

TRANSCRIPT

INTERVIEWEE: Jim Willis

INTERVIEWER: David Todd

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

David Todd [00:00:03] This is David.

Jim Willis [00:00:05] David. Hey, man. Sorry about that. When you don't have water, it's you don't have life. We had to, you know, I had to get this pump man out here this morning. And so now we got, and now I can talk a little more freely and without worrying about whether or not we going to have water. Well, anyway, thanks for being understanding.

[00:00:27] It is a reminder of priorities, when you don't have water. Well, you tell me if this is not a good time, then. It usually takes about 45 minutes to do one these interviews. And I don't want to steal from things you need to do.

Jim Willis [00:00:43] No, that's quite fine. I just, it just, you know, that's part of life in there. You never know exactly if your game plan is going, if you'll be follow exactly, as you know. I played I played college football and we had a game plan. But sometimes the opponent didn't always act like we wanted him to act so we could employ our game plan exactly the way we wanted.

David Todd [00:01:10] I hear you. That's so true.

Jim Willis [00:01:12] He was sometimes bigger, stronger and faster than we had anticipated or they were more, they had more tricks up their sleeve than we had planned on, had planned on. So, you know, you you have to adapt yourself to whatever we do in life and, you've got to fail fast. As I found out here with restoring habitat for quail, my policy became quickly fail fast but fix fast.

David Todd [00:01:40] Well, I think that's so true. And in the hope of not having any shocks or surprises or changes that you didn't expect, let me just explain what we're up to and make sure I've got your permission to go ahead. And what I'd like to ask you is, is with your approval, we could record this interview for research and educational work.

Jim Willis [00:02:08] Yes.

David Todd [00:02:08] On behalf of the Conservation History Association Texas,

Jim Willis [00:02:13] Great. Man.

David Todd [00:02:13] For a book and a Web site for a Texas A&M University press and for an archive at the Briscoe Center for American History at the University of Texas.

Jim Willis [00:02:23] Oh, wonderful.

David Todd [00:02:24] You would keep equal rights to use the recording that I wanted to make sure that's OK with you before getting in any further.

Jim Willis [00:02:34] I'm honored. I really am. And I don't know why me, I think, that for anything that happens with regard to quail or conservation or restoration work. I'm just, I'm honored. But I just have to wonder why me. There are many people out there, including yourself.

David Todd [00:02:57] Well, you're being modest. Well, let's, let's lay it out. So it is May 9, 2020. And we're conducting an interview with Jim Willis, founder of the Wildlife Habitat Federation, based in Cat Spring, Texas.

David Todd [00:03:19] And today, we're hoping that he could help us understand more of the history of Bobwhite Quail in Texas, and you know, the factors in its decline and some of the wonderful efforts to restore at the federation, that you've been involved with.

David Todd [00:03:40] So usually we start these, by just asking a little bit about your career. You've had a very diverse background and so I'm hoping you could, you know, briefly go through it to give us an idea of the context and origins of your interests in quail and prairie restoration, and so on.

Jim Willis [00:03:57] Well, I David, I have to go. I don't know what event caused my interest, spurred my interest in quail or restoration of habitat or bringing back natural resources began. But, you know, I know that way back to when I was as a young man, I remember, remember, you know, I loved to hunt and fish and outdoor activities. And I grew up in a rural setting, where, where we grew cotton, mainly, corn, soybeans, sweet potatoes, whatever. And hunting was just one more activity. It was normal for that, that era and that locale.

Jim Willis [00:04:46] And then my folks bought me, I remember, they bought me here my first shotgun. And, which was pretty - it was a single-shot, 20 gauge, whatever. And I went out and you know it was back then and we didn't really understand game laws and why we had to, the gun was one of those tools, in addition to the hoof, the plow, fire, the axe, and the gun was one or tools that Leopold, Aldo Leopold mentions, as you know, the reason we've lost game and these were the same things that destroyed our natural resources and habitat, or reduced them, to use those same tools again to bring them back.

Jim Willis [00:05:40] But anyway, back then I had my gun and I was walking out across the pasture next to our ranch and this big bird flew over, and I remember shooting that bird, without regard to why or what kind of bird it was or whatever. And oh, yeah, I shot and as soon as I shot, I realized I shouldn't have. It, the bird fell and I walked over and picked that bird up. Sort of still emotional to me, I picked the bird up and it was a large red-headed woodpecker and I hope it wasn't an ivory-billed. But it was it was a big, a big woodpecker. And I sat there and looked at that bird and said to myself, I don't know why I did this. I didn't stop hunting. I continued to hunt: I hunted quail, dove and squirrel and whatever. But I said to myself, one day, I'll be able to, I'm going to offset this. I'm going to do something to make up for killing you, you beautiful red-headed woodpecker.

Jim Willis [00:06:54] And those kind of things happen to people. And it helps people to understand. It may not happen immediately. And it was me, it took finishing my career, and last of which was in the rice industry. And coming out here in the Cat Spring area west of Houston to restore habitats, starting with quail. All wildlife. But anyway, that's a little story to give you a little bit of background. I grew up all that in that area. And like I said, we - my mother, my father, both also very much attuned to wildlife. And, you know, even though they hunted and fished and whatever, we, we still respected it. And I do today even more so.

David Todd [00:07:56] It's interesting how these early experiences looped back in and have effects, you know, ecades later.

[00:08:07] Yes, yes. And so anyway, I made a vow that I'd do something about that. And we bought this ranch when I retired from the rice industry, bought this ranch out here. And all those things that I'd been, had been built up in me to do. All that I'd learned how to do, I put into play. You know, you grow up on a farm; I also owned, you know, my degrees are agricultural-related. And my experiences on the farm and, you know, gave me some input that I needed for doing the restoration habitat restoration work we do with equipment. But I think one thing that helps everybody and is life experiences and what I just mentioned, but you've got to have, you got to be passionate about everything you do. And I know, I know I've seen it in you and others of my friends that are conservation -minded, naturalist types. You know, they, the ones that get something are the ones that, you know, are really, really passionate about it. To put that ahead of everything.

Jim Willis [00:09:28] And I have, as, I played college football and I was too small but, and had some very famous players play, as opposed, as it were, you know, went on to the pros. But I did play, you know, I did start but didn't way but 195 pounds, on the line. Today I couldn't play the game. But I found out real quickly back then, and that was in Louisiana Tech in the 60s, I found out it wasn't the size of the dog in the fight. It was a size of the fight in the dog. And that applies to everything in life. You know, you you've got to just fight for it, scratch for it, never give up, have that never give up attitude. If you're going to be in their playing no matter what. So it might be, now I say that today, you know, those people that play the game are twice the size I was then. There's no way I could even go on the field. But I just say that today that back then. But it did have, it, it was a learning experience. You know, you learn. You just gotta keep on and never quit, and finish the job. That's something I tried to get in. Agriculture, in conservation goals and whatever field. So many who want want to do it, but never finish doing it.

David Todd [00:11:04] Well, this helps me understand a little bit about your attitude and passion. And maybe we can talk just a little about the quail and you know that that has attracted so much interest and passion from you. What is the situation with bobwhite quail of the last hundred years? What's your understanding of how things have changed? For good, for bad, for indifferent.

Jim Willis [00:11:31] You know, we're still trying to figure that out. And you just have to stop and assume that you know, we've been researching this, David, for, what, six decades or more. Why, how did it happen. What do we do to resolve the issue? I bought this place out here with this idea that I was gonna show everybody how to do it. I was going to take all that research we've done and I was going to, because, you know, I look for, I look for, I went to a meeting. I asked who it was that I could be my mentor. And we had a whole roomful of conservation-minded folks. It happened to be at the NRCS, you know, headquarters in Temple. And I remember Jim Connolly with Quail Unlimited. And he looked at me when I asked the

question, I said, "Jim, where can I find a mentor or where can I - who is a pioneer I can go to to do this?" And Jim looked at me and says, "You are the pioneer." And it just rocked me. I mean, I know people have done a lot. There's no way, you know, that you had any burns and that cell was alive and all that. Pettus. All those people who are just so knowledgeable about it. But, I knew that we, if all that information was true. Somebody had to, had to put it on the ground. And so there you go. When I figured out there wasn't anybody doing it and doing it for landowners.

Jim Willis [00:13:16] Here there, maybe, but really had the, had pulled together a team of equipment and expertise and people that had that expertise. Cause I'd tried it myself and I as I told you earlier, my program fail fasts, fix fast went so far, but then I just couldn't get enough done and I finally had to listen to reason and start pulling together all that we needed to make this happen. And I'm sorry to say I wish more had, I wish I was competing with others to do this wish more people were out there assembling equipment and personnel and actually planting native grass seed and forbs, wild plants that that could always share, you know, go over it with us. And so anyway, that the more I did, the more I wanted to do. And, and now, you know, we're working today on, I think, 40,000 acres in Texas alone and doing the largest mitigation project in the state, are helping 14, 15 thousand up north of Red River, but which 19 counties and we started with just here, on my place and putting a wildlife corridor between my place and the Attwater Chicken National Wildlife Refuge - put in a seven-mile long corridor and it worked. And that process, A&M, I can't tell you, sent researchers out and they found 31 species of upland birds. By planting native grasses or putting back, you know, going back the way it was.

Jim Willis [00:15:08] And, you know, I always followed the advice of all those decades of research instead of trying to do it on my own, and felt I was so smart. I wasn't as smart as I thought it was. I listened to some advice and a lot of which was just as bad, people, you know, assuming that that's the answer. And you know, the answer was, you know, more and more involved than I had anticipated. So anyway, it worked. And that just spurred me on to do more and two more people, John Webb, the late John Webb, and, and Bob Moore both came along and we together decided that, OK, let's try it. And it was amazing how much interest there was in people that wanted somebody to go out and actually do it. You yourself are one of those, David, and it just you know, when you see a lot of people encouraging you and you know it works, then you encourage people to do it.

David Todd [00:16:18] Well, you know, it's, it's probably just ingrained knowledge for you, that quail are a shadow of what they were, you know, a hundred years ago. Can you walk people through how the decline of quail from where they were maybe the turn of the last century?

Jim Willis [00:16:41] Sure. I, going back to my childhood. You know, I grew up in northeast Louisiana. And there was a patchwork of cotton fields, gardens, and pastures and you name it, when, where people had come back or you know, it's post world war II era. I was born in '45, 1945. So you know, by the time I was, by the time I was, you know old enough to understand what what was happening, there were people all over that area with bird dogs and they were chasing quail. And I did, my dad was not a quail hunter. He hunted other things. But my neighbors had bird dogs, and I was always intrigued. Hey, that must be fun. I just, this, just didn't know. But apparently there were enough quail out there that people just, so many people, around there had bird dogs. So. By the time I, I didn't really get involved in quail and hunting, pursuing the bird and appreciating the bird until I got in college. And my, my stepfather down in south Louisiana, took me out and I witnessed something I'd never seen

before - a dog pointing birds that held, and then they exploded. And it was most exciting thing I'd ever seen in my life and a lot different from the kind of game I'd pursued earlier or, and it was, it's just so exciting. And that was during a period where they still had the native grasses and it was the Grand Prairies or there were prairies down there in south central Louisiana down there, Acadiana, actually and I was from the northern part, which is quite different, but they were there nonetheless. And I'll never forget David, it was during that period of time that I was in college, and you know that I hoped, just actually, my mother moved down there in '63 when I started Louisiana Tech. And then I came back, came back. And before I finished school, the soybean craze came in. People had heard about it. And I can't remember exactly what year it was. But, you know, there began movement toward, you know, trying to keep, to kind of make money of agriculture, which is always a bit of a feat. And all of a sudden, all those beautiful little patches of gardens and cornfields and hay meadows and a patchwork all over that promoted to a lot of edge and the kind of habitat that quail liked were just ripped up, and from not fence-to-fence, but road-to-road. Fences were taken down. And solid planted in monoculture soybeans. And, and gosh, you know, there were quail across the road when I was, when my mother moved down there. And it wasn't a but a year later, there were no quail. It was just that big event. And they're, so sad. And it just - sure people made money, but they also lost lots of what, you know, made life important to me and many others and that was having all the diversity of upland birds, including quail. You know, and that's been the story all over.

Jim Willis [00:20:41] So we went from late 60s, early 70s, the quail decline really kicked in. Faster, it always, it was going down already because of the more mechanized agriculture. You know, I picked cotton when I was a kid by hand, and then before I knew it, we were had cotton pickers. So the mechanization had already started in the late 50s or 60s and really kicked in really fast once we get crops like soybeans come in, and do that kind of monoculture. And so, you know, I, I can tell you that I witnessed the demise of lots and lots of upland game birds in particular, like quail, rabbits, you know, all those things that we had, such abundance of back then. And then, so I'm just giving you, not a statistical rundown because I don't know exactly what the numbers were and when, what year more and more and more happened or more and more change occurred. But I went to work eventually in Washington, D.C. for the Department of Agriculture. And there, while there, I was, I sat on the Soviet desk, and the Europeans desk. Long story short, I remember predicting that the Soviets had had a winter kill, whereby they, that they're the largest wheat producers in the world, and they lost their wheat crop, a major portion of it, because of winter kill, which is the lack of snow cover to cover the wheat as they planted it, and then the snow cover prevented the harsh winter winds from killing the young tender wheat as it came out, emerged from the ground and they didn't have a snow cover, so they lost so much. And I predicted they would buy 20 million tons. They didn't buy 20 million.

Jim Willis [00:22:50] And everybody told me I was crazy to predict that. They bought 22 million. But after that happened, I remember, reading about or seeing the picture of a Midwestern farmer who was breaking up the land, plowing up land had been in what was called a soil soil bank back then. Now it's called a Conservation Reserve Program or CRP. Back then it was called soil bank and he was plowing it up that land, and he made a statement, "I don't know. It just really doesn't seem right. Plowing up all this beautiful native habitat, we've had in the soil bank for years. But who can turn down the opportunity to plant wheat or other grains to make so much money because prices are so high now? And so that's what happened.

Jim Willis [00:23:40] And, you know, so quail, like other birds, upland birds, you know, they're all over there. And the Midwest was full of them back then and they plowed up all that

beautiful land up because the price of wheat, corn, soybeans, whatever had gotten so high. So I credited a lot of the loss of quail to just, you say, "progress?" I would say, "greed", because, man, you know, these guys were just trying to make a living. But it happened and through no fault of anyone, I suppose it is the fact that, you know, the farmers finally got a chance to live like others and have have a TV and more than one vehicle, and send the kids to college and whatever. So no, no fault of any one in particular, but that's what happened. I feel that mechanization of agriculture was a major cause back then. And it's continued to, you know, people were trying to make money on the land and and then, you know, prices fell, so what happened? Did they go back and plant back the native grasses? No. We planted invasive species or tame grasses like Bermuda grass or bahia grass. You could put fertilizer. We'd learned that we could hey, you can now fertilize these things and you can produce more, more food for cattle. So you convert those previously set-aside acres into pasture and you can plant it in exotic grasses, Bermuda grass from South Africa, bahia grass from Argentina, whatever. And you can make more hay or more forage. That's when price of fertilizer was \$30 a ton back then. So made sense, doesn't make sense now, but it did back then. So know we, the land, and I'll make and I'm going to make a statement now that I have learned over the years. That is that, we are part of a community that involves the land and as that community, we've got to take care of our community. For so long, we have looked at the land as something to use to make money, and to abuse in many cases. But we've got to look at it as something that is part of our community. And so, you know, I grew up on a farm and soil is, is very important for me, one of the natural resources, just like air, water and wildlife. But gosh, it's just ... so anyway.

Jim Willis [00:26:31] We have, we we've gotten quail 90 percent from, or so, from where they were back in the 60s and 70s. And the only way in my mind that they're gonna come back is to restore acre by acre or parcel by parcel. Or maybe we have to create some larger plots, sustainable acres, some larger plot areas that wherer quail numbers don't fluctuate so greatly from year to year. And we've had that happen. We've been able to hold on to quail in Texas because of the fact that, you know, we had some of the largest numbers ever up in West Texas or, you know, a couple years, two or three years ago because the weather was just right. And it, and but we still had enough remnants of native vegetation that they were able to bounce back, big time. And South Texas, too. But, but it's all it's all up and down. The situation is highs and lows and highs and lows. So we've got to get to a situation where we can help keep more and more in other areas where there's not so much variances, variances in the numbers.

David Todd [00:27:55] So, so you sort of laid out this connection between the loss of this patchwork of pastures and gardens and corn fields and so on, and has turned to a more, you know, road-to-road monoculture. What was it about that change that hurt the quail populations, in your view?

Jim Willis [00:28:19] Quail, like many other animals, whether they live on the edges. A black bass, you don't see it underwater, stays on the edge of a group of vegetation or a log or something. A deer in the woods stays on the edge of something, a rabbit or any wild animal. Quail is no different. And and also they have to have certain types of edge. So a quail needs various types of cover to create that edge or just cover, period. They have to have, probably the most important thing that's missing around in our area, and probably throughout the whole nation, is nesting cover, spread out over a large area. And that is that they have to have a place to lay, the hen quail, has to have a place to lay her eggs that's close to an area where, when those chicks hatch, in those 21 days after the incubation, they have to go out and fend for themselves and find bugs. They're M.R.E.s for baby quail. They have to find bugs to persist. And so they go bugging immediately after they hatch and they live off of insects for, I don't know how many days, but, you know, we'll say over a month, or maybe longer, because they

don't have any other source of food. So you gotta have nesting cover over and nesting cover close to bugging sites for baby quail. OK.

Jim Willis [00:30:20] You also needs to have loafing cover. Quail are like teenagers at the mall, they have to hang out some of their life is, is hanging out somewhere that is safe. Not too hot, not too cold. Not too dangerous from the predators around them, snake. So they need to have good loafing cover where they're protected and they have to have screening cover to go from where they are in the field back into that loafing cover, so they have to have screening cover. So they can, can, can move around without being hammered too majorly by the predators. And that has to be spread out over a large area. And why do I say that? Well, you can have good cover if you've got a big field and you have on the cover down in one little corner, that's left. The rest of it is in pasture over-grazed pasture, for example. And you've got, but you've got the native grasses, you've got a pretty good amount of native grasses down one corner. But hey, guess what? If you know they're all down in that corner, you can imagine that the predators know that, too. So they know exactly where to go for their quail needs, dietary needs. Whereas if you had that cover spread out all over that field, clumps here and clumps there, then the predators can't find every clump, every clump of eggs, every, every, every site of baby chicks, every, every, every place where the male or female are, are, you know, are together during the breeding season. So you've got to have that all spread out in a fashion that so that they can go from their nesting sites, for example, and then chick-bugging sites to a loafing area. And those loafing areas had to be, you don't have to necessarily have to have trees or shrubs, you can have enough vegetative grass, good grasses, like eastern gamagrass or switchgrass or, you know, bigger, even bluestems that provide the escape cover in the field. That's every so often there's a big bunch of that so that the quail can go on in there and hide, and those need to be close enough. Dr. Rollins always uses the example of close enough together that you could throw a softball from one to the next. So spread out.

Jim Willis [00:32:56] And contiguous areas, one area, then you'll have an area, that's an island and all of a sudden next door you got an eaten-out pasture with no place for the quail to go. You've got to have this. And that's why we're trying to develop corridors so they can can, can locate, relocate from one, once there, they've used up all their seed or whatever in one place they could move to another. So it's got to be bigger than just, hey, I got some bluestem in the field so I'm going to have all the quail that I want over here. No, you got to have it, you got to have it and your neighbor needs to have it so you got to have a corridor type situation. Quail will have a home range, they say, of about 40 acres, each on a quail coveys. So you got to have these, you know, 40-acre areas and from place to place so they can they can have a place to, that they can meet all of their needs, and quail have to have the same things that humans have. They have to have air, water, good water, good food, good shelter and more of the open spaces.

David Todd [00:34:06] That's fascinating. So I guess from your years of looking at quail, thinking about quail, it's this habitat change. It's really hammered them, it's not so much the spread of fire ants, or the use of insecticides, or maybe suppression of fire. I don't know if that might figure in or, you know, the spread of certain parasites. It's, it's more of this habitat change and the kind of loafing cover and bugging cover areas. Is that, is that fair to say?

Jim Willis [00:34:41] Yes, it is, it is very much. And I don't deny the fact that there are other factors. And it seems that they've hit on something up and they're certainly giving it their best shot of trying to find out how to address the eyeworm is, is, is very, very much a problem, and they find and in quail in, you know, up in the quail belt up north of here. And they're doing all they can to study that and try to bring the numbers, they try to eradicate or at least reduce

that impact of eye parasites, eye worms on quail up there, so but it's not as big a problem in our area in south Texas. But, you know, that's just another factor - we've had a lot of calls. But no, no, no matter what other factors, they are all of these these fire ant surveys, you know, the big reason for the amount of quail, is that was once though. And there's no major disease that I know of.

Jim Willis [00:35:49] But no matter what other factors they are, you've got to have a place that's good, good habitat, you know, and you can do all of you can have all all those other things covered, but you still, it. I've heard, used to hear, you know, quail equals, rain equals quail in south Texas. Yes, that's true. But rain has to fall, not on an interstate highway or gravel road, it has to fall on good habitat. So you, if you don't have habitat and it rains, it doesn't do much good. You've got to have places where that rain can have an impact, not falling on bluestems or other types of native grasses that produce those habitat requirements that quail need - other birds too - whether it be quail or dickthissel or loggerhead shrike or whatever, meadowlark. You can just go on and on and on. All those, all those species have declined in numbers, some even larger than quail because of the lack of habitat. It's, look at a graph of a declining quail. And the lines almost follow one another for all those species. It's just, so there you go, you've got to, you've got to have those ingredients to, that cause of the decline: you've got to change those, so they come back.

Jim Willis [00:37:22] And so you mentioned Vines. You we've talked about the eye worm and here we go. Habitat is in my, my estimation, the number one factor or factor that we have to have no matter what other things we find is causing quail problems. But we, years ago, Leopold wrote, you know, he has to have proper grazing. He can't under graze, nor can you overgraze. And we largely overgraze in our area. We have to burn, if we can. With urbanization occurring it's harder and harder to burn places. And, you know, with the, you know, this is a, it's a major decision when you've got more and more people inhabiting the land, it's very difficult the burn, to do prescribed burns. We need to, we need to continue manipulating the ground. You know, you have to use a plow at times to do, at least a light disking, if not heavy disking in places. And because, what does that do it? Creates, where you break soil, I don't mean in a measured way, but this strips here and there, fire lanes, if you will, is sometimes all you need because you disturb the soil. You also scarify seeds like croton, or wooly croton or dove weed. And that comes up. And that's a major source of food for quails both in insects it produces and in seed it drops later. And in providing screening cover. So plowing. So there you go - hoofs, the cow grazing, the match, being prescribed burns, the plow, the axe, being you've got to continually remove woody cover. You have land, David. In this area here we are continually fighting growth of invasives but also some native species - will just take over, you know, this prairie we have. So as, usually fight, fight for or keeping those woody species for because, you know, you those grasses, the grasses do a lot of things besides providing food for livestock and cover for quail. So the native grasses, they, they hold water, they control the flow, outflow of water. And we know with hurricane Harvey, it is pretty important to have native grasses and all those massive root systems holding the water in the ground, running and just let it run off off the top and flood homes in Houston or whatever. So, you know, so, so we do need to make sure that we keep to the native grasses as many as possible or intact and not cover everything up with concrete, creeping concrete.

David Todd [00:40:22] Creeping concrete! That's so true. Well, so it sounds like you have really put your passions into this prairie restoration effort. And I was hoping that you could help us understand the origins of the Wildlife Habitat Federation back in, I guess, 2004 or so, you started it and how the organization originated, and then some of the work that it did in

recruiting people and techniques, equipment to, to plant more native prairie. How did you do it?

Jim Willis [00:40:58] Well, it just started with a selfish, selfish motives, perhaps. I mentioned earlier, I wanted to show people how to have more quail. Well, you know, a lot of people buy land and. It doesn't mean that they know what to do with it, but they, they make more mistakes with it than perhaps, than they should, because there's a lot of knowledge out there and a lot of stuff written on it, research about it. So I thought I could come out here and I bought a piece of property and, you know, I immediately was told I bought a wildlife desert. But there's plenty of that around because everything was overgrazed out here, because I was just like everybody else, you know? And I, even though I grew up on a farm, I still did not understand. I grew, I mean, I planted a lot of bermuda grass, bahia, I mean, coastal bluegrass from my father, who, by the way, was, you know, back, way back out of college, he was employed by the Soil Conservation Service, which is NRCS, but he didn't know. He assumed that everybody was on the right track, putting in coastal bermudagrass, ripping out those old native grasses that we didn't need and planting something that would really respond to commercial fertilizer. So anyway, I realized that we had, that that didn't work and because, and so I knew that the land I bought was just like a parking lot out here, just grazed down to the dirt almost. And so I was going to find ways to quickly bring back the quail. You know, putting up things like tepees where they could go and hide. Cutting over woody cover and, you know, and sawing it over and let it go down to the ground so they could have protection. Never heard anything about, never realized, what was really needed.

Jim Willis [00:42:56] You know, all these covers that I, like nesting cover that native grasses was the name of the game. So I failed in my attempt to do, and so I started reading and listening and we finally realized that we had to do something with restoring habitat the way it was back whenever quail were in such abundance. And so with the help of John Webb and Bob Moore, we decided to have a meeting. And I couldn't believe the people came to that meeting, every people from all over. You know, the Nature Conservancy, Audubon. You just, you name it, all of those big players. Thanks. Texas Parks and Wildlife, of course. They came to us. We had a dinner and we launched this thing. We came up with a name even - the Wildlife Habitat Federation and that, and that occurred, as you say, 16 years ago, in 2004. And along with that, we got nothing really happened that fast.

Jim Willis [00:44:04] But we finally got that, we got a government grant - first in the state to get a conservation innovation grant and got enough money to put in a corridor along with support from the Texas Parks and Wildlife, Carter Smith. He saw something with us that he wanted to be a part of. And thankfully, he supported us. So with Texas Parks and Wildlife and NRCS' conservation innovation grant, we put it a quail corridor and it started and started building it. When we got the money in 2006 and it took us three years, took us to 2009 to finish it and, heck, we didn't know it was going to work. We just knew that that's what the, that's what the research showed and that's what the experts told us. And that, it went through about four different landholdings and ended up butting up against the Attwater's National Wildlife Refuge, which is on this side of the river, about 8000, a total of about 10,000 acres. So we ran that corridor from here all the way to Attwater and you know what? It just was amazing the response of people. When we found out that after getting that program, before the corridor was even finished, we found, Texas A&M researchers found 31 species of upland birds, and including quail. And it was just, I wasn't amazed. I was shocked. I mean, I just didn't, I just was so thankful to finally, you know, listen to all that was said from researchers that it worked.

Jim Willis [00:45:56] And so, you know, we got a lot of people on board at that point. People - success breeds success. Landowners want to, don't want to talk to the experts. They want to talk to those who succeed - other landowners that have been successful. And that's the way agriculture has always working or in that field. You know, if you are going to grow soybeans, you know, best way, you certainly need the expertise of the land grant universities and all that, and the people who are in ag services. But you know what? You find a successful landowner, too, who has figured out those little, little, little ways that tweak the system to make, giving you that extra amount of yield. And, you know, so they found out that, we had figured out some way to bring back birds. And so we got a lot of landowners beginning to listen to us. And there you go. We're not out to get numbers of landowners, but we're out to get acres of land. And so it's grown and it's still growing.

David Todd [00:47:09] Well, we can get down in the weeds here. Say you approach a landowner and he or she has, you know, 20, 50, a 100 acres. And they want to restore it from a coast bermuda patch to a piece of native prairie. How do you approach it? What's, what's the formula, the method for doing that?

Jim Willis [00:47:38] Well, you know, everybody's different and everybody, nobody wants to spend a lot of money until they know it works. And if even, they know it works. Who has that kind of money? Because it's so much easier just to come out here and build new fences, buy you a new tractor and a shredder, and get you some longhorns and a six-pack in you're a rancher. You know, we've got to catch those people and let me tell you, I say that kiddingly. I was one of those. I came out here thinking I could do it. But you've got to catch those new-to-the-land people. Let me say that first, that have made, made it, their living and made enough money to buy the land and come out here and catch them before they fall into, prey to those who would tell them that you need to put in these livestock-friendly grasses. Well, what they assumed was the way to go with the way we've been doing it for the last I don't know how many generations.

Jim Willis [00:48:54] You've got to convince those people that if you go to natives, you don't have to have that many cattle. You don't have to have, your expenses are, you don't have to be feeding. If you do it lightly you have to have, you don't even have to have hay equipment and you're talking to somebody, that I used to own, two farm equipment dealerships. And so I sold New Holland balers and whatever. And I know. I've been there. And you don't have to have all that, if you, if you manage your place correctly, not say there's going to be seasons where you have to feed some hay. But typically, I don't feed hay. We manage the system, we manage the grasses. With the right number, put the right number of stocking level out there and and you can almost run cattle, year-round with native grasses. You don't have to put out any push. No fertilizer, no lime. You have fewer cattle, so you don't have as many vet bills. You just, everything works for the good of the cause. But if you listen to others, you, they tell you, oh, no, you've got to have, you've got to have hay. You've got to have all the expensive implements, and you know, hay balers, and rakes and tractors and whatever. And you've got to, but you don't. If you, but it's hard to convince people to make that step because they've. Listen: generations have done it this way. Generations have done it the wrong way. Overstocking, relying on tamed grasses that we've brought in from overseas and thinking we've got to fertilize, we've got to put out lime. I'm not against, and we've got to have the right equipment. No, you don't. And of course, you know, if you want to go the opposite direction, if you want to have more cattle, then go to, you know, break up more, have more paddocks and go to Alan Savory principle, you know, mob grazing. But, but it is all about management. So anyway, that's, that's what we, we go to people and convince them that they can make it with, better with natives. And you have you have prettier grasses. I've got, because I manage, I have

I have this beautiful fields of wildflowers that none of my neighbors have because they've overgrazed them. It's all the things that I wanted because, and I didn't know I could have. But you can.

Jim Willis [00:51:24] You're got to, and so one thing you got to do, you've got to go to those people and got to show them. Look, I'll show you. Look at our place. Look, look, look at the health of the grasses. Look at the soil. You show them the soil. I grew up, we farmed. We switched from using manure and green cover crops and green manure crops, to switch to commercial commercial fertilizer. Our soil got so, where we grew cotton and whatever, whatever, got just like concrete. It was here when I bought this ranch. Today I can go out where I have native grasses, I can my, I can stick my fingers in the soil, it is like potting soil. It's just, it's just so friable is the word. It's so friable because it's got earthworm casings all on top of it. It's just. And the microbes in it, so dense. It just, it's just like I somebody gone out there and poured poured potting soil they bought at Lowe's, Home Depot. So I didn't know that could happen. I didn't know. I grew up doing the opposite. So you get those people, show 'em. And they can see it. They're more apt to believe it. And you've got to find people that are in the right area, with the right kinds of mentality, that have the passion to do it.

Jim Willis [00:52:51] And then you might be able to get them to spend the money to do it. And we give them, we go out, we visit their sites and we tell them what it's gonna cost to do it. And if they really want to get into the program, they can get us, we can draw them up a management plan and they follow that plan. They are likely to have just what they see and hear. And it costs money. But why have property if you don't manage it correctly?

Jim Willis [00:53:23] If you want to have more cattle. OK, that's fine. But if you want wildlife, you can have both. Cattle are great tool, if used correctly. You know, everything has to be done with moderation. You know, you can drink too much water, or drink too much whiskey. But you know, it doesn't. If you, you, you use it in the right maybe amount, if you use that, you know, use that land correctly to get a bigger, better response. And so we teach them how to.

Jim Willis [00:53:55] And let me tell you something: I wish I'd had me around when I started. I mean the day around when I started cause I made so many mistakes - the money I lost doing it the wrong way. I'm still recovering, you know. So if you get somebody that knows what they're doing and not just somebody who tells you they can draw you a plan up and, you know, and all those around you, but somebody who really understands and can show you the impact of what they've done already. You know, it's like hiring an employee. You go out and find somebody that can show you the results and get them to draw you a plan up. And so, then, that's the next step. You got to convince them it's going to work. And then you got to, it's going to, it's a shock sometimes of what it's going to cost. But you know what? What does it cost you to own equipment, to put up hay for cattle? What's it cost you to put in a rice crop? What does it cost you to put in whatever kind of crop you're growing on your place? What does it cost you not to restore your property? You know, you just beat it to death. It's going to take years to recover.

David Todd [00:55:08] These alternative costs. Well, so it sounds like you had to do a lot of sort of trial and error, and experimentation, and educating yourself. And as you've I guess, hone this. What have you come up with as far as the technique for, you know, restoring a given field to to natives? Say it's been in coastal bermuda or bahia or some other improved grass, tame grass.

Jim Willis [00:55:42] Well, it was just if that's the only thing you're approaching. You know, wood cover, of course, is the most expensive, expensive recovery process when you had to remove wood cover, especially when you get big trees. But you are just taking bermuda grass and bahia grass and such as that, introduced species of tame grasses out there, basically, you know, it's a pretty straightforward process. So it's not something you do overnight.

Jim Willis [00:56:15] But my suggestion would be you have to, and it doesn't, it does involve at times the use of herbicides, which I'm not a big fan of, but herbicides is a chemical and water is a chemical too, but you do it correctly, you know? And how many, how much abuse has that land already received from overgrazing or plowing or whatever, or past use of herbicides? So you go out there and you look at, you do an appraisal, a site visit, you determine what's needed, where. Certain herbicides are needed for certain grasses and not needed for others. So you try to come up with a plan to use the least amount and the most effectively. And you, so you try to knock back your native grasses or your introduced grasses. I hate to use the word, but they, but they using, when I took an agronomy course in college, they used it, "improved grasses". But it's the introduced grasses and so you knock those back and don't think that just because you put out a certain amount of chemical, say, glyphosphate per acre, like he's putting out a gallon, for example, per acre. That you're going to kill, that you're going to knock, you just them knock back so that you can introduce cover crops.

Jim Willis [00:57:49] And I like cover crops. I like using cover crops as a green herbicide. If you're talking about it, I like put, planting, I like planting certain ones in the winter and certain in the fall, and certain ones in the spring and varies by the soil type and by the season. You know, you tend to put in, to put in certain things like grains sorghum, and millets or whatever turnips or root crops or whatever. And if depending on the soils, in the spring and then you then that that grow out and then in the fall we plant usually some types of, of crops that are, like wheat, rye, barley, oats, cereal crops. So I'm trying to say is cereal crops, in the fall. And then you let those cereal crops cover the land. And let me tell you, that's what, that's a great way to retard or set back invasive species, because those wheat, oat crops will, you know, they go to head and they just create a canopy above and down below you don't see much, much of the invasives after a while, just sort of cuts off the photosynthesis. And so, it's a good way to, you know, to cover the land without having to put out excessive amounts of herbicides, then you might.

Jim Willis [00:59:27] And then in the spring you, if it goes ahead, fine. But you, then in some cases, you even have to go with a herbicide and knock back your, your cover crop. Say you planted wheat or oats and then you knock those back. And you no-till. And by the way, cover crops are usually no-till planted too, without plowing up the soil. But, you know, you no-till grain drill, to put in native grasses, plant plants, those in, say, the fall cover crop, the winter cover crop. So you, and I've had some of my best stands and some beautiful stands of native grasses occur at that point because I planted into a cover crop and the cover crop protects the young native grasses. It conserves the moisture. It protects them from the harshness of, say, eventually the summer. I mean, yeah, the sun hitting them. And so it's good to plant your native grasses in a cover crop. And then you get, usually get a pretty good, more reliable way of getting a good stand.

Jim Willis [01:00:45] And we've had some great success. That, that and that was from learning from mistakes. I mean we cut out a lot of those steps of the past, but we didn't have success rate. And now we're having better success rate. And that's it. You know, what cost more? To do it more cheaply and fail or do it go through the process and do it right? And then you got it for the rest of your life.

David Todd [01:01:12] And what do you do after it is planted and somewhat established? How do you maintain and manage a native prairie?

Jim Willis [01:01:23] Well, proper stocking rate is the first thing you do. You got, you need cattle. Lot of people think, well, I'll take the cattle off and I'll go back to natives and I'll have, everything's going to be hunky dory. You know, I'm going to have, you know, all those beautiful native grasses, flowers again. Not necessarily so. I read once that you know one of the worst things that ever happened to the land was, was let it not be grazed and you had the desertification. And because if you don't knock those plants down, you get real tall plants. They cover up the smaller growing plants. And in no way knock em down. Have grazing animals in there. Or you got to manipulate them. So once you get your, your, your, your stand and you don't graze it right off, you don't burn it, right off, the first year, but you use those kote tools to and you've got to know what you're doing, the proper stocking rates and also prescribed burns. And sometimes you actually I don't, I don't use them, but, you know, if you can't get those things done, sometimes you have to resort to mowing because you don't want to get too rank, not, not little weeds, weeds, cause I don't have any weeds - I have plants whose virtues have yet to be discovered. Cause some weeds have more nutrition than grasses. So you got to be careful. You just tell people, go out and mow the weeds out. But there's, there's a balance you've got to maintain and you learn that, you know, as you go.

Jim Willis [01:03:04] And that's one thing we do, is go back and, you know, we don't, we're not a one-shop deal, a one-stop deal. We got, you have to have people who are willing to go back in and monitor those fields and make sure you're doing the right thing. And so we, and our biologists, will go back and check on those and make sure that you're not overgrazing or you're not undergrazing or you're not doing something that's wrong, cause I wish I had, I just I wish I'd had me around when I know day back day and I kept making mistakes and had to replant, do the whole thing over. But anyway, once you get established, though, native grasses are tough. If you don't graze it, overgraze it. If you graze 'em down to the right level don't graze em down to the ground, you'll kill him. But graze 'em down to the right level. They'll, they'll, they'll dominate. And that's what you want.

Jim Willis [01:04:00] You want things that existed years and years ago and you don't have to have hay, people tell me, oh, no, you can't have ruminants unless you have hay. And my answer to that, I never saw a picture of a Comanche Indian pulling a New Holland baler. You just don't have to do it, if you manage it right. And they had bison back then when the Comanche roamed and they had lots of them and they were in and they didn't have to have hay, because the animals, because, of course they didn't have fences either. So we got fences now. So we got we got to, we got to do something different.

David Todd [01:04:44] Well, you've taken such a different approach to agriculture and to grazing than I think a lot of conventional people. And I wondered, as you look back over, you know, the last 16 years, what kind of lessons have you taken away from this experience with prairie restoration and quail recovery?

Jim Willis [01:05:08] Well, you know, I was part of a system that I worked under, when I was in Washington serving in the Foreign, Foreign Service, I worked under several secretaries of agriculture and you know, I was part of that belief that you've got, I remember one of the secretaries was Earl Butts that I worked for. And, you know, you've got to, he believed that, hey, produce it. And we, we need to find markets and we need to we need to, we need to support the farmer by producing or selling it, if he'll produce it, we'll sell it. And by selling it,

prices are going to go up and may be maintained. And and everything's going to be fine under full production. And and, you know, that sounds good, right? And. And he's a tremendous secretary. And my gosh, we opened lots and lots of markets and we did. And we built this country on the strength of our farming community. I mean, we have a great agricultural complex and, you know, there's nothing in the world that even comes close to it. And because I've seen it all over the world, and I can tell it is, you we do so.

Jim Willis [01:06:31] But we don't have to do it to the extreme. And you don't have to rely on, so much of of of, you know, we would move from the agricultural revolution, industrial revolution to the information superhighway to wherever, and and producers are more apt to go the latest and the biggest and the best. But, you know, the land can only support so much. And you've got to think about, it's got to be put into a soil that has to be enriched. And you can't do that necessarily with just commercial inputs such as, you know, petroleum-based fertilizers. Not, I'm against that. I'm just saying that you got to have humus. You've got to have it, you've gotta, otherwise, you're just producing, you're just doing growing hydroponically, right? All you need water. If you're going to grow most of the crops, today, you've got enough fertilizer, commercial fertilizer. All you need is some medium that will hold the plant up and and water and for the needs on the product on the plant. Well, that I think that there's more involved. You've got to be a little more sensible about it.

Jim Willis [01:08:04] And I, I also think that our farmers have done a wonderful job, but we also we've sold our product too cheaply. You know, think about it. I mean, maybe that wheat, a bushel of wheat should have been a lot higher because then oil price of oil has gone down so, so you can't use that as a point of comparison for right now. But you know, ee were just selling out, we were selling our natural resources out overseas and to rice farmers. For example, you know, we're for years and I don'tt know where it is right now, but for more, more than not, over half of the crop had to be exported to have a decent price for the farmer. So we were pumping out lots of rice, of rice, well, pumping it out, we had to compete in a world market. We couldn't because the cost of the equipment, the cost of the inputs were so much, it got to be so great that right now, you know, we've got our the market over a hundred dollars a ton with respect to Thai rice or Vietnamese rice. But, you know, we, I would like to see the price in the world go up but can't make it go up as we get. So we can't produce the volume. We got the yields up to, I mean, rice, and I'm using rice as an example because I know more about rice, but really we, we out- produce ourselves. We, we you know, we just got. We're so efficient. Good, nice equipment, and know-how. Now we were just out there growing crop hydroponically. And so when the price of rice goes down and we can't, in the world market, we can't sell it in enough volume to keep the price at home high enough, we, you know, we just have to wait till that happens again or what?

Jim Willis [01:10:01] In the meantime, that land is laid out in pasture lands. And the cheapest thing to do, best thing to do, is put cattle on it, and graze stocking heavily and overgraze them in many cases and rely on the bermuda grass and bahia grass to support them. And what happens to the soil? It never improves because most crops deplete the humus - rice included, I'm not picking on anybody in particular, but all crops. So we've, we've sold these products at an extremely, and I figure a low price, to compete in the world market. We've built up our capability of some producing and the yields as well that we are so efficient, that we've out produced ourselves almost and now we are left with a land that's been used and abused and not fit for anything, except maybe extensive cattle grazing and the humus is as low as it's ever been, and the soils here are just horrible.

Jim Willis [01:11:10] And and there's no, seems to be no major way of bringing that back unless, you know, people decide they want to have more, more quail or more better resources or water. And we're left with a land that has the kind of species that water doesn't go in the ground, it runs off the top, and goes in the ditches, the ditches into the bayous, the bayous into the canals, the canals into the rivers, and the rivers downstream. And the water quality is is very poor. The marine life suffers. There's no. When I grew up, there were springs feeding the streams. We had springs of a river in front of my dad's house, go feeding that river. There's no springs, because the water doesn't go down in the ground anymore, the aquifers and whatever. It runs off the top and carries with it whatever, they shouldn't carry with it into the water. And so, you know, that's why the freshwater mussels are under, you know, are being damaged or marine life all the way down the river to the Gulf Coast into the coast, into the estuaries, and whatever. Cause the water doesn't go into the ground anymore and come out into the rivers and springs. It comes out, it goes over the top floods, floods over the top. So, you know, and that's why we have events like Hurricane Harvey, flooding houses. We've got to go back to a situation where. We could go back to natives and have root systems that are 10 feet deep, you know, that hold water.

David Todd [01:12:51] That's fascinating. It's like you made this connection between quail to bluestem, to soil, to other upland, birds, to springs and, you know, flooding from Harvey in Houston. It's an amazing whole collection of ideas and cycles that you've managed to connect. And it's fascinating to hear you talk about this. And it seems like you're still exploring it. I'm curious, maybe as a sort of closing question, where do you go from here? What's your next step?

Jim Willis [01:13:33] Well, you know, you got to live with yourself. And I'm still, I'm still getting over shooting that big red-headed woodpecker. And I, and I just love nature. And I had a friend who said, you know, "Nature is love. Love is God." And I want to do, I want people, I want to help people. And I want to help the things that can't help themselves, like the quail and the other wildlife and even the soil and the water and the air. And so I guess I'll go down fighting for that, not go down, I feel like it's, you know, we're here for a reason in life and we've got to help one another and we can't just accept, you know, status quo and I did for so many years. You know, and my job has, my job has evolved and, you know, when I was stationed in different posts in the Foreign Service to help agriculture, U.S. agricultural ventures sell, farmers sell their product and whatever country it might be and compete. And because it was all-out production then, we were trying to get our product sold overseas, and that's a worthy thing. You know, we opened a lot of markets that way. But and then what? I've just, just, I've gone back and said, doggone it, more to it than just, selling and making a buck. It's, gosh, we have to protect those things that can't vote.

David Todd [01:15:31] That's true. And this has been so helpful. Thank you very much. I'm sorry to steal so much your time, but it's just fascinating and so valuable. So thank you for all the wisdom and the good advice.

Jim Willis [01:15:50] It's an honor. I want to finish, I just want to take a little bit of time and tell you that.

David Todd [01:15:57] Sure.

Jim Willis [01:15:57] Truth is I think, I think people are appreciating. I'm just so proud of my fellow citizens. I'm just proud of what's happening, David, in our area, in places like Houston. You know, it's taken Hurricane Harvey to wake us up. But people begin to understand, even

those who, who, you know, that didn't understand before or considered what we're, I'm trying to do is, you know, it's against the system. So, you know, I'm a little off my rocker trying to. But you know what? It's, if you open your eyes, it's happening and people are going to jump on board.

Jim Willis [01:16:41] Let me just tell you. Hey just say we put in pocket prairies in Houston area. Our first one was at M.D.. Anderson, I got tell you this little story to end with.

David Todd [01:16:48] Yes please.

Jim Willis [01:16:48] We put in native grasses and wildflowers and M.D. Anderson was one of our first. Oh, I guess it was our first pocket prairie we put in. Since that time, we put them in places like Katy High School and Memorial Park and we're working with the Houston Botanical Gardens. And, you know, we're trying to get people educated, is what we need. But the one in Houston at the M.D. Anderson clinic campus was just a real eye-opener for me and many others. All of a sudden, one of those species of birds that were declining, even as fast if not faster than bobwhite quail, the loggerhead shrike, the butcher bird, came in to M.D. Anderson campuses in flocks. And I mean, David, it's hard to find, see one or two on the ranch, you know, here and there. All of a sudden there were flocks of them coming into M.D. Anderson. And we had birdwatchers coming from all over everywhere, come to see those loggerhead shrikes.

Jim Willis [01:17:54] Why were they there? They came there because there were, those wildflowers brought in so many insects, that all of a sudden the bird was telling us, hey, you know, these, these wildflowers are the only place I'm going to find what I want to eat in this city, or a lot of them, to eat. And it, it was a good lesson to learn that, you know, you, you have, you bring your, you plant wildflowers to, for whatever reason at M.D. Anderson, certainly for the visitors and the patients and whatever. And that, in turn, that wildflowers and the native plants help the soil. And brought in, and as a reward, we got to see all of these loggerhead shrikes. So I just want to tell you, you know, a little good goes a long way.

David Todd [01:18:59] Yeah. And there are these nice surprises and collateral things that happen that you may not have expected, but all the better - a pleasant surprise like that.

Jim Willis [01:19:10] Yeah, exactly. Exactly. Yeah, we've got a lot of little things going on here. And love to, for people to come out and see. We're working with Caesar Kleberg, develop the best seeds for the area, we've got test plots here, we're growing out seeds, you know, and we're trying to get up to, up to speed with what agriculture is doing with other crops, we're trying to do it with native grasses and so. Look forward to, you know, continue the process and hope we can help other people enjoy their lands as much as we are enjoying what we're working with here.

David Todd [01:19:52] Well, you're doing a great job. I wish you all the best and thanks again for explaining it and telling some of the roots and what the future might hold. Appreciate it.

Jim Willis [01:20:02] Hope it helps.

David Todd [01:20:03] All right. You take care.

Jim Willis [01:20:06] Thank you for the opportunity. OK, David.

David Todd [01:20:08] You bet. Be good. Take care.

Jim Willis [01:20:09] Yeah, you too.