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Resilient ranching workshop: NCAT presentation: Soil for water

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BEGIN TRANSCRIPTION

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Unknown

We have a really great sponsor. It's ncat. The National Center for Appropriate Technology. And this is Cara Kroeger. Did I get that right? And Cara Kroeger, and she's going to kind of introduce what they do, and then she's going to give a short presentation on soil for water, which is something that I really am particularly interested in because I've had to work, so much in the carbon space, both with my business and then back as, CSU employee with trying to kind of work out what that means.

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But Cara came along and she said, you know, I've got this different concept and that soil for water. And I just went, I love that. So anyway, I'm really excited to kind of shift some, maybe some of our thoughts or think about soil health in terms of water storage in Colorado. And hopefully I'm getting that right.

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But, yeah, she's going to she's going to speak. So schedule wise you're going to be on for half an hour or so. Yeah. Okay. And then we're going to go look at another soil pit, for about 40 minutes. And then we'll be back here. And Nicole is going to speak more on the gut biome and its relation to soil health.

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And we'll wrap it up. So my first, you know, we Nicole and I kind of decided that logistically it's pretty tough, to look at that because we don't have it set up with the computer, but we'll do the lake test and, Yeah. So anyway. All right. Thanks, Andy. Well, thank you everybody. I am Cara Kroeger, and I come from San Antonio, Texas.

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Our program for water started in Texas, and we're expanding nationwide. So I'll explain a little bit more about that. But first I'm going to talk about the National Center for Appropriate Technology, which is a

mouthful. How many people in this room have heard of in cats or the National Center? Okay, so a few people anybody in here hear of Astra?

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Astra, use natural resources. Okay. Good, good. So basically, so all for water is another program of in cat. And first I'm going to start by talking a little bit about just in cat in general. So in cat is a nationwide organization. We've been around since 1976. And we have offices in all these different locations here. We're pretty small organization.

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There's only about 80 of us in the whole organization. And in these satellite offices, there's anywhere from 1 to 5 people in those offices. But in each of these places, we come up with different projects. We get a lot of SIG grants. Within our case. We do a lot of Sare grants. We do a lot of, privately funded philanthropic grants.

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And then we'll do research or we'll do workshops on how to improve farmers, how to get farmers to become more wholesale ready, so how they can scale up and, enter different market channels so that they can improve their bottom line. We also have a program called Arm to Farm, which is a one week long free program to veterans that allow them to, come for a whole week and we pay for everything, the place to stay.

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We visit all these different farms, they do hands on work. And then we have in in class sessions and as well where they learn about, you know, small business start up and things like that. So it's a huge amount of resources. I think our name is not very well known because it's a mouthful, but, if any of you know who have gone to the at your website, there is just a huge amount of publications, podcasts, all kinds of things up there.

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So, how many of you all have participated in an in cat workshop before or done any of our events? Anybody in here? No. Okay. Well, if you are in one of these places near here, hopefully you will start seeing some events. We're going to be doing a lot more events here in Colorado by way of the salt water program.

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So keep your eye out. But I'm going to talk a little bit more about that as we go. So as I mentioned, Astra is our program of in Cat that is funded by the farm bill. So we get money from the farm bill each year to, do workshops, make publications, do podcasts. I mean, I've done podcasts with, Fred Provenza and Glen Ellyn.

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I don't know if y'all know these names. But I've done one with Nicole Masters. I've done one with, Kate Greenberg. So we've got all these really awesome podcasts up there that are with these really wonderful people doing good things in the community, and then also just producers who are just simply have a lot of good technical advice to give to whether you want to have a poultry operation or whether you want to grow a lavender farm or grow bees, it's it's up there.

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It's on there. You can type it in the website and learn. So if you've never visited atrazine cat.org, I highly recommend that you guys check that out. So I'm here mostly to talk about soil for water and soil for water is an initiative to catch and hold more water in the soil. Simple as that, right? Leave the carbon out of it.

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The more carbon follows water, right? So the more that we can, capture and hold water in the soil, the more capacity we are going to have to store carbon, as well as all the other nutrients and trace minerals and things that we've been talking about all morning. So basically, so if a water acts as the facilitator and a networker, an educational resource, and we are interested in connecting with as many partners and producers as we possibly can.

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So that's why I'm here today. I'm going to give you just a little background on the program. In 2011, as you all may have heard, Texas was under a very, very severe drought and we lost huge amounts of agricultural production. A lot of livestock were lost. And, you know, people weren't even able to stock because the prices were were so low.

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And, you know, cattle were just dying. So it was very devastating. And in 2015, this woman here, Peggy, Chris, she is a certified RMI educator and a livestock producer. She approached in Cat and said, I want to create a program that teaches livestock producers how to capture and hold more water in their soil. And so, being in Cat, we are very fortunate that since we've been at it for so long, we get a lot of grant funding.

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People are glad to fund us. And so she came to us and we started well for water. And at that time we were doing a lot of workshops, educational outreach on adaptive grazing, riparian restoration, silver pasture, cover crop or pasture cropping, things like that. We still do that. And then we were also starting some trials.

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So we have trials set up, which I'll talk about a little bit more on 15 different ranches. And so we plugged along like that for the past five years, doing these trials and doing these educational workshops. And then luckily, around 2018, all the 15 ranches that we have, these research trials going on, we, started a network amongst those producers.

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And so we meet about every three months with those, those producers. And everybody has the opportunity to share their stories of what they're doing because they're all in a similar region. It's all in Central Texas, more or less. We have a few outliers. And in the Panhandle, in the bird Clark up in Wichita Falls. But, for the most part, they're all in central Texas.

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And so when we get together, somebody will throw out a subject. So we've had a couple producers who have done some subsoil ripping to, you know, open up the soil where they've had compaction. And so sometimes that will start a conversation and people will share on that. We have some people who have done some microbial inoculations, right. Or some microbial inoculations with the pasture cropping.

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So these conversations develops and more and more people were learning from another. And we realized the best way for producers to learn from one another. And the best way for producers to learn is from one another. So in 2020, we were awarded an NRCs Conservation Collaboration grant to basically expand our network, expand the soil for water network. And that grant gave us the money to expand into Colorado, New Mexico and California.

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And so we have now open that up and are accepting producers, livestock producers from those four states to join the network. And our goal is to slowly build these little, you know, hubs where people can chat and learn from one another, both on the regional scale but as well on the broader scale, too. And, so if anybody would like to learn more about that, I'm going to talk about that in the future.

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And then in 2021, we got a Sare grant to expand into Arkansas, Mississippi and Virginia. And we're going to be opening the network in to that those states as well. But also we're going to be looking at, I'm sorry, why people don't adopt regenerative agriculture, in those states and what, what's taking, taking so long for you know, the movement to be held there.

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So we're going to be working with producers as well as extension agents to see, you know, what it is that is that is preventing people from taking on these, adopting, adopting. That's the word I was trying to figure out. Sorry, it's after lunch. That potato didn't do me, didn't do me very well. So, All right, so just to talk a little bit about the regenerative ag trials that we're doing, in Texas, we are doing annual monitoring services there, and we have specific transects set up on these ranches.

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And we're doing soil testing. We're looking at percent cover data, and we're also looking at the species, as well as the percentage of the species in that pasture. And a lot of these fields are looking at how long it's taking for succession to happen based on a particular management practice. So, you know, maybe they're running hogs through once and then following it with multi-species.

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And we're looking at how that succession happens on those transect lines. In other protocols, we, you know, we've done the subsoil ripping on some of those places and not on the other transect. So we're comparing the two there. And there's a lot of different different. Each ranch has a different concept going on. Right, that we're looking at.

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So, that has been a really, really awesome thing that we've taken on. Unfortunately, you know, this monitoring takes a lot of time. It takes a lot of of people to be doing it. And I know that a lot of producers don't have time to get out there and do this in depth monitoring. But one of the things that we do encourage in the network that we are developing is for producers to figure out some small way to do some monitoring, and that way they can be, you know, you've got a you've got to, monitor to manage.

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Right. It's hard to know whether your management is is really doing the trick if you're not measuring it in some way. So as a member of the network, we offer technical assistance to producers who want to set up either a small trial on their own. We can walk you through how to do that, or we can, just recommend different tools that might be good for your particular scenario and your particular time frame that you have in order to do it as well.

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So even though we don't have in-depth monitoring for all our network members, we can help you design some. This is on a ranch up in the Panhandle, and in Texas. And, the monitoring that we do there, we work

closely with NRCs to do that monitoring. And so they help us with the plant ID and the soil sampling and that type of thing.

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These are some of the different things that we recommend for monitoring. I know that, y'all. How many people in here monitor? What are some of the monitoring tools that y'all use? Where he's at the transects then, and I set you up. Okay. I just got a place that we're starting all over, and then we have a lot of small test sites or watching these little flags and saying,

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And you're looking at ground cover and the species that that common. Yeah. Different things at different places. Yeah. See what's going on. Awesome. Grass snap. Yeah. Anybody else?

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Different monitoring. They're doing the bullseye. The bullseye. All right. Bull's eye. How many people have heard of bull's eye method? Okay, so the bull's eye is a it's a it's a great method. You know, the main thing with monitoring is, you know, a lot of people are like, well, you know, if I just go and drive in my truck and look on the side of the, you know, look out from the truck, you know, you're not going to learn that much.

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That's not the way to monitor. And I know that this group of people knows more, know knows about that. But getting on the land and looking deep into the soil and looking deep at the plants is really and and the plants and pollinators and all the different critters and stuff that are there. So, if y'all need any help with designing any monitoring protocols, please don't hesitate to reach out to me.

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And, if y'all have questions that I don't know, then I will, you know, find the right person to connect you with. But we're we're glad to help in that arena. So this is an example of some of the other, classes that we do, you know, just the, the topics that we do, classes on. And we're always open to suggestions as well.

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So, we will be holding a lot of virtual classes coming up and then in the next couple of years. And so if there's a topic that specifically y'all want to learn about, you can ping me and I'd be glad to put that on the list and, and take it into consideration and do some classes on that.

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So over the next couple of years, Annie and I are talking about putting together a class in either the San Luis Valley or Northeast Colorado coming up in September. Right? I think so, I don't we got to talk a little more. We got to talk a little more. So. Stirling. Yeah. So, you know, these really? Yeah.

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That's not. You. I'm going to have to make a drive. So. We're going to try to hit a few different places, but Yeah. So we've got, we've got more in-person events coming up here in the next year and a half. But we can also do these virtual events. And, you know, even if it's just a small group of people, if you guys in a particular place say we're dealing with this issue, can, can would you mind facilitating a conversation about it?

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You know, we'd be glad to do that and, and help in any way that we can. So please know that we're here as a resource. And, as we build this network, you know, we don't have it all figured out. So your suggestions and your, your input is very helpful to us of what you think might work in your area.

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So I kind of already said a lot of this, but our goal is to, you know, build the network in Colorado. We do have quite a few people who have already joined from this particular area. Natalie Aleo has been working with a few people and talking about it. So we've got quite a little cluster that's already happening here.

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So if you all want to join, yes. Oh you are what's your name? Oh, yes. Good to see you. Thank you for joining. Yeah, yeah. So, Yeah. If anybody else wants to join, you can go to our website. It's all for water.org, front slash network enrollment. And basically there's a short little application that you fill out on there.

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And that application just gives us a little bit of insight into where you are, what it is that you really want to learn more about, any particular issues that you need help with. And then as long as you're a livestock producer and you're in one of the states that we've, we we're open to, you get accepted.

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And then once you are accepted, we offer a couple of different. Let's see, those are the states that were open. And once you, once you are accepted, we have a members only page on our website. And on that website is a map of all the different members that are in the network. And so you can find other network members in the, in your area, and you can connect

with them and reach out, and maybe you'll meet new people who you didn't know where we're doing regenerative ag, and you can opt out of being in the map.

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You don't have to be on the map if you don't want to, but if you want to, it's helped to get the communication going. We also have some discussion forums where we're rebuilding right now to Listserv, but we're rebuilding our discussion forum so that it'll be a little more clear and concise. And you can put questions up there or post pictures if you are doing monitoring, you can, you know, post those pictures and show the changes that are happening over time.

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And these are the kinds of things that we're wanting to build there so that, you know, this, this discussion and this, possibility of showing that it works so that more people want to adopt, is the direction that we're trying to head. So how many anybody in here use pasture map? A few people. So as a member, you get, pasture map for \$99 a year, which is a huge discount.

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So if you want to use if you've been thinking about it, but you're not using it because it's a cost prohibitive, you get that, application for \$99 a year. We're also offering discounts to Region AG Lab, which is in Nebraska. And it's Lance Gunderson just opened this lab. And so you get discounts on soil testing through that laboratory as well.

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It's 10% in the first year and then 15% the second year. So it's pretty significant. Yeah. And we did it that way in order, you know, in hopes of creating that, you test again, you know, look at that comparison. And, you know, with soil testing I mean depending on what you're testing. But, you know, usually every two years is is fine.

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So it doesn't have to be every year. And then we also offer exclusive member events. And there's going to be, like I said, both person and individually. This is a class that we have coming up on September 20th, and this is going to be a workshop held by, D.D. Pursehouse and anybody in here, have you all heard of D.D. Pursehouse?

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A few people. So basically she really works around, you know, creating a framework in your mind around around your management. And instead of thinking of it black and white, really thinking of it in a bigger picture and, and how everything is affected. And so she's going to go into, that concept of, you know, how do we grow community and climate resilience?

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Through regenerating the soil sponge. Right. Because everything is connected, as most of you know, here. And so by way of thinking of it, bigger than just your ranch, it can actually help solve problems on your ranch. So we'll be going over that if you're a community, if you're a network member, this is going to be followed up by a four part series that the group will will continually meet, for four weeks.

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And or let's say, I think it's actually two weeks, twice a week. But we'll be meeting a total of four times and then having really specific discussions. And in those series will actually have a person from each of those four states Colorado, New Mexico, California, and, Texas talking about specific soil sponge issues that they're dealing with in their communities.

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And so if any of y'all want to join and you want to be the farmer that talks about, the rancher that talks about their issue, please let me know. And, you might be able to, have a group working on a problem that you want to solve in that workshop series as well. So, so that's one of the things that coming up, this is open to everybody.

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So regardless of whether network member or not, you can join this. It's an online, event. And you can go to soil for water.org and sign up on the events page. And then if you sign up as a member, there's a members only calendar, on that password protected web page. And you can sign up for the series there as well.

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So, just to give a few other a little pieces of information on the network. Once you're once you're in there, if you go to the network members page, you're going to find a lot of resources that, you can't always find everywhere. We've got grazing manuals on there. So, the each of my grazing manuals. So if you need a refresher on that, or you're new to grazing and you want to really try to step up that, we've got those manuals on there that you can download.

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And those resources are going to continue to grow and build. And, you know, if anybody else has resources that they want to share with others, things that they've come up with that they think could be helpful, please don't hesitate to reach out. And, you know, if it looks like it's in alignment, we'd be glad to share it.

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So, does anybody have any questions?

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Membership is free. That's a good question. Yeah, membership is totally free. Yeah. Most of what it does is is free. And if we charge something for an event, it's just a very small fee so that people have accountability to show up. Otherwise most of what we offer is free. So yeah. Anybody else? Nope. All right. Well, thank you very much for listening.

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And, I do have a few, fliers here on the network, and I will put them at the back of the room. There's a QR code. If you're technologically savvy, you can scan the QR code and, go straight to the network application. So I'll put those in the back. And if anybody has any other questions, just let me know.

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Thank you. Thank you.