People of the Sturgeon: Wisconsin's Love Affair with an Ancient Fish Dan Folz Oral History Date of Interview: July 10, 2008 Location: Oshkosh, Wisconsin Length of Interview: 01:14:03 Interviewer: KSK – Kathleen Schmitt Kline Transcriber: NCC Kathleen Schmitt Kline: Pressing record right now. Okay. So, I'm talking with Dan Folz this morning. Today is July 10th, 2008. Dan, could you tell me just a little background information? You probably did this on your other interview as well. But just where you grew up, and just roughly, how you got into working with the DNR.

Dan Folz: Well, I grew up in Milwaukee. I attended the University of Wisconsin in Madison. When I graduated, I graduated in actually would have been like mid-year in January from University. I was lucky enough to get a part time position with the then, Wisconsin Conservation Department in Norther Wisconsin with the five lakes research project. Then after working there for a couple years, I took the biologist exam and called to report to Oshkosh where I was going to be, in essence, trained for area fish manager position.

Then from Oshkosh, where we went to different places to see what the operations, like the work at the hatchery, work at habitat where I worked on fish removal. Then ended up being assigned to a station. My first station was Horicon. Then after Horicon, there was an opening that came up in Waupaca. I requested to be transferred to Waupaca mainly because of the interest in the fisheries. It had a lot more trout water up there, where in Oregon area, there was very little trout water.

Then in, I believe it was like 1976, of course, we have some reorganizations going on in the Department of Natural Resources, which our name was changed to. There was an opening in Oshkosh. I requested transfer to Oshkosh. I think it was in 1976 and I finished my career in Oshkosh.

KSK: Okay. What was your position when you came back to Oshkosh in [19]76?

DF: Actually, when I was in Waupaca, I was like an area fish manager. But then they changed titles around for a while. I was a Wolf River project manager. Then when I came back to Oshkosh, I was area fish manager.

KSK: Okay. All right. I remember Ron saying something about – I think the big DNR reorganization happened in [19]67 or something. Was that it when it became the DNR?

DF: Yes.

KSK: Then Ron mentioned that, probably because of that reorganization, and just things were different and lots of different things are changing, that they stopped doing any sort of Sturgeon research for maybe somewhere around ten years or something.

DF: Yes. Actually, when I first came to Oshkosh, that would have been 1959, I think it was when I had my first assignment here. Gordy Priegel, who was just a great research biologist, was working on early life history of Sturgeon in Oshkosh on the Wolf River and the Fox River. We didn't actually know very much about Lake Sturgeon. So, Gordy, that was part of his job. Actually, he did life histories on the major species in the Winnebago System, the sauger, the walleye in Lake Sturgeon. So, when I came here, Gordy's research took a couple of years for him to complete it. Then I think, the attitude then was, well, we have the life history. We had

population estimates. We were monitoring the population. There was no need to really do anything more. So, they actually stopped. We didn't tag anymore or monitor the population through the spring harvest. Then while I was in Waupaca, of course, I was close to the Wolf River there and I would go over and look to see the fish spawning in the spring. I don't remember, but I know, one spring, I was standing there. This was like in the in the [19]70s. It just seemed to me that there were more fish than I could recall because I have tagged fish in the [19]50s when Gordy was doing his research. It seemed like there were more fish. So, when I came back to Oshkosh, I thought we should update that stuff because maybe things are changing in the system. A (surgeon?) of pod fish said that we should start monitoring that population again. So, basically, we started tagging and doing more work on the Sturgeon. When I came back in 1976, but [inaudible] was nothing done for a number of years after Gordy completed his research.

KSK: So, it's a good thing that you did that, because otherwise, Ron wouldn't have that data to be using for the management right now.

DF: Yes, that's true. Of course, I'm old enough. I can recall what it was. I think it's kind of interesting Gordy was doing his research in the [19]50s. We used to go up on the river. We only had about, I think it was about seven places that we checked. I can remember spending many nights with Gordy. We were just riding around and kept in the spots all night long. Then when I was fishing where we find some fish spawning at any one of the seven places, we did get a crew. Then we tag whatever we could get. One of the things I remember most in that north part, there used to be trees along where the fish still spawn, and they were cut down now. We actually strung weights up in the trees with generators and [inaudible] the water. We actually tagged all day and all night. But again, we were getting the numbers of fish that you see in the river. Now, we had to work like crazy to get any numbers of fish at all, especially females, because there were not that many fish that we were working with. So, as a result, like I said being in the [19]50s, if we give a hundred fish, that might be pretty good. In fact, in about 1959, I think, we captured about seven females. That was on the Wolf River system in the spot that we knew where fish was spawning. In the early [19]60s, we'd only get maybe eighteen or nineteen females. So, we had to work like crazy to get fish. It's not like right now where the populations actually increase at many more spawning sites. So, when the population had changed quite a bit from Gordy's original research to the when I came to Oshkosh, like I said, it's a good thing that we did. You think you know almost everything, but then you find out how much of it is that you don't know about?

KSK: [laughter] So, when you were helping Gordy in the [19]50s, things were pretty lean finding enough sturgeon to tag. Then when you started up in the [19]70s, you saw a big change then in how many fish there were?

DF: Initially, the numbers picked up. But again, the other thing that, I think, that you have to remember back in the [19]70s is there weren't as many spawning. We really had like skeleton (crews?). That'd be like, for the river system, we have like maybe robbing up a few volunteers for that with the department that we end up with maybe seven or eight people trying to tag the fish. But actually our numbers of fish increased considerably over what it was in the [19]50s. We could actually see that we started catching more females. I think that the most that we

caught in the late [19]70s, we actually take eighty-eight females one year, which was compared to what it was in the [19]50s, which was tremendous. So, we could see the changes taking place.

KSK: Wow. So, like roughly, how many spawning sites were there in the [19]50s? Then how many spawning sites were there in the late [19]70s when you came back to Oshkosh?

DF: In the [19]50s, there were only about seven sites. Actually, as far as tagging goes, we virtually only tag at North Park and (Shawano?) at the dam. There was one spot in [inaudible] back of a lumberyard that we tagged basically some fish at. But mainly, the two locations that had the most fish were (Shawano?) and North Park. When I came back to Oshkosh, one of the things that had really changed is people had started to riprap their shorelines. Inadvertently, what they had done is they started creating sturgeon spawning habitat. So, where we went for like about seven sites of which three were publicly used areas. We ended up with fish on location of at least fifty sites later on that were spread out at different locations along the river. The sites would change almost on a yearly basis. That would be some fish on one site but then they put a rock in, like, somewhere in that vicinity, near [inaudible] and the fish would move. We see more fish using all these different sites. Then, of course, the population was larger, so there were a lot more sites to monitor then.

KSK: So, I was just going over around, and I did an interview with Haze Diemel.

DF: Yes, Haze.

KSK: Yes, up in Leeman. He had said that, yes, in the [19]50s, there was some sort of federal contract deal where the federal government would pay for maybe 80 percent or something of the rip rapping efforts up there on the Wolf. So, a lot of them, the landowners up there started doing that. So, you saw the results of that then when you were coming back in the [19]70s. Suddenly, they were a lot more spawning sites.

DF: Yes. That was a federal program, that was a federal program that was a soil conservation service where they paid for the cost sharing for riprap. By then, over the years, people have been losing quite a bit of shore. So, it was a really, really vital project on the river itself for people to be able to rip rap it and save their shoreline. As a result of that, there's more than fifty sites now where we've seen fish that are not all used heavily.

KSK: Right.

DF: But where we've seen fish at one time or another because they move around. [inaudible] is a good example. That's one of our major sites now. Bamboo bend right along the highway there. But site never existed in the [19]50s. I don't recall when they rip rapped that, but that immediately created a major spawning site. In fact, there was another site owned by a private owner that's not too far from there. He rip rapped his shoreline and the sturgeon has used that site to along with the [inaudible] site ever since I was done. It's another really major site. Of course, (Shawano?) has always been probably one of the main spawning sites. When the dam went in, that probably stopped fish from going further. They actually used to go further upstream probably. But (Shawano?) always was a major location for spawning. KSK: Okay. So, in the [19]70s, after Sturgeon for Tomorrow started up, it sounds like in the [19]50s when this rip rapping started happening, they were doing it for soil conservation. But then after you guys started figuring out "Hey, the sturgeon really seemed to like this," then you started purposefully going out and rip rapping for sturgeon habitat.

DF: Well, actually, the department never did. I don't know when the cost sharing stopped going into effect but people ended up doing it at their own expense.

KSK: Okay. Landowners would?

DF: Landowners, sure. A lot of landowners were doing it on their own expense.

KSK: Okay. Wow, that's really interesting.

DF: Yes. That they were that concerned about shoreline erosion, that they were doing it. In fact, there were some public places where some village or township might rip rap because the river was always changing. So, in some place, that what they call it, not spawning sites, but the river might get a new channel through.

KSK: Oh, wow.

DF: Mabe you didn't want the river going through, changing all appearance of the river. So, people started doing that. While at North Park, which is right near the London, that became a really good site there because the county trunk highway X is right alongside the river there. The highway department, Waupaca County rip rapped that whole thing because to protect the road. Otherwise, that road would – actually, I've seen that road where it flooded over. But yes, they rip rapped that to protect the road. What they did is in the roadway [inaudible] a really good spawning site.

KSK: [laughter] So, I suppose with more and more people showing up on the shoreline, the sturgeon, you said, they wouldn't be at each site every year. But maybe that every time there was new rock put in, then the sturgeon were really attracted to that new rock. So, they would move over to a new site, maybe?

DF: Yes. We documented that that they liked that move to new rock. Basically, a lot of them would come to the same site they did. We could document some homing tendency in those fish. But they would move like a couple of times. They would find that affinity for finding that new rock, so we have to give the fish credit for being pretty smart. Because apparently, they were smart enough to know that with having an adhesive egg, their eggs are going to stick to that new rock better than they would to rock that had been in the river for a while. It might have been covered with some silt or some algae. It wouldn't be as good a spawning site for them. They were able to find those sites. In fact, I remember the fish who are using North Park, I had mentioned about the highway department putting the rock in there. Lee Myers who was working in Oshkosh, they put the new rock in there, luckily. I said, "There's going to be fish spawning on this." That spring, there were a lot of fish spawning on North Port. I mean, some was

[inaudible].

KSK: Wow. That's amazing.

DF: Yes. It is. A lot of times we destroy habitat, but in the case of sturgeon, we actually ended up creating a habitat for sturgeon.

KSK: [laughter] Well, I think I'm going to get into a few of these questions that I listed for you. That first one that I mentioned was just a rough question. Because I was looking through these notes from one of the surgeon for early surgeon for tomorrow meetings. I forget who was taking the notes on it. It might have been (Lloyd Lemke?), but there is a mention that you said that the department, that there was an early attempt to try and raise sturgeon but it didn't work. I was just asking if you have any recollection of that.

DF: Yes. I don't think that we did that. It might have been tried somewhere else. Where I got the interview, there probably was some memo on a file or from something. But I don't recall when Gordy was doing that, that we ever tried to artificially rear sturgeon. For one thing, we knew it was extremely difficult to do. At the time, we were working the fish, so there really was no need to do it, especially in the [19]50s. But you have to remember then, the numbers of fish, maybe they were – but we didn't have near the spearing pressure that is on the lake now that Ron is confronted with. We didn't have near the near the mobility that people have now so that the population was not in a position of being over harvested. Plus, along with that, when we were registering fish, the water clarity has improved to the point where it's almost like clearer every year. When I was working in Oshkosh, we were also charged with a registration of all the things that were speared during the spearing seasons. We always had - I shouldn't say always, but invariably, we had years where we had very heavy algae blooms on the lake because of the nutrients coming in. As people became more aware of that too, they're using better land practices on the upland. As a result, the water stayed clear. It's almost like clearer now. But we had years in Winnebago during the spearing season that you could only maybe [inaudible] of visibility. We had two years that we only registered eight fish in the whole spearing season.

KSK: Wow.

DF: That's how poor the water quality was.

KSK: So, the sports really changed them.

DF: Yes. That's one of the major things that's taken place is that time on the water clarity and the ability to get around up to half a mile. Before, you didn't have a four-wheel drive. Now, you got snowmobiles and four-wheelers. So, people are much more mobile. They're able to move quickly from one spot to another. Plus, there's many more spears now than there were. There's

there's many more Spears out there than there were then there's kind of a hardcore group of spearers a number of years ago. It was like basically, a lot of the same family that were spearing. But then, that changed and it became much more interesting in sturgeon and the pressure on the fish increased.

KSK: I'd like to just ask you a few questions about that very first attempt to propagate sturgeon at (Reverend Lange's?) place. It was a trout hatchery. Just how that all came about and what you remember about collecting the eggs and how the experiment went, whatever you can remember. [laughter]

DF: [laughter] I know, yes, which was probably isn't too much. [laughter] When Sturgeon for Tomorrow came into being, initially, the talk was stocking the Winnebago System. We're learning how to rear fish and stocking the Winnebago System. While the Winnebago System didn't need to be stocked at that time because we had the largest self-reproducing population in the world, the Lake Sturgeon. Plus, at the same time, there was concern too that Lake Sturgeon sells [inaudible] endangered fish species list. If we haven't stocked the lake, then maybe, we're looking at an endanger fish species if the federal government decided that and they could close the scene. There wasn't any reason to do that. So, we didn't feel like we had known the technique for stocking of Lake Winnebago. But as we progress and we talked with Sturgeon for Tomorrow, they determined – and we determined too that in case some natural catastrophe occurred, that maybe we should have the knowledge to know how to do this. Because things are never static. That seems like a viable alternative to us, the people in the department in Sturgeon for Tomorrow to learn how to rear sturgeon artificially if we had a need to do it. As a result why, that's how we started, basically trying to rear the fish. We didn't know much about what we're doing. We knew it was difficult. One, because it was difficult to get the eggs. Plus, we were working with the numbers of females. We didn't have a lot – that we have now, we didn't have crews out there. We just didn't have the manpower to do it. Sturgeon for Tomorrow had contacted (Dr. Ballard?) I believe it was from [inaudible], pan culture. He actually had some contacts in Russia. As a result, of course, we were not on a position in the department to do a lot of this. But Sturgeon for Tomorrow found a private fish hatchery that was owned by (Reverend Lange?) at New London. He actually volunteered to try and rear. He had trout cods in relation to fish hatchery. His primary interest was in trout but he had a really tremendous water supply. He had tanks for [inaudible] and he volunteered to take this on. He knew what he was doing because he had rear trout, so he was not a novice in treating eggs for disease and other things. So, as a result, while (Reverend Lange?) was our contact, and that was who we were going to get the eggs from. I don't recall the details but I know we had a hard time treating eggs for that. I don't even want to call it [inaudible]. On one occasion there, actually where we obtained the first eggs for (Reverend Lange?), we were at a site called the trailer which was not too far from North Park. But there wasn't a lot of fish there. We're trying to get a female. Actually, there's only three of us trying to do this. It was (Mike Premesing?) from [inaudible], (Russ Daley?) who has worked on Great Lakes, and I. We're trying to get the eggs for (Reverend Lange?). Of course, we were trying to manually strip eggs which is very difficult unless the fish has been spawning for a while. As a result, we ended up in the same, and we caught a female. It's hard to believe because you can get so many more male fish than female fish. We caught one of the females and actually ended up getting two. But one of the females that we got, we got a female that just come in to spawn. For whatever reason, there were not many males and of course, maybe it was the fact that we took the female out of the water a lot of times, the males were kind of dispersed and go looking for other sweethearts.

KSK: Party's over. [laughter]

DF: Yes. Party's over, yes, the girls are gone.

KSK: [laughter]

DF: Girls all get prettier and closer [laughter]. So, we got a female and we didn't want to release them just because we couldn't get males. So, we thought we'll hold her and actually, we hold on a pipe. We kept their gills irrigated with water. We kept the fish moist. We held her and we held her for quite a while out of the water.

KSK: Like how long, Dan?

DF: I think probably two or three hours.

KSK: Wow.

DF: Just an hour, but we kept checking her. Actually, I kept asking, "How is she doing, Russ?" He'd say, "Well, doing good." He'd go get another bucket of water and put it on her. Finally, we got a couple of male fish. We got the eggs from her. Actually, this took place like overnight. We were on the river trying to get these eggs all night. Russ and I and Mike, we never slept. We never hardly sat down. We sat down and one of us was always in the water trying to get a male fish. We finally succeeded. I think, it was like about 5:30 a.m. that we finally got the males. Then by that time, we were getting a little goofy. We all have names. I was the "egg man" since I was the guy who was going to do the stripping because I was the biggest guy and probably the biggest hands. (Mike Premesing?), he was the "pan man". He was the guy that was going to hold the pan [inaudible] of the fish for me to strip the eggs. (Russ Daley?), he was the "clay man". What he did is he had to clay the eggs so they didn't stick together after we had fertilized the eggs. So, we had our little jobs and still even until today – (Russ) has passed away, but Mike and I, we kid each other about "pan man" and "clay man", whatever. [laughter] So, we got the eggs. As soon as we got them, we headed to (Reverend Lange?). The place was one of the reason, we wanted to fairly close. [inaudible] just little ways from New London. Then we wouldn't have problems to transport the eggs.

KSK: So, the eggs weren't fertilized until you got to the hatchery then?

DF: We fertilized the eggs. We got a couple of fertilized fish.

KSK: Okay. You fertilize them right there.

DF: We fertilize right there. Everything as done. The eggs were ready to put up in trays when we got to (Reverend Lange?).

KSK: Okay.

DF: We got there, I don't it was probably 7:30 a.m. or 8:00 a.m. because (Reverend Lange?) was an early riser anyway. We got there, and so we got the eggs. So, we put them up. You

wash the eggs, get the clay off them so it wouldn't stick. Put all the eggs up in trays and he'd put them in his hatchery and some process that he had there. We had all the all the eggs set up. Then (Reverend Lange?) said that, "Now, we can relax for a minute. You guys been up all night. So, it's time for a cup of coffee." This was probably 8:00 a.m., 8:30 a.m. We always had a pot of coffee. We went upstairs. As I recall, we had a little brandy with that coffee.

KSK: [laughter] I think you earned it.

DF: Actually, we celebrated. So, that was our experience about getting the eggs. Then, (Reverend Lange?) have a really, really good set of diary on what he did with the eggs every day, how he treated them, kept them. I went up there and checked regularly. Actually, several people check to see how they were doing. (Vern Hacker?) at that time, used to be our area biologist. The eggs were fertilized and everything looked like it was okay. It looked like it might be doing something pretty good. But I think that the biggest thing that happened is for whatever reason and (Reverend Lange?) treated the eggs for fungus and disease. But the eggs started to fungus up. As a result, we reached the point where basically, all the eggs became fungus to the point that it killed them. None of us knew why. So, that attempt was not successful. But we were successful to the extent that we did have the eggs fertilized, and looked like they were okay. We were on our way to be able to rear them. But actually, it was the fungus that that was the demise of the eggs there.

KSK: So, that must have been frustrating.

DF: Yes, it was. When you worked so hard, you feel like you've done something very successful. Actually, this was basically, one of the first times that we had attempted to do this or actually that anybody had attempted to really do this. We didn't have much information. We were just kind of flying away with our knowledge of fish, and whatever, trying to do this with our knowledge.

KSK: But you had really no sort of protocol to follow. It was just kind of, "Well, we'll give this a shot. We'll try this."

DF: Yes, that's right. We'll try this. We know about that. There was a little stuff (Dr. Ballard?) had provided us with some information. In fact, like I said, for whatever reason, we weren't even sure that we would get a female with an egg cell that we could get out. Because [inaudible] strip the eggs out. Other attempts and you've probably seen that up on the river. Unless the female has been spawning for a while and their eggs have loosened up, you'll have a very difficult time. If a female just come in and just started spawning, she just won't release those eggs when she just initially started. Later into the spawning act, you can strip eggs manually. But the females that we got there had just come in. So, they hadn't had a chance to spawn for a while. So, as a result, we had a difficult time getting eggs. That's why we didn't actually want to release that female because they were in short supply.

KSK: Right. Dan, can you just describe when you finally let that female go?

DF: Yes. Maybe it was psychological, but we didn't want to kill a female if we didn't have to.

In Russia, we know that the way they had claimed eggs, of course, they were interested in caviar production. They have a [inaudible]. What they did is they kill the fish and cut her off of the eggs. For one thing, we didn't need that many eggs from one female.

KSK: Right.

DF: Actually, she has been out in the pan for so long, I took her back down to the water. I sat on the water and -

KSK: Did you carry her, Dan or did you have her on a net?

DF: No, I had her by hand.

KSK: So, you had her in your arms.

DF: I held her and supported her belly.

KSK: Wow.

DF: I took her, and I sat down there and moved that fish back and forth through the water to irrigate her gills. It probably took, I'm guessing, maybe forty-five minutes. We could still see her gills were working but she wasn't really active. The more I work the fish, the more active she became. Afterwards, all of a sudden, her gills started moving more and she's starting to get more active. All of a sudden, she's gave us splash and whatever, and took off and swam away. She recovered. It took a while but she recovered.

KSK: You stood there in the water with her the whole time.

DF: Yes. All that time, I held that fish in the water and moved her back and forth to get the water to irrigate the gills.

KSK: So, that must have a good feeling when she swam away.

DF: Yes. Like I said, all the years that I worked with fish and different kinds of fish, for whatever reason, Lake Sturgeon is the only fish that you can become emotionally attached to. [laughter] When you look at their life history. They're primitive fish. A lot of people, one of the most common things that we hear up on the river is "Oh, my goodness. Aren't they ugly?" But if you really look at the fish and look closely at how it swims in the current and what a neat fish and how strong and the conditions, it really is just a fantastic type fish. When you know the longevity of the fish, and spawning 25 years and living as they do, you become emotionally attached to the fish. At least I did.

KSK: Well, it seems to me whenever I spent time with the tagging crews, I think everybody on those crews are attached to them.

DF: Yes. It almost gets to the point where we're all going to tag sturgeon together. But every

year, it ends up something happens that the crew ends up being in awe of the fish. Like you've been tagging and tagging and tagging and all of sudden, here comes an [inaudible] fish and was like, "Oh, man. Look at that. Isn't that beautiful? Isn't that gorgeous?" Yes, you see him in the water or you could touch him and take pictures of him. The people can relate to the fish. Plus, the other thing, the crew, while they tagged a lot of fish, a big part of their job is public relations with the people.

KSK: Right.

DF: People ask a lot of questions about the sturgeon. When the guys take the pan, little kids can touch them. It's almost like a hands-on thing where people can really relate to that then and they end up telling their friends. I think that's part of the reason that that there is so much interest in in Lake Sturgeon now too. Because it's because over the years, people have really learned to appreciate the fish.

KSK: There's nothing like being able to just sit there and watch them in the water. To be just a couple of feet away from them and just to sit there and just stare.

DF: Exactly. Where else can you go, Kathy, no place that I know of for Lake Sturgeon, no place in in the world that you can go on Lakes Sturgeon, sit on a bank or watch a bank where fish are spawning anywhere from one hundred to two hundred sturgeon spawning that up to 80 inches in length and just be in awe. You can't do that anywhere.

KSK: That's exactly why the IMAX people spend so long on the river.

DF: Exactly.

KSK: Because I think they got there and they were like, "Oh my gosh. This is the jackpot."

DF: I know. But like on some of the sites, usually the media will have that on when the sturgeon spawning is taking place. A lot of people may know where to go now.

KSK: Right.

DF: But the only thing is – and we learned this with Gordy. We just used to keep driving around the river that we found fish spawning. Because we knew that they would spawn up again and find the fish. But now the fish come in. We know about when they're going to spawn. We can pretty much predict that. But once they come in, then they'll have the media, they'll say, "You got to go." They usually end up going to [inaudible] to see the fish spawn. They might start spawning on a Tuesday. I say "Well, let's take a ride this weekend and see the sturgeon." Well, by the weekend, you might not see a fish.

KSK: Right. [laughter]

DF: Because when they spawn, they'll continue spawning. They're not going to stop in most cases. They could be all done spawning within a couple of days.

KSK: It's a very brief window.

DF: Yes. When you have to see the fish, basically, what you end up doing, I used to tell people, "Well, it's getting pretty close. It's going to probably happen." They just keep coming, just keep driving over because if you wait a couple days, you might mess up and you'd say, "Those guys don't know what they're talking about. There's nothing here."

KSK: [laughter]

DF: We see people walking up and down the bank looking at the water with no fish quite often.

KSK: There's no fish here.

DF: Yes, there's no fish. They said the fish were spawning, where are they? They have their thing and they're gone. They leave pretty quick. So, you only got a couple of days. It's a very short window usually.

KSK: Did Professor Ballard from (Dartmouth?) come for that first try at (Reverend Lange's?)?

DF: He didn't. I don't know if he showed up at that hatchery. I don't think that he ever came to (Reverend Lange?).

KSK: Okay. It doesn't sound like he did. I haven't found anything that says -

DF: He never showed up on the first try.

KSK: Okay. All right.

DF: I know that he never came up when we were obtaining the eggs.

KSK: Okay. So, let's talk a little bit on the second try that happened at Wild Rose.

DF: Yes.

KSK: So, you got the eggs for that as well?

DF: Yes.

KSK: Who was there with you for that try?

DF: Well, it was basically some of the same crew that we always had, (Mike Benning?) and some of the other volunteers. Lee Myers is usually there. We did an awful lot of wok on sturgeon. (Mike Premising?) and some other people that we could count on. That was the other thing, a lot of times, people had other commitments. So, you'd have to work like heck to round up a crew. But we were set up to do this. So, we were very fortunate that we had a guy,

leader, awful lot of work on surgeon and make premising and some other people we could count on. The other thing too young. A lot of times people had other commitments. So, you'd have to work like active round up a coup, but we had we were set up to do this. We were very fortunate that we had at Wild Rose hatchery [inaudible] who is just a tremendous hatchery man. He was more of a hands-on guy, then he was a, I guess what you'd call a book guy. He was raising mainly trout while in those hatchery.

KSK: He's raising carp?

DF: Trout.

KSK: Trout, okay. I was like, "Wait a minute."

DF: No. We don't have the – [laughter]

KSK: [laughter]

DF: In fact, we also did this on the Fox River on a couple of cases. But anyhow, Don came over and of course, we ran into the problems. We figured that Don would have some of our knowledge in hatchery and maybe some of the advantage of (Reverend Lange?). So, Don came over and again, we did this thing where we didn't want to kill a fish if we didn't have to. But on the other hand, we can also justify that if we had to kill one, we could have. I mean, we're letting people spear them and as for learning how to do this, you know, it wouldn't have been a big sacrifice.

KSK: Right. One sturgeon, yes.

DF: Exactly. But Don came over. In fact, I didn't even know what he was going to do. We now got a female. We tried to strip the eggs, but again, it was like a new female would come in. Again, we're not dealing with hundreds and hundreds of fish.

KSK: Right.

DF: Don came over and finally, we could get the eggs. Finally, we got that fish. But I saw him get a scalpel out.

KSK: [laughter]

DF: I'm like, I don't know if he's going to operate on me or the fish. [laughter] But anyhow, he got a scalpel out. I was like, "What are we doing? Are you going to cut her open or what?" He says, "No. I'm going down near the vent, I'm going to make an incision." He made a small incision down near the vent. Not in the vent, but at the side.

KSK: So, like an inch or like how long?

DF: Yes, maybe an inch or inch and a half. It wasn't very big, maybe a little bigger. But it wasn't very big. He got through the belly and the eggs came out. We started to pull them out. We squeezed her. He squeezed all the eggs that he needed for the hatchery out of that incision. He has sutures and he had [inaudible] or whatever they use to suture people up with by that time. He had got it from a hospital. He stitched that opening back up. I don't think she was out of the water, pick up them eggs, I don't think it's fifteen minutes. Of course, we kept her gills irrigated while she was out of the water. But she was out of the water hardly at all. Don was so good at that. I mean, he had the eggs, stitched it up, and the fish was back in the water probably at fifteen minutes at the most if not before. We never had to hold the fish, put it back in the water and swam away.

KSK: Wow.

DF: Never had to hold the fish or wait for it to recover or anything. That's how quick Don worked on that fish. Then, he took the eggs. They did all the claying and everything, and he took all the eggs back to the hatchery in Wild Rose. We didn't get involved in much like with Don. I don't know if Dr. Ballard came up or not. You had talked about coming up, but I don't know if he came up to see what Don was doing or help or observe or what. I don't know.

KSK: So, you didn't go -

DF: All I know is that Don knows what he's doing and we knew that Don knew what he was doing. He did the hatchery work and he was very successful doing it.

KSK: So, you didn't go back to the hatchery with Don then?

DF: No.

KSK: He took the eggs and they were in good hands.

DF: Yes. He had the eggs. He wants to get them back. We continued tagging fish. Unless anything happens, right now, when the crew is there tagging eggs, while some guys from the hatchery come up and they get their eggs. They leave right away and head back to the hatchery.

KSK: Right. So, you had no idea that Don had this back up plan to do the surgery?

DF: No. [laughter] I didn't know what he was doing. Actually, then after that one, whenever we needed to obtain eggs, that's the way we did it.

KSK: Wow.

DF: Because it was so fast and efficient.

KSK: Right.

DF: As I recall, Don had a really high hatching [inaudible] eggs to him. It was [inaudible] than expected.

KSK: Dan, did you tag that female too? Do you know which female that is?

DF: Yes. We tagged everything. One thing is that we've noticed that we try and keep track around those two fish because he's got that more sophisticated method now with the small clip tag which we didn't have.

KSK: Right.

DF: We use what they call metal tags which were like [inaudible] ear tags.

KSK: That would go on their fins?

DF: It would go on their dorsal fin.

KSK: Yes, okay.

DF: We tag because we have tagged. But we didn't really expect to see that fish with her habit of spawning once every four or five years. If we did, we expect that the incision to heal up. We have seen fish, actually Ron has two where the incisions are from impacting other tags where they're healed completely up.

KSK: That's great.

DF: Actually, when Don made that incision on the fish, we probably had to [inaudible] how fast these fish are. Because there was one year, and this was before we actually started taking the eggs as I recall. We saw a female fish spawning. Apparently, somebody had hit her with a spear during the wintertime. She was up on the river spawning. She actually had a couple of holes on the side of the fish. Actually, we could see eggs coming out of the holes.

KSK: Because she had been speared.

DF: Yes, had been speared. She was spawning just like nothing was wrong. They are extremely tough fish too.

KSK: Wow.

DF: Extremely tough. So, we had seen a fish spawning with a hole and the eggs are coming out. If we had known we were going to do this, we might have invited some [inaudible] that you can cut this fish and remove eggs that way.

KSK: Right. Wow. [laughter] Tough, tough fish.

DF: Yes, they are. We see fish on the river now. Usually, a lot of it is associated with maybe

being hit by motors or stuff. We've seen fish without tails up there spawning. We've seen where there's a healed wound where they were hit by an outboard cup and it heals up.

KSK: Wow.

DF: We still see fish occasionally that were it in a vulnerable spot or speared in [inaudible] that has actually been hit by a spear. So, there are tough fish like you said. Well, it's the same thing as at wintertime because it's really cold out. Unless it's really freezing up, most of those fish that have been speared and they bring into the registration station. They were all still pretty active fish when we're handling them for registering.

KSK: Right. Wow. Just to get your impressions of that time when Sturgeon for Tomorrow was forming. It seems like there is a lot of back and forth between Sturgeon for Tomorrow and people in Madison at the DNR trying to figure it out. Sturgeon for Tomorrow is really pushing for this to happen. The DNR kind of seems like it was dragging its speed because of the reasons that you stated that you didn't see any reason to – you didn't want to stock an already healthy population, a natural population of fish. But then kind of what happened between that first try at (Reverend Lange's?) and then suddenly, the DNR, people in Madison are saying, "Okay. Yes, we are going to try and learn how to raise sturgeon. We're going to do it at our own hatchery in Wild Rose." How did that sort of shift happen?

DF: That came about because Sturgeon for Tomorrow wants us to have the knowledge. You really have to give courage for that. But we figured that rather than having (Reverend Lange?) who is a trout hatchery guy that the attempt would be better if it was done in our hatchery and see if it was a viable thing too. We still don't know. We didn't know if one thing [inaudible] to the hatcher [inaudible] or the hatcher are always going to happen. But the main thing was I think, finally we're all got a while where we got pass the stocking the lake thing to learning how to do this in case of a catastrophe. That was a viable thing for us to know. Plus, we will be on a place that the world could have to see that we could do it.

KSK: Right. Okay. So, it really became more of kind of a scientific pursuit then?

DF: Yes, exactly. Actually, another reason that at the time, I didn't want to put any fish into the Winnebago system is because we're dealing with a reproducing population that didn't meet. Of course, we had all this data on the population that we had accumulated over the years. All of a sudden, you didn't really want to introduce an unknown in there.

KSK: Right. Because it was working and they were reproducing. You already had a good population of fish.

DF: That's right. The other thing is [inaudible] and of course, there was some concern about disease too and we didn't know. As I recall, just as I was looking on some of the things that we have there. Like the sturgeon that Don raised, I think were stocked in the Red Cedar River.

KSK: Yes.

DF: I think [inaudible] St. Croix.

KSK: I think so, yes.

DF: I think it is. But anyhow, I don't know if they ever evaluated that but I also know that you see other states and other people coming here from all over wanting to see how we do this in our tagging operation and do some of their own scientific studies. But one of the things that I remember vividly was – became a good friend for the few times that I had seen him. But anyhow, Missouri, they want us to get eggs. They had raised paddle fish. So, I don't know if somebody had contacted them because paddle fish were fairly similar to sturgeon, and to see if they had any expertise on that. But I remember that that was on the early mid-[19]80s that one of the hatchery personnel and one of the biologists down there, (Kim Graham?) was since passed away, came up and helped. They actually took eggs back to Missouri. They were successful and they released the fish. I don't know if any other states or whatever did it, but in fact, I have a copy of the plan. It was in 1992, Kim wrote a long-range plan for the recovery of Lake Sturgeon in Missouri.

KSK: Okay.

DF: The thing is of course; it was one of those things where you aren't going to see results in two or three years.

KSK: [laughter]

DF: But, yes, he had a really great plan for the Mississippi River. As I said, Kim has since passed away. Before he passed away, apparently, they were very successful in reestablishing sturgeon in the Mississippi and I think probably the Missouri River down there. In fact, like I said, as far as I know, those fish almost really get into the point where they might be self-reproducing now. I don't know.

KSK: Wow. I'll have to check in about that. That's pretty interesting.

DF: Yes. In fact, if you want, Kath, I have a copy. I don't know if you can get it. I can send it to you too if you need it. But it was a real, detailed plan for reestablishing Lake Sturgeon in Missouri. I don't know if other states have done that or not. But it was a pretty comprehensive, good, resource-oriented plan.

KSK: I think I have a letter. I'm not sure if it's from that same man but I have a letter from somebody in Missouri early on. I think it was right after you guys had the successful hatch at Wild Rose. He was contacting somebody at Madison at DNR about what had happened. I think it was right before Don [inaudible] had published the results. He was looking for information about it. I think he was putting contact with Wisconsin because of [inaudible]. I think he had heard about what Wisconsin has one and somehow it came about that way which is pretty interesting. It's a small world with all of these – not very many sturgeon researchers but were just around.

DF: Right. [inaudible], he worked with [inaudible]. He was a great contact too.

KSK: Right.

DF: But in fact, I remember Missouri, they actually flew up here.

KSK: Oh, wow.

DF: I mean, it wasn't like, "We'll drive all day and all night." In fact, Kim was up here. One of his hatchery – they made some time with this tagging, picking eggs, doing [inaudible]. Then when it came to pick up the eggs, they actually flew up here to pick up the eggs. I assume they flew in one of the airports in Oshkosh or wherever and got [inaudible] eggs from Don. But they were interested in this enough to fly up and like I said, drop a long-range plan.

KSK: Wow. Dan, would anybody who is working at the Wild Rose, when this happened, still be around that I could ask? Just somebody who would have been working in the hatchery just to see if I can validate that story about Ballard staying overnight in the lab?

DF: Yes.

KSK: Who's the guy who's running - Steve?

DF: Fajfer?

KSK: Was he working there then?

DF: I don't think Steve was there then.

KSK: Okay.

DF: A lot of those guys have retired. (Clara Moore?), I don't know if Clara is still alive. (Clara Moore?) was there. Let me think. I think he's retired. I don't know if he's still around. We presented some stuff at a seminar in California. [inaudible] was there too in Sacramento. As I recall is (Terry Carpenter?). I think Terry is retired. I don't know, these guys, if something happens to them, you don't –

KSK: Yes. It's hard to know.

DF: You don't know because you're never here.

KSK: Right.

DF: I cant believe that. Of course, Don, like I said, he is more of a hands-on guy. There should be detail in there somewhere in those files.

KSK: Right.

DF: Because they got to have a pretty sizeable sturgeon file.

KSK: Yes. Maybe I'll contact Steve up there.

DF: Contact Stever first.

KSK: Okay.

DF: I'm sure he has Don's old file. I'm sure that they kept it. He probably should be ablet to look that up fairly quickly.

KSK: Okay. I'll contact Stever then. That sounds like a good idea.

DF: The other thing I was going to tell you too. You had asked in your thing about the volunteer.

KSK: Yes. How did that start up?

DF: I don't remember. That was run by law enforcement. The guy who's retired now, used to be here is (Denny Jones?). Ron knows Denny's number or how he can be reached or whatever. Denny was here for quite a while. Before that, it was Chief Rich [inaudible]. But he is over in the western part of the state and I don't even know where he's at.

KSK: So, Denny Jones was working -

DF: He would have been like the area warden here for a number of years. (Todd Shaller?) is the area warden now, I think.

KSK: Okay. That's Todd's position then.

DF: Yes. So, Todd may be able to – you would think that they would have something in the files on that.

KSK: Yes. Okay. All right.

DF: That's if you can [inaudible].

KSK: Right. Exactly. That's great. That's just what I need to know then, who to talk to.

DF: Try those guys first. If you don't find anything, call me back one of these days. Maybe then I could come up with some more names.

KSK: Okay. No, but that sounds like that should head me in the right direction.

DF: Yes. If nothing else, they should be able to tell you to contact so and so.

KSK: Sure. Okay, Dan. I think I've got everything I need now. This has been great. Thank you so much.

DF: I should have one more thing here.

KSK: Yes, go ahead.

DF: I should tell you that I remember when Gordy was doing – I told you about the string and lights and working. We also took fin rays off the fish for aging purposes.

KSK: Right.

DF: We use jus a regular hacksaw blade. Of course, we couldn't get down to the joint because we didn't allow them to bleed. We saw them off and of course, we put them in [inaudible]. At the time, we didn't know but we were obviously missing a lot of [inaudible]. But as a result, I have to tell you, they got me feeds. I do all these and I'll tell how [inaudible] we were in research. When I was a technician, I worked for (John Keppler?). John actually was a guy that did all the aging on these fin bones for Gordy. John, he's cut a cross section, except now we have a machine that does it. John cut all those cross sections by hand with a jewelers saw blade. [laughter] That's how the aging was done. Of course, you look at them under a microscope, and he actually had [inaudible]. It doesn't say we don't have the most powerful equipment. You had the [inaudible] sliding the blade. As he got to the point where John developed a sturgeon allergy.

KSK: Oh, no.

DF: Yes. He developed an allergy. It got to the point where he could still come up on a river but he couldn't touch sturgeon because it takes out on his rash and itch. [laughter] He's the only one I ever knew that developed an allergy to sturgeon.

KSK: [laughter]

DF: He comes up on the river wearing his long [inaudible] come up to your elbow.

KSK: Poor guy.

DF: Yes. John was such a dedicated guy that he got an allergy. [laughter] So, Ron doesn't realize how lucky he is.

KSK: [laughter] That's a great story.

DF: John passed away too. [inaudible]

KSK: Oh, wow.

DF: A lot of people that were [inaudible]. Supervisor (Decares?) who was there. I can tell you

too that we used to be charged with the registration of sturgeon on the lake when I was working at Lee here. Here, the registration was all in our hand and that was all done by stations around the lake. Most of them were, of course, were [inaudible]. I didn't know if you know this, I think as I recall, we paid them 50 cents a fish to register.

KSK: Oh, to encourage them to come in?

DF: Yes. We would check them out and make sure that they were doing it right. But the same way with licenses, we were like two or three [inaudible]. We had to set up - and of course, Lee and I and Jack O'brien sometime later on when Jack came up. Otherwise, we had to set up all the registration stations by ourselves. The tavern owners in that were the one that registered the fish, the licenses that were sold, we even distributed the licenses.

KSK: Oh, wow.

DF: Places around the lake because the county clerks took it over?

KSK: Right.

DF: I had to take licenses around and I had to pick up money all around the lake. Lee did a heck of a lot of work with sturgeon. We're responsible for the whole Winnebago system. Plus, like I said, that's the way it was. We were responsible for the Winnebago system.

KSK: So, Dan, since you started working in Oshkosh, and now since you retired, have you ever missed a sturgeon tagging season?

DF: No.

KSK: So, you've been doing it ever since [19]76 then when you came into Oshkosh?

DF: Yes. Since we started doing it in [19]76.

KSK: What keeps you coming back? I mean, you're a retired man. You should be having a beer out in your backyard. What makes you get up and haul your butt out to Wolf River every spring?

DF: Because it's such an emotional thing and I've done it for so many years. It's a big part of my life. Like I said, even I am still in awe of the fish. Plus, the other thing, it's neat to see all things has changed over the years. Of course, to see the people you work with and the guys that are working now. Of course, that way, you also get to reminisce and say, "I used to do that." Like you big fish, I used to be able to do that. [inaudible] fall in.

KSK: Well, I think Ron will be saying that pretty soon too.

DF: Of course, I can't take credit for instilling that to him. He's got some of my bad traits, I think because I'm probably his mentoring father here. I used to get [inaudible] when it's time to

sturgeon.

KSK: That's how you used to get?

DF: Yes, you just knew. Actually, a lot of times, you run up the river and now you take water temp. What's the water temp and you know about when the fish are coming. Time lets you know you but there was just something about going up there and just feeling it in your bones and you knew that those fish would be coming now. So, you could go up there. One thing that Ron and I joke about that, but it's certainly true. It's the south wind, but whenever you saw the flocks of geese heading north and the south wind is way, way high, sturgeon are coming this morning.

KSK: Ron said that to me the first time I drove up to the river with him.

DF: He did?

KSK: Yes. I'm starting off one of the chapters with that.

DF: That's true.

KSK: So, he learned that from you then?

DF: Yes, I assume he did. I don't know.

KSK: Probably.

DF: In fact, we [inaudible] each other. When I call him before, "You know where I am at?" "You see the geese?" "Yes." "Did they fly over our site?" You just know. I was in Waupaca. I asked the warden to check North Park. He was coming back from a meeting in Green Bay. He got back to the office I think like 1:00 p.m. It was getting warm. Rex knew what he was doing and, "There was nothing there." He said, "I don't see anything there." He sat in the office and "Gosh, I don't know. I got to go over." I went over and between the time, he talked to me and I went over there, "The fish are coming." When I got there, the fish were there. [laughter] I don't know. Maybe a part of us sturgeon for brain, I don't know.

KSK: Maybe.

DF: [laughter] Yes. So, that was then. I can talk about all the times we used to get to celebrate. [laughter]

KSK: [laughter] I've heard of all those stories.

DF: Exactly.

KSK: No, I'm sure I haven't heard all.

DF: You have no idea. [laughter] [inaudible] had we begun, we had all been damned the first

year. [laughter]

KSK: Well, perhaps we better talk about those some other time when I don't have the tape ready.

DF: We'll talk about them when we're sitting somewhere having a drink.

KSK: Okay.

DF: Okay, Kath.

KSK: Dan, thanks so much. This has been really great.

DF: Okay. Yes. If you need a call – give me a call. I'm going to get this plan for recovery of Lake Sturgeon. I haven't sent that to you.

KSK: That would be great.

DF: That way you have it.

KSK: That would be great.

DF: Okay. So, I will talk to you later.

KSK: All right. Take care, Dan.

DF: You too, Kath

KSK: Okay. Bye-bye.

[end of transcript]