

TRANSCRIPT

INTERVIEWEE: Kirby Brown

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 Todd.

Kirby Brown [00:00:04] David, Kirby Brown. How are you?

David Todd [00:00:07] Kirby, it's great to hear your voice. And I'm doing fine. Thanks for asking.

Kirby Brown [00:00:13] Well, good, good. And what's this new deal you're doing?

David Todd [00:00:21] Well, it's, it's another little venture to try to get a better sense of conservation history in Texas. This time, hopefully trying to visit with, with biologists, typically, and try to get a better feel for the role that different animals have played in the state's history. And, you know, I've been sort of puzzled by changes in waterfowl and geese, particularly snow geese, since I was a kid, you know, where they seemed so common and, and, you know, huge flocks, growing up in Houston and, and, you know, out west of there and, and seeing these declines. I thought it might be something to talk to an expert about. And so that trail led to you.

Kirby Brown [00:01:16] Well, I don't know that I'm the best expert on the subject. I certainly don't mind talking to you. But I would encourage you to think about talking to someone like, oh, gosh, Kevin Kraai. He's state waterfowl biologist.

David Todd [00:01:41] Yeah.

Kirby Brown [00:01:42] With Texas Parks and Wildlife. Have you talked to him?

David Todd [00:01:44] No. No, sir, I have not.

Kirby Brown [00:01:46] A great guy. Super stuff. Has, has so much information and data, you know, through time periods. So, so really a good guy. But I'd be glad to talk and give you some background and understanding that I have, you know. But I think Kevin is a huge resource for you.

David Todd [00:02:08] OK. Well, yes. So that that would be wonderful. This is a sort of a, you know, many pieces to this puzzle and so I'll definitely follow up with him.

David Todd [00:02:20] But I wanted to first of all, thank you for taking some time. And I'm hoping maybe we can steal 45 minutes, an hour, maybe, of your time today. And as you may have heard, as the call began, it's being recorded. And I wanted to just make sure I've got your okay about that. And just to lay out the plan here, let me, if you don't mind, sort of recite a little preamble. So here it goes. We are planning on recording this interview for research and educational work on behalf of the Conservation History Association of Texas, for a book and a Web site for Texas A&M University Press, and for an archive at the Briscoe Center for American History at the University of Texas at Austin. You would have all rights to use the recording as well. I wanted to make sure that that's okay with you.

Kirby Brown [00:03:25] Absolutely. No problem.

David Todd [00:03:26] OK, good, good. I'm glad you feel comfortable. So let me just give a little bit of sort of where and when and why of today's conversation. It is July 1st, 2020. My name is David Todd and we are conducting an interview with Kirby Brown, a conservation outreach biologist with Ducks Unlimited, who has had a long and productive career in this field. He worked at Texas Parks and Wildlife, the Texas Wildlife Association, and maybe especially relevant here, served as chair of the Lower Colorado River Basin Coalition. And, you know, we're hoping to talk a little bit about waterfowl, in particular, changes with lesser snow geese in Texas. And I'm especially interested in how that's played out in the lower Colorado River basins along. I hope that you can humor us and talk to us a little bit about these, these issues.

Kirby Brown [00:04:31] Sure. Be glad to.

Kirby Brown [00:04:34] Let's go. Go ahead. Yeah. I'm sorry.

David Todd [00:04:37] Well, let me ask just an opening question we...

Kirby Brown [00:04:40] Sure.

David Todd [00:04:40] Always like to get a start with, and that's please tell us something about your background, your interest in wildlife and outdoors and you know, where, where your conservation interests began.

Kirby Brown [00:04:57] Well, I, I've always loved the outdoors. I guess my interest began in Boy Scouts and then, as, and, I became an Eagle Scout working at scout camps during the summers. But my interest in waterfowl really started not as a young man, but, but in college. Probably my sophomore year where I'm began hunting with several of my friends for, for ducks and, and eventually for geese. And then that turned into a passion that I turned into a degree in wildlife management.

Kirby Brown [00:05:36] And after graduating from A&M with a, with a Master's, I went to work for Texas Parks and Wildlife. And we, we did Landsat satellite imagery, vegetation type mapping. And that's how I got hired on with the department. Then after finishing that project in 1980, I moved to the coast and began work down there in the '80s at the Murphree, J.D. Murphree Wildlife Management area as a waterfowl biologist, and became area manager of the wildlife area. It was a fun time for me because, because of the ducks. But at that time, there were so many geese in the area. It was, there was incredible. Of course, during 1980, the Texas coast had about 585,000 acres of rice at its maximum. We always say about 600,000 acres.

But if you go back to NASA statistics, it's 585,000 acres. That was kind of a high point for rice production in the Texas coast.

Kirby Brown [00:06:45] But water issues, competition for water with urban areas, growing urban areas like the City of Houston and, and then issues of pricing, forced a lot of people out of the business, especially with some of the weather changes that we have had, some of the weather that we had at those times. There were a couple of tropical storms that crushed the rice, knocked it down, and no insurance at the time. And, you know, several farmers, after a couple of years in a row of flooding and winds, basically were forced to go out of business. We saw that continued decline. We also saw a decline in prices for rice.

Kirby Brown [00:07:29] But there were a lot of places, the only thing that they can really do is grow rice or they can use it for pasture. So you you have that kind of soil that's perfect for holding water. But also, if you don't get rain, it becomes very droughty very fast because it's sand overlaying of clay. And those are the places that you typically see rice left today.

Kirby Brown [00:07:57] This year, they're farming about 185,000 acres of rice. So that shows you the decline is about a three-fold decline in Texas of rice production. And that, that rice with, with the water that comes in at, the water that used to hold down the weeds and stuff creates a, a, a rice-prairie wetland ecosystem that is second to none, whether it's in the, the Mississippi alluvial valley, whether it's here on the Texas / Louisiana coast or whether it's out in the Central Valley of California. Those are three priority winter, wintering areas for waterfowl that has been documented by Ducks Unlimited, and I had the privilege to work in down here in Texas. So that's kind of a background on on me.

Kirby Brown [00:08:50] I was hired away from Texas Parks and Wildlife after 25 years to be executive director of Texas Wildlife Association, which is a private lands organization. The folks are all interested in wildlife, have private lands conservation plans with Texas Parks and Wildlife to a great degree and manage wildlife. So great to work for them for 10 years. And then I thought I was retiring and I failed retirement again. And I went to work for Ducks Unlimited and I thought I'd spend a couple of years here. It is eight years later and I'm hoping to actually retire in December. So that's my goal.

David Todd [00:09:33] Brave words. We'll see if that happens.

Kirby Brown [00:09:40] I know, I failed twice.

David Todd [00:09:42] This is a great summary of all that you've done, and it's interesting how there's been this through-line of hunting, wildlife and, and waterfowl in many cases. And I was wondering if you could go into a little bit more to talk about, something that you touched in brief, I think, about how rice production changed. And I think you mentioned, you know, a bunch of factors, including price and insurance and natural hazards. But I think one item you mentioned was just the water deliveries, and I guess maybe the price of water. And can you help us understand how that might have affected things, especially in the lower Colorado.

Kirby Brown [00:10:34] Yes. Yeah. Across the Texas coast, you've seen water becoming tighter and tighter. More urban areas are buying that. Urban areas are expanding. And so there's pressure on, on water that was not there when rice farming, when rice was started in the late 1800s, early 1900s in Texas. And as geese about, oh, probably in the 30s, maybe late 30s, the 40s, early 50s, geese began to migrate into those rice fields. Geese were always

connected with basically, basically, the coastal marsh and feeding in that coastal marsh for tubers and greens that were, were in that marsh. Used to have about a million geese at that time. And then as, as they moved into rice, here was an abundant food source. As they harvest rice, early on, they would shock, they would cut the stalks and shock it up and, and tie those big standing socks in, in large kind of round mounds. And then, and then you just you'd see that all over Texas.

Kirby Brown [00:12:00] And that has changed tremendously as, as what they're doing now is they are able to, to grow the rice at a shorter level, shorter. It's a little more resistant to winds, although, although at certain times they're still very, very subject to wind with a blow-down. And what it, once it has a blow-down, it's hard to harvest that rice. It's almost impossible. You can get some, but not much. And so they managed to take the rice down. That also made it a little more convenient for geese, and to get in and continue to feed. And as the combine would go through, there would be a lot of waste rice, both in the field and on the margins of the field, especially where they would, would take the combines, to go unload them into the trucks and the trailers. So that process over years has, has become very effective and it's kind of an interesting sidebar that we can talk about later.

Kirby Brown [00:13:05] But the water issue. Water is required to come on to rice when it starts, and to keep the weeds down and to fight those weeds. Farmers typically used to use four to five acre-feet of water on a per-acre basis to, to water a field, both for the first crop, and then they would ratoon the second crop, which is a, just actually letting the, the, the stalks that they cut in the first harvest start to regrow, by putting fertilizer on that and then re-watering to keep the weeds down.

Kirby Brown [00:13:48] So from a standpoint of how that works for waterfowl, you had, you had food usually on the ground and in that in the water with that second crop when the early birds like teal came in and then when you harvested that second crop, and usually that was in November, or at the end, you had a whole 'nother set of food that was there and available for geese, especially the lesser snows as well as, you know, other geese like the white-fronted geese and Canada geese, lesser Canadas that were down here.

Kirby Brown [00:14:24] But the water continues to get tighter because of the amount of water rice farmers use. That price of water was starting to go up. And then in 1989, I believe it was, in the lower Colorado River, the rice farmers basically went into court with the Lower Colorado River Authority over, over water. And the judge determined that rice water was interruptible water, as opposed to firm water, which was bought and sold to business, industry, municipalities, those types of folks that would pay a little more for water that would be guaranteed regardless of the situation, whatever the drought was. So it became a separated pool of water, unlike it was for the first 80 years that it was in place in that portion of the river. And so the rice farmers had actually helped build a coalition to form the Highland Lakes, which are the principal source of water for the city of Austin and the neighboring Hill Country municipalities.

Kirby Brown [00:15:51] And whereas the river flow still had to come down, during 2011, we had a severe drought. The drought was probably started in in 1995, off and on, a little bit. But by 2011, that was one of the worst years that we've ever seen. That period 2011 was, was so low that it brought the Highland Lakes down substantially. And under the contract with the rice farmers they continued to supply water during that drought to those fields to finish off the fields. That further depleted the reservoirs, besides the evaporation taking place on the on the lakes, and, of course, a lot of use in the cities themselves to water lawns. That then

precipitated a cut off of water to rice as interruptible. And so rice farmers were cut off in 2012, 2013, 2014 and 2015, four years that they were cut off for water for rice growing.

Kirby Brown [00:17:05] So that was, you know, a terrible blow to those communities down here in the lower Colorado River basin. It affected not just those individual farmers and and the people that they hire and, you know, those types of things, but also affected your, your ag businesses, your, you know, rice seed locations, both the mills and the, and the storage. It affected the tractor sales. It affected the banks. It was a pretty, pretty devastating impact to those rice farmers.

Kirby Brown [00:17:44] But what we saw was a declining goose population that hit that time in 2012 through 2016. And it just almost, you saw the geese come in and you turn them before, before too long, the geese moved. And the geese basically had moved into Arkansas. And they had already started moving into Arkansas, that that Mississippi alluvial valley there, the MAV. And, and because rice was already growing in that area and you saw white-fronted geese, we think, moving more into, into that area. And then snow geese begin to stay longer. And so you had this combination of things where they had no water on that rice prairie. There was no water being put out there on that rice prairie anymore, for four years. So when the geese came down, there was really no rice outside of rice that was being farmed on areas that had groundwater.

Kirby Brown [00:18:48] So those are the, those are the things that that you had had to see, is that reduction in the, in the number of acres was well over 50 percent of the rice. And so you, you took a food resource that has already been declining from 600,000 acres down toward 200,000 acres, and now you reduce that by more than half. So the impact on those lesser snow geese populations in Texas that were already starting to decline, we think, because of the decline of the rice itself on the landscape was just significant and we haven't seen it come back.

David Todd [00:19:31] Well so that's fascinating. And it's, it sounds like there was, it was kind of a tipping point from what I'm hearing you say, that there were already some birds that were short-stopping in the MAV / Arkansas area. And then this, this drought, the water cut-off, may have just encouraged those that were still coming to Texas to decide, you know what, we can get the same rice further north without coming so far south, in Arkansas, and further up there. Is that fair to say that?

Kirby Brown [00:20:09] That's fair to say that. I think that that's accurate. You know, we don't, we don't have proof, but that's the hypothesis. And then the, the, also, you have increased efficiency in combines these days. Really starting in 2000, and more and more of those new combines getting on the landscape, you had less waste rice in the fields. The varieties are now a little bit better about staying on and not shattering during combining. So, so you have to have a lot of things that were just basically working together to reduce, you know, the energetics for geese and the energetics are food. Right? if you don't have food, you don't have the energetics to, to be in the area. So they, they started moving, and you saw the same thing happening with ducks in a way. During that time period, we had huge populations of pintails that were always mixed in with the geese. But that started declining as we saw rice acres moved downhill. So it's kind of been a double whammy for, for both geese and pintails.

David Todd [00:21:33] I think when we first started speaking, you mentioned something that sort of caught my attention and that's that some of these geese and other waterfowl started going to rice fields in maybe the 40s, and they had originally been in the native prairies and

marshes along the coast. What do you think triggered that? I mean, were some of these prairies being turned over for cultivation or development or what do you think made them, ducks and geese, switch their attentions to agriculture?

Kirby Brown [00:22:07] I think there was an increase in rice that was occurring at the time. And with the increase in rice cultivation and in the situation that surrounds the water and the opportunity for those folks to move in, they did that. And as, as they did that, more and more they, and then as rice continued to grow in acreage, you know, we went from a million birds to almost four million birds on the Texas coast. You know, so it's so a huge increase in growth of the snow goose populations itself, the lesser snow goose.

Kirby Brown [00:22:41] What was happening simultaneously is with that large population we started seeing during the 80s, and I say during the 80s, the 80s and 90s, we started seeing in Canada up on the Arctic, those numbers of snow geese that were nesting were growing substantially more. You know, three, four times more than what we ever had before. And they started eating out the habitat in Canada. So you have this major eat-out of habitat that's occurring in Canada that does not regrow fast. In fact, most of the damage has not regrown to date. And so it's, it's been a huge impact on the populations and their ability to have young snow geese. The immature snow geese coming down are a minor part of a flock anymore.

Kirby Brown [00:23:36] And your mature geese, well, those birds can live to 25 years at times, you know. We have banded birds that have lived that long. So you've got a lot of birds coming in. You know, for hunters, it became more and more difficult to hunt snow geese because there were fewer snow geese, there were fewer juvenile snow geese. And the older birds had seen that before. If they were coming into a spread, they'd seen that, they stay up, they stay out of gun range and they are very careful about where they go and then they find no place to go. And so you had really a lower mortality from hunting, which, which could have been an impact that started to occur to again move that population upward.

Kirby Brown [00:24:27] So here you had all of this happening together, kind of simultaneously, and yet the snow geese have not declined continentally. The lesser snow goose is still at that high number, but now they're in the grain, the rice fields in Arkansas, northern Louisiana, up into Missouri, Mississippi. So that's, that's kind of where they've primarily moved into. And those birds can, can come down the flyway and stay longer, move slower, not have to go as far. Again, it's a whole energetics things. And stay in rice. And then as it starts to warm, they can move back earlier and be on the nesting grounds earlier, so they have a better chance of success. So that's kind of what happens from an energetics standpoint, and it's exactly what, what we expect we would see. You know, it's what, adds up.

David Todd [00:25:31] Well, so I guess these birds are pretty cold-hardy. But is there a factor of climate change allowing them to stay longer up north and be, you know, spend their winter months in latitudes that a little bit north of where they used to stay in Texas?

Kirby Brown [00:25:52] Yeah, I think I think we do see that, that climate change has had a lot to do with that. We don't have a good handle on how that is and what that is. But what we do know is that, you know, that in addition to the fact that those more northern climes for that bigger bird, the snow goose, is something they can handle. But they've also got large open water that came up in the 50s, 60s with these large reservoirs that don't completely freeze over. And so here they are: they've not only got rice, they can get into cornfields, migrate into cornfields and then get back into the water, open water in that. And that's what they need in that part of the country. So, so you've had a couple of things happening. It's, it's kind of a, you

know, just, just a growth, a human impact. The human impact calls them to, you know, the population's turned to increase like they did. And now it's just that human impact is, is allowing them to go farther north and sustain those populations farther north come in.

David Todd [00:27:12] And so, I think you mentioned that up in Canada, there's been an impact from these big goose numbers, and if I've read about this correctly, there, there was this Conservation Order that came through to try to cull some of the flocks, to get those numbers down to something that's manageable for their summer habitat. Is that right?

Kirby Brown [00:27:40] That's correct. It was thought that hunting could have an impact if we extended the season, raised the limits by basically, you know, in the Conservation Order, not having limits for snow geese and try to have an impact on the geese. You know, as I said, those are mature birds. And that, that's a, that's a smart, smart goose. And they learn to adapt to that pretty early. And the possibility in Texas that also adds to, to where we saw declining populations ahead of the drought and then dry conditions during that 1995 to 2000, you know, basically 2015-16. During that time, with that Conservation Order in place, we saw very effective decreases of snow geese. Again, we don't know what it's all been all about, but the Conservation Order in Texas, most people are not able to kill geese anymore. The geese are just too smart. There's too many older birds and snow goose hunting, which used to be king of the prairie, the coastal prairie. You know, Eagle Lake was, was called the snow goose capital of the world. And most people don't go there to hunt geese anymore. The geese are just too flaky; they're too difficult. There's good duck hunting. So, so they, they switched over to duck hunting for their hunting at this point. And the snow geese just aren't hunted as much in Texas because of low populations, because they're just hard to hunt. Those smart older birds are just difficult right now.

David Todd [00:29:32] I think you explained this once but I may have not followed entirely. So there are more of these wily older mature geese now, and fewer of the juveniles. And what is the reason behind that?

Kirby Brown [00:29:48] That's because in the Arctic habitats and in the habitats where they get up, they're in good condition. They nest. A lot of that habitat has been changing. The populations are, seem to be doing okay in some of the freshwater areas. But the the saltier Arctic type of habitat just don't grow back as fast. And so that that, that has impacted their ability to, to raise the goslings. So, so the goslings don't make it after, after they hatch. And so you have a lower hatch and that decreased hatch, sometimes we get very, very few immature birds in some of these flocks coming down.

David Todd [00:30:31] Well, do you think that that suggests that when these older birds do die out, that there's going to be a really marked decline, since there's less recruitment?

Kirby Brown [00:30:41] Well, we, we had thought that. But what you're getting is, you're getting a marginal recruitment. Mortality from hunting is lower on the, on the juvenile birds because it's very low on the adult birds. So, so, you know, as long, when the birds come in now, you know, the juvenile birds are the ones that get shot. They, they, they decoy a little closer, too close, and then they'll get shot, whereas the older birds will stay up and out of the way. And so those, those right after the initial phase of hunting the juvenile birds learn to stay with the older birds. So it's, there is some replacement going on. I wouldn't say growth, but it's replacement.

David Todd [00:31:28] Huh. Interesting. So you think that maybe these mature geese are having more opportunities to teach the juveniles to be more careful when they see a spread?

Kirby Brown [00:31:40] Yeah, I do think that, and it's kind of one of those amazing things when you when you think about it, I mean, you know, so we started looking at the, you know, at goose populations and impacts on the Arctic in in the 90s, in a report by Bruce Batt, who at that time was chief biologist at Ducks Unlimited. He wrote a report, Arctic Ecosystems in Peril. And that's where the Conservation Order came out of. So very interesting at that time.

Kirby Brown [00:32:15] And now with, with rice declines, rice, you know, still great for water birds, many other water birds. Being on a combine during harvest is an incredible experience with all of the water birds that are around and just just they're eating the crawfish and the, and the frogs, and the, and the insects that are coming up out of the field. I mean, immediately in front of the combine. It's quite a quite a thing to see. And I'd encourage everybody to talk to a local rice farmer to see if they can't get a ride, it's a really a blast for those of us who love birds.

David Todd [00:32:53] So this is sort of an aside. But I imagine that your, your early interest in the wildlife and, and hunting waterfowl came out of hunting and, you know, are there any great goose hunts that you can recall and describe?

Kirby Brown [00:33:14] Yes. You know, I guess I guess the the things I remember most about, about goose hunts and, you know, are the people that you're with. It's a, it's kind of a friend thing. It's compatriots. It's the times you spend with family, your son. You know, those are the, those are the goose hunts I remember. You know, it's, it's the times with the people. And there's just a love of being out there laying in the mud with cold rain coming down and, and just, just the camaraderie of the complaint. We live through it.

David Todd [00:34:01] It's an acquired taste it sounds like.

Kirby Brown [00:34:05] To some degree. But there are also beautiful days. No geese come in and you still have a great time. So, you know, that's, that's what it's all about, being out in the outdoors, watching everything, watching the bald eagles come into this, you know, to the spread as you know, spooking the geese out, out from nearby and that type of stuff. It is pretty spectacular time. It really is.

David Todd [00:34:35] Neat. So I think we talked about some of the aspects of what's affecting geese from water to farming to these impacts up in Canada. I'm curious about what, what impact sprawl has had. I mean, I when I was a child, we drove down U.S. 90, and later I-10, and I remember, you know, huge flocks of geese. And now all those areas are pretty much built up. And I don't know if that's just sort of a, my own little anecdote, or if that's a more widespread trend you're seeing as well.

Kirby Brown [00:35:18] It's a huge trend we've been watching for many years now. And, you know, as Houston has spread out into the prairies and into the Katy Prairie and, you know, and, and basically the Katy Prairie is mostly houses and residential neighborhoods with ranchettes now. And, and that's, that's brought, you know, lost direct loss of habitat, but also impacts with, with dogs and cats and other things and disturbance in and around those, those smaller tracts where there used to be large tracts of rice or prairie. And it was cattle or it was farming. And now it's really growing out. And those impacts are are, are just a huge circle around Houston now. So the loss of habitat is tremendous. And that's, that's another reason

for the loss of rice. As those, as those people expand out into there, you know, they're buying that land for not just, no longer for just cattle or rice. They're buying it to put houses on. So, so that's this is just being held. A lot of that grows up where it's not accessible by ducks or geese.

Kirby Brown [00:36:36] You don't see people holding water for anything. So it's just a different time. And we saw a lot of the, the reservoirs in the area when I guess, I guess almost every rice farmer, especially if they had groundwater, they had, they had a reservoir and they would pump the groundwater into the reservoir and feed it out. And all those reservoirs in the Katy Prairie, all of those prairies down in Fulshear and south, you know, those have all disappeared. And a lot of the different types of farming because they had no problem with water every year with systems like the LCRA. You know, they went away from the groundwater, went away from pumps, and they went strictly to irrigation systems. A lot of that growth occurred on those irrigation systems. But as water gets more expensive because of the cost of maintaining those systems, you see people looking at going back to groundwater and we'll see what that impact is too.

David Todd [00:37:39] So part of it, I guess, with this whole irrigation system is that you know, the farmers were junior and had interruptible supplies as opposed to the firm ones for upstream cities. Was it also a question of price, you know what they were being charged for the water that they were using, if they had it?

Kirby Brown [00:38:06] It depends. And the answer is, that is increasing. And, and also, you know, the rice farmers are basically downstream of most of this. And so as, as different water authorities figure out different ways to do things, you see different pricing that, that exists and you might see a little movement but of producers and where they go to see if they can't find better pricing. But all of them have got to find something, because with the price of rice these days, prices have been going down and they're finally doing pretty well this year. But prices had been going down for a number of years. As, as that happens, farmers that could, you know, got into other, other crops. You started seeing the infrastructure for rice disappear. And that's part of part of the whole thing that's happening. So. So you had the urban encroachment, the cost or the availability of water. And then once you get away from rice and you lose the infrastructure that's in place, it's expensive to put it back into place. So, you know, it just, it's one of those things that happens.

Kirby Brown [00:39:31] And then, you know, one of the ways that they're trying to manage the cost of water is to reduce the amount of water that they use. And they've been very effective at doing that. They've almost got a three-fold decrease in water that they're using, which is, which is good at these times. It's good to be more efficient, water-efficient. And so, you know, they're, they're down in two acre-feet or below two acre-feet in what they're using on a yearly basis, and that's much better for I think all of us.

David Todd [00:40:03] And I gather some of the decreases in water use, the greater efficiency, if I'm right about this, was laser leveling. Is that right?

Kirby Brown [00:40:18] It is one of them. Absolutely. And it's been a major factor on the LCRA properties in the mid coast. NRCS has a program for coming in and leveling those fields. And it started when, when they started moving dirt with the laser so that they can make a a larger, instead of having the less efficient stepdown fields, and in numerous small levees, they were able to, to move that dirt back and forth, to level it out and then have large, major a larger major levee around that. And, and it works. It allows much more efficient work of both filling and draining water into those particular areas. And, you know, we've, we've, I think, I

think, from a standpoint of Ducks Unlimited, we're not opposed to it. But we do see that it does change the prairie and that area becomes very level and there are a lot of pieces and parts of the ecosystems that you lose on those fields, which include, you know, little mounds or little prairie potholes that used to be in there. And those, those were always, you know, less efficient for rice farmers because they usually got a lower return in rice, in the little potholes or on the little hills.

Kirby Brown [00:41:54] So, so by, by doing the leveling, getting that in place, you, you get a much better harvest in terms of your rice. And it also allows them to do electronically meter in their, their nutrients by measuring their fields and what's needed. And so, so you have that second efficiency that comes from nutrient management and that helps in terms of what goes into, back into the river, because as we get water from the river, there's a load of nutrients already in it. And when it sits on those fields, those things like phosphorus and nitrogen drop out in the system. And then, and then you have a cleaner water. Also, also the particulates drop out. And so you have clear water going back into the river in that part of the river for the most part. So, so that's the, that's also a good thing that we've seen.

David Todd [00:42:51] A lot of moving parts, as you said, about this. So given all the, the stresses on these birds I know Ducks Unlimited has been really active in trying to mitigate as much as possible. What are some of the things that y'all are recommending to try to, you know, help these birds do as well as they can?

Kirby Brown [00:43:20] Well, you know, we've, we've been working on the coast for many years and continuing to put more water on the landscape. The more water on the landscape, the better the birds can spread out. They can, they can spread out. They're, they're not as subject to disturbance and hunting pressure. So, so both the disturbance factor and the hunting pressure itself are different issues. But it's a, it really helps the birds feel safe in, in and have opportunity to eat and helps their energetics. The second thing is we've, we've been helping through our rice stewardship program, working with rice farmers, because we'd like to see rice come back. We'd like to see the growth of this rice/prairie wetland ecosystem that had been in place for years. We'd love to see rice come back in, in these better times. And hopefully, as we see improving markets, we'll see that. And with markets reopening and in places like Cuba and China, you have an opportunity to see that happen.

Kirby Brown [00:44:22] So what, what if if you can get rice prices back up for it's, you know, I guess economically positive, too, to go back into some of the fields, you know, that would be great for birds because then again, you put more water back on the prairie, you put more food back on the prairie. So that would be, be excellent. As we know, for waterfowl in the mid coast, two-thirds of our food resource, two-thirds of their energetics are from rice, so according to Gulf Coast Joint Venture. So, at this point, we know that's, that's much reduced and that's had that impact of watching those numbers of geese go down.

David Todd [00:45:07] I think I've read that that part of your strategy is to try to improve water deliveries, but there's also this idea of trying to protect some roost sites. Is that right?

Kirby Brown [00:45:21] Yes. Water delivery and enhancing water delivery downstream. LCRA recently failed their first new water reservoir, I think since the 50s, maybe early 60s. But, in it in an off-channel reservoir that should come online probably next year or the year after. And then there are some other opportunities, I think, for efficiencies in the delivery system.

Kirby Brown [00:45:50] But. What was the second part of that?

David Todd [00:45:55] Well I am curious about, you know, there are different parts to this. There's the water aspect. But then there's also just the land and property of having a place where the birds feel like they're not being harassed and hunted too hard.

Kirby Brown [00:46:11] We've been in conversations with Texas Parks and Wildlife, along with a lot of the guides, both goose guides and duck guides, and, and, you know, folks at the Joint Venture, Gulf Coast Joint Venture about what we can do. Because besides Lesser Snow Geese, we've also seen the decline in pintails. And that's been a long-term decline since really the mid '80s. And, you know, it, we have to we have to find a way that we can, with the pressure, the leasing pressure on, on the prairies. Is there a place we can go in where there's not hunting existing now and kind of work with those landowners and maybe build some roost sites that would that would put water in that area and that would help provide a place for those ducks and geese to go and, you know, and, and feel protected and allows them to stay in the area, allows them to continue to work and feed in the area, but, but have a place where they're not disturbed. And so those places to reduce disturbance are really important. And that's one of the things that we're looking at right now. We have a plan to do that. Parks and Wildlife has a plan to do that, that is, and the Parks and Wildlife's Migratory Bird Advisory Committee has supported that plan. Ducks Unlimited is provided some suggestions.

Kirby Brown [00:47:51] But, you know, we're, we're just, just part of the discussion on the on the science side to a great degree right now. And if that's what Parks and Wildlife does, we'll be looking forward to helping with that and studying them and seeing how that works, because I think it's, I personally think it could have a very positive impact for the birds and a positive impact for hunters themselves as well as other birds watchers.

David Todd [00:48:19] Most of these roost site sanctuaries be on private lands?

Kirby Brown [00:48:25] Yes. Most of them. There's opportunities to, with some public lands. But a lot of the public lands, you know, already have a certain section that they set aside. But most of those are coastal. So it's coming inland that we're really looking at. And there might be some, some land that we've talked to LCRA about some possibilities. We've talked to some other entities that might have something that could work. But we've also talked to some private landowners that don't, don't historically hunt those places, you know. Where's the opportunities? So that's, that's kind of what we're trying to do. Not reduce, you know, kind of those, I guess, not compete with people that are, that are out there leasing lands, but trying to get something extra on the landscape.

David Todd [00:49:22] Sure. Well talking a little bit more about recent goings-on, I had read that back in May, the Parks and Wildlife Commission sort of spooled back on the Conservation Order and lowered the bag limit. And can you help me understand why they chose to do that?

Kirby Brown [00:49:48] You know, that's, that's just a reaction to the population in Texas. You know, it's a, it's a thought that that hey, let's try and have less of an impact on the geese that we have because our numbers have continued to decline. And goose hunters aren't typically getting the full 20-bird impact anyway. Very few people who are out shooting 20 snow geese. So, I mean, it just wasn't happening. And, but the guides, you know, felt like this was a, this would be a very useful tool to keep snow geese in the area, to reduce impact and to pull hunters out a little bit earlier. Ten birds is still a very generous bag.

David Todd [00:50:46] You'd mentioned that the guides were giving some advice and counsel here. You know, it seems like that is a really fascinating resource that the knowledge and experience that a lot of these guides bring to the whole question. Are there any guides that you have known over the years that, that you've been particularly impressed by?

Kirby Brown [00:51:13] You know, many, many of them. I've learned so much from, you know, the, the top guides that are there on the Texas coast and what they know and their awareness of, of plants and water and impacts. And, you know, some of the clubs that the folks that are at, some of the main clubs that, you know, some of these clubs have been in place, you know, for 100-plus years. We have we have some places in Texas that have been hunted since before the Civil War by clubs and guides, you know, type system. So. So it's a longstanding tradition. It's, it's an incredible tradition. And folks that know what they're doing, it's just wonderful, you know, to see that. So, yeah, there's, there's, there's a lot of great folks.

David Todd [00:52:09] Well, that's good. Well, as we start to wrap this up, when you look back at the trends that you've seen in geese populations, what do you what do you see as being kind of the highlights and what do you foresee in years to come?

Kirby Brown [00:52:30] You know, I don't know about years to come in and I see opportunities to turn some things around in Texas, and you know what I like to be the positive person that really works on, on that, and works to, to see if we can't do that. I would, I would tell you that because of the declines in the rice, because of the warming trends, because of the, the, their, their, the way their energetics work that we may never see snow goose again like we saw 'em before in Texas. And, and, you know, that's that's just where we're at. But if, if rice does come back. If the rice market comes back and rice comes back, then it will be great because I believe you will see a section of those geese coming back down in larger numbers. We won't, we won't be up in the Texas mid coast into the, you know, 350-450,000 geese counts, but, but, you know, we, we might be able to get back into the 100-150,000 geese counts. And those would be wonderful to see.

David Todd [00:53:53] Well, that would be good. Well, is there anything you'd like to add?

Kirby Brown [00:54:01] You know, I mean, just about wore me out. No, I think that we're, we're fortunate in this time to have great biologists at Texas Parks and Wildlife that are working with good people on our national wildlife refuges. You know, that, that, you know, see and understand, you know, what's going on and have, have really made an effort to to enhance wetlands. We have, you know, our Texas prairie wetlands program at Ducks Unlimited. It's a partnership with TPWD, NRCS, Fish and Wildlife Service, and, of course, Ducks Unlimited. And that, that that is delivered by Ducks Unlimited to private landowners. And you know that that's put almost 100,000 acres of private land into wetlands in the system in the last 30 years that it's been in effect. It's the longest-running private-public agency partnership, state-federal partnership for wetlands in, in North America. We're very proud of that and it's been very effective and we'll continue to see that grow. So, so just the fact that we have good young people coming in, good, good folks that are, that are working hard and you know, people that continue to be interested in ducks and wetlands and in wetland management and in restoring coastal marshes. It's, it's pretty impressive as we go forward.

David Todd [00:55:40] Well, that's a good note to end on. Thank you so much, Kirby. Always like talking to you. I learned so much and want to say I really appreciate your time doing this.

Kirby Brown [00:55:53] Well, I'm glad to do it. And, David, I appreciate what you do. It's, it's so great to talk to you, and I always get a lot out of it when I do. So many thanks.

David Todd [00:56:03] You bet. Well, thank you. You have a good day.

Kirby Brown [00:56:06] You too now. Bye bye.

David Todd [00:56:07] All right. Bye, Kirby.