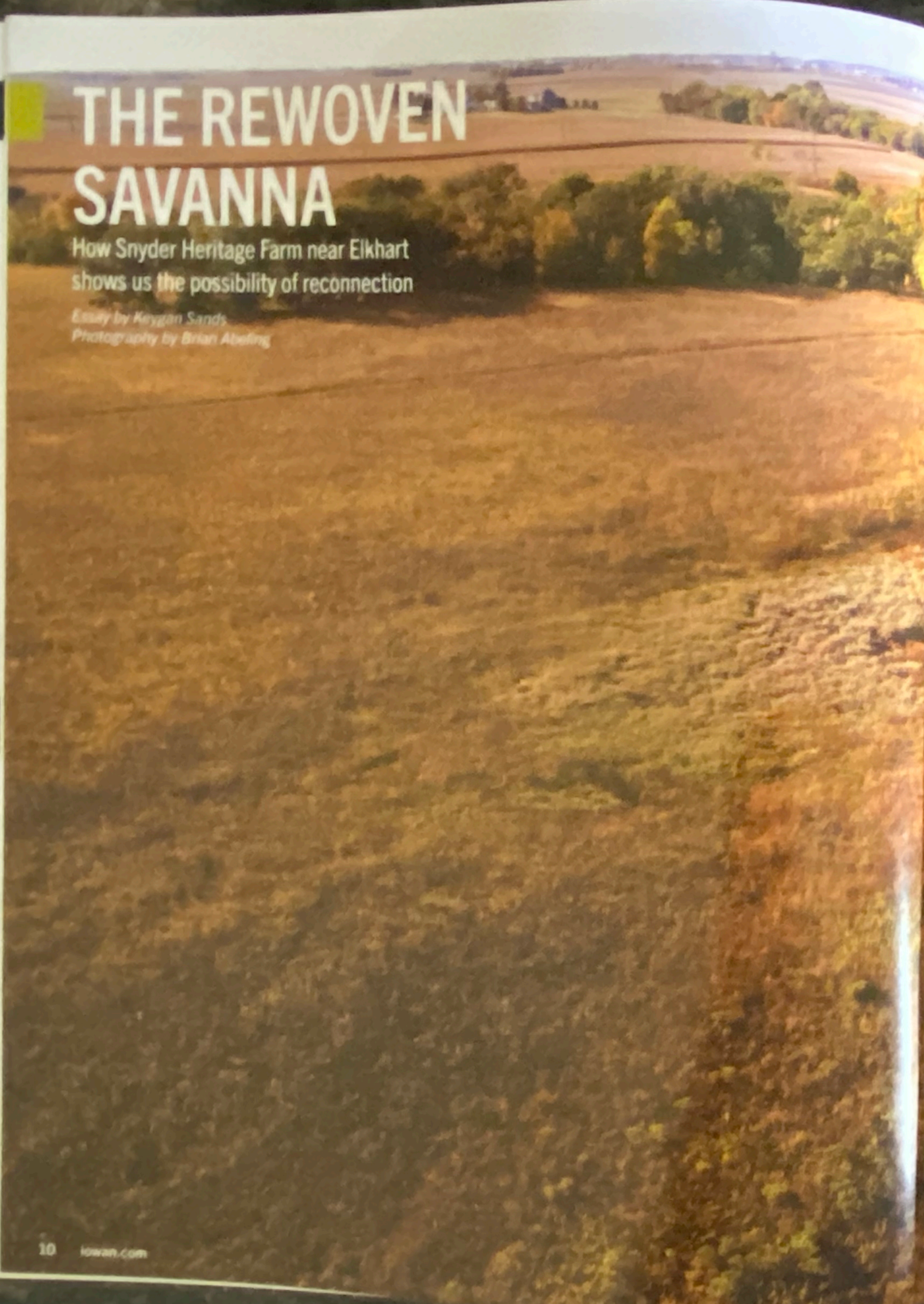
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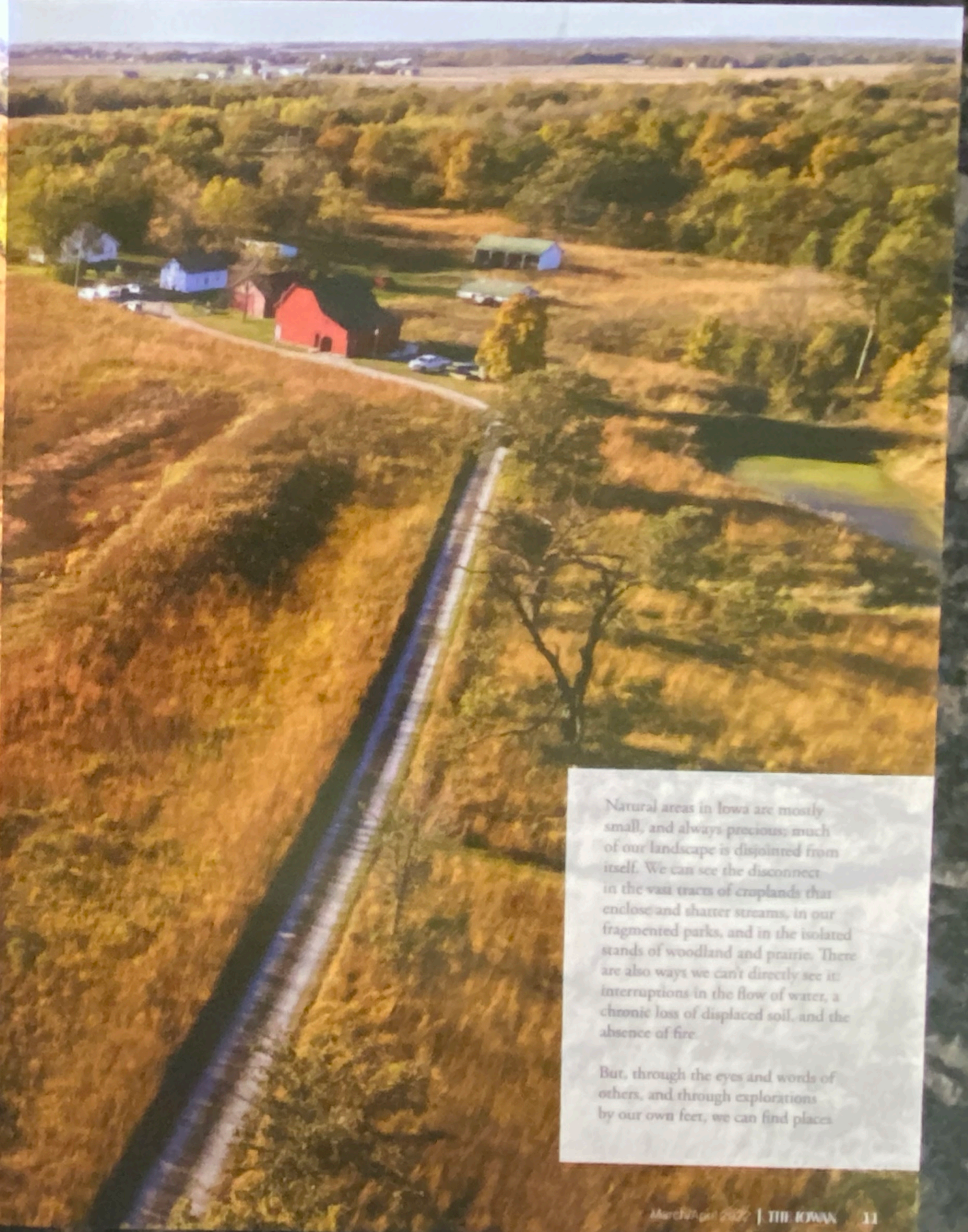
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THE REWOVEN SAVANNA

How Snyder Heritage Farm near Elkhart shows us the possibility of reconnection

Essay by Krygan Sands
Photography by Brian Abeling



Natural areas in Iowa are mostly small, and always precious; much of our landscape is disjointed from itself. We can see the disconnect in the vast tracts of croplands that enclose and shatter streams, in our fragmented parks, and in the isolated stands of woodland and prairie. There are also ways we can't directly see it: interruptions in the flow of water, a chronic loss of displaced soil, and the absence of fire.

But, through the eyes and words of others, and through explorations by our own feet, we can find places



Opposite: Oak savanna, once a common landscape feature of Iowa, is being restored at Snyder Heritage Farm.

Above: Ryan Schmidt, Central Iowa Land Stewardship Director for the Iowa Natural Heritage Foundation, guides visitors during a fall hike at the farm.

where the land has been reconnected: rewoven into the forces of water and fire, into the tapestry of living species which breathe and bloom just beyond our skin. It is the self-appointed task of the Iowa Natural Heritage Foundation (INHF) to protect and restore such places, and to connect the people of Iowa to them.

Snyder Heritage Farm was named for the family that owned and worked that pocket of land since the 19th century. The family, like all farmers, were entrusted with caretaking of the land even as Des Moines and all its

satellites burgeoned just southwest, and industrial agriculturalists channelized the Skunk River to the northeast. Like other farmers, they installed drainage tile beneath their fields, denied fire, and sent cattle to graze beneath centuries-old oaks and hickories.

By the 1980s, the Snyders were aging beyond their ability to farm and, according to Ryan Schmidt, INHF's Central Iowa Land Stewardship Director, "wondering what the next step was for the property they cared so much about." They wanted to

somehow ensure its protection in future years. Through conversation, they discovered INHF, an organization which safeguards natural landscapes, and in 1991, decided to free the land from the pressures of farming and donate their 154 acres.

In the golden hours before sunset on October 14, Ryan, acting as a guide, waited at Snyder Heritage Farm. INHF was holding a Fall Foliage Hike to appreciate the "autumn glory" of the savanna and prairie.



Above: An aerial view of the Snyder Heritage Farm, where farm buildings continue to be used.

The visitors—a group of twenty to thirty people, including families, volunteers, photographer Brian Abeling, and other outdoor enthusiasts—began their walk under the bronzed, glistening leaves of the oaks and hickories. Invisible to them, at first, was the tremendous amount of time and muscle spent on restoring the savanna.

Pluffy, amber seed-heads glistened and swayed around them, a shoulder-high sea of vegetation readying itself for the season of dormancy. Leaves and dry plants crunched and cracked under

their boots. Ryan guided the visitors into the savanna, talking to them as they traveled. They wound between dark, columnar trunks of white oak, bur oak, red oak, and shagbark hickory, and a young boy asked how old one of the trees was. Although Ryan didn't know the exact answer, he discussed how it might be calculated without removing the tree and made an estimate. Although the savanna was in a degraded state when the property was first donated, plenty of big trees still lived on the land, many of them probably over two hundred years old.

According to the Savanna Oak Foundation, "intact oak savannas are now one of the rarest plant communities on earth." They once covered over fifty million acres of Midwestern land, but were also one of the most attractive places for settlers to develop. In a savanna, the tree canopy is sparser than a forest, covering only 10–50 percent of the area. Individual trees sprawl in majestic, bushy plumes, with branches stretching from the trunk in all directions, some almost brushing the ground. Such "open-grown" trees are actually quite familiar: this is the



Above: The driveway leading to the buildings has a canopy provided by a variety of hardwood trees.

shape most city trees form. Savannas allow more light to hit the ground beneath and between each stately tree, so more grasses and wildflowers sprout than in a dense forest. A diverse array of plants, from sun-loving prairie species to shade-tolerant woodland species and even some savanna specialists, can be found in these communities.

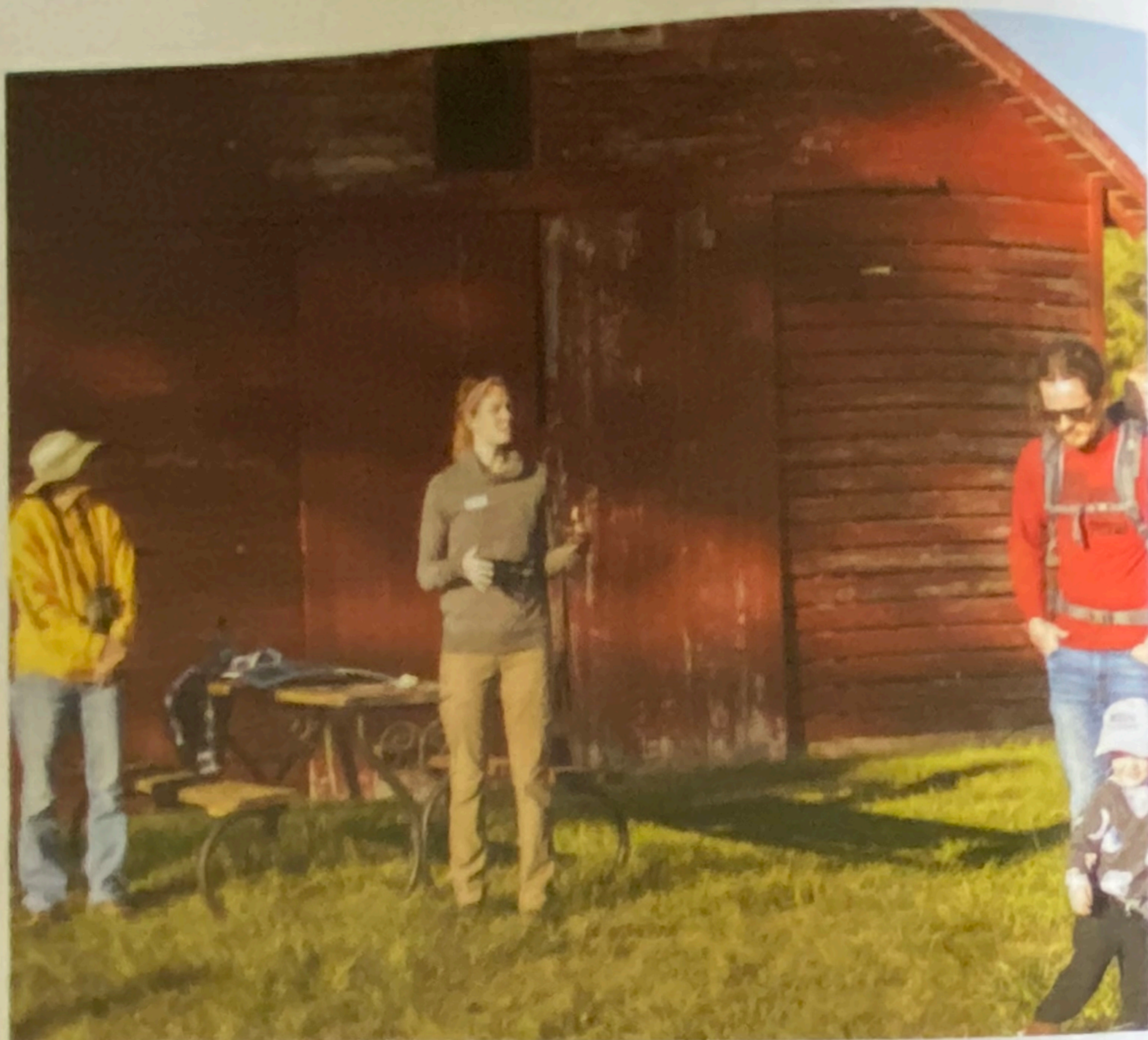
Mowed paths like green ribbons led the visitors through the prairie-savanna edge. Occasionally, the paths wound around an object—Ryan informed everyone this helped to

identify invasive species. Some of the invasives were easy to identify: greener and lusher than many of the other plants despite the lateness of the year. Many of the native plants had already browned, dry and crumbling under fingers.

The evening light and gentle rustling of the trees and grasses settled a mask of peacefulness over the place, broken by voices and footsteps, curious gazes. People just like these visitors have been instrumental in restoring Snyder Heritage Farm to a more complete, diverse state. In the thirty years since

the land's donation, INHF workers and volunteers have removed invasive and undesirable woody species from the understory through cutting and mowing, straining by hand to cull tough stems and shadow-spilling bushes. They also reintroduced a crucial renewing force to the savanna ecosystem: fire.

Savanna trees have coevolved with fire, their tough bark protecting them from quick burns that flashed through the land, fed by their own curling leaves. Fire removes smaller woody species from the savanna, keeping the



Iowa Natural Heritage Foundation volunteer coordination Melanie Schmidt addresses visitors at the fall hike.

habitat open and preventing a tough tangle of shrubs from taking over. Like Iowa's Indigenous Peoples did for thousands of years, INHF and many other restoration organizations conduct controlled burns in savannas and prairies.

Along with the removal of invasive species and the return of fire, INHF has also returned native plants to the site. They collect seed from other central Iowa locations and spread it to degraded or degraded sites, weaving patches of landscape together with species like Indiangrass, big bluestem,

little bluestem, butterfly milkweed, prairie blazing star, culver's root, pale purple coneflower, and purple milkweed, among many others. The deep roots of these plants plunge into the earth, enhancing the soil, and their seed and nectar and vegetable bodies nourish wildlife.

Eventually, Snyder Heritage Farm was enriched with greenery enough that it could begin giving back to other places. INHF now conducts yearly seed harvests from a couple areas on the property, cycling and spreading the plant species back into their

network of protected lands. They call for volunteers for seed harvesting and invasive species removal. Ryan has seen more and more people getting involved with time: volunteer events now attract between 30–50 workers. "People are interested in lending a hand and making a difference," he explains. We have an ingrained need to tie ourselves to our landscapes—we, too, are part of the network of life.

The October visitors weren't alone. They saw the scuffling hurry of



Above: An old fence on the farm is adorned with antlers.

Left: The Iowa Natural Heritage Foundation's restoration efforts have included the introduction of native plants, such as Indiangrass, purple milkweed, and many others.

pheasants. Far above them, turkey vultures circled. Somewhere amidst the trees, another bird screeched. Ryan identified it from the sound as a red-tailed hawk, a watchful presence beyond their sight. He had made many such identifications for the visitors, pointing out plant species and readily discussing their values and uses.

They walked at a laid-back pace, breathing in the crisp air, stopping and learning about what they were seeing. In Ryan's words, he wanted to "let what we're observing be the

teacher." He knows of many more wildlife species that frequent Snyder Heritage Farm: deer, turkeys, coyotes, foxes, bobcats, snakes and other reptiles. In the wetter areas, they've seen turtles, amphibians, waterfowl, and sandhill cranes.

Though the hikers stuck mostly to the savanna, Snyder Heritage Farm hosts another endangered Iowa ecosystem: the prairie pothole wetland. Restoring this habitat took just as much work as in the savanna. Prairie pothole wetlands, wealthy in fertile soil, were attractive to row-

crop agriculture, and thus the flow of water across much of the state has been fundamentally altered. INHF had to excavate sections of the land to remove the subsurface drainage tile and halt the underground flow. Just as they restored fire, they also restored water, allowing the natural hydrology of the land to return. Now the land regularly sings with frog chirps and the warbling calls of cranes, wet and alive, echoing into the trees.

Modern agriculture is measured in seasons, with a rapid turnaround, year-by-year, of planting and harvest.

Humans are pleased to spend
limited resources to move fast to
push the land to its limits. Reserving
a place to its natural state, with diverse
native species, rich soil, and the power
of water and fire, is essential to
survive. There is hope in a place like
Snyder, piling increasingly wearing
trees, expanding like the hyphae of
woodland fungi.

The visitors concluded their hike at
one of the old farm buildings. The
floor rippled with brown shadows,
covered in a layer of plant material
that at first looked like rotch.
In fact, it was the property's
collection of harvested prairie seed,
ready to be spread to future patches
of ranch. Fading sunlight slanted into
the red-stained wood, a small and
quiet conclusion.

INHP will continue to observe and
care for the lands in its possession,
most of which were donated by
private landowners. Ryan and his
coworkers will continue to invite
people to care for natural areas
with them and to visit and enjoy
these places.

By reconnecting ourselves with
nonhuman communities, spaces, and
forces, we can enrich ourselves and
our landscapes.

In a special little place just outside
Des Moines, the trees sleep, and the
seeds of grasses and wildflowers wait
for spring.

Learn more about the Snyder Natural
Heritage Farm and other efforts by the
Iowa Natural Heritage Foundation at
inhl.com.

Right: The tall trees and their way
through the oak canopy.

