TRANSCRIPT INTERVIEWEE: David Owens INTERVIEWER: David Todd DATE: April 16, 2021 LOCATION: Charleston, South Carolina, by telephone TRANSCRIBER: Trint, David Todd SOURCE MEDIA: Google Voice, MP3 audio file REEL: 4052 FILE: KempsRidleySeaTurtle\_Owens\_David\_CharlestonSC\_16April2021\_Reel4052\_NoiseFiltered&Si gnalBoosted.mp3

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

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

David Owens [00:00:06] Hey, David, this is David Owens.

**David Todd** [00:00:06] Well, it's so nice to hear from you again. Thank you so much for your call.

David Owens [00:00:14] Thank you for your tolerance, yes.

**David Todd** [00:00:17] Hey, no, this is great and I appreciate you taking the extra time to maybe fill us in a little bit more on all the ins and outs of Kemp's Ridley sea turtles and related issues. Thank you very much.

**David Owens** [00:00:36] My pleasure. I didn't want. I didn't. I forgot to mention some really important points. So, I'm glad you give me a chance to try again.

**David Todd** [00:00:46] Yeah, well, let's do that. And just so that we can kind of title this interview, let me just note what's going on here. It is April 16th, 2021. My name is David Todd. I'm representing the Conservation History Association of Texas. I am in Austin. We are conducting a follow-up interview with Dr. Dave Owens, who has been a professor at Texas A&M University and the College of Charleston and a long-term, long-time sea turtle researcher. He is based in Charleston, South Carolina. And this interview is being done by telephone and again, we're going to be talking about Kemp's Ridley sea turtles. And with that, maybe I should give it over to Dr. Owens. The gap in the earlier interview you wanted to correct was the discussion about the artificial imprinting experiment for the Kemp's ridley. Is that correct?

**David Owens** [00:01:49] Yes. Yes, that's correct. I started telling the story, it's one of those kind of cool "rest of the story" type stories, and I neglected to finish off, what's really interesting story and very important, I think, in terms of conservation.

**David Owens** [00:02:06] What the government, the governments of Mexico and the U.S., decided to do in the late '70s was to try this experiment with artificial imprinting. They called it a head-starting experiment and they were moving baby turtles up to Padre Island and letting them quote, "artificial imprint" on Padre Island, so, with the hope that they would come back to Padre Island eventually and start a new nesting colony in addition to the major one that was already, which was still going on in Mexico in Tamaulipas.

**David Owens** [00:02:35] But what happened was the government sort of became impatient after 10 or so years and decided to reduce the funding. Now, they continued their collaboration between Mexico and the US in the overall project in Mexico. But what they decided not to do is to stop bring bringing eggs from Mexico up to Padre Island for the artificial imprinting experiment.

**David Owens** [00:02:59] Anyway, so they gave up on that. But in the meantime, of course, Donna Shaver had been hired many years earlier and had started working with the Kemp's ridley and following up on that project and looking at them on the beach every year, looking for turtles. And lo and behold, after about 15 years, Kemp's ridley started to nest again on Padre Island. I say again, because there's historically had been some nesting apparently documented. But then they started coming back in pretty good numbers and now there's quite a significant nesting beach.

**David Owens** [00:03:31] So what happened was we sort of gave up on the experiment, but we gave up too early. And interestingly, because the turtles take so long to reach sexual maturity, that was, it did actually work.

**David Owens** [00:03:43] And so, and the reason we're pretty sure about this is they used various tagging methods. And one of the tagging methods that the little baby turtles, my old advisor, actually my advisor, Dr. John Hendrickson, worked with Donna Shaver and they did what they called a living tag experiment, where they take just a little bit of tissue off the bottom or plastron shell, and they implant that under the carapace, or top shell, on a specific scute for each particular year.

**David Owens** [00:04:11] And so what happened? As the baby turtles grow, that living tag becomes a white mark on the top of turtle, on the carapace of the turtle. And they become quite easily identified many, many, many years later.

**David Owens** [00:04:23] And that's exactly the kind of proof that they had that those turtles, originally from Mexico, now, brought to Texas, artificially imprinted in Texas, raised for about a year in Galveston, after they imprinted in Padre Island, and then eventually, 10, 15, 20 years later, came back to Padre Island. Cool story, cool scientific story. But really a lot of people think proves this idea of imprinting, in fact, artificial imprinting, could actually work.

**David Owens** [00:04:57] So I wanted to make sure that that part of the story got in with the other stories that I told about the Kemp's ridley.

**David Todd** [00:04:59] Yes, no, this is this is tremendous. Well and maybe you can sort of give us the conservation view of why it's important that these turtles not only nest at Rancho Nuevo in Mexico, but also on South Padre Island or maybe other locations in the US.

**David Owens** [00:05:23] Sure. The bottom line was this is the only sea turtle species in the world that has only one major nesting beach, that beach a couple hundred miles south of Brownsville in Tamaulipas, Mexico. And so the concern was that's, if that's the only place they nest, what if we have a horrific oil spill or something bad happens, a hurricane, which would destroy that area where the turtles were nesting in that one and only place?

**David Owens** [00:05:56] So it'd be great to have sort of a backup place where the animals would be nesting in case of an emergency. So that was the logic originally for starting the

whole program, in addition to the work that Fish and Wildlife Service and National Marine Fisheries Service would help the Mexicans themselves down in Rancho Nuevo. And so the idea was to generate a new nesting beach for the turtle.

**David Owens** [00:06:21] And originally it was sort of set up as conservation. We didn't realize at the time that it was very experimental. So the fact that the experiment seems to have worked is doubly important because it means that we could maybe do this kind of thing again and it may actually have happened in other conservation programs in the many, many years that we've been doing the sea turtle conservation. It's exciting that there is now a separate nesting site that can be well protected in Texas as well as in Mexico.

**David Todd** [00:06:52] I see, so I guess the other thing that sort of puzzles me is that, the little I understand, that these, these turtles started nesting once again on Padre in what was it, '96 or so. And, and so there's been some time to kind of understand that, you know, imprinting does have an effect.

## David Owens [00:07:16] Yes.

**David Todd** [00:07:17] Yet I've been reading about the Park Service's decisions, I guess last year, during 2020, to cut back on some of the turtle programs on South Padre, you know, lowering the beach patrols and switching away from gathering and incubating turtle eggs there and, you know, reducing the public's hatching releases. Why do you think that that is? It seems like there isn't the kind of recognition of the importance of the turtles' nesting there, although it seems pretty viable from the last 25 years of experience.

**David Owens** [00:07:57] Wow, that's a tough one. I dread getting into this, but I really think there's some political motivation that goes on and I'm not privy to it. I haven't lived in Texas for 20 years, so I'm not very much aware of why all this would have happened. But I do think to some degree, the success that Donna Shaver of her group has had there at Padre Island was, was part of the issue because there were more and more turtles coming back. At one time, there were very, very few turtles. And Donna would get three or four or five nests a year and that would be exciting, in, in the '90s.

**David Owens** [00:08:33] And so now with 100-plus turtles, or nests, being produced a year, it's not quite the dramatic situation, even though that's really not very many turtles. One hundred turtles, or a hundred nests, is not very many turtles, and it's hardly a robust nesting environment. So, so really, they do need more protection. There's no doubt about it, they, because the nesting numbers have gone up, it's also a bigger, a bigger task to do the artificial incubation, that is, protecting the egg from any kind of predation or any kind of storm situation or something like that. So that has become a more expensive thing over the years. So I think that was also part of the issue, part of the concerns.

**David Owens** [00:09:15] But there's no doubt that they've been successful. I think it's a sad thing that they've pulled back because it's one of the most heartwarming and exciting conservation programs, and successful conservation programs, that I think the United States is ever been involved in.

**David Owens** [00:09:31] And so it's just, I think, an unfortunate thing that they backed off. I can't give you the full rationale about it, but once again, I don't think it's a good idea. But the government has had to make tough choices. I presume that's what's going on.

**David Todd** [00:09:47] Yeah, I guess there's, there's always competition among, you know, different areas of the budget and different priorities. Is that part of it?

**David Owens** [00:09:57] Yeah, I'm guessing that could be involved and all. In the other species, as the ridleys have become more and more abundant, although they're still considered the most endangered sea turtle. And it's possible that other, other animals, other habitat side, fauna, flora, various things could have been elevated. The ridley seemed to be doing better and better. So it may be just a balancing act among the different needs to be met. My guess.

**David Todd** [00:10:27] Yeah. I see. Well, thanks for explaining this.

**David Todd** [00:10:35] I know that that was maybe the major thing that you wanted to add to, to discuss a little bit more about the imprinting program and the return to the US.

David Owens [00:10:45] I think it's really important.

**David Todd** [00:10:47] Well, is there anything else that you might have wanted to add that maybe you didn't get to discuss on April 12th?

**David Owens** [00:10:56] I just want, I think it's important, to mention how many people, and scientists, over the decades, have been involved in, my memory's poor, I can't begin to pull out all the different names, but of course, Donna at the park has been really critical. And but there's been a lot of other important support groups - for example, like Ila Loetscher's group, Sea Turtle, Inc., on South Padre Island. They were just phenomenal. I mean they actually, in the '90s, maybe even the '80s, they actually provided my research group at Texas A&M research grants to go into Mexico and to work with the olive ridley. That's the other species that is closely related to the Kemp's ridley. Really, really go on to the West Coast and Oaxaca, for example, with funding from Ila Loetscher's group to do research down there with my grad students. And so I mean I think that, that helped get the background for arribadas, because they had at that time, they had lots of arribadas on the Pacific coast, but there were none, to speak of, with the Kemp's ridley. So we studied arribadas and we say the reproductive physiology. So, I mean, Ila Loetscher's group helped there.

**David Owens** [00:12:06] Sea Grant, which is a very substantial national program for funding marine research, has a big active program in Texas. And they, they gave us grants to do research on, on endangered species. And everybody thinks that that the Sea Grant's probably as a funding organization probably doesn't support really basic research or conservation, and this and that. That's not true at all. They're very involved in that. And it is critically important. Several of our students were supported on fellowships from the Sea Grant program to develop research. So, I mean, it was a lot of effort from a lot of different angles.

**David Owens** [00:12:44] National Marine Fisheries Service, U.S. Fish and Wildlife Service. A guy named Jack Woody. He was, he was a curmudgeonly guy, fantastic guy. But he worked in the early days to get the Kemp's ridley recovery program going in and working in Mexico. He lived in New Mexico, in Albuquerque, but he was working in Mexico City with the Mexicans and the Galveston people. And, and that's where my office is down and got involved, because the Defenders of Wildlife, also were involved in supporting. And John Hendrickson worked with them. They sent youths down to Rancho Nuevo. The only people that were involved, and I, I'm remiss in not mentioning those when I tell these stories, because I was off in College

Station doing my thing, but most of the work at Rancho Nuevo was being done by the Mexican government, by National Marine Fisheries Service, by U.S. Fish and Wildlife Service.

**David Owens** [00:13:37] So, I mean, once again, and more people like the Gladys Porter Zoo - Pat Burchfield, Jaime Pena. Those guys at the Gladys Porter Zoo, year after year, worked with the Rancho Nuevo crews and the Mexican and American crews. And that so much of this work done was just tedious, difficult work, required permits every year and funding, and new resources of funding when the funding would dry up.

**David Owens** [00:14:01] Wow. It was a monumental program over the years.

**David Todd** [00:14:07] It sounds like he was sort of an all hands on deck situation.

**David Owens** [00:14:11] It really was. And they'd have to scramble from year to year. And Pat Burchfield at the Zoo, was sort of the project director for years and he would have to scramble to get the funding together. At the last minute, they'd get their permits and they get their funding. And then the crews would come together at Rancho Nuevo just in time for the nesting. And it was pins and needles most of the time, but it worked.

**David Todd** [00:14:39] Gosh. Well, it's, it's wonderful that folks saw the dire situation that the Kemp's Ridley was in and stepped up.

**David Owens** [00:14:50] Great story, a great example of what we can do when we all try to work together.

**David Todd** [00:14:55] Yeah, that's, that's so true. Well, thank you so much for giving us your memories and insights about this. Really, really helpful. I wanted to thank you.

**David Owens** [00:15:06] It's my pleasure, totally. David, thanks for the opportunity. I appreciate it.

**David Todd** [00:15:10] OK, well, let's keep in touch. Thank you very much.

**David Owens** [00:15:12] OK. You bet. Take care now.

David Todd [00:15:14] OK.