



Prairie Pod Transcript

Season 2, Episode 3: A Legacy of Conservation with the Service

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

Transcript:

((sounds of birds chirping and wind blowing))

Megan: Welcome back to the Prairie Pod. We are so excited today as we usually are, but I am more excited today because I have a cupcake. (Laughing.) Sorry, I just wanted to lead with that. So I'm Megan. I'm a regional ecologist with the DNR and I'm here with my fabulous co-host - -

Jessica: Jessica Petersen, I am the invertebrate ecologist for the Minnesota Biological Survey and we've got a fabulous special guest with us here today. Marty, do you want to introduce yourself?

Marty: Yes, Marty. I work with the US Fish and Wildlife Service, out of Windom, Minnesota.

Megan: That's very good, you were really articulating that for the masses.

Marty: Well...

Megan: It was good like pronunciation. Windom, Minnesota. That's good.

Marty: I've been known to do that I guess.

Megan: Did you prep for this, Marty?

Marty: Define prep.

Megan: (Laughs)

Marty: Of course I did.

Megan: (Laughing) I didn't prep, I just got this cupcake and then I said Marty's going to do a great job, I'm not worried about it.

Marty: Yes.

Megan: Jess and I have spent a lot of time with Marty in the field. Often it's raining or it's windy or, what was that one time we were doing a plant ID training, which we often do in summer months, like now and oh, Marty (laughing) was out there co-teaching with me and we definitely - -

Marty: It was cold.

Megan: - - it was cold, it was cold. It was June and it was cold.

Marty: Yes.

Megan: And it started to rain.

Marty: Are you sure it didn't snow? (Laughs.)

Megan: (Laughing.) No, we had everybody huddled and we had I think there were like five people who still had their notebooks out – who were super dedicated. They're like I'm going to learn. We're going to learn all these plants and then I just keep looking at Marty like ah, when are we going to the car because this is not safe. Can we please leave and get warm? We did call it.

Marty: We did in the end, but then when we, when - - later in the afternoon, we went down below it wasn't nearly as windy. So it was much nicer.

Megan: Yeah. That's how hills work.

Marty: You're right.

Megan: (Laughing.) Double checking to make sure you know. Oh gosh, so we're featuring Marty because not only is he special to co-teach with, but he's super special just in general. So you have worked for the Fish and Wildlife Service for how long?

Marty: Well, my, my dates on my, when I started is 28 years is how long officially. But, of course, I worked several years before that. So I started in 1983.

Megan: And they just didn't pay you so you're not officially - - did you just follow people around and say that you were working for Fish and Wildlife? (Laughing)

Marty: I, I actually volunteered.

Megan: (Laughing) Okay.

Marty: It's - - because, you know, you need to find any job you can when you're first going to college and that's basically what I did.

Megan: I thought you just like stole somebody's tan shirt and you were like (laughing), here I'm with the Fish and Wildlife.

Marty: No, they would not let you just wear a uniform. I was not able to wear a uniform at that time.

Megan: You know, Jess doesn't know this story, but one of my first jobs when I was in college, I worked for Mass Autobahn. It was probably other than this job the best job I've ever had in my life. Other than this job. And my job during the day was to teach kids about the natural heritage of Cape Cod. And then in the afternoon I led tours; like nature hikes, and boat tours, and I'd be like, look a seagull. (Laughing) People loved it. Or we'd go dig up clams and do all those kind of thing. So, the whole point of the story because of the shirt is that they had these tan Mass Autobahn shirts hanging in the office and every time I would get to the afternoon part of my job I would get so excited to wear that tan shirt. Because I was like I'm legit. I'm a, I work for Mass Autobahn.

Marty: Official.

Megan: I'm a biologist in this tan shirt. It was like an extra-large. It was too big for me. I had to tie it at the waist. (Laughing) But I felt so cool. Jess, did you ever have a shirt like that that you felt cool about?

Jessica: No, no. I've never, I've never had a shirt like that. I've known people that have though, so I see where this kind of shirt envy is coming from. It isn't about Megan's stories. This podcast is about Marty and a legacy of conservation with the US Fish and Wildlife Service. We do. We love spending time with Marty in the field. So, Marty, 28 years, that's a long time. Tell us a little bit about you. What, about your background? What made you, you? How did you become to be the Marty that we know today?

Marty: (Laughing) Yes, that's it. Well, a, a little bit. I grew up in rural Minnesota. Just, you know, like most people, I should say, that's where I came from. A small town called Cleveland, which is, you know, by what 15 miles away or thereabouts. And I grew up with like eight brothers and three sisters on a dairy farm. And you can't everybody stay on that farm - -

Megan: There's not work for all 11 of you, 12 of you.

Marty: - - with that big of a crew. That is correct.

Megan: That's a dozen.

Marty: That's like a herd. (Laughing) So, anyhow, and I don't know what, you know, teacher in high school, you know, whatever they, somebody told me that I could do something else and, of course, I was rather skeptical and saying, what? You can't get paid for learning about, you know, natural resources? What? What do you do with that?

So, of course, what do you think? You think, oh, a conservation officer. That's the only thing you could do with that. Well, as I graduated, my first work with the Fish and Wildlife Service in 1983, I had quite the eye opening experience. And I learned that you can learn about prairie. And I met the - - a person, his name is Larry Hanson and Larry Hanson is like an encyclopedia type of person. I learned more from Larry Hanson on the tailgate of a pickup than I ever learned out of a classroom. That's just how he is. So he's been a great teacher for me. And from then on we have become very good friends and I've learned a lot over the years, to plant prairie. He probably is the one that I should, you know, say has done more of it than I have. And I've just learned more from him.

Megan: You know, this is how we feel about you.

Marty: At first - - (Laughing)

Megan: You're our Larry.

Marty: Well - - and, and, you know, you, you find that person who you can, you learn well from or, or whatever the case may be. You connect with that person, however, that works out. And for me, you know, if I have a question that is the person I ask questions to. He, and - -

Megan: Do you still ask him questions?

Marty: Absolutely.

Megan: I love it.

Marty: Yeah. I think we're going fishing soon.

Megan: Oh.

Marty: So we get to get together from time to time. He learned that if you just put the seed out there it will grow. Back in the, in the '70s and '80s I believe that managers weren't confident that you could get prairie seeds to grow and be robust and end up with good habitat. Because have you ever heard of DNC?

Megan: DNC?

Marty: D-N-C. Dense Nesting Cover.

Megan: I've heard of D.M.C.

Marty: Is what it - -

Megan: Run-D.M.C. (Laughing)

Marty: It's what it stood for.

Megan: Dense Nesting Cover.

Marty: Dense Nesting Cover is what they planted. Because when they would do nest dragging you could learn that you'd find more nests in anything that had some residual height to it and had a little bit more study plants there. So they come up with this mix and it was basically brome grass, alfalfa, and sweet clover.

Megan: Oh, boy.

Marty: And it did work for a few years and then it turned into a, well, a weed patch.

Megan: Hey, you're making a face. (Laughing) Not so great. Not so diverse. Maybe not, maybe not the best for the full biology of the life cycle there.

Marty: Correct, absolutely. Absolutely. But - - and, so, and Larry saw that and so he was trying other things and, you know, he, he was the one that started our snow seedings and our, you know, other types of seedings. 'Cause, you know, back in the '70s and '80s everything was planted with a drill and that isn't always exactly appealing 30 years down the road, when you still see things in a row. At least it's not appealing to me.

Megan: Because you want it to look more natural.

Marty: Most definitely, yes, yes. So - - other things about me. Well, I did work for the State as well for several years.

Megan: Which state?

Marty: The State of Minnesota.

Megan: I was just checking. I wasn't sure the State of the Union, I didn't know. (Laughing)

Marty: It could have, but no, no. The Minnesota Department of Natural Resources and I worked in Madelia at the research station. And with Wildlife, I guess, up in Thief River, it was.

Megan: You've been all over the state.

Marty: Yeah, 'cause I worked out of, just on the edge of Agassiz National Wildlife Refuge. They had two units that they would have hunting blinds and you had to manage those blinds. Talk to people and see how, how successful they were and do bag checks and stuff like that. It was interesting work. But - -

Megan: So how did you - - why did you want to work for the Fish and Wildlife Service then? So you had this great time with the DNR, but then you wanted to work for Fish and Wildlife so I'm trying to understand what made you make the switch?

Marty: Well, one goes where you get hired, it's true. (Laughing) But I, I did work for both of them and I did like the Fish and Wildlife Service more, probably because I was able to work with prairie and, and that's, I don't know. It was just - - once I learned all the different plants and the different ways that they interact and - - it just spoke to me or just, I don't know, I connected with it somehow. So, that's where I was able to work, so that's where I worked in the wetland districts. So I worked in Morris Wetland District first. And then - - now I work in Windom.

Megan: Well, we're not holding it against you 'cause we're all in partnership together.

Marty: Good, good.

Megan: So we don't care which tan shirt you're wearing. We're just happy you're wearing one of them. (Laughing) It doesn't matter.

Marty: So there.

Jessica: So, Marty, tell us a little bit about the Windom District. The landscape context, size, what are you aiming for in terms of function. Tell us a little bit, give us a picture of the places where you work?

Marty: Well, the wetland district is in Southwest Minnesota. The center of it is about Windom. It is 13 counties. It goes from the South Dakota border and Iowa border to about Redwood Falls to the north and to Austin, Minnesota, to the east. Like I say it's 13 counties. It's about 18,000 acres of land that we manage and it is mostly all prairie. Now the prairie in the - - out in Rock County, Pipestone County is going to be quite a bit different than the prairies on the east side of the district where you'll find more of the, you know, hardwood, the oak, savannas and, and stuff like that. Which surprisingly there's some still there. And, and it's interesting to see how they are very similar and how they're different.

Megan: I didn't realize it was so big. Did you know it was that big, Jess? Windom?

Jessica: I - - yeah. I've looked at it on the GIS layer before. It's huge. I don't know how all the work gets done. It's amazing.

Megan: I know. It is amazing.

Marty: It is a lot of driving, isn't it? (Laughing)

Megan: You do a lot of driving, I know.

Marty: It is, it is. What? That, that's what it is. So a waterfowl production area is kind of just how it sounds. It's designed for waterfowl production and, of course, then you'd expect it to have wetlands and uplands on it. Hence, we manage waterfowl for - - or we manage the land for good wetlands, not just one particular type of wetland. Multiple sizes in depth and, and such, as well as good habitat.

Megan: We call that diversity.

Marty: There.

Megan: It's good. We like to mention that as many times as we can on the podcast.

Jessica: That's right.

Megan: So, just, just to clarify, just to make sure - - so the production area is just a complex of habitat. You're not actually ever releasing waterfowl out there. This is a common misconception. So I want to - -

Marty: That is a great point, Megan. We do not release any waterfowl out there. We provide habitat for waterfowl to be prosperous.

Megan: So if you build it, they will come.

Marty: They will come.

Megan: Or they'll fly in this case.

Marty: Or they'll fly right in.

Megan: (Laughing) Fly right in and land there.

Marty: Yes.

Megan: I like it. So why did you come back to Windom?

Marty: Back to Windom.

Megan: Yeah. Or I mean not back, but to this area.

Marty: To this area. Well, I guess probably I, I obviously have a connection with farming. Grew up on a farm and, and such and I felt I could probably do some of my best work in areas that may not have, you know, great quantities of habitat, great quantities of native prairie leftover and such. But, I feel I can connect to farmers and help coach them so that they don't necessarily have to put in production every corner of their property. Some can be left wild.

Megan: Do you still have cows?

Marty: I do.

Megan: I do. You identified a cow for me in my office earlier. (Laughing)

Marty: Well, it was obvious. It was as plain as the nose on your face, I would think. To me. It was a dairy cow.

Megan: So do you still - - do you have Holstein cows?

Marty: I do not, I do not. I, that would mean I would have to milk and that would mean I'd be very, way too busy to actually do my job.

Megan: (Laughing) You're not going to do - - okay.

Marty: I have a couple beef cattle.

Megan: Okay. Do they have names?

Marty: Yeah, some of them do.

Megan: All right. Well, I was checking. I just wanted to know if their names are like - -

Marty: I did not name them though. That would be my wife's thing.

Megan: So they don't have like natural resources names. Like this is mallard and this - -

Marty: They don't. They don't. They have simply names like cows. Mostly roast beef and chuck roasts for me, but it's okay.

Megan: (Laughing) These are the names that your wife came up with?

Marty: Nope. They're my names.

Megan: Okay. Just still checking.

Marty: Lena and Ole are two of them.

Megan: Well, of course.

Marty: Yes.

Megan: It wouldn't be Minnesota without Lena and Ole.

Marty: There, there we go.

Megan: You're going to eat them last though?

Marty: Well, Lena probably not. She's going to be a production cow. Ole's going to make good freezer space.

Megan: (Laughing) We just - - sorry, we're going off script. I just had to, I just wanted to know more about the cows.

Marty: It's okay.

Jessica: As usual. That's a, that's a whole other podcast topic. Marty and his cows. So, Marty, you've lived in this area for a long time and, and worked in it for a lot of time as you're, you're 10 years as the biologist [at Windom]. Tell us a little bit about how you've seen the landscape change. What's, what's happened to this, to southwest Minnesota since you've been around?

Marty: Well, to say it changed a lot, I, I, you know, that, that, I don't see it as a big change. We're making small steps as we can and, and, you know, making good habitat where we can. And, and even changing some of our habitat 'cause, let's face it 20 years ago when we were seeding a piece of property we would seed it, if we were lucky with, you know, five grasses type of thing. And, and thought we did a really good job. And as we've learned in the past 15 years or so, you know, it, it really needs more diversity is what habitat needs. And that's - - I, I've done it to several pieces of property. I call it a conversion site. And it's where you may have, actually you may have some warm season grasses or you may have just a cool season grass. And you can do multiple different things to it, but you want to end up with a good mix of grasses and forbs to create good habitat.

Megan: What's your favorite way to take habitat that's maybe not at the quality or the level of diversity that you want and you're going to shift it? Like what's your - - and add more forbs. What's your favorite way to do that?

Marty: Yeah, well - -

Megan: I mean be specific. Like so fall, winter, spring. Like if you had to pick one, if I only gave you one choice. Let's say warm season grass dominated stand, what's your -
-

Marty: Well, that, that I've got less experience with so I, so I don't have, you know 10 or 15 years of doing that. So I can't say how exact that's going to end because what I really don't know is how many of those old grasses that are, many times are not of local ecotype are still out there, which, you know, makes me a little nervous over time. But we've done it. You end up with better habitat and I suppose the best way is to just do a prescribed burn in the spring. If there, if there are a good amount of cool season grasses in there, you can spray that and just seed it. You can seed it most months of the year, but my favorite is in the fall time or winter time, dormant seeding.

Megan: Broadcast.

Marty: That is correct. Broadcast.

Megan: And you just use an all forb mix?

Marty: You can, but many times I'm going to add several grasses because many of those older seedings - - you know, like I said, you're lucky if we had five grasses in there. So, we're going to add five more or seven more or 10 more so that we end up with 12 to 15 and 25 to 30 forbs.

Megan: Because this idea that you don't just - - to get diversity, you need it on both sides and you need to make sure you fulfill the guilds, fulfill the guilds. Cool season, warm season, non-legume [forb], legume forb.

Marty: Yes.

Megan: I like it. We were just doing a recap there.

Marty: For early, mid and late season flowering, yes.

Jessica: Have you noticed - - this is something I've been noticing is that some folks have a perception of restorations that's a little out of date. And maybe it's just because, you know, a lot of our restorations were planted during that time and we don't have, you know, all the resources necessary to go back and add in those, that extra diversity. But I think it's really important for, for folks when, when we're talking about restoration to talk about this, this evolution. You know, we talked about it last season with, with Dave Trauba and we're getting a very similar message today. But, I think, you know, when, when we talk about whether or not, they're just not all created equal. They're not, they're not all the same and so - - do you find that Marty when, when you're talking with folks about restorations? There's like these different eras of our restorations, right? And now we're kind of cycling back maybe starting at some of those with the brome and the, the alfalfa and, and adding diversity to those, but - -

Marty: Yes, yes I do. It, it - - you know, like I said, back in the day it was called DNC and, and that is, you know, so far removed from what we do today, but we perhaps, you know, I don't, I don't want to blame it on the people who did that back in the '70s. They thought that they were doing the best they had, you know?

Megan: We were learning.

Marty: Absolutely.

Megan: Restoration's a young science. And we didn't know - -

Marty: And we're still not all learned yet type of thing - -

Megan: No, it's complicated.

Marty: Yes.

Megan: If it was easy, you just give me a recipe and just tell me this is what I need to do. (Laughing)

Marty: Yes.

Megan: If the land, if you tell me - - this is what people always say, they say, tell me when to plant my prairie. Do you find that people ask you this question, like was the, I just asked you like when's the best, exact time to do this? And what you should have said to me is tell me what the weather's going to do in the next 12 months and I'll tell you what to do. (Laughing)

Marty: Yes. Yes. But you can't, you can't do that. 'Cause once you put it down the weather's going to be what the weather's going to be and, and, you know, you're, you're back to being a farmer. You're just wishing and hoping that it will, it will work. But, you know, I've - - I cannot say that I've ever had a seeding not work. It just doesn't fail. It, it happens that some don't work as well, but they don't fail. The native plant, or native seeds and, and plants are amazingly hardy and they can take any of Minnesota weather. They do well in it. The workload, of course, it's easier to do in the wintertime when I'm seeding and, and it's easier 'cause I - - that's a less, you know, busy time. They work just fine in the spring. I've planted thousands of acres in the spring. I've planted thousands of them in the fall and in the winter. They all work. You do have to be patient though.

Megan: That's probably the hardest part.

Marty: Prerequisite.

Megan: (Laughing) Jess and I aren't good about being patient especially when it's snack time.

Marty: That's a tough one.

Jessica: I'm not a patient person at all. Speaking of patience, Megan and I have a lot of weird things that happen to us while we're on the job. Marty, what is the weirdest thing that has happened to you while you were on the job? You got to keep it PC here, Marty. This is, you know, we're, we're recording this so - -

Megan: (Laughing) But we want to know.

Marty: I, I wrote nothing down on that question 'cause I, it is - - it's like, well, what, holy cow. But I will have to say one - - and I was working with Larry Hanson and we get this

landowner and the, the poor man would get so upset that he would lose his balance and fall right on the ground.

Megan: No.

Marty: Not once, but like five times. I - - and, you know, I'm a young person and I'm like what is going on? Thank goodness he did leave, but it was, it stuck with me. The poor guy was just beside himself over what we were doing.

Megan: Can you say what you were doing?

Marty: Yes. We were working on some tile lines and working on a wetland restoration. So, of course, we were taking some of the tile out of the ground and then we would daylight his tile, which means bring it to the surface and let the water fill our wetland. But, you know, he didn't know or that wasn't easily conveyed to him. So it was a little challenging.

Jessica: Those are really challenging issues. That's not a, that's not an isolated incident. Those are, those are tough things to deal with.

Marty: It happens.

Megan: It does. Okay. So we're going to move from your weird thing to what was your, one of your favorite moments on the land? And this is where, I know, it's hard to choose because so many good things happen when you're out on the land. Especially when you're out on the prairieland.

Marty: Yes.

Megan: Jess and I have weird things happen, but we have good things happen too.

Jessica: This is very true.

Marty: Basically, what, what it comes down to is, you know, you're out, you've got a groups of kids or a group of adults, you know, and it's those moments when people look at you. It's like 'I didn't know that!' Or, or the light bulb kind of turns on and they like, wow, I, I had no idea prairie was like that. Or I had no idea that that biology worked that way. Or, or, you know, so it, it's, to me it's an education thing many times to people and they, they just don't realize that the natural sciences will just explain a lot of things that, you know, they didn't know or didn't realize worked that way or whatever the case may be. So it, it's when you get that landowner to kind of look at you like, oh, that's how that works? It, it just is a satisfying thing. That you, you connected with that person and, and, you know, they, of course, then realize that you're not there just pulling their leg, you're there actually with meaning. So - -

Jessica: That's great, yeah. So those educational opportunities are fantastic. So, Marty, we love learning from you, too and I'm just curious what accomplishment you're most proud of that you've done during your tenure with the service?

Marty: Well, you know, I didn't write much down for that either, but I'll be honest, what it is, is habitat and acres, you know. You just, I just can't help but be proud of over the years, you know, when I first started seeding back in the what? I think I started in Windom in 1990, what we had to seed with was a, a drill and, you know, maybe seven grasses type of thing to look - - and you can still see those seedings out there. And you look at some of those that we did in the late '90s and, and early 2000s when we were harvesting [seed from] some of our own native prairie. And, you know, mixing that with some other grasses that we had from another piece or whatever. And it's just amazing how those look year after year. And it, you know, they never look the same. But that all is up to the weather, and up to the soil conditions, and, and so on and so forth like that. But that is what I'm most proud of is how those acres look and how many of those acres we have.

Megan: Well, it's a huge accomplishment. You should be proud of that. And it's succession too. I just want to point out other than weather and all these other things, prairie habitats don't stay the same. They move through succession. So they're always changing. So what you see one year, and that's the hard thing is as a manager, right? Is that you have to be like what it was yesterday I have to let go of that 'cause I'm in this for the long term. So, you've been doing this, we keep saying a long time and we're not saying it to - - we're saying it because we admire you, we're impressed with all that you've accomplished. But if you had to give one piece of advice to up and coming biologists, land conservationists, land managers, what would it be? What would you say to them?

Marty: You know, you got to figure out what you, what stirs you. What you think you can become good at and work on that. Because, you know, I, to be honest, I'm probably not real good at managing people. That is not my place to shine. But managing habitat, working with habitat, there's no doubt. I'm a patient person. I'm willing to give it all the time it needs and I just know that it will be successful. So, that's probably, you know - - if you're going to do management you figure out what you're good at and work on that. If you're going to be working with habitat, you've got to figure out how habitat works and how you can make it better.

Megan: You should change your e-mail tag line to plants over people. (Laughing) And right now it's working to keep the planet healthy.

Marty: No, I, I can't, I can't. I have to make sure people stand back and look at the big picture. Too many people they, they just, they get way too focused in the weeds and they got to step back and realize we only have one planet and shame on us if we don't look at it as a whole.

Megan: I like it. We're all about ecological perspective on the podcast and this is going to bring us to the next part of our podcast section.

Megan and Jessica: Let's Science - To The Literature.

Megan: Okay. This is the part of the podcast where we are going to recommend a book, a blog, or a paper and Jessica take it away.

Jessica: Yeah. That was a really good segue Marty into some of the things that I've chosen for today to think about. One of them is a book that if you haven't read it, you should. It's really good. It's called Bringing Nature Home by Doug Tallamy. Megan and I had the opportunity to see him speak relatively recently. It was really great to see him speak. I've been wanting to see him speak for a while now. He's an entomologist like myself and he has this holistic view of, of taking a step back and saying what we can do for our backyard, right? So that's what this Bringing Nature Home book is about. Taking a step away from, you know, thinking about prairies and prairie management, this book will tell you how and why you can plant your backyard to support critters. So, it's a really great book. It kind of shows Doug's own evolution of how he changed the way he was landscaping his yard and what happened through that process. How many birds came? How many more insects came? So he documented all of that. He's got some really good recent PNAS (Proceedings of the National Academy of Sciences of the United States of America) articles about this as well. I can't stick to just one, you know. I got to go, I got to continue to talk about Doug Tallamy. He does really great work. So, you know, back to Marty's point about seeing the big picture. That's really what this book is all about, is, doing your part to make your own yard, your own backyard, wherever your surroundings are a little bit more, a little more diverse.

Megan: And the eye-opening thing Jess, before you move on about that talk that we both went to, I had no idea that there were that - - I mean I'm an ecologist and so often I think maybe too much about the big picture and I need to spend more time on the pieces. And I didn't know that so many of our moths are specialists and that they need, you know, different - - like that we have some that just need maple trees and some that just need boxelder and some that just need oak trees. I mean, I knew this in theory, but I didn't realize how many and he showed so many ridiculously awesome photos of these moths that are using stuff. So you should check the book out just 'cause you're going to learn a lot and expand your knowledge about things that you maybe think you already know, but it's just to be - -[informed]. That put in front of me like right in front of your face to see those really amazing images, I was blown away. I went home and I counted the number of trees that I have in my yard and I was like we have some work to do here. (Laughing) I've got a lot of prairie plants in my yard, but, I know.

Jessica: Yeah, the trees are really where it's at for the moths. The - - he, he points to this website too that we learned about during his talk. It's called Native Plant Finder, we'll link to it on our website and it's really great. You can put in your location, your zip

code, your address and you can get specific results for your area and it, it'll show you what plants you basically get the most bang for your buck in terms of host plants for butterflies and moths. So, it's a really great, great website and that, that was made by Doug Tallamy and it does - - it blows you away how many different insects you can support with a single oak, for example. So that, that's a really great resource. Another one that I really wanted to talk about today and I talk about this frequently. I can't get enough of it. The Upper Midwest Citizen Science Monitoring Guide for Native Bees. And Marty, I don't think I've told you this, I probably should have before now, but here you go anyway. I used this protocol out on Lincoln WPA a couple of summers ago just to get a sense of - - you can use it to monitor bees. So, the, the beautiful thing about this is that it's very simple. It gives you great pictures and resources in the back to very simply identify bee guilds. And anybody can do this. Anybody can pick this up and do this. And so you could do it on a piece of land that you manage or that you visit frequently to get a sense of what bees are there and, you know, monitor that site over time. So, I really like Lincoln WPA. It's a, it's a really beautiful prairie. It must be a newer planting, Marty, because it does not, it's not dense nesting cover.

Marty: Oh, thank goodness. (Laughing) I'll be honest. I think that's in Lincoln County.

Jessica: No, its south of, of Lake Crystal.

Marty: County - - oh, oh, over here. Okay.

Jessica: Yeah.

Marty: Okay. So it's in Blue Earth County?

Jessica: Sure, mm hmm.

Megan: (Laughing) We don't know what county it's in.

Marty: Which is not in our district is all I'm saying.

Jessica: Oh.

Marty: So - -

Jessica: Okay, I got to look at the map again.

Megan: She's trying to give you a compliment. You should have just taken it.

Marty: I, I appreciate that and I can pass that on to Chris, I believe, who'd have been, planting, who did plant that.

Jessica: (Laughing) It's a nice planting if you're, if you're out that way.

Marty: Excellent. Thank you, Jess.

Jessica: It's got some good bees too. So, we'll link to this on our website as well. It's a really great protocol. Just, you know, lots of people are interested in bees. Bees are really hard, hard to identify to species and most of the time it takes, you know, destructive sampling. So this is a protocol that you can use that doesn't require destructive sampling. You can go out there and, and learn your bees. And then the last thing I wanted to talk about today was a relatively new article in the Journal, Wetlands. And this, this isn't in your work area. This is in the Morris district area, but pretty close to home. The title is, "Distribution and Concentration of Neonicotinoid Insecticides in Waterfowl Production Areas in West Central Minnesota." And I, they have another subsequent article talking about, I believe, chironomids (midges) in particular. But this is the one I had, I want to talk about today. So these were, this was a study in, in the Morris District area. They had 40 wetlands that they sampled and they looked at neonicotinoid, say that five times fast, concentrations in, in these wetlands. This is a, this is a, a concern of a lot of folks is, you know, whether or not there's transport and movement in the environment of neonicotinoids, a highly toxic insecticide for insects. And, so, they found that 29 of the sites they sampled had at least one of three neonicotinoid insecticides in them. You know, and these are sites that are buffered or are perceived to be buffered by, by Ag [agriculture]. So, I don't know what it would look like in your district, Marty. You know, a similar study like this.

Megan: When you say they're buffered, Jess, you mean these are sites that have like extra land around the perimeter of wetlands that would kind of be a first line of defense for anything that might be coming in.

Jessica: Right. They've got uplands between the wetland and the nearest Ag field.

Marty: Yeah.

Megan: Also, what's a chironomid?

Jessica: A midge. You may know them as midges.

Megan: Thank you for that. I appreciate it. (Laughing) A little bit in the entomologist's head for a second. Well, yeah. No, good. It's interesting. And we need more science around neonic because we're, we're, there's a, there's a lot of things that we, we think we know, but it's, that's why research comes in because - - and that's why I like podcasts because we're trying to bring in the research aspect, but also practitioner experience because you really need both to understand the full picture of what's going on.

Marty: Yes.

Jessica: Yup. Hey, Megan?

Megan: Yeah, Jess?

Jessica: Take a hike.

Megan: I think I will and I think I will with Marty, by gummy. So, today this is the part of the podcast where we highlight some of your amazing public land and so because Marty is our special guest today, we're just going to turn this over to him and we're going to give you a few of a Marty's faves around the Windom area that he's going to recommend that you visit. And he's going to tell us a little bit about why. And then, as always, you can find these on the DNR Recreation Compass, which you just put that in your Google machine and then you type in the name of the unit and you can also, if you don't know the name of the unit, you can just scroll around where you want to go. You can use the map feature and you can find some of these places. Marty, tell us about some of your faves. Where are we hiking?

Marty: Well, two of them are going to be close to Windom. One is in Jackson County. It's called String Lake Waterfowl Production Area and it's got some great native prairie on it and some actually rare species on it. And it's kind of a, a, well, a ravine look to it, but it, it's not as tight as a ravine. But it's got water. You know, a nice long wetland in the bottom of it. And the side hills are native prairie. Basically, probably because we could not farm them. And, I know, that previous to us owning it, it had a lot of grazing on it with cattle and to be truthful about it that's probably what kept it looking as good as it does today because the trees did not overcome that piece of property, probably because of the grazing that happened to it.

Megan: They provided disturbance.

Marty: That is correct.

Megan: Which prairies need.

Marty: Yes, yes, they do. So that's one of them. The next one is in Cottonwood County [Des Moines River WPA], which would be just north of that and probably about six to eight miles northwest of Windom. And very similar landscape, a couple smaller wetlands down in the bottom, a couple of wetlands up on top. Again, some real nice native prairie on those side hills out there. And it's just a, it's a little longer unit and a, and a little wider, a little more structure to it. It goes up and kind of does a dog leg to the east up on the top. And, again, has some great native prairie on it. And, you know, a little bit bigger native prairie areas where you can get out and find some of those species that you don't often find. Some of those flowers and stuff like that. So, those are two of them real close to where I work. The other one's a little further away. It's over in Freeborn County, probably closest to Alden, Minnesota and it is called Foster Creek and out of - -

Megan: Is it WPA?

Marty: Yes, it is Foster Creek WPA.

Megan: Okay.

Marty: And out of probably a half section of property it's probably like an acre. So it's a very small remnant prairie that's in there. We've seeded the rest of it, but every time I get there I got to go take a look at that piece of remnant prairie because I was amazed when we got it for how small it was. It was like a, an oasis out in the desert type of thing and it had an amazing amount of forbs on it. And it was just a little wetland with a little upland right in the middle of, of the Ag (agricultural) matrix type of thing. It was gorgeous. So, I got to check it every time I get there.

Megan: Is it bigger now? Did you add more restoration around it?

Marty: Well, yes, yes, we - -

Megan: Okay.

Marty: - - made several wetlands - -

Megan: I was just checking.

Marty: - - and several upland, you know, like I say, it's, it's about a half section of property now that we have there.

Megan: Okay.

Marty: It's just in the middle is this little piece of awesomeness.

Megan: Can you tell, now this is a true sign. We do this sometimes at our, at our plant community trainings. We stand people in line, as ridiculous as this is and we have them walk in a line and then I, I'm mean so I have them make animal noises when they think they've crossed the transition line, either into - - we did it two different ways. One year we did it, okay, do you think you're in a dry prairie, and then where do you cross into mesic, and then when into wet to help them see the shifts in the plant communities because they're so subtle. And then one year, but we also did where's the restoration? So we did when, when do you think that you crossed the line into remnant vs. restoration? So can you pass that test, when you cross the line? Do you know when you've hit it or have you done such a good job - -

Marty: No, no, no. I did not do that good of a job. (Laughing) But, okay, maybe some people who are not seasoned like I am, you know, who may not be able to see that, but most likely you'd be able to see that. It, it's a, you know, from native prairie into something that's seeded. Boy that would take a long time to cover that track up. I've never seen it get covered up anyhow. That's all I can say. So, yes, one would probably be able to find that line.

Megan: I just was curious if you, I, I assumed you would be able to find it.

Marty: Well, my problem is I know where that line is so, of course, it's way too easy because it was a soybean field when I first saw it.

Megan: It's kind of like knowing the - - it's like knowing the answer on a test. You're like this test is easy.

Marty: Correct, yes, yes.

Megan: Oh, my gosh, Marty, I just, we could go on forever. There's so many more things I want to ask you. We're going to have to take this off the podcast so that we can follow up with more conversation.

Marty: Yes.

Megan: But I am so appreciative of getting to spend as much time as I get to in the field with you. And all of that when Jess and I get to spend time with you is because of the Minnesota Prairie Conservation Partnership, which is underneath the Minnesota Prairie Conservation Plan. And it's really, all it is, is just people. And we say it's just people working together to build a healthy, better landscape. I mean that's what it's all about. And I feel very lucky that I get to spend this time here with you today and spend it with Jess. I'm just really grateful that I get to learn from you. Not just ending here. How about you, Jess?

Jessica: Yup. I'm always grateful to spend time with Marty. I hope we can hang out doing some more prairie plant ID trainings. Always a good time learning plant facts from both of ya'll.

Megan: And I learn insects from you Jess.

Jessica: Thanks. Chironomid.

Megan: I just learned chironomid today. I was like she said a, she said a C word. I don't know what it is. (Laughing) I'm an ecologist. I know a lot about a lot of different things. Jess is a specialist, she knows a lot about a very particular group of things. And many other things as well. You know, really, you know your plants very well. Let's don't - - well - -

Jessica: I try, I try. Well, they're important for insects, yeah, I kind of have to.

Megan: (Laughing) Yeah, everything's all connected.

Marty: There.

Megan: That's how it works. Well, we hate to end it, but we are going to end it here today. We hope that you catch us next time on the Prairie Pod where we are going to cover the Native Prairie Bank Easement Program with the one, the only Rhett Johnson and his magical vest of stuff. So, we'll learn what the program is, how you can sign up, and how do you really know that prairie is native, which we touched on a little bit today and we're going to give a shout out to String Lake WPA again. So, it's going to be a good time. As always, you can catch all of the resources that we've mentioned today including the Take a Hikes and the Let's Science section on our website on mndnr.gov/prairiepod. We'll catch ya'll next time.

Jessica: Check you later, Megan.

Marty: Thank you guys.

Megan: (Laughing) Thanks Marty. Bye.

Marty: Absolutely.
((sounds of birds chirping and wind blowing))