

TRANSCRIPT

INTERVIEWEE: Lindsey Sterling-Krank

INTERVIEWER: David Todd

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David Todd [00:00:03] Well, good morning. I'm David Todd. And I have the privilege of being with Lindsey Sterling-Krank. And with her permission, we plan on recording this interview for research and educational work on behalf of a non-profit group called the Conservation History Association of Texas, and for a book and a website for Texas A&M University Press, and finally, for preservation in an archive at the Briscoe Center for American History, which is at the University of Texas at Austin.

David Todd [00:00:41] She would have all rights to use the recording as she sees fit, too.

David Todd [00:00:48] And I just wanted to make sure that's okay with her.

Lindsey Sterling-Krank [00:00:50] Hi, David. Thank you for having me. Yes, you have my permission to proceed.

David Todd [00:00:55] Great. Well, thanks for for being with us and for agreeing to do this.

David Todd [00:01:01] So, right now it is Thursday, April 28th, 2022. It's about 11:50 in the morning, Central Time. As I said, my name is David Todd and I am representing the Conservation History Association of Texas. I am in Austin and we are lucky to be conducting an interview remotely with Ms. Sterling-Krank. And she is based in the Boulder, Colorado, area.

Lindsey Sterling-Krank [00:01:33] She is the program director for Prairie Dog Conflict Resolution, and that's associated with the Humane Society of the United States, in its Wildlife section. And I believe she has some fiscal sponsorship through the Defenders of Wildlife. So that may give us some clues as to her background. She has led the Prairie Dog Coalition for close to two decades, seeking to find ways to coexist with prairie dogs and persuade others to do that.

David Todd [00:02:08] Today, we'll be talking about her life and career to date, and especially take this chance to focus in on her work with the prairie dog.

David Todd [00:02:17] So, that's the plan.

David Todd [00:02:19] And I wanted to start with a question for you. Would you please tell us about your childhood? I understand you grew up in Dallas, and I was curious if there might have been any people who were a big influence in your interest in working with animals and prairie dogs in particular.

Lindsey Sterling-Krank [00:02:43] Hi. Okay. Yes. Well, hello from Boulder. And my childhood ... and I did grow up in Texas. I'm definitely a native Texan and proud of my state and miss it often. And really, doesn't it really matter what side of the aisle you're on, I think there's a lot of really friendly people in Texas and I miss that a little bit. So I grew up actually, I lived half my childhood in Arlington, Texas, right in between Dallas and Fort Worth. And then when my parents got divorced when I was in third grade, I moved in fourth grade to Dallas near downtown, near SMU, in a little spot called Highland Park. And I finished my high school there, until my junior and senior years where I transferred to a really neat little boarding school in Sedona, Arizona, called Verde, the Verde Valley School. And that was a really positive, life-changing experience for me.

Lindsey Sterling-Krank [00:03:46] And along my childhood, I had, definitely had, a few people that were instrumental in helping me really just experience a love for nature and the outdoors and wildlife. And that would have been my godmother, Barb, who had a wonderful homestead in Dripping Springs on the Pedernales. And my mom was a working mom and she would send me to my godmother's for at least a month every summer and it was wonderful. We would play in the mud and ride horses down the river and really had a lot of free rein outdoors. And I loved it there.

Lindsey Sterling-Krank [00:04:27] And then my my granddad, my mom's dad, he was a pretty good outdoorsman and he was a hunter and a fisher and a fly fisherman. And he would tie his own flies and bring back a deer and use every piece of the deer and, you know, the fat for bird cake and suet, and the hair to tie caddis flies to catch fish on, and the meat for the meat. And he just didn't let anything go. And I really admired and respected that about him.

Lindsey Sterling-Krank [00:04:58] And my granddad ended up with three girls and didn't stop any of his endeavors into the outdoors just because he had three girls. One of my favorite stories is when they were all canoeing in the Boundary Waters and literally carrying the canoes over their head through the forest to get to the river, and talking about why their backpacks are so heavy. And it's because one of them had packed a hairdryer and who knows what else. So, I really appreciated his drive to, for adventure in the outdoors, and I definitely got a part of that for me.

Lindsey Sterling-Krank [00:05:39] And then my dad, too, was a lover and an adventurer of the outdoors. And when I was 13, he took me on a backpacking trip across the country and we did Grand Canyon from rim to rim. And he also had too heavy of a pack trying to make sure I loved the outdoors, packing sauce in glass jars, and who knows what else. But we backpacked through the Tetons, and river-rafted, and it was an amazing trip. And I think those experiences really cemented my love for the outdoors.

Lindsey Sterling-Krank [00:06:15] But I do have to say, when one of the reasons my parents got divorced was because my, you know, my dad was very, you know, inclined to do the outdoors adventuring. And my mom was not. She was done with her canoe-carrying ways. And she said one day she woke up and she screamed at my dad, "I hate it. I can't do this anymore. I want luxury!".

Lindsey Sterling-Krank [00:06:41] And I always remember thinking, "Oh, no, what if that's going to happen to me?" You know? And I was waiting and waiting and waiting and wondering if my zest and love for the outdoors was real. And I think at some point in college I was like, "Okay, I'm feeling secure in my ways. This isn't going anywhere." And I changed my

major from journalism to environmental science, and here I am still working in environmental science. I think I must be approaching 25 years later now.

David Todd [00:07:10] That's great. It is so funny how these, these early adventures leave a deep, lasting mark. It seems like they have for you.

Lindsey Sterling-Krank [00:07:24] Yeah. It's funny the things that are profound in your childhood were such a small thing for somebody else, but not really.

David Todd [00:07:32] Yeah, they count.

David Todd [00:07:34] Well, so, you mentioned that when you were in college, you had a change of heart and switched from journalism to environmental science. I understood that you went to the University of Montana where you got your environmental science degree.

Lindsey Sterling-Krank [00:07:50] Mm hmm.

David Todd [00:07:50] And and were there any classmates or teachers or events while you were in school there that might have sort of contributed to your interest in nature and science?

Lindsey Sterling-Krank [00:08:02] Yeah.

David Todd [00:08:03] Prairie dogs, even?

Lindsey Sterling-Krank [00:08:06] A little bit of a longer response, but I actually started my college career at the University of Kansas, and then I got a scholarship to travel abroad and study abroad on a Semester at Sea program. And Semester at Sea is like this small cruise ship that literally you sail around the world and you port in ten different countries. And I was porting in all these different countries and getting off and going adventuring and doing outdoors work around the world. And I remember just thinking, "Oh my gosh, the world is ... you know, the environment is in such peril." You know, I would be in the middle of nowhere and there would be a giant pile of trash, you know, like half a square mile big, that really needed to be dealt with, and was full of plastics and toxins. And, you know, I could just see its negative effects leaching out into their environment.

Lindsey Sterling-Krank [00:09:02] And it was really that experience that I came back and I just said, "I love the Earth so much and there's really so much that needs to be done. It's really underserved. And this is what I want to focus my attention on." And it would have taken me three more years to switch my major and stay focused on that at the University of Kansas. So, I switched that summer. I think I had come back and I rode my bike from Mexico to Canada, and along my trek from Mexico to Canada, we stayed in this cute little town called Dillon, Montana, and they had an environmental science department at the University of Montana Western.

Lindsey Sterling-Krank [00:09:40] And I met some people that were going there and met some of the professors, and they were really kind of recruiting students to kind of come and join their program more. And I just got really impassioned with where that was located and their situation and their program and their people and their small town, you know, community. And I transferred there, and I finished there, in the next year and a half or two. And actually met my husband and still have some great friends from there. And worked for Patagonia and they were supportive of environmental efforts there. And that really kind of

sealed my deal to stay focused on, on the environment and environmental science for my career.

David Todd [00:10:26] You know, it's, it's intriguing, this, the mention you give to the Semester at Sea program and just the realization that there is this connection to problems elsewhere and there is no "away". I guess that's a pretty sobering thought and it sounds like it's stayed with you. You've certainly stayed focused on this for, gosh, would you say a quarter of a century? So impressive.

Lindsey Sterling-Krank [00:10:56] Thank you. I definitely want to leave sometimes, and I have to kind of go inward occasionally because there's a lot of conflict in conservation. And basically that's what conservation is: negotiating how much wildlife and how much habitat do we need in order to still meet people's needs with our multiple use lands and, you know, the resources that we need to keep thriving in our community. And the stakes are high. The stakes are high for the people, and the stakes are high for the animals. I mean, they're losing their lives. And people, you know, take it very personally, using public lands and making their living off of public lands. And there's a lot of high-powered conflict and passion involved.

Lindsey Sterling-Krank [00:11:39] And sometimes I do want to walk away because it's just exhausting, and it's such a long fight and such a long battle. And I have to kind of go inward and go outdoors and do a lot of self-care and really look around and say, "This is worth staying in it for." And, you know, kind of do some professional development and take some time to myself and do my self-care and get a new, you know, kind of recharge and get back out there. It's, it's really underserved. So, I'm so grateful to anybody that stays in conservation, anywhere in the country, and at any level.

David Todd [00:12:14] Yeah. I hear you. I think that it's it's such a marathon and a pretty grueling one. So, interesting to hear how you keep yourself cheerful and, and dedicated.

Lindsey Sterling-Krank [00:12:33] Sometimes I think something's wrong with me, like, genetically. I might be, I'm definitely an idealist. Anybody that's going to be a prairie dog advocate has to be. But I, I wonder, like, do I have some sort of, like, tweak in my genes where I can keep seeing the positive ahead, or keep laughing or, you know, keep seeing a solution or keep seeing something worth working towards, because it is, it is a lot of losses.

David Todd [00:12:59] Oh, I bet.

David Todd [00:13:03] So, you know, one thing that that I think some folks look to, to, to feel some community and encouragement is to pieces of the cultural world. And I was curious if there are any books or films or TV shows that have excited and encouraged you, given you comfort, taught you things. Anything like that?

Lindsey Sterling-Krank [00:13:32] You know, I, I remember it being my dream as a, as a kid to work for National Geographic and, you know, because they were really the ones that were really getting out there, going all the way to the edges of the earth, and all the way into the depths of the earth. And, you know, figuring out what are the root problems, and what's going on, and sharing that in a beautiful storytelling way with the rest of the world. And, you know, I have a copy of their latest magazine right here on my kitchen table. And I'm still so grateful to them for really being the root of nature and conservation, you know, in the United States.

Lindsey Sterling-Krank [00:14:08] And, I would say, just knowing that people are out there and doing that work, and it's beautiful and they're having successes, even if they're small. And the world needs so many people, you know, fighting, and standing up for, and speaking for, and working to understand and study nature and the environment, and their display of all that was just so beautiful to me and enticing and, you know, empowering and motivating.

Lindsey Sterling-Krank [00:14:36] So, I still, I actually got to be on National Geographic a couple of years ago, and I felt like it was the, one of the zeniths of my career. And that really, you know, brought things home to me. And I know people that work for them here and there. And I'm really grateful and appreciative to, to what they've committed to doing for the earth and nature and the environment.

David Todd [00:15:01] Well, I bet with your earlier interest in journalism and your, your later commitment to environmental science and the prairie dog work, you must feel a real empathy for those folks who work at National Geographic and are telling those stories.

Lindsey Sterling-Krank [00:15:20] Yeah. And for the people whose stories they're telling. I mean, that's, that's really, you know, why, that's really what the story is, right? That's really the heart of the issue, too. So, I'm, I think that that's, it's so meaningful and beautiful.

Lindsey Sterling-Krank [00:15:35] And I, I remember, you know, talking to my stepbrother once and I was saying, I, you know, I did not choose a lucrative field, but my life is so rich. And he said, "Oh, gosh, that's amazing that you think that. I don't even think my kids would know what that word of that, that that definition of the word means, and the way that you're using it. And I just thought, I'm not sure I'd change it.

David Todd [00:16:03] Yeah, I guess there's there between the price of things and the value of things.

Lindsey Sterling-Krank [00:16:08] And just, yeah. And you know, when I think of "rich", I think of deep color and, you know, heartfelt meaning, and layered textures and fabrics and, you know, parts to the ecosystem. So, it's very, it's a very rich experience to be a conservationist and be somebody who's immersing themselves in nature. And it's a beautiful part of life.

David Todd [00:16:36] Yes.

David Todd [00:16:39] Well, you know, the, I guess one of our hopes in visiting with you is to learn about your experience with one piece of the environment. I mean, it sounds like you have a really wide, kind of horizon of, of interest. But maybe you can tell us a little bit about your, your experience with prairie dogs. And I'd be curious how you first encountered them and got interested in them.

Lindsey Sterling-Krank [00:17:12] Well, my first encounter and when I got interested in them was just hearing one of my colleagues, who was the (one of my colleagues now), who was then somebody I really admired and idolized a little bit and looked up to - Jonathan Proctor. He was working in Montana, too. And he was, he did his master's thesis on the range of the black-tailed prairie dog and how imperiled the species had become. And I think we were at a Patagonia conference or something, a wilderness conference somewhere in Montana, and he was giving a speech. And I just thought, "Wow, that is really awesome work, and a really big cause, just really looking at the Great Plains." And then I went off and I went

around the world, and I traveled, and studied a lot of different, you know, species and immersed myself in a lot of different environments. And I came back and I decided I'm not going to work for somebody else's hip research projects anymore for wildlife. I'm going to work for a cause.

Lindsey Sterling-Krank [00:18:14] And the only job that I could find was prairie dogs. And I know my granddad, I had a little bit of some temporary work in there working in the Aquatics Department for Colorado Parks and Wildlife. And my granddad being the fly fisherman he was, was very excited. And I remember him taking me to the Arkansas Game and Fish, and the Arkansas Fly Fishermen annual meetings and showing off his granddaughter, who was working on fly fishing in Colorado, now in the big rivers. And I think he was probably a little disappointed when I took the prairie dog job.

Lindsey Sterling-Krank [00:18:52] But when I decided I needed a full-time job, prairie dogs were the only thing available. And that was 25 years ago.

Lindsey Sterling-Krank [00:19:02] And it's been, you know, it's been a challenge and beautiful and a blessing, and sometimes I say a curse, all at the same time. And I I'm so, I have, I'm, I feel so privileged to be able to work in this field.

David Todd [00:19:20] Yeah. And it sounds like you have, have really committed to it. And it's hard to stay focused when there are so many distractions and, and things that interrupt us in life.

David Todd [00:19:33] Yeah.

David Todd [00:19:34] So ... go ahead, please.

Lindsey Sterling-Krank [00:19:38] Yeah. I was just going to, to say one thing that, you know, really has impacted my decision to stay working on the prairie in the grasslands and the Great Plains is a couple of things, you know. I used to study Northern goshawks, and bugs on the Colorado River, and bighorn sheep, and they were really kind of species-specific. And studying a prairie dog and getting to know a prairie dog colony, a prairie dog ecosystem, is really rich, again, because there are so many other species associated with a prairie dog town, that you get to see and experience so many more wildlife than I'd other ever experienced, you know, working on some of these other species.

Lindsey Sterling-Krank [00:20:21] And that was really just so interesting and intriguing and so rich with biodiversity to me that I got to see bugs and you know, gosh, we have tiger salamanders in prairie dog burrows, to American badgers and coyotes and mountain lions hunting on prairie dog colonies, and, you know, raptors and eagles. I once saw a bald eagle and a golden eagle fight over a prairie dog with their wings, in a battle of their wings. And, you know, just the most amazing different wildlife species I get to experience and enjoy on a prairie dog colony has really been compelling and really driven home the fact, you know, how important of a species and a keystone species prairie dogs are to so many others.

Lindsey Sterling-Krank [00:21:10] And then there was this one person that said, "Well, Lindsey, I know it's hard, but you're doing good work and anybody can love the mountains, but it takes a true soul to love the prairie." And I was like, "Yeah, I guess I'm a true soul." So, that was a little bit encouraging.

David Todd [00:21:31] Well, it's, it's interesting about the prairie, you know, it's so (I mean, intact prairie), I guess, is so rare and...

Lindsey Sterling-Krank [00:21:39] Totally.

David Todd [00:21:40] And it's and it's not dramatic. You know, it's it doesn't it doesn't have the, you know, the great heights of mountains or the big, you know, depths of the ocean. But it's, it's got such complexity and richness. And sounds like that is a part of the whole ecosystem that you've been studying, you know, through the kind of window of looking at the prairie dog.

Lindsey Sterling-Krank [00:22:04] Yeah. And I think actually if you were to sit out on the prairie, or the grasslands, for just a little bit, and turn your ears on, it really comes to life with a symphony of sounds. And it is dramatic. I mean, you have, you know, Northern harriers diving for prairie dogs and the whole prairie dog colony, you know, communicating, and chirping and making song for each other. And the western meadowlark coming and singing its beautiful trill.

Lindsey Sterling-Krank [00:22:31] And it's, you know, it has, what the weather too: you know, you can see it coming and then it's here and oh, my gosh, it's, you know, another storm and then a beautiful sunset.

Lindsey Sterling-Krank [00:22:41] And it's, it is dramatic. You've just got to sit still for a little bit.

David Todd [00:22:46] I hear you. And I guess I should just pay more attention.

Lindsey Sterling-Krank [00:22:51] Yeah, do it. You'll love it.

David Todd [00:22:53] Well, you know, I think it's, it's interesting that there's some folks who do this as a, as a hobby, and they do it on weekends or nights or, you know, spare hours here and there. But, but you've really committed, as a career, to study and help these prairie dogs. And I was curious how you first came to work for the Prairie Dog Coalition and the Humane Society. And, you know, if you have any sort of insights about the institutional side of what you do, the career as opposed to the, you know, the thought and the care and the, you know, hands-on work that you do.

Lindsey Sterling-Krank [00:23:41] Yeah. You know, I, so, I guess I first got, I was working in the field for a long time actually doing translocations and relocations of prairie dog colonies and working for a small non-profit called "The Wild Places". And they were kind of where I got my start in prairie dogs and my first prairie dog job. And I'm very grateful to them for giving me that chance. And at some point, they were kind of moving on or dying down. I can't remember how that happened. And this full-time job for the Prairie Dog Coalition came up and I thought, "I got to I got to try for that". And I remember there was this wonderful colleague of mine, and she put her name in the hat, too, and I thought, "There's no way they're going to hire me over her". So, I was totally deflated and I don't know what happened, but she pulled her name out of the hat the night before, and I don't know if I would have got it or not, but the next day was the deciding day, and I did get offered that job and I was really excited.

Lindsey Sterling-Krank [00:24:47] And that full-time job was a decent salary, you know, back then, 20 years ago. It was low-paying but, you know, decent for conservation. It was fine.

And it was after a series of internships and, you know, stipends, and low-paying jobs, and working for free, all to stay in my field. And I really kind of felt like, at my age in conservation, you know, you either got a job after school and stayed in your track until you got a job. You could sometimes work your way up through the government fields if you could stick around that long. Or, you went to grad school.

Lindsey Sterling-Krank [00:25:24] So I really stayed in my lane and I really always kept an environmental science job until I got a full-time salaried job.

Lindsey Sterling-Krank [00:25:32] And then from there, you know, I've had a series of just different phases of kind of being a social entrepreneur. And, you know, being a non-profit, I've definitely had to fundraise quite a bit and I've always had to fundraise. And I have really, I still kind of want to, I didn't go back to school and I didn't get my masters. And sometimes I still want to do that just because it would be something I'd like to accomplish in my life. I feel like I'm definitely doing environmental science and advocacy and environmental management and planning at a higher level. And sometimes I want a degree that reflects that. But I'm, I'm in there. I've stayed in my lane. And, you know, I've been able to learn management now a little bit, too, and have a little bit of that under my belt and, you know, figuring out what it means to be a leader and how to bring out the best in others while still producing results on the ground for the animals.

Lindsey Sterling-Krank [00:26:32] And I've been diverse. I've always loved my field and my job, because sometimes I'm stapling papers and sometimes I'm, you know, at the Capitol lobbying to try and prevent or pass a bill that needs environmental support. Or sometimes I'm raising money. And sometimes I'm, you know, pulling prairie dogs out of imperiled burrows and building them new ones in safe zones and putting them back in with a great group of people. So, it's really diverse, and I think that's important in that part too why I've been able to stay for so long.

David Todd [00:27:07] Yeah, it sounds like you wear many hats.

Lindsey Sterling-Krank [00:27:11] It's true.

Lindsey Sterling-Krank [00:27:13] So, I, I think it's interesting how there's this ecosystem of, of non-profit groups that work on conservation. And, you know, each has its own niche and specialty. And when I think of, of the Humane Society, which I guess you all were under their umbrella for a good many years, I think of them as sort of an animal welfare group.

Lindsey Sterling-Krank [00:27:39] Mm hmm.

David Todd [00:27:40] And, and I'm curious how the prairie dog fit within their overall program, because, I mean, it sounds like there's, there's definitely a humanitarian side to what you're doing, but there's also a, you know, big-picture, prairie ecosystem conservation portion to what you do.

Lindsey Sterling-Krank [00:28:04] Mm hmm.

David Todd [00:28:04] And I'm curious how, you know, the prairie dog work sort of fit within the Humane Society's wheelhouse.

Lindsey Sterling-Krank [00:28:16] Right. Yeah. That's a, you know, just infrastructure. So, that's a good question. And I'm, so I, I am the program director for Prairie Dog Conflict Resolution with the Humane Society of the United States now. And I serve on the Prairie Dog Coalition's Advisory Board. And I was the executive director of the Prairie Dog Coalition for about 20 years. So, recently, the Prairie Dog Coalition came out from underneath the Humane Society of the US, because we realized we had just become, you know, a program of HSUS, and not a coalition, and a coalition that was really getting input and direction from many different groups. So, this all happened at the time that HSUS was doing a re-org and that kind of notion for the Coalition was kind of being brought up by some of the folks that had been founding members of the PDC, too.

Lindsey Sterling-Krank [00:29:09] And so, now the Prairie Dog Coalition is fiscally sponsored by Defenders of Wildlife, and I'm on the advisory committee there. And they really kind of morphed into a network for conservation and amping up advocates' efforts for prairie dog conservation and protection. And the reason that it worked with HSUS and HSUS wasn't the only animal welfare group that was interested in the plight of the prairie dog. Many were. But the reason the Prairie Dog Coalition worked so well, and that housing the PDC under the Humane Society worked so well, was because we always kept our our eyes on the two main things that got us there - animal welfare and the environment. And everybody that was a part of the Coalition had that, that, that was working on one of those two issues.

Lindsey Sterling-Krank [00:30:05] And the reason it really related to prairie dogs and their plight was because what was happening to the prairie dog? I mean, mass shooting, you know, mass poisoning campaigns, taxpayer-funded poisoning campaigns, kill contests on public lands, kill contests on private lands, you know, really all contributed, and exotic disease, which has now become the number one killer. But all of these things really contributed to the prairie dog's decline by 98%. The black-tailed prairie dog, which is what we have in Texas, has declined by a pretty standard, accepted 98%.

Lindsey Sterling-Krank [00:30:42] And so, you know, seeing the things that we were doing to prairie dogs and, you know, piling them up in giant piles on top of the land, and that's just what you could see. Who knows if you could actually see what was happening to them below ground. You could see the cruelty and the inhumane things that were happening to these animals. They're really social, familial species, and they have really, really tight territorial bonds. And so, you know, looking at a colony and shooting the ones that are up, you know, takes out half of their family members and really just creates chaos in, in their social ties and their familial system.

Lindsey Sterling-Krank [00:31:23] So, there was a lot of things that we have been doing to prairie dogs and other wildlife for centuries that we outlawed centuries ago on our dogs and cats. And so really thinking about the inhumane cruelty that was occurring to this species was where the animal welfare kind of drive to protect them from that, that suffering comes in.

Lindsey Sterling-Krank [00:31:48] And at the same time, prairie dogs are this keystone species in the environment. So, you know, their, their service to the ecosystem is even greater than their abundance. They have, they're having more of an impact on their ecosystem, in their habitat than you can even see. And, you know, everything is either eating them or living in their burrows. So, the more prairie dogs you have, the more biodiversity you have. So that was really where the environmental piece came in and the animal welfare piece came in.

Lindsey Sterling-Krank [00:32:20] And the Prairie Dog Coalition has been a, you know, a coalition and alliance of animal welfare and environmental groups working towards those things. And it's been pretty easy to stay in sync because, you know, the ways that prairie dogs die - some, you're completely allowed to put an explosive down their burrow and half blow them up. And that's just not okay.

Lindsey Sterling-Krank [00:32:44] And, you know, I will say that I've been really, I can see a difference in our advocacy, in our work, over the years, because when I started, there were no non-lethal management plans for prairie dogs. And now we're, you know, starting to put together co-existence clinics. You know, how can we prevent these conflicts from occurring in the first place? What are our other options to, you know, killing these animals when we need to manage them in, on these multiple-use lands. And there, we're getting a lot of feedback and a lot of support and our first ones will be this field season. So, I hope they're well-attended. But I think they will be.

Lindsey Sterling-Krank [00:33:26] And the tools that we've developed over the last 20 years to provide non-lethal alternatives and to really understand the behavior and the movements of these species so that we can manage it, instead of just kill it when it gets in our way, is, is encouraging and innovative and pioneering. And we have something to show for. So, that's, that's great.

David Todd [00:33:53] It's so interesting that you're sort of at this nexus between animal welfare and how we think about and treat individual animals, and then also the sort of conservation aspects of how you deal with ecosystems and species writ large.

David Todd [00:34:09] I wanted to just take a moment, though. I'm hearing this background, this like this high-pitched whine.

Lindsey Sterling-Krank [00:34:15] I hear that, too. I thought it was from you.

David Todd [00:34:19] No.

Lindsey Sterling-Krank [00:34:20] I think it's on my computer.

Lindsey Sterling-Krank [00:34:21] Let me see if I can close down some other things.

Lindsey Sterling-Krank [00:34:24] It might be a fan on your computer. Hmm. What do we do about that? I don't want to close that down. Can't close that. Yeah. Okay. I'm afraid it could be a fan. I'm not sure what to do about that.

David Todd [00:34:46] Well, there may not be anything thing to do, but I just thought I should check. So, why don't we go back to yakking and.

Lindsey Sterling-Krank [00:35:01] You know, I have one more thing to add about the... do you want me to try and use my external speakers?

David Todd [00:35:11] I would stick with ...

Lindsey Sterling-Krank [00:35:13] Is my fan on my laptop.

David Todd [00:35:15] Okay. All right.

Lindsey Sterling-Krank [00:35:19] Hmm. Sorry about that.

David Todd [00:35:21] That's okay. You know, if there's a way to get some distance from it or muffle it with a towel or a blanket that can help.

Lindsey Sterling-Krank [00:35:34] I'm trying to get some air.

David Todd [00:35:37] Mm hmm.

Lindsey Sterling-Krank [00:35:41] Okay. Let me see if I can get a towel or blanket. Just a sec.

David Todd [00:35:44] Sure. Okay. So. Okay. Oh.

Lindsey Sterling-Krank [00:36:56] Are you still there?

David Todd [00:36:58] Yeah. That's, that's much better. Yeah. Thanks for helping us out there.

David Todd [00:37:09] So you've mentioned some things kind of in passing that I think it might be nice to just sort of drill into a little bit more.

Lindsey Sterling-Krank [00:37:19] Okay.

David Todd [00:37:19] And that is, is, if you could perhaps tell us about the life cycle of the prairie dog and its ecological role. I think you touched on some of this, but maybe ...

Lindsey Sterling-Krank [00:37:31] Yeah.

David Todd [00:37:33] You can give us a sort of start to finish explanation of this key role that this animal plays in the ecosystem, but also its really interesting features.

Lindsey Sterling-Krank [00:37:44] Yeah. Can I back up for a second?

David Todd [00:37:49] Of course.

Lindsey Sterling-Krank [00:37:49] And then I want to answer that question. I want to say that we're, the Humane Society of the United States, has always had a wildlife protection department. And within the Humane Society of the United States, Wildlife Protection Department, we have several different programs. And my work falls under Humane Wildlife Conflict Resolution. And we have several different species we're working on in there - grizzly bears, wolves, urban wildlife like raccoons and possums, and all these species that are, you know, having a hard go at it in these urban corridors.

Lindsey Sterling-Krank [00:38:27] And I get to have a program for prairie dogs. And I'm really glad they see the value in that work. And I know that they do. And it's a very under-served species and HSUS has always been about all animals and prairie dogs have found their home there. So, I'm very grateful to them for giving the prairie dogs a home.

Lindsey Sterling-Krank [00:38:50] And I'm very grateful to Defenders of Wildlife for helping the Prairie Dog Coalition. Both of these, both of these programs work. You really can't have

enough. The sheer number of prairie dogs that are, you know, killed every year, mostly unnecessarily, really begs the need for them to be incorporated in these organizations' work.

Lindsey Sterling-Krank [00:39:20] So, anyways, that's where we landed, and that's where prairie dogs find their role at HHS US. And I just wanted to finish mentioning that.

David Todd [00:39:29] No, that that's so important. I mean it's, it's the, this sort of back office issue of, you know, having organizational support and financial support. And it's, it's just so critical. And I'm so glad that you've found, you know, a sponsor and a group of colleagues. That's...

Lindsey Sterling-Krank [00:39:51] I have been working with some of the same people for 25 years. And those people are just getting better, right, with age. And I, it's a, it's a really great group of people. It's hard to leave because they're so involved, and just like family at this point.

David Todd [00:40:09] Yeah. Yeah, I bet.

David Todd [00:40:12] Well, so the star of our show today, the prairie dog, you were going to tell us a little bit about its life cycle, and then maybe you could segue to talk a little bit about its ecological role.

Lindsey Sterling-Krank [00:40:26] I hope you get it to include a little bit of visual with this interview somehow because they are super, super, super cute. And they, you know, really just have this little, you know, stand up on their hind legs. And some people say they greet the sun every morning and, you know, kind of do this yoga pose. And Terry Tempest Williams writes about that. But they might follow the sun through the sky through the day, much like a sunflower, you know.

Lindsey Sterling-Krank [00:40:55] And they you know, in addition to just being adorable, they are very worthy. You know, they play this role in the ecosystem where they are native to here. And any species that's, you know, really native to here, kind of grew up and evolved in accordance with what their habitat and the environment of which they are a part of needs. And so, for the prairie dog, that's churning the soil, and aerating the soil, and making little starter holes, and keeping out invasive species and invasive weeds when they come in. They act much like a pruner of a rosebush, you know, clipping down little pieces of grass that they'll be shorter and more nutritious. So, you have this kind of shorter, more nutritious blade of grass as opposed to this, you know, kind of large, you know, smooth brome-type of field or something.

Lindsey Sterling-Krank [00:41:50] And they are very selective in what they eat. And they won't eat everything at the same time. They're adaptive and they try to adapt to the environment around them. They reproduce, or don't reproduce, each year based on how many resources and how much their habitat can support at each time. They are really only in estrus for 5 hours a year, I think is the term. And they have a one pup-season, one birthing season per year. And they are, I think they're in their bellies for about 30 days and this happens in the spring. And in the early summer, late spring, you can start to see pups above-ground and they'll stay underground for, oh, probably about 6 to 8 weeks.

Lindsey Sterling-Krank [00:42:46] And you know, a lot of people think, oh, they're rodents, they're breeding like crazy, they're like rabbits, but it's not true. A mom will have an average

of about roughly six young per year, and only half of that will survive to make it above-ground, and about half of them will survive into adulthood. So, when you're looking at a prairie dog colony, they do, they're not, you know, they're not all out there reproducing. And sometimes you're seeing a burrow with six or eight prairie dogs on it. But that's often the young of a mom and her cousin or a mom and her sister, and their litters kind of combined.

Lindsey Sterling-Krank [00:43:30] They have an average, so that comes out to about an average of 2.5 young per year. And they live a lifecycle of about 3 to 5 years in the wild. I think five is kind of the extreme end. And they don't reproduce in their first year. They usually reproduce in their second year as a young, a yearling, or a young adult.

Lindsey Sterling-Krank [00:43:52] They have, live in coterie. And each coterie typically has one breeding male and one to two females, and their young. And each coterie is a family unit of prairie dogs. And it can be anywhere from two individuals to 40 individuals, or even more - large.

Lindsey Sterling-Krank [00:44:15] And when you look at a prairie dog colony, it is made up of several different coterie. And those coterie then kind of section themselves off into wards, just like we have a neighborhood. And then those neighborhoods and those wards are part of a larger colony.

Lindsey Sterling-Krank [00:44:33] And if you're lucky, that colony is part of a complex. And a complex of prairie dog colonies is a series of colonies that are less than a mile apart, or 1.5 kilometers. And those complexes of prairie dog colonies are really where the species richness, and the biodiversity, and their associated species really get to come into play. And you can see how this species gets to work and interact on a landscape.

Lindsey Sterling-Krank [00:45:01] And as a conservationist and as a planner, and somebody who's advocating for prairie dog conservation on the land and on the landscape, I'm always looking to can I create a complex of prairie dogs? Because if I can create a complex of prairie dogs or put together and protect, with some sort of protections, a complex of prairie dogs, you know, you could start to have their predators come back in and keep that ecosystem in balance.

Lindsey Sterling-Krank [00:45:23] And you know one of the most endangered mammals in North America is the black-footed ferret and the black-footed ferret is endangered because its key food, its only diet, is made up of prairie dogs. And prairie dogs have declined by 98%. At one time, they thought there were no ferrets left. And this ranch dog named Shep was in Wyoming and he showed up at his porch at the end of the day, and he had a black-footed ferret in his mouth and his parents were able to know what that was and identify that as a black-footed ferret.

Lindsey Sterling-Krank [00:45:56] And they, and they called the Game and Fish. And I think they and some other biologists followed Shep back out to this colony and found 18 black-footed ferrets left in the wild, totally. And they took those ferrets and trapped them and put them into the captivity. And we have been working on a reintroduction program of black-footed ferrets ever since.

Lindsey Sterling-Krank [00:46:19] And it's been hard because in order to have a successful black-footed ferret program, you have to have a successful prairie dog colony. And it's been hard to convince folks to do that and to kind of de-vilify the prairie dog over all these, after all

these years of ag really being focused on getting rid of them, just thinking we can have more grass for our cows and our livestock industry if we have less prairie dogs.

Lindsey Sterling-Krank [00:46:45] And so figuring out a way to kind of slow that role down, and a way that we can reap the benefits of the prairie dog's ecosystem services, and have grass, and provide habitat for the species and, you know, grass for the livestock, has been something that we've all been working on, and are still working on to achieve success, obviously.

Lindsey Sterling-Krank [00:47:09] There's been a lot of neat programs. Pete Gober runs the Black-footed Ferret Program and he is actually a native Texan too, and I think he lives in Texas quite a bit. And I don't actually think there are any successful black-footed ferret reintroduction sites in Texas right now, but I hope I'm wrong. So, we should fact-check that. And Pete would definitely know.

Lindsey Sterling-Krank [00:47:35] You know, I have been working on how can we make it work better for landowners with prairie dogs. And so far, the things we've been trying have not been compelling enough. So, that's our work that we have cut out for us still and the solutions that I'm working on implementing on this part of my career.

David Todd [00:47:54] You know, you mentioned that having prairie dog colonies, and maybe even better than that, complexes, is important for supporting black-footed ferrets. I've heard that there are also, the prairie dogs, that is, are important for migrating birds and swift foxes and pronghorn antelopes, and other creatures. Can you sort of run through some of those other species and why they rely on the prairie dog?

Lindsey Sterling-Krank [00:48:27] Yeah. Of course, I'd love to. All right, so let's start with burrowing owls. Who doesn't love a tiny little owl with stick legs? And they're beautiful. They have this, you know, totally symmetrical design. They match right in their great, rusty brown color with big, beautiful yellow-green eyes. And they live in prairie dog burrows, and they raise their young in prairie dog burrows. And that is one of the most directly associated species to prairie dogs.

Lindsey Sterling-Krank [00:48:59] And not only that, but another little migrating bird, a mountain plover: they only lay their eggs in dirt patches on prairie dog colonies. So, that is very specific. And they are really cute. They're like a little piping plover or a little shore plover that we could see on the coast, too, in Texas. But they're a mountain plover. And, you know, people look at these prairie dog colonies and think, oh, it's just dirt in some of those spots and that can't be good. But a mountain plover lays its eggs on a dirt patch in a prairie dog colony. So, that's, you know, kind of a couple habitat pieces.

Lindsey Sterling-Krank [00:49:40] An antelope, and even a cow and a bison, they really love prairie dog colonies because, like I said earlier, they're really, you know, pruning the grasses and the forbs. They often have more nutritious blades of grass and more nutritious forbs, which is like a little flowering plant that lives on the prairie, too, on their colonies.

Lindsey Sterling-Krank [00:50:05] And those, sometimes I think there's been some studies that show that prairie dog colonies, grasses and forbs on prairie dog colonies might be less in weight, but they are higher in quality. So you really have some good food on prairie dog colonies. And that's why here larger grazers are going to be attracted to that because they're

keeping the native grasses and they're rich, they're tasty, they're nutrient-rich, and they're a great firebreak.

Lindsey Sterling-Krank [00:50:35] I don't know if you remember these giant grassland fires in Oklahoma and Kansas a few years ago, but I was working on the Z-Bar Ranch, one of the Turner ranches, working on a Turner Endangered Species Fund project. And there was a giant grass fire, and all the bison that were free ran to the prairie dog colonies and were spared because they did not have a lot of fuel and they knew to go there and that they wouldn't burn at this big, hot, fiery level, that they would be safe. And they were. And that was amazing.

Lindsey Sterling-Krank [00:51:04] So, all the way from a mountain plover to prairie dog colonies being, really hosting a lot of pollinators, and also hosting a lot of micro invertebrates and macro invertebrates, so just bugs and insects, that's going to be where your, your birds are going to be more attracted to a colony, your smaller birds, your songbirds and your migrating birds.

Lindsey Sterling-Krank [00:51:28] And then all the way up to big birds, - ferruginous hawks, golden eagles, you know, redtails, Swainson's - they're definitely chowing on some prairie dogs for lunch, if they're lucky. And I always find that to be such a dynamic feeling to see these big raptors come in and get a prairie dog for a kill. I'm happy for the bird and sad for the prairie dog. Nature is very savage and it is not easy. And sometimes they can fight them off. And I'm so impressed and just amazed at prairie dogs' skills to fight off these big predators.

Lindsey Sterling-Krank [00:52:00] But as a prey species, you know, that's why they live in these colonies, and ideally, these complexes. So, I hope I'm answering your question.

David Todd [00:52:10] You are. You're doing great.

David Todd [00:52:16] So, one thing that I think has been intriguing, just, you know, as a layperson reading about prairie dogs, and maybe this relates to how they defend themselves against raptors, is that they seem to have this, this wonderful communication system...

Lindsey Sterling-Krank [00:52:34] Oh yeah.

David Todd [00:52:35] Where I guess you have sentries and, you know, who warn the rest of the colony.

Lindsey Sterling-Krank [00:52:39] Yeah.

David Todd [00:52:40] Can you talk to us a little bit about that?

Lindsey Sterling-Krank [00:52:41] Yes, I'd love to. Can I put you on hold for a sec to go to the bathroom?

Lindsey Sterling-Krank [00:52:46] Of course. I'll be right back. I actually don't know how to put you on hold. Or maybe you can just ... maybe it doesn't matter.

David Todd [00:52:57] We'll just, we'll just be here.

Lindsey Sterling-Krank [00:52:59] Okay. I'll be right back.

David Todd [00:53:01] No problem.

Lindsey Sterling-Krank [00:53:05] Okay. I'm back.

David Todd [00:53:08] Welcome. Nice to hear your voice.

Lindsey Sterling-Krank [00:53:13] Thanks. You too, David.

David Todd [00:53:16] So, when we broke off earlier, you were, I think, going to talk to us a little bit about how prairie dogs communicate with one another...

Lindsey Sterling-Krank [00:53:29] Oh, yes.

David Todd [00:53:30] And why.

Lindsey Sterling-Krank [00:53:30] Yeah. Well, the biggest reason why is because they are a prey species. And one of the adaptations that animals make to being a prey species, and they're enhancing their survival in the littlest way or any way that they can, is their communication system. So they have what is known as one of the most sophisticated communication systems, or language even, of a mammal that has ever been studied. And the reason that is they actually decided to coin a language from a communication system is that they determined that prairie dogs were able to create new words.

Lindsey Sterling-Krank [00:54:11] And there's a wonderful researcher, Con Slobodchikoff, and he would definitely explain this probably even better than me. But he determined that prairie dogs have such a sophisticated system that they could say what color shirt you're wearing - red, green, blue, brown, black, white, gray. They can say if you are a friend or a foe. They measure the amount of danger that you associate with their, with your presence on the colony.

Lindsey Sterling-Krank [00:54:44] So, for example, if I were to walk through the colony in my green shirt with a gun and they would say, okay, you know, here comes the lady with the green shirt and a gun and she's coming this fast, and you need to be watching her at this, you know, at this spot over here. And no matter if I never went back through there with a gun again, they would always tell, say she's dangerous. She has, they would always remember that I walked through there with a gun one time, and I would always be associated with that level of danger. And that's, my word would be, my phrase would be, that I'm dangerous.

Lindsey Sterling-Krank [00:55:24] And the way that they convey, they convey so much information in like one little chirp, you know. It's like a whole sentence to them. And they coin these words through different tone, pitch and frequencies in their chirps.

Lindsey Sterling-Krank [00:55:38] So, one of their, my favorite interactions that they do is called the "jumpy up" and they go "EKUU" and they do this little, you know, down, they get down on the ground and they jump in the air and go "E-UU", and it means, we don't know what it means. It means, "all clear". Or it means, "I'm over here", or "I'm over there", or "I'm over here". And, you know, or maybe it's like a roll call: "David, Lindsey, Sarah, Jan, you know, we're all here". "I'm here. I'm here. I'm still here. Who got eaten? Who's still up?" You know?

Lindsey Sterling-Krank [00:56:09] So, that's always one of my favorite things to hear on the colony. It sounds like a wave going through the colony. But...

David Todd [00:56:17] Do you think there's a portion of their communication, that's like a pantomime?

Lindsey Sterling-Krank [00:56:22] Mm.

David Todd [00:56:24] Their gestures?

Lindsey Sterling-Krank [00:56:26] Totally. I mean, yeah, they have tail flares, they have teeth chirping, they have the, "all clear". They put their, they show their rears and their tail flares so that you can smell their scent glands, and, you know, the pheromones that they're giving off are angry or scared or aggressive or maybe it's, you know, during reproduction time and, and, "Since I'm in heat, let's do this". You know, it's it could be a lot of different a lot of different signals that they're giving each other. And that's another reason why they're so fascinating to watch a prairie dog colony. And another reason they're dramatic.

David Todd [00:57:01] That's great. Well, so, you have been looking at these prairie dogs for, I think you said over 25 years.

David Todd [00:57:12] I think I'm aging myself.

David Todd [00:57:15] Oh, no, it's, it shows a lot of good experience. I was curious...

Lindsey Sterling-Krank [00:57:22] I think it's 23 years if we're just being exact. I think I was. I'm 45 now and I think I was 22 when I started over here. So, yeah, early twenties.

David Todd [00:57:35] Okay. Well, I am wondering if, you know of any of the early impressions that humans had of prairie dogs, whether it's Native Americans or early settlers, pioneers, explorers, and what they thought of this creature. I mean, especially for Westerners, I imagine it was a new thing to see.

Lindsey Sterling-Krank [00:57:58] Yeah. I remember.

Lindsey Sterling-Krank [00:58:03] Hold on, I'm going to close my daughter's door. I can hear her cough ringing aloud. Be right back.

Lindsey Sterling-Krank [00:58:09] I remember hearing stories about the Hopis using prairie dogs to predict rain. And I think that was because when the barometric pressure would change, they would go below ground. And that would indicate that the humidity and the moisture in the air is about to change.

Lindsey Sterling-Krank [00:58:33] And I also heard stories about prairie dogs being water-keepers and, well-keepers, because they're, you know, digging in burrows into the prairie to help retain water and aquifers underground. So, those were some of my first comings across of Native American, you know, lore and prairie dogs.

Lindsey Sterling-Krank [00:59:00] And I also remember this Hopi boy capturing a prairie dog and having it as a pet and just being really enamored with the animal. And there have been several stories of people with pets, including Lewis and Clark.

Lindsey Sterling-Krank [00:59:15] I can't remember if it was Lewis or Clark, but on their trek out West were really intrigued and fascinated by the prairie dogs. And they sent one back to the president, which I think, I don't remember which president it was at the time. We should look that up. I have it in a kid's book somewhere.

David Todd [00:59:37] Jefferson?

Lindsey Sterling-Krank [00:59:37] It must have been Jefferson. Do you know?

David Todd [00:59:40] I think that's right.

Lindsey Sterling-Krank [00:59:42] That's right. I knew it was a a more prominent name. And sat in their desk in a cage, like a bird cage, I think it was depicted as, for a really long time. And they just kind of developed a little camaraderie and were really intrigued and impressed by this little creature. And they are the ones that I think actually named them, "prairie dogs" - Lewis and Clark and some people on that expedition.

Lindsey Sterling-Krank [01:00:07] And I never thought that was accurate, but they named him a prairie dog because they chirp. And I always thought they should be little prairie bears. They look more like a bear, but I suppose they are a burrowing mammal and a burrowing rodent. So, prairie dog it is.

David Todd [01:00:27] Well, you know, something else that you've mentioned earlier, since we've been visiting, that sort of caught my attention. And maybe you can give us a little bit more detail now, is that while these prairie dogs have, I guess, evolved and occupied the the prairies for eons, their recent years have seen this really dramatic decline. I think you said 98%. And I just wondered if you could talk to us a little bit about the timing of that decline and why they declined so severely.

Lindsey Sterling-Krank [01:01:00] Yeah. So, prairie dogs have several different causes to their, you know, threats and threats to their population decline. And those are shooting and shooting campaigns, and poisoning and government-sanctioned poisoning campaigns. And those are kind of the two biggest agriculture threats that come from agriculture. And really that comes from the historical science of, you know, prairie dogs eat as much grass as so many cows, and we're going to have this many cows. One cow eats as much grass as this many prairie dogs, so if we're going to have this many cows, we need to get rid of, you know, that number times, whatever, prairie dogs.

Lindsey Sterling-Krank [01:01:46] That's a lot of prairie dogs. So, that was really where, you know, kind of getting rid of prairie dogs started. And it was a pretty, kind of, you know, as we industrialized and, you know, kind of terraformed the West, what all of kind of our response was, and the Western response was, to the wildlife that were existing there, you know, the bison, the wolves, the prairie dogs. It was all the same thing, kind of a threat to the livestock industry.

Lindsey Sterling-Krank [01:02:16] So, those, those are some of the big, bigger causes in how we got into the numbers that we had. I mean, even the U.S. Biological Survey and the Civilian Conservation Corps back in the day, all great programs, all really bent on, you know, really reducing the numbers of wildlife. And I don't think at the time that they probably realized what the long-term, you know, negative ramifications were going to be of that, and how all of

these different, you know, taking out all of these different types of species, we were going to lose their ecosystem services, too.

Lindsey Sterling-Krank [01:02:47] So, you know, we look at a pasture of grass sometimes these days or grasslands sometimes these days and say, "Oh, this looks like it's been hammered and it looks awful". And it's not, you know, you see some prairie dogs on it and, "Oh, it must be because the prairie dogs are there". But it's, it's really not. It's you know, we got rid of all the native grasses. We planted all these different pastures. We got rid of, you know, a lot of predators of prairie dogs. And the prairie dogs are the only ones that can kind of eke out a small living there at this time.

Lindsey Sterling-Krank [01:03:13] And how do we kind of restore all of this together to, you know, kind of put this regenerative type of system back into place and play that's going to keep a more rich, biodiverse environment and ecosystem for us currently and for our future generations, too.

Lindsey Sterling-Krank [01:03:33] So, that's a little bit of a look ahead.

Lindsey Sterling-Krank [01:03:37] You know, other reasons to how we got here are, of course, urban sprawl and development and just straight-up bulldozing over prairie dog colonies. I've definitely seen some injured prairie dogs from bulldozing just, you know, half maimed. And that is an awful experience. And urban sprawl is a threat to so many of our desires and uses to recreate and agriculture and, and conservation.

Lindsey Sterling-Krank [01:04:06] And finally, we have exotic disease. Exotic disease is really what is affecting the prairie dog in the biggest way is a disease, is a bacterium known as *Yersinia pestis*. And *Yersinia pestis* is a bacteria that can live in the host of, be hosted by some fleas, and not all species of fleas, but some fleas. And some prairie dogs have fleas and some prairie dogs don't, and just kind of like dogs and cats. And some prairie dogs get this specific host of fleas on them. And those species of fleas that have *Yersinia* can bite the prairie dog and the prairie dog can be infected with sylvatic plague.

Lindsey Sterling-Krank [01:04:53] And sylvatic plague has become the biggest killer of prairie dog ecosystem these days, because it is an Asian disease that was brought over from Asia into the ports of ships. So, we brought it a long time ago into North America. And a North American animal, such as the prairie dog, which is native, has not, just basically, had enough time to develop immunity to this disease that has been brought over from a different continent.

Lindsey Sterling-Krank [01:05:24] So, it is going to take a long time and I'm laughing because it's scary to me and it doesn't, I feel a sense of urgency to protect prairie dogs from plague. And I don't know if it's something that will happen in our lifetime. I'm sure it will not. How long does it take for your genetic code to mutate and change enough over time to develop some sort of resistance to a non-native disease or a native species, no matter which continent, which disease it is?

Lindsey Sterling-Krank [01:05:56] That's what we're dealing with, with prairie dogs. And, you know, it's been interesting because, you know, as an advocate for the last 20 something years on prairie dogs, you know, we have been successful at creating some spaces and carving some spaces out for prairie dogs. And now we find many of those, many of those places devoid

of prairie dogs. Because of so much plague running through the system, we haven't been able to keep those spots occupied with this really important animal.

Lindsey Sterling-Krank [01:06:23] So it's been an interesting spot to look at conservation planning now. How do we keep those prairie dogs in there? And translocation has kind of picked back up as this, you know, socially disruptive, yet important conservation tool for augmenting and supporting and rebounding prairie dog populations in these key areas.

David Todd [01:06:47] It's, it's hard to find the answer, I bet.

David Todd [01:06:52] So, one other thing that I think I've read about is, as a, I don't know if it's, if it's at the same level as, as the other factors you've mentioned, but what do you think - let me put it that way - about the effect of the pet trade on the prairie dog?

Lindsey Sterling-Krank [01:07:12] I don't know. I, you know, I don't know how many prairie dogs have been taken out of the wild by the pet trade, but I certainly know they don't need any more dips in their populations, or threats to their population. I think that a prairie dog is a wild animal. It's a wild burrowing animal that is a prey species. And so I think it's going to have a hard go being in a cage and that it's going to be hard for people to host wild animals in a cage and in a way that is, you know, not without conflict.

Lindsey Sterling-Krank [01:07:49] There's prairie dogs, pet trade in Japan really took off for a while and the, one of the main folks who helped start that, turned into a sanctuary and was trying to figure out ways to accommodate all of the prairie dogs that were coming to him from a sanctuary that people didn't want them as pets anymore. And he came over, and I remember he was one of my biggest donors at the time (this is like 15 years ago), and he gave me a \$500 check. And I just thought that was amazing. And he said, "You know, I, I'm giving you this. And I'm hoping that you can figure out a way to take these prairie dogs back."

Lindsey Sterling-Krank [01:08:29] And I just thought, "Oh, man, I can't take your prairie dogs back from Japan. And we shouldn't be breeding them anywhere for the pet trade. And we shouldn't be getting them out of the wild for the pet trade here. It's gotten so out of hand that they want us to take it back from Japan."

Lindsey Sterling-Krank [01:08:42] So, I'm not a fan of the pet trade, and I think we should keep wild animals in the wild.

David Todd [01:08:52] Yeah, I. I follow you. I guess it's, you know, a plus that people think that they are cute and adorable and would welcome them as pets, but maybe not the right place for them to be.

David Todd [01:09:07] You know, you touched on efforts to try to protect and restore these, these prairie dogs. And maybe we should talk a little bit about that.

Lindsey Sterling-Krank [01:09:17] Yeah.

David Todd [01:09:18] I understand that one of the big initiatives was an effort in 1998 to list the prairie dog, the black-tailed prairie dog, as endangered. And can you ... this may have started just as you were starting to work with them, but do you know much about how that initiative was begun and then why it was rejected?

Lindsey Sterling-Krank [01:09:42] You know, I think that I don't know that much. And, you know, it was right around my same time that I came on board. But we should, we should, we could look into this a little bit more, but prairie dogs met all of the criteria. I think there's four biological criteria for being listed on the Endangered Species Act, and they met all of those criteria. And what really pushed them over the edge at that point was the introduction of sylvatic plague and how far, you know, it started on the ports in San Francisco and California. Right? And it just started slowly moving through wildlife populations and working its way east. So, at that point, it had pretty much worked through the entirety of the prairie dog range. And that was really, I think, the tipping point for pushing that species over the edge.

Lindsey Sterling-Krank [01:10:27] They had already declined by a lot from agriculture, poisoning, shooting, urban sprawl, the regulars. And then having this exotic disease piece really encompassed throughout the entirety of the prairie dog's range almost was, was what pushed them into being listed.

Lindsey Sterling-Krank [01:10:42] So, you know, the Endangered Species Act has been a great tool for rebounding populations. And I think one of the things that it sparks is a host of funding, or maybe attention if not funding, maybe both, for collaborative partnerships and some real kind of think-tank thinking for how can we start to problem-solve keeping this population at its numbers that it's at? And so really what it spurred was a lot of different conservation plans to be written to conserve the species at certain levels in certain different states. And the multistate plan became available and enough states signed on to meet their conservation levels at a certain number that would keep their population from not being threatened to the point of becoming extirpated anymore, that they were able to delist them in 2004.

Lindsey Sterling-Krank [01:11:41] And they were never a full-on endangered species, a species on the endangered, on the endangered species list. They were a candidate for listing. So, I think the truth is, you know, I'm not sure how much ... I think the states have all agreed to, you know, maintaining their populations at those levels since then. And that that is happening for the most part.

Lindsey Sterling-Krank [01:12:07] But what I do know is when the states come back with their census of the prairie dog population in each state, you know, a lot of the lands where the prairie dogs are, are not protected. And so, that's really where advocacy can come into play. And, you know, these kind of more on-the-ground conservation partnerships that NGOs work to create and make happen.

Lindsey Sterling-Krank [01:12:27] And then I will say we have been, excuse me, we have been a part of a project called, "Homes on the Range". And Homes on the Range is really looking at the black-tailed prairie dog species and short grass species range in the grassland from Mexico to Canada and kind of centered it about a biological look through GIS mapping and modeling on the ground of suitable prairie dog habitat from Mexico to Canada. So, that whole Great Plains part, of which Texas is a part of too, and looking at their range and saying, where is it now and what it looks like now.

Lindsey Sterling-Krank [01:13:03] And these are, you know, really preliminary results. But and I wish I could show you because it's really a visual, is that that range has shrunk from the north and it's shrunk from the south, and then it's shifted north. And the whole eastern spot, the whole eastern half of the range, is gone. It's all basically cropland and not suitable habitat

anymore. And of that really kind of small chunk that probably represents, you know, 25, 35% of its original habitat, 0.2% of that was protected.

Lindsey Sterling-Krank [01:13:31] So these are, you know, preliminary results that will come out this summer, in 2022, at probably the Western Association of Fish and Wildlife Agencies' meeting, that, that kind of information will start to come out through the Homes on the Range Project, through Dr. Anna Davidson. And all the different state agencies have been really wonderful to work on with it understanding this.

Lindsey Sterling-Krank [01:13:57] So I think, you know, regardless of what those numbers show, we have lost a lot of habitat, and we have lost a lot of numbers. And that is going to be the theme, and it's going to really highlight more of a need for these are these key areas that we have got to hold on to. Like these are the last, best places, right? I mean, we're at this point in conservation and history in the United States, in each of our states, and in Texas and Oklahoma and Kansas and Colorado and Montana, beyond. And all saying these are, these are the spots where we have to come together to ensure that this species can have some sort of a future into future generations.

Lindsey Sterling-Krank [01:14:41] And it's not going to be guaranteed. It's going to take some effort to keep them on the ground, because of sylvatic plague, because of agriculture, because of urban sprawl, because of all these different threats that they've been facing. Now we need to come together and put these collaborative conservation plans in place. And those types of collaborative conservation planning, throughout the ranges, throughout the species range, and especially in these key spots, that's what keeps a species from being listed. And that's something that every landowner and every scientist and every NGO wants to see is the population to be sustainable enough to thrive into the future, or sustain itself, I'm not sure about thriving in a lot of places anymore.

Lindsey Sterling-Krank [01:15:22] But how could we sustain this into the future? So, I'm looking forward to the results of Homes on the Range, even though I myself have found them depressing, because there's going to be a little bit of hope in there. And as Jane Goodall would say (she's a badass: I really love her), there's always hope, Lindsey. So, I, I'm going to take, take that and run with it, with these results.

David Todd [01:15:49] Okay. So, something you said just in passing there...

Lindsey Sterling-Krank [01:15:57] Yes.

David Todd [01:15:58] Maybe you can tell me a little bit more about, you said that the, this GIS and modeling that you've done to try to find that Home on the Range has shown that the range of the prairie dog has shifted north. And I'm wondering if that's connected with climate change or if you think there's something else going on.

Lindsey Sterling-Krank [01:16:19] You got it. It's climate change. And this mapping and modeling effort modeled what they think the temperatures and the precip levels will look like 80 years from now. And a lot of, a lot of ranges are shifting north for a North American species because the southern part of the range is becoming desertified, and so hot and dry, that it's just not supportive of different animals and wildlife and life in the way that it used to be. So, yes, it's warming up. The climate's warming up. And I feel like I'm raising my kids in a different time than even when I was a child. We weren't talking about this and studying it, and

keep seeing. You know, I live in Colorado and we have these stochastic fire events. And last year was the wettest we had seen in 30 years. And it's, it's April and we are in drought.

Lindsey Sterling-Krank [01:17:13] And it is just these really, you know, kind of extreme stochastic weather events happening and the temperatures really warming up. I think each year was hotter than the next and it's been on record like that over and over again. And you'll see species and habitat and key conservation areas shifting north to accommodate that loss of suitability in the southern part of their range.

David Todd [01:17:44] Well and trying to, I guess, sort of mitigate these impacts, you do a lot of outreach and education and, and collaborative work, I guess. And I was hoping that we could talk a little bit about those efforts.

Lindsey Sterling-Krank [01:18:03] Sure.

David Todd [01:18:05] You know, one of the things that struck me is I think you said that the politics of prairie dog conservation often are divisive, and that you've said that the supporters of the prairie dogs are sort of put on the defensive. And I was wondering if you could sort of give me an example what, what you mean by that?

Lindsey Sterling-Krank [01:18:24] Yeah, I just you know, there's not a lot of people speaking up for prairie dogs, and there's a lot of people speaking out against prairie dogs. So, you know, from the start, you're typically outnumbered and the agriculture industry is something we all need and, you know, respect, worthy and also intimidating. And I think, you know, their numbers and the fact that they, you know, began the onslaught of the prairie dogs and wildlife historically has really just kind of, you know, created a power dynamic where they're the aggressor and we're, you know, the underdog and we're trying to stick up for this species that, you know, has this small amount of their population left that we see as key to surviving and supporting this whole ecosystem's conservation values for the future and for years to come.

Lindsey Sterling-Krank [01:19:16] So, I think that's just always kind of where the dynamic started from was, you know, on the defense is being a prairie dog advocate and, you know, these ranchers and these landowners and these farmers that are struggling with prairie dogs, it's, you know, very personal to them. And I think they feel sometimes like the more prairie dogs I have, the less cows I can have, and the less cows I can sell at market, and the less food I can buy for my family. So, it's super important to them.

Lindsey Sterling-Krank [01:19:45] And as advocates, you know, our job is to figure out how to create solutions that work for these landowners to host wildlife habitat and to, you know, still be able to support their livelihood. So, the solutions are wide and they are, there's many of them and they're, it's difficult to change a system to include those solutions, too. And it's difficult to, you know, say to a landowner, "Hey, how can we use our farm bill, or our grassland fund, or our, you know, farm aid funds and, and even our private market system to, you know, support you and pay you to ranch wildlife habitat instead of just livestock. And that, you know, incentive that they, or, you know, funding or payments or voluntary incentives that they might decide to participate in could return some sort of regular yield for them that could then make that amount of food that they have for their table more reliable and more steady every year.

Lindsey Sterling-Krank [01:20:52] So it's really those types of, you know, kind of mitigation programs that you can figure out that, those types of conservation transactions that can be

private, that you can figure out and quantify and find funding for. And it's really those types of efforts where we say, "Hey, this is a great spot for cows and it's a great spot for prairie dogs. And I understand that you don't want to keep them all on your land. How about can you keep some of them on your land? You know, can we dedicate this spot for them? This is a really super suitable spot."

Lindsey Sterling-Krank [01:21:25] And, you know, figuring out partnerships and, you know, putting barriers and buffer places for places that are, where they can't be tolerant of prairie dogs, but so where they can, you know, you can kind of draw a line in the sand, and say, "Okay, we can, you know, keep prairie dogs on this side and not on that side. And what types of, you know, things can we put in place to make, you know, make that actually play out on the ground?"

Lindsey Sterling-Krank [01:21:49] And that's something that we're starting to share all of our knowledge with that we've been learning over these past 20 years, as, through these coexistence clinics, and putting those all, you know, trying to do it like a collaborative information-share together with a lot of different people so we can understand what, what methods have worked and haven't worked. And, you know, where do they work, and where do they don't work, and how much do they cost? And, you know, figuring out which types of plant species, you know, are best to host prairie dogs, and have which kind of impacts, and which kind of impacts do they not have, too? And, you know, figuring those pieces out together and putting those types of solutions in play.

David Todd [01:22:38] Okay, well, so maybe you could give us a little bit of an example here. Say, you are doing this GIS work, what, and you're trying to locate a good site for a colony to work with the local landowner and or the operator who's using public lands. How do you identify a good candidate location for a colony? And then also, how do you create these, these buffer or barrier areas...

Lindsey Sterling-Krank [01:23:14] Yes.

David Todd [01:23:14] To try to segregate the prairie dogs from the sheep, goats, or cattle that are on the ground?

Lindsey Sterling-Krank [01:23:21] Sure. That's a loaded question, with a lot of different answers. But basically, basically prairie dog habitat is anywhere prairie dogs are. And that's just a good way to start off. What defines prairie dog habitat, or what makes habitat suitable to prairie dogs, is their soil. You know, what type of soil is it? Is it clay enough, and not sandy enough, to actually support a burrow infrastructure that they're going to dig? What type of vegetation is there? Is it native? You know, are there a suite or different, diverse, different prairie patches of grasses and forbs - you know, anything from prairie aster, which is, you know, kind of prairie dog resistant, to buffalo grass, which is the, you know, cotton candy or maybe a carrot (it's pretty nutritious), so, you know, to a prey dog.

Lindsey Sterling-Krank [01:24:18] There's a lot of different types of grasses that are native that, that they would want. So, you really want your native grasses and forbs. You really want your kind of soil that has enough clay in it that can hold a burrow. And you don't want that much slope or hills. Yes, of course they'll live on hills, but they really want to see their predators coming at them so they know to jump back and down, scurry into their burrow.

Lindsey Sterling-Krank [01:24:41] So, you you're looking for something that's not very mountainous or sloped, and veg, the right veg and the right soil content. And that's those are the three biggest factors.

Lindsey Sterling-Krank [01:24:53] The other things that I would love, as a conservationist and somebody who is building a complex, is, are there other colonies of prairie dogs nearby? Are they adjacent? Are they within one mile? Because then I know that different associated species and predators and insects and pollinators can travel back and forth from those colonies easier. And that's going to be like really high real estate for these types of wildlife. So, is a colony nearby?

Lindsey Sterling-Krank [01:25:24] And does it, is it protected? You know, is it, does it have a conservation easement on it that allows for prairie dogs to thrive, or survive? Does it have, is it on public lands? Is it with a conservation-friendly landowner? You know, those are the types of kind of social factors that you're starting to look at. You know, are they willing to conserve types of prairie dogs? If, if not, sometimes it's not worth having the discussion. Or if not, what can we do? Is there anything, any of these solutions that sound good to you, that are enticing to you?

Lindsey Sterling-Krank [01:25:56] And then, you know, I'm, I am, I'm paying attention to sylvatic plague. You know, I'm wondering if it's in the area. I'm wondering if they're open to using some of the prophylactics to prevent it from taking off on that colony. And I'm wondering, I think that's what I'm wondering, David.

David Todd [01:26:18] Gosh. What a, what a check list. It must, must be difficult. And so, also, I think you have been having some recent efforts to try to offer clinics on how to coexist with prairie dogs and to try to, you know, reduce the conflicts that land owners and operators feel. How would you make the pitch in one of these clinics to try to persuade?

David Todd [01:26:50] What's your sales speech?

Lindsey Sterling-Krank [01:26:52] That's a great question.

David Todd [01:26:54] If your parents might be listening.

Lindsey Sterling-Krank [01:26:55] Yeah. You know, I haven't I haven't dove into that yet because the first people that I've, you know, kind of started, it's my first year to design them. And I went to people managing prairie dogs professionally. So, those people are going to come because it's professional development for them, right?

Lindsey Sterling-Krank [01:27:13] And they, I will say, I will say, I will say I have found that saying to any group of people, whether it's the professional product managers or the landowners, you know what, "Love 'em or hate 'em, we got to have them. You know, they are an important part, native part of our ecosystem, too. And let's try and figure out how to make it a little easier on you."

Lindsey Sterling-Krank [01:27:37] And I think, you know, those ease, and love 'em or hate 'em, we got to have 'em, and conflict reduction are all, all selling points and all keywords. I find a lot of great people that are killing prairie dogs that don't necessarily want to be, and just don't know what else to do.

Lindsey Sterling-Krank [01:27:52] So, I'm hoping that this leaves people with knowing that there are other things that we can do with them, as opposed to just kill prairie dogs. And I'm looking forward to sharing that with them. And I think I'm going to start small because I'm, this is my first time to do this. And I have a lot to share and a lot to say. And I, I think there's a right way to do it. And, you know, obviously there's good messengers and I'm not, might not be the best messenger in all these, in all these different instances.

Lindsey Sterling-Krank [01:28:19] So, putting together that and starting small with these prairie dog managers is, is my go-to for this year, and then, you know, hoping to go out and get to work with landowners on a case-by-case basis so that we can kind of tailor it to their efforts, is more what I'm looking for down the road, and I'll get my sales pitch a little bit better then. So, come back, David Todd, couple. Give me, give me a couple of years. I'm just getting going.

David Todd [01:28:45] Okay. Well, so another thing I think that you mentioned is, is especially as you look into your future work with prairie dogs, is that I think you said that you're going to try to "elevate" the prairie dog. And what do you mean by that and how does that differ from maybe your earlier work with prairie dogs?

Lindsey Sterling-Krank [01:29:07] Well, I'm not sure if this is something I'll take on in our first day in my clinics or if we can, you know it's something that the Prairie Dog Coalition can, you know, kind of work on doing. We had a strategic plan meeting yesterday with the Prairie Dog Coalition. One of the biggest priorities is how can we elevate the positive perception of the prairie dog? And I think the prairie dogs have really been vilified, probably incorrectly and unjustifiably so, all this time as the key, you know, eater of all the grass in the West. But I think the prairie dogs are just one other awesome worthy species trying to eke out a living on this, you know, rough prairie and grassland. And they deserve a lot of respect, too.

Lindsey Sterling-Krank [01:29:51] ,I can't remember what you just asked me. I'm getting I'm getting hungry.

David Todd [01:29:55] No, I think that's really responsive.

David Todd [01:29:57] I know it is that time. I'll, I'll let you go very shortly.

David Todd [01:30:02] I'm just trying to see how, how you change the attitudes about an animal and this, this sort of question of how you elevate.

Lindsey Sterling-Krank [01:30:12] The positive perception of the prairie dog.

David Todd [01:30:12] The perception of those is really a puzzle.

Lindsey Sterling-Krank [01:30:17] You know I think we did do a media and messaging workshop in 2006 and then we went back and measured if we had been effective five years later, and it had. And some of the key messages that we shared there that were important were prairie dogs are a keystone species. Most people didn't know what that meant, but you could say a key species. And what that meant was a lot of different animals relied on them for either shelter or as a prey source for food. So, really just letting people know that and let that sink in a little bit.

Lindsey Sterling-Krank [01:30:53] And then, you know, anything you can teach them about prairie dogs is also just, and their behavior. There's so many myths and misperceptions about the animal itself, you know: "Oh, they're a rodent. They breed all year." Actually, they can only get pregnant once a year for 5 hours. So, can you believe that?

Lindsey Sterling-Krank [01:31:11] And, you know, they don't migrate and they don't move all around. You know, prairie dog colonies, really stay in these areas and they expand and contract based on the amount of precipitation that's, you know, applied to the ground each year and how far they have to go out to look for grasses, if it's not all in one place and they need to expand their search or not.

Lindsey Sterling-Krank [01:31:29] So, it's really just sharing as much as we know, and sharing ways to reduce conflict and also highlighting what a, what a beautiful, important, tough, worthy, valuable species they are.

Lindsey Sterling-Krank [01:31:42] There's a movie coming out called, "The Nature Makers", and it looks at how hard it is to replace nature once it's lost. And it looks at it through the lens of three different species. And it's the humpback chub, which is this fish on the Colorado River and the Grand Canyon, and then it's the prairie dog on land, and the sandhill cranes in the sky. And it looks at all three of these different species and it just tells a beautiful story. So, I hope that we can use that film to get some of our story across too.

Lindsey Sterling-Krank [01:32:14] What do you do if, if there's somebody who isn't really antagonistic necessarily, but just has no regard for a creature? I was thinking about Donald Trump, Jr...

Lindsey Sterling-Krank [01:32:26] Yes.

David Todd [01:32:26] And his shooting campaign, which seemed more about recreation than any sort of real, you know, opinion about prairie dogs.

Lindsey Sterling-Krank [01:32:41] You know, I remember offering to Donald Trump, Jr., "Why don't you come out with me? I'll let you shoot them, with a camera. And, you know, we can sit there just like you said, you know, and wait for the drama to come on and wait for all the associated species to come in - and the badgers and the coyotes and the eagles and the ferruginous hawks and the mountain plovers and the burrowing owl - and just really taking an opportunity to share the beauty of the prairie that the prairie dogs create, and are centered around the prairie dogs with these folks."

Lindsey Sterling-Krank [01:33:15] I think supporting a shift in conservation, and supporting shooting with cameras instead of guns, is something that we can all value. Americans love wildlife, you know. And Americans typically love conservation, too. And just sharing that with them and not including shame, I think is important. And being part of the solution and not the problem, I think is important too.

David Todd [01:33:44] Okay. So just a few more questions and then it'll be lunchtime.

Lindsey Sterling-Krank [01:33:50] Okay. My stomach is growling.

David Todd [01:33:53] Oh, no!

Lindsey Sterling-Krank [01:33:54] I might, I might get hangry on you.

David Todd [01:33:57] Oh, Please don't. So, I'll try to, to move along.

Lindsey Sterling-Krank [01:34:03] Consider yourself warned.

David Todd [01:34:06] Okay. All right. I, I'll be careful.

David Todd [01:34:10] So, I think that you said that, you know, some of your work is, is, you know, negotiating and lobbying and persuading and educating, but that you've also done some hands-on relocating, translocation. And I was curious if you could talk about some of those experiences and, and what it means in the age of, of plague also.

Lindsey Sterling-Krank [01:34:36] Oh, yeah. I really am getting hungry.

Lindsey Sterling-Krank [01:34:41] Let's see, we ... translocation is a great tool. I think I summed it up best a little bit ago when I said it's a socially destructive, yet important and effective conservation tool. And really, it's a complicated process, if I'm being honest.

Lindsey Sterling-Krank [01:35:01] But the basics of translocation are you have a colony in peril and you have a receiving site, and your receiving site is a protected grassland or a protected piece of suitable habitat that has agreed to accept the prairie dogs. And that is the hardest part of translocation: is finding a receiving site or some piece of land that's willing to accept prairie dogs. Most people would rather get rid of them than accept them. So, it's, it's not an easy task.

Lindsey Sterling-Krank [01:35:34] But if you can do it, and I can play, I can speak to how that sometimes you can find spaces that are, have been, and have burrows that are unoccupied because they have experienced a plague, epizootic. And plague has really changed things on the ground and created a lot of different unoccupied, you know, suitable habitat colonies for prairie dogs. So, that is a great potential release spot.

Lindsey Sterling-Krank [01:36:02] And really, so, if say you find one of these spots and you're lucky, you then go to your source colony, or your colony in peril, that's in conflict, and you do a behavior analysis and you check it out for a few days and you count how many there are, and you identify their family units or their coteries, and you start to map it and you put a stake in the ground at each family unit. And you call this family unit "A", and that family, unit "B", and that family, unit "C", then you take a GPS point on each of those spots, draw a boundary around it, put it on top of your Google Earth image, and now you have a map of your colony broken into coteries.

Lindsey Sterling-Krank [01:36:44] And because you've done your behavior analysis, you've figured out how many individuals, approximately, are in each of those coteries. So, say I figured out that Coterie A has 12 prairie dogs, and I am ready to take my map and go to my release site, and I'm going to try and put down my new colony on the release site, in the same social format as I picked it up in. So, I am going to try to put Colony A, or Coterie A, next to Coterie B, next to Coterie C, on my release site.

Lindsey Sterling-Krank [01:37:17] And because I determined that Coterie A has those 12 animals in it, I either have abandoned burrows that I know I need two or three burrows that can accommodate 12 individual animals. Or if I have to install artificial burrows, those can

usually accommodate 6 to 10 animals. So, I probably need to put in two artificial burrows for Coterie A.

Lindsey Sterling-Krank [01:37:38] So, you actually have to use a backhoe and build a nest box, or a nest chamber, and it has to have two holes on each, either end of it. And you put two pipes coming out of each side of that nest chamber. You dig four feet down into the ground, about ten feet long, and you drop that nest box down into the bottom of your trench that you've just dug. And you go about four feet down, 3 to 4 feet down, because that's about below the frost line. So, that stays at approximately the same temperature year-round. And you drop your nest box in it, fill it back up with soil and you have a piece of pipe sticking out of either end the front and the end of your burrow. You cap one end, and on the other end you leave it open, and you put the rest of that pipe and you set an acclimation cage over that, over that little piece of pipe entry.

Lindsey Sterling-Krank [01:38:27] And the acclimation cage gets fixed with soil and hay or grasses and it has a door on it. And after I put my trap site, or my source site, into pre-bait and put my traps all around those main few burrows and each coterie, I take my family unit of 12 individuals, hopefully, don't ever get them all, so it's kind of sad. And take them to my source site and I put Coterie A into the burrows designated for Coterie A. And I always try to put an adult down first, sometimes the female, because they're the best diggers and put them down into the burrows first and put their young down behind them. And then I close up that acclimation cage and I make them stay there for approximately 3 to 5 days.

Lindsey Sterling-Krank [01:39:17] And I feed, I make sure there's food in there, and protection from predators in the acclimation cage, and their social structures and their family intact. So, that's what they need to survive and that's what the acclimation period does. It really plants your colony on your release site. You never just go to a prairie and open up the trap and let them go. Can't do that to a burrowing prey species. So, yeah.

David Todd [01:39:45] So, there has to be that infrastructure there, already prepped and ready for them to occupy?

Lindsey Sterling-Krank [01:39:51] Yeah.

David Todd [01:39:52] Okay. And is this translocation taken on more importance because of plague?

Lindsey Sterling-Krank [01:40:00] Yeah, great question. So, really, you know, yes, it has. You know, we have these, you know, spots that are identified as key conservation areas devoid of prairie dogs because they've experienced plague epizootics, and really, translocation, you know, kind of gives us an opportunity to get these animals out of conflict and get them back into this conservation zone.

Lindsey Sterling-Krank [01:40:22] And I think, you know, on the bigger map, you know, how I was mentioning earlier, we have this Homes on the Range mapping and modeling process that we've done, you know, project that we've done, you know, it will reveal these results and these are these key spots. So if we are unsuccessful at managing plague in these key spots and we don't have prairie dogs in there, we have an opportunity to move prairie dogs out of some of these conflict zones and into this conservation zone. And then to apply a plague management plan on top of that and be able to, you know, hopefully successfully manage that population into the future.

Lindsey Sterling-Krank [01:41:01] Yeah.

David Todd [01:41:02] It's, it's stunning. I mean, that you're, you're working with people's, you know, beliefs and myths, and then these little bacteria at the same time.

David Todd [01:41:15] Well, let's, let's try to let you get to lunch.

Lindsey Sterling-Krank [01:41:18] Okay.

David Todd [01:41:19] And to look after your wonderful daughter.

David Todd [01:41:23] I just wanted to ask what sort of future you might see for the prairie dog that you've been caring for, for so many years?

Lindsey Sterling-Krank [01:41:33] You know, I hope if we're lucky at this point, that we are able to keep, keep what's left, and we're able to put successful and effective conservation management plans in place for that species, and for the landowners that live around those species in those key spots, and that we can maintain those in the key spots.

Lindsey Sterling-Krank [01:41:58] And that because of plague, we also have a reserve population in place. We're not, you know, despite a lot of plague, sometimes intense plague management efforts, sometimes we're not successful at keeping that bacteria out of that species' bloodstream. And it has almost a 100% mortality rate in a very quick short amount of time of nearly 24 hours. So, it can really wipe out a whole colony really quick.

Lindsey Sterling-Krank [01:42:26] And I hope that we, we can put those plans in place in a way that can support landowners who are supporting wildlife and keep that reserve population in place, so that when those plague management plans don't work, we can have a source colony that can grow or expand on its own, or be used as a translocation or a source site for some of these other spots.

Lindsey Sterling-Krank [01:42:50] So, we, you know, with a 98% decline, we're really looking at keeping what's left.

David Todd [01:42:58] Okay.

David Todd [01:43:00] Well, is there anything you'd like to add that we just haven't managed to, to touch on today?

Lindsey Sterling-Krank [01:43:06] No, I just would say there's nine species of wildlife that directly depend on prairie dog populations for survival. So, you know, we have hawks, we have eagles, songbirds, ferrets, badgers, coyotes - you know, all these different species. And even if a prairie dog might not float your boat, I'm sure one of these other species do. It takes all of us, and all these different species together, to create enough diversity and enough richness on the prairie, you know, on the grasslands to thrive.

Lindsey Sterling-Krank [01:43:36] So, we we'd love to, we'd love to help you conserve the species for the future, and we're here to listen and to provide solutions. And we need a lot more of us. So come join us. Hug the prairie dogs - love 'em or hate 'em, we got to have 'em.

David Todd [01:43:58] All right. Well, you have been so generous and kind and patient. Thank you for doing this. I hope that you, you see your daughter feel much better really soon, and that you get some food in your tummy momentarily.

David Todd [01:44:14] So, thank you again. And I hope that our paths cross soon.

Lindsey Sterling-Krank [01:44:19] Oh, me too. I would love to meet you.

David Todd [01:44:23] Well, likewise.

Lindsey Sterling-Krank [01:44:24] All right. Take good care.

David Todd [01:44:25] Take care.

Lindsey Sterling-Krank [01:44:25] Bye-bye. Thank you for having me.

David Todd [01:44:28] You bet.

Lindsey Sterling-Krank [01:44:29] Ciao!