



Prairie Pod Transcript

Season 6, Episode 55: Learning to love the prairie: Engaging youth in prairie conservation

Hosts: Megan Benage, Regional Ecologist; Sara Vacek, USFWS Wildlife Biologist

Guests: Molly Stoddard, Environmental Education Specialist, U.S. Fish and Wildlife Service; Michael Kurtz, Cultural Interpreter, Shakopee Mdewakanton Sioux Community; Alisha Paplow, Executive Director, Prairie Ecology Bus Center

Podcast audio can be found online at mndnr.gov/prairiepod

Transcript:

((sounds of birds chirping and wind blowing))

Megan Benage: Hey Prairie Pod listeners, I'm Megan Benage, regional ecologist with the Minnesota Department of Natural Resources.

Marissa Ahlering: And I'm Dr. Marissa Ahlering, lead scientist with the Nature Conservancy in Minnesota, North Dakota and South Dakota.

Sara Vacek: I'm Sara Vacek, wildlife biologist with the U.S. Fish Wildlife Service, based out of the Morris Wetland Management District.

Mike Worland: And I'm Mike Worland. I'm a wildlife biologist with the Minnesota DNR Nongame Wildlife Program.

Megan: We are part of the Minnesota Prairie Conservation Partnership and we're here to help you discover the prairie.

Marissa: Discover the prairie.

Sara: Discover the prairie.

Mike: Discover the prairie.

((music playing and sounds of birds chirping))

Megan: Hey, welcome back to the Prairie Pod. Sara! It's you!

Sara: Hi Megan.

Megan: I know, I'm very excited to podcast with you today.

Sara: Yeah, it's been a while since we talked.

Megan: I know it's been a while and we're going to talk about something that's near and dear to our hearts, you know what it is – the love of the prairie. You know, Sara! You love the prairie.

Sara: We do love the prairie don't we?

Megan: We do.

Sara: And it's fun to share with people.

Megan: It is fun to share. Look, you just already spoiled it. You gave the spoiler alert right away. That's what we're going to talk about today.

Sara: It's part - - well they were just saying it. (Laughter.)

Megan: Just sharing our prairie knowledge, learning to love the prairie, so think and we want, if you're a listener right now, close your eyes, imagine the moment, if you feel comfortable close your eyes. If you're like walking across the street please don't do that, keep your eyes open. But close your eyes and just imagine the moment when did the prairie first capture your interest? Did you have an ah-ha moment at a special place? Did it sneak up on you or one day you suddenly were looking out at this beautiful vista and you thought to yourself this is living. This is what it's all about. I mean prairies are pretty amazing, but as we've discussed in the past, there is a subtlety there that can make it easy to overlook that amazingness, especially if you don't get out there and walk in it and see all the diversity and life, and individual stories that are playing out every single day. So how do we get people especially young people excited about prairies and Sara, you've seen this blog post that Chris Helder did.

Sara: Mm-hmm.

Megan: Well it's not actually a blog post, he made a miniature video about how to get people excited about the prairie and he has, it's all stick figures, so we'll put it up on the website but basically he's like coming up to a person with a snake in his hands from the prairie and he's like look, a snake, isn't this awesome? (Laughter) And the other stick figure is running away 'cause it's too much, too soon. Too much, too soon. So he talks about how do we ease people into the prairie, especially people who might not be nature lovers like we all are, who might not be as indoctrinated or ingrained in it. How do we make this, you know, a slow burn for them? Something that they can lean into so that they can have a lasting love for this landscape. How do we do that, Sara?

Sara: That's an important question for a lot of us who are maybe more in the management side or restoration side of the prairie world. We don't necessarily have a

lot of training or experience in, in helping. So we are the ones that are going to run up with a stake and look at this and, and, you know, yeah, so that's, it's exciting to have some friends to talk to today that might be able to help us think a little bit about some better approaches and some creative approaches to helping people find that love.

Megan: Absolutely. We know education like I come from a family of educators, and it's a skill, and it's a science, and it's something that's learned. What is that saying, like if you can't do, teach, or something like that, but it's, we, teaching is a skill, and not everybody is a good teacher, and so we're really lucky today to have three awesome teachers with us. I mean, I say teacher not as like schoolteacher, but they're, they're teachers of nature, and so that is a science, it takes a lot of skill, and we're going to learn from that. Let's have you guys just introduce yourselves really quick. Michael, let's start with you.

Michael: Háu Tašun̄ka Opi emacīyapi. Kul Wičáša Oyate hematan̄haŋ. Hello, my relatives, my Lakota name is Tasunkja Opi, Wounded Horse, I'm from the Lower Brule tribe of South Dakota and my English name is Michael Kurtz. I'm a cultural interpreter at Hočokata Ti, the lodge at the center of the camp, which is our museum, Cultural Center at the Shakopee Mdewakanton Sioux Community, but I also do a lot of work around the community. I'm a birdwatcher, a wildlife photographer, I'm always out in nature a lot of times in the prairies, catch me on the prairie on Sundays, my days off, but just do a lot in the community.

Megan: Alisha, let's go to you.

Alisha: Hi, I'm Alisha Paplow, and I am the executive director for the Prairie Ecology Bus Center, but I've been with the company for 15 years and I've been a naturalist and teaching kids and, and that's our primary focus, and I just really like getting outdoors and being able to share my love for the outdoors with the kids, and I'm going to definitely bring cheer with my two little boys that I have. I'm always getting them outside and kind of driven them to following mom's footsteps as being a naturalist.

Sara: Molly, can you introduce yourself, please.

Molly: Sure. Hi, everybody. I'm Molly Stoddard. I am working for the U.S. Fish and Wildlife Service at the Prairie Wetlands Learning Center in Fergus Falls, Minnesota. I work as an educator here. We're part of the Fergus Falls Wetland Management District and the National Wildlife Refuge System. Been here a long time and also love to spend time in the prairie outside when I'm not at work, and definitely have become a prairie person over the years, so thanks for, thanks for the invite to join you today.

Megan: Absolutely. We're going to start with, with an easy one, but one that I think is always fun to listen to, and we'll just take all of these sort of round robin talk with each other here. But what drew you to the prairie or nature education or like why do you think like why do you want to teach about prairie to other people or share that love of the prairie? Michael, we're going to start with you.

Michael: All right. So my inspiration of the prairie kind of went over years. I've always connected to nature, wildlife, birds, animals as a kid, but I'm going to kind of put it into perspective like a baby meadowlark. You got this baby meadowlark born out in the prairie, got no feathers on him. As he grows up, he's adding more layers of feathers and

stuff, so over the years, I kind of realized more about like the grasslands and prairies and kind of how important it is to conserve and save these disappearing grasslands. And so as that meadowlark gets older, he's like on his full adult plumage, like the older I got, the more I kind of realized this highly important to save these prairies because still to present day they're disappearing at a great rate. We need to protect them, educate, teach the youth, teach adults, teach everyone about prairie conservation.

Sara: Alisha, how about you? What got you into this?

Alisha: So I initially grew up in northern Minnesota or central Minnesota, and I was all about trees for the longest time. And then my dad moved us to the prairie and that honestly, I for the first part of it, I was like where did you move us, dad? Why? This is like frozen tundra out here in the winter and I don't have trees, and it's wide open, I can see for miles. But over time, that has become near and dear. Like I love being able to see for miles and, and then I got the job at the Ecology Bus Center and it was one of those things where it just I kept being out in the prairie and seeing lots of different diversity and that the beauty in the prairie, and then just being able to show those that live in the prairie that they don't have to travel long distances to find beauty in nature, and that they can just go in their own backyards and they're able to see that the beauty that is out there, and that there's this great piece of natural resources that we have and that it is dwindling and we do need to be paying attention to it and getting people out there is key to help with our restoration of it.

Megan: And just tell, tell the people who, who might not be familiar, what is a prairie ecology bus?

Alisha: So we are a mobile nature center. We, we have a bus that is a mobile lab and we pick people up, kids up, and we bring them out to a site nearby them, so we're kind of breaking down that barrier that they have to go a distance and we're able to just bring them out to where they are by themselves.

Megan: Awesome. And I know you'll tell us more about that in, in a little bit. Molly, what drew you to the prairie?

Molly: Yeah, well, I grew up in Chicago and there's, you might think not a lot of prairie left there anymore, but there's some bits, and fortunately there were a few teacher who planted seeds berry seeds in us growing up, just a few experiences, started getting into birding in junior high and high school and with my mom, and that brought me out to more prairies. Had an awesome teacher in 12th grade ecology that put us out in the Illinois prairie path to help monitor and restore it, we burned it, this little tiny triangle literally between a street, a bike path, and a railroad track. So but really, I really fell more deeply in love with the prairie when I moved to Fergus Falls and I got to be out in the really open prairie here on a daily basis with children. It transformed me because most people fly over the prairie to go from coast to coast. We tend to turn a blind eye to it as a people, and once you go immersed in it on a daily basis, and you get to be in it up close and experience it with all your senses and your heart as well, then yeah, that, that really clenched it for me.

Sara: Wonderful. So let's maybe dive in a little bit more working with youth specifically, and I know each of you do that. What do you, what do you feel like is, maybe Michael, we'll start with you. Why, why do you feel like it's important to, to focus then on youth education, or is that just our default because we think of teaching kids more than we think of teaching adults? Why, why, why reach out to that age group?

Michael: In my experience at least I feel like touching the youth is important just because you can have a lot like, for example, a school group you can get like 30, 50 kids all out at once, they're still kind of growing their life experiences, life views and kind of getting all the kids at once in one place out in the prairie, you can kind of show them how important the prairie is, whereas adults, we have busy lives living in the city outside of the prairie that's like the prairie jungle in the city, I don't know, but yeah, it's very hard for us to get time. Adults are still willing to learn, but the kids you can just kind of mold them a lot more easier, and, and getting them young as they grow up to get interested in a lot of these younger kids might go into careers in prairie, they might have passions about it, and those young minds are the ones that are going to save the future in our Dakota Lakota life ways, we look seven generations ahead, so getting the young and protecting the, the whole landscape ecosystems for seven generations is quite important in at least my perspective.

Megan: I love that. Alisha, what do you think?

Alisha: I would agree with Michael on that, and I would also add that kids are sponges. They, they want to learn and they are constantly seeking different knowledge and information, and so I think by reaching them at a young age, because they are so interested in learning, it's, it's easier for us to reach them, but also they love to share their experiences. Like they love to go and talk with their friends, their family, and so if we can instill that, that love, that excitement, enthusiasm, then they're also going to be able to help be stewards of our, of our earth, of the prairies, and they may be able to reach those adults that we're not necessarily able to reach because we can't get them to come to a program with us but we can get their kids to come to a program with us by working with the schools and that, and so I think that's one of the main reasons why reaching our younger generation is so important.

Molly: I'll just jump in, there's a lot of wisdom to both you both just said. It reminds me of when the recycling in the '70s became a thing, and it became a thing because it was taught to children in schools and they in turn took it home and taught their families. So we think we're the teachers, but children, children are teachers too, like you said. And they, they are more open to their values are just forming in childhood, whereas as adults, most adults have already formed their values. And once that happens, it's really hard to, or less likely at least for an adult to change their values. So if, if children learn to value prairie when they're growing up, they're going to carry that with them into adulthood and hopefully that then will – it will impact their lifestyle or their choices that they make as an adult.

Megan: I also want to mention like sometimes we think about youth as just, you know, like elementary school kids, maybe sometimes we throw in junior high kids, but I was going to be a writer my whole life until I took a high school environmental science class senior year, and I was struck because we just had a regional staff meeting, and we went

around and people described, you know, why they work for the DNR and how they came to this career, and I was shocked by how many people said it was senior year of high school that changed their mind. It was a class in high school. And so I just want to throw that out there that you're, you're never too old to learn. That's for sure. But even when you're a senior in high school, that's a pivotal moment where you have to suddenly make all of these adult decisions, like what do I do next, like what, where am I headed, where's my path, and that might be a perfect time to plant some prairie seeds in someone for the future.

Molly: That's funny you mention that, Megan because I have the exact same situation where I was going to be a writer, a journalist, and then I took an ecology class my senior year in high school where the my teacher, my siblings all had before me, and they loved and said I had to take this class, and yep, that changed my trajectory definitely, among a few other things. I mean, there's other variables, you know, but.

Megan: Sure, yeah. I love Mrs. Snodgrass, if you're listening, you, you made an ecologist out of me right at the end. I mean, okay, my mom had something to do with it too, but Mrs. Snodgrass, this one's for you.

Sara: Yeah, you never know those conversations that you might have with someone that can change the whole trajectory of their life, yeah, but we all have stories like that, it's so great. So I would kind of like I think now to jump into talking with each of you in a little bit more detail about the kind of work that you do, and you know, part of the reason that we asked you all to join us is that you're all involved with, with, with education and, and getting people excited about prairies. But in I think very different styles and different programming styles, so I'd like to dive into that a little bit more. So we'll start with Molly. Can you tell us about the Prairie Wetland Learning Center and specifically about the prairie science class that is there? That's such a cool model, I think.

Molly: Sure, absolutely. Prairie Wetlands Learning Center is a big, has a big visitor center on a waterfowl production area, part of our wetland management district, and so it's open to the public. You know, there's hiking trails, 330 acres of land, anybody can come here, any day of the year, daylight hour, it's free. There's an indoor visitor center that currently is only open on Fridays, we're rather short staffed, but there's also a major partnership with our local school district in Fergus Falls where the same 200 children attend school here every day of the school year for half their school day. So I'm just going to say that again because it's sort of a mind bender for most people. The same 200 fourth and fifth graders, so 9, 10, 11-year-olds attend school here every day of the school year for half their school day. It's a daily immersion program, a partnership really, and so it's, the Fish and Wildlife Service, our staff, which is mostly just me right now, and an intern, we work with them once a week, but their teachers are housed here, this is their quote school and so they are really the ones teaching these children on a daily basis outside, support, support standard standards, of course, and curriculum that they are required to teach, so my favorite word to use to describe the Prairie Science Class, that's the name of the partnership, is different. It's a different way of doing education and it's a different way of doing environmental education. The partnerships has been going since 2003 and so a number of years, and it's amazing to see the lasting impact that it has had on students, immediate impact but also lasting impact what some of

those students are now adults and what, how they are coming back and participating in the prairie in various ways, whether it's doing, becoming a board member of the Friends of the Prairie Wetlands or now they're bringing their children out to the prairie, or just a variety of ways that we see change happening in the community. The city of Fergus Falls became the first Prairie City USA last year, just like Tree City USA, it's running through Wildlife Forever out of St. Paul, but there are now pockets of prairie within the city and the city park system. It's, it's been amazing to watch and participate in over the years as well.

Megan: What does it mean to be a prairie city and how can I convince my city to be one? I mean, that feels like something that already you're sparking competition in me when you're like we're the first, I'm like we going to be the second. I just wanted to know like what does this mean, how do you do it.

Molly: Tree City USA, it's modeled after that program that is run through the I think the National Arbor Day people, and so Prairie City USA is very similar in that, you know, if you're working with your city to, you, I don't know who you is, but if your city is working on providing things like prairie plantings, prairie education and outreach, then you can go through a short process to apply to be a Prairie City USA and get that designation. They have a handbook on their website I think, Wildlife Forever does, so that would be my suggestion would be to check that out, and - -

Megan: All right, Sara, challenge accepted.

Molly: Megan's on a mission.

Sara: Megan is on a mission.

Megan: Challenge accepted. (Laughter.)

Alisha: I'm also going, I am going to beat you, Megan. (Laughter.)

Megan: This is a thing. Well, I think Michael beat me too, but this we're going for it, it's happening, let the – the competition is now on.

Molly: Oh funny.

Megan: We don't get any rewards, but like we're still into this competition, well the reward is now we're promoting prairie but you know. (Laughter.)

Sara: Molly, I had one follow-up question I was going to ask you. So when, when the prairie science class was set up, I'm sure it wasn't just we like 10-year-olds and so you picked that age group. Could you talk to us a little bit about some of the, I mean, I think I know there's some research, right, that's gone on kind of thinking about age groups and when communication is absorbed readily - -

Molly: Right.

Sara: - - and some of that kind of can you talk about that a little bit?

Molly: Yeah, sure. The, my general answer, my surface-level answer is that any age, every age is the best age to be outside for children, and to learn outdoors. However, I'll

just add to that, that research and environmental education suggests that that age of 9 and 10-year-olds, 9, 10, 11-year-olds is one of the times, best times to reach them in terms of skill development, that values formation, and their receptivity to learning about nature. So that was very intentionally chosen, those grade levels. Well, it started with fifth grade, the first five years or so, and then fourth grade was added after that. So yeah, there, there science in just like we are prompted to do good science in our work as conservationists, there is also good science in environmental education. So that was something I learned along the way but more so when I really when I came to Prairie Wetlands Learning Center, yeah, it's not just about what we teach but how do we teach it, what does the science say about pedagogy, for example, should I, should I do a one and done rotation of stations kind of field day at the event or would that time be more impactful and energy if I did something a different approach? That's more observational and more immersive in the prairie experience, so it would be the latter, but that's just another example of how research can play a part in what you decide, how you decide to teach in the prairie.

Megan: Well, and I'm sure too how, how different people learn, right? We all learn differently, like some people can read a book, my brother can read a book and he knows everything that's in the book, like the one time he read it, and he can tell you everything that's in it, and then there's me who's like reading the book 22 times and I'm like I don't know what this book's about. Like 'cause it just, 'cause it just takes - - my brain it just, I just need repetition and I need hands-on learning for me to like fully absorb and get it, but it's like very clear. I mean, we're siblings, and it's very clear to me he has a very different brain than I do. So I'm sure that's really hard to, to balance as well.

Molly: It's, it's fun to see how the prairie as an outdoor classroom has a way of leveling the playing field among students. Students who maybe struggle to learn in a, you know, traditional ed setting indoors really often flourish in a learning center like the outdoors. So those kids who are like me and can't sit still and are hyper and, I'll say energetic, and who are distracted and always looking around the room and boy, those kids are the best observers outside. They don't miss a thing. They don't miss a bug or a bird. And it's, it's very rewarding for them to have the positive reinforcement that they can get because of that outside.

Alisha: I think also getting like when teachers are out with their kids when they see that, like I've had multiple times where teachers will come up and be like you need to keep your eye on these few kids because they're going to be your trouble kids, they, they just can't sit still, they're, you know, constantly having to be on them. And by the end of the field trip, they're like I've never seen this kid in this, this state of mind in this element, like this is his element, this is their element, you know, they, and, and it brings home to them where they really need to look at what can they do inside the classroom to help them also. So I feel like getting kids out into nature and the, and teachers too, seeing like the different styles of teaching that we do with the kids, I've had some teachers that have brought that back into their classrooms because they saw a different, a different light in the kids that aren't necessarily book smart and need that hands-on learning, and we tend to forget that when we're constantly inside all the time with them, so getting

them out in nature, we get to see the styles of, the different styles of learning with the kids.

Megan: Yeah. Education definitely isn't linear. Well, speaking of a person who never misses a bug or a bird, Michael, we're going to shift to you really quickly. I don't know if you, you appreciate that analogy, but I know you are an avid birder and you love all things outdoors, and so you, you're very good and you're someone that strikes me as a person who really doesn't miss much when they're outside. So can you describe your work a little bit that you did for Dakota County and then your current role at the Hočokata Ti Cultural Center with the Shakopee Mdewakanton Community.

Michael: Yes. I will say I may have missed a beetle or two, there's like a quarter a million beetles in North America, so just, I'm just - -

Megan: I feel like that's fair, Mike. Okay, I feel like that's fair.

Michael: A lot of beetles out there, pretty hard to, and they're all over in the prairie, probably majority of beetles in the prairie probably, but anyways, for Dakota County, I did a lot of kind of like taking the kids out in prairies. We got, I worked at Lebanon Hills in the prairie where I was stationed at, so a lot of taking out looking at bees or looking, catching butterflies, just basic education of the prairies, so almost every day I was out there in the prairie or at work, Lebanon Hills is kind of mixed – has small restored prairies, wetlands, forests, so I was kind of dabbling in all of the different kind of areas, and then a little bit more about me as well, I didn't really explain this at the start, but I grew up in the Dakotas, so North and South Dakota, which is like expansive grassland areas, and then coming over to Minnesota, we have like the mixed like in the Cities where traditionally it says big woods area, but still grasslands among like the border on the edge of it in Shakopee, so a lot of in between areas. And the one thing I do like about these prairies or teaching the prairies, you can see a lot in the prairies and I do love the north woods, I go to the north woods all the time, you know that, Megan, but it's like you don't see as far, and back to all those things you can miss like in the prairie, there's just so much going on, it's like a cup is running over full insects and bugs you get the snakes and skinks and like that's a good about the prairies, there's just so much there. So here currently I have my role over at Shakopee Mdewakanton Sioux Community, the cultural center when I got here, the prairie was being restored, so Ferin Davis Anderson who works in our land and natural resource department, if you haven't, go check out some of your podcast recordings in the past. She helped with her staff restore this prairie at the cultural center. So when I got here, it was just in the beginning stages. So at that point, the flowers and the grasses were just coming back, so I'm going to do another bird analogy here. We're going to have another prairie bird that, the Henslow's sparrow and its little we'll say when a bird is born, it's got little bald head, no feathers on it, and that, then it starts to get its feathers just start poking out, little baby feathers, that's what our prairie was like when I got here, and every year there's been like grasses coming out or flowers, and Ferin's been great in helping teaching me that, but we're still in the beginning process where that little Henslow's sparrow, it's just got a little bit of feathers on its head, but it's still been like really cool to bring the kids out there. I, I do a lot of different roles at the cultural center, I work in the museum, down in the collections, up at the desk, the gift store, and do a lot of the natural work with Ferin

and her team, but I do get to take the kids back hopefully in the future get to take them back a lot more, but actually just yesterday, we're out on a walk and for the first time we had the kids out in the prairie, nothing's really sprouting up yet, but there was trash out there, and the kids wanted to go out and pick up the trash. And I was like whoa, they're actually grabbing the trash on the prairie and I didn't even ask them to do that, and I've seen that done at Dakota County, but that was the first time ever I've seen that happen here at Hočokata Ti, and I was just, it was really cool to watch, but our, our prairie here at the cultural center too, we, it's not open to the general public, so a little bit different, but every now and then we do take groups out there. A lot of times I'm taking the tribal members on the walks back there, but that was the first time yesterday that the kids were out there, I was like they're caring about the land, caring for the environment, picking up that trash out there, so that was really cool to watch for the first time.

Megan: Awesome. I like it that, like even the kids know what's supposed to be there and what's not supposed to be there, right? They're like okay, well, we don't see the prairie plants yet, but we know this trash isn't supposed to be here. Can you talk a little bit about the Hočokata Ti and how those gardens there are food and medicine?

Michael: Yeah, so we have our prairie in the back, but we do have gardens as well, and for tribal members, utilize that garden, that space, but all the food, like every single prairie, not just our prairie, but every single prairie across Minnesota into the Great Plains, everything can be utilized from the leaves to the roots, even parts of the plant as food or medicine, and that was kind of like I'll say our Walgreens or something or you go to like get your prescription, everything is good, good and utilized to like fix your ailments or your sickness, and the prairie is full of that. I don't know too much about that stuff, so I just, I'm a naturalist, so I know a bit or I know a little bit about a lot, so I'm still kind of learning a lot of those medicines and stuff, but yeah, we have our own prairie or sections that are dedicated to that, but the prairie when you go out to like a larger prairie, you'll have plenty of medicines all over and they're just out there. You just got to learn about it and learn how to utilize them.

Megan: Yeah. I was shocked to learn that metal and goldenrod are great for allergies because when people, we often people call and they'll say oh, this goldenrod is making me sneeze, but it's really not the goldenrod, right? It's ragweed. But I thought how ironic that not only is it the thing that's not making you sneeze, but it's also a traditional remedy for your allergies, and I was like that's just funny to me because it's the irony of it, right? This thing is making me sneeze but no, actually it's not, and actually it could help you with your allergies. So anyway, that's just an aside. Okay, Michael. You've given us two bird analogies. We know you're a birder, so and I just love thinking about Mike Worland, our other podcast cohost would really get a kick out of thinking about a, a new establishing prairie as a, as a bald headed baby bird, like just getting its little feathers out there, he'll just get a kick out of that. But so you really like wildlife watching of any kind. What drew you to wildlife and birds in particular and, and you think it's important to share that knowledge and excitement with others.

Michael: Yeah, so once again as a very young kid, I was out hiking Black Hills, different areas in the Dakotas, and I knew what a muskrat was when I was a couple years old probably, and I go back like in my writings when I was a kid and I was like dang, I didn't

even know that. I, I knew people in high school and college that didn't even know what a muskrat was or certain animals, and I've always been watching deer and birds. I didn't know the specific birds back then, so a lot of people that know me know I'm actually a bigger mammal person, so I got my coyote sweater on right now, I got a couple coyote sweaters and actually wore a coyote t-shirt yesterday too. The coyotes were important animals on the prairie, so we have coyotes all over now but they originated on the, on the prairies, they're actually called like brush wolves and they, they were very important parts of the prairie, and then now they expanded their range, but just over the years seeing like the coyotes or a deer, mule deer, out west, but all these animals, all these birds got picked up more interest after college, got more into the photography side and just picking up on all of these different animals. So go to the greater prairie chicken now, we're going to use that one. So over the years, just adding more knowledge that greater prairie chicken, you know, they go out and display, we get some of them in Minnesota, very western end. I still haven't seen a greater prairie chicken, I've been hunting for them for a while, but they're just beautiful birds and I just started picking up more and more of this knowledge and, and passing it on its importance too because as a photographer, I'm always trying to get a picture because in my mind, I like going after like the rare or harder to find birds and I would like to capture these moments because a lot of tribal members too out in our western tribes never get to see them, some kids, some adults that live cities never get to see these birds, never get to see these wildlife interactions, so I'm always trying to track them down, get a photo, and then publicly educate them just because of the conservation and like all these birds are disappearing, so I have like a couple stats I'm going to pull out now too. So just in the last 50 years from 1966 to 2015, some of our prairie birds like the bobolink is down 65% of their numbers, field sparrow down 69%, eastern meadowlarks, they live a little further east, different from our western meadowlarks, we get both of them in the state, they're down 89% of their numbers, and then as well short-eared owl in the last 40 years is down 71% of what their populations are. So their, these numbers are decreasing, they're still decreasing, I was actually looking at some short-eared owl just this past weekend, I had to leave the state to get them, but our short-eared owl have been all winter trying to get them, those owls are ones that typically come down to grasslands, they need the grassland prairies to hunt in the winter, then they'll go back up north in the summers, but we used to have them a lot more in Minnesota. I actually saw one down here on tribal lands one time, there was one hanging out down here last winter, but it did return this winter, and there were a lot more in Minnesota last winter and their numbers were really down this year, so just passing on that information to the kids to the children that all these birds are, are vital to our ecosystems to the prairies and when the prairies go, these birds are going, the prairies still disappearing at a rapid rate. We've lost 2 million acres in like just the last couple of years still that's just in Minnesota, 2 million acres of grasslands being turned into farms a lot of times after farming, they like to develop them or they don't restore them like this is still happening now and these birds need our help, these birds need us.

Sara: I love that notion, Michael, of helping to expose people to things that they maybe don't have a chance to see in their day-to-day life, and as somebody, I'm looking out my window at a pretty good size prairie and, you know, I fully recognize that I sort of take that for granted sometimes and I love that idea of using your photography to help do

some of these other things that we've been talking about as far as education and, and, and teaching about things 'cause like what's that there's a saying that you, you care about what you know or something along those lines, you know, so if people don't know what a prairie is, they're never going to care about it, right? And I feel like that's a great tie-in, Alisha, to what you were saying before about the, the prairie ecology bus that, you know, the, that idea that you had of, of helping to share with people that they don't have to necessarily go far to see. You may not be a huge, expansive thousands and thousands of acre prairie, but you got prairie scattered around most of the state, and Alisha, could you talk to us a little bit more about the Prairie Ecology Bus? You introduced it earlier, but just dive in a bit more on what it's all about and, and that notion of getting people to those prairies that maybe don't see in the - -

Alisha: Sara, you know, I did talk a little bit about what we do and, and that, but, you know, when we were formed 30-plus years ago, we had that notion like most nature centers where we needed to have a specific site and to be able to educate people about the natural wonders, and they were more focused on the wetlands in this area because we're predominantly the prairie pothole region, right? So that we have a lot of wetlands that we're along with that prairie, and then the parcel of land that they wanted to get to do their, or their natural or their traditional nature center got pulled out from underneath them, and so then someone said hey, what about if we did this concept where we had a vehicle that could help us be drive that education portion, so we could go to the people and teach them about the nature right there in their own towns, and we're modeled after a bus in Sweden that I believe is no longer in operation, and so we are, we're very unique in that you don't see this very often, you know, usually you have someone you bring the kids to you and then you teach them, but we wanted to be able to share that it's not just in one spot, like and it doesn't have to be this grand expansion of stuff either, it can be just small pockets, like you just said, you know, we have small pockets of areas that you can go and you can explore, and these small pockets, they are disappearing, and so what can we do to, to make sure that we are saving them. And, you know, we get the kids on the bus and, and we're introducing, so we have a bus that's 32, we can sit 32 passengers on it, so it's a classroom size we get on, and then we like to go within 15 minutes of their school, and the great thing about that is we've had students who they enjoyed being out on the prairie. We do some woodland, you know, forest stuff too, but when we had them out in the prairie and the teacher sent us an email saying this kid had a birthday party scheduled to go bowling, and he went home from our field trip and said mom, I want to change my birthday party. I want to bring everyone out to this prairie so we can run and we can explore and we can find the different things that we learned about in my field trip, and that's just one of the stories that we've had. And so I think by getting kids and making them realize that hey, there's this great resource right here, you know, as us, as adults we tend to, we did this with our traveling also. We don't necessarily like to explore what's right there and nearby because we're like oh, I can go do that whenever, and so I want to take my trip to a different state, to a different country, and we forget about being able to explore what is right there. And so that's really what we are focused on is getting people to realize that exploring their backyard is, there's so much to see and there's so many different wonders that they can learn about.

Sara: Those are all some great models of, of teaching and exploring prairies with, with youth and, and others. So I have a question as a mom of kids and a, a wildlife biologist who occasionally has school groups or scouting groups that might come visit our office. Give us some, some of your best tips for other adults who maybe aren't professional educators that might be working with, with kids and how to get them excited about prairies. Whether that's a, a parent or a, a land manager or, you know, maybe a traditional classroom educator. Alisha, let's start with you.

Alisha: I think one of the things that I really learned throughout my years is just really when you get kids out into the prairie or people out there, just you kind of like be there to a little bit of guiding, but their exploration help do the guiding. So let their observations, you know, I mean, you can start out by pointing like oh, look at this really cool grass, you know what does it feel like or whatever, and that'll help them kind of think about what to be looking at, but let their observations lead, lead you into learning and teaching.

Megan: I like that. Molly, you're nodding. What do you think?

Molly: I was just going to add on to that. We call that the guide on the side. Be the guide on the side in the prairie. Not necessarily leading a tour but get out of the way, let the prairie do the teaching, yeah, I, I, I totally love what you said Alisha. I think I would, I would also suggest don't just read about prairie, don't just talk about prairie, don't just watch videos about prairie. Get out in the prairie. That's when it really comes alive for children. It, that's when it's real for them. So that would be my suggestion and combined with what you said, Alisha and then exactly what you said. Let them explore it. Let them find their way. Let them ask questions. Don't worry if you don't have answers. You don't have to know every bird and bug and cloud and whatever. You, you can learn with them. You can make up names for stuff. It's not that important. The more important thing is if you're out there in it, you're going to develop a relationship with it. You're going to see the prairie as your home because it is, it is our, those of us who live in prairie, it is our home, and we have a responsibility to know our home and know how the earth works and pass that on to the next generations. So what, I can't think of a better way to figure out how the earth works than to get out in it. Read the owner's manual all you want, but it really will gel when you're experiencing it firsthand for yourself. That was long, sorry. I got on a ramble.

Megan: No, it was great. I love this analogy of an owner's manual. I just never thought about it that way. It's like really funny to think about like oh, we have, and I, and I love what you said too about we have a responsibility to do this. This is our home and, you know, there's an analogy that we use like you wouldn't let somebody come into your home and start throwing all your stuff around and dumping trash in your living room. Like, and we, this planet is our home, so we have a responsibility there too to, to keep it nice and alive and connected and understand how it works.

Molly: Think about all the things that like the prairie and other parts of the earth give to us generously freely, and yet what do we give back, how do we reciprocate that?

Megan: Reciprocate the relationship. Michael, what do you think?

Michael: Yeah, I agree with that. Getting out into the prairie is like the most important thing for some parents that maybe don't know about the prairie either, I'm still over at Dakota County Parks, I'm still connected with them, do things with them, but there's a lot of free classes and resources through a lot of these nature centers, they have small pockets of prairies that a lot of places in the Twin Cities and a lot of times they have children, family classes that are free that you just have to look at their websites or find them on they're, they're not happening every day, at least maybe, maybe they are, and I don't know that, but right in the Twin Cities I've seen a lot of good free resources for these nature centers that they provide for people that are interested or just ready to learn about the prairie. So if you're interested in that, just keep looking online.

Megan: I was going to say too, speaking of that, we have on our state parks calendar, there's all kinds of naturalist events where you can go on lots of different tours, some are prairie related, some are not, but they're all, I'm going to say this, they're all going to be a good experience of being outside with a knowledge person who's helping you see things that you might not have seen before or understand certain things, and our naturalists are, I just can't give them enough proportions because they are amazingly talented educators who do, it's, it's hard work to have people out on summer vacation, 30 people asking 30 different questions at once, and they just do such a great job. Alisha, you were going to say something too.

Alisha: I was also going to say as a tip like don't be afraid, you know, Molly brought it up, if you don't know something, that's okay, and don't be afraid to learn right along with them and because I feel like a lot of times when you tell the kids oh, you know, that's a really good question. I don't know that. They get invested and help them figure out that answer.

Michael: Yeah, I got another, got another tip too. So with going out, getting out in there, getting out is the first step, this is for like parents or people that really don't know a lot, I don't know if Megan has some experience in this. I just feel like you'd have something like this. I always, here at the cultural center too, I always have this like a scavenger hunt and I made bingo sheets. I actually got both, scavenger hunt and bingo sheets just finding like to find a tree outside or if you find a rock, find a cloud in prairie grasses, different animal tracks, just getting them out there and the kids really connect with that. Even with like a large group, if you have 50 kids and you're out there trying to figure out what to do, if you have two kids, then they're, they're still like for some reason a lot of these kids are connected to like the scavenger hunt or the bingo, they're like I got to get five in a row, even when it's not a bingo board, they're like I've got to get a bingo on this, they love doing the scavenger hunt, they like looking for things that helps get them to their eyes on the prairie, and that's where you find a lot of those insects and beetles, that's why I don't miss a lot of things.

Sara: It's because of all those bingo cards.

Megan: He's got an internal bingo card going at all times. Yeah, that's funny because Mike and I, Mike Worland and I have a race that we're in right now to find a particular kind of insect in the prairie, and so we, you know, we've been scouring, it's not a bingo board, but it's, we have this competition right now to try to find this one bug, and we

haven't found it yet, so I'm not going to tell Michael what it is because he'll find it before me.

Alisha: I like that element, though, of making it sort of a game and playful. It's not just about learning things, you know, and big air quotes that some of that best learning happens where you don't even realize it happening, right?

Molly: Nature, nature plays.

Megan: Yeah. Molly, I will tell you it's a camouflage looper that we're trying to find, so it's a, it's a bug. It basically takes parts of the flower and parts of the plant and sticks it to its back, it's caterpillar, so it sticks it to its back so it looks like part of the flower or the plant. It is the coolest, weirdest looking thing that you've ever seen, and I, I want to find one someday. Michael, you had a.

Molly: No wonder they're hard to find.

Michael: So I have one more thing to add here. Instead of a bird reference, I'll go with the coyote here. I've got my coyote right on my coyote sweater. I got big, beautiful winter coats, so there's like layers in the winter, they get that winter coat, and there's just so many themes in the prairie kind of like the coyote's coat like we didn't even barely scrape the surface so children that are out there, if there's children listening right now, we didn't even touch on the butterflies or the moths and the prairies too, talking about the prairie potholes all across the Great Plains, you got all of these wetlands where even the ducks will go into the prairies like these, the deer, you might get the moose on the northern edges of the prairies, you might get wolves traveling in from the very western edge of the prairies, just so much wildlife and then you get into the prairie grasses and the soils and the slugs and all kinds of lizards and snakes. We didn't even get to the very kind of tip of that coyote's fur. That's just layers full of the beautiful fur of a coyote. So there's just so much out there, it's so expansive, and we can put 100 people in this room and talk about it, still would barely even get to that surface of that beautiful coyote coat.

Megan: I love this. This reminds me, Michael, when we first started this podcast, somebody said to us oh, that's nice, a podcast about prairies, so you guys will probably do like what, like 20 episodes and you'll be done with things to talk about, and we kind of laughed because we thought they were kidding, but they, they weren't. It just they, they didn't realize how many layers, like you're describing the coyote coat there, how many layers and levels there are in the prairie and how, I mean, the, the amount of things that you could talk about and explore and discover feel like they're endless in a way.

Molly: Absolutely.

Alisha: That's one of my favorite things. That is absolutely one of my favorite things about the prairie is it looks on the surface like not a lot, and then you get in there and dig around and.

Molly: That's why we don't get bored in it.

Alisha: Endless layers. Yeah.

Megan: Yeah, endless.

Molly: Different every day, every afternoon versus morning or night, you know, every season it's, it is endless, there's infinite surprises just waiting for you to find them in the prairie. It's not just grass.

Megan: They are, and we don't want the learning to stop, oh yeah, you're right. It's not just grass. So much more than grass. Well, we don't want the learning to stop here. We have got to jump into our next section.

(Music playing)

LET'S SCIENCE: To The Literature!

Science!

Megan: This is the part of the podcast where we recommend a book, a blog, or a paper or just a resource to keep the learning going. So Alisha, you've got one for us. Let's start with you.

Alisha: One of my favorite resources especially because I don't know everything with being a naturalist, I, we all carry our phones with us here and I have the app Seek by iNaturalist. And so when the kids ask me what is this, and I'm like I don't know this, you can take a picture of the item that you're looking at and there are all kinds of people who will help identify it and sometimes they'll pull it up right away, sometimes you got to wait for a scientist or someone else to help, but then you also get to use this as you could be a part of some type of scientific research that might be going on too. So I would say Seek by iNaturalist.

Sara: Great. Molly, what's your resource?

Molly: My resource is a booklet that we created at the Prairie Wetlands Learning Center called The Compass to Nature. It's the approach that we used to teaching outdoors, 30 pages long, but lots of photos, people, and lots of tips, kind of highlights the what, what ended up to do, we didn't start out like to write a book, but we figured out after the fact long story short that there's some things that seem to help more than others, so place prairie phenology, nature's calendar, journals, using the nature journal outside, and naturalists as our role models, conservationists, and then all tied together with the sense of wonder. It's available on our website, it's free, you can get a printed copy by coming to our summer workshop at the end of June, and it's, it works anywhere for any age, any time of year, any geographic location, any ecosystem. Compass to Nature. That's my recommended piece of for Let's Science.

Megan: Nice. Michael.

Michael: All right. So I brought this in the office with me today. I got the National Grassland Guide: Guide to America's Undiscovered Treasures. It's a huge book about all the national grasslands. So if you go further out west, it's got the maps in there, the expansive areas that a lot of people don't know about. I've driven by the grasslands many times, I've been to a couple of them, but I just bought this book a year ago, and I, I was really interested in checking out more of like the, the grasslands and the prairies

out west. These are large bodies of prairies, I've been out to a few of these places like I really like immersing yourself in the prairie, you get out there and you're just surrounded by miles and miles of prairies and birds and no people out west, we've just taken that, you can meditate, just go out in the prairie and you're just for miles and miles, you're just surrounded by the prairie. So book, this guide will be really good if you're interested in going out west to the larger grasslands and completely unrelated, but kind of like a short-eared owl feather that fell off, I found a sticker in my office and it's a National Grasslands sticker, and on it, it says itsallyours.us. So it's actually been there, it talks about the National Grasslands as well, not associated with the book, but it talks about connecting how these grasslands are yours, these areas, these natural areas are ours to explore, ours to learn from, so this is all about the National Grasslands and itsallyours.us, it's a free website for the general public. You guys can go, anyone can go check it out and it's informational about all our natural national spaces we can go and explore. They have one for the forest and other places, national forests, but this one sticker is really cool because it's just for the grasslands.

Sara: I like stickers.

Megan: Me too. He's holding up this sticker and I'm like I want that sticker like that.

Michael: I may have one extra for you.

Megan: Okay. I'll trade you.

Michael: I used to have a lot.

Megan: This is going to be a fight. This is going to be a struggle. Michael, I'll trade you some Smoky Bear paraphernalia for a grasslands sticker.

Michael: There, Smokey.

Megan: Sara, Sara, what do you got? Okay, well, we learned a lot I kind of want to follow Michael's style of hiking like this is a go to a place, take a nap, this sounds like my kind of hiking. You know what I'm saying? Sara, where do you want to go hike today to take a nap? Do you want to go on a hike with me?

Sara: Do I? Yeah, and I'm bringing snacks, right? That's my job.

Megan: Your job is always to bring the snacks, yes, because you have the best snacks. Oh, gosh.

Sara: Let's find some great places to go.

Megan: Yeah, let's all hike together. Molly, where are we going to go? Where are we hiking to?

Molly: Oh, well, I'd be remised if I didn't recommend Prairie Wetlands Learning Center to come hiking, so you can hike here any day of the year, daytime, daylight hours, three and a half miles of hiking trails, open to the public, no charge, we're in it, we are in the eastern edge of the prairie pothole region that was mentioned earlier, so it's 330 acres of grass, 28 wetlands, and one lake in that space. And a couple of oak savannas for you tree people, so yes, come, come enjoy the prairie here and the big sky, you can see

what the weather's doing at all times. And you can get on top of a hill and have a lay back, watch the bird migration happening right now. The, the river and the sky is flowing north since Friday here, yeah, come on, come on out to the prairie.

Sara: Beautiful. Alisha, where would you like to take us hiking?

Alisha: My favorite place is Touch the Sky Prairie that is just north of Luverne, Minnesota. And I, I just love being able to explore the different diversity of flowers, I'm a flower person, so I love all the flowers that they have there, but then also my favorite thing to show my, my son, he loves looking at the rocks that are there with the buffalo rubs and everything from, from back in the day and so, that's one of my favorite places to go. I had a really hard time picking this because I have a couple of them, but I would say Touch the Sky Prairie north of Luverne.

Megan: Michael.

Michael: All right. So I had to pick a different one than I did last time on the podcast, so I chose one in the Cities, Gray Cloud Dunes. It's a little restored prairie area but it's really good for birds, it's little kind of bushwacking if I could say, so just check for ticks, but it's a really nice prairie trail right in the Twin Cities, people can drive right down to it, it's called Gray Cloud Dunes. I believe that's what it's called, or something similar to that.

Megan: You're right on, Michael. That's definitely what it's called. It's just such a beautiful descriptive name. You're going to see dunes and you might see some gray clouds. I like it so much. We could, I mean, this is always what happens. We could talk with you all, all day long. You're, I'm smiling so much during this podcast and it's my real smile, my cheeks sort of hurt a little bit, Sara's cheeks hurt too because it's just wonderful to talk about all of these moments of discovery on the prairie and it's so clear that all of you love what you do, you love this landscape, and I'm so grateful that you shared your time with us today.

Thank you so much. It's been fantastic.

Megan: It has been. Michael, go ahead.

Michael: All right. I got one more to share now that I thought about it. This is a big one. It's way further out west but Theodore Roosevelt National Park, lots of grasslands, they're actually reducing their wild horse herd right now, so their population could be greatly decreased. So if you hear this right now and if you've never been to Theodore Roosevelt just to see those horses running around on the plains and through the badlands of North Dakota, this is your chance. Get out there. They may keep a couple of them, they may just reduce the herd, they might get rid of them all in general, still under the process, but get out Theodore Roosevelt National Park if you can.

Megan: I love it. See, we just, we just can't stop ourselves. There's so many places we want to recommend and go to, but it's just, there's so much. Well, if you, if you're hungry for more, catch us next Tuesday on the Prairie Pod. We'll be right back here talking about our love of the prairie and its many forms and how that inspires us and sparks our imaginations to energize us into action, namely the act of creating art. We'll be joined by four different artists working in all different mediums from fiber quilting, photography,

songwriting, poetry, and painting. They'll walk us through how prairie lives in their art and why that inspiration continues to move them and us. As always, you can find all of the links we talked about today on our website at mndnr.gov/prairiepod. This episode was produced by the Minnesota Department of Natural Resource South Region under the Minnesota Prairie Conservation Partnership of which we are all part of it. It was edited and audio engineered by Dan Ruitter. Our web production team is led by Bobby Boos and our social media lead is Kelly Randall. Gosh. I don't even know what we should say. Just get out there and go explore, and then go tell people about your explorations, right?

Sara: Mm-hmm. Perfect.

Megan: Okay. Bye all. Thanks for being here.

Michael: Thank you.

Alisha: Thanks.

Molly: Thanks for having us.

((sounds of birds chirping and wind blowing)).