**TRANSCRIPT** 

INTERVIEWEE: Kelley Snodgrass
INTERVIEWER: David Todd

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

**David Todd** [00:00:04] This is David Todd.

**Kelley Snodgrass** [00:00:06] Hello, David Todd. This is Kelley down at Fossil Rim. How are you doing?

**David Todd** [00:00:10] I'm fine, thank you so much for doing this. I appreciate the call and I look forward to visiting with you a little bit this afternoon.

**Kelley Snodgrass** [00:00:18] Well, I look forward to it, too. And it's a wonderful subject, Attwater Prairie Chickens. And before we get started. David. Yeah. How do you know Sandy?

**David Todd** [00:00:29] Sandy Skrei. Yeah, it's a long story. I knew her when she worked down for Audubon in the lower Rio Grande Valley and.

Kelley Snodgrass [00:00:44] Right.

**David Todd** [00:00:45] And then she did some work, if I'm not mistaken, with Janice Bezanson and the what was called TCONR, Texas Committee on Natural Resources. But she lived in Austin, where, or I guess she spent a lot of time here. I think she lived a little bit outside of Austin. So we get to see here and then, Ann Hamilton is an old friend.

**Kelley Snodgrass** [00:01:09] Oh, yeah. Oh, no kidding.

**Kelley Snodgrass** [00:01:13] You should go talk to her.

**David Todd** [00:01:13] From years ago. So, you know, I just haven't been in touch with a lot of these people, but fellow travelers, I guess you might say.

**Kelley Snodgrass** [00:01:23] Sure. Well, if you talk to Ann Hamilton any time in the near future, be sure and tell her Fossil Rim says hello.

**David Todd** [00:01:30] I will do that. Thank you so much. Yeah.

**Kelley Snodgrass** [00:01:32] Yeah. And I'll tell you what, David, Krystyn Jurzykowsy would be a wonderful person to talk to in regard to Texas fauna and the individuals that have certainly done some incredible things.

**David Todd** [00:01:48] Oh I admire her so much. Yeah, exactly, exactly.

**Kelley Snodgrass** [00:01:54] So, so, do we. So do I.

**David Todd** [00:01:57] Well, and I've been impressed by what I've learned about you, you know, through what I've read, and I was hoping that we might spend some time today just talking about some of your life and career and, you know, maybe focus a little bit on the prairie chicken just as a kind of a vehicle for talking about, you know, a wide variety of things you've done.

**Kelley Snodgrass** [00:02:21] Sure. And and I'm going to be totally up front. I'm going to try to deflect as much as possible away from me, because there are so many others that have been so instrumental, you know, in regard to the species, specifically, and of course, much broader, broader applications of their talents as well. But, but anyway, yeah, obviously we're always thrilled to talk about it.

**Kelley Snodgrass** [00:02:47] And the first thing I need to say, David, is, is that thank you for doing this. I mean, because, you know, if it wasn't, if it weren't for, for you drawing attention to, to, you know, some of the unique and special things that we have going on right here in our backyard, in our state, the great state of Texas, you know, we wouldn't know about them. And so thank you very much for what you're doing for, oh, for nature, for the people of our state and really all of us.

**David Todd** [00:03:23] Oh, well, that's very kind. I think, you know, a lot of people get understandably busy with what they're doing. And I'm just trying to be a scribe to, you know, help people recollect what they've done and make sure that it's not missed or forgotten. So thank you very much for participating in this.

**David Todd** [00:03:43] And I feel like I should introduce this more formally, in part for the record, and also to make sure that you're on board with this. So if you're game let me just dive into this.

**David Todd** [00:04:00] So the plan that we've got, Mr. Snodgrass, is to record this...

**Kelley Snodgrass** [00:04:06] Please call me "Kelley".

**David Todd** [00:04:08] Kelley, I'll call you "Kelley". Thank you.

**Kelley Snodgrass** [00:04:10] Thank you.

**David Todd** [00:04:10] Kelley, our goal here is to record an interview for research and educational work on behalf of the Conservation History Association of Texas and for a book and a website for Texas A&M University Press and for an archive at the Briscoe Center for American History at the University of Texas at Austin. And, you know, in addition to those purposes, we really want this to be a record that you can keep and use, as as you see fit. So I wanted to make sure that that sounds good with you.

**Kelley Snodgrass** [00:04:47] Sure, sure. OK, I hope that I can contribute in some small way.

**David Todd** [00:04:52] Yeah, well, I'm sure you can. Well, let me just set the frame for when and where this is all happening.

**David Todd** [00:05:01] It is January 7th, 2021. My name is David Todd. I'm in Austin. I'm representing a nonprofit group called the Conservation History Association of Texas. And we are fortunate to be conducting an interview with Kelley Snodgrass, who is executive director at the Fossil Rim Wildlife Center in Glen Rose, Texas. And he has worked at the Center since 1984 in many capacities, wearing hats as Animal Care Director, Natural Resources Management Director, Chief Operating Officer and other roles.

**David Todd** [00:05:37] So today we will be talking about the Attwater's prairie chicken in some regard and about its decline and the Center's leading efforts to breed it in captivity and help its release to the wild and gradually for the goal of restoring the bird to Texas and elsewhere.

**David Todd** [00:05:59] So that is kind of a little introduction and usually we start these interviews with some initial question about your childhood and if there might have been any people who you might point to who were a big influence in your interest in what's now become a life-long career of working with wildlife.

**Kelley Snodgrass** [00:06:24] Well, David, it's, you know, it was a childhood filled with being within the outdoors and, and as you can well imagine, that you pointed out that I've been here since 1984, which puts my childhood even prior to that. So you can kind of get started drawing a little bit of a guess as to my age. But, but so a lot of our activities, a lot of my activities centered around being outdoors and in nature, with nature. And so that was that was, that was a big guiding influence. And then, then from a family perspective, I had a family that had its roots in kind of the agrarian lifestyle, and so that too being outdoors. And and I've got I've got to say that my family was an incredible foundation for me in all things spiritual, physical and emotional, all things, and, and I would certainly not be anywhere today without that, that grounding, that love and and that nurturing. So anyway.

**David Todd** [00:07:40] Were there any sort of early experiences that you recall of being with animals or being, you know, in the outdoors that really stay with you?

**Kelley Snodgrass** [00:07:55] I don't, I don't know that I can draw anything specifically other than, than just having a general and deep-seated desire, interest in being outdoors, being in nature, you know, in many ways and shapes. I don't, I don't know. I just, I just can't imagine a world without that, we can't experience within the natural element because everything is so intricately tied together, including humans. We're not separate from nature. We are part of nature. And it's hard to tease any, any of that apart and to point to a specific occurrence or event or series of events that kind of guided me in this direction. And quite frankly, you know, this, the profession that I wound up choosing - I'm not sure I chose it, I think it chose me - just through the nuances of life and having arrived here in '84, it certainly was not on my radar as a lifelong profession. But so it turned out to be.

**David Todd** [00:09:26] Yeah, I guess sometimes it's just such a part of your being that it's hard to track down a source.

**David Todd** [00:09:34] So I understand that you went to Tarleton State University here in Texas and studied agricultural education while you were there. Could you tell us anything about the lessons you learned there or some of the colleagues and classmates you might have run across who really, you know, were a big influence in your later career?

Kelley Snodgrass [00:09:58] Absolutely. Fantastic university, a small university. And, and it had a strong agricultural program at that time. And so, you know, with the degree path that I took, you know, one could get a lot of experience in animal management, land management, nutrition, genetics, you know, a lot of the basic, basic things. You got, you know, you have to understand that Fossil Rim Wildlife Center is a conservation center. It's, it's set on 1800 acres. So there is a lot of, a lot of similarities in being a conservation center, we're producing animals, typically of the threatened and endangered variety, and we're managing them in large, natural, semi-natural areas. And so therefore, we're working with the forces of nature, whether it be, you know, the soil, the flora, you know, the wildlife itself and doing so relationally among all of those things. So, so having an agricultural background was, was actually very good, you know, a very good academic training and with some practical to be applied to to Fossil Rim.

**David Todd** [00:11:09] That's fascinating.

**Kelley Snodgrass** [00:11:10] Because it's all about sustainability, and systems and communities and and, you know, how they all play and work with each other over the long term.

**David Todd** [00:11:26] So it's just there are a lot of commonalities and similarities between a ranch, for instance, in maybe raising cows, sheep, goats and the situation you find yourself in, where you're raising these very rare species.

**Kelley Snodgrass** [00:11:42] No doubt. No doubt. And that's, that's an interesting, interesting thought, because I once gave a talk at one of our conservation meetings where I use the word "production" 19 times. And that's not in the conservation, you know, circle's community, that was not a common word, commonly used word. And I pointed it out at the end. It was actually a cheetah meeting, of all things.

**Kelley Snodgrass** [00:12:08] And but it really is, you know, if in order to to conserve something, to save something, to secure something going forward, to sustain it, you know, you've got to, you've got to produce them and manage them. And so there are a lot of similarities between, between the livestock industry and the conservation, and the wildlife conservation efforts for different, you know, different end, so to speak. But yeah, yeah, no doubt, you know, just as a good manager of a cattle operation needs to know, you know, nurture the soil, to nurture the plant and nurture the animal, to nurture, to nurture the environment. So too do we.

**David Todd** [00:13:02] That's, that's really interesting - all the overlaps. Well, so let's see if I got the chronology straight here, I believe you started at Fossil Rim Wildlife Center in 1984 as a ranch manager, and gosh, been there going on 35-plus years. And, can you tell us about some of the highlights of your work while you've been at the Center?

**Kelley Snodgrass** [00:13:35] Absolutely. Absolutely. Too many to mention, quite frankly. But, you know, I think one of, one of the highlights is, is the incredible, incredible people that I've had the good fortune to work with and to meet and and to learn from over the years. I mean, even in the early days of 1984 when I came here, there were just a few other employees of Fossil Rim Wildlife Ranch, at that time. And, you know, and the learning opportunities that were presented. And because we were able to do, you know, we had to do so many things, you know, it's been an opportunity to evolve with the, the, the, the place. And when I say the place,

it's all encompassing the land, the people, the programs, the animals, all of those things. And so it's been an incredible journey, if you will.

**Kelley Snodgrass** [00:14:41] But so many incredible people ... people, you know, our staff and volunteers past and those present today. And quite frankly, we, you know, we have such an obligation to carry the good work forward for, for conservation, but also for those who put so much of their time, effort, energy and expertise into this organization, and those that will come after us. We have a rather large responsibility and certainly to the, to the land itself and the wildlife that we're, we're protecting and the education programs and the research and the training, you know, the whole package that is our mission.

**David Todd** [00:15:34] It's a really multi-faceted operation. I mean, gosh, the number of species, small to large and, you know, I always thought of the Fossil Rim program is mostly focused on hoofstock. And I was always surprised to learn that that you know the center had been so involved in the early days of trying to care for Attwater's prairie chickens.

Kelley Snodgrass [00:16:03] Mhmm.

**David Todd** [00:16:03] And, you know, maybe we can segue to talk a little bit about the bird. Could you tell me a little bit about what you know of the prairie chickens' biology and maybe some of the problems that face that, you know, first drew the Center to be interested in it?

**Kelley Snodgrass** [00:16:27] Yeah, well, let me give you let me give you just kind of a snippet of our mission statement for this organization.

David Todd [00:16:33] Yes please.

**Kelley Snodgrass** [00:16:33] And I kind of alluded to it just previous, and that is to certainly work with threatened and endangered species. But it's also conservation. It's conservation education, research, professional training and natural resources management. And we hope to do all of those things with the support of a, a, you know, a concerned and inspired public component, and that we can all therefore do better with nature. And so that's that's it. That's the five legs.

**Kelley Snodgrass** [00:17:11] So so if you take that and you apply it to to the many programs, the programs that we have, I can, you know, we can talk about how we've trained over 600 in terms of preceptees, et cetera, over the years and the, the species programs, the educational programs that we've done.

**Kelley Snodgrass** [00:17:38] So back in the 90s, (and I'm getting around to Attwater's), David, in my wanderings there for a minute.

**David Todd** [00:17:45] Yeah, no, this is great.

**Kelley Snodgrass** [00:17:46] So back in the 90s, you know Christine Jurzykowski, and at that time Christine, gentleman started Fossil Rim by the name of Tom Mantzel, wonderful gentleman that we still have a wonderful relationship to today, acquiring land and getting into some of these non-native wildlife species. And he operated it until '87. And Christine and Jim acquired Fossil Rim and and pushed us into the conservation forefront even more, and wonderfully so, incredibly passionate and fantastic people who I can't say enough about them.

**Kelley Snodgrass** [00:18:31] Anyway, they started they saw the need that, you know, we're working at that time with animals primarily from Africa, and they, they became aware that we have a number of endangered species here, not just in North America, but in Texas, a large number of threatened and endangered species. So they launched an initiative called, "Pride of Texas". And, and so we then pivoted a little bit, not away from, you know, the other wildlife species that we were working with, but to add in addition too. And we added the Mexican gray wolf, the North American red wolf, at that time, the white nose coasti, and the ocelot.

**Kelley Snodgrass** [00:19:21] And then in addition to that, we were approached by Fish and Wildlife, by Dr. Nova Silvy with Texas A&M, to consider Attwater prairie chickens, because the wild population of Attwater prairie chickens was plummeting exponentially. But I think there were very few left, and maybe 40, 40- something, 50, I can't remember. This was back in the early '90s. And but it was, it was going down, and no one was was rearing Attwater prairie chickens. So in order, for this species to continue to exist, something had to be done.

**Kelley Snodgrass** [00:20:04] And yes, you're right, David. We were mostly hoofstock, we had had some good success with cheetah, you know, a carnivore species, a cat. So we thought somebody's got to do something. And we were just coming through this, this Pride of Texas initiative. And we thought, why not? Why not? We will learn a lot. And we did. We had quite the steep learning curve. But fortunately, learning did happen. Other facilities came on board and it turned into a good, a good collaborative effort to save the Attwater prairie chicken from extinction. And to date, so far, we've been able to do that.

**David Todd** [00:20:56] Can you tell us a little about why the prairie chicken was in such dire straits when y'all decided to intervene?

**Kelley Snodgrass** [00:21:07] I'm sure it was, you know, a multi-pronged, multi-influenced thing. Mike Morrow will be able to to give you so much good information as someone who has dedicated his life, his professional career, to this species, to the Attwater Prairie Chicken National Wildlife Refuge. He is, he is a wonderful source of natural history of the species and certainly has been instrumental in all facets of the recovery work to, that has been done to date.

**Kelley Snodgrass** [00:21:45] But but, you know, it was it was a bird that that has evolved in a very specific habitat, stretch of the coastal prairie of Texas and Louisiana. And so much of that, that habitat had been changed, fragmented, influenced. And in my opinion, and this is my opinion only and that is, is that then you have a number of other species changes, whether it's raptors, whether it's the, the red imported, the introduction of the red imported fire ant. You know, there has been a number of other probably influences as to to its decline. So I think it was you know, it was a combination, a combination of a number of influences that that, that pushed the numbers downward.

**David Todd** [00:22:38] And I gather that the Fish and Wildlife Service had been looking after the bird at the refuge down near Eagle Lake, and there were also some private land near Goliad. But I think you mentioned that Dr. Silvy though, well you know, these animals are not going to persist in the wild. You had to turn to captive breeding. And I was curious if you recall any of the conversations with Fish and Wildlife, because, as I have understood that, you know, they are reluctant to turn to captive breeding because it is so difficult and expensive and complicated.

**Kelley Snodgrass** [00:23:26] It is and usually is compounded by the fact that you wait to the, you know, less than two minutes in the fourth quarter before you move into, to apply that, that methodology to, to saving a species. And so you're kind of behind the eight ball, because there's so much that one needs to learn to be able to effectively, you know, raise and manage this, this particular species, but basically any species.

**Kelley Snodgrass** [00:24:00] So, you know, you kind of go into it with your hands tied behind your back when, when you only have so when you have so few to to work with, at the start. But, but yeah. You know, and yeah, you we all know that, that where one should recover a species is in their native habitat, in the wild, in their natural conditions, not in captivity. And so that's, that's where, you know, you pull out all the stops to try to do that, to save them there.

**Kelley Snodgrass** [00:24:31] But at the same time, for so many, and a growing number of species, we need to, in order not to lose that segment of biodiversity, we need to have insurance populations or assurance populations. And so that's why we do what we do and that's why many others do what they do, and thankfully so.

**Kelley Snodgrass** [00:24:56] And that is, you know, biodiversity is, is, is going to be a, is a very precious thing to all of us, humans included. So with with the Attwater prairie chickens, thankfully, you know, some, some key people within Fish and Wildlife, Texas Parks and Wildlife, Dr. Nova Silvy at Texas A&M, said we better do something, better, we better do something now.

**Kelley Snodgrass** [00:25:22] And and so we kind of jumped on board with them and said we'll do an Attwater prairie chicken rearing facility and thankfully others that came on board as well. In the past, San Antonio SeaWorld was involved for a while. The Abilene Zoo was involved for a long while. Caldwell Zoo in Tyler, Texas remains a participant and a producer of Attwater prairie chickens. Certainly the Houston Zoo is a key player and producer and supporter of the recovery program there in Houston. Now, the Sutton Avian Research Center has come on board, and again, thankfully so, the more we can get involved, the more we can, you know, kind of diversify the production chain and therefore support the releases and sustaining this bird in the wild.

**David Todd** [00:26:26] And when the Fossil Rim Wildlife Center got involved in this Pride of Texas effort and tried to intervene to help the prairie chicken, this was was one of the original efforts, from what I heard. And so y'all were kind of inventing this as you went along. I mean, were there models that you were turning to and, you know, whether there's been grouse recovery efforts elsewhere or some sort of example you could turn?

**Kelley Snodgrass** [00:27:00] A little bit, a little bit, but not, you know, there wasn't a lot out there. You know, again, Mike Morrow, another gentleman, John Tepfer, who knew a lot about the natural history and the birds in the wild. You know, we tried to draw on a number of things and and then introduce what, what challenges hurdles we may have within, within a captive setting. And, yeah, again, the learning curve was very steep. And so we started in the early '90s, oh, my gosh, '92, '93. '93, I think was Attwater prairie chickens. And we did produce birds, but there was a lot to learn and the best way to house them, to manage them, nutrition, you know, behavior, everything.

**Kelley Snodgrass** [00:27:48] And, but that's what you do. That's what you do. You learn. You do all the research you can based on prior experience with similar species, and then you become constant learners, year over year, season after season.

**Kelley Snodgrass** [00:28:07] Our current avian curator, Janet Johnson, is, and then our lead, our senior avian specialist, Cara Burch, they're incredible. They are the best. And of course, I'm a little biased, but they are best. They, they, they've been working with Attwater prairie chickens here at Fossil Rim, Janet, for 20 years. And she is learning and Cara is learning. And they're applying those learnings year over year and refining their, their, their management, their rearing techniques, year over year. And it's, they're incredible. I mean, literally, the survival of a species rests on their shoulders, on the Houston Zoo's shoulders, on the Caldwell Zoo's shoulders, but they rest on their shoulders. No pressure there.

**David Todd** [00:29:03] It is a heavy load, a really daunting...

Kelley Snodgrass [00:29:04] It is.

**David Todd** [00:29:04] Challenge. I see that.

**Kelley Snodgrass** [00:29:08] And that's where I feel so under, you know, I can't explain the, because, again, to ensure the sustainability of a species, you have to ensure the sustainability of that effort, that those learnings, that knowledge, that continued learning and then certainly all the other things, the funding in order to to continue to sustain that species, at least to a point where, you know, it can sustain itself, which is not something you do overnight. It takes time. It takes changes, you know, and certainly in the environment in which you're trying to reintroduce them and get them to, to sustain themselves. So it is, it's it's, you know, my awe and appreciation of what they do day in, day out, all, every day of the year. And, and certainly in the breeding, laying, hatching, rearing season, is, it's unbelievable. The pressure is there, the intensity is there. And then the application of their knowledge prior, and their learnings going forward, is there.

**David Todd** [00:30:27] I bet. Well, you've clearly built a good team there. You know, when you look back over the last 27, 28 years of working with the Attwater prairie chicken, do you recall any, you know, particular successes or challenges that, you know, really pop out for you?

**Kelley Snodgrass** [00:30:52] Yeah, yeah, yeah, absolutely, and, and, you know, I got, I got to say that so many of the programs that we work with, so many of the species that we work with, you know, you don't get to see that, that, that full circle of of effect as you do with the Attwater prairie chickens. For example, we have a species, an antelope species here called the scimitar oryx, and we've had them since, oh, my gosh, the early '80s, mid '80s. And during that time, they actually went extinct in the wild. And, and, you know, no hope for a reintroduction program, recovery program, any of that. They're from North Africa.

**Kelley Snodgrass** [00:31:35] And, yet back in 2010, the UAE said we need to try to release scimitar oryx, and they initiated a program, a funding source, provided the funding to do just that. And they reached out to another organization, Sahara Conservation Fund, who reached out to several organizations, Smithsonian, Zoological Society of London, Fossil Rim. Anyway, we became involved in that program. And so that, now there are scimitar-horned oryx running around in the country of Chad, in the wild.

**Kelley Snodgrass** [00:32:16] And so but those opportunities are so few and far between. So and even if they become available, it takes so much time to get there. With the Attwater prairie chicken, our staff, our interns, the birds themselves, the other institutions that are involved in this, they can see, you know, starting in March, the eggs hitting the ground, the chicks hatching, the chicks being raised, and those chicks going to release by what, July.

**Kelley Snodgrass** [00:32:49] So you get to see a means to the end and in the end to the means in a very short period of time, and then that is so rare in our world of, you know, working with these endangered species. But what a wonderful opportunity! Our interns that come here for that professional training are able to witness that, to see what all of their hours, their many hours of application of their time and effort in raising, you know, these, these, these birds, to be able to see that release and to know that that there are birds in the wild because of their effort. What a wonderful, wonderful opportunity!

**Kelley Snodgrass** [00:33:37] Now, that's that's the positive side. But then..

**David Todd** [00:33:39] So then I'll have to stop you there, I just..

**Kelley Snodgrass** [00:33:43] Sure, sure.

**David Todd** [00:33:44] Make it clear, the difference. So, with a lot of the species you work with, if I'm following you, it's sort of a closed loop. You, you breed them, you raise them, and then they probably stay in captivity. Maybe it at Fossil Rim, or at another zoo or willdlife ranch...

Kelley Snodgrass [00:34:02] Right.

**David Todd** [00:34:03] But they don't return to the wild. And that that's what makes the experience with the Attwater prairie chicken unique. Is that right?

**Kelley Snodgrass** [00:34:11] That's that's exactly right. But again, again, it's about conserving, saving biodiversity. Right? And we need to do that on so many different levels, from the soil, to the to to the plants, to the insects, to the animals, you know, the air, the water. You know, we need to do as well as we can to save as much of it is as we can. But it is so rare that we get to, or have the opportunity to raise a animal or whatever and then put it back in the wild and have it march on forever more, because so much is, is influencing our environment, our climate, quite the other way.

**Kelley Snodgrass** [00:35:02] There's going to be more need for creating these these assurance populations, these insurance populations, because, again, you know, people ask us, why don't you do what you do? And I will, every time I'll point to the Attwater prairie chicken or the scimitar-horned oryx and say that's what we do. Because if, if no one was raising scimitar-horned oryx, there wouldn't be 300-plus oryx running around in Chad right now, because they wouldn't exist, they would be extinct.

**Kelley Snodgrass** [00:35:36] So we need to make sure we maintain as much of this biodiversity as we possibly can. And in order to do that, you need to create sustainable populations, both ex-situ and then ideally in-situ, meaning in the wild.

**David Todd** [00:35:54] I see. So so a lot of what the Center does is create sort of a genetic bank, you know, some sort of a bridge to a point maybe in the distant future where these

creatures can be released. But that's the situation with the prairie chicken, where there are actually grasslands where you can take them is, is unusual.

**Kelley Snodgrass** [00:36:18] Yeah, absolutely. Absolutely.

**David Todd** [00:36:22] Well thanks for clarifying that.

**Kelley Snodgrass** [00:36:23] Yeah. Yeah, sure. Sure. You know, we all know about, or we all think we know about the web of life, but we, you know, how much do we really know? But, but, so, so many of these things are, are, we don't know what's, what is most important in the grand web. We're not even sure what's happening under our feet at the, at the, at the, with insects. I mean, you know, there's, there's a lot going on in nature right now and and a lot of it is not in a good way. And so, anything anyone can do again to save biodiversity, whether it's in your backyard, on a farm, on a ranch, on a rooftop, we need to be working that way.

**David Todd** [00:37:14] Right, right. Well, so you talk about the sort of up-side of success that you've had with the prairie chicken, and I think you're about to describe the other side of the coin, and I interrupted you. You can tell me little bit now.

**Kelley Snodgrass** [00:37:31] No problem. No problem. Disease, you know, a virus. And it's interesting that that comes up now as we are in the midst of our own pandemic. But, but, you know, just like humans, I mean, a virus breaks out in the Attwaters and that can, can really hamper a year, a year's production, a year's release. And so those are, those are hurdles that we've hit. And not just Fossil Rim. Fossil Fim, certainly, but also some of the other captive facilities. And, and, and it's a challenge. And fortunately, it's one that hasn't been, you know, totally terminal at this point.

**Kelley Snodgrass** [00:38:20] And but we learn and that's that again, that's where the science comes in. That's where, you know, some of these other disciplines come in to help us get through the those periods.

**Kelley Snodgrass** [00:38:34] But, yeah, and and then you have just the things one can't control. Humans can't control a hurricane, for example - hurricane Katrina, for example. So many, so many hours and hours and days go into, to raising the, the birds for release and and so much time and effort for the refuge, biologists and the biologists working on the private ranch where they they release the birds and, and then to have a hurricane come in, or a year prior to that, a flood. That can be quite devastating. It can be quite devastating, certainly to the birds, but also, you know, to all the effort that went into getting those birds out there.

**David Todd** [00:39:30] It's intriguing to me, it seems like there's you're taking a really modest way of talking about this, that there's just a lot we don't understand about the web of life and the sort of the machinery of producing animals and keeping them safe, you know, at the wildlife center and then and then afterwards, there are so many factors you just can't control. How do you deal with this sort of uncertainty that seems like it's very much part of your day-to-day life there?

**Kelley Snodgrass** [00:40:04] Yeah. You can't control the weather now, can you? And no, and, oh, my gosh, and I'm sure you read and you know what's going on with climate, which is affecting weather patterns even more dramatically. Yeah, it's the things that we can't control. One, David, we're incredibly persistent and maybe the eternal optimist, but we have to do what we, all we can. Again, it's about saving biodiversity. You know, we can't emphasize that

enough. We can't focus on that enough. We can't protect nature well enough. We have to keep working at it. And on so many different levels, so many different levels and so many different ways, because this is the one and only world in which we have to live and we better protect each and every natural part of it that we can because if we don't, and then it may not be quite the quite the lovely existence that that it could be.

**David Todd** [00:41:16] Well, so tell me, I guess part of your responsibility is, is, you know, doing public relations and raising funds for these endangered species breeding programs, whether it's Attwater prairie chicken or certainly the other animals that you work with. What is the gist of the pitch that you try to make to people who may not appreciate the nuances of what's going on in the natural world? You know, they have a, you know, a white collar job in a high-rise somewhere. And it's a, you know, sort of an artificial, built environment that they're in and they may not be aware of what's going on. How do you, how do you approach that? What's your 60-second elevator speech that somebody like that?

**Kelley Snodgrass** [00:42:11] It's not a speech? It's, well, there is that. But it's really the experience. When, when you come to Fossil Rim, one, we want people to come to Fossil Rim because they will then be in nature. They will, they will be in nature. They will, they will see wildlife in a semi-natural setting, in natural herds, correct social orders, behaving as much as they would as if they were in the wild, et cetera, et cetera. So, you know, you almost have to, you feel it, to see it, to experience it.

**Kelley Snodgrass** [00:42:51] And then at each and every turn we try to to inject why we exist, you know, that mission and then tie in how they, too, are supporting that mission. Again, whether they they come here and, and drive through, they stay at our lodging, they buy a hamburger or they make a donation contribution, as we are 501(c)(3). Each and every one of those ways is supportive of the efforts to conserve the Attwater prairie chicken, and the cheetah, the southern black rhino, the Mexican gray wolf and the numerous other endangered and threatened species that are here.

**Kelley Snodgrass** [00:43:40] It is again, we bring it back to. Well, let me let me ask you, David. Have you lived in Texas a lot of your life.

**David Todd** [00:43:50] All my life.

**Kelley Snodgrass** [00:43:53] All your life. And how have you seen Texas change over those years as far as the human impact?

**David Todd** [00:44:02] There are lots more of us.

**Kelley Snodgrass** [00:44:04] A lot more of us: that's really, that is, that is so true, and especially along that 35, 45, I-20, those corridors. And so much of our green space, so much of our nature space, is getting cut up, fragmented, and lessened. And so each and every thing that we can do to save green space, therefore to be able to to provide wildlife and and again, it is not just, you know, the big, beautiful, furry thing with horns, antlers, stripes, spots, fangs, claws. It's, it's the, what is under the soil. It's the soil itself. It's, it's the things that grow from the soil to sustain the air and the things that that utilize the plants that come up - be they trees, grass, whatever. And we are such a part of that. And we have to draw that connection back to that. And so, so for the white-collar person in the office building, we need to give them that experience and that information of why it is important to them, as well as that Attwater prairie chicken back there.

**David Todd** [00:45:27] So you're saying it may not be the sermon or lecture, it's, it is almost like an intuitive sensory thing, and when you're in nature and you see these natural systems and orders then it, it makes sense to you and it's important just intuitively. Is that where you were going?

**Kelley Snodgrass** [00:45:47] I think it is I think it is to, to a large degree, but it's also to inspire that kind of that curiosity on, "OK, that's them over there doing that. Great. We're going to, you know, support them in doing that. But what am I going to do?" And that's that's that's the next step, right, is how do we, how do we provide that opportunity, that inspiration, that, that self-revelation that, that each and every one of us can do a little more to protect our natural world, or to do a lot more to protect our natural world that we are a part of. That's where we're going. That's where we have to go. That's where we need to strive for. Because it's, you know, it's not enough to say, "OK, you guys do that over there and we'll support you in that, but we're not going to do it over here."

**David Todd** [00:46:45] So you're hoping that Fossil Rim might get cloned and maybe maybe breed some places like it? Is that it?

**Kelley Snodgrass** [00:46:56] Well, it's for all that. Well you know what, and that effort can be as diverse as the species that are on the planet. You know what we need and this is not my, this is our belief here. And that is that we need a diversity of effort to save, save nature, save wildlife at the scale necessary. So we need, we need private and public to come together. And I'm saying private landowners and public facilities. We need the cities and municipalities to come together to conserve as well. We need our business, businesses to come to the table to conserve as well, you know.

**Kelley Snodgrass** [00:47:35] And especially in going where you were going earlier, in how Texas there is so much development going on in Texas. You know, how can we do that better? You know, how do we do that in relation to, to, to the water, the green spaces, the, the view sheds, you know, all of it. And is, are there ways that we can draw and pull together to - we're not going to necessarily stop that development, but how can we be a little more planned in its, in its deployment.

**Kelley Snodgrass** [00:48:16] So, yeah, it's, it's a challenge, it's a challenge, and but, but what is at stake is, is, you know, what are we using up today that that our, our children, grandchildren, their grandchildren will need in the future, you know.

**David Todd** [00:48:38] Keeping the future in mind.

**Kelley Snodgrass** [00:48:40] Absolutely. We don't need to be thinking about us right now or even 2050. We need to be looking generations ahead and.

**Kelley Snodgrass** [00:48:51] Yeah, it's it's a challenge.

**David Todd** [00:48:56] Well, so here's a question for you. You know, we're all sort of dealing with with limited resources - time, money, expertise. How do you deploy what you've got, you know, the people there, the money in the bank, whatever, among many needy species? As you were saying, it just, it could be insects that we should be worring about. And you've got a species like Attwater prairie chicken, which has been sort of stubbornly stuck in low numbers, in the wild, at least. And, you know, folks charge well, it's conservation-reliant and, you know,

it's been on life support for a long time. We should be investing that those resources elsewhere, you know, whether you get a better response. What what do you say about that kind of triage aspect to conservation?

**Kelley Snodgrass** [00:49:51] Well, well, you know, you started out that, that question with, you know, how do we apply our resources here? And, and I've got to say that that we don't work with a huge number of different species here. We work with with, you know, roughly 50. And and so we're not trying to spread ourselves too thin, we're trying to work with animals whereby we can have a positive impact on the, not just the population here, but the metapopulation, the whole population, and, in ensuring that, you know, the existence, the survival of the species has to work within, within the environment here and ideally with some level of expertise that that we have here as well. And so, you know, we're very careful.

**Kelley Snodgrass** [00:50:41] And then we have to work with the environment that we have, the land base that we have and, and realize the effects of what we're doing here on that, because the land is going to be here long beyond the last Attwater or cheetah or rhino that we have. And so we need to take care of that as well. We know that, that we're not perfect in all areas, by any stretch of the imagination. And that's why we have to be constant learners. That's why research is one of the primary things listed on our mission. You know, science-based, good applied research. We need to know how to do it better, what we're doing to make it better. And we need to be able to share that and learn from others and learn from the many, many others.

**Kelley Snodgrass** [00:51:33] And I'm sorry, David, I lost my train of thought and I forgot what the last part of your question was.

**David Todd** [00:51:39] Well, just about this critique, I've heard some people say...

**Kelley Snodgrass** [00:51:44] Oh, right.

**Kelley Snodgrass** [00:51:44] Of efforts, you know, with the Attwater prairie chicken, where it says it's conservation reliant. If you didn't have good folks like you breeding them year in, year out, they would just evaporate in the wild.

**Kelley Snodgrass** [00:51:56] Yeah. The scary part of that, it is that, that same, the same thought could apply to a number of different species. And, and I know of a couple of other ones that we've been, we've gotten involved with. And they happen to be native to North America and the American red wolf and the Mexican gray wolf. There were very few red wolves in the, that existed in the world in 1980, '89, when we got involved in them. That's a U.S. Fish and Wildlife Recovery program as well as, you know, like the Attwater prairie chicken is. And the same with the Mexican gray wolf. I want to say there were 42 Mexican gray wolves when we got involved, and that's in the world - 42 Mexican gray wolves, when we got involved in that program.

**Kelley Snodgrass** [00:52:49] The point being is, is that, you know, what you have oftentimes is what you have and you have to start from there. So and we can't think in this, in this give-it-to-me-now world that we're going to be able to solve all things in a time frame that we would care to. Sometimes things take much longer.

**Kelley Snodgrass** [00:53:11] The the scimitar-horned oryx example earlier, you know, we're going from extinct some time and I can't remember late '80s, early '90s to then being

reintroduced in and in the early 2000, 2000, what was it, '12, '14, '14 or '16, '16 maybe. So that was a fairly long period of time too. So, you know, spending money here and maybe taking money or time and effort away from another species there, the triage moment, that may come to be at some point.

**Kelley Snodgrass** [00:53:48] But again, we need to conserve as much biodiversity as we possibly can because there is that web and we, once you lose something, it's gone. We can't discover it's, it was incredibly important down the road and say, oops, maybe we shouldn't have let that one go. So anyway.

**David Todd** [00:54:18] Well, maybe a kind of related question, I think you mentioned this earlier, that some of the animals that you work with are really magnificent creatures, great racks or fangs or just sheer heft. And then you get a bird like the Attwater prairie chicken, which is, you know, small brown bird that, that sometimes is really hard to find in a prairie. And how do you explain to somebody that, hey, this is not a charismatic species perhaps, but it's important, nevertheless.

**Kelley Snodgrass** [00:54:53] I do, just pretty much like you just said. When I'm out doing, I'll take someone, a you know, a special tour back to the Attwater facility and I'll pull up and one just the sheer size of it, you know, I mean, it's, you can't help but look at the, the, the numerous external flats where these adults are, and then the incubation and hatching building, and then the chick room building and the associated flights out behind it, and not to go, "oh my gosh, they're doing this in a really big way. They're serious about this!".

**Kelley Snodgrass** [00:55:28] And then the level of dedication of the staff of Janet, Cara, the interns that we bring in for the production season, the one of our other animal care staff that's so transferred over to there, our animal health team, oh, my gosh, they are just remarkable, and the attention and care and the nurturing they give to the the birds during the, all year long, but certainly during the production season. It is a huge, huge, huge effort.

**Kelley Snodgrass** [00:55:59] But I'll pull up in front of there and I'll say, "now this is one of the most important conservation programs we have going on here at Fossil Rim. No, they do not have fangs. No, they do not have stripes or fur or claws or horns. And they're not big and all of that, but they are one that is so very close to extinction. And they are one of our own. They're one of our own. They're a native Texan. And shame on us if we as Texans let this bird blip out on us because we didn't try hard enough. We didn't try everything possible. We didn't do everything possible to conserve this bird, which may be vitally important in some way, shape or form to a coastal prairie restoration program.

**Kelley Snodgrass** [00:56:46] How could you know that be different in the future? And what impact might that have to the human population lives along, in that area and therefore the other wildlife that is reliant on that. Anyway, I do point out that it is a very conservation-dependent and very native species, that is, that is one of our own here in Texas and how important it is that we continue to work, learn and do better with, with trying to conserve it.

**David Todd** [00:57:20] Well, you explained this really well. In fact, just this last comment you made really was an eye-opener to me. If I'm following you right, it sounds like you're thinking that the Attwater prairie chicken may be a key part of restoring native prairie, the whole ecosystem.

**Kelley Snodgrass** [00:57:41] That very well may be.

**David Todd** [00:57:43] It may be a key player there.

**Kelley Snodgrass** [00:57:46] Right. And, and the other thing, too, is, is that so much of our biodiversity is in decline. And that includes a lot of our songbirds, a lot of our ground-nesting birds, which, which includes other ground-nesting grouse species, which an Attwater Prairie chicken is - it's a grouse. And, and so what we learn with them can be applicable to so many to, to other species. So they don't have to start from square one. They and yes, I know Janet has, has influenced a lesser prairie chicken management program. She's on a masked bobwhite quail recovery, u.S. Fish and Wildlife masked bobwhite quail recovery team. She has gone to Canada to help them develop a sharp-tailed grouse, breeding / management program. So it is about community and connectivity and learning from one area to another and sharing those learnings.

**Kelley Snodgrass** [00:58:48] But, but absolutely, we, whether it's the Texas coastal prairie or native prairie here in north Texas, you know, again, we're losing habitat and in a lot of cases, species. And in order to, even to have some idea of how to triage anything, much less, you know, pick and choose what species you work with, what you don't, you've got to have a little better understanding of the effects that it may cause. And so, again, you know, we tend to separate ourselves from it. We as humans tend to separate ourselves from nature, thinking that we can overcome whatever with technology or, or whatever, and that's not necessarily so. And so anyway.

**David Todd** [00:59:43] This is really interesting. I think back to this past hour I've had with you, which I really appreciate, you again and again talked about your staff, and how much you admire and value, really treasure them. And I'm wondering, you know, we all have a job to do each day, but this career that you and your team have seems more like a labor of love than your usual 9-to-5 day. Is that fair to say?

**Kelley Snodgrass** [01:00:25] No doubt.

**David Todd** [01:00:27] And how do you keep that kind of morale up.

Kelley Snodgrass [01:00:28] Oh, by having this, you know, this, one, you understand the necessity of it, the gravity of it, but the opportunity of it as well, and certainly the importance. And again, you know, not thinking of just one, oneself, but thinking generationally in front. You know, I want my granddaughter, my granddaughters, to have the opportunity to go into nature here. I would love for them to be able to go out and see a covey about bobwhite quail. We don't have bobwhite quail in this area anymore. I would love for them to go down the road across our pasture to one of the waterholes and hear adult bullfrogs in the evening. We don't have adult bullfrogs here in the evening. I would love for them. You know, the list could go on. And what we don't want is to have that list expanding into the future. Well, I remember when, you know, we had this. We had that, you know. No, that's unacceptable. That's unacceptable. So anyway, yeah.

**Kelley Snodgrass** [01:01:42] And certainly the staff here are incredible. Mike Morrow at the refuge is incredible. The staff and the efforts of the other, other institutions, the Houston zoo's, the Caldwell zoo's, they're doing the good work and very oftentimes quietly so. And especially in Texas, especially as a Texan, we need to know these wonderful things they're doing and you're helping do that. And and anyway.

**Kelley Snodgrass** [01:02:15] Yeah, David, I hope you do. I know you're going to connect with Mike Morrow. I would be tickled to give you Janet Johnson's contact information because she, like I say, she's she is, my opinion, the best at rearing these, these birds and has put in a lot of time and learning towards it.

**David Todd** [01:02:37] Well, I would love to do that. And maybe after we break off, you know, copy me on an email address or something. But before we do that, I did want to just open it up. I've asked you a lot of prying, annoying questions here. And I'm just curious if there's just any sort of open-ended thing you'd like to comment about before we call it quits today.

**Kelley Snodgrass** [01:03:06] I guess the most open-ended comment would be one that I've already made and that is, that is, you know, so many, so much of our successes or failures or intentions and this and that going forward is going to be totally dependent on our ability, our human ability to come together from many different walks of life, be they, they, they occupational, recreational, political, any of those things. So many more alliances need to be created again in order to fully address, fully tackle how we are this part of nature that that can actually do something about the effect that we're causing. So I'm a firm believer in, in alliance-building and, you know, crossing the aisle, so to speak, to, to accomplish a greater good for for nature.

**David Todd** [01:04:18] Yeah, changing minds.

**Kelley Snodgrass** [01:04:20] Changing minds.

**David Todd** [01:04:22] That's what you are doing. Well, good. Well this has been a wonderful hour. And I really appreciate you taking time to explain so much of what has been going on in Fossil Rim and particularly about the prairie chicken. So thank you.

**Kelley Snodgrass** [01:04:38] David. Have you ever been here?

David Todd [01:04:41] Twice. I have.

**Kelley Snodgrass** [01:04:43] All right. Well you need to come back.

**David Todd** [01:04:44] I got to stay in one of your whole safari tent? Oh, yeah, yeah, I was I have a picture of my daughters in the back of the car with a giraffe, eating out of their hands and I think that we will remember the place very fondly.

**Kelley Snodgrass** [01:05:07] That's fantastic. Well, David, the invitation stands. Please come back.

**David Todd** [01:05:12] I'd love to. Well, thank you very much, Kelley. And I hope you have a good evening. Thanks again for your time.

**Kelley Snodgrass** [01:05:18] I will. Tell Mike Morrow hello. And I will shoot you Janet's phone number, email address, etc. actually, I may just send an email to both of you introducing, and that way you have them.

**David Todd** [01:05:30] Perfect. Thank you so much.

**Kelley Snodgrass** [01:05:32] All right. All right. You bet. Have a good day.

**David Todd** [01:05:35] All right, you too. By enow.