# Episode 90: Bethanie Walder On The Importance Of Ecological ...

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**SPEAKERS**

Jack Humphrey, Bethany Walder

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We are now in the beginning of what the United Nations has declared to be the decade on ecosystem restoration. And this episode of The rewilding Earth podcast is sponsored by bio habitats, a company dedicated to protecting and restoring ecosystems. Bio habitats would like you to enjoy a virtual moment inside the red horse bend Nature Preserve in Fremont, Ohio. Not long ago, this site which is visible from us, highway 20 consisted of frequently flooding farmland. Today. Thanks to the Black Swamp Conservancy, it is coming back to life as a functioning floodplain of the Sandusky river. 54 acres of floodplain habitat have been restored here, and it is already being enjoyed by many local and migrating species. The sounds of wood ducks and Eastern Phoebes are already beginning to drown out the hum of highway.

Jack Humphrey 01:15

You're listening to the rewilding Earth podcast. The Society for ecological restoration has been advancing the science practice and policy of ecological restoration for more than three decades. Bio habitats recently explored the evolution of the field over those decades in the latest issue of leaf litter. The issue also includes a special feature on the Society for ecological restoration. To check it out. See the link and extra credit at rewilding.org/pod Episode 90. Bethany Walder joined the Society for ecological restoration as executive director in September 2015, and has more than 20 years experience in environmental conservation, restoration and education. Prior to joining the SER Bethany served as executive director of wildland CPR, where she oversaw several highly successful conservation and restoration campaigns. Today, she's responsible for helping guide STRS overall work to achieve its mission of advancing the science practice and policy of ecological restoration.

B Bethany Walder 02:28

I'm Bethanie Walder, Executive Director of society for ecological restoration based in Missoula, Montana, the society is based in Washington, DC, ser, some people call us ser, some people call us ser, I say ser, is a global society of people interested in the field of restoration. And our mission is to advance the science practice and policy of ecological restoration to sustain biodiversity, to improve resilience in a changing climate, or enhance resilience in a changing climate and to reestablish an ecologically healthy relationship between people and nature. And the Society was founded in 1988. And it a group of people came together and said, We're all doing this thing, trying to kind of fix the mess as we've made. It didn't really have a formal name and, and it became named ecological restoration through the work of some of the founders of the society, but people have been restoring the earth and, and practicing restoration for millennia. It didn't come about in 1988. But it was it was created by practitioners and wanting to share knowledge about how to do this work and how to get out there and clean, not just clean up but heal, restore the environment, restore degraded lands, when the field of ecological restoration first started, there were some philosophers who said, this is a bad idea, because this will create a justification for further degradation of land and water and natural resources. Because if you say you can restore it, then sure you can degrade it. And so the society has tried to be very, very clear that restoration should never be considered as a justification for any type of degradation. And I think it's important to recognize that distinction. So we are we have about over 4200 members in over 100 countries around the world. We have, I think now 16 chapters, the majority of our chapters are smaller and in North America, in Canada in the United States. I think that's 12 of our chapters are 13 and then we have European wide chapter and Australasia regional wide chapter, Latin American or American and Caribbean chapter and UN continental Africa chapters. We are a society which means that our members provide a lot of The content for what we do is what we create. What we do is what our members do. These are people who work professionally as researchers, for governments for indigenous communities for industry, for nonprofits, for academic institutions. There are also people who work as practitioner practitioners for all of those same entities. So our membership is really broad in the sense that it covers kind of every sector. And it also covers every type of person who works in the restoration space from policymakers and regulators to practitioners and restoration designers, to academics and researchers, to volunteers, and people who are just interested in this because they think restoration is an important thing. We publish the journal restoration ecology, which is a peer reviewed journal on the science of ecological restoration, which is restoration ecology. We host the certified or we run the certified ecological restoration Practitioner program, it's the only program in the world to get certified as professional in this space. We are actually piloting some different models for certifying restoration projects. And we also do a lot of training, education, convenings, webinars, field trips, all sorts of things through our chapters and through STRS main, through the SER Secretariat, we have 30 student associations, which are student groups that are affiliated with universities, mostly in North America, but also several outside of North America.

Jack Humphrey 06:44

You hear a lot in the headlines now about restoration about tree planting, and what different companies are doing I think Subarus got a commercial out right now. In fact, it's talks about planting a million trees, which now we know isn't really that many trees compared to how many we need. But there's a lot of stuff going on out there. And I think people sense we've been around long enough to sense that not all of that is on the up and up, do you? Do you get to does your organization get to, you know, weigh in on some of those things or advise on some of those things on the big level at the 30,000 foot

B Bethany Walder 07:20

view. Ser released in 2016 followed up with a second edition in 2019, a set of international principles and standards for the practice of ecological restoration. And we did this precisely because we had really serious concerns about issues with biodiversity and collateral damage, for lack of a better term from tree planting initiatives. And so one of the things we see as all of these global targets for tree planting just in the name of carbon sequestration are promoted is that it can create a perverse incentive. And so because people are approaching this idea of trees as a way to address carbon instead of forests, as a way to provide a broad suite of benefits for nature, inherent benefits just for nature to exist, as well as benefits to people ecosystem services, that's typically called, we've seen this emphasis on tree planting, and that emphasis on tree planting can be negative. Because if we care only about carbon sequestration, then the outcome is that you only get rows of trees planted and you don't get an ecosystem and you don't get habitat. You don't get other ecosystem services that including non timber forest products and other things that would be provided by reforestation and full ecological restoration. There's a new paper that just came out in Science Magazine, by an SVR member Feng Yuan flaw who's based in China. And she did this study, after an analysis she did based on a reforestation program in China. I think this is I know, this is a little bit technical, but I think it's a really good example. So when we look at the need to reforest our planet to plant all these trees, and we need to plant a lot of trees, and we have millions and millions and hundreds of millions and billions of hectares. That could be reforested. The question is that you asked, Are we planting trees? Or are we reforesting? Are we creating? Are we restoring native forest ecosystems? Not just fans of trees? And fangyuan did an assessment in China have what's called the Chinese Green For Green program? We're starting in the 90s because of they had issues with erosion and flooding because China's been continuously settled for 1000s of years, and it's been heavily deforested, and they implemented a very extensive forest restoration program or re Planting tree planting program and they planted, I believe, and I'd have to double check this 28 million hectares of land in a forest in 14 years. But the assessment that Miss Wah did, or Dr. Hua did is that the biodiversity 80% of them were monocultures. And the biodiversity in these planted areas as a result of this program was lower than the biodiversity in adjacent agricultural lands, which is stunning. So that data came out years ago, she went on doctrine, while went on to say, well, everybody says all the time that tree plantations aren't the same as forests. But there's no study that shows this. So just in March, or maybe very late February, she had a study published in Science that she did a massive meta analysis was a bunch of other authors, and basically proved that tree plantations do not provide the same level of benefits no matter what, compared to native forest restoration. And the only justification in her assessment, and I'm simple if I'm radically simplifying her her study. But the justification for tree plantations would only be if your goal is that you need wood products out of it. And otherwise, if you have any goals beyond wood products, you are better off with a more native eco, a native for reforestation approach. So that's not what all these global targets say. They just say we need more trees on the ground. And one of the things we also see is that we're digging up and destroying biodiversity, healthy, old growth, for lack of better term grasslands, to plant trees, because it's not a forest. And if we forested, it'll be better. And we're releasing all sorts of carbon into the ecosystem, destroying all sorts of biodiversity in the name of addressing the climate crisis, but caught but exacerbating the biodiversity crisis. So and probably not helping the climate crisis much either. So we need to plant the right trees in the right place, and not plant trees where they don't belong, and also plant a broad diversity of native and appropriate species to that area. And that's how we need to think about reforestation.

Jack Humphrey 12:32

Is somebody talking to them, or their changes happening in the awareness on a big level? Because when these guys decide to do something they could do a lot of damage in the process of doing think is good?

B Bethany Walder 12:44

Yeah, I think I think this is a great question. And I think that most of these companies who are getting on this bandwagon are doing it because they want to do the right thing. And they want to be better. I don't think they're doing it on purpose, because they want to do bad. So I want to start with that. I think that's really important. We have had numerous entities contact us and say, if we want to get involved in tree planting initiatives, how can we do that in a good way. And one of the things that ser is going to be involved in well, we we are involved in a brand new project that's launching very shortly, the funding just came in, were a partner to a larger project to develop a global biodiversity standard to being run by a group called Botanical Gardens Conservation International. And were one of the key ecological restoration partners to develop the standard, especially for biodiversity in the context of context of tree planting initiatives. And so there are some big companies who are doing big tree planting programs who are going to be involved as well. And we're really looking at can we start to certify or, you know, verify that these tree planting initiatives aren't being implemented in the wrong places, and are being done in a biodiverse and responsible manner, including in a socially responsible manner. And that's super important as well. Because if we just continue with our colonial approach, as speaking from somebody in the United States with this colonial approach, and we can go to Africa and tell you exactly what to do, and how to plant your forest, that's not going to be very helpful either. And we need to take we need to understand local and indigenous and traditional knowledge in these projects, too. But from a corporate perspective, I think that I hope that this new global biodiversity standard, which is going to take a couple years to get up and running is very beneficial. Ser is also partnering with some other entities on testing project certification for forest restoration. The biodiversity standard is not just about restoration. There also is another new paper from some ser members that tries to provide some guidance on how to look at tree planting initiatives. And this just came out with in the last few weeks I actually just received it and haven't He was finished reading it yet, so I can't even talk to you about it. But my hope is that it starts to provide some of the types of answers to the questions that you're asking. So then, if that is the case, and I think it will answer some of those questions, then I think we're starting to put some materials out there so that as companies start to engage in these projects, and I can say that I've been approached that ser has been approached by some very, very large global companies asking for advice. We can provide technical support to those companies so that if they do undertake a tree planting program, hopefully it will, it will actually be a reforestation program with a broad suite of objectives and outputs and outcomes and not just looking at carbon sequestration and number of trees planted as a goal. I think I think we have a lot of work to do still, to broaden the understanding of large entities, including corporations who want a simple solution to a complex problem. And tree planting is a simple solution to the complex problem of ecosystem degradation, and the twin biodiversity and crisis and climate crisis.

16:21

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Jack Humphrey 16:59

And it will be even cooler if one company or two might undertake a project that deals with reforestation, but also in key areas that provide connectivity. And bring in a little bit up there, too, you know?

B

Bethany Walder 17:15

Oh, absolutely. I mean, I think that when we look at that idea of we don't want to invest in and implement reforestation projects in areas where they don't belong. The the antithesis of that is saying, Where do you get your most benefit, when you do implement a restoration project, including a reforestation project. And if you could look at doing that in a way that you could be working in a connectivity corridor, and restoring conductivity corridors between, you know, core habitat areas, or taking core area and expanding out the buffer and doing restoration in the buffer zone so that the buffer zone becomes much more healthy, and then you have a bigger core area. Those are the kinds of things that are going to have where you get even more benefit from your investment. And so one of the other things we talk a lot about at ser is how do we motivate interested restoration partners in undertaking the most impactful restorative activity, instead of doing the bottom threshold? Well, we've done restoration, and we've done the simplest thing we can do, instead of saying, in this situation in this context, with the same amount of money, if we invest here, or if we do this action, instead of that action, we're gonna have way more impact. And we need to start looking at restoration. In that way, also that that large scale restoration projects especially create an opportunity for us to fight them, and to design them for best possible greatest possible impact to people and nature. In the fcr international principles and standards for the practice of ecological restoration. We have something called the social benefits wheel, and the ecological recovery wheel. And we encourage entities undertaking restoration, to design their projects using those wheels, to implement them using those wheels and to monitor them using those wheels. And we have seen people use these wheels around the world, especially the ecological recovery wheel because it's been out longer. They modify them. It's been modified for coral reefs for river restoration for marine restoration for all types of different restoration. So you can put in what you want to measure but what's beautiful about the wheel is that it looks at six attributes not just at one attribute of carbon sequestration. And by look at both wheels do this, but on the ecological side. So if you if you look at the ecological recovery wheel, it asks you to plan your restoration, and then to monitor your restoration based on physical conditions, species composition structure Will diversity ecosystem function, external exchanges, that's where you get at that idea of landscape flows and connectivity and absence of threats. And if you design a project using the wheel, and then similarly with the, with the social benefits wheel, it looks at things like community well being and sustainable economies, restoring natural capital stakeholder engagement, benefits distribution, equitable benefits distribution, if you design

your projects using these wheels, and then you monitor them, you will literally be able to show change from the baseline, and how you improve those different things. And if you only plant trees with the intent of sequestering carbon, you're gonna have one little sub attribute that's doing great. And you're gonna have 17 other sub attributes that are degrading. And that's going to show that you're not taking a holistic approach to restoration, and potentially that you're causing more harm than good. I can say we're working on on a modification to the, to the standards specifically for the mining industry. And recognizing that, you know, right now, the equipment we're both using to have this conversation is, requires certain things that be mined for be mined from the earth. And so we're we've been working with some entities in the mining industry to develop restoration guidance for post mining for the post mining situation, recognizing that most regulatory approaches to mining only call for reclamation, they don't call for restoration. So how do we create a Race to the Top in the mining industry, and you know, kind of push them to do push them as part of their social licence to operate. In other words, as part of their engagement, their community to commit to higher levels of restoration, then what they might be committing to now, we added some things to the wheel to better represent mining impacts. And we've now got six case studies that will be in the final mining standards, that look at different mining restoration projects and apply that in the ecological recovery wheel. So they're there, we've got them, they're going to be published soon. And it's really, really interesting to see. I mean, I do think the companies we've been working with are progressive companies. And I think they're excited about being able to show that they're having this positive impact through, you know, yes, they're providing resources that the human society needs, but they're also trying to clean up their mess. And that doesn't mean that restoration isn't justification for mining. But if we are mining, how do we do real restoration instead of just reclamation, where we stop the damage, but we don't ever put it back to a high functioning ecosystem.

Jack Humphrey 22:44

lest someone get a little depressed about the headlines. And think, well, it's just the companies now that are going to be able to bail us out of this because what can little old me do? What would you have to say that

B

Bethany Walder 22:56

I would start by saying, something we say often, which is and we're not the only ones who say this, but I would say that restoration is the antidote to despair. The environmental news these days is pretty despairing and pretty distressing, and hard. And I waffled between being optimistic. And I'm extremely hopeful, and being only mildly hopeful. Because I do think that we have as a human society, we have the tools, we have the knowledge, we have the information knowledge are similar, we have what we need to heal the Earth, we know what we need to do to heal the earth, right now as a global species, as the human species as globally does not have the will to do that. And that's sad. Because we don't need geo engineering tools, we don't need other stuff, we just need to create the will to do this. And that starts that's everywhere from the individual level up to the largest corporate or governmental level that that you can imagine. One of the things ser is doing and we're doing this in conjunction with the United Nations decade on ecosystem restoration, the UN in 2019, in response to a proposal from the government of El Salvador, which came to the United Nations and said, if we don't heal the planet, we're not going to have a country anymore. We can't deal with all of our other

problems if we don't deal with the ecological degradation. So the then Minister of the Environment of El Salvador, Lena Pol, made an impassioned speech to the UN General Assembly, and the UN declared 2021 through 2030 as the UN Decade on ecosystem restoration, and this decade recognizes what I'm just talking about because the UN has a set of sustainable Development Goals 17 Sustainable Development Goals that they were that the intent was to really kind of transform human society by 2030. And, and move to a, where we're living more in harmony with nature. And what the UN Decade recognizes they don't use this exact language but ser does is that conservation alone is not enough. If we want to heal the planet, we've got to conserve everything that's still intact and healthy out there. And we have to restore a bunch more than that. So that we go from global net degradation to global net improvement. People talk a lot now about Net Zero Net Zero is not enough. We need conservation, plus restoration to heal this planet, we need both together, neither one alone is enough. And then combine that with more sustainable approach to resource extraction. So if restoration is the antidote to despair, and as individuals, it's hard not to get depressed and to be despondent over the state of the planet, ser in conjunction with the UN Decade on ecosystem restoration, in 2021, as part of you know, during COVID, and when everything was shut down, and we couldn't all meet together, we launched something called Make a Difference week, and make a difference week was built modeled after something we used to do in conjunction with our in person conferences called Make a Difference Day, where we would get together with a local organization in the host community where our event was happening. And we get our hands dirty, maybe our feet dirty, and our elbows dirty doing a restoration project with a local group. But when we had to turn our conference virtual because of COVID, we said, Well, what do we do with Make a Difference Day, and we decided to turn it into make a difference week. And so the first make a difference week happened in June of 2021. And it opened up on the same day as the launch of the UN Decade on ecosystem restoration. And our goal with make a difference week was to have at least 50 projects around the world with at least two on every continent. And I am really pleased to say that we ended up with I believe 134 or 144 Total projects in 34 countries around the world, over 3000 volunteers, over 20,000 volunteer hours. And those people did invasive species control seed collection and processing revegetation projects, citizen science monitoring, habitat construction, garbage collection, and a variety of other things. In just over the course of that one week, they collected over 11,000 kilograms of garbage, they planted over 30,000 plants, they removed over 5000 kilograms of invasive species. And what this really shows is that individuals working in their own backyards or in small groups, you know, in their communities, collective, you know, on these individual projects, when we measure that collectively they had a global impact. And make a difference week is really intended to get everybody everywhere out there doing restoration in your backyard, anywhere across what we call the restorative continuum, it might be weed pills, a whole suite of types of activities, we've decided to make make a difference week a global have an annual event. And this year's make a difference week is happening from June 4 to the 11th. It is not too late to host a project, we do have a website, which is make a difference week.org. And you can get involved, you can propose a project, you can register an event. And then we will do the same thing as we did last year where we collect as much of the data as we can from all the people who participated. And we show the global impact that we had. One of the things that I think is super important is that we don't rely only on corporations to change their behavior. And we don't say Well, what I do won't matter until Exxon changes. So yeah, we need Exxon to change, but we need every individual to change to and that's one of the messages of the UN Decade, that by 2030 by the end of the UN Decade. We want to transform our relationship with nature. And make a difference week is a way to do that by getting out and participating in restoration. And it's really interesting to come back to that idea that restoration is the antidote to despair. I've talked to a number of people who participated in make a difference week last year. And the message I hear over and over again, is that they just were

smiling for a week. or more after they did this make a difference week event, because it felt so good. It's just so uplifting, to say, I can make a difference, every single one of us can make a difference. And if we, if everybody out there went out, and did restoration one week, a year, don't help. If we all change how we engage with the environment, and we start to engage with the environment, where we're doing small, you know, we talk about small acts of kindness, but small restorative acts throughout the year, all all the time, in addition to the big 10,000 hectare or million hectare projects that are happening, then we're showing that we have control over our future. And that matters. Because right now, I think many of us, myself included, sometimes, you know, feel like what difference does it make? Why bother, you know, but it does, it does make a difference. And if we show that by doing by going out and restoring by encouraging our friends and neighbors to restore, by encouraging our elected officials, to invest in restoration, and to care about restoration and to promote restoration, by requiring restoration, we can change the future of the planet, we as people change the future of the planet with the industrial age, we can change it again. And we don't have to have this climate and biodiversity crisis and badly, we can reverse it, we have the power, we have the tools, we just need the will. Maybe I should rephrase it, maybe we don't quite have the power yet. We need the will and the power combined with the tools we already have. And then we can do this. We don't have to have that depressing, worst case scenario future that we hear about every day in the climate depressing news. That doesn't have to be the outcome of where we are right now. But the only way to change that is to take that power, empower ourselves, democratize restoration, make it something everybody everywhere, not only does but expects that everybody will do.

Jack Humphrey 32:18

I can report that I am no longer bummed. At least for the moment, you have lifted my spirits. And another thing that's an antidote to despair, at least for me today is looking at your infographic from just depicting all the work the hours, everything that was done last year, it's really uplifting. And that's kind of what I was looking for today. Because it was like, man, it just seems like the only people have the ability to make a really, really big impact. It's just the corporations. Now, a lot of the headlines are leaning toward that story right now. And I started like kind of believing it. But you're very important work here in documenting the result of week one last year is really empowering. What are your goals for this year after having such a year that blew away your numbers that you would expected for last year?

B Bethany Walder 33:05

Well, we're our goals were to double our participation. I'm not quite sure we're going to meet that. But I hope that some of the people listening to this podcast today will submit some late projects so that we can not late there's we had projects being submitted until the day before make a difference week last year. So I think we brought on about 50 new projects in the last 10 days before make a difference week last year. So we're still we're very enthusiastic that we'll have good numbers this year. So I would encourage people, even if it's just that you go out in your backyard and you plant milkweed, I would encourage you to submit that and you know, for milkweed for some monarch butterflies and and to be part of make a difference week because everybody everywhere can be part of make a difference week. And I think that the more we do this, we can also move those corporations Jack. And I think that's really important. And we can show them that we don't just want simple answers to these complex problems. We want the

corporations to take it seriously and that when they do invest, we want them to invest in a meaningful and high impact manner. And not in a in a manner that gives them some good publicity, but doesn't have a real impact on the ground.

Jack Humphrey 34:17

If you're listening to this podcast anywhere other than rewilding.org, you can find out how to get involved even if you want to just plant milkweed there's no requirement for you to pull off a huge project. Anything anybody wants to do or can do is going to contribute to you guys beating your numbers from last year by at least double that's our goal here, then you would need to go to rewilding.org/pod and check out episode 90 of the podcast. And in the extra credit section. Bethany is going to supply me with all sorts of resources and links to help you do your thing. I think my voice is about an octave higher than it was when we started this Bethany and it's all All because of you. So thank you so, so much for taking the time to do this and all of your work and all the work that your organization does.

B

Bethany Walder 35:08

Thank you so much. It's a great, really great honor to get to talk with your members. And I just want to say I'm a huge fan of rewilding. I think it's so imperative as part of the entire restoration approach. And it is just as inspiring to me as as just the term restoration throughout my career I've been working on rewilding, I think since the early 90s. It always makes me smile. So I have a big smile from ear to ear on my face, too. And I look forward to having some of your listeners join us on make difference week.

Jack Humphrey 35:40

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