

TRANSCRIPT

INTERVIEWEE: Jonah Evans

INTERVIEWER: David Todd

DATE: December 3, 2020

LOCATION: Boerne, Texas, by telephone

TRANSCRIBER: Trint, David Todd

SOURCE MEDIA: Google Voice, MP3 audio file

REEL: 4041

FILE:

BlackBear_Evans_Jonah_BoerneTX_3December2020_Reel4041_NoiseReduced&SignalAmplified.mp3

Google Voice [00:00:00] This call is now being recorded.

David Todd [00:00:04] Jonah, this is David Todd.

Jonah Evans [00:00:07] Hey, David, how's it going?

David Todd [00:00:09] It's going fine, thank you. Thank you for giving me another try. I appreciate it.

Jonah Evans [00:00:14] No problem. Yeah, I just, kind of going to start moving on to other work and waiting for it, I think I figured it would be just a matter of minutes while the glitches got worked out.

David Todd [00:00:24] So. Yeah, it sounds like we've got a good signal and thanks for setting aside some time to talk today.

Jonah Evans [00:00:34] Absolutely. Now, let me ask you a question right off the bat. Are you recording this for the purpose of notetaking? And the reason I ask is if the answer is yes, then I can walk around and make some noise in the background and keep my hands busy while we talk. But if you, if you wanted to record this for any, like, audio clips or something, then I'll make a better effort to keep the background quiet.

David Todd [00:00:58] It's, it's more the latter. This, in fact, let me just give a little context to this, and it's, it's some boilerplate, but I think a good part of it is maybe useful to you.

David Todd [00:01:12] So the thought is that we would record this interview for research and educational work for a nonprofit called the Conservation History Association of Texas, and for a book and a website for Texas A&M Press, and then for an archive at the Briscoe Center for American History, that is at the University of Texas here in Austin. So to your question, this goal is to, to transcribe it and to have it as a record in perpetuity so that the quieter it can be, the better. Sure, I know that's difficult because I know I have, you know, dogs and people mowing and blowing...

Jonah Evans [00:01:58] I'm working from home and, you know, I make a habit on when I get on recorded, and when I get on long conversations, I try to make a habit to wander around outside and stuff. But there would be a lot of wind noise and so no problem at all. And also sounds like I should try to sound intelligent a little bit during this.

David Todd [00:02:21] Ha ha ha. I don't think that will be a problem, from what I hear, you'll be great.

David Todd [00:02:29] And so I explained maybe half of, you know, the use for this. The other half is that we certainly would invite you to use the recording for your own purposes. I mean, some of this is, is really a personal history, and as much as the history about the black bear. So young as you are, you've done a lot. And it might be useful for you. And I hope you know that the recording is for your use as well.

Jonah Evans [00:02:58] All right. Appreciate that.

David Todd [00:03:00] Well, good. Well, let's get started. I'll try to sort of set a frame for when and where it is. It's December 3rd, 2020. My name is David Todd. I'm representing the Conservation History Association of Texas. I'm in Austin. And we are conducting an interview by telephone with Jonah Evans, who is the Texas Parks and Wildlife mammalogist. He is based in Boerne.

David Todd [00:03:30] And today, I think the goal is to talk a little bit about his background, but also about the American black bear and its decline and recent return in Texas and maybe some, some issues about tracking the animal and trying to deal with problems of coexisting with the bears as they gradually recolonize the state. So that's the goal. And I've got some questions, and if you can bear with me, I'd like to launch into that.

Jonah Evans [00:04:01] Absolutely.

David Todd [00:04:03] All right. Well, I'm intrigued about your childhood because, you know, on the one hand, you're growing up in this town of Boerne that's rapidly changing and developing and getting built up. But at the same time, you were the child of Brent and Carolyn Chipman-Evans, and they are, you know, devoted conservationists involved with the Cibolo Center for Conservation, and so clearly saw a lot of value in the nature that was changing in Boerne. And I was wondering if you could talk a little bit about that sort of mixed upbringing.

Jonah Evans [00:04:44] Absolutely, you know, it's, it's interesting because I don't think anyone looks at their childhood and thinks that it was unique because it was the only one that they've had. Although in retrospect, when I was growing up, you know, I, I grew up on a family ranch and I was the seventh, seventh generation in my family on that property and spent, you know, all my days not in school wandering around the ranch and playing outside. And all my summers were outside on the ranch and all my friends lived in neighborhoods in the town. And it didn't even occur to me that much then as a, as you know, in middle school and high school, when friends would come out, I just somehow didn't even occur to me. But it did have a profound impact, you know, growing up on a ranch, outdoors all the time, with parents that were dedicated to conservation.

Jonah Evans [00:05:42] And, you know, the conservation that my mom and my dad were working on with the Cibolo Nature Center was also very much tied to a family connection to the land because that, that land that the nature center is on was historically owned by my great-great-great-great-grandfather. And, and so it was, it was this interesting combination of family heritage mixed with wildlife and natural, like conservation of the land that somehow created a certain level of meaning to it for me, that made it just seem inevitable that I would end up in a, in this kind of career path. And, you know, I, I when, when it was spring break, I

would be at the nature center volunteering with research. If it was summertime, I'd be there helping with summer camps. And, you know, I was just sort of bred into that world.

Jonah Evans [00:06:42] And, and, you know, it's really interesting. On one hand, it seems inevitable. On the other hand, I have a sister who writes cookbooks in Italian and lives in Milan and loves, you know, the culinary culture of, of urban centers in Europe.

Jonah Evans [00:07:02] And so very, very different outcomes for the two of us. But for me at least, it seemed inevitable. And I just grew up super passionate about the outdoors. Everything is this, is this endless mystery. The deeper you dig into any, any corner of nature, the, the more, you know, intricate universes that continue to unfold.

Jonah Evans [00:07:24] And, yeah, so, so it was it was a pretty unique upbringing, I think, you know, we were on a, on a ranch right on the edge of a town, this small town that's been growing really fast. And that's been really hard to see from some from the perspective of someone who really loves the land and sees the value and the, and just sort of the historical value of, of land. And, you know, when you walk around on a ranch and you see rocks sitting there on the ground that have probably been sitting there for hundreds, if not thousands, if not hundreds of thousands of years, and, and seeing plant communities that have been slowly developing and sitting there for a really long time, it's, you know, certainly tough to see those be paved over at a really alarming pace.

Jonah Evans [00:08:13] But yeah, so, I mean, I think that's, that's sort of where I'm at. You know, it was really interesting to get to come full circle back to living in Boerne. That wasn't necessarily the plan. I didn't expect there to be wildlife jobs that would land me here, but my current job was flexible enough to allow me to office here and it's been really need to, to come back here and see the town and see how it's evolving and, and get to be a part of that.

David Todd [00:08:45] Well, it's interesting that you talk about how life sometimes takes us full circle, and as I understand, you became interested in the techniques and whole culture of wildlife trafficking from Elbroch and Halfpenny and others. And now, you know, many years later, you've developed an app and you've got this nature tracking website and, you know, clearly trying to promote and share that, that kind of knowledge. And I was hoping you could talk a little bit about how that, that skill has played a role in your life.

Jonah Evans [00:09:30] Absolutely. So, so wildlife trafficking is something that was historically a natural part of growing up as a human on earth, you know, when you when, you know, many native cultures don't have a separate word for wildlife tracking and hunting. It's the same thing. And when, when the San Bushmen in Africa go and, you know, would do persistence hunts and chasing down kudu or some other, you know, large antelope on foot, I mean, they would run the equivalent of a marathon barefoot through the desert at the hottest time of day looking for tracks. And, and there's been actually quite a bit of research into how animal tracking - there was likely a fair bit of selection pressure on early hominids to be able to track animals. And those that were able to do it well were more successful hunters, and that, that may have actually had an influence on some of the cognitive development of humans.

Jonah Evans [00:10:36] So anyway, I know I'm kind of going down a wormhole here, but for me personally, it was, it's fascinating, because it brings together a wide variety of other natural history and nature skills, right?

Jonah Evans [00:10:51] So when you're, when you walk into an open meadow and you look on the ground and see the scat of a bobcat, that scat might tell you all kinds of stories about what animals are in that meadow. So maybe there's vole skulls and pieces of voles in that scat. And then you look around in the meadow and you notice all these little vole trails using the meadow. And then maybe you find an owl pellet nearby with skulls of those voles. And then, anyway, it starts to build a story of the ecology and the food webs that are happening in an area.

Jonah Evans [00:11:25] And then you might wander to a different meadow and see no signs of voles. And then you wonder why aren't there any here? And maybe you find out it's due to some, you know, soil differences or different species of grasses that are there. Who knows? But it's sort of that deep ecological understanding that's really exciting and is connecting different, different pieces. I mean, when you find a scat and you see that it has persimmon berries in it, or fruit, and it has the seeds of persimmons, well, then that tells you something about where that animal has been and what plants are in fruit. And so it's just, it's not just about identifying the footprints of an animal. It's much more about the, the larger reading of the landscape and the ecology. It's like field ecology.

Jonah Evans [00:12:14] What I found when I started getting excited about animal track identification and interpretation is I went and studied with a variety of different experts in the field, spent quite a bit of time dedicating, I mean, huge amounts of time. I mean, I've read every single book multiple times and I mean was just obsessed with animal tracks for quite a while. I travel the whole country and have thousands and thousands of photos of animal tracks and ended up writing the field guides, the iTrack app series and then also a coauthor on the California Field Guide to Animal Tracks and Scat, I think it's called, through UC-Davis. So anyway, I really got, you know, obsessed with it and tried to do a lot to get to share that excitement with other people.

Jonah Evans [00:13:08] It really triggers a part of your brain, I think is so satisfying it's sort of that Sherlock Holmes solving natural puzzles. You know, when I find tracks on the ground and you can interpret these weird little stories of animals, it just opens up an entire universe to people who, who have not...I mean, like if a person who is unfamiliar with animal tracking, when you go on a walk outside, you might see some birds and some deer and a couple other animals off in the distance, a squirrel or two. But otherwise, nature seems pretty, pretty quiet. But to a person who is really paying attention to animal tracks, you walk in your backyard and there's these stories of all these dramas that have been going on all night. And it's just, it becomes like, you know, a routine, like reading the morning newspaper or something.

Jonah Evans [00:14:02] So I know I'm kind of rambling on a long time on this question, but it's something that, you're right, I am very passionate about. I started working through a organization called Cyber Tracker in South Africa. Mark Elbroch brought, they have, they created a certification system there for rating trackers. Mark Elbroch brought that to North America. And I worked through the system here and have over the years run over 200 Texas Parks and Wildlife biologists through this certification course. It's a two-day field exam. Not everyone is awarded a certificate. It's sort of a test and training at once.

Jonah Evans [00:14:40] And by over 200 people have gone through it, and when I apply for my first job with Texas Parks and Wildlife, five of the six people on the interview panel had taken my track training or taken the tracking certification from me. And so ultimately, it did lead full circle in a way in that I, when I applied for this job, it was - everyone already knew

who I was and was excited about my passion for wildlife tracking. And it really it was sort of a natural connection into this position.

David Todd [00:15:16] That's fascinating. Well, it sounds like, you know, part of your education has really been, you know, informal and, and self-led. You're like an autodidact.

Jonah Evans [00:15:30] Exactly! Is that how you pronounce it? I always thought it was autodict.

David Todd [00:15:35] I don't know. I don't know. I may I may be mistaken. I kind of go back to autodidact school.

Jonah Evans [00:15:43] Yeah, me too. I aspire to be, for sure. I mean, I taught myself how to program and wrote and developed iPhone apps from scratch. And, and, you know, I've really taught myself a lot about, like how to play jazz guitar. And like, I just, I am kind of a ravenous learner and, and really passionate about being able to teach yourself things and, and that's actually one thing that I love so much about the tracking certification system, is that it rewards people based on their own skill level, not based on their credentials. So I have I've seen many PhD mammalogists who are, are completely out of their depths when it comes to wildlife track identification. In fact, that's probably the norm. And so if you're hiring people for a job where you need to do some wildlife track ID, you might see somebody who has a PhD, and think, all right, this is the person for the job or maybe there's this hobbyist. And it turns out they actually have way better skills in track ID. And so it's a really, it's really great to honor people's skill levels based on their abilities and, you know, actually based on their skill level and so, rather than their credentials.

Jonah Evans [00:17:04] And so, yeah, I definitely have a bias towards being an autodidact, autodict. I like the way you say it sounds better. It's probably the way you say it.

David Todd [00:17:21] Well, you know, aside from what I think you've taught yourself, you have gone through the more, you know, credentialed, official, formal kind of schooling. And I thought we might just briefly talk about your time at Prescott College, which, as I understand it, has a sort of experiential approach. And then later, you get your master's in the wildlife science from Texas A&M, which is just another way of thinking about learning about the environment. So can you talk about those two experiences?

Jonah Evans [00:17:56] They were polar opposites. Prescott College - there's a new student orientation, which is a month-long backpacking trip with a group of 10 other students who are just coming in. And it's led by two outgoing students who are, you know, trained up in wilderness safety and stuff. And so you're spending a month backpacking through the Arizona wilderness. And then you come into the school and, and the class sizes are limited to about, you know, 13, 14 people, so that with the teacher you can all fit into a 15-passenger van and go out into the field. And it was very experiential, very hands-on. It heavily favored, like, written reports, oral presentations, over testing. So there was very few tests, but there was a lot of presentations and a lot of reports and a lot of, you know, written, you know, essays and stuff like that.

Jonah Evans [00:18:54] And so in a way that actually is much more similar to a career is like. I mean, once you, once you graduate from college and you end up in a job, how often are you taking tests, versus how often are you having to write reports and give presentations? And, you know, I can say that I have taken very, very few tests since I've graduated from high

school. And so anyway, that philosophy, I think, I think suited me well and also suited my personality type well. I was somewhat disillusioned at the time with my high school experience and the way education, the educational system seemed pretty, pretty factory style and just wasn't connecting to my somewhat, you know, somewhat scattered and ADD sort of personality type. And I mean, I, I think maybe if I have those tendencies or tendencies, not actually anything has been diagnosed, but, you know, I just kind of have a lot of energy and I'm kind of interested in what I want to study and don't really, I've never been great in like reading a textbook on something I'm not interested in and reciting it for a test.

Jonah Evans [00:20:09] So anyway, that was a really neat opportunity. There was a lot of very progressive thinking about technology and, and theories about wildlife and the environment and management and all kinds of work there.

Jonah Evans [00:20:26] And then I spent, after that I graduated and my wife and I, who I met there at school, traveled around and worked a number of different environmental education jobs. And then I found, and meanwhile had already been obsessed with animal tracking, and then I found out that Mark Elbroch and this guy, John Young, who were both well known in the tracking community, were offering a nine-month tracking apprenticeship in California. And so we applied for it and were accepted as a group of 10 people. And we, we drove from Texas to California and got jobs doing environmental education work, and kind of freelance work in between, and lived there for nine months, while every other weekend we took a course in animal tracking with Mark Elbroch and John Young. And that really got me very interested in the more rigorous aspects of wildlife science and in kind of working, it, just sort of the deeper dive that I wanted to take. And, and so once we started that, about halfway through that, I decided to apply to Texas A&M University. My wife and I actually both applied and both got accepted to the master's degree program there in wildlife science.

Jonah Evans [00:21:43] And, you know, so we went from this small liberal arts college, very kind of forward-thinking and very experiential-based to, you know, sometimes these lecture halls of 100-plus students with a teacher who you never really actually had a conversation with face-to-face and in this giant, in this giant university setting. However, the resources that are available to you at a huge institution like that are amazing. And so you need a statistician, well, there's a bunch of them looking for things to do, potentially, you know, if you bring the right project to them. So it was a, it was a very different experience, but I think opened up a lot of different doors for us and it kind of gave me a perspective into multiple different worlds, so to speak, which has ultimately served me well in the ability to kind of communicate to people across both, you know, political spectrums and just sort of ideological spectrums. And so, yeah, I actually think that that combination worked well for me.

David Todd [00:22:49] I see. Yeah, it seems like a nice combination of different scales, and what, with a small place with a sort of experience approach can offer, and what a, you know, a large institution like A&M can, can provide.

David Todd [00:23:08] Well this gives us some idea of where you, where you came from, you know, from Boerne, and Cibolo Center, through Prescott and tracking and Texas A&M. And maybe we can just launch into some of your thoughts about black bears in Texas.

Jonah Evans [00:23:29] Sure.

David Todd [00:23:31] I'd be curious to know what you can tell us about some of the early days of, of people's interaction with bears, I guess, was largely hunting and I guess a lot of it

focused in east Texas in the Big Thicket and so on. I've read about Uncle Bud Bracken and Ben Lilly, active in the late 19th and early 20th centuries. And is there anything you could share with us about, you know, those days and that, that place as, of course, related to the bears?

Jonah Evans [00:24:08] You know, there's, there's a book called Big Time Texas Hunts, I think. And I'm not pulling it up, but basically it sounds like there's a similar story for West Texas and you know, I spent five years living out in Alpine, working as a wildlife diversity biologist for Parks and Wildlife there, before I became the mammalogist. And so I'm actually much more familiar with the West Texas history than I am the East Texas history. Sounds like you might be more expert on the on the historical aspects of East Texas than I am, except for I can, I can basically say that I think the story was pretty similar all over. You know, we're in the days before any, anything like TV or, or Internet or phones to keep people entertained. So people, the idea once bears, you know, once people were, you know, safe and in the cities and had jobs and had food, I mean, the idea of going on an adventure to hunt a bear had so much allure. And, you know, there's these stories of these big hunting camps that were set up every year on the Davis Mountains out in West Texas. And there would, you know, be a bunch of guys on horseback and they'd go out and hunt as many bears as they could. And you know that, that carried on through the early 1900s. But I think by the 1940s, the bear numbers started to get really low. And by the '50s, I believe, they were pretty much wiped out in most, if not all of the state.

Jonah Evans [00:25:59] And and. Yeah, I mean, as I was talking about being an autodidact and I was mispronouncing the word (I did look it up, you had it correct earlier), this is an area, like some of the historical aspects of bears in the state is something that I've researched. But I haven't really, I haven't read like all those great historical, historical accounts to the degree that I would like to have. And so, so I really can't speak to in fine detail except to say, you know, bears were basically completely wiped out almost, almost entirely due to overhunting. And a lot of it was sport hunting. It wasn't related to depredation or livestock, you know, reducing mortality of livestock (but there's some of that as well). And, and after they were wiped out in the state, it basically was, you know, 30, 40 years of, of not much bear activity before they started to turn up again in little tiny corners here and there around the state.

Jonah Evans [00:27:13] But yeah, I mean, I know I know there's a history of black bears in East, I mean, they historically roamed everywhere on the state, but I think some of the later strongholds for them were in like the Big Thicket area and up in northeast Texas in some of the dense piney woods and then, and then in the mountain ranges out west.

David Todd [00:27:35] OK. And I guess in the '80s, and I guess my notes suggest that in '83, Texas outlawed bear hunting and then Mexico gave it endangered species protection in '86. And I was curious if some of those laws, in your view, had much impact on the bears' gradual resurgence.

Jonah Evans [00:28:05] So they definitely did not have any impact immediately because there were no bears for quite a while, at least in Texas, right. When there's no bears there, it doesn't matter what your laws are. But once bears started trickling back in. Well, first they actually trickled back into Big Bend National Park, which is a large protected area. So even there, the laws weren't super applicable. But, but certainly as bear started to expand beyond the park and showing up in other areas of the state, they, it was become crucial that they have this level of protection because they are a very fragile population at this point. You know, if today they did not have that protection, there really would be no path for bears to ever recolonize.

Jonah Evans [00:28:55] So, you know, the idea is if you can recolonize and have areas of the state where there's healthy and functioning bear populations, you know, maybe one day we can get to a point where we're able to open up a limited or very regulated hunting season. And that would potentially build a lot of support to having bears in areas from some of the local communities that would benefit from some of the, the revenue streams associated with hunting and stuff.

Jonah Evans [00:29:25] And so, but and I can't speak too much to the story in Mexico, but certainly, you know, our bears are coming in from Mexico. And so if the, if the Mexican government had a different set of regulations and now I will say that I believe that their regulations are pretty loosely enforced. And so I don't know, I mean, I've just, I've seen lots of images of people killing bears in Mexico. And, and so I'm sure that it's, you know, if you get caught by the right person, you get busted. But I think it's fairly loosely enforced. But there are at least enough areas with enough bears there where there's a surplus and they're looking for places to go and they're crossing the border and ending up in Texas.

David Todd [00:30:23] Do you think you could tell us much about some of these first appearances in Texas? I think that there were some sightings of transitory males in and around Big Bend, so maybe you were mentioning in the '50s, '60s, '70s.

Jonah Evans [00:30:41] Yes.

David Todd [00:30:42] Were they coming in from Mexico? Is that what you're thinking?

Jonah Evans [00:30:45] Yeah, for sure. They were coming in from some of the mountain ranges just across the border. And, and what typically happens and what we've seen happen in two different cases now since I've been with the agency is when conditions are poor, when there is a drought or wildfires, or for some reason, the food resources don't materialize, that causes bears to need to disperse to find food.

Jonah Evans [00:31:15] And so if there's a big drought in Mexico and there's just not enough food suddenly, and there has been plenty for years, now there's not very much you end up with bears traveling in all directions to try to find enough food. And a lot of those bears ended up showing up in Texas, and if they happened upon an area that is suitable and they find food then they'll stay there. And so I think, it's hard, it's hard for me to say what the conditions were like in the '80s and in the early '90s when bears really started to turn back up in Big Bend National Park. But it might have been instigated by some kind of, something like that in Mexico. It certainly has been the case that the big spike in bear activity we had in 2011 and again this, earlier this year in Del Rio and some of the border cities around, along the river, a lot of that activity is likely due to this spike, or this, a drought that we had over in Mexico this year.

Jonah Evans [00:32:26] So, yeah, so so anyway, I don't I don't know...OK, the other thing I could add is that, it is, as you said, it is almost always transitory males are the first to show up into an area. They tend not to stay there if there aren't females. You know, they tend to wander through and notice that there's no females and work their way back to an area where there are some females. But certainly that's when you're on the periphery of the range of black bears, the bears that you'll see showing up first are going to be juveniles, potentially, and transitory males that are just wandering through. And, but if you want a population to really stick, that's really, that's where you really need to have, you know, a female set up a

territory and have some cubs, and then once that starts to happen, that's sort of the next phase of bear recolonization after you have that transitory male phase.

David Todd [00:33:33] And what do you think would have been the reason behind these first sightings of breeding bears, I guess in the late 80s in Big Bend? Was there some sort of tipping point, some, some kind of precipitating cause, I guess, that you can point to? Is it drought, I think you mentioned earlier, do you think that was a factor? Or fires down in Mexico, what do you think was a factor?

Jonah Evans [00:33:59] So, yeah. So I don't know that anybody knows for sure. I just don't think we have those data. But there's a couple of different options. Right? So probably, so, so it's, if you ... It's just like people, if you have a hometown and you love it and you're happy there and there's good jobs and you're making a lot of money, you're not going anywhere. But when conditions get poor and the company goes bust and there's no money anymore, or there's or whatever, there's a horrible drought and there's the dust bowl or something, you know, something like that, suddenly you have these big migrations of people. So, so with bears, there has to be something that pushes the bears out.

Jonah Evans [00:34:41] And now one thing it could have been is conditions were so good for so long that the population just built up to a point where there was a lot of competition. And, you know, a couple of big male, territorial male, black bears will start to push out some of the other smaller bears that can't hold the territory and, and actually will get quite dangerous for those small bears. And so, so it could be that the, that the larger black bears, you know, that became established there were just, you know, there was a territoriality thing that was pushing bears out of the area. You know, if, if that didn't happen immediately, or on its own, then it might have also happened in conjunction with some sort of environmental characteristic like the food, that caused the food resources to not materialize, so like, you know, drought or wildfire.

David Todd [00:35:38] This is really interesting. I mean, from what I've heard, it's just so rare for endangered species, threatened species, to naturally recolonize. So I hope you could just explore this a little bit more, because I understand that bears have been returning to east Texas, as they have to Big Bend / Trans-Pecos. Is there anything you could tell us about what's behind that? I mean, I heard there were some bears that were reintroduced to Louisiana maybe 15 years ago. Is that part of what's in play there?

Jonah Evans [00:36:18] You know, so the Louisiana Black Bear, which is a different subspecies of black bear that was federally listed and protected, was, I mean, there were a number of bears that were reintroduced to Louisiana. There's a lot of protections there.

Jonah Evans [00:36:33] But actually, the bears that we have showing up in east Texas the most are up in the very northeast corner of the state, I believe like Red River County or up near where Texarkana is. And I think a lot of those bears are actually coming in from Arkansas and, and Oklahoma. And, you know, I don't know a whole lot about what's going on across the border there. But what I, what I do know is, so far we have a photo of a bear that shows up on a trail camera and then we never hear from it again. And likely there's a couple of things that are the reason for that. It could either be transitory bears that are just going on little walkabouts from a safe area across the border and they come into Texas and get a picture taken of them and then wander back. It could be related to cultural carrying capacity, which is just a term that describes whether or not the culture will accept the animal at a certain density in your area. So, so, that's just a nice way of basically saying it could be that somebody

shot it and it just, you nobody ever heard about it, it got shot and nobody said anything about it.

Jonah Evans [00:37:54] But, yeah, but those, but those bears, like we have yet to see breeding female, you know, females and cubs and, and confirmed female bears, I mean, you can't often tell the sex of a bear from a photo from a trail camera just so it might not show the right features or whatever. And so you have this bear and we often just assume that they're young males, or adult males or whatever. And, you know, if we see one with a cub, we'll know for sure. But at this point, East Texas is more just kind of that. It has yet to really be colonized. It's, it's really just this kind of area where bears kind of wander around from time to time. And meanwhile, the Louisiana black bears, I think, are too far into Louisiana really for them to show up in some of the more southern counties along the border with Louisiana.

David Todd [00:38:57] Oh, OK, well, you know, it's intriguing to me that, you know, at the time when these black bears are reappearing, particularly in west Texas, and they're doing it of their own accord, largely, Parks and Wildlife and others are going to great ends to reintroduce desert bighorn sheep. And I was wondering if you could just compare the two approaches to trying to bring a, a rare species back to an area where they've been extirpated.

Jonah Evans [00:39:35] Right. So so because sheep are, are a very different example. Because they are isolated to, to mountain ranges and the West Texas mountain range system was, my understanding is that they were, I think, completely wiped out from the whole system, and it was unlikely that natural recolonization would ever play a part in getting them back. And, and the other thing is that there's a broad base of public support for bighorn sheep reintroduction.

Jonah Evans [00:40:13] Being a big predator, and especially a predator that has a track record for getting into trouble, meaning that, so, so black bears, I mean, humans have learned to live perfectly well with black bears in many parts of the country. So you can go into Aspen, Colorado, or some towns in Tennessee, or even New Jersey, or all over the country where towns have adapted. And really it's about securing trash and any food attractants that will lead to bears becoming habituated or food-conditioned.

Jonah Evans [00:40:52] And so once once a bear turns up in, say, Texas, and, and encounters a homeowner who doesn't expect a bear to be there and immediately gets into the trash, or kills their chickens, or gets into their deer feeders, or one thing after the other, that bear builds up a pretty bad repertoire of dirty habits, they get it into continually more trouble. And there's an old saying, "a fed bear is a dead bear." So once a bear ends up like that, there's just very little you can do to retrain it, to be able to live and coexist well with people.

Jonah Evans [00:41:32] And so I think that that is really at the root of one of the big challenges and big differences. Bighorn sheep are not going to go raid people's hunting cabins and, and eat all the food out of them and smash things and, and stuff like that, or tear open a trash can. A bighorn sheep are sort of this majestic animal that people love to see, and it provides a big hunting incentive as well. Whereas, whereas bears meet almost all those criteria, but they have that kind of added piece that makes it really complex.

Jonah Evans [00:42:07] And so one of the challenges is, with the reintroduction effort, is you really need broad public support for it to go through. They're very expensive and they're very challenging to do, and, and with bears, if we introduce them to a part of the state and there isn't really broad support from the public and every, you know, basically all the homeowners are willing to retrofit with bear-proof trash cans, are willing to have bears brought back, then

it's very easy for that effort to fail because the bears learn bad behaviors and then also it ends up being a huge staff time requirement, dealing with all the nuisance bear activity, trying to haze bears and stuff like that.

Jonah Evans [00:42:54] And so, so, yeah, there's some really interesting parallels in those two stories, but I think there's some, some very important differences too that explains one of the challenges that the agency would have in doing sort of a large-scale reintroduction, unless there's really broad public support in a region.

David Todd [00:43:23] OK.

Jonah Evans [00:43:24] For some reason, broad public support for bighorn sheep is a real low hurdle. You know, the county commissioners and the city councils and the, and the, you know, governmental representatives at all different levels all support it, the public support it. When you go and say, hey, we'd like to do a black bear reintroduction, you just get a very different response from the public, and that makes things a lot more complicated. And so we really have favored this idea of natural recolonization, let the bears kind of come back in and, and as they do gradually, they'll give the people in these areas time to gradually adjust their behavior so that they can live more effectively with bears.

Jonah Evans [00:44:16] And we just saw that happen in Del Rio a few months ago where we had, you know, three or four different bear, bears show up in the city in like a three-week period. And the town hadn't seen bears in forever and really quickly, we learned things like, oh, well, there's some feral cat colonies, or they're leaving food out and that's attracting bears to those areas. And there's some other, you know, they're getting into certain places or whatever. It was a learning curve for the community.

Jonah Evans [00:44:49] And, you know, now the city council and the mayor, they were very proactive in trying to, trying to do things to better, you know, communicate how to, how to coexist with bears. And so I think they're, yeah, and I think that strategy really, as long as the bears continue to increase in population and then after recolonization is happening, I think that strategy will be more fruitful than one where we brought the bears to the area and now everyone's mad and pointing the finger at an agency who is responsible for it, rather than just supporting the natural recolonization.

Jonah Evans [00:45:29] So that's sort of where we came down on that equation. I think, you know, intelligent people could come to a different conclusion potentially. But that's sort of how our calculations have worked.

David Todd [00:45:41] That's interesting. And I guess that maybe a slower, natural reintroduction is just...it's stickier. There's less, less risk of folks reacting in a bad way. This way that they adapt may be more practical.

David Todd [00:46:01] Well, let's talk a little bit about this aspect of bears moving around, and of, you know, with your tracking skills I'd love to hear, you know how you can trace these animals' movements, whether it's by sort of the noninvasive ways of tracking, you know, hair or scat or, you know, footprints, versus some of the, you know, the banding and telesurveys or radio collaring. Sure.

Jonah Evans [00:46:43] So, so first of all, I I rewrote the black bear guidelines for the state several years, I mean, maybe 10 years ago, eight years ago maybe. And I have, since then, been

discouraging the use of radio-collaring bears without there being a clear research objective. I think there was a time when, when people would get really excited because they had a nuisance bear and they got it in a trap, and they'd think, "hey, let's put a collar on that bear, I see what it does!" That's, to me, that's not really part of a research objective. We need to know why is it worth it to, to, to do something so invasive to this bear? And what are we really going to get out of it that's going to be helpful. You know, what scientific question are we trying to answer?

Jonah Evans [00:47:38] And so, so I've really I've really been discouraging what you know, some people term like recreational collaring. You know, it's the things that biologists love to do. And just by nature, you want to get your hands on the animals and stuff. But I think we need to let the animals be animals as much as possible and get out of their way. And, and, you know, we definitely need to gather data, but what data do we really need? And so so I think, yeah, that I've discouraged that aspect.

Jonah Evans [00:48:09] Now, I've certainly used my tracking skills to help with confirming the presence of bears in different locations. You know, people send me all kinds of photos or I'll be out in the field and you know, we'll find bite marks on trees, or bear, bear rubs and scratches and scat and, and tracks all over the place. And that's, that's certainly really helpful. I mean, my, my, my time studying, you know, wildlife tracking has come in really handy for that. But, but, you know, it's more about watching, like, you know, the population level questions, right? Where our bears? Are there bears showing up in this area? Are they still there, over identifying individual bears and tracking them around, if that makes sense.

Jonah Evans [00:49:01] So I'm, I'm currently less interested in knowing what an individual bear does because that's been studied so much already, right? People have put so many radio collars on bears in the history of, you know, bear research, and they've watched bears wander around for days and weeks and months. And, and we know a whole lot about bear behavior now. And we know a whole lot about their diet.

Jonah Evans [00:49:28] And, and, so, so, really, the focus now is just where are the bears turning up and really focusing more on communicating that information with landowners and with, you know, people who live nearby where we're seeing bears turning up so that they can be prepared, we can kind of get ahead of any sort of bear activity in an area, so that we can, you know, assist with that natural recolonization.

David Todd [00:49:59] Gotcha. Can you go into a little more detail about, about these radio collars and how they might interfere with their normal behavior, you know, be invasive in some respect?

Jonah Evans [00:50:15] Sure. Well, so, first of all, they're big. I mean, these are not little things, right? There's a big battery on one side, a big trans, transmitter on the other side. And so these are big heavy collars that weigh down there and in the leather is really thick. You know, they're just big, big collars. There's been a lot of research into, you know, some you know, I guess your biases that might be created or injuries to wildlife. You know, I think, I think sometimes that's OK, right, sometimes like if there was a very important research question, that will likely help us answer a question that's crucial for conservation, then we can tolerate some risk to individuals. Right? And we can tolerate some disturbance and maybe we're stressing out the animal, but maybe that's, maybe we decide that, you know what, it's OK to have a couple of stressed-out bears with this idea that we're going to answer an

important question down the road that will be important for, you know, recolonization of the, of the species.

Jonah Evans [00:51:26] That said, yeah, I guess to me, it's more about that piece of it. It's more about making sure that we're focused on using the right tool to answer the right question, rather than using the tool that is fun for us to use, or that that we know how to use, and we're just going to do it, and not maybe answer the right question. So I try to be very strategic and focused on what do we need to know, and let's focus on our knowledge gaps and focus on answering those questions in the best way, rather than, you know, a tool that has potential to, I mean, they, they can cause injury, right? There are pictures of animals with where underneath the collars it's all worn down and it's chapped and, and irritated underneath the skin there, against the hide, where all the hair has been worn off.

Jonah Evans [00:52:23] And it's possible for animals to hang themselves on collars. You know, the bears climb trees a lot. What happens if they're climbing down a tree and a little branch hooks up under that collar? You know, I work on a project for the fishers in the Sierras and we had a fisher die that way. It's a, you know, big weasel animal. But it was climbing in a tree, and its collar got hung on a branch and it hung itself. So so, yeah, there's just, there's risks associated with any kind of real hands-on invasive work and potential stress that can be caused by it. So we wanted to, in general, just focus on using the tool that we need to for the job, and, and discouraging, you know, the things that might be the more glamorous and more fun stuff, but maybe not quite so crucial for the questions that we need.

David Todd [00:53:15] OK, well, one other question about monitoring the bears: I've read that you helped develop an online black bear reporting system, and I gather that's a way to sort of engage the public in understanding more about bears. And I was curious if you could talk about that, and just this sort of general idea of citizen science, and whether there might be value in efforts like that.

Jonah Evans [00:53:40] So, so we have sort of two different avenues there. One is we have this internal reporting system. So somebody from the public calls and says, I saw a bear. And we ask them a few questions and we categorize those sightings based on whether the bear, whether they had photos or whether, you know, is a dead bear or some kind of confirmation, a perfect track with a photo of it. Or, whether it was just observed by somebody or whatever. We have different categories based on the reliability of the observation. And and so we keep track of those. We have maps, you know, I can pull up a map and I can see where the bears have been seen and when they've been seen there. And that's very helpful for, you know, identifying areas where we might need to start focusing more PR sort of projects, reaching out to the public. Or, yeah, and just having a record of all the different sightings and sort of the outcomes. You know, what did we have to do with that bear? What did what did we try? What worked? What didn't - stuff like that. That, that's just sort of like this internal tool that we use as an agency for people who happen to call us and tell us they saw a bear.

Jonah Evans [00:54:55] There is another tool that in general I recommend people use that's available to the public, which is iNaturalist.org. And if you get on there, if so, if somebody from the public sees a bear, they can get on iNaturalist and they can identify, you know, something that they saw - any kind of, any kind of anything, it can be a plant, a bird, a bug or a bear. And they identify it and mark where they saw it, and it makes that data available to the public. And you can obscure the exact location as well so that not everybody will be able to know that there's a bear at this exact point, which might be a good thing to do in some cases, especially.

But yeah, so it gives you this ability to, to share information with scientists and with the public that's available to everybody, not just to Parks and Wildlife.

Jonah Evans [00:55:52] You know, somebody wants to give the information to us, they're welcome to call the agency or talk to one of the biologists. We'll get that in there. But if you want to contribute to a larger body of science then iNaturalist is the way to go for sure.

David Todd [00:56:07] I see. And so that's a way, I guess, to get more eyes and ears on the ground, beyond just professional biologists like yourself.

Jonah Evans [00:56:16] Huge. It is huge. I mean, before iNaturalist, if I wanted to know where river otters were in Texas. I mean, literally ten years ago when I started with Parks and Wildlife, I would pull up the Mammals of Texas book and I would look at a range map that showed all the historic records of river otters, ever, for Texas. And some of those locations could be 100 years old. And it was really hard to know because survey efforts are super hard to coordinate, very expensive. And now I could pull up an iNaturalist and I can see it up-to-date map of exactly where river otters have been seen last year. And, and it's amazing. I mean, we have learned so much from that tool, especially for charismatic, easily identifiable species - it is an amazing, amazing tool.

David Todd [00:57:07] That's interesting, I guess, especially for animals that draw attention. They're charismatic, as you say, or easily identified. Interesting.

David Todd [00:57:20] So I guess another set of questions I had for you is, what happens when bears recolonize an area and you start realizing that you have a three or four hundred animal who likes food and is strong and can get into all sorts of buildings and vehicles and causing havoc. I think you wrote, black bear response guidelines for the state not too long ago, and I was wondering if you could talk a little bit about how bears and humans can be managed to successfully coexist.

Jonah Evans [00:58:04] Yeah. So now you're getting into my bread and butter here. So, so, first of all, it's important for people to realize that attacks, especially fatal attacks, on people by black bears are extremely rare. From 1900 to 2009, I believe there are 14 confirmed black bear attacks on people in the lower 48 states. So over one hundred and nine year period, we had 14 fatal attacks on people. Every single year in the United States, there are 20, on average about 20, people killed by domestic dogs. And in the last hundred and something years, we've had fewer than 20 people killed by black bears. So, I mean, that's clearly, you know, they have the potential to be able to kill a person. They are, they can be dangerous, but it's very important for people to realize that the risk is extremely low, especially considering how closely bears live to people in much of the country.

Jonah Evans [00:59:13] Now, the other thing that's important is that, is to know what is a dangerous bear. The bears that, that have historically been dangerous to people are not what you would think. Most people think, oh, a female and her cub - don't get by a female and her cub. Well, of the, of the 60-something fatal black bear attacks that have happened on people - now, that's including Alaska and Canada, where bears are a lot bigger, all right - so I'm including those areas now. So that's a bigger dataset. Of the 60-some odd fatal bear attacks on people, black bears, I should say, all but one was by a male bear. Or I should say, I think it was 92 percent or by a male bear. Eight percent were by a female with a cub. And so the vast majority are solitary male bears behaving in a predatory fashion - not exhibiting the natural

(it is totally normal for a bear to be get into a defensive posture, to stand up, to even bluff charge), normal natural bear behavior. He's communicating, back away, that's all.

Jonah Evans [01:00:26] But what's dangerous is stalking bears - ears down, coming in close, trying to make physical contact, kind of backing away, testing you to see if you'll run. That's the, that's the dangerous kind of bear that you want to avoid.

Jonah Evans [01:00:40] So, so, yeah, it's, that's, that's really important. First of all, is that bear attacks on people extremely rare. They can live and interact in close proximity to people and they do do that in much of the country, with no real significant impacts.

Jonah Evans [01:00:59] Now, the next piece is critical is that that most of the negative interactions that we have with bears are due to human behaviors, not bear behaviors. So that's, that's critical to, to know. Right. So first, bear attacks on people are super rare. Then the negative interactions that happen are almost always due to human behavior. And that behavior is almost always related to an attractant - so something that's attracting a bear to an area, whether it be a, a, a trash pile or a compost pile or beehives or fruit trees.

Jonah Evans [01:01:42] In someone's backyard, which is a little bit more challenging to control, but it's, but it's usually something that's attracting a bear to an area with people and that bears begin to learn behaviors. And once that bear learns, learns to associate people with food, then there's very little we can do. At the early stages, we, we will attempt to do a number of hazing practices with, you know, paintball guns or cracker shells in a shotgun and things that go boom that will scare the bear away, but that will only work for so long. And once it, once it associates people with food, it's a downhill struggle at that point. It is unlikely to, to be successful.

David Todd [01:02:31] How do you compare? I mean, aside from the sort of reeducating folks and trying to reduce these attractants, how would you compare hazing a bear, versus going to the lengths of trapping and relocating one?

Jonah Evans [01:02:50] Yeah, so, so trapping and relocating, this was something that was very important to me when we set up our new bear guidelines, is to give bears a chance to correct their behavior and to live in place, first. And so, so there's a number of things we can do. I mean, step one is always to secure the attractant. So you had cat food on your porch, you're feeding cats and, and the bears were getting into it. Put that away. Problem usually goes away. That's step one.

Jonah Evans [01:03:23] Step two is if you can't secure the attractant, then set up deterrents of some kind. So maybe a bears breaking into a hunting cabin and you can put up an unwelcome mat they call it, which is basically a board with a bunch of nails pounded through, you know, nails' point up. And you put that in front of the doors and windows and the bears don't like stepping on nails and they'll leave it alone. Or putting an electric fence around the beehives, or things like that. So step one, security attractant, step two, if not possible, then defend it with some kind of deterrence of some kind to make the bear, you know, want to go away.

Jonah Evans [01:04:01] And then step three, haze the bear. And that hazing can be done with just a person with a pot and pans screaming and yelling at the bear and making a lot of noise and through body posture alone, scaring the bear away and making the bear want to, you know, leave that person alone. It can be throwing a rock at a bear. Or it can be paintball guns and pyrotechnics and all kinds of stuff. It could even be trapping the bear on-site and, and

then releasing the bear and shooting it in the butt with some paintball gun, you know, paintballs and stuff, as it runs away to haze it on site. So that's another strategy.

Jonah Evans [01:04:39] Last stage that we want to avoid is relocating the bear, because once that's happened, that bear's opportunity to contribute to recolonizing a new area is lost. Right? It's been brought back to an area where there's lots of bears and, and really far away, where it's unlikely to interact with people. So, so that's our last our last shot for that bear, is to relocate it. If it continues to get into trouble after that, and it's become a really, really significant problem that can't we can't resolve, it will either be relocated to a zoo or a sanctuary of some kind or euthanized. It just means, you know, at some point we'd have to shoot it. Fortunately, we have not had to do that.

Jonah Evans [01:05:27] You know, we had to, we did have to bring one bear to a zoo that after we hazed it multiple times and relocated it and it continued to get into a bunch of trouble. And so that one is living out its days in the Gladys Porter Zoo in Brownsville. But other than that, we have not had to euthanize any bears. And, and we definitely make an effort to try to, you know, make sure to, you know, make that a last resort.

Jonah Evans [01:06:00] Well, given the risk for either recalcitrant people or difficult bears, are there some parts of the state that just are not good candidates for bears to be colonizing? And I think they mentioned to you that Dianna Doan-Crider, you know, who lives out in the Hill country, said, you know, this is perfect bear habitat, but the bears' recovery would be really complex given all the small tracts and the many people in that part of the state. What's your feeling about that?

Jonah Evans [01:06:37] So that kind of brings us back full circle to that term I brought up earlier, which is cultural carrying capacity and it depends on the culture. I mean, we can, we can regulate bears and we can tell people not to kill bears, but if the, if the locals don't want them, people will probably shoot them anyway, especially in rural areas where there's not a, no game wardens in sight. You know, you're out on a big ranch and you don't want bears there. That will probably continue to you know, that could, could happen.

Jonah Evans [01:07:10] And I and I yeah, I really I really think that, you know, what I'll say is, it's a challenge, I don't think it's impossible. I know there's lots of areas around the country where people live with bears just fine in small tracts of land and, you know, spread out. I mean, similar scenarios they live with bears just fine.

Jonah Evans [01:07:34] The difference is when you go to an area where everybody knows that there's bears there, everyone's prepared for it. Nobody puts trash out. The trash cans are all bear-proof. And, and, and, you know, one of the other somewhat unique problems we have in Texas is that in most states, baiting for wildlife, for hunting is illegal. And in Texas, it is run of the mill for people to put up deer feeders to bait deer in for hunting purposes. And so, any normal healthy bear wandering around in the woods, roams, you know, wanders upon this giant can loaded to the brim of corn, is going to eat it. And so that is somewhat of a gateway problem for bears, is that once they do that, if that person had recently filled it, maybe it starts to smell like people or something, and it might lead to other things and and also it's a sort of an early, it's just, it's like a nuisance problem waiting to happen. Every single time a bear gets into a deer feeder, you know, it might damage the theater. And then the landowner calls us and they're upset that the bear's getting in the feeder. And, you know, we're not going to haze that bear and we're not going to relocate that bear. Doesn't, you know, the litmus test that we

use is if we replace that bear with another normal healthy bear, is it going to behave differently? And no, it's not. You know, that's normal, normal bear behavior.

Jonah Evans [01:09:08] And so that's that's a tough one because it costs money to retrofit a deer feeder to be bear-proof and telling the landowner who has 10 deer feeders out, that they need to put electric fences around all the deer feeders and maintain them and keep checking them. You know, it's just not something they want to hear. So, yeah, it is definitely a challenge.

Jonah Evans [01:09:32] Now, it's nothing close to the challenges that we have in other parts of the country where there's, you know, people trying to raise sheep and wolves interacting or something like that.

Jonah Evans [01:09:43] It's and what I will also say is most of those ranchers and landowners who own those properties are pretty darn happy to have bears on them, even though they're damaging the deer feeders. And, you know, they're looking for solutions and they're not happy about the fact that bears are damaging their feeders. But most of them I've talked to are really excited to see a bear back on their property after not having any for, you know, a hundred years or something. So that's been my experience. I mean, obviously, it's biased by the people who I happen to talk to, but.

Jonah Evans [01:10:25] But yeah, so anyway, it's, it's a challenge, but I think, you know, these kinds of large predator conservation challenges are just, they're normal and they happen, they're happening all over the world, all the time. And, and it's and this one I view as relatively low controversy, in comparison to many of the other ones. And, and I think that, you know, it's a challenge, but it's not, it doesn't, I don't view it as some kind of insurmountable challenge. I think it'll take time and money and work, but that's what we're here for.

David Todd [01:11:03] OK, so just another shot at this, this issue of cultural capacity or tolerance for bears - I gather that in West Texas, the sheep and goat industry is much declined from what it was, you know, 50 years ago, and that similarly in east Texas, you just don't see people running hogs in the wild like they once did. And I was curious if that contributes to people being more willing to accept bears in their landscape than they might have been earlier.

Jonah Evans [01:11:45] I mean, certainly sheep and goats are vulnerable to bears and mountain lions, and, and so that change, I think, has been beneficial for actually both of those species for bears and mountain lions. You know, in west Texas now it's primarily hunting operations where people are coming out to hunt mule deer and other you know, hooved animals. And, and so that transition has probably benefited bears. But, yeah, it's hard it's hard to say with certainty, and but I do think that, you know, it probably has some amount of benefit for bears in recolonization. But it's hard to you know. We haven't measured it. And, you know, as a scientist, I kind of try to avoid too much conjecture.

David Todd [01:12:47] Well, and just as a general comment, as you look into the future, given your experiences to date, how do you think it would be best to try to ensure black bears' successful return to the state?

Jonah Evans [01:13:07] You know, that's a good question. So, you know what, and actually, you know, I'm in the process of, I have actually written the first draft of the black bear management plan that's being reviewed by the Texas Black Bear Alliance right now. And

we're hoping to get that out. And basically, the goal of that plan is to lay out that vision of how that would basically, you know, what we're going to do and how that's going to work.

Jonah Evans [01:13:36] The, the primary thing that I think needs to be focused on, out of the box, more, and, you know, we're doing a lot, we've recently published three different bear brochures for people. And the folks out in west Texas are giving workshops and talking to landowners and stuff. So there's a lot going on right now already, but we really need to get ahead of this from the public outreach side of things.

Jonah Evans [01:14:09] And so what I would, you know, I think make a lot of sense is to focus on the areas where we're seeing bears turning up. So that would be northeast Texas, kind of corner near Texarkana, Red River area, and it would be the border regions of Mexico and Texas, along the Rio Grande. You know, and I would focus on all the different, the different, you know, towns and cities along those border regions and then really focus on areas where we're seeing a lot of bear activity. And so, you know, as we start seeing more bear activity in an area, I think it makes a lot of sense to start ramping up our public outreach efforts to start building the cultural carrying capacity to start, you know, educating the public about, you know, A) bears aren't super dangerous of people, for one. And people live side-by-side with them in a lot of the country just fine. This isn't something to be really afraid of. We take some basic precautions and the risk is almost completely reduced to zero and, and, and then take a few other, make a few other little small changes so that there's nothing that's going to attract a bear to your area. And you can pretty much live just fine side-by-side with bears. And then you get to see cool bears wandering around every now and then.

Jonah Evans [01:15:32] And so, yeah, I don't know, I think I think there's a lot we could do on that front alone, and that's really where we seem to have our main limiting factor, right? Bears show up places and then they disappear. During 2011, during the big droughts, we had a lot of bears coming into, deep into central Texas - Mason County, Kerr County, Edwards County - lots of bears turning up. And then a year later, nothing: like we didn't hear anything of those bears ever again. And, you know, maybe that story would have been different had we really been proactive in preparing people for the possibility of bears turning up in those areas. It's hard to say for sure. I really think that's, it's the human problem that we need to solve more so than it is a bear one. If humans disappeared off the earth, it wouldn't be very long before bears were covering the whole state again.

David Todd [01:16:37] That's a thought.

David Todd [01:16:37] Well, let me just ask one last question, if you don't mind, and it's open-ended, is there anything you'd want to add about, you know, the experiences and insights that you've had about bears and what you'd like to share?

Jonah Evans [01:16:56] You know, yeah, so one of them is that, so as the mammalogist for Texas Parks and Wildlife, my job is focused on non-game and rare mammals in the state. And bears are one of the species that's under that umbrella. There's a lot of others.

Jonah Evans [01:17:15] And the thing about bears is, while they are considered threatened in Texas and there's not very many of them in the state and we want to see them recolonize, there's a lot of other animals that are in real dire straits that are needing a lot of time and energy, because they're facing much bigger problems. You know, bears are bears are doing extremely well in most of the country - all up the East Coast and all up the West, all up the, I guess when I say East Coast, I meant like the like, all up the Appalachian chain and all through

the Rockies, there's a lot of bears. And, and so they're at no risk of extinction. And the populations aren't in some, you know, big decline or anything. In fact, they seem to be doing pretty well.

Jonah Evans [01:18:03] So as far as the allocation of time for me goes. Right? So you sit in my job and you look out at the state and you say, all right, what are the big problems facing mammals, non-game mammals in Texas? And what should I spend my time working on? Well, we have the Texas kangaroo rat up in the Panhandle that is only found now in five counties in the whole world. And if it goes extinct in those counties, it's probably, I mean, it's done. It's extinct. And so we have the Texas kangaroo rat. And, and we're doing a lot of work on that species.

Jonah Evans [01:18:40] And we have a bunch of bat species that are being hammered by white nose syndrome, as this disease spreads across the state, you know, spreads from the across the country. And now it's in Texas, we had a bunch of myotis velifer, or the cave myotis, die last year. And we're doing a lot of research and treatment work. And, you know, I've written a lot of grants and studied this problem really hard to try to find ways to support bats in the face of this really devastating disease that's coming through. So there's that issue as well.

Jonah Evans [01:19:18] There's the swift fox, which was historically found and up to 78 Texas counties, which is now found in one, partially, you know, a tiny bit in a second. So, so swift fox was once found and swift fox has been seeing big declines in a bunch of other states as well.

Jonah Evans [01:19:36] And, and, you know, quite a few more. I mean, we even have ocelot. Now, ocelot is sort of like bears in a way. There's, they're common in parts of Mexico and and south. And so should we spend a ton of time working on them? Maybe that's debatable based on the fact that they're existing in other areas. But anyway, there's a lot of different conservation problems and challenges.

Jonah Evans [01:20:02] And, and bears, I think are an important one, especially because of the interest, but, but they end up when I do all the math and I look at the ones that are the, of the biggest conservation concern for the state, you know, they usually end up ranking kind of low. And so I definitely try to put, I mean, they get more of my time than they deserve, based on their conservation rank alone. And I think that's largely because of the public interest in bears and because of the, the, the potential to interact with people and livestock and be, you know, threatening and stuff. But strictly from a conservation need perspective, and when we do sort of objective rankings of what the threats are and what the need is, they don't rank super high.

Jonah Evans [01:20:54] So, so, I you know, I usually try to explain that to people when they're asking, like, well, why haven't you guys done this and this and why aren't we doing all this different stuff with bears? You know, the reality is there's some really big, daunting problems facing certain Texas mammals. And, and there's one of me for the whole state. And, you know, I get spread pretty thin, trying to, trying to do all that stuff. So I feel like we've done a lot with bears based on, you know, the limitations that we have. But, but we also have to make some real kind of hard triage-like strategy, you know, strategy decisions to decide where to spend our time and energy.

David Todd [01:21:37] That's, that's really well put, I guess triage is, is the word for it. I mean, your, your time and attention is spread across 254 counties and many, many species. And it must be a really tough challenge to figure out which one would benefit.

David Todd [01:22:01] So thank you for explaining all this. I really appreciate your time. And I wish you well with sorting out the swift foxes, ocelots, and Texas kangaroo rats, and black bears as well.

Jonah Evans [01:22:17] Hey, it was a pleasure talking and I hope I help some folks find some value in this. And, yeah, it's always fun to get to share what I'm doing every day with somebody who's interested in it.

David Todd [01:22:33] Well, count me in. Thank you so much. I appreciate it, Jonah.

Jonah Evans [01:22:37] Absolutely. Hey, you have a good day.

David Todd [01:22:39] Yeah, you too. Bye now.

Jonah Evans [01:22:40] All right.

David Todd [01:22:41] Bye.