Rootstalk

A PRAIRIE JOURNAL OF CULTURE, SCIENCE, AND THE ARTS

VOLUME VII, ISSUE 1, FALL 2020

Rootstalk, *Fall 2020*
Volume VII, Issue 1
Supported by Grinnell College's Center for Prairie Studies
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Grinnell student **Sofia Carr** *created the art we're featuring on the cover of this issue.*

Cover design: Mark Baechtel, Jonathan Andelson
Table of contents image: Jon Andelson
Layout: Jon Andelson, Mark Baechtel

Photo courtesy of Jon Andelson

Jon Andelson *is the Publisher of* Rootstalk. *He is Rosenfield Professor of Social Science (Anthropology) at Grinnell College and co-founder and emeritus director of the College's Center for Prairie Studies.*

Publisher's Note: Bad, Badder, Baddest

by Jon Andelson

There's been a lot of bad news in 2020, and much of it has been tied to the natural environment. The news exists on a continuum, ranging from bad, to badder, to baddest.

First the bad: everyone agrees that's what the derecho was: a line of storms that swept across much of Iowa, Illinois, and Indiana with winds sometimes in excess of 100 mph. The storm uprooted or snapped off tens, maybe hundreds of thousands of trees, downed or dangerously stretched power lines, left over a million people without electricity, some for over a week, and forced businesses to close temporarily due to a lack of power. Fortunately, the derecho caused few deaths.

Bad also were the record wildfires that raged up and down the West Coast, and the hurricanes and tropical storms that hammered the Gulf Coast. Both claimed human lives. Nor were these disasters limited to the United States: wildfires devastated large areas of Latin America, Africa, Asia and Australia. The destruction of wildlife populations is incalculable, and of course of property and infrastructure as well.

Cleaning up the derecho's mess has been pretty straightforward, and we have some general ideas about how to reduce the damage should there be another. Burying power lines is a start. The tree damage is probably inescapable. The fires and floods have caused great losses. Planning for how best to avoid future losses is going to be contentious and hard.

Less straightforward, and more fraught with difficulty—and thus badder—has been the global COVID-19 pandemic. COVID has disrupted our lives for months,

put businesses on the ropes or shuttered them indefinitely, substantially reduced our social interactions and colored them with caution and uncertainty. Too many lives have been lost—in Iowa, the United States, and around the world. As I write, the number of American deaths has passed 250,000 and the number worldwide is over 1,000,000: all caused by a new type of virus that may have first appeared in Wuhan, China, may have originated in bats, may have been transmitted to humans by pangolins, may have emerged from a recombination of viral genes across different species—scientists are still trying to determine its origin.

We appear to be on the verge of having an effective vaccine against the virus following a massive effort by scientists. In the meantime, there is widespread agreement among infectious disease experts that we can lower rates of contagion by wearing masks, practicing social distancing, engaging in contact tracing, and minimizing time in small enclosed spaces. Not everyone is convinced of this, and others are unable to follow these measures due to their living situation or their jobs. In the midst of the COVID pandemic very few people are talking much about how we might avoid the next one, or at least respond to it more effectively.

Bad as the pandemic has been, though, there is a still bigger problem—the baddest: climate change. In fact, climate change could well be a contributing factor to the derecho, the wildfires, the hurricanes, and the pandemic. And beyond the short-term damage caused by the derecho or the mid-term damage caused by the pandemic, the damage that will be produced by climate change is likely to be very long-term and very pervasive, more pervasive than COVID, causing food shortages, the spread of diseases, and decline in our quality of life of crisis proportions.

"Climate change" is actually too benign a label. All life is change and adaptation to change. "Climate disruption" comes closer to the truth. Disruption implies change on a scale or in a direction that may make adaptation impossible. It is a step on the way to climate crisis. Indicators reach tipping points, resources are diminished, options are limited, and neither mere wealth nor sheer will are sufficient to overcome the threat. Much uncertainty surrounds COVID's future, but most of us are confident that it will soon be behind us. The uncertainty about climate disruption is vastly greater because so much more will be impacted.

As derechos go, the one that hit the Midwest in

Derecho damage at the Heartland Co-op in Luther, Iowa. Photo by Todd Hultman for *DTN Progressive Farmer*

August was unusual in its intensity and its scale, and climate scientists have been saying for several years that one of the likely consequences of climate disruption is more severe weather events. Since derechos have not been studied as much as tornadoes or hurricanes, at this point meteorologists are cautious about saying this applies to derechos, but an August 27 article in *Science News*, "What's behind August 2020's extreme weather?", notes that warming at Earth's surface "could increase the likelihood of more and stronger derechos by increasing atmospheric instability."

> Climate disruption is the baddest of the bad threats we face as a nation and a world, and we need protection from it. If we act in concert now we can avoid the worst of its effects. Doing so may also help protect us from more derechos, more wildfires, more hurricanes, and more pandemics...

The frequency and scale of wildfires is also related to climate change. The Center for Climate and Energy Solutions, an independent, nonpartisan, and nonprofit organization working on practical solutions to climate change, states unequivocally that "climate change has been a key factor in increasing the risk and extent of wildfires in the Western United States." One consequence of climate change in the American West, their research shows, has been the creation of warmer and drier conditions that increase the combustibility of forest fuels. This led to a doubling of the number of large fires in the West between 1984 and 2015. The year 2020 set new records.

What about pandemics and climate disruption? Scholars at Harvard's T. H. Chan School of Public Health know that disruptions in climate impact how we relate to other species on Earth. On their website they write, "As the planet heats up, animals big and small, on land and in the sea, are headed to the poles to get out of the heat. That means animals are coming into contact with other animals they normally wouldn't, and that creates an opportunity for pathogens to get into new hosts." Direct degradation of habitats, such as through deforestation, has the same effect of stimulating the movement of animals and the pathogens they carry into new places.

The effect all of these threats have on agriculture is of major concern to Midwesterners. The recent derecho massively damaged the corn crop, with one market analyst estimating the loss at between 200 and 400 million bushels. The LNU Lightning Complex Fires in California, the second largest in the state's history, had consumed 341,000 acres in Sonoma, Napa, and Lake counties as of August 24, 2020, at which time the fire was 17 percent controlled, according to a report posted to the website Civil Eats. The fires are "impacting agriculture communities known for diverse family farms" through direct damage to crops and livestock and deteriorating working conditions near the fire. "For many indigenous peoples of California," the report goes on to note, "the fires are wiping out entire harvest seasons, threatening their food security." COVID-19 disproportionately impacted Iowa's meatpacking industry and its heavily Hispanic workforce. Swine flu, a form of coronavirus which appeared in 2009, infects pigs worldwide. Avian flu can infect domestic poultry. (Both can also spread to humans.) Climate disruption, by affecting temperature and rainfall patterns, impacts growing conditions in ways that have already harmed agriculture in many parts of the world. Could Iowa's climate become too dry to successfully raise corn? Perhaps in the future Iowans will learn to boast about our sorghum or millet crops, both of which are more drought-tolerant than corn.

The current model of agriculture in Iowa and the Midwest is also a major contributor to the oncoming climate disruption. Intensive use of fossil fuels, the methane produced by large numbers of ruminants, and farming wholly reliant on annual monocultures all ei-

Iowa National Guard Soldiers of the 186th Military Police Company and a local health care professional operate a traffic control point at the COVID-19 testing site at the Iowa Events Center in Des Moines, Iowa, on April 25, 2020. Photo by Cpl. Samantha Hircock

ther increase carbon emissions—the main cause of climate disruption–or make remediation efforts more difficult.

It makes practical sense for us to reduce the causes of climate disruption, thereby scaling it back to a form of climate change that we can successfully adapt to. It is time for state and federal government to join ordinary citizens and corporations in this action. President Ronald Reagan said, "Government's first duty is to protect the people, not run their lives." Protecting the people can entail some sacrifices, as with seat belt laws and smoking bans. Climate disruption is the baddest of the bad threats we face as a nation and a world, and we need protection from it. If we act in concert now we can avoid the worst of its effects. Doing so may also help protect us from more derechos, more wildfires, more hurricanes, and more pandemics.

Photo by Jan Graham

After the Storm

by Mark Baechtel

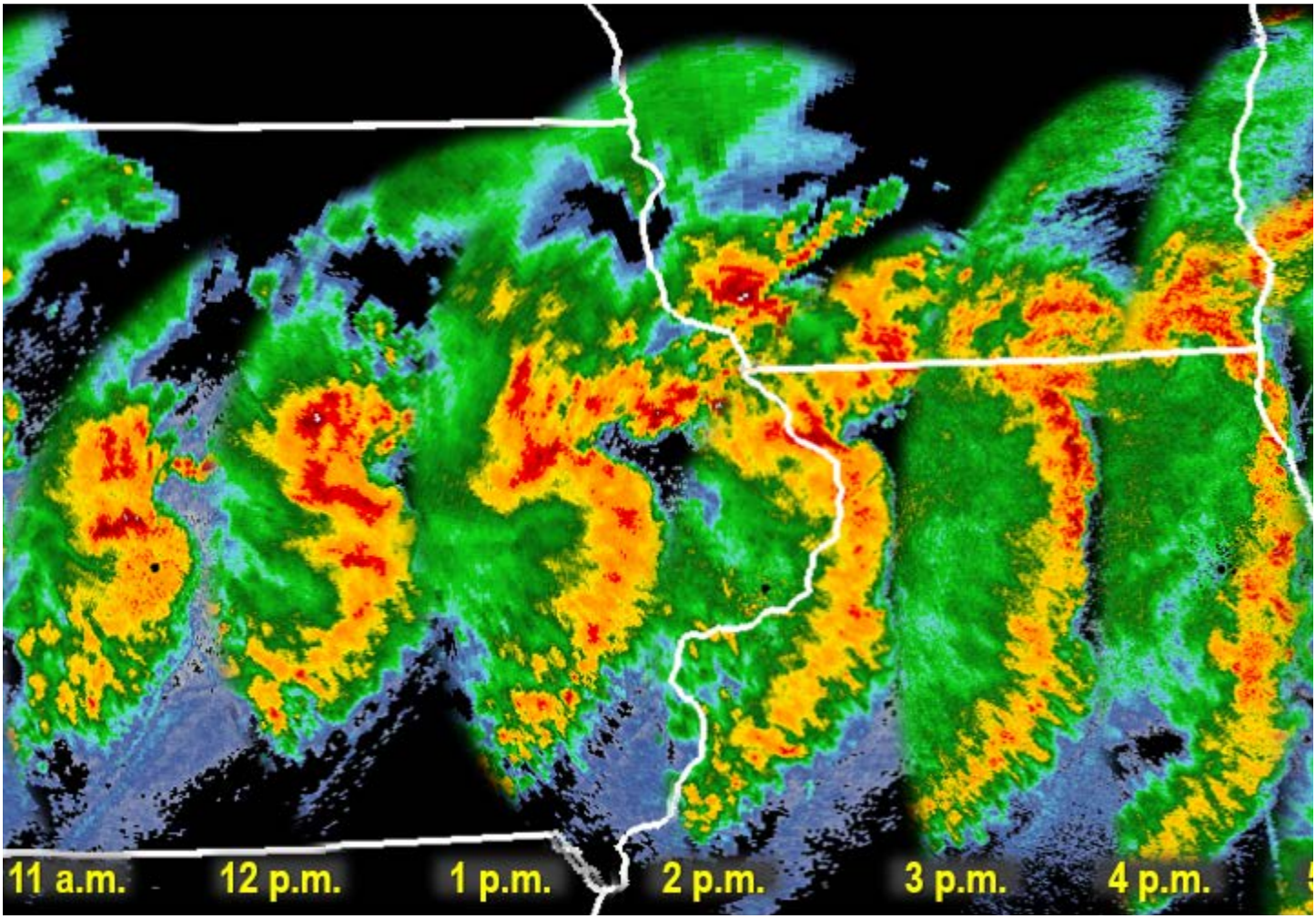
The storm on August 10 began the way so many others do in the Midwest: a darkening sky, pulled like a curtain across the western prospect, the light changing from brassy-brightness to gray. But then things went green, as if we had been plunged suddenly beneath the surface of an algae-choked farm pond. I was standing in the front doorway of my 1880s house, watching it unfold.

Leaves and twigs began to fall from the trees in my yard. Nothing unusual about that. One of the rituals of summer here is picking up sticks after a storm. But in the few minutes I stood there watching, the wind steadily grew. Then the wall hit.

It was a derecho—a fast-moving, straight-line storm system that can travel hundreds of miles on a vast front. News accounts later said that the wind-gusts went as high as 140 mph, making the storm like an inland category 4 hurricane. The rain blew in sideways; first branches, then limbs began to fall, and then the top of one of my mature maples came down with a crash. I decided it was a bad idea to keep watching, and retreated further into the house. The house's frame reverberated as a venerable hackberry—three feet in diameter—gave up the ghost and struck a glancing blow to the northwest corner of my roof. Above the howling of the wind around my house's eaves I could hear more trees toppling. I looked out another window and saw a terrified German shepherd come pelting at full speed across my back yard, looking in vain for shelter.

It was over in about 20 minutes, and when calm was at last restored, my neighbors and I emerged into a

Mark Baechtel *received his B.A. in print journalism from The American University in Washington, DC, and his M.F.A. in fiction-writing from the Iowa Writers' Workshop, where he was selected as an Iowa Arts Fellow. He has over 30 years of publishing experience, and is author of* Shaping the Story, *a textbook guide to short-story writing (Longman, 2003). He has taught at the University of Iowa, Grinnell College and various art centers, as well as working as a professional book editor. His work has appeared in numerous newspapers, magazines, journals and anthologies, nationally and internationally. He is currently polishing the stories in a collection of short fiction, titled* What Moves and What Is Still, *and is at work on a novel titled* Renovation.



Radar image of the August 10 derecho by the National Weather Service

changed world.

I couldn't get out my front door at first; my porch was completely blocked by the crowns of the trees that had been wrenched off and flung there by the wind's power. Many cars parked in the streets were damaged; one of my next-door neighbor's vehicles had been smashed like a stepped-on tin can.

My neighbors and I called out to each other, asking whether anyone was hurt. Miraculously, no one was. The whole town had lost power in the storm's first few minutes, and most of us wouldn't get it back for 10 days. We had no phones, no internet, no air conditioning. Our refrigerators and freezers began to warm, and all the food they contained to spoil. It was like we'd been blown back into the mid-19th century.

We would learn later that our experience was duplicated across the country's midsection. The derecho traveled at freeway speeds for 770 miles, from South Dakota to Ohio and lower Michigan, over a span of 14 hours. Whole towns were blasted. The mayor of Cedar Rapids, Iowa, estimated that there wasn't a square mile of his city that hadn't sustained damage. Billions of dollars-worth of corn and soybeans were flattened in the fields.

Devastation, by any definition. And yet, in short order, we began to pull together.

The day after the storm, Megan, my coworker at Grinnell College, showed up with her neighbor John and a chainsaw. My teenaged daughter Claire pitched in too, and the four of us spent a busy morning cutting and stacking debris. Then it was my turn to help them. It was a scene being repeated up and down the street, and

our town's soundtrack for the next week was the steady growl of chainsaws during the day and the thump of gasoline-powered generators at night. Line crews showed up from as far away as Wisconsin to help get the town wired back together again. One crew from Quebec even took part.

Todd and Shannon, neighbors a few blocks away, have a house with a big front porch and a capacious gas grille, and it became the unofficial evening gathering spot for the cleanup crews that patrolled the neighborhood's back-alleys and front yards. Everyone was emptying their freezers, using Todd and Shannon's grill to cook whatever they had before it spoiled, and adding it to the community potluck. My garden came through in remarkably good shape, so I was able to throw together a few massive salads as my contribution, along with a dozen or so pork chops that would otherwise have gone to waste. Everyone in Todd's and Shannon's yard was mindful of the pandemic, wearing masks and sitting in lawn chairs six feet apart, resting from the day's labors, chatting, watching as the kids chased each other in the waning light of evening.

It wasn't long before someone stated the obvious—that this was how things used to be, before our lives came to be dominated by screens, before COVID hit and virtual work and video meetings—once the realm of science fiction—became our daily reality....

It wasn't long before someone stated the obvious—that this was how things used to be, before our lives came to be dominated by screens, before COVID hit and virtual work and video meetings—once the realm of science fiction—became our daily reality. Before we plunged down the rabbit hole of isolation.

One night as we all sat with our now-empty dinner plates in our laps, Todd said: "We should keep doing this!" At the time, we all agreed, and for a few nights, we did. I wish I could say we continued beyond the end of our cleanup operation, but when the lights came on again, when the cell-towers went back into service and the fiber optic cables were restored, when the streets began to be cleared of their heaps of debris so traffic could move unimpeded, we went back to our dens and living rooms, and the whine of our central air units replaced the steady thump-thump-thump of the generators. Our society fragmented once again, our gatherings shrinking from neighborhood-sized to the dimensions of our living rooms, our couches. The many dwindled to a few, or even to just one.

We've had what has arguably been one of the worst years on record: a disastrous season of weather-events like ours, driven by climate change; political tumult of an unprecedented rancor; the flouting of many of the norms of decency, plain-dealing and probity which we have previously taken for granted as features of our democracy. Civil unrest has convulsed our cities, highlighting the deep divisions and inequities to which our society has turned a blind eye for too long. And then, of course, there is the election, which has been like none in modern memory. Bestriding all of this has been the colossus of the pandemic, with a death toll that keeps spiraling up and up, approaching—at this moment—a quarter-million souls, with a concomitant, disastrous effect on our economy.

It's tempting to say that the solution to all this literal and figurative storm and strife would be a return to that simpler, less-complicated way of life, when people gathered on each other's porches in the evenings to pass the time in conversation, watching the evening light die as it filtered through the limbs of the elms. Those elms were long since carried off by blight, though, and our communication devices and our high level of connectivity are fixed realities now, at least until they're replaced by the next new thing. We are not now what we then were, and we will again be altered, by and by. Things inevitably change, and change can be good or bad, or—more likely—good-and-bad. That's the way of things.

What I find comforting in the face of this ambiguity is the thought of Megan and John showing up on the day after the storm, working shoulder-to-shoulder with Claire and me through a long, sweaty morning, for no other reason than that she knew me and knew I needed help. Whatever the truth of our tech-driven isolation from one another, when push came to shove on August 10 my neighbors' impulse was to help one another.

When things get bad—as they inevitably do—when a derecho hits the Midwest, or a hurricane sweeps all before it in the Southeast, or the Western forests kindle and burn, or a demagogue in a position of power persuades us to turn on one another because of the variety of political sign we've got spiked into our lawns—it's small and modest acts of heroism and our durable sense of community that get us through it. I feel a complicated pride when I think of that.

Front porch society, as it used to be. Photo courtesy of Daphne Lockett's blog, *Ramblings*

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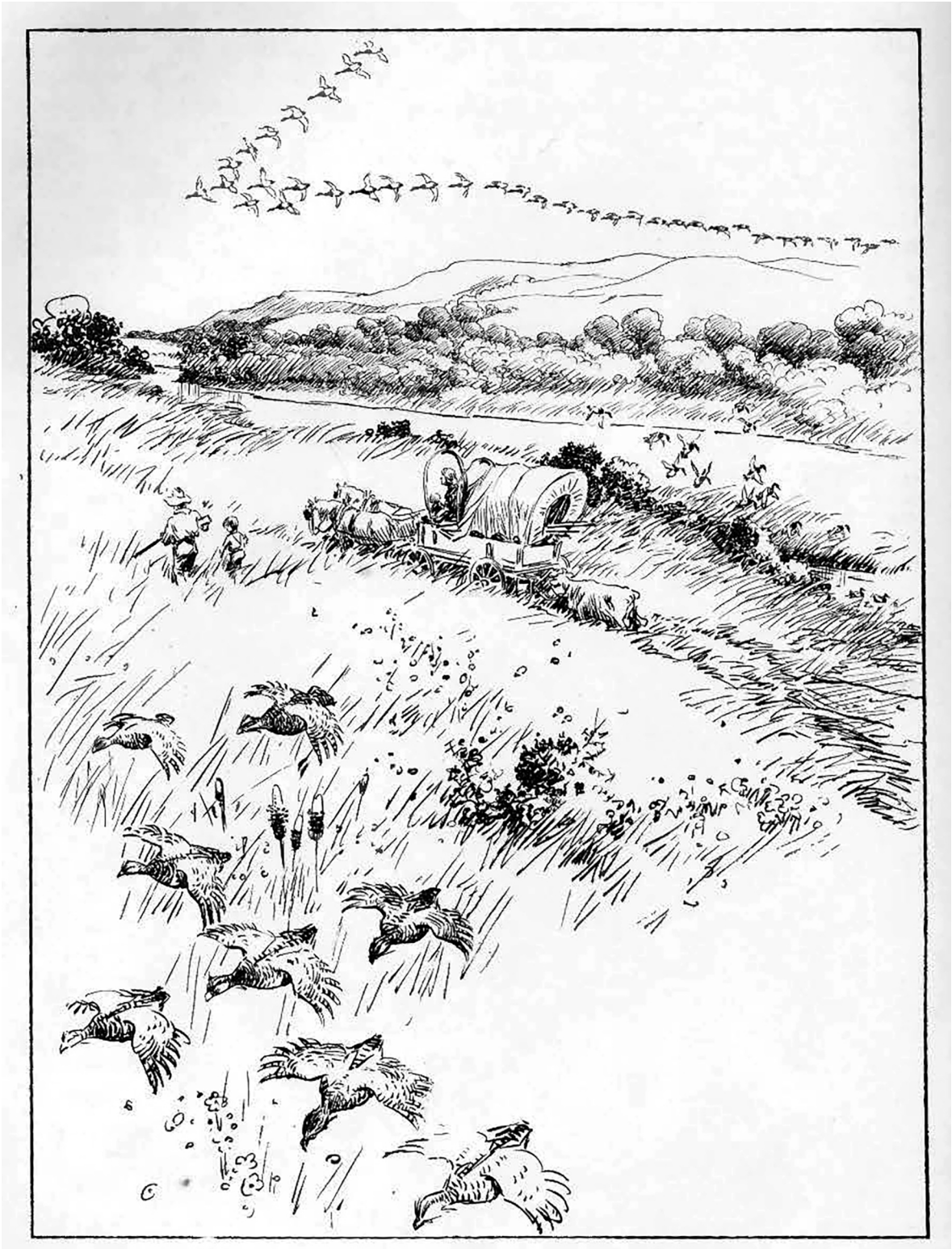


"Iowa in 1834" (1933) Courtesy of the Jay N. "Ding" Darling Wildlife Society. As published in *Iowa's Evanescent Prairie*, by Grinnell College's Center for Prairie Studies

Contents

In order of appearance

By category

Words

Sounds & images

Photo courtesy of Sofia Carr

Sofia Carr '22 *is a third-year sociology major at Grinnell College. Her studies revolve around economic and social inequalities, specifically how institutions restrict agency along economic and social strata. As a Mellon Mays Undergraduate Fellow, she is working on research about the impact of the COVID-19 crisis on low income students' academic and social success. Aside from being passionate about her studies, Sofia loves to create art in her free time.*

To Understand the Prairie's Beauty, "Deconstruct to Reconstruct"

by Sofia Carr

I began this project—including the cover of this issue and the illustration at right—having been inspired by old apothecary plant studies. For my subject, I chose to illustrate some of the plant species that can be found on the eastern Wyoming prairie.

As a self-proclaimed "city girl," plants are beyond my realm of comfort. But, like much in life, I've found it important to take a moment to appreciate the fine details of something beautiful. Learning to draw things requires an attention to form, structure, and the minutiae of the subject. Much like what I do in sociology, this is a "deconstruct to reconstruct" approach to understanding the beauty of the prairie. I chose to highlight each plant's structural features and natural beauty. The gold detailing evokes the glowing scenery of a vast prairie. This art piece, rendered in pen and acrylic paint, is a creative and informative approach to observing and admiring the beauty of the prairie.

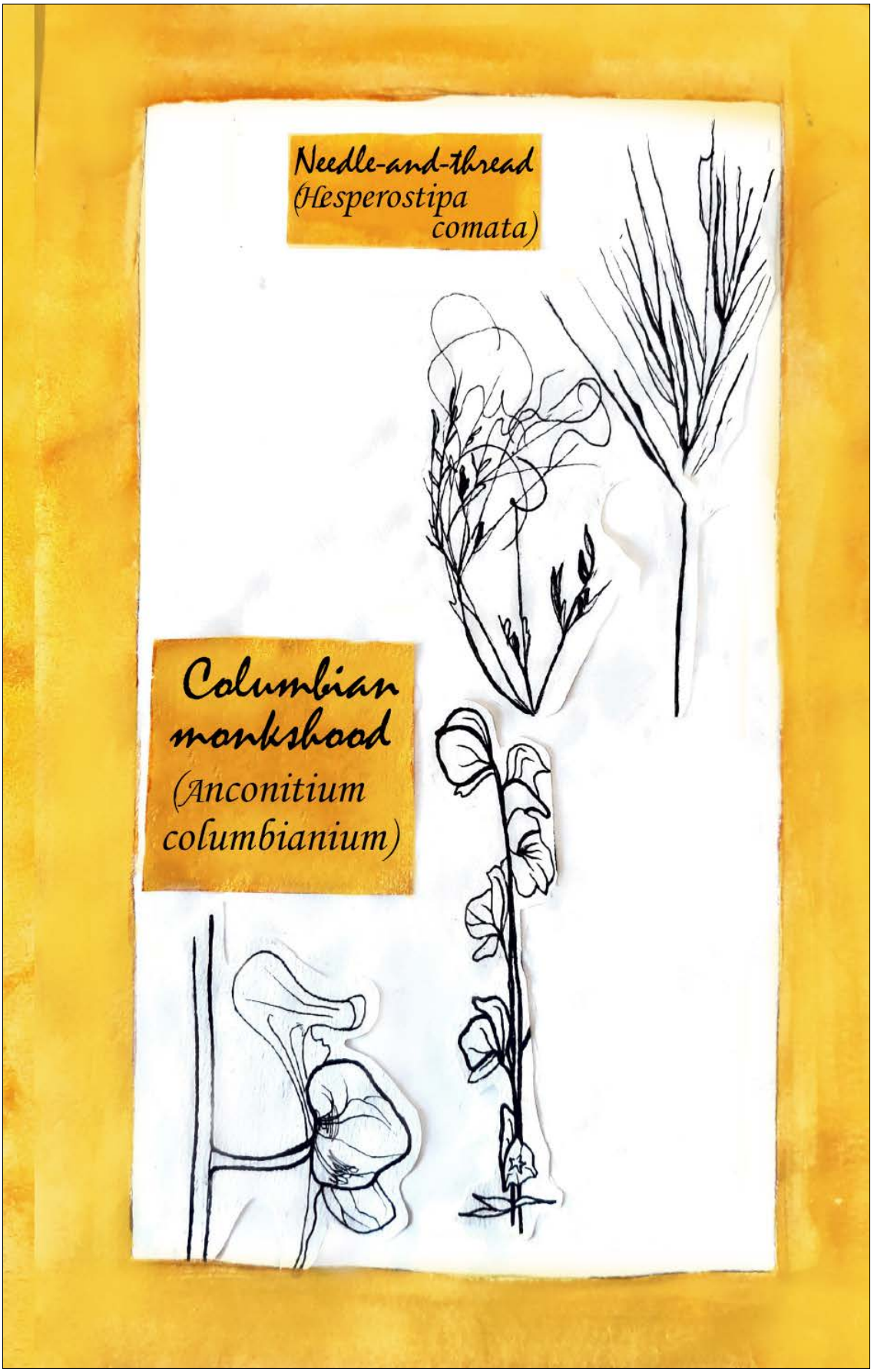

Needle-and-thread
(Hesperostipa
comata)
Columbian
monkshood
(Anconitium
columbianium)

Photo courtesy of Winnie Commers

Winnie Commers *is a third-year student at Grinnell College majoring in biology. She learned to sew as a young child and enjoys seeing what she can make with her sewing machine. In addition to sewing, Winnie dabbles in other textile arts and photography.*

Visualizing Loss: Fabric Art and Photography

By Winifred Commers

Before European settlers crossed west of the Mississippi River, prairie covered the continent from what is now Montana to Indiana and Canada to Texas. The prairie, a mostly treeless ecosystem characterized by grasses, forbs and rich soil, depended on annual fire, grazing bison, and moderate rainfall for maintenance. As settlers moved into the region and pushed out indigenous groups, the prairie began to shrink as European immigrants over-hunted bison and began to turn the prairie into farm fields. This systematic destruction of the prairie has continued to this day, to the point where, throughout the prairie region, very little of the original prairie remains. In many cases, it is less than one percent.

I wanted to show the loss of the prairie ecosystem through the old practical art form of quilting. The art was brought to North America by European settlers who then introduced the art to Native Americans, and many quilts from the last 300 years have featured or been inspired by the prairie.

To visualize prairie loss, I enlisted the help of Montana-based photographer Chris McGowan and Minnesotan photographer and videographer Graeme Thompson. McGowan and Thompson shot photographs of the prairie in Montana and South Dakota, respectively. I ran their photographs through a web program that broke them down into a select number of the colors that make up each image, and determined how much of the image is composed of a certain color. I then created a visualization of the web program results and began sewing the quilt.

As you look at the quilt and following photographs, consider what the Midwest would look like if it were still covered in tallgrass and shortgrass prairie.

Chris McGowan *is a freelance photographer and instructor based out of Helena, Montana. Chris's passion for photography stems from his deep love of nature and the outdoors. Primarily a wildlife and nature photographer, Chris travels Montana capturing images of wildlife as well as the state's vast and ever-changing landscape.*

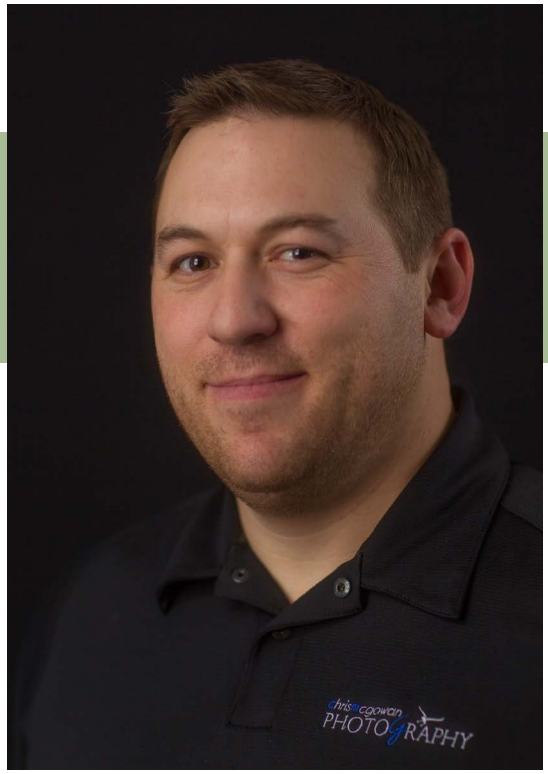
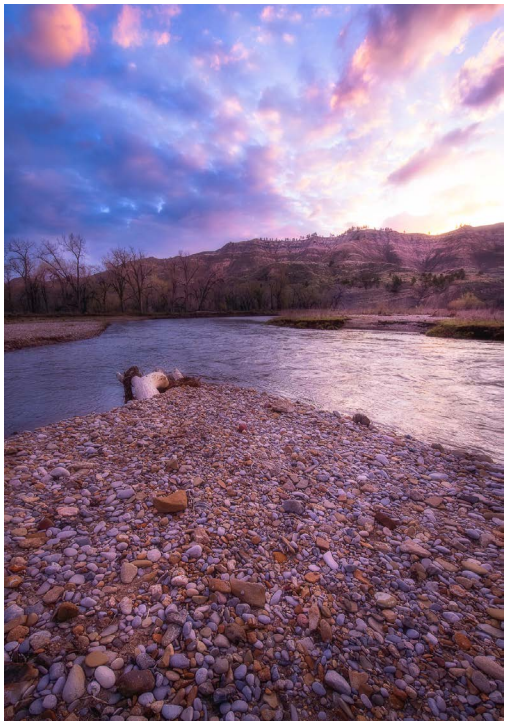


Photo courtesy of Chris McGowan

Graeme Thompson *is an amateur photographer and videographer from the Twin Cities who recently has been exploring long exposure time lapses of the western landscape. He hopes to continue his work with the goal of becoming a cinematographer.*

Photo courtesy of Graeme Thompson

Quilt by Winnie Commers



Untitled images by Graeme Thompson (upper left, middle right, lower left) and Chris McGowan (upper right, lower right, middle left)

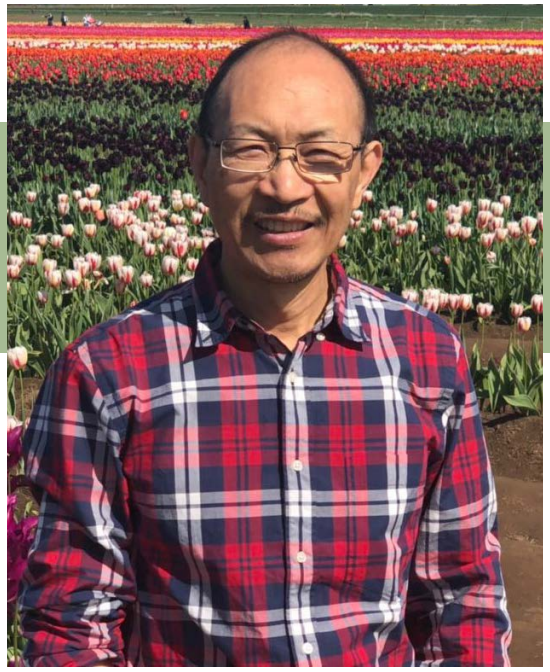


Photo courtesy of Changming Yuan

Changming Yuan *began studying the English alphabet in Shanghai when he was 19, published translation monographs, and served as a college lecturer and administrator before leaving China. An independent tutor and translator with a Canadian PhD in English, Yuan is currently editing* Poetry Pacific *in Vancouver, where he also works on his own poetry. Credits include ten nominations for the Pushcart Prize, eight chapbooks, inclusion in* Best of Best Canadian Poetry: 10th Anniversary Edition, Best New Poems Online, *and publication in more than 1,700 literary outlets across 45 countries. Occasionally, Yuan blogs on yuanspoetry.blogspot.ca.*

Two Poems

by Changming Yuan

Know Thy Crow

Crows everywhere are as black as one another.
—*Chinese Proverb*

Like the shadow of your shadow
The crow stalking constantly behind you is
No other than the soul of your other self
Visiting you from a quasi parallel universe

Winged with the feathers of benighted spirits
It has a deep darkness-filled throat, trying
To summon every bit of your inner being
In the name of Raum or Jingwei*

Horror Vacui

Even in this very moment
My mind is full
Of struggling presences

Such is
Always the case:
The moment its door opens
It is infused with whims & wishes

I stop to squeeze out
Each bubbling perception
But it always returns in a deformed form
To occupy the vacated room
Which has held part of me

You long to become mindful
Of a spiritual vacuum
Yet it never allows for
The briefest moment
of emptiness

*Raum *is a figure known in demonology as the Great Earl of Hell, depicted as a crow.* Jingwei *is a goddess from Chinese mythology who drowned while playing in the Eastern Sea, after which she took a bird's form.*

Autumn colors on the northern prairie. Photo by Bruce Leventhal

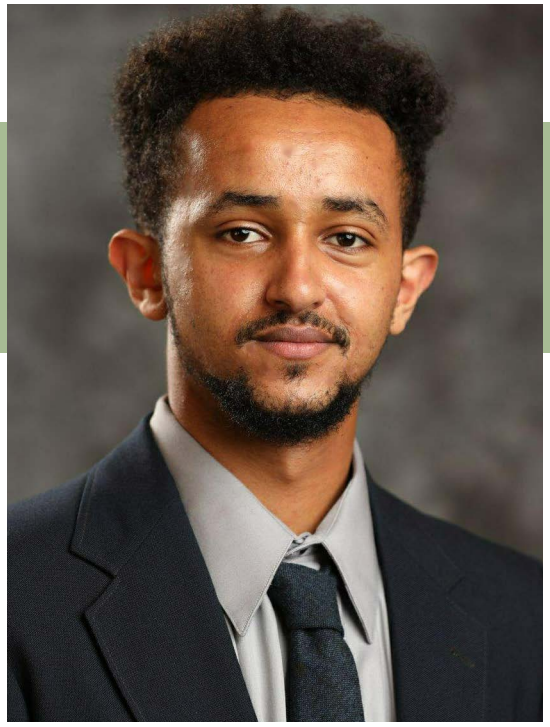


Photo courtesy of Fit Getahun

Fit Getahun *is a senior biology and history major at Grinnell College. He also concentrates in neuroscience and hopes to somehow combine his interests into a fulfilling career someday. From Addis Ababa, Ethiopia, he relishes any opportunity to travel and swears by the healing powers of the change in perspective that it allows. While at Grinnell, he has completed three separate Mentored Advanced Projects (MAPs) in plant and fungal biology and hopes to publish a few prior to graduating.*

Trees of the Prairie*

by Fit Getahun

Many people think of the prairie region as a treeless expanse of windswept grassland. But while it is true that the prairie is widely characterized by oceanic areas of wide open country, that country, before the advent of industrial-scale agriculture, was covered in a wide variety of plant species. These include grasses, but also many types of flowering plants, as well as multiple species of coniferous (evergreen) and deciduous (leaf-bearing) trees.

In recognition of this fact, in this issue of *Rootstalk* we are featuring a new addition to our regular "...of the Prairie" feature. In past we've highlighted prairie birds and prairie mammals; in this issue we're leaving the animal kingdom for the realm of the plants, and offering mini-profiles of four trees that are native to the prairie.

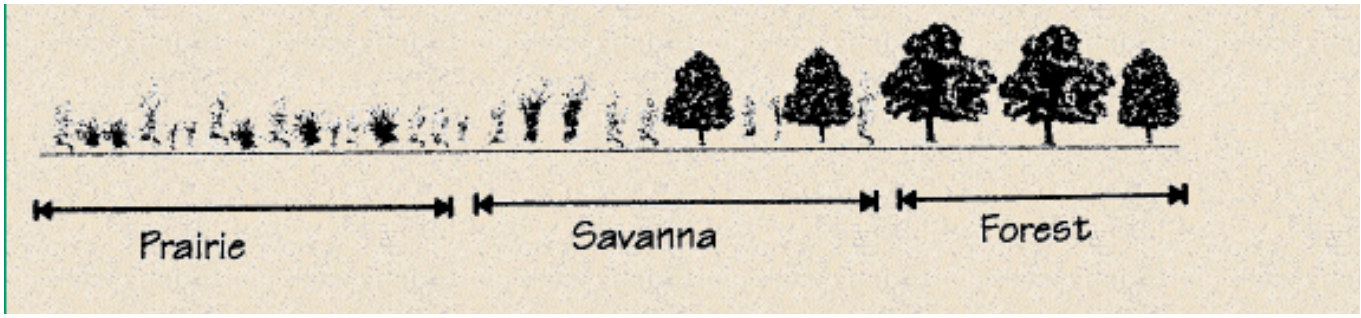


Illustration from "Managing Michigan Wildlife: A Landowners guide," Sargent, M. S. and Carter, K. S., ed. 1999. Michigan United Conservation Clubs, East Lansing, MI. 297pp.

Photos courtesy of Homer Edward Price (above) and Wikimedia Commons (upper and lower left)

The American Elm (*Ulmus americana*)

Flowers: March-April
Height: 40-98 feet

Elms are loved for their graceful, stately shape, with branches like spreading fountains, and their green leaves that turn gold in fall. Among the original prairie trees, elms are also essential in regulating ecological balance in floodplain forests.

Sadly, the American elm (*Ulmus americana*) can no longer be recommended because it is vulnerable to a devastating pathogen called Dutch elm disease. Caused by the fungus *Ophiosthoma ulmi* and spread by the elm bark beetle, this disease has wiped out hundreds of thousands of elms since its introduction to the Americas in the 1930s.

The biggest lesson learned from Dutch elm disease's devastation is the importance of having a variety of trees along streets, in parks, and in home landscapes —this so that no disease or pest can kill such a large proportion of the trees. Arborists and foresters alike recommend diversified tree planting, with a particular focus on trees native to the region. (Description adapted from text created by the USDA Forest Service).

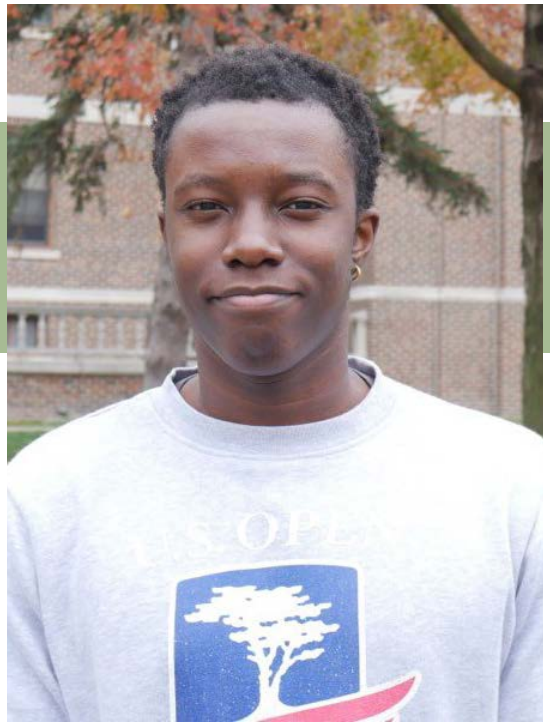


Photo courtesy of Elisha Tibatemwa

Elisha Tibatemwa *is a fourth-year student from Kampala, Uganda, at Grinnell College studying Biology and Political Science. He also intends to pursue a concentration in Neuroscience. He is very interested in the intersection between policy and biology, especially when it comes to public and environmental health. During this pandemic he has decided to try new things and recently started learning to skateboard and code in different languages.*

Infographic:

How Wetlands Contribute to Water Quality*

by Elisha Tibatemwa

Wetlands are an important part of the prairie and the environment but often get overlooked. They offer many benefits to the environment but have been and are still being destroyed.

As I did research on wetlands I found that many people advocate for their protection because of their identity as carbon sequestration zones. With the imminent threat of climate change they are becoming more and more important.

However, in this piece I wanted to focus on a lesser developed importance of wetlands, and this is the ability of wetlands to improve water quality. The Midwest is home to a lot of farmers, and their activities affect the quality of the surrounding water bodies. I made this infographic to showcase the positive effect wetlands have on the environment, and to advocate for restoration and protection as they not only offer long term advantages when it comes to climate change, but also immediately improve the environment they are found in.

**All footnote information appears in "Endnotes." Images obtained from free stock image websites freepik, imgbin and vhv.rs.*

THE CONTRIBUTIONS OF WETLANDS TO WATER QUALITY

WHAT IS A WETLAND?.

A SWAMP, A MARSH A BOG!

Wetlands are parts of our landscape that are defined by the presence of water. Specifically, they are areas where the presence of water determines or influences most, if not all an area's biogeochemistry. The U.S Fish and Wildlife services defined wetlands as transitional lands between terrestrial and aquatic systems where the water table is usually near the surface or the land is covered by shallow water[1].

THE DECLINE OF WETLANDS

Nearly 90 percent of what were Midwestern wetlands at the time of European settlement have been drained, mainly for agricultural development. During the 1970s, it was realized around the world that wetland restoration was important[2]. People begun to realize the large ecological impact these areas had on the environment and the many benefits they provided. Since that time, many wetlands have been either created or restored. In Iowa, the restoration activity more than tripled from 77,000 acres per year from 1982 to 1992 to an average of 263,000 acres per year from 1992 to 1998[3].

WETLAND DESTRUCTION AFFECTS WATER QUALITY

In 2014 the entire population of Toledo, Ohio, was cut off from its water supply due to toxins that accumulated in Lake Erie. Algal blooms piled up around the city's intake pipes as a result of excess nitrogen in the water[4]. This problem is not unique to Toledo; in Iowa, runoff of Nitrogenous fertilizers used in agriculture has created a major water quality problem, polluting the state's waterways and ground water[5]. This is called nutrient pollution.

POLLUTION FILTER

LESS POLLUTION, MORE BENEFITS

Wetlands remove pollutants from the water supply and trap sediment runoff which is detrimental to most species of fish, and which makes drinking water treatment more costly. By slowing the flow of water, wetlands allow sediments to settle out[6].

TOXIC SUBSTANCES

Toxic substances like pesticides, herbicides, petroleum products and metals are also contaminants found in water, which can be dangerous to people and wildlife. The soil chemistry, microorganisms and plant communities in wetlands are very effective at removing nutrients and metals from the water[7].

Case Study

ILLINOIS

Illinois is the number one contributor to nutrient pollution that has effects reaching the Gulf of Mexico. The Wetlands Initiative partnering with farmers in the state's Big Bureau Creek watershed shows how small, precisely placed wetlands on farms naturally remove nutrients from agricultural runoff and prevent them from entering local waterways. This initiative will improve water quality not only locally but throughout the Mississippi River basin to the Gulf of Mexico[8].

Photo courtesy of Ingrid Meulemans

Ingrid Meulemans *is a third-year English major with a concentration in environmental studies. Ever since she was given the* Little House *Boxed-Set as a child, she has had a love of reading, the environment and anything that has to do with the prairie. Meulemans currently lives in Wisconsin, which is where the first Little House book,* Little House in the Big Woods*, takes place.*

Memory in A Mustard Grain: Three Indigenous Women

by Ingrid Meulemans

"I must hide my memory in a mustard grain
so that he'll search for it over time until time is gone.
I must lose myself in the world's regard and disparagement.
I must remain this person and be no trouble.
None at all, so he'll forget.
I'll collect dust, out of reach,
a single dish from a set, a flower made of felt,
a tablet the wrong shape to choke on."

Louise Erdrich, "Fooling God" 1989

Plant images are of species pressed and dried by the author.

Queen Anne's lace (*Daucus carota*)

On Pressed Flowers and Memory

There's something about pressed flowers that I have always found so beautiful. When you press a flower, you don't just preserve the blossom, you also preserve the memory. At my home growing up, we used to have a big, red dictionary that we kept on the top shelf of the broom closet. I would pick tiny flowering weeds, tuck them into its pages, and not stumble across them again for years.

When thinking about the prairie, this same kind of elusive permanence comes to mind. Season after season, the same plants bloom. Each season is reminiscent of the last, but no bloom is ever the same as it was. Through fire, freezing temperatures, and pouring rain, these plants regrow again and again. There's something so beautiful about their resilience, about the way they survive in spite of our efforts to obliterate them.

Though it's an invasive species in the Midwest, Queen Anne's lace, or *Daucus carota*, has always been my favorite flower, and the fact that I usually see it blooming in the gravelly side of the highway makes it even more lovely in my opinion. Flowers are traditionally associated with the feminine, so I thought it would be an interesting to try and align the lives of Indigenous women in the Prairie-Plains region with the traditional wildflowers in the tallgrass prairie. I had hoped that the flowers could serve as a worthy medium through which to communicate their stories. The connections only scratch the surface, though. The patterns that I found over and over again only reaffirmed what I had already known to be true: that the natural world witnesses our lives, the good and the bad, and continues to grow.

In pressing the flowers I selected, I had hoped to preserve and present a visual representation of a woman's experience. Instead, I pressed a moment in her life. The flowers I carefully dried out over the last two months contained fear, trauma, hope, love and regrowth. This is the memory in the mustard grain. It's just no longer hidden.

Buffalo Calf Road Woman

When the last days of June tumble into July on the banks of the Little Bighorn River, the only thing that can be seen for miles in each direction is the ocean of grass. Some call them the four horsemen of the tallgrass prairie: little bluestem, big bluestem, indiangrass, and switchgrass.

The Battle of the Rosebud happened on June 17, 1876, in what is now Montana, while these grasses were still getting taller. The battle pitted the allied forces of the Lakota and Cheyenne, led by Crazy Horse, against troops lead by General George Crook. The tribes felt the General and his men were attempting to steal their land from beneath their feet.

During the fight, one of the warriors from the Northern Cheyenne, Chief Comes in Sight, was left wounded on the battlefield. Then the golden sea of grasses parted. Sitting tall on horseback, his sister, Buffalo Calf Road Woman, rode onto the battlefield, picked up her brother with her own two hands, and carried him to safety. Her people rallied, then defeated the troopers.

Since it took place on Rosebud Creek, Crook's side called it the Battle of the Rosebud. The Cheyenne called it "The Fight Where the Girl Saves Her Brother."

In ten days, the two sides fought again. We have come to call this the Battle of Little Bighorn or Custer's Last Stand. The indigenous people called it the Battle of the Greasy Grass. On the shores of the Little Bighorn River, the grass was cold with morning dew. When afternoon came, the sun wasn't even enough to dry the land. Buffalo Calf Road Woman stood next to her husband during battle. They said she was an excellent markswoman, but she was also quick on her feet and quiet. It was a club, not an arrow, that she used to knock Lt. Colonel Custer off his horse. This engagement, in which the people of the plains annihilated Custer's 7th Cavalry, was only one engagement in the Great Sioux War. After their victory, native forces began to disperse, the army brought reinforcements into the area, and the indigenous peoples were defeated the following May. The victories they won over Crook and Custer all but blew away with the wind. Nearly 150 years later, both sides still tell the story, and Buffalo Calf Road Woman's brothers and sisters still ride horses through the same grass in her honor.

Indian Grass (*Sorghastrum nutans*) and Canada Wild Rye (*Elymus canadensis*). Photo via Wikimedia Commons

Smooth Aster (*Aster laevis*). Photo courtesy of Spotted Horse Press

Winona LaDuke

Winona means *first daughter* in the Dakota language, and that's what she was. Born in August in California, Winona LaDuke would have been far from the Great Plains. She would find her home there, eventually, but by the time she did, the asters and the grass would have been blooming and waiting for over two decades. LaDuke's parents were an Ojibwe (also known as *Anishinaabe* or *Chippewa*) father and a Jewish mother. She didn't learn the Ojibwe language until her 20s, after she had graduated from Harvard University.

At Harvard, LaDuke learned how to become a voice for the voiceless. Becoming involved with indigenous groups on campus, she embraced her Anishinaabe heritage. After graduation, she moved to the White Earth Reservation, in Minnesota. She taught at the Reservation school and later earned her master's degree in Community Economic Development from Antioch University. During this time, she helped found the Indigenous Woman's Network and worked with Women of All Red Nations. Throughout all of this, the flowers of the tallgrass prairie bloomed and faded in their natural cycles.

In 1989, when she was 30 years old, LaDuke founded the White Earth Land Recovery Project. Throughout the 19th and 20th century's the Ojibwe people had lost nearly all of their 860,000 acres of land. With the European-American model of substance farming on the rise, much of this land had been acquired through improper sales and treaty abrogation. The White Earth Land Recovery Project aims to take back that land, legally. When LaDuke started working, the Ojibwe people held only one tenth of their previous land. By 2000, they had bought back an additional 1,200 acres.

But LaDuke wasn't done. In 1996 and again in 2000, she ran for vice president with Ralph Nader on the Green Party ticket. In 2016, she received an electoral college vote—the first native woman to have done so.

Now she celebrates her August birthday on the prairie. When she looks out her window, it's likely she can catch glimpses of the blue asters that dot the sandy soil of the White Earth Reservation. The blue aster is one of the hardiest varieties of the aster family. It holds out unusually long and is strong and resilient in response to predators. It grows in sand and on the sides of roads in bursts, and when LaDuke drove to Minnesota after graduating from Harvard, she most likely looked out her window and saw its lavender petals.

Savanna LaFontaine-Greywind

The ox eye sunflower is uncommonly beautiful. Nestled amid golden petals, its center is a sort of sun, beckoning to bees and butterflies. But the ox eye sunflower is also uncommonly strong. Unlike other wildflowers, it can survive in wet and clay-like soil. Savanna LaFontaine-Greywind, whose Dakota name was Where Thunder Finds Her, was also uncommonly beautiful. And, living just a short walk from the Red River, which divides the plains of North Dakota from the plains of Minnesota, she would've walked alongside these wild sunflowers as a girl. When she carried her own daughter for eight months, she would've walked these same paths.

She was pregnant when she went missing in North Dakota. In August of 2017, kayakers found her plastic wrapped body floating in the Red River. She was not the first Native woman to be found there. Her family hopes that she can be the last. And alongside the river, despite the horror, ox-eye sunflowers bloomed.

During the subsequent investigation, it was found that on August 19th, a woman had been seen leaving a Fargo apartment with a newborn baby. They were a white couple, Savanna's neighbors, and they told the police that while the baby was Savanna's, they didn't know where she was. The couple later testified that they wanted her baby. They confessed that they had lured Savanna into their apartment and, with a small knife, cut the unborn child from her mother's womb. Savanna's neighbors pleaded guilty and were sentenced to life in prison.

Like the ox eye, Savanna was uncommonly beautiful. And she was also strong. Rooting in the clay-like soil that borders wetlands, the ox eye blooms, and begins life again. In late September of 2020, the U.S. House of Representatives passed Savanna's Act. In her name, the statute mandates protection for Native girls and women through increased access to data on Native American crime victims and establishment of mandatory protocol and annual reports about crimes committed against Native women. When the House passed Savanna's Act, the ox-eye sunflower would have just been slowly fading into fall. The U.S. Senate passed the measure on October 10, 2020, as Public Law No: 116-165.

False aster (*Boltonia asteroides*) and ox Eye Sunflower (*Heliopsis helianthoides*). Photo courtesy of the *Bismark Tribune*.

Photo courtesy of Connor Arneson

Connor Arneson *is a second-year student at Grinnell College where he is studying History. Born and raised in Minneapolis, Minnesota, Connor has deep connections to his local community and frequently participates in neighborhood activities. Outside of school, Connor enjoys reading, video games, video-editing and spending time with his family.*

The Politicians of Edison High School

by Connor Arneson

Thomas Edison High School is an average-sized public high school located in Northeast Minneapolis. It has stood in this neighborhood for close to 100 years, through economic depressions, world wars, and rapidly changing demographics. Countless students have filed through its brick entryway; a surprisingly large number have left with a future in politics. In this audio essay, Connor Arneson, an Edison alumnus himself, attempts to explore this trend. Through conversations with five elected officials who're also Edison alumni (including his mother, Jenny Arneson, and also including an exclusive interview with Edison alumnna, Democratic U.S. Representative Ilhan Omar), Arneson sets out to answer the question: Why has this seemingly normal high school produced so many politicians?

Click the image above to listen to the audio essay

Photo courtesy of Ilhan Omar

Ilhan Omar *represents Minnesota's 5th Congressional District in the U.S. House of Representatives, which includes Minneapolis and surrounding suburbs.*

An experienced Twin Cities policy analyst, organizer, public speaker and advocate, Rep. Omar was sworn into office in January 2019, making her the first Somali-American Member of Congress, the first woman of color to represent Minnesota, and one of the first two Muslim-American women elected to Congress.

Photo courtesy of Kari Dziedzic

Kari Dziedzic *represents Minnesota's District 60 in the Minnesota State Senate, which includes portions of Minneapolis and Hennepin County.*

Senator Dziedzic currently heads the Agriculture, Rural Development, and Housing Finance Committee and serves on the Judiciary and Public Safety Finance and Policy Committee, as well as the Taxes Committee.

Edison High School in Minneapolis. Photo by Connor Arneson

PHOTO COURTESY OF KEVIN REICH

Kevin Reich *grew up in Northeast Minneapolis and received a Bachelor of Arts in both Philosophy and Asian Studies from St. Olaf College after graduating from Edison High School. He has represented the First Ward on the Minneapolis City Council since 2010, chairing the Transportation & Public Works Committee and serving on the Business, Inspections, Housing & Zoning Committee. He also chairs the Mississippi Watershed Management Organization Board.*

PHOTO COURTESY OF JENNY ARNESON

Jenny Arneson *represents the First District (northeast and southeast Minneapolis) on the Minneapolis School Board. Arneson earned her bachelor's degree from St. Olaf College and master's degree from the University of Minnesota, both degrees in social work. Jenny is a third generation Edison graduate.*

Arneson's professional experience, primarily in North Minneapolis, includes working with pregnant and parenting teens, leading social skill groups in Minneapolis Public Schools and providing emergency services for families.

PHOTO COURTESY OF JILL DAVIS

Jill Davis *formerly represented the First District on the Minneapolis School Board, serving from 2008-2012. Davis has a BA in psychology from the University of Minnesota, a MA in counseling psychology from St. Mary's, and is a licensed psychologist.*

Davis has worked for Anoka County in Social Services for 22 years and supervised a School-County Collaborative program, an Early Childhood Intervention Program, and is currently supervising a unit that facilitates adoption for children whose parent's rights have been terminated.

Photo courtesy of Mary DeVany

Mary DeVany *is the Associate Director for the Great Plains Telehealth Resource and Assistance Center (GPTRAC), within the Institute of Health Informatics at the University of Minnesota. Ms. DeVany has been involved with telemedicine since 1993. She first served as the state-wide telemedicine activities coordinator for the State of South Dakota and has since served as the Director of Telehealth at Nebraska Medicine in Omaha, the Telemedicine Coordinator for Sanford Health, and the Director of Avera Telehealth.*

Telehealth on the Prairie

Interview by Berit Madsen

As COVID-19 rages through the country, new safety measures and healthcare methods have had to be implemented rapidly on a massive scale. Telehealth, broadly defined as the use of technology to deliver care to patients at a distance, has been one of the most important. While telehealth has existed in the United States for decades now, the recognition of its importance has only increased due to the pandemic. Rootstalk *Associate Editor Berit Madsen spoke with Mary DeVany, Associate Director of Great Plains Telehealth Resource and Assistance Center (gpTRAC), which provides assistance to healthcare providers implementing telehealth programs in the Great Plains region, about the changes the industry has seen as a result of COVID-19 and how telehealth helps patients in the rural Midwest in particular.*

Rootstalk: How would you define telehealth?

DeVany: Generally, we define telehealth as the umbrella term under which all aspects of virtual care delivery fall. One aspect is telemedicine, which encompasses clinical patient to provider services. These services are often between facilities with a larger health system, or with an urban-based tertiary center supporting care being delivered at a rural hospital or clinic. Another component is remote patient monitoring, which involves helping patients manage their chronic diseases in their home. Virtual care in the home is another component which has also certainly grown over these past several months. This is mostly primary care services or urgent care services where the

patient is in their home, on their phone, or in a place of convenience for them. But generally, the term telehealth is defined as providing care at a distance through technology.

Rootstalk: How does telehealth operate within the Great Plains region specifically?

DeVany: The rural areas of our country jumped into telehealth earlier than our urban locations. For example, South Dakota has been involved in telehealth since 1993. At that point, it would have primarily been the hospital to hospital or hospital to clinic types of services where patients who needed an additional level of support from the more urban center. Now, the rural areas often push the envelope around telehealth. Many of the things that are now going on during the pandemic often started in one shape or form in a rural area.

Rootstalk: What are some of the main challenges that affect the Great Plains region?

DeVany: One barrier unique to rural areas is broadband access. Broadband makes telehealth a lot easier and safer because if you've got enough bandwidth, you get the full experience. The healthcare facilities have usually accommodated the necessary bandwidth in order to make those calls, but as we stretch out from there, bandwidth and broadband becomes even more critical. Some of the challenges that patients or clients experience as a result of bad connections or small data plans are faulty video and dropped calls. The cost of these connections can be a challenge as well.

Rootstalk: The Midwest has seen rising case numbers of COVID-19 in the fall compared to the spring, when it was more clustered around

Photos by Justin Hayworth

the coastal cities, so how has telehealth in the Great Plains been used to respond to this?

DeVany: Telehealth is here to support. Telehealth is not a different kind of medicine, but a tool in the delivery of care that is in the toolbox of providers regardless of where they are. As providers get more comfortable, and as those that haven't been using telehealth up to this point now continue to utilize it, I think we'll continue to see telehealth play an important role. For example, how do we keep people distanced appropriately? One way is to not have them come to the clinic if they don't need to. Some rural clinics incorporated telehealth within their own parking lots. If a patient came for a COVID test, they might have had an iPad or a tablet with which they connected to a provider in the clinic from their car. That way they would not run the risk of contaminating or exposing people.

Rootstalk: What are some of the changing concerns for telehealth providers and for hospitals in rural areas that you've seen as a result of COVID-19?

DeVany: Certainly, one of the changes has been get ting comfortable and familiar with serving patients at home. Before COVID hit, home-based care was pretty unique. If it was done, it was usually on a platform that was separate from the other telehealth activities. It might have been a doctors-on-demand kind of platform or a commercialized plan through the patient's insurance carrier. Now, it's not just the big companies and big insurance carriers who need to figure this out; the critical-access hospitals and primary care clinics truly need to figure out how to support their patients when they can't or won't come to the clinic or hospital because of concerns. A lot of learning

had to happen really fast on both sides of that connection.

Rootstalk: That leads into my next question: how do patients and medical practitioners feel about telehealth, and have those attitudes changed recently? Is there a difference in opinion between patients and practitioners?

DeVany: Yes, there has always been a bit of a disconnect between the providers and their patients. Until March, providers often perceived that patients would feel disconnected from them and wouldn't like using telehealth. What they forget sometimes is that while, yes, patients would love to be in person with providers every time, many patients come from a very long distance to see their providers, especially for higher-level specialties. When coming in for a checkup or a follow up that might only take a few minutes, they might have to drive anywhere from two to six hours round trip or more. That becomes a significant hardship for many families, whether it be just the cost and travel time for that appointment or the other family expenses or challenges that might occur. The other component is the economic loss that happens when the patients have to leave their community for those visits. Their medication may not then be provided by the local drugstore or they'll buy groceries along the way and not in the community in which they live. Some providers believe telehealth is a good thing, but that their patients won't like it. However, we have seen a 95-98% patient satisfaction on many of the surveys that organizations are taking. If given the choice between seeing a provider in person and doing telehealth, they'll often pick in person, but once they consider the other components and costs, they'll pick telehealth. Especially our elderly patients, who aren't always comfortable going into the big city alone and finding their way around. Now, from COVID going forward, a lot of providers with patients who come in as often as once a week see the value of being able to see and therefore care for their patients regularly even though they aren't in person.

What they forget sometimes is that while, yes, patients would love to be in person with providers every time, many patients come from a very long distance to see [them]...

Rootstalk: Have opinions on using telehealth changed primarily in urban areas, or in both rural and urban areas?

DeVany: I would say both. There are certainly people with challenges getting healthcare in urban settings too, so I don't want to diminish that. Many of the people in urban locations who had flexibility to get to appointments in person were impacted by the pandemic. Not only did patients not want to come in, but their providers and healthcare clinics told them not to come in except for emergencies due to lack of PPE and other resources. Telehealth is certainly a way to address the needs of the patients, whether they're urban or rural.

Rootstalk: What are some of the ways in which you think telehealth needs to improve, and how are providers and hospitals addressing these issues?

DeVany: There are multileveled difficulties involving various policy perspectives and understanding

that regulatory and reimbursement issues still cause challenges in the state and federal levels of government. I think the other piece is that, from the perspective of a facility, clinic, or hospital, providers need to fully understand the pieces and parts of the in-person experience in order to emulate it as well as possible through the telehealth experience. For example: if the patient must sign a form, how do they do that virtually? How do you collect their insurance card? If a nurse normally checks vitals before the provider comes in, how can that happen virtually? It's important to understand that it may take some different thinking.

Rootstalk: Mental health is particularly a concern for rural communities, especially now during isolation. Telehealth has been used in the past to help with mental health, so do you think that using telehealth to provide mental health services is going to become more important as well?

DeVany: Behavioral health services and psychiatry services have been one of the largest uses of telemedicine since the beginning. It's a specialty that works really well through the technology. That being said, there certainly has been a significant growth in mental health service offerings in the last six months. All levels of behavioral health providers either had to figure it out because of the pandemic or now better understand how seeing patients in their home environments could help providers deliver more appropriate care. It's one thing to come to the clinic and share about your family or home environment; it's another thing, from a provider's perspective, to actually be able to see some of that when you're connected with the client.

All levels of behavioral health providers either had to figure it out because of the pandemic or now better understand how seeing patients in their home environment could help providers give more appropriate care...

Rootstalk: Do you think telehealth is going to be a more permanent staple of healthcare going forward?

DeVany: I do. The use volume went from very small to huge in basically a week, and the organizations that had telehealth already incorporated at some level were miles ahead. They went from prepared to very prepared simply by training their providers. Those that did not have telehealth had a large hurdle to get over. Many organizations did it with guidance from their professional associations or calling us at Great Plains Telehealth Resource Center. I don't think that it will continue quite at the level it is, because people do prefer in-person in many cases, but I do believe that telehealth usage will remain above where it was. We are seeing more understanding of the flexibility of telehealth. For example, during harvest time, when farmers are getting crops out of the field and not coming to the clinic, there was a farmer in Minnesota who didn't feel he had time to get off his tractor for a basic appointment. But when he was given the opportunity to connect through his phone from the tractor, he agreed to take a few minutes at the end of the row to talk to his provider and then got back to his harvest without missing his appointment or putting his health at risk. There are also certainly some policy challenges that have now become much more visible to organizations

and to our country around licensure and reimbursement that need to be resolved, or at least better defined, as we go forward. But there's a lot of interest in getting those things addressed more formally as we continue down this road.

Rootstalk: Do you know any more stories about patients in rural areas?

DeVany: Yes, we've got a number of those that we could share. Remote Patient Monitoring helps people with chronic diseases better understand how their daily decisions impact their disease by using devices in the home. I worked with a program that was able to walk through this with patients who have diabetes, and some of the things they watch with their patients are weight gain, blood pressure, and blood sugars. One goal is to understand how decisions patients make about what they eat impacts their health. One of the patient stories that somebody shared with me went like this: nurses were visiting a patient and realized that the patient's weight had gone outside of their approved range, so they called to check on them and asked what the patient had eaten the previous day. The patient said they had a breakfast and a light lunch, so the nurse

asked what they had for lunch. The patient said they had fish. Thinking that this didn't sound too bad, the nurse asked what kind. "Sardines," said the patient. Sardines, of course, have a lot of salt, so the nurse asked the patient how many servings they'd had and what the serving size was. The patient said they'd had one serving but couldn't remember the serving size. The nurse asked the patient to look at the can, and since the patient was at home, they could retrieve it. The nurse then asked the patient to check the nutritional information. "How many servings are in that can?" she asked.

"Four," said the patient, shocked. The patient then looked at the sodium content and said, "Oh my gosh, I've eaten the sodium content for my next week all in one meal!"

They may have never thought to look at the can had they not had that connection with that nurse through that remote patient monitoring program.

There's another story I like to talk about because it's a little funny. One program used a different kind of remote monitoring. They used home sensors that could identify falls, bathroom usage, going in and out of rooms, whether the patients were opening their refrigerator doors enough to be eating, and stuff like that. The activities can't be seen; when the patient goes into a room, the sensor simply identifies that they're in the room. The patients all consent to being monitored. In this story, let's call the patient George. George was elderly, but he was doing great. Over the course of a few days, the nurse noticed that George was spending a lot more time in the bathroom. The nurse asked if George was feeling okay, and he said he felt fine. She monitored for another few weeks and he was still in the bathroom a lot, sometimes for hours. Finally, she said, "George. Your increased time in the bathroom is really concerning."

He burst out laughing and said, "Oh my gosh, I am *painting* in the bathroom because it's got the best light!"

He had taken his easel and set it up in the bathroom, so that's why he was spending so much time in there!

[Telemedicine] has become an expectation from patients now. They understand what the technology can do...

However, he indicated that he was thankful to know that they were watching and really paying attention to what's going on. He had an increased sense of security and his family did as well.

Rootstalk: Do you think that despite it being through video and not in person, telehealth can lead to even more of a connection between patients and their providers?

DeVany: I do. Whether it be from an audio and video connection, remote monitoring, improving the education of patients around their disease, or just maintaining regular communications, it has become an expectation from patients now. They understand what the technology can do. They've likely used it these last 6-9 months and they're not going to let it go away. They understand the convenience, certainly, but also its value to them as a patient, and I believe the providers have understood the value as well. So yes, I think it will continue to be an important part of the healthcare picture going forward.

Except where noted, all photos courtesy of Agnès Ohlenbusch

Agnès Ohlenbusch *grew up in France and has lived most of her life in the Alsace-Lorraine region, but she also enjoys U.S. citizenship through her father. She was trained as an architect, but after completing her professional training, she elected to stay with her children rather than jumping into the modern, active, working and competitive world. When she first began to read about intentional communities, she realized her family of six functioned much like a small alternative community, and she eventually followed her interest to the East Wind intentional community in Missouri.*

"Freedom and Equality": Missouri's East Wind Community

by Agnès Ohlenbusch

I'm French and American. I've lived most of my life in France, but when my 24-year-old son decided to come to live in the U.S., I asked him if he'd like me to come with him. To my surprise, he said yes, and settling here became our project.

At first, we looked for a room and jobs in a big city, but that all sounded weird to us. In France, we had already had a life different from the majority of people: my son was homeschooled using "unschooling" ideologies, which is very rare in France, and was raised in a non-violent environment without a system of reward and punishment. My priority was to enable him, his brother, and sisters to come as close as possible to being the persons they really are. I wanted to give them the chance to develop at their own pace, the way that suited them. From the beginning, I saw myself as a guide who was learning with her children, rather than being a teaching mother who knew everything, especially what was best for her offspring. As the years passed, my relationship with my four children evolved into something that was closer to a trustful and deep friendship. We had chosen an alternative, ecological lifestyle involving DIY projects, bartering instead of money, environmental permaculture, recycling, and up-cycling.

As my son and I researched our move to the U.S., I asked friends for their ideas and advice. One evening, a friend asked: "Why don't you go live in an intentional community?"

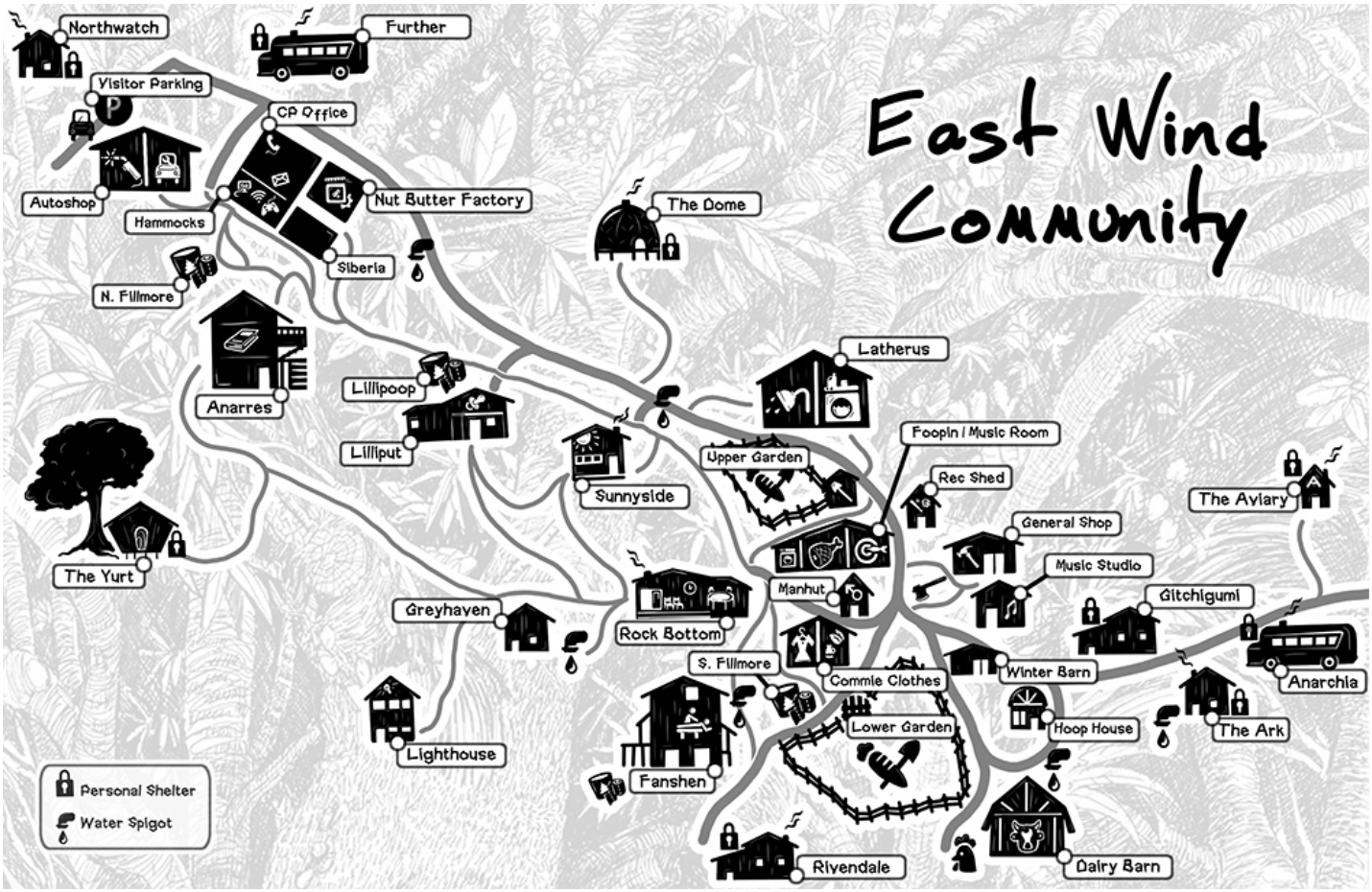
I had heard about intentional communities in France, but it had always been someone else's dream. Being a quiet introvert, I couldn't really imagine myself living with lots of people for a long time. My son and I wanted to explore all the possibilities, though, and researched egalitarian and income-sharing communities.

We discovered that our family had been functioning similar to the way that a small intentional community functions, so we thought that a more formal communal living arrangement might be a good idea after all. My son ended up choosing the East Wind Community, located on just over 1,000 acres near the town of Tecumseh in southern Missouri.

East Wind was founded on May 1st, 1974 with some ideals such as freedom and equality. Its founding principles of freedom and equality are probably for me the main reason I'm living here. Residents (65-plus people) are required to do a fair share of the community's work—at least 35 hours a week. There is a general "no boss" attitude, although there are managers, meaning people responsible for the different areas of the community, and the motto "don't tell me what to do" expresses another aspect of this ethos of individual freedom. This type if freedom doesn't suit everybody, but it is attractive to some people.

We arrived at East Wind about one and a half years ago. As we were new people, members were a mixture of suspicious and curious about us and our beliefs, and the fact that we are French made us even bigger curiosities. However, we found a connection with another French American here, who was happy to be able to talk French with us. It's really when you are away from your country that suddenly the differences show up; it was funny for us to realize how French we were.

After our arrival, for a period of about two weeks, we were considered "guests of the community." After this we began a "visitor period." This was a three-week trial, after which—because there weren't enough concerns raised about to bar us—we became "provisional members" (PM). The PM period lasts for one year after



The East Wind Community is located in the foothills of the Missouri Ozarks. Map courtesy of the East Wind Community

which we were submitted to a yes/no vote to establish whether we could stay on as full members. We passed the vote with success.

Living in an intentional community is different for each person, and as we settled in, I tried to avoid having any expectation for what our experience would be. I thought that my 20 years of experience with various forms of benevolent sharing—with people in many different contexts—would be helpful. I assumed, however, that I would be living in a group of people who shared similar goals, or at least some similar ideals. In the end, all of these assumptions got swiped away, and not always in ways that were easy for me to understand or accept. Living at East Wind might look chaotic to some, but it is rich and complex for others. I'd like to emphasize that my observations are not meant to be judgments. What follows is my personal attempt to bring order to my ideas.

Community defined

According to Miriam Webster's online dictionary, one definition of a community is "people with common interests living in a particular area." I had previously thought that a "community" could only be a kind of homogeneous group. While it is certainly true that East Winders are living in a common place, our goals and interests are not at all the same.

I have given lots of thought to the question of this toleration of difference, and the answer is rather complex. In a nutshell, East Wind is a place where people who do not fit in mainstream society can live. It's a magic island, but it is far from easy to fit in and stay there, in part because its acceptance of difference also makes it a place of constant contradiction and even occasional incoherence.

This should not be understood only as negative, because the contradictory and incoherent aspects of life at East Wind also means openness to enormous possibilities. The energies released in the community are very strong and dynamic, which is not bearable for everybody and explains why there's so much member turnover. High turnover also partly explains why full members do not generally involve themselves in more than superficial relationships with newly arrived peo-

East Wind's residents in May of 2016. Photo courtesy of the East Wind Community

Products for which the East Wind Community is renowned include nut butter and its line of Utopian rope sandals, produced by its members in the on-site workshop (above)

East Wind bakes fresh bread every day. Agnès is one of seven community members who work at this important task

According to East Wind's blog, the community "assumes responsibility for the needs of its members, from food and shelter to medical care and entertainment. Everyone is free to have their own personal possessions such as clothing, media, and electronic devices. Provisional and full members receive an equal 'Discretionary Fund' each month...that members are free to spend as they please"

ple, or share competencies with them—often saying, as I've heard them say many times, that "it's not worth it." I know that, for myself, as the months passed, I began to really feel that I was gaining more credibility and was surprised when people suddenly began acknowledging me with a friendly "Hey!" and sometimes engaged in short personal discussions that showed me they trusted me more.

Personally, I like to meet new people and, in judging the experience, I focus on the meeting in and of itself and not on its duration. One young Italian woman spent less than a week at East Wind—a visit during which she made fresh pastas like her grandma used to. She organized a workshop to teach this skill to the community, but I ended being the only one really interested, so she showed me. After that, I made some of these pastas for the whole community and was able to show others how to make them.

On my side, I was able to teach our Italian visitor and her companion how to make fresh butter out of cream. It was a wonderful and joyful exchange and we've kept in contact through email, maybe not on a regular basis, but I know that we could meet each other in some years and the link would still exist. The same with a guy from Morocco who lives presently in Japan, with a couple from Norway who are specialists in Permaculture, with a young woman from China, and with many other American people who visited for a more or less long period. All of these people are now part of a relational web which is very valuable to me, because with each of them I had a very specific, special, unique and deep exchange, not at all superficial though often short.

As I learned, after arriving at East Wind, following the more-or-less polite welcome my son and I received from most of the members, we had to find our way in. People might help or not, and often it's been a lonely path. It felt incredible, though, to be able right away to enjoy the home-cooked food, and to use the materials and tools, the common computers and library, the many facilities and buildings, the clothing, etc. There is an idea about community items that since they are the community's, they are not "mine"; but since they are the community's, "I" can use them. As a result, the materials were not always in such a great shape because of the many (and, oftentimes, quite rough or incorrect) uses to which they had been put. But the possibilities seemed

endless.

This freedom-of-action has its downside, though. Often one must protect one's projects, at least by labeling them (something new people must learn very fast), as some others might just take the tool, space or whatever else one is using. It is then very frustrating to come back to a project and see it has disappeared or was modified. On the other hand, one can see unfinished projects that have been left lying around, some of them for probably many years, and often from members who are now long gone. It gives one a sense of the true dimensions of East Wind's 45 years of existence.

I thrive on being able to decide when, what, where, and how I will achieve what I want to do. This freedom in organization is for me a real luxury that I did already have in France and that I was so happy to be able to find again in the U.S.

Some members maintain a defined schedule, with fixed hours and a clear distinction between work and leisure, week, and weekend. Others have a more flexible schedule, often changing depending on the weather or just their desire. I personally have about 17 fixed hours and the rest moves around. I love being able to wake up late in the morning not really knowing what I will do with my day, and as I like the quiet, I'm often working at night where I can have the common spaces all to myself, with the only noises being those I'm making.

But there's more to freedom than doing whatever one wants, whenever one wants to, and as a French saying from the Revolution says: "One person's freedom ends where another's begins." In a group of close to 70 people living together, it's not easy to know where those limits are, especially without much direct and frank communication, so the overlap is not usually easy to manage.

People are treated as individuals at East Wind, but there are still some commonly accepted rules which evolved over the time. There are bylaws and a set of legislation and policy tools (called *legispol* by the community), as well as unwritten social rules which change depending on the current members. This can render of East Wind's cultural landscape somewhat unclear. For example, actions like physical violence or trespassing in private space are not tolerated. All in all, to me it feels like swimming in a big body of water, with waves and currents that need to be navigated. Each person has to decide whether to go with or against the waves, and this makes it either more or less difficult.

Socializing revolves mostly around drinking and smoking, but the many parties and events the community holds regularly are open. Although I am a non-drinker and non-smoker, I have always been welcome at these gatherings, at first with some surprised looks from members who were mostly younger than me, but now often with a welcoming cheer as I'm always arriving late to parties that have already started hours before.

I'm not sure whether it's a cultural difference or a personal need, but it is difficult for me to have a deep and trustful exchange with people here. I very rarely feel the occasion to have an interesting conversation or project with the sharing of thoughts and experiences in a commonly open and curious mindset. This is something that surprised me and that I really miss, as I had many of this kind of valuable exchanges in France.

At East Wind, each of us has a personal room. It's part of the condition to be considered as a member.

Agnès made the cakes of butter above using cream from the Community's cows

The rooms are rather small because of a lack of money when East Wind began, but also because it was originally hoped that the main spaces would be where people mostly spent their time. Meals, gatherings, meetings, and parties are mostly communal, but on most evenings, the majority of community members spend their free time in their rooms. And as I like silence and calm, I must say that it's quite fine for me that people are not much in those common spaces at night! Personally, I like bigger spaces and not being in a locked environment, so I mainly use my room for sleeping and to store my personal belongings.

Over the past year, I've managed to do at least one new and more-or-less-big thing every single day! I've learned how to make cheeses and butter with a very skilled member, learned how to bake Parisian baguettes from YouTube, as well as making some beer and wine with different members. It's ironic that I—a French person—would be acquiring these skills in the U.S.

I've served on the social committee, and regularly worked in areas such as the herb garden, childcare, cooking, food processing, wood and metal shop maintenance, and computer installation. I've designed a logo, made sandals, and have worked on various other tasks in support of the community, such as doing some monitoring in the nut butter factory, doing secretarial tasks, and packaging some orders. Once a week I drive to town, do errands for the community and drive other community members to various places. Several months back, I was made East Wind Craft's manager, in charge of the E-commerce platform and the retail section for small businesses.

Because I simply don't make a separation between life and work, my days are pleasantly quite full. I'm often shifting my mindset and I feel that I'm working, learning and playing all the time. I really enjoy trying to bring something to others, whether that's by being a direct support or just by making a homemade beverage. Such latitude is a luxury, and I'm happy to be able to have such freedom-of-choice and lifestyle.

I have also found that many of East Wind's residents are recovering from major traumas. This aspect is very present and heavy in the community. It probably goes a long way toward explaining the attitudes of, and relationships between, members. I deeply believe that because people come here with baggage, they should allow themselves or just be allowed by others to drop that baggage at the community's entrance and become a part of another society. There are different ways the community helps its people to heal: discussion groups, a talk circle, and a new group on trauma.

My days are pleasantly quite full. I'm often shifting my mindset and I feel that I'm working, learning and playing all the time. I really enjoy trying to bring something to others, whether that's by being a direct support or just by making a homemade beverage. Such latitude is a luxury...

But while East Wind is definitely a place where one can heal from past traumas, it's also a place where one can slide down. This will depend on the personal choices, motivations and willingness as people are often left to themselves or keep to themselves. Respect for the individual is very much a part of East Wind's culture, but there is also gossip, which can lead to friction and has resulted in some people having to leave the community. In general, people are left to themselves and permitted to do whatever they want, as long as it doesn't impact others or the community.

Another important aspect is the constant possibility for each member to directly and openly express themselves in front of the whole community by simply writing a note and pinning it up on the different boards displayed in the main common space so anybody can read them. I value this way of communication, but I also have often felt that one-to-one exchange was lacking. When there are issues between members, some people offer mediation, but this has the limits each of the in-

volved community members gives to it, and this leads to problems not always being solved in a satisfying way for everybody. This means that a sense of frustration and resentment can remain, depending on the individual, and this becomes a part of the energy moving around in the community. Broader issues involving more people or being considered as a community issue (such as acts of physical violence, violation of boundaries or of private space) are brought to either the Social Committee, the board, and often to a community meeting which all members can attend. Finance, legislation, and all kinds of projects that involve the community also lead to community meetings with a vote.

Living at East Wind is a special adventure for me. I would never have thought I would be engaging in this kind of lifestyle experiment. It has been an exceptional journey, and though I won't say it's always been an easy one, from the beginning I have like felt at home… plus 65 people, all making a big difference!

To find out more about the East Wind Community, in addition to visiting its website, you can view the videos in the collection posted on its YouTube channel, or read entries in its blog.

The Light House, where East Wind houses its visitors

Trees of the Prairie

The Burr Oak (*Quercus macrocarpa*)

Photos courtesy of Carl Kurtz (left), Wikimedia Commons (upper, above) and the Missouri Department of Conservation (lower, above)

Flowers: April-May
Tree height: 40-100 ft

Known for their wide crowns and sizable diameters, Bur Oaks grow chunky limbs and leaves that can be up to nine inches long. The largest of all native oaks, they also grow noticeably fringed acorns, giving the tree its other name, the Mossycup Oak.

The Midwest was once rife with oasis-like "oak openings," fertile plots of land interspersed and lined with bur oaks, and these giants marked the edges of prairie lands further west, protecting the woodlands from prairie fires. Beloved for their strong wood and resistance to drought, these sentinels of the prairie deserve a round of applause. (Description adapted from text created by James R. Fazio from the Arbor Day Foundation).

Photo courtesy of McKenna Doherty

McKenna Doherty *is a third-year student at Grinnell College majoring in English and Studio Art. Born in Red Lodge, Montana but raised in Monona, Wisconsin, McKenna feels proud to call the Midwest home and considers cheese to be one of her favorite foods. While on campus in Grinnell, she actively participates in the unicycling and juggling club, writes a weekly column for The Scarlet & Black newspaper, and serves as co-president of the Wisconsin Club. Currently, McKenna works in the Grinnell Math Lab as a (remote) calculus tutor.*

In her spare time, McKenna enjoys crafting, illustrating, playing racquetball, and dreaming of one day owning a cat named Cardboard. At present, she is co-authoring a novel with her best friend inspired by their time at Grinnell and loosely based on Train's hit song, "Hey, Soul Sister."

Video Essay

Barns of the Midwest: An Homage to Our Agricultural Past

by McKenna Doherty

As a Midwest native, I'm accustomed to passing abandoned farms and farmhouses nearly every day. However, aside from noting their beauty in the fleeting moment in which these farms are within eyesight, I've rarely—if ever—given them a second thought. Here, in the form of a video narrative, I've attempted to pay tribute to the decay of these delicate, lonely structures.

While gathering footage around my home in rural Wisconsin for this video, I paused at each shooting location to record audio samples. For instance, I captured the noise a rusty hook makes as it rattles against the side of a barn. I knocked one fist against a half rotted door. I held my phone up to the sky to record the buzzing of cicadas in a nearby tree. After returning home, I composed and recorded a song, titled "Prairie Lullaby," incorporating these compiled noises.

As you can see in the last few seconds of the video, I used GarageBand to cut and splice my collected sounds to create beats that replicate drums. Subsequently, I added a couple of instrumental tracks over top in which I play simple melodies on the piano and the organ. A handful of sounds (specifically, the woodpecker noises and the wind whistling through grass) come from Freesound, a collaborative sound database. I've included the audio as a separate file in case the voiceover of the video is distracts from these subtler elements.

As the National Barn Alliance professes, "A barn is more than wood and nails." I hope you come to share a similar impression after watching my video.

To link to a YouTube file of McKenna Doherty's video essay, click on the image above. To link to the essay's soundtrack, "Prairie Lullaby," on Souncloud, click on the audio icon below. Listen for the woodpecker sounds, recorded in the Oklahoma's Joseph H. Williams Tallgrass Prairie Preserve

Except where indicated, all images courtesy of Clay Bonnyman Evans

Clay Bonnyman Evans *is a freelance writer, thru-hiker, and board member of the Great Plains Trail Alliance. During his time as a journalist, he wrote for the Los Angeles Times, the Orange County Register, and the Boulder (Colorado) Daily Camera. He is the author of the book,* The Trail is the Teacher, *about his 2016 thru-hike of the Appalachian Trail. He lives in South Carolina and Colorado.*

*Footnote information appears in "Endnotes."

A Conversation about the Great Plains Trail*

Interview by Cara Keleher

For serious hikers, there are a number of trails that offer peak experiences. Two of the most venerable—located on opposite sides of the continent—are the Appalachian Trail (stretching from Mount Katahdin in Maine to Springer Mountain in Georgia) and the Pacific Crest Trail (stretching from the U.S./Canada border in the Pasayten Wilderness and the E. C. Manning Provincial Park, to the town of Campo, California on the Mexican border). To these can now be added the Great Plains Trail, a 2,100 mile route that crosses the prairie from the Canadian to the Mexican borders.

Clay Bonnyman Evans (AKA "Pony"), one of the board members for the Great Plains Trail Alliance, has been associated with the development of the trail from the beginning. Pony has hiked nearly the entire trail, and Rootstalk *Associate Editor Cara Keleher spoke to him recently about his experience.*

Rootstalk: Can you begin by talking about your connection to the Great Plains Trail?

Evans: Sure. I spent almost all my life in the Mountain West and California. I was born and raised in Colorado, then worked as a cowboy in Wyoming, then lived in New Mexico and California, then became a journalist after those cowboy years—which is what I was originally was going to do before I did the cowboy thing. I worked for newspapers for a number of years. I've always been an outdoors person, but when I was

about 54 (I'm 58 now), I took my first long distance hike on the Colorado Trail, which is about 500 miles, and I really, really liked it. I mean, I really liked it. So, the next year I hiked the Appalachian Trail, and then started doing some lesser-known trails—the Foothills Trail (in North and South Carolina), the Pinhoti Trail (in Alabama and Georgia), just different places. And—it must have been 2018, but I can't even remember exactly how it all went—I found a story on the back page of *Backpacker Magazine*, and it was an interview with Steve Myers, who just happened to live about six miles from me in Colorado. The article was about Steve's long interest in starting something called the Great Plains Trail. At that point, he'd been doing things with the trail for—oh, I don't know, 7 or 8 or 9 years even, and it was really his brainchild. He had grown up in Minnesota and driven across the Northern Plains frequently, and he'd always been fascinated by them. He just got intrigued by the idea of a long trail across the Great Plains. We have these long trails that go up California, Oregon, and Washington; and the Continental Divide Trail goes through New Mexico, Colorado, Wyoming, Idaho, and Montana; and the Appalachian Trail—the famous one—goes through fourteen states. So, Steve just thought, *the plains deserve some respect, maybe we can do this here*. So really, Steve's the guy that got the whole thing going. The *Backpacker* story got him some attention, and it certainly caught my attention, because growing up in Colorado, I was of course involved in mountain stuff, very outdoors, and when I was younger, my family used to go out to a big reservoir in western Nebraska. Starting then, but accelerating when I got a little bit older, I just thought, *people are always so into the mountains, and that makes sense, but they don't realize the amazing things that are here*. If you look east where I was in Colorado, the Great Plains were just incredible! So, because of that, I was fascinated with the story that I read about Steve, and I contacted him and got involved as a volunteer doing various things involving the

Great Plains Trail Map courtesy of the *Rapid City Journal*

trail. And then last summer—one of the things the board was doing last year was kind of trying to come up with a "pilot trail," because when you create something like this, that is 2100 miles, you're not going to have a foot trail all along the way. A lot of it's going to be on roads, or dirt roads, and you have to figure out where the public lands are that you can route it across. Steve's done that work for years, and they wanted to come up with an option that they were calling the pilot trail to sort of test a 350-mile section that people could do either on bike or on foot. There is one person who is also on the board (and I am now on the board) of the Great Plains Trail Alliance, Luke Jordan, who is the only person to date known to have actually hiked the whole trail. The trail changes all the time, so what Luke actually hiked, back in 2015 or 2016, is a little bit different than what I did last summer, which is hike the pilot trail from Bear Butte, South Dakota, outside Sturgis, down to Scotts Bluff, Nebraska.

> [N]obody had done this, so I said, you know what? I'd just love to go walk and see what it's like...

Rootstalk:: How has the route been chosen?

Evans: It's mostly been Steve's effort. He was just interested in this and wanted to make it happen. He was living in Colorado at the time, and he just started going to the areas he thought might work and looking at maps, and he ended up coming up with a route going across public land. And if you're doing a long hike, you need to be able to go into town to buy food, and plan your route around water sources, so Steve did that. It's gotten more refined over time, particularly up north. Nebraska, South Dakota, and North Dakota are mostly on public land now—not entirely, there's still plenty of dirt road walking—but a lot of that section is now on public land. So that's what it was—identifying public land, identifying water sources and towns and things like that. And at this point, the further south you go, the less developed it is. When Luke hiked the whole thing, he needed vehicle support. He needed somebody with a car that could help him. What ended up happening was board members from the organization gave a week each and went down to support him. And that makes sense, because there's just so much road walking, and there's no public land for him to stay on, and so forth. So, he walked the route, but they would pick him up to take him into town or take him to a campsite, things like that.

Looking west toward Sturgis from the summit of Bear Butte, South Dakota (northern terminus of GPT pilot trail and Centennial Trail) at sunset.

A bull bison who was blocking the trail early one morning in Custer State Park, South Dakota

Rootstalk: Can you talk about your personal experience on the trail last summer?

Evans: Oh man, I loved it. Like I said, I have an interest in long distance hiking, and I wanted to help the organization because, we were trying to put this idea out there, and besides Luke, nobody had done this, so I said, you know what? I'd love to just go walk and see what it's like. My timing was important because at the time Omaha Public Radio had a reporter who was interested in doing part of the trail, so we timed it for her schedule. This worked out okay, but it just happened to be the incredibly hot, hot, hot late August/early September of 2019. I started at Bear Butte, which is outside Sturgis, South Dakota, and the first roughly 125 miles from that point are actually contiguous with the Centennial Trail, which goes through the Black Hills. It was great! I mean, it's a real trail. I didn't find any other backpackers on the trail; I only saw occasional people at trailheads. There are sufficient places where you can walk a mile or two off the trail to get supplies, the water was great for me that year (it can be difficult at times if it's a drought year). It's just fantastic. It's beautiful. It's pine foothills. It was excellent, I loved it. After that section you wind up in Wind Cave National Park and then you go down to Hot Springs, South Dakota, which is a great little trail town—it doesn't know it yet, but it's got natural hot springs and plenty of cheap motels where you can do your laundry, and all that stuff that thru-hikers have to do. So, I went there, and then I started west. A little bit of road walking out of town, and then I was back on dirt roads and camped west of town. And then I continued west and hit a rails-to-trail bike trail called the (George

S.) Mickleson Trail—beautiful also, well-groomed for bikes, and they even have a water cache system there. Then down to Edgemont, South Dakota, an old run-down rail town, and from there, I had a pretty hefty day of doing mostly dirt road walking down into Nebraska, into the Oglala National Grasslands. And then I crossed the grasslands, which are just unbelievable. I mean, they're just so wide open, and there really aren't fences. A lot of it is private property, a lot of it is BLM land[1], but just gorgeous. But no shade, and very little water, so I had Steve and Luke (who just happened to be out in the area scouting route changes in South Dakota) stash water for me, which was really good. It turned out I would have been okay, because I could have gotten water along the way, but it was nice to have. And then down into the little town of Crawford, Nebraska, which is again, a great little trail town, I mean, just perfect. And then, southeast of there, back onto a trail called the Pine Ridge Trail, and then more dirt road walking down towards Alliance, Nebraska. And then west on farm roads, dirt roads, and those are very long days that I didn't even do all of. If you're going to do that, you would have some very long days there, unless you had vehicle support. But really, it was spectacular. It's just a part of the world that so few people know about and see. It's beautiful, it's wide open, you're not going to see anybody else walking, nobody. For me it was a very solitary experience, except for the three days that I was with the radio reporter and her camera guy. It's just spectacular, it's gorgeous. There are hills and antelope up in the Black Hills, and cutting through state parks you see buffalo, hawks, snakes, and canyons. All this stuff, and people call the great plains "fly-over country" but it's not. It's just spectacularly beautiful. I loved it. I loved it a lot.

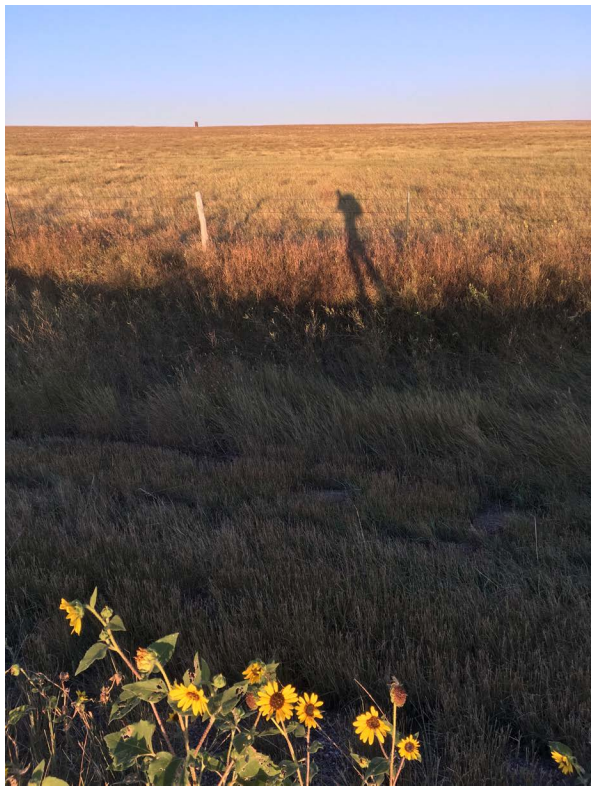
A "confidence Marker" on the Centennial Trail in South Dakota. The Great Plains Trail is contiguous with the Centennial Trail through the Black Hills

Rootstalk: How many miles did you end up hiking?

Evans: It was about 300. I did skip some of the road walking. Part of that was a matter of convenience. First of all, I've done plenty of road walking. I wasn't out there trying to take every step of that route necessarily. We wanted to see how feasible it was, and those road walking days would have been almost 40 miles. That is a long day, even if you're very, very in shape. And then it just happened that the radio people were able to get me a ride that would allow me to just skip that section. It wasn't that important to me to do it, so they dropped me off so that I didn't have to do the long road section there.

Rootstalk: You've mentioned that you've done a lot of hiking on various other long trails throughout the US. How did this experience compare, or how was it different from those experiences?

Evans: Well, let's take the Colorado Trail and the Appalachian Trail. Those are two of the better-known ones that I've done. Something that I didn't really anticipate when I did the Colorado Trail—and by the way, I consider myself to be a fairly solitary walker, and I also climb a lot of mountains and mostly do it by myself—so what I wasn't anticipating was the community. And the Appalachian Trail especially—every single person that does it winds up being so pleased that community was such a big part of it. Because, you're meeting people, you're forming what people call trail families, you may be walking with the same group of people for a few hundred miles and then breaking apart, whatever. So, community is a big part of a lot of thru-hiking experience. There is no such thing on the Great Plains Trail. It's new, it's not well-known yet—I wrote a little bit about it and about the Centennial Trail after I finished, and I certainly heard from a couple dozen people who were interested in doing either the Centennial Trail or all or part of the pilot trail. And that's just really what it takes. I mean, that's why I did it partly. It takes people doing it, and learning what it is, and wanting the challenge, and so forth. So that's the biggest difference. I saw almost no one else, except for people in town, until I met the radio reporter. So that's a piece of it. It's also very different in that most trails, perhaps understandably, are mountain-focused. And there are definitely hills and ridges, it's not flat, and the Black Hills are real mountains, they're just low mountains. But it really is very wide open, and a lot less mountainous, and you're just traveling through very sparsely populated country, for the most part. So, even if you're going to town—sure, Hot Springs is a real town, and Crawford is a real town, but they're small, they're really small. So those kinds of things. And, you know, I was camping by myself every single night, except for the couple nights that I was with the radio reporter, and you wouldn't generally expect that on most of the other, better-known trails. And if you're a person that worries about that, or isn't into that, that's fine. This trail is not going to be for you. Or, go with another person. But if you are a person who likes that kind of solitude, and adventuring by yourself, it's a spectacular experience, it really is.



Pony casts a long early-morning shadow as he walks south of Edgemont, South Dakota

Rootstalk: Do you see the trail becoming more widely used in the future, or do you think it will remain a more solitary hiking trail?

Evans: The Pacific Crest Trail goes back to the 1930s, the Appalachian Trail goes back to the 1920s, the Continental Divide Trail goes back to the 1950s or 1960s—you know, these have been

Long, straight road from Edgemont, South Dakota into Nebraska

around a long time. And part of the reason that I got involved with the Great Plains Trail is that I thought to myself, well, you're not probably going to see how something like this happens from the ground-up, or frankly, doesn't happen, aside from this. And for years and years, it really was just Steve doing it—it was almost like a hobby. But over time, we've gotten a fair amount of media coverage, and the route has gotten more refined, we have a board that's more organized—so all the little steps you would imagine that have to happen to make it more permanent—I think they're happening. I'm not going to predict that it's going to become the Appalachian Trail of the Great Plains, because it's an advanced trail for the most part. Not all of it—the Centennial Trail part is a great beginner trail, like true beginner. But for the rest of the trail, you have to be willing to do some long miles, you have to carry food and water for longer distances and so forth, so I don't know if it's going to stick, but what I can say is that all of the arrows are pointing in the right direction, and we certainly have gotten the attention, and we certainly have gotten more people interested. At least a half dozen people have contacted me, and ended up hiking at least the Centennial Trail. It's a slow, deliberate process, but I'd love to see it happen. I think Steve is correct when he says that we need to remember that this can be a bike trail too. There's a whole separate bike route—it's very similar to the hiking route, but there are several places on the hiking route that you can't take bikes, so there's a whole separate bike map. So, I think the trail just has to find its place and its audience. Again, I wouldn't dare to make a prediction, but I see all the arrows pointing in the right direction.

Rootstalk: You mentioned biking—do you know of anyone who has biked the route?

Evans: At this point the whole thing is more bike-able than it is hike-able. To our knowledge, no one has biked the whole thing, but I have a friend who has biked almost all of the Colorado section, so it is very doable by bike. The difference is really that you can go a lot more miles per day on a bike. Even a very sturdy hiker—only a tiny percentage of people—are going to be able to do 30 miles a day on a regular basis. So, let's say a very strong hiker is doing 20, 25 miles a day. Those are long days, especially if it's hot. But on a bike, a similar effort can get you 100 miles.

So, the problem with the distance between public lands where you can camp, or waterholes, or towns, becomes an easier logistical issue when you can go 75 or 100 miles a day. I'd love to see somebody try to bike the whole thing—it's super doable.

Rootstalk: Where do you see this project going in the future?

Evans: It's always being refined. Part of the section that I

hiked outside of Crawford, Nebraska, went over some dirt roads to get to the Pine Ridge Trail, and there's a wildlife refuge to the west of there. We're working with the rangers there and Steve has gotten permission to route the trail through there. This is kind of how it happens. What that means is, when that happens, suddenly those miles—8 miles, 10 miles, whatever it is—are going to be through wild country and trails. So those kinds of things are happening. Last year when I was up there, Steve and Luke were scouting north of where I started—north of Bear Butte, north of Sturgis—and they had come up with a route that takes advantage more of public lands, and they had gotten to know the owners of a tiny general store in the town there and asked them if they would be willing to be on the route—you know, could people throw up a tent there for 10 bucks, or whatever? So, those things are just happening all the time. And I haven't been up there, but apparently North Dakota is mostly on public lands now, so that's pretty impressive. I expect it will continue going like that. Again, it's much more challenging in the South, because if the public lands are there, they're there. If they're not, then what do you do? What we've talked about is maybe down the road we can get public land easements. That happens on other trails. So, the trail is always being developed. We don't have a ton of money, so we're not buying land like the Appalachian Trail Conservancy, which was able to partner with various local communities to complete that trail, which is entirely on public land or public easement land now. But it's slow and steady, and I expect that to continue. We do need to focus more on raising resources so that we can do what that the ATC is doing. Well down the road, if we had that kind of money, it would be great to partner with the Nature Conservancy or something to pull out some land and get an easement where we could use it as trail, and it's preserved and so forth.

Rootstalk: Where does the money for the trail currently come from?

Evans: Right now it's just donations. I've worked for nonprofits in the past, and I'd like for us to get more engaged with trying to get some grants and things like that. I think there have been small pieces of money from grants in the past,

Bluffs outside Crawford, Nebraska. The trail was recently rerouted to take hikers much closer to the bluffs.

but again, it's coming together, and it's a slow process. And for me, that's really interesting to watch, because we do have people with different areas of expertise now. We have an academic from the University of Illinois, I'm a media person, which helps with publicity...so it's been pretty cool to watch it all happen, and I expect it will continue.

Pony's tent in the Oglala National Grasslands, Nebraska.

Rootstalk: Is there anything else we should know about the Great Plains Trail?

Evans: Well, if anyone is interested, they can go to greatplainstrail.org. There's an interactive map there, as well as a media section, which is a really great way to get a sense of what the Great Plains Trail really is. The website has interviews with people like me and Steve and Luke, who have some real familiarity with the trail. There's lots of good resources there. And there also is also a contact form on the website, to reach us. And, by all means, if somebody thinks they're interested in doing part of the trail, they're welcome to contact me directly (claybonnyman@gmail.com). I love talking with people about the trail. I'm certainly very familiar with the Nebraska and South Dakota parts of the trail, and Luke is familiar with the other parts.

Rootstalk: What are your own future hiking plans right now?

Evans: Well, I was supposed to hike the Pacific Crest Trail this spring, and you know what happened [the COVID-19 pandemic]. But I am hoping to do at least part of the PCT this coming spring. I would like to do what's calling the Triple Crown, which is thru-hiking the three best-known long trails—the AT, the PCT, and the Continental Divide Trail, which goes from New Mexico up to Montana to the Canada border. I'd love to do that. I'm still in good shape, despite my age, so I do hope that I will get the chance to do it. I do hope that this spring I'll be out on the PCT. In the meantime, I'm always doing little things. I'm leaving next week to do a workshop for people that want to hike the Appalachian Trail. I write for a website called the Trek (thetrek.co) and I just published a book about my Appalachian Trail journey (*The Trail is the Teacher: Living and Learning on the Appalachian Trail*), so I love the world of thru-hiking, and I try to stay plugged into it any way I can.

Rootstalk: I am impressed by your trail resume.

Evans: Don't forget, thru-hiking gets all the publicity, but tons and tons of people do what we call section hiking, which is just doing what you can, when you can, over a course of years. When I was on the Appalachian Trail, I met an old guy from Alabama, who started in 1974, and that year, 2016, he was finally finishing. So, there you go. Those options are all there, and you can do anything you want. Here's my recommendation: if you think you're interested in long distance hiking, I would highly recommend starting with the Colorado Trail. It's very doable in less than a month, and it's spectacularly beautiful. The ratio

of reward to effort is much, much higher than on the Appalachian Trail.

Rootstalk: Can you explain how you got your trail name, Pony?

Evans: On the third day of my 2015 hike of the Colorado Trail (my first thru-hike), I walked past an older man who had set up his tent not far off the trail. As I passed, he called out, "Slow down!" Being the sort of person I am, I stopped and asked why he said that to me. His answer, in a nutshell, was that he felt most hikers walk too fast, failing to "stop and smell the roses" and missing out on the experience. I told him I disagreed, noting that first of all, I wasn't walking that fast, and second, I was soaking up all kinds of experience and absolutely loving it.

"I'm not fast," I told him. "I just wake up early, put my head down, and go all day without stopping."

He stroked his chin thoughtfully.

"So", he said, "you're like a little mountain pack pony!"

I thought about it for a moment. I remembered once telling a friend of mine that she ran like a gazelle, and she responded that I was like an Icelandic pony—a short, hardy, sturdy breed not exactly known for its speed.

"Yup, I am," I told the old man, and mosied on. From that moment forward, I introduced myself as Pony.

Incidentally, I later learned that the man, trail name Slow Man, made a habit of doing what he did to me to pretty much every hiker he passed, not just on the CT but also other trails.

I still disagree with him, but I'm grateful for the name, which suits me!

Pony at Toadstool Geologic Park

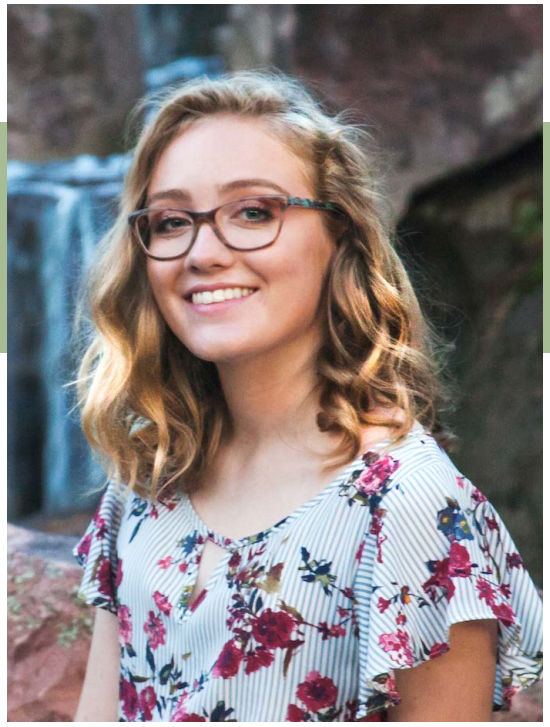


Photo courtesy of Jonathan Vu

Katie Goodall *is a second year Grinnell College student from Colorado Springs. She is studying English and sociology, and hopes to work in radio journalism post graduation. Living in Grinnell has increased her love for the prairie region, and she hopes to do more work with this beautiful land in the future.*

Infographic

Prairie Restoration: Grown at Home

by Katie Goodall

The idea of writing about backyard prairie restoration started in Kansas.

In late August, I was researching prairie-based stories in Kansas when I came across a short audio piece, only a few minutes long, about a small-scale prairie restoration in Edgerton, KS. Residents of that city had voted to install a prairie plot in a local park to teach children about the prairie and entice them into exploring the larger patches of prairie beyond the playground. It's a long-term project, since the prairie will take a couple years to get established. City officials hope that children who grow up with the prairie will have an interest in restoring even more of it when they reach adulthood.

Kansas, the third biggest producer of sunflowers in the U.S., is known as the Sunflower State. Among many other wonderful attributes (including road-trip attractions like the world's biggest ball of twine), it is home to the Tallgrass Prairie National Preserve, the only national preserve dedicated to the preservation of America's tallgrass prairie. Today only four percent of the tallgrass prairie remains, with the largest areas being the Flint Hills of Kansas and the Osage Hills of Oklahoma. The Edgerton plot is one example of how the state is starting to recover their original landscape.

Though this story started in Kansas, my research did not remain there for long. Within days of discovering the Edgerton restoration, I learned of a community in Minnesota which was creating prairie restorations in its residents' own yards. As a person who lives in an area of Colorado that is more desert than prairie, this was new to me; when I started this research, I'd had no idea that prairie restoration was a concept, much less something people could do in their own backyards. I began to look more deeply into the phenomenon of the

backyard prairie, and fell down the rabbit hole of prairie restoration, both big and small-scale.

As it turns out, seeds, dirt, and a little hard work are all anyone needs to start their own prairie. There are countless articles and resources online about people who have gone through the process themselves, and how they've reaped the benefits of these efforts years later. When planted in the right environment, prairie eventually becomes mostly self-sufficient and requires less upkeep than a traditional grass lawn. It will attract native insects and animals, increasing biodiversity and animal-watching prospects, and resulting in a healthier ecosystem wherever it grows. If you're inspired to grow your own prairie, the infographic which follows is a step-by-step starting point for any beginner. Growing your own prairie will take patience and time, but remember—this is a project bigger than just you, and you are joined by other people all over the prairie. Good luck!

A prairie garden has replaced the lawn outside Grinnell College's Macy House. Photo by Jon Andelson

How to Create a Backyard Prairie

Looking to restore the prairie?

Recently, small-scale prairie restoration has grown in popularity as people turn back to the plants that originally covered most of middle America.

Step 1

Start with Dirt

There are three options here:

1. Use light herbicide to get rid of any invasive plant species.

2. Dig up sod by hand or use a mechanical sod cutter to remove pre-existing lawn

3. Cover your yard with cardboard or a black tarp for a couple months.

- Cardboard is more environmentally friendly, but plastic tarp will heat up and ensure all invasive seeds are sanitized
- Remove bigger bushes and ground cover by hand
- This method is much easier than the ifrst two, but takes several months

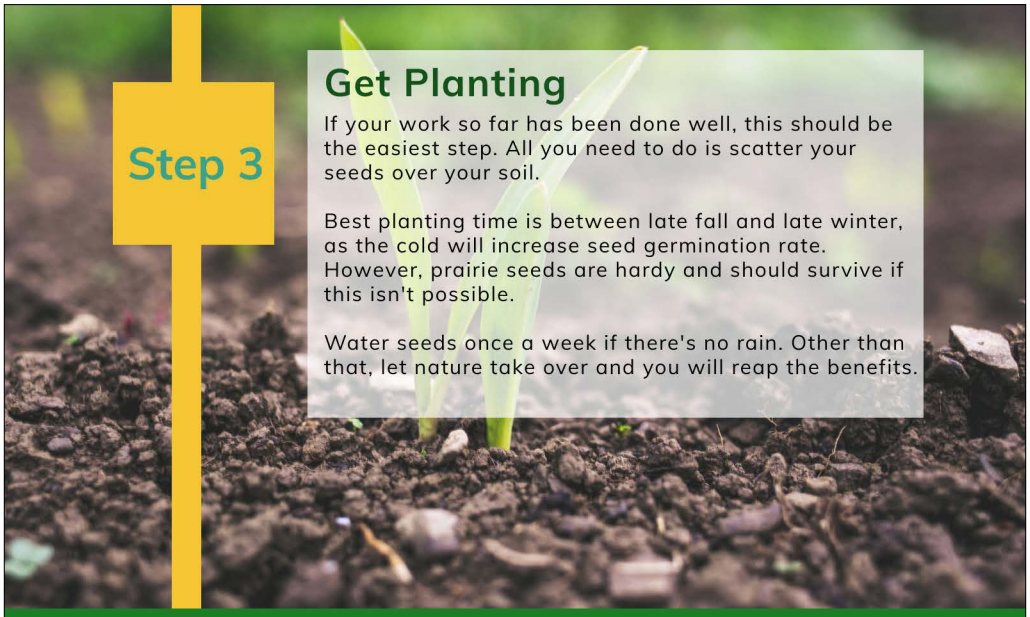
Step 2

Pick Your Seeds

This part is totally up to you! There are three different types of prairie: tall grass, short grass, and mixed grass. Once you've identified your region of prairie (easily done in a quick internet search), you can look into plants native to your specific area, or stay with the general mix. Either way will result in beautiful plants.

- For tall grass prairie, click here
- For short grass prairie, click here
- For mixed grass prairie, click here

For specific types of seeds, or seeds that are local to your specific ecotype, use heirloom seeds. These are un-bred seeds that have been passed down through generations Seed Savers has a wide selection, as well as Baker Creek.



Step 3

Get Planting

If your work so far has been done well, this should be the easiest step. All you need to do is scatter your seeds over your soil.

Best planting time is between late fall and late winter, as the cold will increase seed germination rate. However, prairie seeds are hardy and should survive if this isn't possible.

Water seeds once a week if there's no rain. Other than that, let nature take over and you will reap the benefits.

Step 4

Upkeep

For the first few years, your prairie will be extremely susceptible to weeds and invasive species. Weeding by hand or mowing when weeds reach 12 inches is the best way to combat this.

Eventually, your prairie should be able to survive with less upkeep than a traditional yard. Weeding will still be necessary, as well as seasonal mowing, but the prairies plants will take to the soil and leave increasingly less room for invasive weeds.

Over time, you will have a beautiful yard to attract local animals and insects.

Why Restore the Prairie?

- Restore native plant life
- Improve native animal habitat and wellbeing
- Create a better ecosystem for all living things
- Bring natural beauty to your yard

For sources and further reading, visit:

Iowa National Heritage Foundation
Milwaukee Journal Sentinel
Five Steps to a successful Prairie Meadow Establishment

Photo courtesy of Maya Andelson

Maya Andelson *is an alumnus of Grinnell College and an Iowa native with her roots in the state's rolling hills, prairies, corn fields, and hickory and walnut forests. She is the daughter of an anthropologist (*Rootstalk *publisher Jon Andelson) and musician Karin Stein, and, naturally, she has an academic background in anthropology and a history of harp playing and singing with her mother and her two sisters.*

Andelson lives in Chicago and works in international education. In her free time, she enjoys drawing and painting, greenwood carving, nature rambling, animals, books and film, and travel.

A Summer's Day on the Prairie

by Maya Andelson

Associate Editor Emmie Smith interviewed Maya Andelson to learn more about the video that she recorded.

Rootstalk: What does this video capture?

Andelson: This slow-motion video captures a Swallowtail butterfly fluttering around a patch of wild monarda native to the prairie (*Monarda fistulosa*, commonly known as bee balm). Other pollinators like bees and wasps zoom across the frame too. They're all doing their own work, but they're all part of the same essential process.

Rootstalk: Do you happen to have a background in entomology?

Andelson: I don't have a background in entomology, but I love nature and identifying species, so it's something I just take a basic interest in.

Rootstalk: What moved you to film this video?

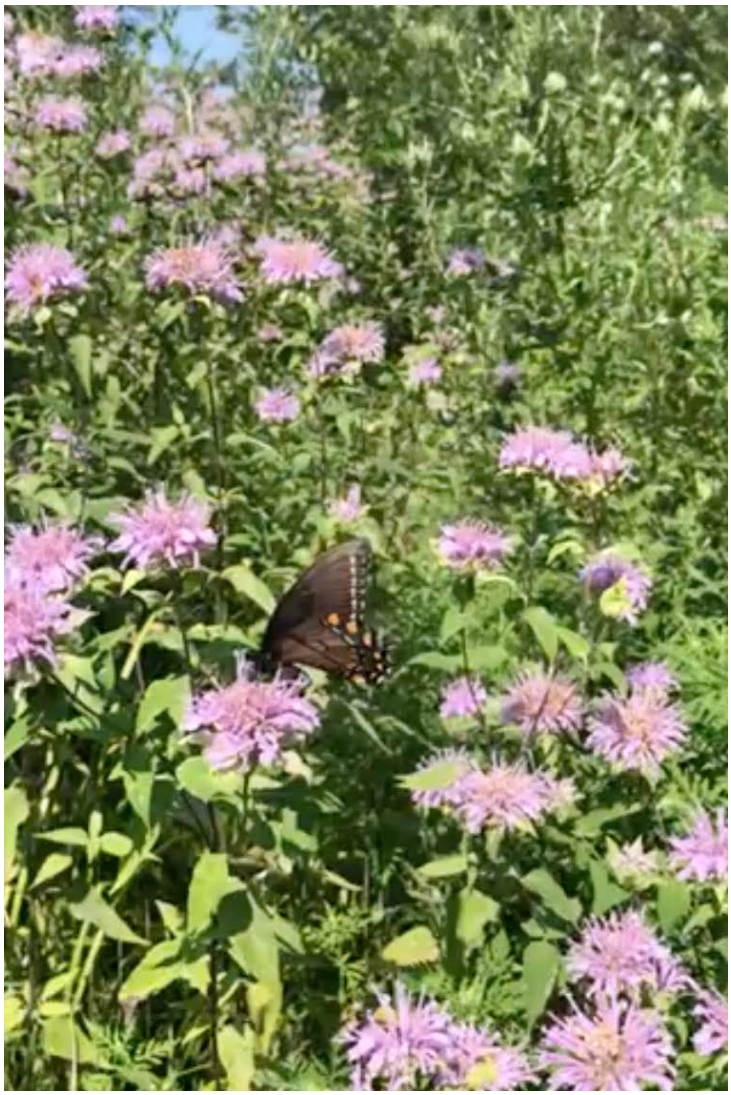
Andelson: I spent at least 25 minutes standing in the sun watching pollinators at this stand of flowers. The diversity of species in such a small patch of land (no bigger than 3x3 yards) caught my attention. They were working so hard all day, and I felt gratitude for these small and colorful insects upon whom we all depend. The butterflies are, in particular, lovely to watch, and filming them in slow-motion allows one to really appreciate the grace with which they fly.

Rootstalk: What can you tell us about the soundtrack for this piece?

Andelson: My husband, Oliver Muñoz, wrote it to accompany the video, and played it on viola.

Rootstalk: What does this video mean to you?

Andelson: The video is an invitation to slow down and observe the details around us. So many of us rush through our day with a too-full agenda, spending too little time outside.



To view Maya Andelson's video on *Rootstalk*'s YouTube channel, click on the image above

Photo courtesy of Nicki Kreutzian

Nicki Kreutzian '23 *is a second year student at Grinnell College, studying Political Science and German. She grew up in Omaha, Nebraska, where she wrote and designed for her high school newspaper. She has fond memories of spending summers on Cass Lake, where her great-grandmother owned the Cass Lake Lodge. She enjoys cooking and making traditional and family dishes, and is well known in her family for making* krumkake *every Christmas. She plans on attending law school after receiving her undergraduate degree.*

Exploring Minnesota Foodways through Four Recipes

by Nicki Kreutzian

When most people think of Minnesota food culture, church potlucks, state fairs, and lines of hot dishes are often what pops into their minds. Meals like tater tot hotdish, *lefse*, or freshly caught fish are in most Midwesterners' brains. The Minnesota State Fair, the second-largest state fair in the country (after Texas), features a very unique brand of fair food. Fresh donuts, malts, and cheese curds are on the menu, along with a healthy dose of the iconic Midwestern fixture, corn. It's found roasted in the husk, but also as an ever-popular flavor of ice cream.

Every iconic Minnesota food has its own unique origins, as immigrants and settlers have come into the state from all across the world. The culinary landscape is still in flux as traditions are revived, and new groups of people bring their foodways with them. New restaurants open constantly, from Sean Sherman's first full-time decolonized establishment, the Indigenous Food Lab (slated to open in 2021) to the massive growth of Latino-owned establishments. From the indigenous people who first inhabited the land, now to the Somali and Hmong people who call Minnesota home, there is something for everyone.

Across Minnesota, new restaurants are opening, featuring foods of the many ethnicities that inhabit the state. Food, for many people, is home, and chefs from many groups are experimenting with blending the traditions of their homelands with classic "Minnesota food." This allows them to feel connected to their past and share it with others. Minnesota food represents a crossroads between what is available from the land and the cultural traditions of those who settled there.

Anishinaabe and Dakota—Wild Rice and Berries

The Anishinaabe (also known as Chippewa) and Dakota people inhabited much of Minnesota until the early 19th century. Originally living along the Great Lakes, the Anishinaabe pushed the Dakota people south and west over time. As French fur trappers came into the territory, the added pressure pushed the Dakota further west, while the Anishinaabe forfeited much of Wisconsin and Northern Minnesota. Now, the tribes are scattered throughout different reservations in Minnesota and the Dakotas.

Many reservations are not located in places that were traditionally occupied by the tribes, and many living on reservations lack easy access to grocery stores. For many living on a reservation, canned and boxed foods are dietary staples, and traditional dishes have been rendered obsolete. However, some chefs are attempting to combat this slow fade of indigenous foods. Sean Sherman, an Ogalala Sioux chef and founder of the Sioux Chef, a group of indigenous people seeking to revitalize Native culture, is working to recreate traditional dishes with many tribes around the country. He encourages sustainable, native-harvested options. The recipe we're reprinting here, which appeared in the *New York Times* cooking section on November 4, 2019, uses wild rice and berries, which are endemic to Minnesota and are common ingredients in many recipes from the region. Whenever possible, Sherman encourages using Native harvested ingredients, such as wild rice from Native Harvest, which prioritizes native harvesting methods.

Photo courtesy of Nicki Kreutzian

Photo courtesy of Sean Sherman

Oglala Lakota Chef **Sean Sherman**, *founder of The Sioux Chef, is decolonizing our food system. From growing up on Pine Ridge to an epiphany on a beach in Mexico, Chef Sean Sherman shares his journey of discovering, reviving and re-imagining Native cuisine.*

INGREDIENTS

1 ¼ cups long-grain wild rice, rinsed
½ cup mixed dried berries
3 tablespoons maple syrup
¼ cup whole hazelnuts, crushed
2 tablespoons hazelnut oil
Fine sea salt and whole chive stems for garnish

METHODS

1. Heat the oven to 350 degrees.

2. In a large saucepan, bring 5 cups water to a boil over high. Stir in 1 cup wild rice along with the dried berries and maple syrup. Once the mixture comes back to a boil, reduce the heat to just simmering, cover and cook until the grains begin to open, 20 to 40 minutes, checking done-ness after about 20 minutes. (The rice is done when it has opened slightly, is tender and has quadrupled in size.)

3. Drain the excess liquid from the rice.

4. Meanwhile, toast the hazelnuts. Lay the hazelnuts in a single layer on a baking sheet and toast them until the skin blisters and cracks, and they begin to smell nutty, 10 to 12 minutes. Transfer the nuts to a clean dish towel and massage them aggressively to remove most of the skins. Crush the nuts directly in the towel using the flat side of a knife.

5. Add the remaining 1/4 cup rice to a dry skillet and cook over high heat, shaking the pan, until it begins to darken and about half of the kernels have popped, 2 to 3 minutes. Remove from the heat.

6. Drizzle the boiled rice with the hazelnut oil and season to taste with salt. Garnish with the popped rice, hazelnuts and chives.

From Sean Sherman via NYT Cooking

Somali Influences - Pear and Cardamom Cake

Photo courtesy of Abderazzaq Noor

Abderazzaq Noor *started The Somali Kitchen because it was a great way to combine his passions—food, cooking, eating, writing and Somali culture. His love for food and cooking came from his beloved parents, who ran a popular Somali restaurant.*

INGREDIENTS

2 ripe pears, thinly sliced
¾ cup brown sugar
¾ cup white sugar
¾ cup butter, room temperature
½ teaspoon ground cardamom
1 teaspoon vanilla extract
2 large or 3 small eggs
Pinch of salt
1 ½ cups flour
2 teaspoons baking powder
½ cup milk

METHODS

1. Heat the oven to 180 degrees C (350 degrees F) and butter a 9 inch round spring cake pan.

2. Sift the flour, salt, baking powder and cardamom and set aside.

3. Melt one portion of the butter in a pan. Add the brown sugar and stir until the sugar has melted. Pour the mixture into the prepared cake tin and ensure it spreads to cover the bottom evenly.

4. Arrange the pear slices in a circular shape around the pan and finish with any remaining slices in the center.

5. Mix the remaining butter and white sugar and beat until creamy. Adds the eggs and vanilla and whisk for a couple of minutes. Add in the flour and milk and combine gently.

6. Spoon the batter over the pears in the cake tin and smooth over.

7. Bake for about 40 minutes, until done.

8. Cool and gently turn the cake onto a plate.

From Abderazzaq Noor via The Somali Kitchen

Much contemporary Somali cooking was influenced by Italian colonists who came to Somali in the 1880s. Spaghetti, for example, is a staple in Somali kitchens. One finds many similarities between Somali and Italian cooking, although spices or cooking methods often differ. Curries, stews, and protein over rice or spaghetti (sometimes both) is the basis of many Somali recipes, usually with a homemade hot sauce. An equally important aspect of Somali cooking is the banana. It is served with nearly every meal, and eaten with rice and stew. Every Somali kitchen includes cardamom. Cardamom cookies are a staple, and Somalis consume the second most cardamom per capita, after the Finns.

Even just a few years ago, Somali cuisine was difficult to track down. The first groups of Somali people came to Minnesota in the 1980s, with a majority arriving in the late nineties. However, the Somali language began to be written down only in the 1970s, and because of this there has been only one Somali cookbook in English, called *Soo Fariista/Come Sit Down*: *A Somali American Cookbook*. Most family recipes were never written down, just passed along orally. In 2018, a group of Somali teens, most of them first-generation immigrants, set out to create a new Somali-American cookbook. This book's authors followed their parents around the kitchen, documenting cooking processes that had been passed down from generation to generation, and which were available in print only on little-visited internet sites. The authors' ambition was to make these foodways available in everyone's kitchen.

Photo courtesy of Abderazzaq Noor

1920s Settlers - Minnesota Bean Pot

As America pushed to settle the West, more and more people looked at the Midwest and decided to settle down. During the late 19th and early 20th centuries, the Twin Cities experienced rapid growth, due to the high prevalence of industrial jobs, especially in wheat mills. Many German and Scandinavian immigrants settled throughout Minnesota, both in cities and small farming communities. Minnesota was geographically most similar to their home countries, with mild summers and long, harsh winters. They brought the food traditions that sustained them through those long nights and found that many vegetables they grew back home flourished in the Minnesota Climate.

This recipe, from a "Mrs. A. P. C." of Bemidji, comes from *Ladies Home Journal* Vol 46 Issue 4, published in April 1929, just months before the stock market crash that heralded the Great Depression. In this time of surplus, many people were able to afford prepackaged foods from stores, and small personal gardens fell somewhat out of favor as people flocked to large cities. This was the start of more cultural homogenization, and as the article notes in its title "Minnesota, Border State, Shows Foreign Influence." While rather unassuming and, mainly consisting of meat, crackers, and potatoes or carrots, the recipes are heavily indicative of the food culture and landscape of the prairie region in the early 1900s.

Photo courtesy of Nicki Kreutzian

Ladies Home Journal, April 1929

INGREDIENTS

½ pound kidney beans
1 medium onion, sliced
1/8-pound fat pork
½ pound ground beef
6 small red peppers
1 quart of canned tomatoes
3 teaspoons of salt

METHODS

1. Wash the beans and soak overnight.

2. The next day, cook the onion and pork until slightly browned, then add the beef, peppers, tomatoes, salt, and drained beans. Add one quart of water.

3. Bring to a boil and let it cook for two and a half hours, until the beans are tender. Remove the peppers and serve with crackers.

From Mrs. A. P. C. via Ladies Home Journal

Hmong Sweet and Spicy Cucumber Salad

In the 1970s, the Hmong people began immigrating to the US, fleeing wars in their homeland of Laos. Now, the Twin Cities have the largest concentration of Hmong people of any city in the United States. Making their home in the Midwest allowed them to bring their culture and food traditions with them. A decade ago, as the first Hmong restaurants began opening in the cities, Hmong restaurants did not capture the true Hmong foodways. The menus often had everything from cashew chicken to *pho* and everything in between. It seemed that there was a view that it was "Asian food", and Minnesotans had not quite seen how it set itself apart.

Over time, more children grew up and began to blend their Hmong roots with their Midwestern upbringing. Today, Hmong food has carved its distinct niche in the Minnesota food scene. For chef Yia Vang, food, and in particular, hospitality is the backbone of Hmong culture. It is a way to connect, to show warmth, and to appreciate history and how far families have come. For many restaurants, the food that appears on their menus is not of their invention, but rather something their parents made for them growing up. It is comfort food, at its essence.

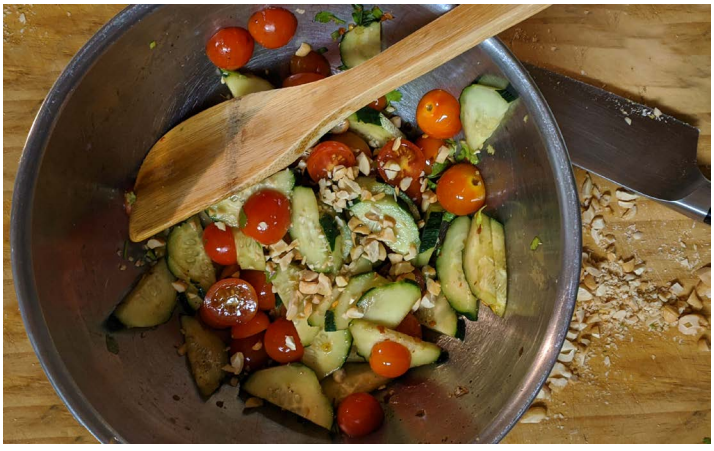


Photo courtesy of Nicki Kreutzian

Yia Vang *was born in a Thai refugee camp, came to the United States at five years old, and eventually arrived in the Twin Cities as part of the largest urban Hmong population in the world. He cooked at Nighthawks Diner & Bar, Borough, and Gavin Kaysen's Spoon & Stable before starting Union Hmong Kitchen, and serves as a passionate, tireless, funny, and forgiving advocate for Hmong food as an expression of Hmong culture.*

INGREDIENTS

½ bunch cilantro
1 small shallot, finely chopped
1 garlic clove, finely grated
2 Thai chiles, finely chopped
¼ cup tamarind concentrate
2 Tbsp. fresh lime juice
2 tsp. fish sauce
6 medium Persian cucumbers or one large English cucumber, some peel removed in thin alternating strips, halved lengthwise, thinly sliced on a diagonal
1 cup cherry tomatoes, halved
Kosher salt
Store-bought fried shallots and coarsely chopped salted dry-roasted peanuts (for serving)

METHODS

1. Thinly slice cilantro stems until you have about 2 Tbsp. and place in a large bowl. Coarsely chop remaining cilantro; set aside for serving.

2. Add shallot, garlic, chiles, tamarind concentrate, lime juice, and fish sauce to bowl with cilantro stems and mix well. Add cucumbers and tomatoes, season with salt, and toss until everything is nicely dressed.

3. Transfer salad to a plate and top with reserved chopped cilantro, then fried shallots and peanuts

From Yia Vang via Bon Appetit

PHOTO COURTESY OF TENZING SHERPA

Tenzing Sherpa *is a third-year student at Grinnell College majoring in biological chemistry and concentrating in neuroscience. She grew up in Nepal and holds Nepali food and cooking dear to her heart. She loves painting and is currently volunteering with Grinnell College Museum of Art to hold virtual art sessions for children in town.*

From Bhutan to Omaha: Refugees Put Down New Roots

BY TENZING SHERPA

During the early 1990s, more than 100,000 Bhutanese refugees of Nepali descent living in southern Bhutan were deported and wound up in refugee camps in eastern Nepal. The 1980s Bhutanese campaign, "One nation, one people," allowed the ruling Drukpas to culturally homogenize the country by forcing out the Lhotshampas (southerners) with a different ethnic and religious background. Many of these displaced people spent over two decades at the refugee camps waiting to either be welcomed home or resettled in a third country. While opportunities for resettlement are often hard to come by, 85 percent of the resettled refugees are now in the United States.

However, even after being resettled, their problems have been far from over. Navigating daily life in a completely different corner of the world, often without English language skills and little-to-no personal connections, has required them to rely heavily on resources provided by federal and community organizations. Lutheran Family Services (LFS) in Nebraska (headquartered in Omaha) has been one such organization. LFS has been actively involved in refugee employment support, ESL education, and caseworker matching, among other services.

"Global Roots" is one of LFS's latest projects that provides plots for gardens which refugees can use to grow food to feed their families and to sell at farmer's markets. Kalpana Rasaily, the interpreter for the Bhutanese-Nepali Global Roots group, says that she first learned about the program through her internship at LFS. Rasaily, who is an involved leader at her local church, relayed the message to other Bhutanese Nepali churchgoers who expressed great interest. Currently, among the 41 refugee farmers, eight of them are Bhu-

Himal Gurung (at far left) and Indra Gurung (Third from far left) with relatives at global roots farm

tanese-Nepali folks who are actively farming at the garden.

Cait Caughey is the program director at Global Roots. She describes one of her fondest moments while working in this brand-new refugee agriculture program that started this past January., "I am a big seed-nerd," she says. "The most exciting time for me was when we were growing out plants in our green house. When everyone showed up with their giant boxes of seeds, I was crying!" The refugee farmers, most of whom were working in a greenhouse for the first time, brought a variety of seeds, everything from ethnic chili peppers to mustard and okra. Little did they know they were also sowing the seeds of a community for new Americans, rooted in collaboration and support for one another.

When asked about the changes in her life after coming to the US, Kalpana Rasaily says, "Life in the refugee camp was hard. We lived in tiny huts without basic amenities, which to say the least was drastically different from my life now. But we have other challenges in the U.S." She says that in the camps she was well acquainted with her neighbors and was always socializing, while here, the American lifestyle can be isolating.

> Of course most of us stick together with people from our own country. But we also get to meet other refugees, you know, become acquainted with our neighbors with similar stories. It gives us a sense of solidarity...

"Some of the refugees without jobs spend the whole day indoors because, well, we don't know a lot of people," she says. And yet, others who are working, like herself, are always busy with conflicting schedules. The Global Roots program has given them a platform to come together and to work on something as a community. The farmers usually go to the garden in groups. They plant seeds, dig out weeds, and check up on their plants to water them. Rasaily adds, "Of course, most of us stick together with people from our own country. But

we also get to meet other refugees, you know, become acquainted with our neighbors with similar stories. It gives us a sense of solidarity."

The farmers also connect with one another over their shared experiences of farming back home. Rasaily grew up watching her family and friends farm on the little plots of land they had around their houses. They composted food scraps and yard waste to make organic fertilizers and fetched water in pails from the river for their plants. She says that it is hard to farm in the same way here. "You have to ask for permission with authorities and gain a permit to even do a little bit of digging around your house. They ask a lot of questions. It's just a whole mess." So, for the refugees, access to land and tools to use their skills is what has proven to be the most important aspect of the project.

Even Caughey, who has been farming for eight years, says that she is always learning from them. "Intercropping and interplanting are just such amazing skills that folks have that I can't even necessarily describe it. They know how to maximize space. They have introduced me to new hand tools that are so much easier for me to use as a woman in farming." She emphasizes, "It's not about teaching them how to farm. Their farming is a very intuitive, intergenerational practice that can't be taught by an extension service. It's about giving them land, equipment, and support so they can get back into farming."

Although the pandemic has led the project in a different direction than the one Caughey had imagined when she stepped into her role at the beginning of January, she has shifted its focus accordingly into what she thinks is most important for this season: ensuring access to food for the farmers and their families. With so many people getting laid off from their jobs, Caughey says that they did not develop a market this year because their first priority was to get the food from the farm to their table. She beams as she says, "It was just so amazing to see giant totes and literal garbage bags full of produce that were being pulled from the farm and hauled onto their trucks." The farmers do not have to go to the grocery stores as often; they can easily cook up a few meals per week from the farm's produce. This, Rasaily claims, has been a blessing as they try to reduce contact with other people due to COVID.

But even through this hurdle, they persist. With their masks and gloves, six feet apart, the farmers continue to harvest their produce. As summer comes to an end, they are clearing out their plots, sowing cover crops and putting the soil to rest with a hope symbolic of what holds the world together today: the hope for a better season to come.

Mor Meh, from , with some of the harvest from her garden

Photo courtesy of Cait Caughey

Cait Caughey *is a farmer and an agricultural educator. She grew up in Omaha, Nebraska, where she attended college. During her time there, she volunteered at community gardens and was involved in anti-oppression organizing around climate change. Later, her travels outside the U.S., where she was able to study localized food culture and witness women's role as food producers, inspired her to pursue a career as a farmer. Previously, she worked as the education director at The Big Garden, a non-profit in Omaha focused on school gardening. She now lives in Southwest Iowa, with her partner and two kids, where she runs Mullein Hill Farm, a regenerative small-scale farming operation. In Omaha, she works at Lutheran Family Services as the program director of Global Roots project.*

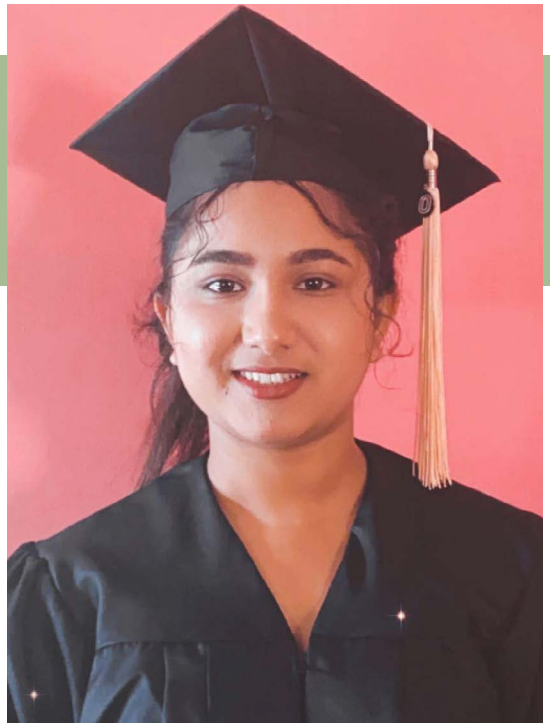


Photo courtesy of Kalpana Rasaily

Kalpana Rasaily *moved to the U.S. from Nepal six-and-a-half years ago and currently resides in Omaha, Nebraska, with her family. She is a recent graduate of the University of Nebraska (Omaha) and is working as a nurse aide at Omaha Public Schools. She serves as a leader and an interpreter for her Bhutanese-Nepal community at her local church. At the Global Roots project, she works closely with the program director to ease communication and deliver concerns from the farmers.*

Trees of the Prairie

The Cottonwood (*Populus deltoides*)

Flowers: April
Tree height: 65-130 ft

Cottonwoods grow naturally throughout the United States, but are important residents of the prairie ecosystem. You can recognize them at a distance by their massive height and broad, deeply furrowed trunks.

This useful tree species served as trail markers and meeting places for both Native Americans and early European settlers. Cottonwood trunks were used by Native Americans as dugout canoes. The bark provided forage for horses and a bitter, medicinal tea for their owners. Sweet sprouts and inner bark were a food source for both humans and animals.

In spring, female trees produce tiny, red blooms that are followed by masses of seeds with a cottony covering (Description adapted from text created by USDA Forest Service).

Photos (clockwise from upper left) courtesy of the Missouri Department of Conservation, Jason Sturnr, and Carl Kurtz

Photo courtesy of Oona Miller

Associate Editor **Oona Miller** *is a Class of '21 Grinnellian finishing up her English major and Technology Studies concentration. Hailing from Madison, Wisconsin, Oona has enjoyed storytelling since she was a kid. Aside from writing and coding, she delights in drawing characters, making up languages, unionizing student workers, and consuming audiobooks for power.*

Oona's short stories and plays have received awards from the UW-Whitewater Creative Writing Festival and Grinnell College's McClenon Clark Playwriting Contest. In 2018, Grinnell College Press published her first book of poetry, How to Draw a God. At any given time, she is working on at least three novels.

Evening Falls on the Prairie: an Interactive Poetry Module

by Oona Miller

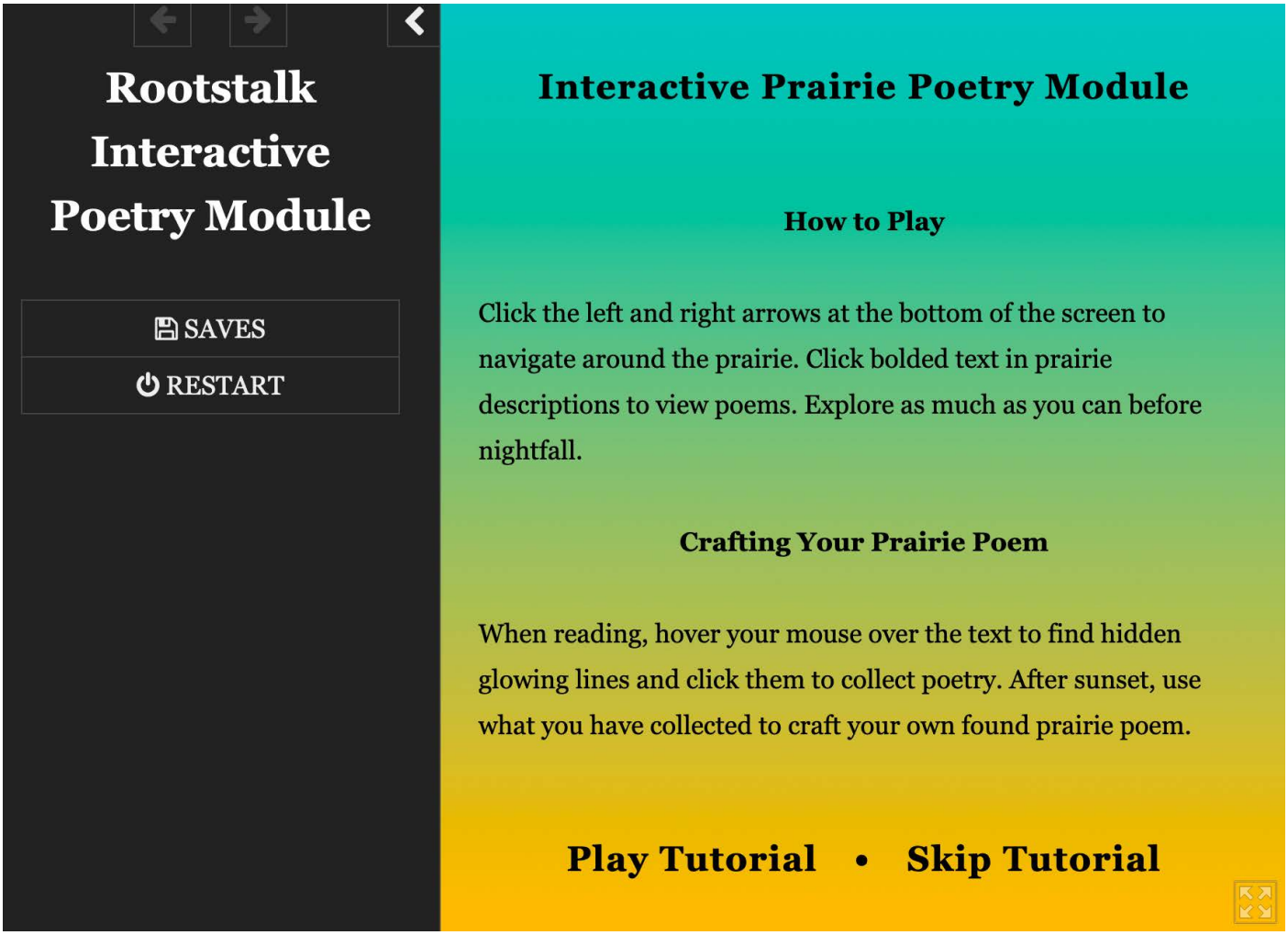
Spanning over a dozen states and provinces, the prairie has succeeded in lodging itself in the hearts of North American poets for centuries. A myriad of plant and animal species make their home in this ecosystem, alongside millions of humans living in cities, rural communities, reservations, and small towns. To this day, writers remain enamored with this emblematic biome for its natural beauty, abundant life, rich history, and diverse population. I created the Interactive Prairie Poetry Module as a small collection of prairie poems, including eighteen works by nine authors.

The game is also a collage-style writing tool which asks you to navigate the prairie by clicking the left and right arrows at the bottom of the screen. You can read about each area of the prairie and click on bolded text to view poems, and you can also hover the cursor over the text to find hidden glowing lines, then click them to collect poetry. At the end of the game, you can use the lines you've collected to piece together your own prairie poem. When you're done, be sure to save your poem by taking a screenshot or copy-and-pasting it into a separate document.

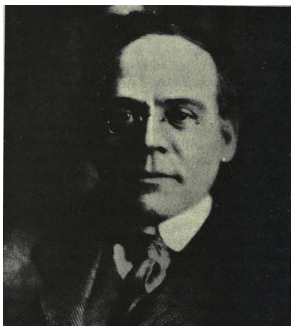
The program I used to create the Interactive Prairie Poetry Module is called Twine. Twine is a free, open-source tool which uses HTML to craft interactive and nonlinear stories in the form of web pages. Learning Twine is easy and requires very little computer science knowledge; anyone can teach themselves the basics with "A Quick Twine (2.2+) Tutorial" by Allison Parrish. When I began this project, I wasn't sure what shape it would take. I knew I wanted to make poems into an interactive experience, and I knew the basics of

what Twine could do. Many of my ideas for the module came later when I read through the complete SugarCube v2 Documentation, which lists everything you can do with SugarCube, the free Twine story format I used. As the module became more complex and I found myself wanting to add more and more to it, I ended up teaching myself a fair bit of HTML and Cascading Style Sheets (CSS) with the help of free online tutorials from websites like W3Schools and open community forums like Stack Overflow.

Over the course of this term, working on the module and reading great swaths of prairie-themed poetry, I came to appreciate the community and commonality that the prairie represents. I chose the poems featured in this game based on their blatant admiration and unabashed honesty regarding this place's simple virtues and imperfect complexities. These poems and our beloved prairie remind us to find elegance in the simple, the common, the small, and the quiet. They emphasize the connections between people, animals, plants, and the earth as blessings to be celebrated. They capture the smallest moments of beauty, mere murmurs of delicate truth in the tall grass, and hold them under the bright prairie sky for all to see.

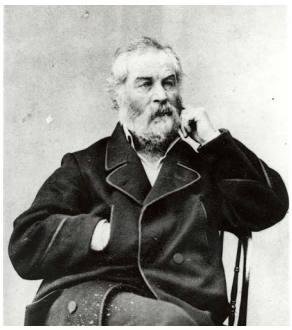


Click the image above to link to the Interactive Prairie Poetry Module



Edgar Lee Masters *(1868-1950) was an American attorney, poet, biographer, and dramatist. His most well-known work,* The Spoon River Anthology *(1915), is a collection of short poems narrating the epitaphs of the residents of Spoon River, a fictional town named after the Spoon River near his hometown of Lewistown, Illinois. His poetry illustrates rural and small-town American life as it explores themes of community and grief. Photo originally published in* Tendencies in Modern American Poetry *by Amy Lowell, Boston: Houghton Mifflin, 1921, accessed via Archive.org.*

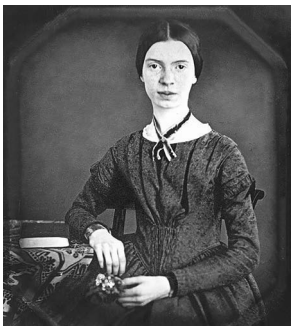
Virna Sheard *(1862-1943) was a poet and novelist from Toronto, Ontario. She wrote her first books for her sons, then went on to author several romance novels and five volumes of poetry. Her poems deal largely with religious themes. Photo originally published in* The Book Buyer, *Charles Scribner's Sons, 1903, accessed via Wikimedia Commons user Penny Richards.*



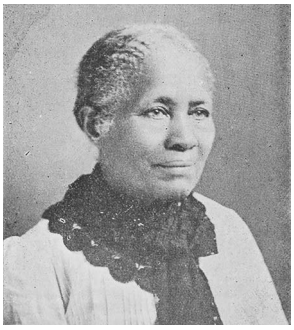
Walt Whitman *(1819-1892) was a writer from Brooklyn, New York. He left formal schooling at age eleven to work, eventually going on to inhabit several roles, including journalist, teacher, and government clerk. He published the first edition of his poetry collection,* Leaves of Grass, *in 1855 with his own money. The poems are an American epic, hailing the virtues of democracy and the wonders of nature. Photo by Alexander Gardner, accessed via the Walt Whitman Archive.*

William Carlos Williams *(1883-1963) was a Puerto Rican-American writer and physician born in Rutherford, New Jersey. Inspired in part by the Walt Whitman's free verse, Williams was known as an innovating poet who wrote on America with great honesty and empathy. Photo courtesy of the Beinecke Rare Book & Manuscript Library, Yale University.*

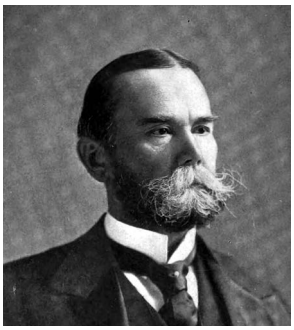
Additional prairie photos featured in the Interactive Prairie Poetry Module courtesy of Adam Alexander, Jon Andelson, Andrew Burns, Justin Hayworth, Jun Taek Lee, Sarah Licht, Wikimedia Commons user Mattnad, David Ottenstein, Ken Saunders, Brett Sayles, Pixabay, and Snapwire.



Emily Dickinson *(1830-1886) was an American poet from a prominent family in Amherst, Massachusetts. She wrote over 1,800 poems exploring themes of art, death, nature, and spirituality, though only a handful were published during her lifetime. She loved baking, gardening, and taking walks with her Newfoundland dog, Carlo. Photo courtesy of the Todd-Bingham Picture Collection and Family Papers, Yale University Manuscripts & Archives Digital Images Database, Yale University via Wikimedia Commons user Deerstop.*



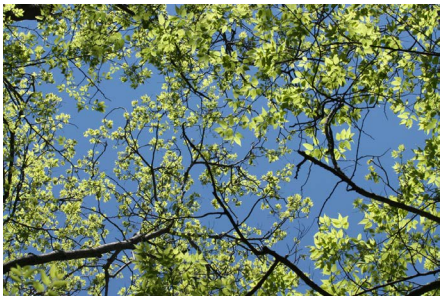
Frances Ellen Watkins Harper *(1825-1911) was an American writer as well as abolitionist, suffragist, and teacher. She was born in Baltimore, Maryland, which was then a slave state, to free parents. She went on to become one of the first African American women to be published in the United States. Her novels and poems deal with social issues including women's education and the abolition of slavery. Photo courtesy of the Schomburg Center for Research in Black Culture, Jean Blackwell Hutson Research and Reference Division, The New York Public Library.*



John Milton Hay *(1838-1905) was an American author and politician born in Salem, Indiana. Aside from being the Secretary of State under Presidents William McKinley and Theodore Roosevelt, he also served earlier as private secretary to Abraham Lincoln and eventually co-authored an influential biography on him. Photo originally published in the* Encyclopedia Britannica*, v. 14, 1920, accessed via Wikimedia Commons user Bob Burkhardt.*

Emily Pauline Johnson *(1861-1913), also known by her Mohawk stage name Tekahionwake, was a Canadian writer and performer born in Six Nations, Ontario. Her works celebrated her mixed-race heritage—her father was a Mohawk chief and her mother was an English immigrant—drawing from both Indigenous and English influences. She enjoyed canoeing, being on stage, criticizing the government, and fighting for social change. Photo courtesy of Library and Archives Canada.*

Sarah Licht '23 *is a third-year Grinnell student majoring in English and Psychology, a writer of poems and short stories, and an avid dreamer and gamer. A Florida-native, she would much rather avoid the sunshine altogether and curl up with a good book. When she isn't writing, she can be found getting another cup of coffee, watching bad movies, or playing with her cat, Lilith. In the future, she hopes to publish her own poetry collection and, even more hopefully, several novels. Photo courtesy of Sarah Licht.*



Photos (clockwise from right) courtesy of Breezy Hill Nursery, Kathy Zuzek and Carl Kurtz

Trees of the Prairie

The Hackberry (*Celtis occidentalis*)

Flowers: April-May
Height: 75-100 feet

Hackberries are a stately mainstay of many Midwestern streets. A relative of the American elm, but not susceptible to Dutch elm disease, they grow tall and provide ample shade, as well providing clusters of *drupes*—small berries that serve as an important food source for wildlife, particularly birds and small mammals. These berries stay firmly attached to their twigs for longer than most boulevard trees and feed traveling birds throughout the winter. Hackberries are hardy and stand up well to the extremes of prairie weather, resisting drought, short-term flooding, heat, cold and ice. They're also very resistant to pests and diseases; in fact the only problem they regularly have is with the formation of "witches' brooms"—dense clusters of twigs which form when the tree is infested with a particular species of mite. Though odd in appearance, these do not much affect the overall health of the tree. (Description adapted from *Silvics of North America* from the U.S. Forest Service via its Southern Research Station).

Endnotes

Infographic: "How Wetlands Contribute to Water Quality"

[1]The Wetlands Initiative: What Is A Wetland?—The Wetlands Initiative. [online] Available at: <http://www.wetlands-initiative.org/what-is-a-wetland

[2]Middleton, B. (1999). Wetland restoration, flood pulsing, and disturbance dynamics. New York: Wiley.

[3]United States Department of Agriculture. 2020. "Restoring Iowa Wetlands | NRCS Iowa". NRCS.USDA.Gov. https://www.nrcs.usda.gov/wps/portal/nrcs/ia/newsroom/factsheets/nrcs142p2_008530/

[4]Environmental Change Initiative. 2016. Fertilizer Runoff And Drinking Water. Video. https://www.YouTube.com/watch?v=CZIPx-qMgY&ab_channel=EnvironmentalChangeInitiative

[5]Iowa DNR. 2020. "Watershed Basics". Iowadnr.Gov. https://www.iowadnr.gov/environmental-protection/water-quality/watershed-improvement/watershed-basics.

[6]Montana State University. 2016. Wetlands & Water Quality. Video. https://www.YouTube.com/watch?v=DzsN6xAPRRA&ab_channel=MSUExtension.

[7]Montana State University. 2016. Wetlands & Water Quality.

[8]https://www.mcknight.org/news-ideas/how-wetland-restoration-in-illinois-has-a-positive-domino-effect-outside-of-the-state/

"A Conversation about The Great Plains Trail"

[1]The Bureau of Land Management (BLM) owns nearly 250 million acres of land in the United States, mostly in the western half of the nation. Most BLM land is free to camp on for up to 14 days, making it a popular choice for thru-hikers.