

TRANSCRIPT**INTERVIEWEE:** Matt Lechner**INTERVIEWER:** David Todd**DATE:** May 13, 2024**LOCATION:** Stonefort, Illinois**SOURCE MEDIA:** M4A, MP3 audio files**TRANSCRIPTION:** Trint, David Todd**REEL:** 4206**FILE:** BartonSpringsSalamander_Lechner_Matt_StonefortIL_13May2024_Reel4206.mp3

David Todd [00:00:02] Right. Well, good afternoon. My name is David Todd, and I have the privilege of being here with Matt Lechner. And with his permission, we plan on recording this interview for research and educational work for 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 an hour class at the Briscoe Center for American History, which is at the University of Texas at Austin.

David Todd [00:00:35] And I want to stress that Mr. Lechner would have all rights to use the recording as he sees fit. And, before we went any further, I just want to make sure that's agreeable to Mr. Lechner.

Matt Lechner [00:00:46] Certainly.

David Todd [00:00:47] Well, good. All right, well, let's get started.

David Todd [00:00:51] It is Monday, May 13th, 2024. It's about 2:40 p.m. Central Time. My name, as I said, is David Todd, and I am representing the Conservation History Association of Texas. I'm in Austin, and we are conducting a remote interview with Mr. Lechner, who is based in the Stonefort, Illinois area.

David Todd [00:01:17] By way of introduction, Mr. Lechner has a B.S. in Biology, with an emphasis on Fisheries from the University of Wisconsin in Superior, and also an M.S. in Wildlife and Fisheries Science from South Dakota State University.

David Todd [00:01:35] He's worked in a number of areas, including service as a biologist for the Forest Service from 1988 to 1997, and then from 2003 to 2019, with time at both Sequoia and Shawnee National Forest. Of special interest to us is his tenure from 1997 to 2003 with the U.S. Fish and Wildlife Service. Mr. Lechner worked in those years as a fish and wildlife biologist in the Service's Austin office, where he was deeply involved in the recovery work for the Barton Springs salamander.

David Todd [00:02:14] Today we'll talk about Mr. Lechner's life and career, and especially focus on what he might be able to share with us about the Barton Springs salamander and its life and conservation.

David Todd [00:02:26] So, with that introduction, I wanted to just, first of all, thank you for taking time to talk to us.

David Todd [00:02:34] And then, maybe we can start with a question about your childhood and early years and see if you can point to any people or events that might have been influential in your interest in animals and science and conservation.

Matt Lechner [00:02:53] Well, I grew up in Springfield, Illinois, kind of right on the edge of a city, where we had a cornfield across the way and a couple of nice creeks. When we first moved in, they actually had fish and crawdads. But, as the area developed, the streams became dished out and impervious cover was so great that it just eliminated the fish in the stream behind my house.

Matt Lechner [00:03:32] And there were some bigger creeks and we used to walk them. I found some baby ducks one time and went back two or three times and raccoons had got them. And I figured out that I was probably the source, because my tracks went right to the nest and away. So, I felt bad about that.

Matt Lechner [00:03:56] And then I was a Cub Scout for years, and our leader, Carl Saladino, was a great guy. Took us hunting with little B.B. guns when we were just young. And I shot at a woodcock, and I hit him. And, then I found out you're not supposed to shoot woodcock, so I felt bad about that.

Matt Lechner [00:04:21] So, I guess, really, I'm just trying to make up for all the bad things I did when I was young.

Matt Lechner [00:04:27] But it really was being in the outdoors, you know, in the days where you got on your bike and you went. And what we had available to us was cornfields and hedgerows and woods. And we spent a lot of time in them.

David Todd [00:04:48] Well you mention Mr. Saladino. Were there other adults that encouraged this or inspired this in you, or, do you think you're more sort of self-taught and, you know, these explorations about ducks and fish and crawdads and so on, were sort of on your own time?

Matt Lechner [00:05:11] Well, I can think of Mr. Petrowski. He used to make burgoo, which they'd have a big old part of burgoo, and it was basically squirrel and rabbit and 'coon and anything you could catch.

Matt Lechner [00:05:27] But for the most part, we spent a lot of time outside. Did a little bit of fishing. And it was part of that culture, you know. People raising their own food or hunting.

Matt Lechner [00:05:46] So, really I didn't make any decisions until, oh, probably after my first two years of college as far as what my career path would be.

Matt Lechner [00:05:59] But childhood was certainly foundational.

David Todd [00:06:03] Right. So, would you be able to recall any books or movies, maybe TV shows, radio shows, anything like that, that was kind of out in the public media, that you enjoyed and might have found influential in what you ended up doing with your life?

Matt Lechner [00:06:28] Well, when I think back to those things, I don't know that I could point. Certainly, Mutual of Omaha's Wild Kingdom was a Sunday night ritual when I was a kid back in the '60s and early '70s. National Geographic was great. Later, I read the book Sand County Almanac. And that, Aldo Leopold wrote that book, and he was a Forest Service employee for a while, and then, a professor up at UW-Madison.

Matt Lechner [00:07:07] And my favorite quote from that book is one that kind of stuck with me. I always did my work in endangered species or, focused on threatened or endangered species. And his quote was, "Mankind stands guard over works of art that are but a few hundred years old. Yet we let species that have taken eons to evolve disappear from underneath our noses."

Matt Lechner [00:07:43] Now, that may not be a direct quote, but it's pretty close. And I guess the way I look at it, Barton Springs salamander, the golden trout, the golden-cheeked warbler, Indiana bat - all these animals are more important to me than even the Mona Lisa. So yeah, that book had a very strong impact on me.

David Todd [00:08:19] Well, it's very poetic. And it sounds like the message must have really chimed with you.

David Todd [00:08:30] Well, you know, I'm thinking about your education as well. You had a number of years in school, certainly - grade school, and then, you know, your Bachelor's at University of Wisconsin in Superior and then South Dakota State for your Master's degree. Did you find classmates there or teachers, or staff members, field people, that might have been helpful and good support for what you were interested in doing?

Matt Lechner [00:09:05] I think the answer is definitely "yes", every step of the way. And one of the things that I always find is that people matter, and make education such a powerful thing - both your fellow students and certain of the teachers.

Matt Lechner [00:09:28] And, I started my college career at Springfield College in Illinois, and I went into it, to a two-year liberal arts general education, because I wasn't really quite sure. I thought that making a career choice when you're 17 or 18 years old just didn't make sense to me.

Matt Lechner [00:09:53] So, I went in there and took calculus and sociology and biologym and just general education. And what I found was that biology came easy to me.

Matt Lechner [00:10:09] And, we took a field trip. It was a winter field trip where you got three credits or so, and it was, two or three weeks we spent down in Galveston, Texas, on the island there, and kind of got to explore the tide pools and the beach habitat and all that stuff. And I just kind of fell in love with biology.

Matt Lechner [00:10:39] And that led me to, a friend of mine from Springfield College was a year ahead of me, and she went to the University of Wisconsin - Superior. So, I followed in her footsteps.

Matt Lechner [00:10:56] And when I got to Superior, I had all my general education behind me. So, all I had to do was complete what I needed for my biology degree. I had an Associate's degree, and that exempted me from the college requirements.

Matt Lechner [00:11:16] And so, I kind of got an in-depth, two ... well, a year and a half. I graduated a half a year early into the biological world.

Matt Lechner [00:11:34] My fisheries class, we had three students. And the teacher was just great. We would, he would take us on field trips to the American Fisheries Society meeting for

the state. And we got to meet the state biologists and federal people who worked within the state.

Matt Lechner [00:11:57] And, there was one day we went to a American Fisheries Society meeting and didn't get home till 1 or 2 in the morning, and there may have been drinks involved. And we got there at school for class at 9:00. Our professor just looked at us and said, "Let's go drink coffee in the Union and have class." And the three of us sat around the table drinking coffee, talking about fish.

Matt Lechner [00:12:31] So I really liked that small, hands-on kind of a school. We got to go out, and do sampling and stuff like that.

Matt Lechner [00:12:47] I also worked for a place called the Center for Lake Superior Environmental Studies. And there we did toxicology work. And it really laid a good science foundation for me. And my bosses there were great. They were understanding. They took us out ice fishing. We just had, we worked hard and we had fun.

Matt Lechner [00:13:13] And that's what the whole school thing is about is, your fellow students and the teachers. And at Superior, we actually spent weekends going out fishing with our teachers. So, that was a treat.

Matt Lechner [00:13:31] And then, I went on to South Dakota State University, and I can remember Ray Linder was the head of the Cooperative Fish and Wildlife Research Unit, and he was one of Aldo Leopold's students, I think. And he, the first day I came in the office, he said, "If I'd known they had offered you the assistantship, I would have told them to cancel. But you're here now. We'll get you through." And he really did.

Matt Lechner [00:14:12] That whole school, there was like 26 graduate students, half were wildlife and half were fisheries. We called them "pluckers and the squeezers". Duck hunting was a big thing. So, the wildlifers were known as, "pluckers". And fish-squeezing - squeezing eggs out of fish.

Matt Lechner [00:14:33] And we'd have softball games and hacky sack and just a whole lot of camaraderie. We shared classes and helped each other do field work all over the state, really.

Matt Lechner [00:14:50] One of my best experiences was with another graduate student. I helped her look for least terns and piping plovers along the Bad River. We did a 23-mile canoe stretch and the only sign of humans that we saw was one fence post and one telephone line.

Matt Lechner [00:15:17] And it's right in the middle of the Bad River band of the ... I want to say Bad River. No, whatever tribe Sitting Bull was in: because at the bottom of the river is where Sitting Bull's grave was. I think they were Lakota Sioux.

Matt Lechner [00:15:42] Anyways, we got to take that trip and it was wonderful. At one point, we were canoeing down and the wind starts blowing a little bit and this gigantic cottonwood tree starts creaking and just falls over. I turned around to my partner Monica. I said, "Mon, do you think a beaver took that down?" "I don't know. Let's go see."

Matt Lechner [00:16:09] And we walked over there and sure enough, a beaver had taken that tree down. But the bark was dry, so we knew beaver just took it to a certain point and then left, because those beavers that stayed to the end have a tree fall on them.

Matt Lechner [00:16:26] So, it was a learning process all the way along, and I could list dozens of names of people who were instrumental. But, suffice to say that every step of my career, the people are the hallmark of getting things done.

David Todd [00:16:50] That's interesting, I know there's so many ways that you learn things, you know, from books and all the media, but, gosh, it's just the people who take a special interest in you and make it interesting, make it fun. Sounds like you were lucky to have people like that in your life.

David Todd [00:17:11] So, now, this is going to skip over some important things, but I wanted to focus in on one brief chapter of your life that brought you to Texas. And I was wondering, how you came to work in Austin, Texas for the Fish and Wildlife Service? It sounds like it was a bit of a detour from what you'd been doing before.

Matt Lechner [00:17:35] Well, at the time I was fish biologist for Sequoia National Forest and working with golden trout, which were a threatened species. We did a lot of golden trout restoration. Our motto was "big trees and little fish", because we had the sequoia trees, but the golden trout in its native habitat really only gets to be about five inches. And its name is *Salmo gairdneri*, which means "pretty in the water". And it certainly is. It's a stunning fish in its native habitat.

Matt Lechner [00:18:17] The one thing I'd like to touch on relative to that was we had a Kern River hydropower plant that we participated in the relicensing of. And we worked with Southern California Edison, Fish and Wildlife Service, the California Department of Fish and Game, and some consultants. And we put together a trust fund, where Southern California Edison donated 2 or \$3 million to this trust fund.

Matt Lechner [00:18:52] And it just sits building interest and spits out 100 to \$200,000 a year that's used for restoration in the Kern River basin. And we probably took 20 or 30 cubic feet per second (like one cubic foot per second is 7.5 gallons of water passing a point), so we took about 30 of those per second, and let them generate electricity for this 15-mile stretch of the river. But we increased the flow from where it was by 60%.

Matt Lechner [00:19:42] So, it was a good thing overall for the resource, and one of those real career stars that I'm so proud of, that we thought outside the box and set up a permanent trust fund. Every year, a portion of the interest goes back to help build the principle. And far as I know, it's still going today.

Matt Lechner [00:20:11] But then after I had done the golden trout stuff, and we did reservoir stuff. We did a lot.

Matt Lechner [00:20:20] It was time to leave. California was getting crowded and expensive. So, we moved to Texas. And, it was a big jump. And at first, it was good. I think Austin's getting a little big for its britches now, to say the least.

Matt Lechner [00:20:42] But when we got there, the salamander had just been listed, like, six months. I was aquatic ecologist. And the salamander was my primary responsibility. But I also worked with all the salamanders in central Texas. Though, Comal Springs and San Marcos were under a different biologist. I did all the ones to the north, all the way to Salado Springs.

Matt Lechner [00:21:20] So yeah, that's kind of how we got to Austin and it was just time for a change to get out from under my wife's parents and spread our wings a little bit.

David Todd [00:21:38] Well, tell me about your first visit to Barton Springs, and perhaps the first encounter with a Barton Springs salamander. How did you get introduced to the two?

Matt Lechner [00:21:53] Well, I think the first trip to Barton Springs was probably with a biologist from the City of Austin. We worked pretty closely with them on everything. And just toured around looking at Sunken Gardens and Eliza Springs and the upper springs and the main pool itself, I think it's called Parthenia Springs.

Matt Lechner [00:22:24] Who could not be impacted? The statue of Webb and ... (oh boy, I probably shouldn't have started) ... Webb and Bedichek and Dobie, the Philosopher's Stone. You know, those are lifelong memories. And over the course of the next several years, I spent a lot of time down there.

Matt Lechner [00:22:54] My first encounter with the Barton Springs Salamander, as I recall, was actually we'd do monthly surveys, and the first time I put the SCUBA tank on and swam in the pool, we would do it when the pool was closed for cleaning, so there weren't other people around, which was kind of nice. And the vegetation that grew in there and finding salamanders, it's just, to be underwater there and be able to breathe and just watch what goes on, it is an incredible life-long memory.

Matt Lechner [00:23:40] And when you add it together with this history of the Springs and the use of the Springs, it's really, an incredible place that you can be five minutes from the capital of Texas, and swimming with an endangered species, doesn't happen very many places in the world.

David Todd [00:24:07] Yes. The context of the Springs is is unique, you know, this jewel in the middle of a really built-up area.

David Todd [00:24:19] Well, maybe you can give us a little introduction to this creature, the Barton Springs salamander. Can you tell us a little bit about the life history and the niche, the ecological niche, that the salamander fills?

Matt Lechner [00:24:37] Well, the Barton Springs salamander is what they call a neotenic salamander, which means it remains aquatic all its life. Most salamanders metamorphose and come out as a terrestrial creature and return to water to spawn. But the Barton Springs salamander and its companion, the Austin blind salamander, are both neotenic salamanders that retain their gills all their lives.

Matt Lechner [00:25:15] And their habitat is restricted to the four springs that I mentioned: upper Springs, which is just above the pool, the pool itself, big spring or Parthenia is found within the pool, just upstream of the diving board. And then you have Eliza Springs. Some people call it Elk Springs, because the Elks used to have the meeting there, and then Sunken Garden across the way.

Matt Lechner [00:25:48] And really, these four surface habitats give us most of the knowledge we have about Barton Springs salamander. What we don't know is how many of them are in the springs themselves.

Matt Lechner [00:26:05] We know that salamanders do travel back into the springs. We believe that's where they lay their eggs, because we've never found eggs in any of the surface habitat. I think they have found a few eggs that basically came out of the aquifer. There's some stuff about that in the Recovery Plan. And Dee Ann Chamberlain, Lisa O'Donnell, Robert Hansen: they were great people and very dedicated and hard-working.

Matt Lechner [00:26:45] So, really, what we know, we know from the surface habitat. And it really begs the question, what goes on within the aquifer.

David Todd [00:27:04] So, yes, that's intriguing that you may be getting just the briefest glimpse of of a creature that has a whole other life, and maybe a large part of its life, in another, whole other habitat.

Matt Lechner [00:27:20] Well, certainly the blind salamander would spend most of its time within the aquifer, in caves, or it would have evolved eyes.

David Todd [00:27:39] Well, and so can you tell us a little bit about, you know, a day in the life, the feeding and reproductive behavior of a Barton Springs salamander.

Matt Lechner [00:27:57] Probably other people could tell you more about that. Dee Ann Chamberlain runs the captive breeding program. But basically, when we sampled salamanders, we would find them in the springs, crawling around rocks. They like vegetation. They're feeding on little insects and detritus and all different kinds of stuff.

Matt Lechner [00:28:30] And they're generally happy-go-lucky opportunists, I guess. They can swim very well, even in strong currents.

Matt Lechner [00:28:43] And that's really about all I can think of. I don't know where they spend their night because I never SCUBA dived at night.

Matt Lechner [00:28:57] But they do nestle into the rocks. They like to have a little bit of flow over.

David Todd [00:29:09] Okay. Well, so, I guess one of the interesting, or worrisome, aspects of the Barton Springs salamanders is that they've had low numbers from time to time, and, they're in a place that's changing constantly. I think that there were low census numbers that were reported for the Barton Springs salamander just shortly before you arrived in 19 ... - I think some of those numbers came in in 1995.

David Todd [00:29:41] And I was wondering if you could sort of speculate on what are some of the the causes and concerns for these salamanders there in Barton Springs?

Matt Lechner [00:29:56] Well, I think the Recovery Plan basically lays out a pretty good outline of what the impacts are. But, basically, because their habitat is restricted to the four spring outlets, and water is coming through those spring outlets, anything that impacts the water has the potential to impact the salamanders.

Matt Lechner [00:30:28] And, the population estimates specifically have varied quite a bit. And even like one time they work with pressure-washers and cleaned the gravel at Eliza Springs. And there had been no salamanders found in two month surveys. And then they went in, they cleaned it and they found a record numberm - 244.

Matt Lechner [00:31:04] So, is clean habitat. In the spring outlet an attractor? We really don't know because we don't know what goes on inside the aquifer.

Matt Lechner [00:31:20] At times of drought in all central Texas springs, salamander numbers kind of dive, but once water comes back, salamanders come back.

Matt Lechner [00:31:33] So, without the answer of what's going on inside, and the fact that salamanders do seem to come back - very cyclical use of the surface habitat. And we don't know, what their subterranean use is.

Matt Lechner [00:31:57] We have had some issues. Like, sometimes the spring water will become super-saturated with gas, and that has caused gas bubble disease. We lost 17 salamanders, I think, in 2002 or 2003 to this super-saturation.

Matt Lechner [00:32:17] And there are several, human impacts that could lead to super-saturation, but we don't know. It's very difficult in dealing with the salamander to really point to cause and effect because we don't have enough data, nor the money to collect all the data that we would need to really prove a cause and effect. Science is a tough thing at times.

Matt Lechner [00:32:52] And so, I think that we are concerned whenever census numbers go low. But over the years, salamanders have seemed to persist. So, that's a good thing.

David Todd [00:33:09] Yeah, yeah, it seems positive. A resilient creature.

David Todd [00:33:13] So, I think that one of the concerns that I read about, of course, I am just a bystander here, but, that sediment runoff was an issue that seemed to have caused worries for these Barton Springs salamanders. Can you help us understand what the concern is about sediment runoff, and I guess how that might be connected back to development and highway construction?

Matt Lechner [00:33:48] Well, the City of Austin has done studies and it's pretty much known nationwide now that development, impervious cover, road construction, anything that generates sediment or concentrates waters, you know, all the water off the roads goes into a ditch and they get it away from the road as fast as they can. It's had extreme effects on some of the creeks that run right through Austin. Fortunately, they're rocky and resilient to some of those changes.

Matt Lechner [00:34:34] But siltation can have a variety of effects. With greater development, you get greater transport of sediment within the aquifer. And we are pretty sure that they spawn in the aquifer and any filling up of cracks and crevices within the aquifer would tend to limit the amount of habitat that's available for spawning. Eggs could be impacted. If they're covered with silt or sediment, they may fail to develop.

Matt Lechner [00:35:17] We don't really know the extent of this because it all happens within the aquifer.

Matt Lechner [00:35:25] What we can say, basically, is that sediment has the potential to impact both within the aquifer and can deposit it on salamander habitat at the surface.

Matt Lechner [00:35:38] But also, in addition, and probably more problematic, related to sediment, is that sediments bind and carry pollutants. And exposure to these chemicals, whether they be pesticides, parking lot runoff, lawn chemicals - all the things we do out on the aquifer - these can cause impacts to salamanders.

Matt Lechner [00:36:05] I should take just a second and explain that I don't know the numbers off the top of my head, but somewhere in the order of 350 square miles of water, when it rains, can make its way to Barton Springs. About 90 square miles of that, I think, is the recharge zone. And that's directly in line with Barton Springs, where water coming across creeks or coming down creeks, it gets into that recharge zone, it has the potential to go into the aquifer and come out at Barton Springs.

Matt Lechner [00:36:55] The area upstream of the recharge zone, that 250-some, 260 square miles, is called the contributing zone. And that goes all the way almost to Wimberley, certainly a little bit past Dripping Springs, the whole Barton Creek watershed, almost down to Buda. It includes the Onion Creek, Williams and Bear Creek, Little Bear Creek, and Barton Creek. And I may be missing some. Those are just the ones that popped in my head.

Matt Lechner [00:37:31] And that contributing zone is being built out. The development out there is just going hand-over-fist because it's a beautiful place and people like to escape Austin and get out in the Hill Country.

Matt Lechner [00:37:47] But, those impacts will translate. The contributing zone is made up Glen Rose limestone, which is very hard and water doesn't percolate through it. It runs off.

Matt Lechner [00:38:02] So, if you put lawns and people are spraying fertilizers and weedkiller and stuff like that, that has the potential when it rains to run off and get into those streams and be carried to the recharge zone and then to Barton Springs.

Matt Lechner [00:38:26] So, one of the main things that chemicals do is they hook to sediment and that's the transport mechanism that would deliver some of those chemicals to salamander habitat, and why they are of concern.

Matt Lechner [00:38:46] There's been some, work done, by the USGS, United States Geological Service, Peter. And, I can't remember Peter's last name [Van Metre], but Barbara Mahler was the other one. Raymond Slade did some work too. It was very good science and showed chemicals of concern in salamander habitat. So those definitely, sedimentation and chemical impacts, need to be minimized.

David Todd [00:39:31] I see. And I guess, here we're talking about time when there is water flowing into the Springs and affecting the Barton Springs salamander's habitat.

David Todd [00:39:44] But, what happens, in your view, when, you know, we have a shortfall in flows and during drought periods? Is that a problem, as you see it, for the Barton Springs salamander?

Matt Lechner [00:40:02] Well, to be honest, I don't know what's been happening with the years of drought you've had. From the time I was there, '97 to 2003, we never really had extended drought. I know that Barton Creek becomes more important at those times because it's the main source to feed the Springs. And, I don't know. I know that there has been some

concern, but, as far as I know, when the water starts flowing again, salamanders show up. So. I guess I would just say, I don't know the effects of the drought, because I haven't lived it.

David Todd [00:41:00] Yeah. Things fluctuate. It's been a number of years since you were here and a different kind of rainfall and drought have visited the area.

Matt Lechner [00:41:14] Well, let's talk a little bit about, your role here during that period. So, my understanding is that you were an aquatic ecologist and the lead Fish and Wildlife Service representative on the Barton Springs Salamander Recovery team starting in 1997, just after it was listed. And then you carried through for another 5 or 6 years, with that work. How would you describe that job.

Matt Lechner [00:41:47] Well, I had a boss, Dave Frederick, who cautioned that the Endangered Species Act, you can wave it around like a hammer, but you never want to strike it because it's a glass hammer.

Matt Lechner [00:42:07] Certainly, Austin is and always will be a political place. We had great participation with scientists on the Salamander Recovery Team, with technical experts that we brought in. We had the Barton Springs - Edwards Aquifer Conservation District. We had professors from U.T. - both biologists and hydrogeologists, water quality specialists, the City of Austin Watershed Protection Department, I think it was called, and the Balcones Canyonlands Preserve people. All kind of participated and worked together in a very positive way.

Matt Lechner [00:43:09] The environmental groups, the ones that come to mind are Save Our Springs and Save Barton Creek, were kind of instrumental in putting the pressure on, and, very helpful because they got people to care. And, when you're dealing with endangered species, people caring can go a long way.

Matt Lechner [00:43:40] Yeah. So it was really that team atmosphere. As I said in the beginning, it was the people that I worked with that really synergistically came together to push forward several things.

Matt Lechner [00:43:59] One was the Habitat Conservation Plan was the first one we worked on, and there were some developers that brought lawsuit, basically, I think, designed to penalize the environmental community for pushing for the listing of the salamander.

Matt Lechner [00:44:20] And, the Habitat Conservation Plan we worked made sure that cleaning the pool was safe for the salamander through the cleaning process. And, I was thinking that it was all a team effort.

Matt Lechner [00:44:52] And when we got to court, the U.S. District Judge, Sam Sparks, in typical Texas fashion, he actually wrote a poem to be the synopsis for the lawsuit, you know, the summary of it. And I'm just going to take a second and read it to you. And these are the words of Judge Sam Sparks. I spent like, four hours testifying in front of them. But this was his summary of the situation.

Matt Lechner [00:45:31] Barton Springs is a true Austin Shiite shrine: 100 years of swimming sublime.

Matt Lechner [00:45:38] Now, the plaintiffs say the swimmers must go because of stress to the critters, 50 or so.

Matt Lechner [00:45:46] They want no cleaning because of these bottom feeders, saying it's law from our Congressional leaders.

Matt Lechner [00:45:54] But really, nothing is changed in all these years, despite federal laws and these plaintiffs' fears.

Matt Lechner [00:46:02] Both salamander and swimmer enjoy the springs that are cool and cleaning is necessary for both species in the pool.

Matt Lechner [00:46:12] The city is doing its best with full federal support, so no temporary injunction shall issue from this court.

Matt Lechner [00:46:21] Therefore, today Austin citizens get away with a rhyme, but the truth is, they might not be so lucky next time.

Matt Lechner [00:46:29] The Endangered Species Act, in its extreme, makes no sense, and only Congress can change it to make that problem past tense.

Matt Lechner [00:46:43] So, that was pretty eloquent of the judge. And basically he agreed that Fish and Wildlife Service and the City were following the law, working together, and it all worked out.

David Todd [00:46:58] Well, tell us about this effort to clean the pool for both swimmers and salamanders. It sounds like that was a delicate balance to strike.

Matt Lechner [00:47:14] Well, basically, the shallow end of the pool gets slippery and mossy and can be attractive for salamanders. And that's where, on a good summer day, there can be 100 people walking around.

Matt Lechner [00:47:34] So, what we wanted was to keep that shallow end kind of clear of moss, to keep it very rocky so that it would be less attractive to salamanders, and they would stay in the spring habitat, which is deeper, and where the impacts from swimmers don't exist.

Matt Lechner [00:47:57] There's also an area that we call "the beach" that's kind of straight out from the diving board to the side of the pool where the building is and maybe comes out 15 or 20 feet and goes all the way to the end to the dam. And this is kind of a rocky area. And we found that using a hose and kind of washing that down, washed out some sediment and made better habitat for the salamanders.

Matt Lechner [00:48:34] So, cleaning the pool can be beneficial and limit the amount of harm that comes to the salamander.

David Todd [00:48:52] So, I guess the spring operates kind of in concert with, in tandem with, the surface habitat that you described - this 350-odd square miles of the contributing zone. And then, of course, that 90 square mile recharge zone. And, I gather you got involved in trying to manage that surface habitat and were recognized with a Star Award. How did you go about trying to manage some of those land use practices?

Matt Lechner [00:49:35] Well, the Endangered Species Act generally puts a lot of responsibility onto the federal agencies. If they have programs that they are implementing that can be used to benefit endangered species, they should be trying to do that.

Matt Lechner [00:49:59] And the EPA, under the Clean Water Act, has what they call the National Pollution Discharge Elimination System. It's a mouthful. It's NPDES. And construction, like out on the aquifer, is required to get a stormwater permit through this program.

Matt Lechner [00:50:24] So, what we did was we worked with the recovery team and basically with the development community and the City of Austin and the Lower Colorado... What do they call it? River district?

David Todd [00:50:48] Probably the River Authority. Is that right?

Matt Lechner [00:50:50] Yeah, yeah, the Lower Colorado River Authority.

Matt Lechner [00:50:54] They were putting a pipeline out.

Matt Lechner [00:50:58] So, we all kind of worked together, and we came up with water quality protection measures that we required of developments in order to get their NPDES permit. There was impervious cover limits. Riparian buffers were a requirement.

Matt Lechner [00:51:18] And we did something a little bit different than was done before. We took wherever about five acres of land come to one spot as the beginning of a creek. And it's pretty accurate in the Hill Country: if you come to a spot, you can start to see a channel forming. And we put a buffer around that channel in the headwaters. It kept those buffers all the way down.

Matt Lechner [00:51:57] What the developers found was, "Wow. We could just, call it a "streamside zone" or a "hiking path", and then charge another \$50,000 for the houses there. So it actually worked out good. And they put less development. You know, they were 3 to 5-acre houses rather than subdivisions, houses right next to each other. And they limited their impervious cover to that 15%.

Matt Lechner [00:52:32] They also caught their stormwater, re-irrigated it on fields. You know, they'd have to catch the first couple inches of water, which would have most of the chemicals in it. And then re-irrigated that, so it's trapped in the vegetation.

Matt Lechner [00:52:55] And I can't really claim credit for it all. It was a team effort by a bunch of good people who were a lot smarter than I was.

Matt Lechner [00:53:05] One of the things that I did do is, I got the developers who needed the permits to go through Mike Barrett at the University of Austin. He worked up at the Pickle Center. He was an engineer, a hydrogeologist with an engineering background, and he would do the calculations to make sure that the proposed developments met the water quality protection.

Matt Lechner [00:53:37] And then when LCRA put that pipeline in. That was one of the requirements, was any development hooked to it would have to follow those water quality protection measures.

David Todd [00:53:50] Well, we should talk about the pipeline. I think that was a really interesting kind of issue of secondary development and what that can mean.

David Todd [00:54:00] But I wanted to just touch on one thing, while we're talking about the NPDES permits, and that is, I understand that there were two different rules that that could help with the runoff and try to filter things before they got to the springs. And, one was just keeping the impervious cover low, but then the other was built, manmade structures - detention ponds and retention basins and so on. And I was wondering, you know, what you thought of those two options?

Matt Lechner [00:54:40] Well, those were both part of the water quality protection measures. And, you know, when you boil it down, if you're going to have development, it's probably the best that you could do to minimize the long term impact of that. Anything else would be cost-prohibitive. And the Endangered Species Act is not designed to stop things from happening. It's designed to minimize impacts to the animals.

Matt Lechner [00:55:24] And the two-pronged approach that you talked about is exactly what the water quality protection measures do, is limit it in both ways.

Matt Lechner [00:55:43] And you really could add the stream buffers in as a third way. You know, we kept those lawns 50 or 100 or 200 feet back from the creek itself. And that buffer is important too, because a buffer can actually capture a lot of sediment and retain it without letting it into the creek.

David Todd [00:56:14] I see. Okay.

David Todd [00:56:18] Now, before I interrupted you, you were starting to talk a little bit about the LCRA water pipeline, I believe, that was begun about 2001, I think, to provide service to Hays County. And, you know, I think there was concern at the time that but for that water pipeline, there might not have been very intensive development out there. And so, I gather the pipeline was linked to construction limits to protect the Barton Springs salamander. Is that basically right? Maybe you can give us some insight about how that all worked.

Matt Lechner [00:57:04] Well, there was actually a lawsuit brought against the Fish and Wildlife Service and the Lower Colorado River Authority for just that reason, because the Save our Springs Alliance and the environmental community really did believe that but for water, they wouldn't be able to develop. And that may be true. It certainly, water would have been a limiting factor, but would they have got it from somewhere? I don't know.

Matt Lechner [00:57:41] And we wrote before, when the Lower Colorado River Authority was contemplating the pipeline, we wrote them a letter, basically saying, "What you're proposing could jeopardize the continued existence of the salamander." We didn't say that it would. We said that it could, if not done properly. And that's about the strongest language you can use at the Fish and Wildlife Service without making a formal declaration of jeopardy, which is rarely done.

Matt Lechner [00:58:27] And Judge Sparks' poem, he alluded to the Endangered Species Act in its extreme. And, there was a darter that lived below a dam in Tennessee that held that dam from completion for several years until they did more research and found the darter was more plentiful.

Matt Lechner [00:58:56] So, all that kind of comes together and we use as strong a languages as we could. And the bottom line was LCRA was willing to commit that all the developments would have to follow the water quality protection measures. That was about the best that we could do.

Matt Lechner [00:59:21] I'm not sure it was enough. As, I was just in the Hill Country a couple weeks ago. And, man, there's a lot going on out there, maybe too much. I don't know. Hopefully they're all following the water quality protection measures.

David Todd [00:59:44] Well, like you said, it's a beautiful place and people, you know, want to settle there and lead their lives.

David Todd [00:59:53] So, one of the things I thought was interesting, is, you know, of course you worked a lot with regulations and trying to set good rules in place, but I understand you also managed to bring over \$2 million in mitigation support for listed species in about 2000, and again got another Star award for that. And, I was wondering what sort of strategies were you trying to support for the salamander there?

Matt Lechner [01:00:28] Well, I'm trying to think of what, actually, that money was all about.

Matt Lechner [01:00:37] One thing we did do was we worked with the Longhorn Pipeline company. They wanted to change an oil pipeline to a gas pipeline. And there was a big political kind of skirmish between the environmental community and the...

Matt Lechner [01:01:05] Pipelines are managed by the Department of Transportation Office of Pipeline Safety, and it involved the Environmental Protection Agency.

Matt Lechner [01:01:19] And we did a spill plan and I looked at it and I was talking to my office mate, and I said, "Well, right here, this would cause jeopardy to the salamander because they didn't have adequate containment of a spill." And as I went through their spill plan, I found, I think, "Oh, here's jeopardy again. We'll call that "J-squared." I found J to the seventh - seven different places in their plan that were lacking, and could jeopardize the continued existence of the species.

Matt Lechner [01:02:07] So, we worked with them and it actually got elevated all the way to the Council on Environmental Quality. Bill Clinton was President, Al Gore was Vice President. And the head of CEQ, the Council on Environmental Quality, was George Frampton. And really, decisions were made there. I used to be on a weekly phone call with the Council on Environmental Quality.

Matt Lechner [01:02:49] Just for reference, when the spotted owl thing kind of blew up out West, they came in and settled it between the federal agencies, and were kind of referred to as the God Squad. The Council of Environmental Quality is actually a cabinet-level committee that involves the Department of Interior, the Department of Agriculture, the Department of Commerce, and the Environmental Protection Agency, and maybe others.

Matt Lechner [01:03:22] And what it all boiled down to was we made a good enough argument on the salamander, that the Council on Environmental Quality told Longhorn Pipeline to give the Austin office everything they want, and what we ended up with was probably one of the safest pipelines in North America.

Matt Lechner [01:03:51] I had a pipeline expert who reviewed it, and he said, definitely in North America, but I'm not familiar with what they do in Europe or in Northern Europe and in Russia, but I would probably say the safest in the world.

Matt Lechner [01:04:13] And what we did was we got a pipeline that, was, across the recharge zone, it could pump for five minutes and be retained within a trench and the connecting discharge pond so that it wouldn't get out and get to the salamander.

Matt Lechner [01:04:41] And they basically build an epoxy-lined trench all the way across the recharge zone. And, at the bottom, they put a wire that, if gas contacts it, it shrivels up and sets off an alarm. There were five inches of sand, couple of feet, of, well, maybe it was a couple feet of sand with the cable at the bottom, then the pipeline, then dirt, and then a concrete, cherry-red, fireengine - red, concrete cap all the way across the top, so that backhoes or whatever would hit cherry-red concrete before they'd hit the pipeline.

Matt Lechner [01:05:37] And the pipeline company put in quite a bit of mitigation money. They contributed to the captive-breeding program, kind of funded that for the San Marcos. They were paying a full-time person to run that captive-breeding program. And that's in addition to the one that the City of Austin does. And there used to be salamanders up at the aquarium in Dallas, but I don't know if they're still there.

David Todd [01:06:18] That's impressive of lots of lots of techniques and tactics there to protect the salamander.

David Todd [01:06:27] Was I mistaken? I think I may have heard that there was also some sort of heavier lining of the pipeline itself. Was that correct? The pipeline walls?

Matt Lechner [01:06:42] The epoxy walls were the big thing, and they basically made a trench all around where the pipeline was going to be. And they sprayed epoxy all along. And their first attempt didn't really work because if you went down to the bottom of the trench and you looked, there were holes in it. But they came back and patched all those holes.

Matt Lechner [01:07:13] My understanding was that the pipe could break. The alarm would go off. It takes like 15 or 20 minutes to shut the pipe down. And, it could handle that volume, which is really about the best we could do, is to keep the gas within the trench. Does that make sense?

David Todd [01:07:48] Yes, yes. No, that's just good to know. Yeah.

David Todd [01:07:52] Aside from, you know, things that were sort of particular to the Longhorn Pipeline, I understand that there's also just a lot of contingency planning that y'all had to do to, I guess, "wargame", simulate, what might happen if there were a hazardous waste spill or oil release in the watershed that might affect the salamander. How did you go through that process? What were you trying to do?

Matt Lechner [01:08:27] Well, basically that was part of the recovery team effort, was to identify those places and to try to minimize those impacts. And frankly, I don't know if they succeeded or not. Catastrophic spill, whether it be, tanker-truck full of bleach or whatever hazardous material it could be coming through the recharge zone has the potential to show up at Barton Springs.

Matt Lechner [01:09:05] In their highway designing, I think they've looked at expanding the capability of their detention ponds, and re-irrigating some of that, so that it doesn't go directly back to the aquifer.

Matt Lechner [01:09:23] But I'm really not up to date on what's been done. And when I left, it was one of those things that we certainly dealt with it relative to where the Longhorn Pipeline went through, and all the drainage to all the ponds, and we required them to seal some of those ponds that had sinkholes or such, just to be sure that if it happened, it would get caught and not make it to the springs.

David Todd [01:10:02] Great. I see. Yeah. Well, that seems totally practical to have those precautions. Yeah.

David Todd [01:10:13] I understand that that, you know, with a lot of these issues, there was a whole team of different biologists and agencies involved, but, when it came to some of the sort of push-and-shove, you got sent into the the breach to do some expert testimony in federal court on behalf of the Service. And I was wondering if you can relive some of that and tell us what that experience was like.

Matt Lechner [01:10:44] Well, I can think of the first time: it was with the Habitat Conservation Plan, and the next one was with the Save our Springs lawsuit.

Matt Lechner [01:11:00] And I can remember I got up on the stand and Judge Sparks, who I had seen 3 or 4 years earlier, he said, "Your beard's a lot longer than it was last time." And I said, "Well, your Honor, it got about four inches shorter last night."

Matt Lechner [01:11:22] And basically we went through and discussed ... the big thing was that jeopardy letter that we sent, and by the fact that we issued the Habitat Conservation Plan for LCRA. We were basically saying that you've met our concerns by meeting the water quality protection measures.

Matt Lechner [01:11:52] And the Save Our Springs Alliance did a really good job. They knew the issues inside and out. But when Fish and Wildlife Service signs off, judges, by default, are supposed to give deference to the federal agency who's responsible, unless they're wrong. And that happens. But in this case, we did the best that we could do. And, the judge found it to be enough.

David Todd [01:12:36] You know, it's interesting. I guess some biologists deal with things that are pretty abstract, or in the lab, they're in the field, perhaps. But, at least during your tenure in Austin, you were right in the middle of some very controversial political things. And I'm wondering what you learned from that experience of sort of being in the line of fire, you might say, between the development community and the citizen advocates and then and then some of the agencies that were your colleagues and and partners.

Matt Lechner [01:13:16] Yeah. You know, I don't think the Austin years were good for my health. There was a lot of stress involved. I was having meetings with powerful lawyers, you know, on the 17th floor of Congress, looking out at the Capitol building. Kind of intimidating. Very much an adrenaline job. You know, when you get home at night, you're thinking about it. When you wake up and you're having your morning coffee, you're thinking about it. It was too much.

Matt Lechner [01:14:04] And that's basically why I got out. I probably caused too much trouble, and the Fish and Wildlife Service was happy to see me go.

Matt Lechner [01:14:21] But, I guess the difference is, when I got here, I kept getting an alert on my phone that said traffic is light in your area. And I got it for about three weeks, and it never changed. So, I finally had to go into my phone and figure it out and turn it off.

Matt Lechner [01:14:42] You know, I lived ten minutes from our office in North Austin, and I used to have a rule that I wouldn't be at any meeting before 10:00, and I had to leave by three to get back to North Austin. And, I think the window may be even smaller today.

David Todd [01:15:07] Oh, yeah, there are lots of Austinites now. As sometimes we say, that we have lots of "company" on the freeways.

David Todd [01:15:16] Well, you know, I've always heard that you were a straight shooter. And I'm curious why you think Fish and Wildlife might have felt like you were causing trouble. What was their concern, do you think?

Matt Lechner [01:15:33] Well, to be, frank and a straight shooter, during that time our Governor went and became President. And he took about 70% of the lawyers in Austin with him. And, we definitely got pressure from the Administration. And they kind of forced me out.

David Todd [01:16:10] That's interesting because, you know, you were just enforcing the law that's on the books. But you felt like they felt like this was a staffing issue?

Matt Lechner [01:16:25] Yeah. They brought a guy in to be head over the Texas offices, and he changed the direction that the agency was heading and was more accommodating to what other people wanted. I felt that he didn't really follow the science the way that he should have.

David Todd [01:16:59] Well. That's frustrating. I'm sure, you know, with your training and experience and interests, to see that kind of decision-making.

David Todd [01:17:13] Is there anything that, you know, you can say, as a staffer, if you're within a big agency like that? Or is it, do you feel like the the lanes are pretty tight, where, you know, you can't swerve out of your particular direction of travel?

Matt Lechner [01:17:34] Yeah, I would say they're pretty tight, and they're skewed towards management. You know, if you would go the union route or anything like that, you're usually not ...

Matt Lechner [01:17:51] And the issues are complicated enough. There's nothing that's black and white. So, they could be safe within the gray area.

Matt Lechner [01:18:07] And, basically, they moved me off the salamander, and they put me on another program. They limited my field time. Made it so that I would not be happy. So, I took another job. And I really thank God I did, because I probably would still be there, but I'd have ulcers worrying about things, if I was still in the midst of all that politics.

David Todd [01:18:45] Yeah, well, I guess, really, you need to take care of yourself, and I know that people can make your life intolerable, and that's a rough situation to be in.

David Todd [01:19:01] Well, so tell me. I guess nothing is in isolation, and I know that a lot of your work was probably focused on the Barton Springs salamander, but I'm wondering if some of the land use controls and habitat protections that you worked on might have also affected the fortunes for other rare species, some of these cave critters or the golden-cheeked warbler, the black-capped vireo. Do you think there were some sort of repercussions there?

Matt Lechner [01:19:35] Oh, certainly, certainly. Probably the biggest protections were what the City of Austin did with their water quality protection lands. The Balcones Canyonlands Preserve, that the City got for the golden-cheeked warbler, has land within, the Barton Creek watershed.

Matt Lechner [01:20:16] In fact, when we were working on that Longhorn Pipeline, Ben Barnes, ex-Lieutenant Governor of Texas, was one of the lobbyists for Longhorn and he basically went in, had my boss come into an office in the UT Tower. And the Regents were meeting. And Ben just knocked on the door and called the President, and said, "Come here." And he left the Regents' meeting, came, and Ben said, "I want you to sign this." There's a writers retreat, I don't know if it was Dobie or Webb or one of those, that UT owned. And he just had ... I think it was Cunningham who was the Chancellor.

Matt Lechner [01:21:11] He just had him sign that and made it part of the BCP, right there, to show my boss that he had power. And he did.

Matt Lechner [01:21:26] And then and went back to his meeting with the Regents.

Matt Lechner [01:21:31] But those lands, being set aside for warbler habitat, are also not being developed. And the city's water quality protection measures: they've bought a lot of really great properties that are on the recharge zone, that have karst. They do have cave critters. And they probably have warbler and vireo habitat as well. So, anything you can set aside, recharge or contributing zone, even up in the Bull Creek watershed while that may not affect the salamanders there, Barton Springs salamanders, there are salamanders in Bull Creek and Walnut Creek and several of those creeks up in northern Austin. And a lot of that Balcones Canyonland Preserve land that was set aside for black-capped videos and golden-cheeked warblers is also benefiting the salamanders there.

David Todd [01:22:42] Isn't that nice that there are these spin-offs that are sort of a little virtuous cycle there.

David Todd [01:22:51] So, I think it's interesting about the Barton Springs salamander in that it had its own distinctive problems, but I understand that amphibians in general, not just in Austin, or not just in Texas, but maybe globally, have been facing problems. And I'm curious if you see similarities or contrasts between those things that were affecting the Barton Springs settlement and those that may be a problem for other amphibians.

Matt Lechner [01:23:27] Well, certainly the things that can affect the salamander, and again, we don't have cause and effect proof, but herbicides, pesticides, any chemical pollution, it impacts the frogs worldwide, because they breathe through their skin. And, even, like, in the High Sierra, they have measurable concentrations of chemicals like atrazine or pre-emergents or even PCBs that have been banned for 20 years can show up in the High Sierras.

Matt Lechner [01:24:18] So, and the emissions from cars: you know, cars leak oil that runs off down into your storm drain, down to the creek and to the recharge zone and comes out at the springs. Anywhere it's found, it can have impacts on amphibians. So, if we can move away from that, that would be a great thing. Certainly, the electric car probably has less from an emissions point of view, but I don't know what the cost is for production, if it's a net benefit or not.

David Todd [01:25:08] There's so many cogs and wheels and connections here, it's hard to say, isn't it?

David Todd [01:25:15] So, when you think about the Barton Springs salamander - you spent, gosh, half a decade or more thinking about it - I'm wondering what sort of value you see in this little three-inch creature. I mean, do you see it as sort of an ecological value, or do you see it as a valuable just as every Tom, Dick and Harry, every individual salamander? Or do you see that there is sort of ethical thing in play there? How do you see this creature?

Matt Lechner [01:25:56] I would, I really don't like the idea that species have to be important to humans to be valued. Certainly, that's true of an awful lot of things, but I'd guess I would take you right back to Aldo Leopold's quote, "We stand guard over works of art that are but a few hundred years old. But this species has taken eons to evolve, and it is what it is, it lives where it lives, and it deserves, intrinsically, to have that continued existence to become whatever it would become in the future."

Matt Lechner [01:26:47] So, and that's true of all God's creatures, I think.

David Todd [01:26:56] I think that's interesting. It's not only those eons of evolution, but I think you've put it well when you say that there's a whole future in front of it and you don't know, what it might become. And, so I guess you're protecting not just its inheritance, but its descendants as well.

Matt Lechner [01:27:23] Sure.

David Todd [01:27:24] That's very interesting.

Matt Lechner [01:27:26] Well, so, you know, you've you've been a, a scientist, a fisheries biologist, for the Forest Service and for U.S. Fish and Wildlife Service and elsewhere. And I'm wondering, as you think about your career to date, what what sort of view do you have of that career as a scientist? It seems like such an interesting criss-cross of policy and research and regulatory work. What do you think about it when you when you look back on it?

Matt Lechner [01:28:09] Well. I had a 31-year career with the federal government and I raised a family. I had a blast. It wasn't all fun and games, but there was enough fun and games to keep me going. And I think, when I look back, that's why I mention the trust fund, because that's going to be 150 to \$200,000 a year forever, more and more, you know, as inflation happens. It should be able to keep pace. And that's going to real on-the-ground things that are good.

Matt Lechner [01:28:59] They're no longer stocking coastal rainbow trout in the Kern River. They have developed a strain of the Kern River rainbow that they are using to stock those areas that need stocking.

Matt Lechner [01:29:19] The water quality protection measures in Austin: everything that I tried to accomplish was designed to help. I don't think it solved all the problems. But, baby steps, you know, forward, always forward. So, yeah, I think I had a positive contribution overall through my career, and I'm quite satisfied with that as my legacy.

David Todd [01:30:00] Well, I think there's that line about some people are part of the solution and others are part of the problem. Sounds like you've been more of the former.

David Todd [01:30:10] So, you know, it's interesting to visit with you because you've had an extensive career, as you said, at the federal government, but, wearing two different hats. You know, you had the tenure at the U.S. Forest Service and then also this period at the Fish and Wildlife Service and, both within the Department of Interior, but very different agencies, different charges, different statutes. How do you compare your work at those two agencies?

Matt Lechner [01:30:46] Well, Fish and Wildlife Services in the Department of Interior. The Forest Service is actually part of the Department of Agriculture.

David Todd [01:30:55] I'm sorry. You're so right. You're so right.

Matt Lechner [01:30:58] And really, they're, you know, the Fish and Wildlife Service has the National Refuge System. It has Ecological Services and it has a Fisheries branch. I worked in Ecological Services, which is basically the regulatory side of Fish and Wildlife. And then at the Forest Service, I, was basically, natural resource program leader for the Shawnee, where I had timber and geology, wildlife, fisheries, botany, all the natural resources were kind of under my purview to do budgets, and go out and get money and stuff.

Matt Lechner [01:31:52] The nice thing about working for the Forest Service is you're working on your own property. This land belongs to the United States of America, to the citizens of the United States of America. And you could, you know, do management that you felt was necessary, without ... Now, don't get me wrong: cities, counties, landowners were adjacent. Every turn you make, you'd better be talking to people. Because people care.

Matt Lechner [01:32:34] And, I guess they're the same in that respect.

Matt Lechner [01:32:41] The difference was, everything was at Fish and Wildlife Service was the Endangered Species Act, and as Dave Frederick told me, "It's a glass hammer. You never want to slam it down."

David Todd [01:33:02] I see. So, I guess with the Forest Service, you you had a little bit more leeway and discretion, where the Fish and Wildlife Service, gosh - very political, legal and a fragile kind of leverage that you had on all these issues.

David Todd [01:33:24] Well, I was wondering if there's anything else that you might like to add before we sign off? Anything that we might have missed that you wanted to touch on about the Barton Springs salamanders or more generally about wildlife conservation?

Matt Lechner [01:33:43] No, I think I've about reached my capacity as far as talking goes. So, I sure appreciate your efforts and appreciate what you're doing.

David Todd [01:33:58] Well, it's been a pleasure. I've learned a lot. And thank you for the time you spent with us and for sort of enlightening us about all these things that have happened in your life and the lives and creatures that we share. So, thank you very much.

Matt Lechner [01:34:17] No problem.

David Todd [01:34:19] All right, well, I will, shut off the recording.