

Soil Health, Food Sustainability, and Environmental Justice with Sage Fairman

Cierra Dawson: Hello, everyone. Welcome back to the Speak Environment podcast. I'm your host, Cierra Dawson. So I'm really excited about today's episode because I brought on Sage Fairman for my first guest episode in a very long time. Sage is the program manager for the Oregon Climate and Agricultural Network, which we'll refer to as OrCAN throughout the episode. Um, and I was just immediately drawn to her as a person. You know, when you are in the same room as someone and you're immediately like, I want to talk to this person. I want to pick their brain. I want to know more about the way they think. Sage has been that person. You'll hear us talk about it today throughout the episode. But I first met Sage back in January of this year when I found myself at a soil health summit. And if you know me, I do not have a background in soil science or agriculture. But with that being said, I do walk through this world with a bunch of curiosity and a willingness to learn.

Cierra Dawson: So I was very drawn to learning more from Sage. The three main themes of our conversation today centered on soil, sustainability, and environmental justice. You'll hear how these themes come up through our conversation today, but it's largely based out of Sage's very rich diversity of experiences in life and her professions. She has a background in regenerative agriculture, bilingual farm business support, and farm worker advocacy. In all, I think the conversation we had today is a really good jumping off point for learning some of the basics of soil science and soil health principles. But this episode doesn't wrap up in a nice little bow. There are still tons of questions that need to be answered, especially as OrCAN finds itself on the precipice of launching a very important Oregon statewide initiative. But as Sage says, we learn as we go. Enjoy the episode. I usually like to start off interviews in more of that, like, relational piece. So I kind of want to talk more about, like, you and your journey of how you got to where you are now with the Oregon Climate and Agricultural Network. Um, so the first question I had for you was just kind of like, to walk me through, you know, one or two important moments. Some people call them pivotal moments or just, like, special things that you can remember that kind of got you interested in this whole big wide world of sustainability and soil health and stuff like that.

Sage Fairman: Yeah, definitely. Well, I, uh, Sage Fairman, and I am the program manager at the Oregon Climate and Agriculture Network and just started in November of 2024. Food has

always just been a passion of mine in many different ways. I think the first moment that comes up for me relating to the soil is, um, I grew up in the mountains of Santa Cruz in California, and we had this little community garden at our elementary school. Um, and I don't remember harvesting anything or growing anything there, but I remember going back there and playing with the worms. When it would rain, the worms would come up and my friend and I would get out a ruler and measure the length of the worms and have different names for them and, uh, try to look for them every time we went outside. And when I think about my connection to soil health, that is the first thing that comes up for me. Um, and then my passion for food really grew into cooking and, um, eating food and relatable. Exactly. Right. Um, yeah. Just got a huge passion for cooking and did not know what I wanted to quote, unquote, do with my life. But I knew I liked food and like, social justice issues. There was a moment in college, I went to, um, Western Washington University up in Bellingham, Washington, and I started volunteering with this community based organization called Community to Community Development and they advocate up for immigrant rights and farm worker rights. And I remember there was just this moment where I was helping at an event and I had just gotten back from a year in South America and speaking Spanish the whole time. And then I was working at the campus farm called the Outback Farm as operations coordinator. And at that moment, like being at that event with the, uh, with Community to Community Development and being able to support folks in Spanish and have it be focused on the food system and taking care of the people who grow our food who are left behind a lot of the time. That was just a moment that really clicked for me. Like, this is something that I want to do. This is really like, hitting home with me. And, uh, something that I find so much passion and life and joy in is in community around food and agriculture.

Cierra Dawson: Nice. Wow. You kind of took us through a big, um, like, stretch of time there. Starting with like, yeah, childhood and wanting to, you know, just have hands in soil and looking for worms and stuff, which is a relatable experience. I did the same thing when I was a kid. Right. And, um, yeah, I totally admire the, um, connection of environmental justice related to food systems too. I took a class in environmental justice when I was at Oregon State University in my undergraduate. And I just remember being like, there are so many facets and so many avenues to explore and so many, like, intersections in environmental justice, whether it be, you know, like housing or food security or proximity to like, power plants and things like that. Like, there's a lot of things to explore in that realm. So

it's really cool that you chose the avenue of, like, food systems and sustainability and things like that.

Sage Fairman: Right? Yeah. All the elements of environmental justice are really important, but the one that clicked with me the most is food. Um, and I think that's something that everyone has a relationship with food. And, um, for me, it was, yeah, really a great personal connection. And, yeah, food. Food's the way.

Cierra Dawson: I agree. Um, how did you get involved with living in South America? You said for a year. What was that from?

Sage Fairman: Yeah, through my university. I did an exchange program at Buenos Aires in Argentina.

Cierra Dawson: Oh, cool.

Sage Fairman: And I, uh, created my own major in college called Food Sovereignty in the Americas. Um, and I based that on a wide variety of classes I took, including political science. And I was really interested in Latin American politics and Spanish and food justice and agroecology. Um, and so I spent half a year in Argentina going to school there, and then another half of a year I took off of school to do some work trade in, um, southern Chile. I brewed beer and sold at different festivals. And then I went to Peru near Machu Picchu, and worked at a ecological garden there.

Cierra Dawson: Wow, what a cool experience to do in school and to bring all of that knowledge back to the States and kind of like, be in the right place at the right time. At that, um, that event that you had mentioned, um, where it all kind of, like, clicked, where you're like, oh, this is actually really where I'm interested in going.

Sage Fairman: Yeah. Um, after graduating, it was 2020, then the pandemic, and was really challenging to find a job in, like, food and the, like, food justice world. I wanted to continue in, but moving down to Portland, Oregon, I, uh, got an AmeriCorps position with the nonprofit Adelante Mujeres. Before my transition to joining OrCAN I was the market access program manager at Adelante. So I was there for four years working with Latina women and their families. And so the work that I did in the community building through South America

all culminated there too. So. So that kind of led me into my career path, too, of working with farmers and supporting farm businesses. Yay.

Cierra Dawson: Okay, so we kind of talked about, yeah, your interest starting in childhood and kind of some formative experiences through your, um, schooling and earlier career, like how you got started with, um, working with farm service producers and stuff like that. So I guess that kind of leads me into my question about, um, really diving more into the Oregon Climate and Agricultural Network, which we're Talking about, uh, by the acronym or can. Um, so my next question was, what is OrCAN and how did you initially get involved?

Sage Fairman: Yeah, OrCAN is a non profit based in Oregon, um, that was founded in 2017 and we aim to convene a inclusive network to promote soil health and climate resilience through collaboration, through education and advocacy. Really the focus has shifted over the years, um, all under the umbrella of climate and agriculture, but with a specific focus on soil health and climate resilience. And when I saw an opening to be the program manager, I got really excited because I knew I wanted to dive deeper into agriculture as I was working with a lot of different business types at Adelante and was excited to really hone in on um, agriculture and saw the importance of soil health as like the base of everything. In this role too, I was excited to apply my skills in working with Latina farmers. And um, I am white and not Latina myself, so come from this background of privilege and experience to navigate these various Systems in the U.S. um, being fluent in English and at the same time I have so much care and love for just different cultures overall and want to do that in the most respectful way too. And I developed my Spanish speaking skills over time. And um, working at Adelante Mujeres, I was able to build trust and build relationships with that foundation of trust with the uh, producers and small business owners there. So I was excited to bring that and learn more and apply it at a statewide level too.

Cierra Dawson: Cool. I'm really glad the opportunity opened up for you when it did especially. Yeah. To try to scale the impact, like you said, on a statewide level is really exciting.

Sage Fairman: It is, yeah.

Cierra Dawson: Um, well, for people that are not familiar, orcan's website lists three program areas, um, and you kind of mentioned them in your introduction of the, of the network. But

the website states the organization's working on the Soil Health Network, which I know you were very involved in, and education and policy. Um, so I was just kind of wondering if you could provide an example of current projects or just things that are happening in some of those program areas.

Sage Fairman: Definitely. So although soil health is really critical to climate resilience and is the foundation of thriving food systems in Oregon, the support for producers is really fragmented. There's still not adequate technical assistance, financial resources or really the peer network of support needed for farmers and ranchers to be able to implement these holistic land management practices, um, across the state, which looks very different in each region.

Cierra Dawson: Right.

Sage Fairman: So the Soil Health Network's goal is to increase implementation of Soil health practices across Oregon's farms and ranches. Um, and we're doing that by streamlining access to um, relevant resources regarding soil health, fostering connection among peers through farmer to farmer events. Um, and farm service provider to farm service provider events too. Um, as farm service providers are the ones on the ground like giving that support to producers and really creating some alignment across the state towards soil health. So that is more about the Soil Health Network. Um, for the education piece we have done a few different um, train the trainer and farmer to farmer events. Um, but last year or not last year, this January, it feels like a year ago.

Cierra Dawson: Yeah. Time is flying. I'm like why are we already halfway through May? This is ridiculous.

Sage Fairman: It's true. Right? Four months ago.

Cierra Dawson: Yeah.

Sage Fairman: I got to meet you Cierra and about 90 other folks at our Soil Health Summit, uh, which was our first in person statewide gathering focused on soil health. We had keynote speakers and soil health science workshops and a producer panel and um, other things like resource tables and a presentation on funding opportunities all focused on soil health and

connecting a majority of farm service providers to find some long term collaboration opportunities and alignment. And then lastly with advocacy. We are in the state legislative session right now through the end of June and one of orcan's top priorities is a bill called the Food Systems Resilience Bill. And this bill funds various grant programs that touch different parts of the food system including grants for farmers and ranchers, grants for farmers markets and grants for food hubs. And this funding helps all these different groups be more resilient to climate change. And so one of the grants is the Farmer and Rancher Disaster Resilience Grants which I think there were over \$7 million requested. Um, and yeah over like 300 applications around the state for both rounds. Um, and there was \$2.5 million available. Um, um, yeah, so that much was distributed out to ah, farmers and renters across the state. Um, um, but there's such a high demand, um, and a huge need to fund climate resilience strategies. And um, so this is a huge one that or Canada is advocating for right now.

Cierra Dawson: Got it. Yeah. I'm no stranger to uh, grants being so competitive. Um, um, in my world, in my realm of invasive species work and trying to get grants to help community members here in Benton county address certain um, invasive species that they just have in residential areas. I'm not surprised to hear that that is a similar um, experience in food uh, producers realm of things.

Sage Fairman: And yeah, right. And that shows a huge demand, um, which is great to bring back to Legislators. And we know it's a tight budget this time of year, so, um, advocating for that renewal is really important and see what comes.

Cierra Dawson: Yeah, for sure. And, um, I realized in your answer too, that I am operating from a place of having already had the privilege of attending the Soil Health Network event in January and things like that, and launching the network and hearing, uh, all about it already. Um, but for people that were not there in person with us in January, not last year.

Sage Fairman: Right.

Cierra Dawson: Um, I just wanted to also ask you to like, define in however many words about, like, what does soil health mean to you? And I know that I've been in the same room with you a couple of times, including a really fun, like, contestant, like, game show kind of thing at a conference, uh, last month that was about soil health. But can you define soil health and maybe give your favorite soil health practice?

Sage Fairman: Ooh, of course. I know that was a really fun game show, uh, for soil health, that I somehow got roped into being a contestant.

Cierra Dawson: You did great. You did great.

Sage Fairman: Thank you. So at ah, OrCAN we define soil health as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals and humans. And that's pretty broad, but it defines soil as a living ecosystem. It sustains other living things around it. Um, I would also add fungi.

Cierra Dawson: Yeah, yeah. The mycorrhizal network put some respect. I agree. It's true. Yeah. Okay.

Sage Fairman: Where is she?

Cierra Dawson: Yeah.

Sage Fairman: Um, yes, mushrooms and fungi and the mycorrhizal network are huge parts of soil health, but won't get too far into that.

Cierra Dawson: Yeah, yeah, we could both keep going with that one.

Sage Fairman: So, future episodes. And so there are four basic soil health principles, uh, as defined by the nrcs and many other, um, organizations use this as well. Um, and then there's the practices. So the principles are maximizing living roots, minimizing disturbance, maximizing cover or soil cover and maximizing biodiversity. So really making sure that there's living roots in the soil to feed, uh, the microorganisms, um, and create air pockets, um, minimizing disturbance. So that means no till or low tillage, um, as that disturbance can, um, well, disturb the microorganisms in the soil that are working hard to keep it healthy. And maximizing, um, soil cover looks like adding cover crops or mulching. And, um, a little blanket over the soil so it can regulate its temperature.

Cierra Dawson: I love that visual. I haven't heard somebody say that, that I'm going to start explaining mulching and cover cropping in that way. Kind of just like put a little blanket over it.

Sage Fairman: Exactly. Get it cozy. Get it tucked in.

Cierra Dawson: Yeah.

Sage Fairman: Um, and maximize biodiversity. Um, I think that's fairly self explanatory, but incorporate different types of crops and, uh, flowers and, um, animals if you can too. Um, to somewhat mimic natural systems. Um, yeah. And you asked me what is my favorite practice? Um, I would probably say no till. Um, or low till. It's. Yeah. No till overall. And, um, I've gotten to make some permanent rows, um, in working at Mujeres in our community garden. We would make these like 100 foot long and I think 4ft wide rows, um, and do a technique called doble cavado or like double double dig, um, to build these beds, um, and incorporate compost. And you don't need to till them because they're just full of nutrients in the soil. Yes. Is disturbed to make the bed, but, um, it can be easily maintained just naturally. And, um, it's really great to keep all the microorganisms alive.

Cierra Dawson: Yeah. I've talked to a couple of landowners just in doing site visits for different reasons. And I was most recently just on a farm where someone had a really heavy infestation of just meadows, meadow knapweed, black knapweed, just invasive species. And that's why I was there. But, um, he's also trying to make garden areas, and we're trying to figure out the best way to kind of address this invasive weed that he's got that's kind of taken over this new land that he's acquired, but also in a way that he doesn't want to spray herbicide because he wants some garden areas. And what can I do? And tilling is kind of an interesting situation too, when it comes to invasive species management.

Sage Fairman: Right. Tilling can turn up seeds that were maybe dormant in the soil that are known as weeds, too.

Cierra Dawson: Mhm, yeah.

Sage Fairman: And so that can be an issue, but it's also not something that you can switch your whole farming operation to in one year and just think it'll magically work. So it's all a gray area that we're learning as we come. What is your favorite soil health practice right now? Ooh.

Cierra Dawson: Um. Okay, wait. I don't know. Is the. I think I might be mixing up the principles and practices I was gonna say is like, maximizing living roots. I don't know if that's a principle or practice.

Sage Fairman: That'll be more in the principle. Principle practice would be like what you do on the ground, like applying compost. Ah. Rotational grazing. If you're working with cattle Adding, um, biochar, cover cropping. Now, those are some sort of practices.

Cierra Dawson: I think the area, the one that I want to explore more on, especially with my whole role being, like, plants, invasive and native plant coordination and giving technical advice, is cover cropping. Because I just don't know much about, um, cover crops and in, like, an agricultural system, because that's just not my background. So those are some things that I want to, like, learn more about. That's what I would go with then.

Sage Fairman: Good choice. Good choice. Yeah. And with COVID crops, um, I mean, with maximizing soil cover, you put a blanket over it. But with COVID crops, in the spring, when you go to cut them down, you give them a little haircut. Uh, so it maintains the living roots. You're not pulling the roots out. Um, you just give it a haircut and can put the COVID crop itself. Um, just lay the cut crop the holy.

Cierra Dawson: Yeah, just let it stay. Yeah. Oh, uh, can I say how much I appreciate you putting it in terms like that for me and probably other people that don't have, like, an agricultural background, because now I'm like, oh, I have such an accessible way to explain these concepts. Thank you for that.

Sage Fairman: That helps me, too. I don't come from a science background. I come from, yeah, more social science. And, um, yeah, just some experience growing food, and it's that reciprocal relationship and taking care of the soil and the plants, um, they're living beings to. The soil is living, and so we have to take care of it.

Cierra Dawson: That's awesome. I actually think that our backgrounds combined is, like, so, so powerful because, yeah, you have a relational piece and, like, an ability to kind of translate a lot of complex topics into something that's very easily understood. And I do have more of a science background. I'm like, yeah, that micro. Mycorrhizal network and, like, all the microorganisms and stuff and ketone exchange and like, all of the, like, sciency things. I'm

like, oh, ah, yeah, I can get into that. So that I think this could be, like, we got something going on here.

Sage Fairman: It's true, it's true. We got to just bring over some braiding. Sweetgrass by Robin Wall Kimmerer. And that's the perfect combination.

Cierra Dawson: Yeah. Uh, I love it. In general, what is one thing that you want more people to know or understand about the work that you do?

Sage Fairman: I think the work that we do can be, um, confusing. Ah. As a network model focused on climate and agriculture, our role really is to serve as a connector. Um, Allison from the Rogue Valley Food Systems Network used the term um, in describing what they do as like they're the backbone of a lot of different food systems work. Um, and I think OrCAN could be described in that way too, where it's like we can support in XYZ and education, collaboration and advocacy. Um, and there's be that like support on a holistic level for the work that's happening on the ground and throughout the state.

Cierra Dawson: Oregon's a really big state with a lot of different ecosystems and just landscapes so I bet that there's a lot to coordinate and take in and consider at a statewide level for doing something like this.

Sage Fairman: There's still a lot of questions we have, but that hope that gets resolved or answered as best as we can through people and through those connections and conversations. So really making sure that we're not um, just reinventing the wheel or creating something that's not useful, but rather based in the needs of the folks around different regions across the state.

Cierra Dawson: Yeah, and I know that um, this organization, I mean it's, it's not new like you said, it's been kind of the inception around 2017, but it's still, you know, it's always going to be like a work in progress and a lot to learn and just keep evolving and iterating. The last question that I had for you was what are you most excited to see or achieve in the future going forward?

Sage Fairman: I'm excited to see the Soil Health Network functioning and running and uh, we're getting some agreements finalized right now with regional, uh, hub leads to have that

regional support tailored to place. Um, so excited to get those agreements formalized and just see in five years, ideally more greenery around the farms and ranches seeing more beautiful like dark brown black soil.

Cierra Dawson: Uh, organic matter.

Sage Fairman: Organic matter, yes. Um, and excited to see producers that aren't being reached right now get the support to be able to implement soil health practices and usually isn't. Well, I don't want to say it in like absolutes, but it's usually not a knowledge gap. Farmers and ransors know their land and know what they're doing they're experts in. So it's the adequate technical assistance, it's the financial support and connection to others. Um, if your neighbor is doing something that is working well for them, like you'll probably maybe be more willing to try that to um, implement that on your land as well. So yeah, overall, looking forward to the Soil Health Network functioning and seeing those stories and uh, the change on the ground and in the ground below the

Cierra Dawson: ground and in the ground. Yes, I like it. And there you have it. I hope you enjoyed hearing from Sage today. If you're now so hooked on organ and wanting to learn more about the organization and its program areas, you can visit the website, which is oregonclimateag.org and there are resources, all of the soil, health practices and principles that we talked about in today's episode. And if you primarily speak Spanish, the entire website can be translated in Espanol.

Thanks so much again for listening and I'll see you next time.