

Lake Simcoe Sessions Podcast

Episode 4: Changing Ecosystems

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This episode features two speakers:

- Katie Biddie- Podcast Host and Outdoor Educator at LSRCA
- Lori McLean- Special Guest and Restoration Specialist at LSRCA

Introduction with music 0:03

Hi and welcome to Lake Simcoe sessions, a podcast hosted by the Lake Simcoe Region Conservation Authority. I'm your host Katie Biddy. Join me as I chat with the experts to learn all about how climate change is impacting us and our ecosystems right here in the Lake Simcoe region. Our goal is to discuss how we can all work together to build a resilient future for our watershed. This podcast is being recorded on the lands of the Williams treaties First Nations, we are committed to renewing our relationships with First Nations peoples and deeply appreciate their historic connection and unwavering care for this land and water. This podcast has been made possible thanks to the generous support from the RBC Foundation and the Lake Simcoe Conservation Foundation. Hello, and welcome back to Lake Simcoe sessions. You're currently listening to Episode Four. And today we're going to be talking about restoration in the Lake Simcoe watershed. And I'll be honest, I am welcoming this episode because I have spent my morning Doom scrolling social media Doom scrolling being the term for just reading headlines that can be kind of depressing and negative and, and alarming. And sometimes this is what happens when we talk about climate change, you end up going down this spiral of doom, right? It feels very daunting. The sheer size of the challenge we're facing seems insurmountable, and it can be easy to get like really down. And that's kind of how I was feeling this morning. But at the end of the day, feeling down about climate change doesn't really lead to any solutions. And it's actually more beneficial for us to take a solutions based approach when it comes to climate change, start to think about how amazing the world is going to be when we reach our climate targets. And when we reduce the amount of greenhouse gas emissions we are putting into the atmosphere. A key part of our conversation today is going to be talking about carbon sequestration, which is a fancy way of saying things that capture and store carbon dioxide. The things that do the best job of carbon sequestration in our watershed are, of course, our plants. We've talked about how forests and trees do an excellent job of

sequestering carbon. But today we're also going to be talking about some other habitats that absorb and store carbon, such as meadows and wetlands. And my special guest today Lori McLean is a restoration specialist. And that means that her role is to find places where we can install new habitats that do a really good job of absorbing and storing carbon. Without further ado, I'm excited to introduce you to Lori McLean.

Okay, yeah. Hi, Lori, and welcome to Lake Simcoe sessions. I'm so excited to have you here on our podcast today. Hi, Katie. Thanks so much for having me. I'm really excited today to go ahead. I'm so glad I was hoping Lori that we could start here. If you wouldn't mind just telling us a little bit about yourself, your background and what your job looks like as a restoration specialist.

Lori McLean 3:22

So for as long as I can remember, I've always had a passion for the environment. I grew up going to our family cottage and spent a lot of time in summers there. And from that young age really had a passion for for the environment, which actually led me to studying wildlife biology at the University of wealth and lead to a career with the Lake Simcoe Region Conservation Authority. And I've actually been here over 15 years now and working in different departments with our monitoring and with communication. And now I've sort of found my dream job in the restoration department, which I absolutely love, because it does provide that opportunity for me to work with our, you know, our residents, Western residents, as well as schools and community groups and our number of municipalities to really help deliver our restoration programming and offer that technical and financial assistance to landowners to complete projects and really provides me with that opportunity to explore the watershed and to have those hands on opportunities and really use my background knowledge to help residents implement projects on their on their private property.

Katie Biddie 4:32

Amazing. I feel like we have so much in common because I feel like that was kind of my path into the environmental sector as well as like growing up spending time outdoors feeling really connected with nature. And then I didn't know you went to Guelph. I also went to the University of Guelph we have that in common as well! And I totally agree. I feel like your job is really kind of empowering because are we talking on this podcast, we talk a lot about climate change. And it's easy to get into the doom and gloom and the finger pointing of like, humans are doing so many bad things, and humans are causing this problem. But in your job in restoration, it's kind of the opposite. It's humans doing amazing things to help, you know, restore the environment and make changes for the better. So, I think what you do is really

inspiring, could you tell us just a few examples about some of the projects that you've worked on? And what restoration means?

Lori McLean 5:30

Yeah, so worked on, you know, some, some larger projects, and much smaller projects, they all they all have their value in, in restoring our watershed. But really looking at some areas that were a little bit more degraded, or potentially didn't have, you know, some of the native species that we wanted to see there. Some of the larger projects working at one of our conservation areas, Rogers Reservoir, and we did a wetland creation project there, as well as currently working on a metal restoration project. And so, looking at these, these areas that provide a great opportunity for these types of projects, and just to really have that opportunity to create, you know, these unique habitats, that wouldn't be there, otherwise, if, if there wasn't, you know, some manpower put in to help facilitate these, these habitats, but it's really taking a look at what opportunities are out there. Whether it is on our RCA lands or opportunities, as I mentioned to you with the private landowners or even school properties or municipal public lands, right. In Rogers reservoir. That's where is that conservation area located? So that one's actually located in the town of East Gwillimbury. In Holland landing,

Katie Biddie 6:53

Oh, nice. And, and so with the restoration project like that, what did the habitat look like before your team stepped in to restore it,

Lori McLean 7:03

So I'll focus on more the meadow restoration project, because that is one of my, one of my favorite ones that that I really enjoy working on right now. And essentially, we acquired this land in 2014. And it was an old hay field. So it was agricultural land, way back in the day, but it had been not known or used for production for several years, I think almost a decade at this point more than that. And so it was just a monoculture. Just of the singular grasses, they were non native grass that was used for hay production. Okay, so looking

Katie Biddie 7:44

at and non native just means they wouldn't grow here, naturally, like they come from a different part of the world or

Lori McLean 7:52

non native being that they were more for agricultural use. So they would have been planted and seeded for grazing pasture. And as I mentioned, to hay production in the in the later years. So it wouldn't be those native species that we would want to encourage within a meadow habitat.

Katie Biddie 8:12

So there were non native grasses that were meant for agriculture, why would it be better to have native species of grass and native species of flower, say that are now planted in the meadow space.

Lori McLean 8:23

So it was a monoculture of sort of those cool grass species. And we really wanted to increase the diversity of what was there. So incorporating some warm grass species. So the composition, changing that a little bit to provide some more variety, and also introducing some wild flowers to the mix, as well. And these wild flowers will be great habitat for pollinators, and as well as bird species to and really wanted to recreate this natural habitat to attract some of the species that were there. Originally some endangered species, the meadowlark, and the eastern meadowlark that were found at that property at one time, but we have not seen them there for a long time now, and trying to encourage some of these, you know, native habitats for them by improving the the composition that's there and also attracting other grassland species and insects.

Katie Biddie 9:29

Amazing. So you're basically taking this space that used to be, you know, non native species that weren't really beneficial for the birds and the bees that live here and transforming it into a more naturalized space which would be what would have been here before humans took over that land. So you're kind of changing reverting things back to how they used to be.

Lori McLean 9:51

Yeah, and with the the native species too, they do have such deep root systems too, that they really, really stabilize the the ground. And when they are seeded, you know, it does take a while several years to, to establish, especially from seed because they don't flower typically in their first or even second year. But those native species will have much deeper root systems and be able to absorb a lot more carbon a lot more, you know, photosynthesis through their, their root systems, and then through their leaves and be able to store a lot more carbon as well down the

road. Because it is these, you know, more native species with these more extensive root root systems.

Katie Biddie 10:37

Oh, so that's a, it's like a double benefit, then, not only is it going to help biodiversity, but the native species also will like sequester more carbon, which as we know, we've been talking a lot on this podcast about, you know, climate change and how how sequestering carbon is a really important piece to mitigating into making a better future for our planet. So that's, that's a double win for restoration. Right is it's helping the animals, it's helping the species that are on Earth, but it's also going to help with our climate.

Lori McLean 11:09

Yeah, I think too, with it being you know, agricultural field before, you've got the grasslands that are enhanced with the native species, it that carbon is being sequestered. And it's it's staying within that grassland. And during farming practices, sometimes that carbon is released during tilling, and the everyday stuff that needs to be done on the farm. So having these natural areas, essentially, left unkept, as far as you know, tilling and having mechanical things go through them, it does really help store carbon and prevent it from being released. Absolutely.

Katie Biddie 11:49

So it's in really our best interest to see more and more of these restoration projects happen in the watershed. Because there are just so many benefits. Would you say the Rogers reservoir project is one of your favorite projects that you've worked on? Or is there another restoration project that you found to be really impactful?

Lori McLean 12:08

I think right now, it's sort of top of mind for me, it's one that I'm currently still, as I mentioned, these, these projects do take time. So started the work for designing the grassland back in 2018, all the way now to actually doing some seeding and starting to see those native, those native species grow and start to, to emerge. And I think what's also beautiful that those grassland habitats is the color is those flowers that you can see blooming from spring, summer and into the fall, that also provides you know, habitat for the pollinators throughout the year, as opposed to the hay that was there previously, that just would have been one species monoculture. And not having that, that aesthetic,

Katie Biddie 13:00

right, it has the third benefit, we know we've talked about the benefits but it has the third benefit of making our outdoor spaces more beautiful, right. And this is a place where people can go and they can ride their bikes and and walk our dogs or go for a walk with friends. And now they're surrounded by new flowers, new species of like, you know, butterflies and bees and birds. So it's also just helping people out to enjoy their time spent in an outdoor space.

Lori McLean 13:26

Yeah, and they the educational piece, as I mentioned, we have land owners that want to create Meadows to and it's that piece that they do just take a little bit more time. So you're not going to have a meadow next week and things start to grow that it does take a little bit longer. And I think that's really, really important that with these species as they are rate they do take longer to to establish but their benefit in the long term is so much more impactful.

Katie Biddie 13:56

That's really good for me to hear Lori because I put I have this little garden in my front yard and I wanted to do a native species garden because I had heard you know about all these benefits. So I put a pack of native wildflower seeds in my little garden. And I was so excited to have this beautiful garden right off the bat and this first summer I'm going to be honest, it doesn't look great right now. It looks kind of like there's a couple flowers in it but I was expecting more of this like beautiful typical Meadow garden right in my front yard. But that's a that gives me hope that maybe I just need to give it some more time. I can't expect it to be ready for me right in the first season that I planted the seeds.

Lori McLean 14:34

yeah. But what they do is they focus more again on that root system and then they'll focus more on the flowering. Once that roots, the roots are established I so myself too. I've got some native plants that I don't have any flowers yet this year. But they were just newly planted. So I'm hoping that next year. Once the roots have established they'll be they'll be ready to put some energy into their flowers and reproduction.

Katie Biddie 14:58

That must be a challenging part of your job. Though is the patience of doing these amazing projects and putting seeds in the ground and plants in the ground, we have to have some patience let nature take its time to really turn into the abundant habitats that we're aiming for, right?

Lori McLean 15:12

Yeah, yeah. Yeah. Now more than ever, we're seeing and feeling the effects of climate change as the lakes and go watershed resident. I'm thankful for the generous support of the RBC foundation to help us each learn a little bit more about how we can take actions against climate change, starting right here at home.

Katie Biddie 15:35

And on the topic of like, what you can do at home, do you have any advice for homeowners or community members? Is there anything that they can do or you recommend that they do to enhance the habitats in their own spaces or yards?

Lori McLean 15:50

every project, as they mentioned, even at the beginning, any size is beneficial. So even if it's a small, little pollinator garden that you're creating in your front yard that it doesn't seem very big doesn't seem like it's making it an impact. If you had done that, and your neighbour has one and down the street has one next thing you know it is actually creating more of a corridor for these pollinator species to move. So I think it's any opportunity to choose native and to plant native, I would highly recommend over the other alternatives that are available. Because those native species not only again, have that benefit to the pollinators and wildlife habitat, they also have, again, those deep root systems, they'll be able to withstand drought, less watering down the road. And also being able to, you know, filter in, you know, those nutrients, just with those deep, deep roots, they're able to filter out anything that could be going over top of the surface surface runoff, things like that. So any opportunity to plant I would highly, highly recommend even if you think it's a small, small piece, I think it all has an impact down the road and even myself of planting some cone flowers last year, I thought, Oh, this is great. I saw some bees there during the summertime, but in late summer, early fall, I actually had some goldfinch that were on there and they were eating the seeds from it. so it's just that need that need you know, realization that it's not just the pollinators it does have other benefits even throughout the year, you know, an annual from your garden center might not have an that habitat to throughout the the winter months, just providing that cover and space with the the natives if they're left, don't cut them down in the fall, just leave them up just provides other opportunities for wildlife throughout the winter,

Katie Biddie 17:43

I kind of love it, it just comes down to the idea that like nature knows best right? Like the plants, the species that have grown here for 1000s and 1000s of years really are the best ones because they can survive harsher conditions, they help absorb carbon, they're meant to be here and they support the animals that are meant to be here too which is it's kind of just a beautiful

connection, right? It's as much as it's great some of the non native species can be really beautiful in gardens. I agree with you, it has so many benefits to putting native plants in your garden or in your green space. So Lori, just one last question before we finish up here. I was wondering if you wouldn't mind telling us what gives you hope. So what gives you hope about climate change, and about the future for our planet and our watershed?

Lori McLean 18:29

I think in my role, I have the wonderful opportunity to go out and speak with landowners and residents, and visit private properties and, you know, some gorgeous, gorgeous areas. And just seeing the hope of the residents that they want to do projects and that they want to improve as much as they can on their little piece of land. And I think that provides me with a lot of hope that you know, there are several out there that do want to make a difference and to preserve their parcel of land again, big or small or whatever, whatever the size may be. There's also those on my site visits that might not be aware of some of the things that that are going on. And just having that open ear and and listening to some of the things that I'm talking about, and might even change their mind on things that they had thought they might want to do. And now hearing me here or having me come out and talk to them about it, it's it's provided some insight and change their mind for for doing something that's a little bit beyond maybe what they wanted to do. So I think that the hope that I have is that there's lots of opportunities out there to do these types of restoration projects with the willing landowners that are out there. And it's just a matter of tying it all together. And I think with our program, we're able to provide some funding assistance as well. Which really is is key to I think some of those landowners taking that next step. And I know other conservation authorities also have funding programs that provide some funding for residents to do these types of projects, whether it's restoring wetlands or creating grassland Meadow habitat, they do provide that that funding as well. So I think for myself, it's that hope that there are lots of willing landowners that want to do good out there, it's just providing the the right next steps and connecting those pieces for it.

Katie Biddie 20:28

I agree, that's such a big piece for me, too, the more people I talk to about climate change, and the more people I talk to about, you know, restoring our environment, like what you're doing, the more I realize that people really do want to make a difference. And we know we need to. So I'm always so inspired by people, right? I came in, like you were saying at the start, I came into this industry, because I loved nature. But I feel like it has also made me realize that people are also awesome, right? People like you really want to make a difference. And so that gives me hope, as well, that we have some pretty amazing people in this watershed and on this planet that are going to make a real difference going forward.

Lori McLean 21:10

Yeah, I think that's what's fun with my job too is I get to take part in our community tree planting events, which is also another, you know, great opportunity for residents and community groups and schools, to come out and plant some trees and to really make an impact and make a difference in their community in their neighborhoods, in their, you know, in their backyards. It really is that, that piece to really connect, connect others with with nature, and really do make a difference. For

Katie Biddie 21:41

that's the thing is getting involved really makes you care more right, I heard I've heard a quote that goes something like we care. We care about what we know, right. And we know about what we've done. And so if we can provide people the opportunity to learn, and have these opportunities to get their hands dirty, and put trees in the ground or put plants in the ground. It makes them feel more connected and and ultimately what we can do with that is build a more connected community of people who care about our environment. So those community pieces that you work on Lori are so important and so amazing. And I'll just do a little plug here, I'll put in the show notes for all our listeners, a link to the restoration page on our website, and also the events calendar page. So you can keep your eyes peeled because there might be community planting events in the future. Lori, I just wanted to say thank you so much for joining us on lake Simcoe sessions. you've provided us with all sorts of inspiration and information about restoration.

Lori McLean 22:35

Thanks so much for having me today. Katie.

Katie Biddie 22:42

My favorite question to ask all of my special guests in this podcast is that last one that I asked Lori, what gives you hope about climate change? I find too often in conversations about climate change, we focus on the scary parts, right. And it's really easy to get caught up in that Doom spiral where we end up feeling really hopeless. But there are so many things that give people hope. And I love being reminded of that by my special guests. For me, anytime that I'm feeling really down or anxious about climate change, what I like to do is I like to try and imagine what our world is going to look like when we reach our climate targets in 30 40 50 years. So I think about land that maybe isn't currently being used restored by people like Lori into habitats that are teeming with wildlife. I imagine spending time outdoors in the centers of our cities breathing, fresh air, swimming in clean water. I imagine our cities and towns with more green

infrastructure and people out and about walking and biking and staying active and healthy outdoors. And I find just keeping my mind focused on that imaginative and hopeful view of our future helps me to feel better about the future of our planet and stay motivated to help reach our climate targets. Now my challenge for you this week on Lake Simcoe Sessions is I want you to take a moment to think about what gives you hope when it comes to climate change. We'd love to hear from you. So please feel free to tweet at us @LSRCA. Or you can even email me with your thoughts at Education@LSRCA.on.ca. I'll put both of those tags in the show notes for this episode. If you're looking for some inspiration about what gives you hope about climate change, I suggest you visit the newly restored Meadow habitat that Lori was telling us about at Rogers reservoir conservation area. Again, I'll put the link to that in the show notes. It's such an amazing place to go for a walk to spend some time outdoors and to see the positive impact that people can make on our land and on our water. So go check it out. It'll leave you feeling really inspired and hopeful and it's also just a great place to get outdoors and spend your day. So thanks for joining us. Next week we will be having our final episode in this series of Lake Simcoe sessions. And I'm actually going to be talking to public health experts about how climate change is impacting public health. So it's gonna be a good one. And I hope to see you there. Have a great week and we'll talk to you next time on lakes simcoe sessions.

Conclusion with music

Thanks for joining me and tuning into this episode of Lake Simcoe sessions. Let us know what you think by using the hashtag climate connection on social media or tagging us at LSRCA on Twitter. Make sure to like and subscribe the podcast or visit our website at LSRCA to see all of our podcast episodes. LSRCA is committed to providing an accessible experience for all so transcripts of each podcast episode will be posted on our website. Special thanks to the RBC Foundation whose financial support has helped to make this podcast possible.

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