



## Prairie Pod Transcript

### Season 3, Holiday Episode (28): Stories from the Field

Podcast audio can be found online at [mndnr.gov/prairiepod](http://mndnr.gov/prairiepod)

#### Transcript:

((sounds of birds chirping and wind blowing intermingled with holiday music))

Megan: Mike! Are you feeling jolly?

Mike: Megan! I am so jolly.

Megan: It was hard for me to tell.

Mike: Ho ho ho

Megan: ((laughter)) Ho Ho Ho. Your face was not matching up with your words, but it's good to see your face Mike.

Mike: You too Megan. Digitally of course, yeah.

Megan: I know. It's that time of year. It's chilly outside. There's a little bit of snow on the ground. My little baby prairie plants at my house are just poking through and I love how they look all dusted with snow.

Mike: Oh, that is cool.

Megan: It's just a magical time of year.

Mike: Allison was listening to some holiday music last night ((chuckling)) and I am gradually getting into the mood here.

Megan: I know. There's always so many fun things to celebrate. And I love all the different ways that people celebrate—all around the world. That's something that's really special too. Just the diversity of perspectives and traditions.

Mike: Yeah.

Megan: It's wonderful.

Mike: I hear ya.

Megan: One tradition that does not change on this podcast because it's the prairie pod is celebrating prairie ((singing)). You don't need a special time of year to do it! You can do it now! You can do it tomorrow and every day into the future. While it has definitely been a year. It's been a year, right Mike. It's been a year.

Mike It's been a dumpster fire of a year some people have said.

Megan: Yeah, that's what people have said. But there's been a lot of good things too and we hope as we bring you these stories from the field, that you're going to hear the magic that is prairie, the healing power of nature, and all of the good things that can help bring you back to that state of cheer.

((holiday music))

Megan: Oh what a year we've had together. It's easy with all the stress swirling around us to forget what we have right in front of us. Through all the ups and downs, twists and turns, and unexpected events, we are part of a carefully woven fabric. More intricate and complex than any man-made fiber. Woven to include millions of parts and pieces that connect us today just as they have through all the years before us. The natural world is not separate from us, it is our world—our one and only and it's right here with us every day, offering support, constancy in times of changes, discovery like nothing else, and the promise of the sun rising and setting tomorrow. The Minnesota Prairie is a legacy that connects us. Through the sounds, sights, smells and memories for all who are lucky enough to stop and take notice. This year, we offer you the power of prairie in the voices you'll hear today. We hope you'll laugh, cry, and lose yourself for a little while in the stories of what prairie offers us: the power to make us whole again.

Sara Reagan: My name is Sara Reagan. I am a Farm Bill Biologist for Pheasants Forever in Lac qui Parle County. I have been working there since March of 2018. My story is in April of this year, springtime, normal stuff we all go through: sick of the mud, sick of the snow, ready for some green grass, ready for some beautiful flowers. So, I was on the hunt and hoping to see some pasqueflowers. I had never seen them before. So, I asked a coworker who's been working in Lac qui Parle for many years, where in the county they might be—if he had seen them before. He told me about a remnant [prairie] pasture that had south-facing slopes. Over the years, he had seen this hill covered in pasqueflowers. So, I made a lot of excuses on my field checks to wander to that part of the county, which I had to be doing a lot because the workload was pretty heavy this year. At the time, I was also 5 months pregnant. So, knowing that it was going on maternity leave, I wanted to get all my work done as much as I could. So, I was feeling the stress at work even in April. So, I was checking twice a week, every week for the whole month. And the end of April came and I had seen nothing. No luck at all. So, I had given up and thought well, maybe next year it will work out better. As far as home life, it was also a little bit stressful, my other son, who is about a year and a half old, was having a lovely growth spurt. His big molars were coming in and he was a little grumpy to say the least. I wasn't sleeping a ton

because of the pregnancy and everything. One evening after I had picked him up from daycare, he had been pretty much fussy, crying, and frustrated the whole time since we got home. My husband, who is a farmer, was in full planting mode. I hadn't seen him in days and he called me up and asked me if I could deliver him a supper. I said, of course I will, but I'm not bringing this kid with me because he's not having a good time. I didn't even want to try to fight him to put him in the car seat. So, my mom came over to watch him, which I felt kind of guilty about because she wasn't going to have a fun time playing with this tearful baby. I wanted to get it done as fast as I could—bring my husband a supper and get back home. I got everything ready and drove out to the field he was in down a few gravel roads. Wait for the tractor to make another round, dropped off the meal, gave him a quick hug, and then I was ready to go back home. I had parked by the side of the gravel road. There's crop fields on both sides. I turned my car around and out of the corner of my eye in the field of brome at the top of the ditch, 10 little white flowers just growing there. Of course, I had to get out and see what they were. And there were the pasqueflowers that I had been looking for and hoping for and had given up hope on. It was a really nice moment to remind me, quit stressing out about all this dumb stuff that's going to go away eventually. A nice little reminder that the prairie will be there in the places that you least expect it. I was not thinking they would be at the top of a road ditch next to a cornfield. It was just a nice little blessing and nice to finally have my moment where I got to see them. So, I got another one [prairie flower] checked off my list too.

Megan; I love that!

Mike: Awesome.

Megan: That's so beautiful. It also kind of tells you the land is speaking to you—telling you what it was before, which I love. It's like, "look, we used to be prairie here, check us out!"

Sara: Yeah, I feel like I should've put a flag down because I'm going to go check it every year now to see if they keep coming back.

Mike: Sure.

Megan: After we got done recording Sara said it was a needed day, it was uplifting for sure. I love this idea that prairie will be there when you least expect it—where you least expect it. This is a theme we heard from a lot of our guests this year and you'll hear this again as USFWS Biologist, Becky Esser tells us about an unexpected hill prairie discovery in northwest Minnesota. The phrase of the day is HOLY BLUE GRAMA, would you look at that!

Becky Esser: My name is Becky Esser and I'm a wildlife biologist for the U.S. Fish and Wildlife Service. I am stationed at the Detroit Lakes Wetland Management District in north west-central Minnesota. Today, I'm going to talk to you about one of my few field days that I had this season. Like most of us in conservation, my field days were few and far between so when I had the opportunity to go out one of these days, I really packed in my schedule. I mean, I scheduled my time. I scheduled 4-5 field stops. It was late September already and I was going to go back

and take a look at a couple of our grazing units. I was going to do some meandering [surveys] and monitoring of our native prairies just to see how they responded a couple years post-grazing. I was going to also check some of the seedings there because we're trying to interseed and trample those seeds in using bison and cattle. I had big, big plans. I got to my first spot and it's in the very southwestern part of Becker County and of course like y'all know when we get on to prairies, you know, I didn't just wrap this up in an hour or so. I was out there for quite a while. So, I got this site done and it was already closing in on lunch and I'm already seeing that there's no way I'm going to get my schedule figured out and have everything finished. And of course, my stomach was growling so I decided to detour to a place for a quick lunch. It happened to be a new acquisition that we had just purchased for the Northern Tallgrass Prairie National Wildlife Refuge. It was just a few miles away. I had never been there, but this summer, a coworker of mine had visited and sent me pictures describing these hillsides of blanketflower and locoweed. I'm like OK, I know I'm not going to see the blanketflower and locoweed in bloom, but I got to see this. And it's lunch time so I'll take a detour. I went there and I visited Coot Landing for the first time. Coot Landing doesn't exactly invoke picturesque prairie, but that's its name. So, I had a quick lunch in the truck and then I decided to go take a quick walk, right? A quick walk to see what I could see. I wandered for 30-45 minutes just jotting down species [I was seeing]. It was good, but [I knew} this was not it. I still needed to find out where the great prairie is. So, I texted my coworker and asked if they could navigate and get me a little closer. He sent me a point on Google Maps. And I was quite a ways away. It's only an 80 acre prairie, but for whatever reason, I was still in the front 40 acres ((laughter)). I wandered and wandered and I started cresting some hills. And mind you, this is southeast Clay County so this isn't flat Aggasiz beach ridge prairie. This is topography! This is oak draws, oak woodlands and savannas with beautiful hill prairies and deep, shallow marshes and lakes. I crested this hill and in front of me I was in awe. I saw this even taller hill for starters, but I knew I was getting closer because I could see the change in vegetation. I could see the colors starting to come out even in September. You know that beautiful red and gold hue that we see in September prairies. So, I knew I was getting closer and I kept pushing towards that point. When I got there, I could not believe my eyes. I got to the top of the hill and the vista was incredible. And I started texting my coworker. I'm seeing more little bluestem and porcupine grass. I started running into Echinacea (narrow-leaved purple coneflower) here and there. Needle and thread [grass]. Finally, I texted him and I'm like "HOLY BLUE GRAMA!" I knew I was there. And he's like, "you found it didn't you?" I definitely found it. Things started getting a little cheesy from then on because when you know you've found a special spot, you've got to share it with somebody, right? I took it all in for myself, but I did a group text to the management staff at our office, which is about 5 or 6 people. I started using words like "this is amazing", "spectacular", "this place is special," "this is one of the best dry-prairies I've ever seen in my life!" They knew I was excited because they started sending these gif photos back of these babies and little kids with their hands in the air, and a Rocky moment from the movie. It got pretty cheesy, but they knew I was excited ((chuckling)). Let's just say I never made it to the rest of my planned sites for that day. I spent the rest of the afternoon at this prairie. I'll tell you what, after the year that we've all had, you

know, it just really struck me how much I needed that day out on the prairie. And how I needed that time to myself. It really was good for the soul. It just spoke to me how much we need to get out and have those days for ourselves. So, that was one of my very few field days this season, but it was so well worth it. I never did see a Coot on Coot Landing, but the prairie that was there was definitely worth it.

Mike: That's a great story, Becky.

Mike: HOLY BLUE GRAMA. That's going to become a trend. You're going to be hearing that on the street sometime soon. Certainly, Megan and I are going to be using it so thanks for that Becky. You know I loved how she highlighted that she needed that experience and how it was good for the soul. To me, it really reinforces that we need those kinds of moments to help keep this passion about the work we do to conserve prairies. We need those moments. Here's another one—another prime example of that kind of moment as told by Carol Hall.

Carol Hall: My name is Carol Hall. I work with the Minnesota DNR in a program called the Minnesota Biological Survey. The Minnesota Biological Survey works to identify and protect Minnesota's biological diversity. I work out of the St. Paul office, but I travel around the state a lot doing amphibian and reptile surveys—searching for frogs, salamanders, snakes, lizards, and turtles. I'm very thankful to have been approved to conduct fieldwork during this past 5-6 months. And really how awesome is it to have a job that requires you to go outside and work hard ((chuckling)). So much of my fieldwork in 2020 involved turtles in southeastern Minnesota in riverine habitats. But, I did make a trip to the southwestern Minnesota prairies of the Minnesota River Valley. And with me, came a bullsnake. A species of special concern in Minnesota due in part to the loss of prairie and savanna habitats needed by this wide-roaming species. But I wasn't just bringing him along for the ride-- I was bringing him home. This snake had been found the previous summer by Nick Schultz who was tracking bullsnakes that had been surgically implanted with transmitters so that we could track them and learn about their movements and habitat use throughout the site. You can learn more about this project in Episode 5 [now episode 13: *Herp Tracking in the Minnesota River Valley: Snakes, Skinks, and More*] of Season 2. For those diehard Prairie Pod fans that have listened to every episode, you may recall that we were tracking 10 bullsnakes at this site at one time. In 2019, Nick was out collecting some final locations for the few remaining snakes that we still had on air when he encountered this really sad looking fellow. The snake he found was an adult and was over 4 feet in length, but it clearly had a problem. The scales on its head were raised and crusty. His eye caps or the scale that covers his eyes were cloudy. He couldn't see. He was weak and thin. It was possible that the unusual growths on his scales was due to a snake fungal disease: SFD for short. It's an emerging infectious disease that has the potential to significantly impact local snake populations. The vet at the Minnesota Zoo, Dr. Lahner, put the snake under an anesthesia at her lab in Apple Valley, [Minnesota]. She collected a biopsy that was sent to the National Wildlife Health Lab in Madison, Wisconsin. Fortunately, that test result was negative. There was fungus impacting the snake's scales, but it was not SFD. There was a lot of recovery

needed before he could be returned to his home territory. By late September when the snakes are thinking about going underground for a long winter's nap, it was determined that he was not ready to go back yet. It was decided that he would remain in the care of the Minnesota Zoo. And I would release him first thing in the spring. And then, what happened? Covid hit and all plans went out the window. So, I finally had time to return him this past July—roughly 1 year after he had been initially found. Dr. Lahner assured me that his eyes were functioning and he was ready. Minnesota Zoo staff warned me that he'd recovered his wild aggressive nature. And I figured, well that's a good thing since it would serve him well going back into the prairie. Well, I combined his release with a trip to Blue Mounds State Park in southwest Minnesota. I camped at the park and was planning to meet park staff first thing in the morning. I arrived at our meeting spot early. The sun was out. It was a beautiful morning and I thought as I sat there, I bet that snake would like to come out and enjoy a little sunshine after being in captivity for a year. So, I reached into the cooler where he was secure in the snake bag. I opened the bag and right away the hissing started. I opened the bag wide enough so I could tell which end was which and I grabbed him behind his head. He struggled, hissed, and thrashed about trying to get free. But, I held firm. He even wrapped his body around my arm and squeezed as constrictors will do. Bullsnares being a constrictor. I sat quietly with him until he finally realized I wasn't going to eat him. After a few minutes, I loosened my grasp and he didn't move. We quietly sat in the sun together. He slowly stretched out onto my arm and let the sun shine onto his beautiful snake body and not so pretty head. I don't know how long he stayed there without moving, but I managed to take several pictures of him with my other arm. From the first to the last photo was a 10-minute period so he was probably there about 15 minutes just basking on my arm and it was a joy to watch him. My colleagues arrived and I returned the snake to the bag and the cooler. And later that day, I drove up to the Minnesota River Valley and released him where I knew he'd find a burrow for protection. He didn't waste any time finding it and disappeared shortly after I released him. Hopefully, he had a good remaining part of the summer back on his home territory. And is now safe in a deep burrow where he's overwintering. So, that's my holiday story and don't you just love happy endings ((chuckles)).

Megan: I do love happy endings. That was beautiful. I have to ask you because you know I asked you this earlier, but I'm going to ask you this so everybody can hear—so all the listeners can hear. So, my uncle bob is a sea turtle biologist and he used to collect turtles and other animals on the side of the road for necropsy. He would stick them in the freezer until he was ready to analyze the cause of death and figure out more. So, my aunt would always go in there and there would just be like ice cream and dead animals right next to each other. So, I'm just curious when the snake was in your cooler, what's your comfort level as a scientist? Are there grapes in there? You got a sandwich in there next to him? What's going on in that cooler?

Carol: You know I think if things are well contained, I don't mind mixing it up a little bit. Especially with a snake in a snake bag. It wasn't going to be all over my food or anything. As I recall, I might have had another cooler just for food. Because coolers can latch and be locked up, they can be a good little carrying boxes for critters.

Megan: A little safe place for your snakes and your snacks as we like to say.

((Group laughing))

Mike: There you go. Nothing better than releasing a healthy animal back into the wild where it can just be its own wild self. I love that story and Carol, just nice job. I think that's just a prime example of the kind of experience, you know a hands on, emotional experience, that really motivates us to care about these creatures and conserve their habitat. It makes me want to work hard to do that. The next story by Jaime Edwards is an excellent example of how we can always rely on prairie to surprise us, keep us on our toes, and make our life more interesting.

9. Jaime Edwards: My name is Jaime Edwards. I am currently the wildlife manager at Whitewater Wildlife Management Area, but was the Nongame Specialist for southeast Minnesota for about 18 years. The story I'm going to tell is when I was the Nongame Specialist working on bluff prairies. We had just started doing goat grazing on the bluff prairies to try to set-back buckthorn. As part of this, we were required to do some monitoring to see if the goats were having a negative impact on the prairie plants. We want them to have a negative impact on the buckthorn, but were they having a detrimental affect on the prairie as well? We go out and these goats are quite friendly ((chuckles)). Basically, I was out with my coworker, Barb Perry, and we were checking a site. As part of this monitoring, we had set-up these quadrants and marked them with PVC pipe. We were out trying to search for these quadrants to go and do our plants surveys. And these goats were just following us all over. They were chewing on our gloves and eating our datasheets. They were just a lot friendlier than we thought. We're also trying to keep an eye out for rattlesnakes because there are rattlesnakes on this site. One of the concerns we had because people kept bringing this up is what if the goats got bit by a rattlesnake. And we were like, "oh that's not going to happen! They've evolved with rattlesnakes. It's perfect. It will be fine." So, we're out on the site and Barb and I are towards the top of this bluff and we look down and we're like, "Ah! There's a goat down there. It looks dead!" So, we're like, what do we do? Because all the other goats are following us so surely this one is dead. So, I'm like, "what if it was bit by a rattlesnake?" We were paralyzed standing there looking at this thing. Finally we decide we should go check it out. So, here we go with the herd of goats following behind us going down and we've got our snake sticks, which are like golf clubs with the club off and now, it's got a hook on the end. We're walking by all this beautiful prairie that's got buckthorn growing up through it and we get to this goat who's just sprawled out on this rock. And we're like, "Holy moly. This is the biggest goat in the herd." So, we're just standing there and we poke it with the snake stick ((chuckling)). And nothing happens so I'm like man, we got to call this contractor and tell him that his goat died. I wonder when it died, do you see any bite marks? It's not swollen or anything. We're standing there talking and all of a sudden the thing just jumps up! It looks at us. He was just sleeping there. What the heck! ((Laughter)). He just turns around and looks at us and he starts chewing on our datasheet ((all laughing)). It was like are we mad at this goat for pulling the wool over our eyes? Or are we

happy that it's alive? ((All laughing)). We decided that we were happy it was alive and we carried on with our survey. It followed us along with the rest of the goats.

Mike: That's awesome.

Megan: That is an excellent story.

Mike: I'll say that my favorite day in the field ever was probably the first day I worked with goats.

Jaime: Yeah.

Mike: They are so funny and entertaining.

Megan: Oh, man goats, excellent management tool, sometimes a sneaky creepy critter. You never know what's going to happen in the field and I love that the one goat dared to be different. I also love that when it jumped up, it was like, I'm going to eat your datasheet. Oh, gosh. Speaking of datasheets. I love that Jaime was writing everything down that she was doing. I know you thought you were going to escape hearing it, but here you're hearing it again: it's so important to write these things down. Up next, we're going to hear from John Latimer, who in addition to his many accomplishments, he is somebody that I really see as doing life right. When he is talking to us about the natural world, you can just hear the joy and excitement in his voice. He's so happy to share his experiences and he's somebody who for the last 40+ years has been tracking the phenology where he lives. So, what do I mean by phenology? He's tracking basically what's happening to the natural world. When did the tamaracks put on bud? When did they go to seed? When did the first bird start arriving back in spring? All of those seasonal changes, he's tracking when that happens. And like he says, the only difference between him and a naturalist is that the phenologist writes it down. He also shared with us a story not about eating datasheets like in Jaime's story, but a story about how the number one question he is still asked when he goes to schoolkids and he's teaching them about tracking these seasonal changes—because anyone can do it, it's for everyone! You can do this! All you need is a notebook, a pencil, and a will to discover. He says the number one question he keeps getting asked is: "Can I eat this? Can I eat this? Can I eat this? Is this edible? Is *this* edible?" And I empathize with him on that fact because whenever we do prairie trainings that's still the number one question that I am asked also. We hope you enjoy, listen, and experience the seasonal change of the world through John's eyes.

11. John Latimer: My name is John Latimer and I do a program in Grand Rapids, Minnesota on KAXE radio called the Phenology show. And every week, I make an effort to catalogue the things that I've seen that have changed over that week and to tell people that these are the things they ought to be looking for. I try to keep it current. At the same time, I try to incorporate some of the things that happened in past years so that they can get a chronological or a feeling for climate. Whatever time of year it is, I want people to be aware of the circumstance and be attuned to nature. We're coming into a time of year where it's probably



going to be a lot of talk about the type of birds that you're likely to see, the phases of the moon, the type of clouds that come along in the wintertime and those sorts of things. But you know, eventually we'll run around to spring again and we'll talk about the returning Robins and the emerging flowers on the speckled alders and so forth. That's a bit of what I do.

Megan: John, tell us a little bit about how you came to love phenology and just love nature. How did that come about? You were telling us earlier about your mail route.

John: Yeah, well to go way back, my mother was a farm girl from Redwing and my father graduated the University of Minnesota and became a forester. That was in 1940 I think he graduated from the U or 1941. He was a forester. So, as a child, I knew the names of the trees. Being a forester, he didn't give a whip for anything that didn't grow up and produce wood. It was just not part of his world. He did instill in me a knowledge of all the trees and I just assumed everybody had that knowledge. I just assumed everybody knew that the white spruce looked like a white spruce and a balsam looked like a balsam and the difference was pretty obvious. I was sort of disabused of that notion somewhere along the line. At any rate, I had this background and my brothers and sisters—I have 6 brothers and sisters. Total six. I don't have 6 brother and 6 sisters ((laughter)).

Megan: It would be OK if you did.

John: I have 4 sisters and 2 brothers. But, they were always criticizing, not criticizing me, always teasing me. Because I just had an eye for detail. We'd be driving down the road and I'd be like, "Look at that hawk over there sitting in that oak tree!" I just saw things. Just one example, I went to see my dentist, whom I see maybe once a year. This is years and years ago. I sat down in the chair and he's just about to start working on me and I go, "You got new glasses." And he kind of looked at me and he goes, "You know, I've had these for a month and my wife hasn't noticed yet." ((All laughing)). At some point, I took a job with the U.S. Postal Service and I was lucky enough to be a rural carrier. Those of you who are rural carriers, know why I say lucky enough. It's a great job. You go in and sort your mail, load your mail in your car, and then you drive away. For me, it was a 5 hour route. I had 100 miles. I drove for 5 hours by myself. I got to do exactly what I wanted to do besides stick mail in mailboxes. Somewhere along the line, I met a woman early on who happened to remark to me one day at the mailbox that she thought she had seen her first Robin of the year. So, obviously it was probably in the springtime. After that, I kind of got to thinking about that. You know, I don't recall seeing a Robin, but I bet there are some around. I started looking and meeting with her once a week. I brought her mail up to her house once a week. She had a lovely place on a beautiful lake and lots of nature around all the time. I would bring her mail to the house and we would have coffee and some days it was a half hour and some days it was an hour. It didn't matter, that was my time. And I would just talk to her. She bought me a couple of books on nature. Some of the Stokes guides for tracking in winter, birds, and bird behavior. Just gave me this nudge. She was actually probably my mentor. After that, somewhere in about October of 1983, I started keeping records of what I was seeing. It started off pretty rough because I didn't know anything. I have maybe a dozen different

books on flower identification. Ultimately, I settled on Newcomb's because it was the one that got me most often or at least close [to the right plant]. By the time I got it narrowed down on Newcomb's, I knew I was looking for a plant with alternate leaves, toothed edges, and 5-parts per petal. It got me close. So, I took Newcomb's with me. I've got a battered copy of Newcomb's in my car that I've had with me since the early 1980's. I have highlighted every plant that I have found in Itasca County. I have now lists of adjacent counties of plants that I have found. So, I know when I go in my book if I find a plant that I don't recognize, I can kind of tell: a) if I've seen it before or b) if it's native to the county. I began just keeping these records and about that same time I began to volunteer on KAXE radio as a morning host. In those days, there was no morning news program so we would rip the news off of the teletype machine back in the closet and we'd read the news. Then, we'd have time to either play music or talk. I began talking about phenology and what I was seeing. The response was immediate and overwhelming. People loved it! But, the word "phenology" had no—it was like nobody even knew what it was. So, I started coming up with a definition and talking about phenology. Just getting people interested in what's happening outside. I didn't have any formal training, but if you start in your yard, you can learn the trees. Then, you can follow the trees and you can learn the plants. You can do it on your garden. You can do it when the carrots come up or when the beets come up—whatever. It can be anything as long as it's something you do yearly and you keep track of it, you know. It becomes phenology. All of those records are valuable. Anybody who has any sort of records at all—they are unbelievably valuable records. Any day that you start doing phenology is a good day. And if you can keep it up, that's all for the good.

Mike: One thing I took away from John's story is the importance of paying attention. I think of prairie kind of like fine art. If you're observing it carefully, it pays big dividends. Those observations can be a number of activities. You can be collecting wildlife and plant data like John does. You could be hunting. You could be doing photography or some other type of art form or whatever. The important thing is that you're making those observations and then you're recording them in some manor. That information can help us conserve prairie certainly. It also will make you more present while you're there. IT will connect you to the prairie and enhance your experience there. Our next story comes from George Shurr. George has deep prairie roots, if you'll pardon the metaphor. He spent much of his life on prairie. He writes a blog about it. George is going to tell us a story about the prairie and the stream on his land and the lessons he's learned from them.

13. George Shurr—My name is George Shurr and I'm down in extreme southwestern Minnesota. About twenty years ago my wife and I moved back to my family farm along a prairie stream down here. I took early retirement as a geologist from a career of teaching at a college in the woods of central Minnesota and from doing summer fieldwork out on the short grass prairie in the Northern Great Plains.

We were both raised in this farming community and looked forward to reconnecting with family and friends. We knew that agriculture had changed a lot in the thirty years that we were

gone and it took some time to get used to the new agricultural practices. But, I had not anticipated the lessons that the Land itself would reveal about the history of the tall grass prairie back in deep time. And, I'd like to share some of those stories with you. They're based on posts that are available in [lonetreefarm.blog](http://lonetreefarm.blog), no spaces and no capital letters.

**Seasons change** and we mark those changes with holidays. Winter, spring, summer, and fall all flow through the modern working landscape in just the same way as the seasonal rounds made their way through the tall grass prairie in the past. We move cattle from paddocks on the floodplain to graze cover crops and corn stalks on the surrounding uplands after the corn and soybeans have been combined. That's similar to the Native Americans' fall harvest of their cornfields and gardens and to the processing of bison for winter supplies.

However, all of that activity depends on the weather. This fall was dry, but we had record rainfalls during the past two years. All of that extra water brought the pasture creek up to prolonged high flow conditions and that produced a lot of erosion along the high channel banks. When water levels dropped, there were treasures of artifacts and bones to collect on the sand bars.

**Generations change** and we celebrate with baptisms, confirmations, weddings, and funerals. Over the past 150 years since the farm was homesteaded, six generations of our family have shared those celebrations. Our grandchildren continue the family tradition of looking for adventures along the pasture creek. Prior to the last few years, only a couple of arrowheads and one bison horn had been picked up by kids of previous generations. But, the recent high water changed all that.

In the last few years, three complete bison skulls and six individual horns have washed out of the channel banks. In addition, dozens of possible prehistoric corncobs have been deposited on sand bars. The grandkids have found some great artifacts: six different kinds of arrowheads, two large leaf-shaped blades made of a distinctive gray rock, and two pieces of pottery. This wealth of cultural resources probably got liberated from underground storage pits when the high water eroded the creek banks.

**Cultures change** and we should acknowledge those changes with respect and tolerance. These days people travel to other countries to experience different cultures and languages, but the tall grass prairie has traditionally hosted multiple diverse Native American cultures. The people who lived along our pasture creek probably raised corn and hunted bison about a 1,000 years ago. At least that's what a friend who is an archaeologist has suggested after identifying the pieces of pottery.

Another archaeologist has conducted a geophysical mapping survey that reinforces these ideas. She interprets her data to suggest that there was at least one dwelling and multiple underground cache pits associated with circular vegetation anomalies on the flat floodplain. In addition, she speculates that this is a multi-component site because of the different types of arrowheads. That means over multiple centuries, several different Native American cultural

groups lived along the pasture creek. Or maybe they were just passing through because this stream valley would have provided a natural travel route. It is one of several that originally formed when there was a glacier in southwestern Minnesota.

**Environments change** and we know that some changes are natural cycles while others are the result of pollution. The advance and retreat of glaciers thousands of years ago are natural cycles, but the climate change that gave us record rainfalls in the last few years are not. About 10,000 years ago, the margin of the last ice sheet came to within about 20 miles of our farm. Melt water from that glacier flowed to the southwest and carved the valley where our pasture creek is now located.

There were earlier ice sheets that moved through the area and deposited sediments, but it is this last glacier that gave us our creek valley. The tooth of an Ice Age animal has washed out of the eroding creek banks in a manner similar to the artifacts and bones that are much younger. A scientist at the Mammoth Site in Hot Springs, South Dakota has verified that the molar came from a mammoth. So, the increased erosion due to modern climate change has exposed a fossil that documents an environment that is completely different than the tall grass prairie that we live in now.

The lessons that we can learn from the Land are like prayers. Sometimes they don't directly answer the questions that we ask and sometimes we're surprised to learn something that we haven't even asked about. However: "For everything there is a season, and a time for every matter under the sun." This holiday season, I'm grateful for the privilege of living on the prairie and learning from the Land.

Megan: George has this fantastic way of making the past make sense in the present. How the land was shaped, how it's changed through time and how there's still so much to uncover about its secrets. I love that he described these lessons like prayers where the answer isn't always what you thought it would be. Prairie is powerful. This land connects us through smells, sights, and memories. And you're going to hear more of that. Up next in our last story of the day, Upper Sioux Agency State Park Manager, Emily Albin tells this story of the prairie legacy being passed down from her father to her and then to her two girls, brought me to tears. I'm not ashamed to say it, I cried. I had two, big ol' tears rolling down my face. This is why prairie is important because it connects us through time. Through hardship, through joy, through frustration, through sadness, it is there as a pivotal piece to tie together boundless memories. Listen as Emily shares her passion for prairie and how it can help you remember the joy of discovery and a connection to the past.

Emily Albin: Howdy, I'm Emily Albin--the Assistant Park Supervisor at Upper Sioux Agency State Park. It might be the best park in the state, but I could be slightly biased. I always joke that I have 30 years of experience. I'll be 36 here shortly. That is because I'm a DNR [Department of Natural Resources] brat. You know, there's that term, military brat, well, I'm a DNR brat. I grew up in the State Park system. My dad, Randy Lorenzen, was an Assistant Manager in the state

park system for over 30 years. He ended his career with over 20 years at William O'Brien State Park. So, I grew up in the park, shadowing him, following him around. When you're a DNR kid, you don't get sent to summer camp, you follow mom and dad to work. And in my case, while other kids were out swimming and doing fun stuff at camp, I was having porcupine grass wars with my dad and learning how to say the word "puccon." And how to identify prairie plants. A lot of what you see at William O'Brien was started by hand well over 20 years ago. We moved there in 1990. At one point in my life, he had me so well trained that doing 55 mph on a highway, I could go past a prairie plot and easily identify 15-20 plants without even trying. He was pretty proud of that, I think. That got me thinking this year, you know, Megan, you asked me to reflect on my field season. This year, like a lot of people, I didn't really have much of a field season. I didn't get out into the prairie very often and when I did it was more of an escape for me. It brought back a lot of those memories of being a kid. I would bring my girls out with me too. I have a 7- and a 5-year old. Teaching them the flowers. I realized I was introducing them to my favorite plants that have smells to them just like my dad did with me all those years ago. Anise hyssop with that licorice smell and gray-headed coneflower with that amazing smell. And Monarda [bee balm]. I think my favorite part was them finding a new smell and running up to show me and then getting to teach them what that plant was. I guess what I would like to put out there is that the flowers aren't just pretty. Kids see flowers every day. It's that scent, the aromatherapy of it. I think, I don't know what I'm trying to say here—those smells brought me back to my childhood and I'm very excited for the fact that my daughters will hopefully have that smell factor with them. So, next time you find yourself near a prairie or you have a special moment near prairie, crush one of those flowers and you get that smell and it will help bring you back next time.

Megan: Those are such good stories!

Mike: Those are great stories! You know, the reason I love this holiday episode with these stories from the field—I was thinking about how our jobs now, how we spend most of it sitting in front of the computer. So, our time in the field, which means so much to us, we've really got to cherish that time and make the most of it. I don't have to tell you this, but that's when we learn. I suppose we learn something sitting in front of the computer ((chuckling)). The field is when we're learning and I feel like, when we're really doing our best work.

Megan: I had one of the folks I used to work with always say that conservation happens in the field. It happens outside, not behind a desk. And while definitely the work that we do in the office is certainly important and valuable, those experiences outside in nature with each other, they just feed the soul. It's a beautiful thing to spend that time in nature. And we heard that from all of our guests. What I love about it is it's the partnership.

Mike: Right.

Megan: It's the partnership that we're all doing this together. We have different ways that we're accomplishing these goals of keeping prairie on the landscape for future generations, but

I love that we're all in this together. Just hearing people talk about how prairie brought the peace, how it brought them joy, how it brought them that moment of hope that they needed throughout the year. It's just exactly what I needed to hear.

Mike: I'm gonna get out there this winter. I'm not going to wait until spring, Megan. I'm going to get out there this winter and tromp through the snow in the prairie.

Megan: You got your boots! You got your hat! You got your mittens! You're ready to go!

Mike: I don't have mittens, but yeah.

Megan: Oh, well, Alright. You got gloves. OK, fine, you have some manly gloves, whatever. You have some hand coverings that you can wear.

Mike: We can do it together, socially distanced of course. We'll look for an excuse OK, Megan.

Megan: All right, this sounds great. We're going to go out. Mike and I are going to frolic and we encourage you to go outside and frolic too. The prairie is beautiful right now. All of those grasses lodged with snow. It's a quiet, peaceful time of year. We wish you a safe, peaceful, and hopeful holiday season. We hope that you get to spend that time out in the prairie, on the prairie, just enjoying all that it has to offer. ((Holiday music playing quietly in the background)). Are you ready, Mike?

Mike: Happy Holidays everybody!

Megan: Oh my gosh, we're supposed to do this on three. ((laughter))

Mike: Were we supposed to do this together?

Megan: Happy New Year! Ok let's try this. 1...2...3...Happy New Year!

Mike: ((slightly delayed)) Happy New Year!

Megan: We're so great at this. I'm so proud of us. High five!

Mike: High five.

We're going to wish you a safe and peaceful holiday season while you're watching the prairie grasses lodge with snow.

((sounds of birds chirping and wind blowing intermingled with holiday music))

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