Ron Bruch Oral History Date of Interview: September 24, 2007 Location: Van Dyne, Wisconsin Length of Interview: 01:53:14 Interviewer: PM – Paul Muche Transcriber: NCC Paul Muche: Hear from her back. Well, just to get started, today's date is Monday, September 24th, 2007. I am doing the interview. My name is Paul Muche. Actually, we are at my residence at N8795 Lake Shore Drive. This is Van Dyne, Wisconsin. Today I have the privilege of interviewing Ronald Bruch. Ron has been helping out also with the history project here. But today, I get to throw some questions at him instead of him doing the questioning. Just to start out, Ron, your official title at Oshkosh is works for the Department of Natural Resources, sturgeon biologist, and based out of Oshkosh, Wisconsin.

Ronald Bruch: Right. My real official title is the Upper Fox-Wolf Fisheries Work Unit supervisor. But then I worked my second hat as a sturgeon biologist.

PM: You have had that title for how many years?

RB: Let's see. Since 1990.

PM: Since 1990.

RB: Yes.

PM: So, that is 17 years.

RB: 17 years. But I've been in Oshkosh since 1986. Prior to that, well, Dan Folz was here as the biologist. When he retired, I got his job.

PM: That is when everybody got to know you, pretty much. But originally, where were you born and raised?

RB: Well, I was born in Milwaukee and raised down there. But I spent most of my summers – as long as I can remember – up in Ashland County where my family is from. That's really where I got my first association with sturgeon. Because the Flambeau River, right where it comes out of the Flambeau Flowage, that section between there and Park Falls, I fished there a lot growing up. There's a pretty good sturgeon population in there. As a matter of fact, the very first picture of me with a sturgeon, I was 10 years old. It's a picture about me and my brother with about a 45-inch sturgeon taken at my grandma's house. This was in June of 1964.

PM: Sixty-four. It is going backwards.

RB: In June. There's no harvest season in June.

PM: [laughter] There was that day, though.

RB: There was that day [laughter]. So, we used to catch them all the time down there. We went fishing for walleyes and frogging around by the river. I always was fascinated by them. Never in my wildest dreams thought I'd come back and actually be able to really concentrate on them. Then I went to work for the DNR up in – well, actually my first job at the DNR was here in Oshkosh. In the summer of 1976, I had an internship and worked on vegetation on the lakes

actually, and primarily on the Upper River Lakes. Wasn't even with fisheries really.

PM: You went to college at Stevens Point?

RB: Yes, Stevens Point. Well, my bachelor's in Stevens Point. Then I did my master's at Milwaukee. I'm just finishing up my Ph.D. right now at Milwaukee.

PM: You are?

RB: Yes. So, I hope to have that done by next summer.

PM: You already got it.

RB: So, I'm working on sturgeon stuff and all this sturgeon data analysis. Matter of fact, I want to show you some before we leave here today. What I'm working on, it's really cool stuff.

PM: Well, in college, when did you think you -

RB: I actually went to school for veterinary medicine.

PM: You did?

RB: Yes. I loved the fish, but I wanted to be a big animal vet. But at the time, Wisconsin didn't have a school. There were only two students from Wisconsin who would get accepted into Minnesota every year. You had to have a straight A average. I was doing okay until I got to organic chemistry, and I didn't get an A. So, I washed out of pre-vet school. Decided to go back to my first love, which really was fish, and got back into the fish program.

PM: So, then you started out in Oshkosh as an intern?

RB: Yes, Oshkosh for my internship. Then I got a job in Marinette working on Green Bay. From Marinette to working on the O'Connor River Project, to Milwaukee, to Eagle, to Milwaukee, and then finally back to Oshkosh. So, in the first 10 years of my marriage, my wife and I moved eight times.

PM: So, then who said there was no position open? You started out as just a fish biologist or was it sturgeon? How did you get centered on sturgeon?

RB: When Dan Folz retired in 1989 actually. The fall of [19]89, I think he retired. I was just wrapping up the Winnebago Comprehensive Management Plan at that time. That was my job when I got here in [19]86, is to facilitate the development of that plan. I was at a pay range that was at the same level as Dan. When he retired, we reorganized a bit and I just basically slid into his position. Then hired our tech load to replace me in my old job. That's how that worked. That's when I really became focused on sturgeon, was in 1990. Actually, throughout my career even when I was in Marinette, even though I worked in the Great Lakes, they had a sturgeon program on the Menomonee River. Oh, every 3 or 4 years they ran shocker surveys on the

Menomonee. I always got involved in those surveys. When I was in Milwaukee, they were doing sturgeon research down there at the Great Lakes Water Institute. That's where my office was. I got involved in that a little bit. So, I've been around sturgeon most of my life and almost all of my career but really intensely since 1990. I supervised the work unit, but I spend as much time working on sturgeon as I do now.

PM: You keep on bringing up Dan Foltz. He was one of the - as far as educating you about sturgeon to begin with?

RB: Oh, yes. Dan was like a second father to me. He laid the foundation. He was working on sturgeon. He first got to Oshkosh in 1974. Prior to that, he had worked for almost 20 years for the department and other spots. Would work on different places like that. For a while, he was up north. But he actually was working on sturgeon on the Wolf River in the late [19]50s, early [19]60s already. Then when he came to Oshkosh, then he was responsible for the whole sturgeon program at that time. They really didn't have a one designated sturgeon biologist prior to 1974. They had some research people that worked on sturgeon, but those were different individuals. Without a doubt, the most prominent is Gordon Priegel. I've got to interview him for the project here soon.

PM: Sooner or later [laughter].

RB: But yes, Dan, he laid the foundation. A lot of the data that we're working with today, the date sets that he started, the surveys that he started, we continue on. That's what's given us the long-term data that you really need to manage a species like this. Because without the long-term data, you just – some of the stuff I'm working up right now with the growth data, the adult females grow on an average of only a little more than a quarter inch a year. I haven't finished working on the males, but it's probably not going to be much different than that.

PM: Now, the secret word you used in there was average. The shad existed back 40, 50 years ago is when they were recorded being in the Upper River Lakes. Me growing up, I did not know they existed until the late [19]80s.

RB: Actually, they didn't really become an important part of the fish community until the late 1980s. We have records of them going back to the [19]50s.

PM: But they were not as dominant as they are right now.

RB: They weren't as abundant, no. But you're right, there is a lot of variability in growth. There's probably genetic variability between individuals. Some individuals are just born to grow faster. That's just like humans, some are bigger, some are smaller. Some grow faster, some grow slow. Same thing's going to happen with sturgeon. There's probably going to be more similarities with sturgeon and human growth than there is sturgeon and other fish growth. Because they are so long lived, and they have life history characteristics much more similar to a slow-growing mammal as opposed to a fast-growing fish. But there'll be individual variation. But there'll also be what we call temporal variation through time depending on what food resources there are. That will be one of the things I'll actually be able to tease out, is take a look at with the same individuals that we've been tracking for 25 years. Where we may have caught three, four, or five times in those 25 years, what growth rates do each of those little individual time periods have? So, it's fascinating stuff.

PM: Out of everything you have learned through the years, is there anything that really jumps out at you that shocked you? Or has everything pretty much come in stride?

RB: Well, I would say shock me. Let's put it this way, it didn't shock me, but a little bit of a surprise was that they are a lot older than we thought they were. We just finished the work with the bomb radiocarbon assays. The males we were calling 45 years old are really 67 years old.

PM: Really?

RB: Yes. Or older. Even though we've got some big, old fish in the system, we haven't even reached the potential of how old they can really get yet, because our harvest rates were high. They were high enough over the years, and the population was at a level where we could sustain the population, but we couldn't sustain really old age growth. Because by the time they got to a certain age, they were likely harvested off. Now, we're allowing it because of the changes that we've made in the harvest regulations. We've got such a healthy stock. There's enough escapement where we should be able to see some of these really old growth fish coming on a regular basis into the future. So, we've got 200-pounders out there now, but we could have 250-pounders.

PM: That ties into one of my questions. The biggest one ever recorded taken was just a few years ago. Actually, you got a picture with the fish.

RB: Yes, 188 pounds.

PM: 188 pounds, 79.5 inches. Do you have any inkling as to – if you had to take a guess – how many are above that?

RB: A nice guess, oh, I would say there's dozens of fish that size in the system right now at a minimum. Because we see them every spring. We can't net them. We can't get at them. But we do catch a couple.

PM: Everyone you see is?

RB: I would say at a minimum, there's dozens. There could be hundreds of that size. But at a minimum, dozens.

PM: That is very good the way you set today.

RB: Now, I'm sure you've probably seen that picture of Goyke from the early 1900s from the set line.

PM: From the set line?

RB: I just found an article today that describes that whole episode. Let's see. It was on August of 1913. They caught those on a set line out in Winnebago here.

PM: 1913?

RB: 1913. The biggest one was 187.5 pounds. That real big one that's on the right. That's only 0.5-pound shy of the record. Because at the time the record was 180 pounds that Elroy Schroeder had.

PM: Elroy Schroeder.

RB: Well, Elroy Schroeder set the record in 1953. But the article that I have comes from about that time period when they were calling into question, was that really the biggest fish ever taken? Now, we know for sure that was probably the second biggest fish ever taken, was that one that Goyke had on the set line.

PM: There is other like (Galloway out of Little Beaumont?) they had some large fish taken. I do not think they were quite that big looking back at it.

RB: See, yes, those I'm not familiar with. But there's some big fish out there.

PM: Since you say 1990, all of a sudden you came on the new guy and you came up to these spears on Winnebago and started implementing or started saying, "Well, we have a problem. We cannot over harvest these fish." Out of everything through the years, it is difficult to – nobody likes change. Change is always difficult to do in any sport, especially when you got the traditions of sturgeon spearing. What are some of the difficulties that you had through the years? Any in particular?

RB: Well, the first difficulty was even though we have a lot of information, we didn't have enough of the right kind of information to either prove or dispel the theory or hypotheses that we had, that we were over harvesting the big fish and the females. So, that was one of the first things that we did after I got the job, was we started sexing fish in the harvest. Well, we actually began that in 1991. Yes, we started it in 1991. I had first got the job actually in February of [19]90. So, the spearing season was actually partially over when I started this job. But in [19]91, we started right away. There wasn't really any guide on how to sex the fish or stage them or anything. So, we had to develop that work. I still remember seeing my first fish over at Brothertown. I was driving around the lake. We were setting this whole thing up as is opening day. We didn't know how we're going to be sexing fish, what we were going to be doing. The guy had a sturgeon in there. When he was out, we stopped him on the road. We pulled it off on the side of the road and we took a little slit in there and we had our first peak at what it looks like inside. Now, people had done this before. People had the foresight to do this before back in the [19]50s. In 1954, they collected the gonads from seven-fifty-some sturgeon. 758, I think, or something like that, in the Upper Great Lakes harvest in 1954. They wrote down meticulous notes on every one of these fish like how much they weighed, what the color was, whether they had eggs or what they looked like and fat and everything else. But they never wrote it up. They

never. That's the only time they did it. So, we did this for a couple years here. Then looked back at those old notes and we were able to put together the gonad guide and come up with standardized criteria on how to sex and stage these fish, stage maturity. But once we had that information, then we had good hard numbers on what the sex ratio of the harvest was and the maturity ratio. That showed that we were indeed over harvesting the females. Because then we could take all our egg returns and split it out by males and females and know what our separate exploitation rates were. Because the males at the time, we had a 45-inch size limit. You know the whole story. The females were being over harvested, and we couldn't prove it. Now, we had proof. Right after that, we had the hooking incident out here on Winnebago with that really cloudy year in [19]92. On the heels of that then is when we formed the Sturgeon Advisory Committee with the Citizen Sturgeon Advisory Committee to have a formal group that I could work with and we could discuss all the data and the information together, discuss problems together and solve problems together. In that way, build ownership amongst the people that are actually out there doing this.

PM: That is important.

RB: At the time, there were some people in my agency that said, "You're letting the fox guard the hen house type deal. You're trying to regulate the spears, but yet you're asking them for what they think should be the rules and regulations." I said, "No. I'm confident this is going to work." Because number one, people that do spear, they do have respect for the tradition of spearing. Some of them may think that we may have too many fish or whatever, but they all want to keep spearing going. The only way we're going to keep spearing going is to keep sturgeon going. So, if we got good information, we should be able to make good decisions and move this thing forward and we have been able to.

PM: So, information, it is incredible. It is an incredible story what we have now compared to 1990 as far as the hard facts are. Then I got to believe just educating these people, you can say you got the facts and they still do not want to believe.

RB: I don't even like to use the word educating people. Because when I hear people in government saying, "Well, we've got to go out and educate the public," I feel that's a little condescending because it's like we got to go out and teach these idiots what's right. My whole attitude is, provide good information. These people are intelligent enough that they'll be able to come up with a conclusion that's maybe similar to mine. Or I'll give them my opinion or my interpretation, but I can't make them believe that unless they truly believe it themselves. So, they're all adults. They're all educated people. So, I like working with them on a level playing field and work together with them. You don't always agree a hundred percent because there may be some other agenda item or agenda that worked there, a hidden agenda or something. But the vast majority of them, given factual, good, solid information, will come to a good conclusion.

PM: On the Upper River Lakes, it is just one thing that jumps out at me. There are these many adult females harvested. People will still go back and say, "No, we are taking those back [laughter]."

RB: [laughter]

PM: That is bad spearing up there. I just read some information, in 1998 on opening day out here on Winnebago, we harvested more adult females than we did in 20 years of all the seasons [laughter] on the Upper River Lakes.

RB: On the Upper River Lakes. Oh, yes.

PM: You documented that. It was just to comment on that. 2007 was the first year on the Upper River Lakes for that.

RB: Right, for the lottery.

PM: There are still people that do not want to even associate that they do not want to do anything about it. But I experienced it.

RB: Oh, it's a great fishery.

PM: It is like a dream. That is such a quality program. It is spread out perfect.

RB: Oh, it's just a quality program. There's big fish up there and there are black egg fish. The opportunity for taking a trophy up there is pretty high in an absolute quality atmosphere. There's nothing wrong with taking a trophy as long as we don't take too many. We've got it really well controlled, I think. There's no place else in the world that you can go and have those kinds of odds. It's fun enough going out here on Winnebago and doing it.

PM: It is just doing it best.

RB: But this is like the ultimate dream trip to go someplace and have those kinds of odds to be able to see fish like that. Have a 75 percent chance if you're fishing on Poygan, that you're going to spear fish. But I haven't figured out the odds of spearing a big fish. I could do that too, but that might aggravate some people [laughter].

PM: A lot of them. Well, I did it myself. I know that I have seen about twenty-five sturgeons on Upper River Lakes this year. I know that there were only maybe two of them over 60 pounds. I know back in, I think, two thousand, that was the last year. It was one of the years it was over. But I know I have seen a number of bigger ones there. You have to sit and first you need to know what an actual big one looks like [laughter].

RB: Average weight, yes.

PM: I don't think people see them, "Oh, that is a big one."

RB: Yes, they look a lot bigger in the hole.

PM: Just to see opening day out there, just to look - I did not have a tape, but my wife had a tape. Steward had a tape, my brother-in-law, and a number of people. But then to look outside

and there were a number of fish on the ice. Then the question was, "Well, do you think it is going to close today?"

RB: [laughter]

PM: I am sitting there looking and I am thinking, "Man, they are nailing them." I am going, "Well, you can take your chances. You can pass them out."

RB: Yes. It went 10 days.

PM: Yes. It was unbelievable.

RB: It was a great fishery. I'm very proud of that fishery, not just for myself, but for the committee. All the stuff the committee has done that everybody has done.

PM: Everybody. Then I tell people this, I am starting to think, "Should I be telling this to many people?" There is a fine line.

RB: Last year, we had 2,795 people apply. This year it was over 3,500 that applied.

PM: It was that much.

RB: Yes. Almost a thousand more.

PM: That was a lot.

RB: It'll probably get to a point level off, it'll stabilize.

PM: I hope so.

RB: Because not everybody that spears out here is going to apply up there. But I wouldn't be surprised that it gets to half. That it gets to five thousand a year, then your chances –

PM: When you look at a bear permit, chances of getting a bear in Wisconsin, it is like 10 years. I think with last year's numbers, you are maybe looking at 1 out of 5 years.

RB: That may change depending on what we do with the harvest caps and all that over time.

PM: Do you see that? Well, actually, was it the adult females? It was really close on the Upper River Lakes?

RB: It was the adult females that triggered it. I'm trying to think. It was close on one of the other.

PM: I think males, yes.

RB: I think it might have been close on the males too.

PM: It was within the river.

RB: But that's how it's designed. We designed it that way. We designed it to maximize the harvest of males without going over on the females, and it worked.

PM: It was perfect.

RB: Yes, it worked.

PM: Just a beautiful season.

RB: It didn't take any fish off the lake because we were able to up the harvest caps. You still have five hundred females out here. The nice thing about it is that can close, but it's not going to affect what happens out here. Winnebago will more likely affect the Upper River Lakes than vice versa.

PM: It was just a dream to be able to go up. It always was. But then to go with that amount of days, to only open until noon, that was incredible. It was just beautiful. I know with a lot of your presentations you always say your number one goal is to preserve sturgeon. You always want the sturgeon. Then the next point is preserving the sturgeon season. Where we are at today, what is your biggest concern in the next coming 10 years and next a hundred years?

RB: Oh, probably environmental changes that might occur to the system that could negatively impact sturgeon such as aquatic invasives coming in that could somehow disrupt the food chain out here and the productivity of the system. The raw productivity probably isn't going to change as far as the amount of nutrients and the type of water that we have. That type of thing isn't going to change. But it's a matter of what the system produces. If he gets a mix of species out here that are not favorable to producing a productive food web for sturgeon, that could impact the ability of the system to sustain the population that we have right now. I don't think sturgeon will ever. Unless we just basically make unrestricted harvest open again, I don't think we're ever going to be out of sturgeon. I think we'll always have a fairly robust sturgeon population. But robust at what level? So, long-term environmental changes to the lake system and the impact that they might have on the sturgeon. But then again on the other hand, sturgeon have been around for 150 million years. They've been through and seen a lot more changes than we could probably ever imagine in their lake systems' natural changes. So, if there is an animal that should be able to handle that type of long-term change where you're changing ecosystem communities – which doesn't happen necessarily overnight. It may happen in a matter of years or decades or even centuries – if there is an animal that would have a good chance of handling it, sturgeon would be one. But that would be one thing. Then the other thing I think it's maintaining the spearing tradition and keeping that alive and keeping it going. Hunting and fishing in general, even though it seems like there's a lot of anglers and hunters out there and a lot of spears out there. The young people, it doesn't seem like we're having as much recruitment into these sports as we used to.

PM: Yes, we have seen that.

RB: Especially hunting. But who knows if it's going to happen with fishing. I think even fishing to some extent. Maybe it isn't so evident right around the lake here because it's such a big part of everybody's life having this lake right in your backyard or in your city. But that's one thing, is just keeping the tradition alive. That would be another long-term concern. In a hundred years, are we going to still have spearing in a hundred years? I hope so.

PM: You have played just such an incredible role. We have Sturgeon for Tomorrow and we have got a voice in that. But you have been our mediator to take our opinions. You got Sturgeon advisor. You have been the man to take it to the DNR and implement these ideas. What is going to happen when you are gone [laughter]?

RB: Well, Kendall will do it [laughter].

PM: Is he next in line?

RB: Oh, yes. Well, there's really no next in line necessarily.

PM: Once you retire, what is the -

RB: I can retire in less than 2 years, but I probably won't. I want to finish my Ph.D. and then apply that. I have been applying it already in the sturgeon work. But I'd like to apply that for a few years. But it's conceivable that by – well, let's see – 2010, 2011, I could be retired possibly. I hope though at that time that I'll be able to cut a deal with Kendall or whoever gets my job, that I can continue to work with sturgeon in some capacity. I don't think I'll ever get tired of it, but you never say never. It depends on what health situation, what the family situation, that type of thing, is too. The whole thing is a lot bigger than I am. I'm just one part in this whole deal. But what's really going to keep this thing going is we've built such a solid program. Then we, being the advisory committee for sturgeon, everybody that's involved in this, and that it's going to be hard for that to break down. Because it's got such a rooted foundation starting with the information that Gordy Priegel and Dan collected, which we built upon. Everything is rock solid. There's not a weak spot in the foundation as I can see it on this program. Things will come up and there'll be changes and there may be other challenges, I'm sure, that'll come in the future. But the program should be able to withstand those and move on. I don't have to be here to make that happen. There's a number of loose ends that I want to tie up before I do retire. That's my goal is to get these. Most of these loose ends are in our assessment program. The data trying to – even though we've got really high-quality data – trying to even make it better and set a template for a long-term sampling that will be absolutely completely reviewed right now as to whether there's any holes in it whatsoever. Or are we doing things we shouldn't be or are we not doing things that we should be doing and move from there. Whenever I do leave, whenever that is, whether it's 4 years, 5 years, 10 years, I plan on having this thing where pretty much it's going to just go. It's just going to happen.

PM: That is good to know. Because then, yes, we do have a good, fantastic foundation. A lot of that has to do with you, right?

RB: I feel like I'm one of the luckiest fisheries biologists in the world, truly in the world. To be able to have the privilege of working with this sturgeon population and with the people that recreate with this fish. Because really there's no other place in the world like this. This is it. To be able to do this kind of work with sturgeon, this is the only place.

PM: At the same time, I can say that we have been extremely lucky to have you. I know that there is a lot of work that goes into it [laughter]. It is incredible what you have learned.

RB: Fun stuff.

PM: You never did point out your high school. You finished just about top of the class?

RB: No, not the top. I hunted and fished too much.

PM: [laughter]

RB: I think I ranked thirty-third out of three hundred and some kids in the class.

PM: But you were very good. I know somebody that stood up in your wedding – I do not know who it was.

RB: Scott Zoellick.

PM: Scott Zoellick, yes, the artist. Said that you were very good at whatever you did.

RB: [laughter]

PM: But to get in the information -

RB: He's quite a bullshitter, though.

PM: [laughter] Hopefully, he will not hear you say this.

RB: [laughter]

PM: But to implement everything that you have and it went fairly smooth, I feel. I remember going to those town hall meetings. Have you ever received any threats?

RB: Not really. I've had a lot of people yell at me over the years. The only real bona fide threat was from the old posse up in Clintonville. They had a death threat out on all DNR people. We were notified on that. But I've had people get in my face and people yell at me and challenge my family history and things like that. But that's just whatever. It comes with the turf. You got to have a thick hide. You can't take it personal. It's hard sometimes.

PM: You have done very well just to be at those town hall meetings. I know myself just having

somebody come in there after all the history of sturgeon spearing and to say, "Well, you really should cut these seasons down." Any change is tough. But I honestly have to say that everybody knows when they step back and look at it, everything is for the good. It is quality what we have right now.

RB: I had not a town hall meeting, but a sportsman's club meeting one time at the Quinney Quencher. This was quite a few years ago. This was probably about right after I got the job. It was a snowy night. I'm driving over there with my old pickup truck. Lost both windshield wipers on the way because it was snowing so hard and I had them flipping so hard like that. They just flew off the truck.

PM: [laughter]

RB: I was late to begin with because I was a Boy Scout leader and I had to get out of my Boy Scout meeting first. So, I finally got over there and they had been drinking already for an hour waiting for me.

PM: It is always with influence.

RB: I got in there and my introduction was, "The guy from the DNR is here." That was my whole introduction. So, I got up front and these people were primed and ready to unleash. They started just yelling and screaming. Then that was at the time when walleyes were in the tank. Zebra was in the tank. Perch was in the tank. They didn't like what was happening with sturgeon. There weren't many happy people. This was 1991. Or maybe it might have been 1990, I don't remember. They were just all yelling at once. It's in a garage with acoustics and the noise and everything else. I stood up there and I thought, "What am I going to do?" I can whistle really loud. I whistled really loud. I startled them and I said, "I don't have to stand up here and take this shit. I drove all the way over here. If you want to talk civil, I'll talk to you. But if you don't, I'm leaving right now." They all got quiet. We had a great meeting [laughter].

PM: [laughter] You need to speak their language.

RB: [laughter] Yes. Haven't been back there since [laughter].

PM: [laughter]

RB: No, actually I have been. So, there's been a few like that.

PM: Well, anything else that jumps out at you? It was incredible. The chance to be able to talk to you out of this history project that is going on. It is neat to get all the history from years ago. But I know you know more about sturgeon than any person around. It is just great to be able to sit with you and all the information. The good thing that I got from you, and every bit of information you got, typically you get down on paper and try to give that to everybody. We appreciate that.

RB: I like to put the summaries together while they're fresh and get information out to the

people. Right after the spring season, typically that's the one main summary I put out each year. Information is the key to making good decisions. The whole business is just making decisions about what are we going to do with the fish community auditor. The sturgeon stock is just a component to the fish community. So, we can't even just think in terms of sturgeon. We have to think in terms of the whole community. But it's been an absolute joy to work with these fish and with these people.

PM: The numbers that we have out there right now, do you feel that they were ever that high at any given time in the history of the sturgeon? It is hard to say?

RB: It is hard to say. Although, they probably were at this level in the 1800s during settlement time. Let's put it this way, the lake system has a carrying capacity to support sturgeon fish. Given that curing capacity now is similar to what it was prior to European settlement, we could have had as many sturgeons in the mid-1800s as we have right now. Also, at that time all the natural spawning areas would have been accessible to the fish. But then we wouldn't have had all the manmade spawning areas. So, it's hard to say. But if you look at the history of sturgeon in general in Wisconsin - and much of that real dramatic history took place on the Great Lakes those populations were really robust even 1850s, 1860s. 1870s fishing started a little bit, but really wasn't until about the 1890s that it really ramped up. Over the course, actually, from the start of fishing to the end, in 30 years they decimated the population on the Great Lakes. Actually, the closure that we had here in 1915 on Lake Winnebago was a statewide closure of fishing for sturgeon or any harvest of sturgeon. That came after the horse was out of the barn for most of the sturgeon populations and the Great Lakes populations anyways. Winnebago and the other inland populations, in hindsight now we can see that they benefited more from that closure than the Great Lakes populations. Because the Great Lakes populations were driven to such a low level that even now after almost 100 years of having a closed fishery on the Great Lakes – if I said Upper River Lakes, I meant Great Lakes. On the Great Lakes, they're just beginning to show some signs of recovery in some areas. Just beginning with only dozens of fish spawning in some of these spawning streams. Whereas on Winnebago, there probably was commercial fishing. That picture from Goyke shows that there was set lining and probably a fair amount of effort. But apparently, it wasn't at a level where it drove it down close to extinction. Because a 15-year closure is a very, very short time to have a closure to try to rebuild the sturgeon stock. That's a little bit more than a half of a generation of fish. So, that'd be like if we decimated our walleye population out here, that would be like just closing the fishery for 3 years and expecting it to be a full bore when you open it up again. It's not going to happen. That tells me that we must have been in a halfway decent shape, but still a fairly sizable stock even though it may have been somewhat depressed. But sizable enough so that when a fishery opened in the [19]30s, we could sustain a fishery.

PM: You said carrying capacity.

RB: Yes.

PM: I know now we are at these numbers, and it is incredible what you see on Upper River Lakes and see this monster. When you go out here on a clear year, the amount you see is high. Some people's concern is, do we have too many?

RB: Well, the lake will let us know when that happens. I think we had our first clue that we're close to carrying capacity in 2005 when the fish were so skinny. That particular year the lake flies were down, the zebra mussels were down, and the shad were down. Even though zebra mussels are not a big part of sturgeon diet, they will shift to them if they don't have anything else to eat. It showed up as really skinny fish, which they bounced back from. Almost within a year, they bounced back because we had really good worms and shad the next year. But that tells me that we may be close to carrying capacity. Now, some of the mathematical models that I'm doing for my Ph.D. are actually going to let us peek into that a little bit to see how close to carrying capacity. The challenge will be what level do we want to keep it at. Then how do we keep it at a healthy level? So, I'm guessing that we're probably going to always want to keep it right about just a little bit under carrying capacity. Because once you reach carrying capacity, no matter what happens with reproduction or anything else, that's all the biomass that the system will support. That you can only support so many pounds of fish.

PM: So, you already have the hard numbers on the carrying capacity?

RB: Well, they're still going to be estimates. They'll be estimates. But the modeling will allow us to evaluate whether we're getting close to it or not and what actual carrying capacity might be as far as pounds of fish or numbers of adult sturgeon.

PM: It is so tough to determine that.

RB: Yes, definitely.

PM: One year you have shad, you have the red mussels.

RB: Well, then you're hitting it right on the head because there's going to be some variability. The system will vary from one year to the next as to how many pounds of fish that it can support. But that variability is going to occur within a certain range. So, it's that range is what you're really looking at of we can support this many pounds or this many pounds per acre of sturgeon in the Lake Winnebago system. We should be able to come up with a reasonable estimate of what that range is of pounds of fish that the system can support. Then know where we're at with our population.

PM: It has got to be incredible. Like you mentioned, it is the only place in the world. For this body of water to carry that many big fish – they are huge fish – to be able to support that is just mind-boggling. You take any body of water – well take Green Lake, for example – I cannot believe there is even close to that.

RB: Green Lake is an oligotrophic lake. So, it's not as productive as Winnebago. So, the pounds per acre in there is not going to be what it is out here.

PM: So, that all goes into effect how many miles is fed into the lake.

RB: Well, the type of watershed a big thing is the depth of the lake. The Green is a very deep lake. So, as a result, it gets a permanent stratification in the summer. You don't get the resuspension of nutrients from the bottom in that lake like you do here. Like today, we got a good, windy day. It's resuspending nutrients from the bottom back up in the water column that can goes into algae, which goes into zooplankton, which goes into fish. Your fish that eats the zooplankton, the fish that eat the fish. Sturgeon is more on a lower trophic level. It's a big fish on a low trophic level because it's primarily what we call a benthivore. It feeds on primarily red worm or larvae that live in the bottom. But it'll eat other things as well. It'll eat dead gizzard shad and it will eat some fish sculpins and other things that live on the bottom. But this is a very productive lake, Winnebago is.

PM: You have seen what they have over in Russia. If you had to draw up a diagram, that perfect scenario for sturgeon, is this it?

RB: I would say this is about as perfect as you can get for this particular species. Now, there's twenty-five different species of sturgeon. A really perfect habitat for lake sturgeon because you've got hundreds of miles of spawning river. Fifty, sixty, seventy different spawning sites. Absolutely ideal habitat for young stock in the first year and later years. They've got the Upper River Lakes that provide a juvenile nursery area for sub-adults. Then Winnebago with literally the entire bottom of the lake as a factory producing food for these fish. So, really, you couldn't have a better system for lake sturgeon than this. Where we have lake sturgeon in other waters in the state, mostly they're all the big river systems. Because they absolutely have to have a river. At a minimum, they have to have a river for successful spawning and young stock rearing. In Russia, the Russians call this type of situation where you've got the rivers going into a big lake, the big lake they call the fattening up area. Because they do all their spawning and young rearing in the river. But then they come down and feed on the abundance of resources in the productive big shallow lake. The northern part of the Caspian Sea where the most famous Russian sturgeon resources are, is very similar to this. It's a lot bigger than this, but it's very similar. It's shallower, lots of benthic resources, huge rivers like the Volga and others coming in there that the fish can run hundreds and hundreds of miles. So, I think the Volga, they used to be able to go a thousand miles upriver and spawn. Then all those areas of river are for young stock. Then finally, getting back down to the lake to feed and grow up to be adults.

PM: Will we see here any changes like the lowering of the water and now we see so much more vegetative growth on the edge, and you see fish like the bluegills. The perch are going crazy now and got the bass. That really should not affect them.

RB: No. That shouldn't affect them because those fish are all the really tight near-shore community type fish. Basically, where the vegetation is. Now sturgeon, they don't like vegetation. But the areas that are vegetated now that weren't 10 years ago but are vegetated now as a result of improvements in the water clarity in the lake, those areas before probably didn't support much of production for the fish anyways, for sturgeon, for anything. They were basically a sand desert, or they probably had some invertebrate life. But if you were just to take a cross section in the literal zone, say out from shore out to 8 to 10 feet of water before and be able to count all the different bugs and stuff that are living on the bottom or in association with that particular GPS point in the lake, with the vegetation out there now you're probably going to

have a thousand times more animals and bug life and different things that would feed into the food chain of different species of fish and possibly even into sturgeon than you had before. Before that productivity was being channeled was into algae. Now, it's being channeled not just into algae, but into other things. Plant life and other things that are benefiting the fish even more. The main sturgeon area is the center of the lake. That's basically where they get their nutrition, is from the mudflats. That's where they feed.

PM: That has always been the way for them.

RB: I think that's always been the way for them. Now, you're going to see fish in shore now and then, I would guess, that are wandering in there to feed on stuff or whatever.

PM: In the mudflats, basically is it over 90 percent lake fly larvae or is it not?

RB: Oh, yes. Well, there are several species. Actually, quite a number of species of lake fly out there. They're not just one. The one that everybody sees is the big, red one. But there are lots of other ones that the sturgeon will eat too. Oh, I wouldn't be surprised if there's at least a half a dozen different species out there, if not more.

PM: Of just lake fly.

RB: Lake fly.

PM: Really?

RB: Yes.

PM: Probably more.

RB: There might even be a dozen. There's a lot more than just one. There are probably three or four main ones. But then there's a number of other species.

PM: I always wondered that. The lake fly larvae, when you pull a sample of the mud out in the lake, you always come up with shorter. Sometimes you have shorter ones. Sometimes it is the big, fat ones. But those must be all different.

RB: Well, there's different species. Plus, there's different in stars for each one.

PM: Well, I think that just about wraps it up. I am trying to think if there was anything else from a historical perspective as far as overharvesting and as far as the illegal harvesting that set it back years ago.

RB: Yes, I would say it probably did.

PM: That probably peaked out in what year probably? In the [19]60s.

RB: Well, probably in the [19]30s and the [19]40s, I would say. During the Depression, people were still doing a lot of sustenance survival living mode.

PM: Survival living.

RB: Then during the war, law enforcement was probably a little bit scarce because a lot of people were in the armed services. So, that would have been a good time too for them. Plus, with food rationing and things like that during World War II. This is an aside, but it does have to do with just the history of sturgeon poaching. I think it applies to any kind of poaching, really. When my great-grandfather came here in 1880, there weren't any laws basically. You could go out and just harvested whatever you needed to eat to survive. That really was the mode, well, for hundreds of years really in North America up until about 1900 when they started passing natural resource or conservation laws, Teddy Roosevelt era, that type of thing. But people still felt it was their birthright to go out and harvest whatever they wanted because they and their ancestors had been doing it for generations. There were still a lot of people, even up through the [19]30s and [19]40s, that depended on what they caught to eat in a lot of ways. So, there's still a lot of people alive today that grew up. They were taught that as they grew up. But most of those people now are probably in their [19]70s or their [19]80s and they're too old to do it anymore. The younger generations coming on haven't had the real social or economic need to go out there and harvest in that manner. It's more of a sportsman's era now. You're going out for recreation. You're going out to get fish to eat, but if you didn't catch the fish you're not going to starve. So, I've seen it. Even in my career, I've seen a real change in attitude, more from just resource use to resource stewardship. I've seen that also just in the last twenty years here on working on sturgeon. Because when we first started looking at the problems in the early 1990s when the water began clearing up as a result of – we don't know for sure what – but we started a number of programs in the late 1980s out of the Winnebago Comprehensive Management Plan. This is going to be just a little side story. With the (sewing?) around the lake, with working with the counties on trying to prevent agricultural runoff, barnyard runoff, the federal program for Conservation Reserve Program for putting highly erodible lands into permanent cover, all that stuff had a pretty dramatic impact pretty quickly. We started seeing clearer water. So, in the early 1990s when basically the water cleared up and there were a lot of sturgeon out there that the population had been growing under the cloak of darkness for almost 30 years. The darkness being cloudy water. The peak of the cloudy water in Winnebago was in the [19]60s, [19]70s, and [19]80s. The population was allowed to recover from a pretty high harvest that occurred in the 1950s. But anyways, so when the water cleared up and people started seeing all these fish and spearing all these fish, we realized we had a potentially very serious problem on our hands with over harvest. There was, I believe at that time, sturgeon inflation. People felt that we had so many sturgeons. That what's the difference? Go out and hammer them. We got all kinds of fish. Man, we should be able to harvest more fish. That's when Kendall Kamke came up with his famous canned ham quote, who was in the Fond du Lac's The Reporter, the newspaper. I think it was the [19]90 or [19]92 season or something like that. Kendall said, "They don't seem to have any regard for the fish or something like that." He said, "They might as well be spearing canned hams." That was in the paper. Ever since then we called him Kendall Hambone. That's his radio name when we're working registration stations. But that was a concern that people had lost an appreciation for what it takes or never had or ever really gained or understood what it takes to sustain a fish like this. That you can only harvest maybe 5 percent of the stock every

year. There is a limit to how many of the system can hold. Sturgeon for Tomorrow started in 1977. They started because they wanted to stock the lake because they felt they were running out of fish. That there wasn't enough fish. Our surveys at that time had shown that we went from ten thousand legal fish in the late 1950s after some very serious over harvest in the 1950s. By the time the [19]50s were done, we only had ten thousand legal fish left in the system. A number of estimates over a course of a number of years in the late [19]50s, early [19]60s – which isn't very many – was that fish over 40 inches. By the late 1980s, that had grown to 36,000 legal fish in the late 1970s. But yet at the same time, people thought there wasn't enough fish because they weren't spearing that many. Their spearing wasn't that good. But if you go back and look at what the average water clarities were in the [19]60s and the [19]70s, it was terrible. Right now, maybe you will have 2 out of 10 really cloudy years. Back then they had maybe 2 out of 10 really clear years. So, basically, they mistook the poor water clarity and the ability not to see fish, they thought it was because there weren't any fish. But it was really the water clarity. What's really interesting is that when you look at the water clarity records over the years and match it up to what the harvest rates are, there's a break point. There are really low harvest rates, low harvest rates, low harvest rates, until you get to about 12 feet of water clarity. Then it shoots right up. There's a real break. It's not a gradual line. It's not linear. So, in other words, 3 feet clarity is going to give you this much, 6 feet's going to give you twice as much, 9 feet's going to give you three times, it doesn't work that way. It's 3 feet about this. 6 is almost like 3. 9 is almost like 3. But as soon as you get to 12, it pops off the charts. What happened in the [19]60s and the [19]70s and [19]80s, we didn't have many years over 12. Some of them were right under it, 8, 9, 10. But when you get to that 12-foot point, it just breaks. That's what happened in the [19]90s. All of a sudden, we started bumping over 12 on a regular basis, and the things took off. But in the 1970s, we had a lot of fish, but people didn't think we did. They wanted to stock fish. That was the answer.

PM: Although, it was still -

RB: That's always the answer when you don't have enough fish, is you got to stock fish. People I think are becoming more now informed or they have a better understanding or appreciation for the importance of habitat than we used to. Even in our own agency, we have a much better appreciation for it now and the importance of it before. We just know more now because of different studies and things that have been taking place in our own experience in managing natural resources. So, habitat is really the key. With a natural population like this, you don't have to stock, even though we are stocking a thousand fish a year in the Upper Fox River. We're learning more from those fish then it doesn't affect the population one way or the other.

PM: It does not affect the population one way or the other. It is just learning.

RB: I'm weaving from one thing to another here. But ultimately, that thousand stocked fish that we're putting in every year, they're marked. They carry a permanent PIT tag mark. Eventually, those fish will allow us to very accurately estimate what the natural recruitment is. Because once those fish start coming into the fishery, we'll be able to say, okay, well we got two hundred, 15-year-old sturgeon in the harvest. Out of that two hundred, 15-year-old sturgeon, we estimate that ten or fifteen of them were these stocked fish. Well, that means that 85 were natural. So, we'll be able to literally estimate what our natural recruitment is eventually.

PM: It will be pretty important.

RB: Oh, that'll be very important, yes.

PM: How many years are we away from seeing those fish come into the fishery?

RB: Into the fishery, probably really another 10 years before we start seeing any appreciable number come into the fishery. So, I could be dead by then. But we're laying the foundation for things in the future that people are going to really be able to benefit from like this. Sturgeon for Tomorrow pay for raising these fish. Then we're buying the PIT tags out of the sturgeon license money. That's going to be one of the benefits of that program. Another one will be, like I mentioned earlier, these fish are older than we thought they were. We've used some very sophisticated techniques, very expensive techniques, to figure this out. But we still don't have a definitive answer on all the ages, how long they are at age. Because this other method we used is just so expensive that we had to have a very limited sample of old fish to tell this story right now. But in time when these marked fish come back, we'll be able to take a fin structure off of them and we'll be able to read the rings on the fin bone and then look at the PIT tag. The PIT tag's going to tell us exactly how old it is. We'll be able to tell for sure then how old or how long these fish are by sex at different ages. Those data will be coming back to whoever the fishery's biologist is here for the next 100 years.

PM: Good information. It is exciting.

RB: It's going to be fantastic information. So, we're setting this thing up for people that are coming afterwards. They're going to have this and we're thinking in those terms. Well, they may not have it easy, but they're going to have information that does not exist anywhere else in the world on any species. Nobody is going to have this information, or very few people will.

PM: That is exciting.

RB: Yes. So, I wish I could live for another – who knows how many years – another 50 years. But that could happen, I guess. I might be over a hundred then [laughter].

PM: You just need to come up with a way to keep on living. As far as the hook and line, you do not hear too many people asking for that. Or do you see that ever in the future?

RB: Well, I would say that we shouldn't ever completely eliminate it off the table. I think we should always be open to providing recreational opportunities, harvest opportunities, if it's not going to be detrimental to the fish stock, either directly because of over harvest or indirectly. Because it's opening up some sort of mechanism that allows illegal activity to take place. So, I wouldn't say we should completely disregard it or eliminate it. For me, either way it works. If we did have a fall hook and line season or any kind of hook and line season, even if it's in the wintertime, move through the ice, all that would have to be molded in or blended into the overall harvest management program to make sure that we stay under our harvest caps. So, it wouldn't be extra fish. It would be applied to the existing caps. Also, whatever we do would have to be

enforceable so that we don't have illegal activities taking place that are going to be detrimental to the stock.

PM: Different people bring that up to me and I would see that there would be people coming from a long way.

RB: Oh, yes. Well, that would definitely grow the fishery. I don't know if that's a good thing or a bad thing. I'd say for now it appears that we're very close to getting to where we want to be with managing this fishery with a very nice harvest rate, but yet it's not over harvesting. A nice diverse fishery between Winnebago and the Upper River Lakes. I'd say we want to just sit back and watch this thing for a while before we open up any new adventures.

PM: Do you see the out of state licenses? Is that going up at all?

RB: I haven't heard that it's going to go up. No. It did go up once already.

PM: No, I mean the amount of people applying.

RB: Oh, the number? No, I haven't seen that.

PM: It really has not.

RB: No, it's been really stable. It's less than 2 percent. It's been that way ever since we've been keeping those records.

PM: No, I think it is the sturgeon spearing season and people just have no idea. Whereas if you would open the hook and line, you might get through the -

RB: If you open the hook and line, you'd bring another element in. There'd be a lot of people around here that'd probably be curious about it and try it and maybe really like it. But you would bring a lot of people in that don't spear right into the harvest. It could be done in highly regulated and – if it was on a river, for instance, in the fall – you could restrict it to a very narrow section of river. So, there's ways to regulate it. But I think for now we should probably just – that's my gut feeling anyways – is just to sit back and ride this horse right now while she's got good shoes [laughter].

PM: Good shoes she has.

RB: So, we'll just let her go for a while. I think it's really important to try to maintain this spearing tradition because it is so unique. It's something that really brings a lot of people around the entire Winnebago system together as one big family. In many respects, that's what makes this job a lot easier for me. Because dealing with a group that has one main interest or key resource, even though they may not always agree and there are people that disagree within the group, it's like disagreements within a family. You can deal with that.

PM: They all want the same result. They all want to see their children flourish.

RB: That's exactly right. They all want this. Maybe not all, but I'd be willing to bet it's well over 90 percent of the people will say that they want their kids to be able to do this and their grandkids and keep that tradition going. Then you're dealing with just one audience. You're dealing with one group or one group of cooperators or whatever you want to call them. Whereas if you're working on inland lakes up north, for instance, you've got a lake association here, you got a lake association here. Every lake's got its own different group, different issues, different problems, different personalities. It's like trying to put out a whole bunch of brush fires. Here it might have one raging inferno, but then you can call the reinforcements.

PM: Actually, what is encouraging is the new Sturgeon for Tomorrow group opening up later.

RB: Oh, yes. That's very encouraging.

PM: The only thing that separates a lot of them. There are people that view this as one system and that is a different system.

RB: Yes, that is encouraging -

PM: They need to come together.

RB: – that, yes, they're going to come together and that's a good thing. It's mostly young people. They'll have a good jumpstart to be a lot of enthusiasm and energy to be put into that chapter. The way that we've been doing things here – and again, the "we" is not just me, it's not just DNR, it's public in general – and what everybody's done, truly is looked at as a world model for sturgeon management. Now, places like Russia and Iran and other even European countries, they got different types of problems, biological problems, social problems, problems with their sturgeon stocks. But when it gets right down to it, this still is a model for the world for sturgeon management. Because number one, you got to have good assessments set up so you know what you're dealing with, how many fish you got out there, how many you can safely remove. That doesn't matter where you are. Here at Timbuktu, you have to be able to answer those two questions to have an effective management program. Then you have to be able to engage the people that want to harvest that fish. Again, I don't care if you're here in Russia or wherever, unless you can engage the people where they actually believe in the program and believe that the fish and them are going to benefit from the program, you're not going to be successful. We've been able to do that together successfully here. Other parts of the world where they got serious problems, they haven't been able to.

PM: It is tough.

RB: It's tough.

PM: Like you said, it is fantastic dealing with the people. That it is family-oriented, and everybody has got a common goal.

RB: So, we want to keep that alive and going as long as we possibly can.

PM: I feel like we came up with a lot. Back then it seemed like big changes. But now here, sitting in 2007 looking, what amazes me just looking back at what we had, we started the second Saturday, and we went to March 1st. You do not feel like you lost too much. There were half days I can remember sitting all day. I do miss that.

RB: [laughter]

PM: Sitting from sunup to sundown, that drags it out and it gets away from the fast pace of the world we are. Everything is speeding up where you used to be able to go out there.

RB: I've had a lot of guys come up to me at registration stations. Their buddies are already walking in the tavern. They'd come up and they'd go far around. I really like those 6 hours of spearing. I can't spear down that hole for more than 6 hours.

PM: It separated a lot of people.

RB: [laughter]

PM: It is more for the fast-paced world. But overall, it is fantastic. The changes that have taken place have all been for the good.

RB: We want to keep it alive.

PM: Yes, that is special.

RB: Because I'm sure there's groups out there that may think that spearing is cruel and prehistoric or anything.

PM: Yes, we have people that do.

RB: But we want to make sure that it's a part of the culture here, because it is. It deserves to be a part of this culture. I would say the vast majority of sturgeon spearers when they really sit down and think about it, hopefully they have respect for this animal and just understand. I think a lot of them have a better understanding that the average sturgeon in a harvest is probably somewhere around 25 years old. That fish has been around for a long time.

PM: That is neat. It is pretty special. For example, my wife, she does not hunt. She has not been out fishing the whole time, but sturgeon spearing she actually drew a tag last year for the system there. I had two of my sons in with her the whole time. I knew that eventually there was going to be one coming through. She actually had seen a couple of other ones before this.

RB: Yes, then she got one.

PM: Yes. The kids were sitting there, "Mom." I said, "Make sure it is the bigger ones."

RB: [laughter] "Watch well and make sure it's a big one."

PM: But it was big enough. But she wanted a good one. They went, "That one is bigger than the last one. The other one was bigger."

RB: [laughter]

PM: She was scared of me. It was 30 or so pounds. But that is fantastic. Up there or anytime out here too, a clear year, you see a lot of fish. It is just so family-oriented where the kids you cannot take them out on a deer stand and jumping around. You cannot. A lot of people are against guns or whatnot. But sturgeon spearing, it is really neat.

RB: That's why I just thought it was so important to capture the history of this because it's so important to the people around here. We need to document this. That's really this book the thing that'll really live on past this book besides sturgeon spearing, hopefully. But just where this all came from and the legacy of Sturgeon for Tomorrow of different people that have made a contribution to this sport either decoy carving or whatever, somewhere down the road. That there's such a wide range of different personalities and people and groups that contributed to this. That combined legacy will be captured in this book. A hundred years from now, your great-grandkids and my great-grandkids are going to pick this book up and they're going to look through that book and they're going to know where it came from, where this whole sport came from, and why they still have it today a hundred years later. Who was involved in it? How it worked and pictures. If we don't capture this stuff now and put in this book, it's going to be lost. It's just going to be an oral history that eventually who knows. Then this is going to preserve and help protect the sport, I think, for a long time down the road.

PM: Well, we got good footings like your always, so we got a good foundation. Things are looking bright.

RB: Yes. I did cement work for quite a number of years.

PM: It is all in place.

RB: Did a lot of really muddy footings. But you got to get all that mud and goo and everything out of there and get a good foundation there. We got that.

PM: Yes, we do. Well, I think that wraps it up. It has been a privilege. Out of all the history of sturgeon, your name will be there and rightly so.

RB: [laughter]

PM: Well, it has been incredible. We got a lot of people who care and fortunate to have an individual like you –

RB: Thank you.

PM: – that started in 1997. Hopefully, be around a couple years as far as the input and, like you said, another 10 years before we start seeing those feedback. I'm sure we'll have you in the line there [laughter].

RB: Oh, yes, hopefully. That was good, Paul.

PM: Well, I appreciate it, Ron.

RB: No problem. You got a minute? I can show you a couple of these.

PM: Sure.

RB: It's data that I'm working on. Really perfect habitat for lake sturgeon because you've got great –

Kathleen Schmitt Kline: Was that the owner of the bar?

RB: Yes.

KSK: What is his name?

Male Speaker: Waverly Richard.

RB: Bill. See, because I don't remember his last name. Kendall would. Hey, Hambone, what's Bill's last name in the bar here?

Kendall Kamke: I cannot think of it right now. I will work on it and get back to you. I think I got it written down in my calendar though.

RB: Okay. Thanks.

KSK: Then what was the harbor?

RB: That's Stockbridge Harbor Bar.

KSK: That is a nice place.

RB: Yes. It used to be one of these classic, old taverns. They tore that down and built this new place about 4 or 5 years ago. But they had an old dance hall next to it. Then we used to register to fish out of the dance hall.

KSK: Oh, really?

RB: Yes.

KSK: [laughter]

RB: Out there, they had a little coat room in the front of their dance hall. We used to sit in there.

KSK: [laughter] Check your coat and check your sturgeon. So, that is interesting to hear one of the tavern owners saying thanks for having your registration here.

RB: Oh, they all wanted it.

KSK: Yes. I never even thought of that. So, they have awesome business. I saw his hours. He was opened at 6:00 a.m.?

RB: Actually, I suppose it does bring some business in. But people are just out during the spring session and they're going to go to whatever their hangout is. I'm guessing that having a station does contribute a little bit to extra business. Because you get some tourists and onlookers that come around to see if they can see a fish.

KK: Bruch, Hambone.

RB: Go ahead.

KK: I am pretty sure it is Bill Schwartz, S-C-H-W-A-R-T-Z.

RB: Okay. Thanks.

KSK: Great. Thank you. (Wens?) must do banner business though.

RB: Oh, that'd be great. I talked to Sean the other day and I said, "Did you have a good season?" "Oh, this is great. It's one best. Just great season." So, he was just doing outstanding. Because there's enough fish coming in to keep people interested.

KSK: It seemed like there were a lot of spectators there. People stop by. They know that is a good place. Then they will go in and have lunch or something.

RB: Right. Go and have a beer or lunch.

KSK: Was all that included in that economic study that that one guy did?

RB: I believe so.

KSK: I have not read through that for a while.

RB: Although, I'm not sure. I don't know. They may have just interviewed spearers. So, there's another whole tourist element. But I don't know. I'm guessing that they probably did include it because they did a similar story for sturgeon viewing where they had an interview. They had to send sturgeons to the general population. So, they may have just taken samples from some tourists or something. I'm not sure. I just don't recall what they did.

KSK: Ron, how did you get involved with sturgeon?

RB: Well, actually I've been involved with sturgeon since as far back as I can remember. Because where my family's originally from up in Butternut, the Flambeau River is up there. That has a sturgeon population. When I was a kid, I didn't grow up there, but I spent all my summers up there. My dad would take me fishing up there in a lot of the rivers. Every spring when we were walleye fishing, we'd always hook in some sturgeon, or we'd see sturgeon jumping. Or my dad would take us up by the dam. We were just little. There are two things he'd take us to see, the bears in the dump and a sturgeon at the dam. So, I was exposed to them pretty young. Even every once in a while, we'd even catch him and take it home you illegally. So, they always were an interesting fish for me. Then I started working with DNR in March of [19]77 up in Marinette. The Menomonee River is up there. They did some surveys. They survey the population in Texas every 10 years. Well, it happened to be [19]78 was the survey year. That was the same year I got married. So, the week before I got married was the week they were doing the shocking survey on sturgeon on the Menomonee River. I was up there the whole week running a shock boat and handling fish and taking fish and doing all that stuff. I was an LTE at the time. But I had such a blast. I was all sunburnt, never got my hair cut, nothing. I just was having so much fun. I just got home in time to go to rehearsal dinner on Friday night and got married on Saturday. I looked like a hippie.

KSK: [laughter]

RB: My hair was so long and I'm geez. I look back at it now like, wow.

KSK: [laughter]

RB: But, boy, I sure had fun with sturgeon that week.

KSK: Your wife must have been like, "Oh, my God."

RB: [laughter] She's got a cartoon that shows a guy sitting with the remote and a couple cans of beer and his head is a sturgeon [laughter] and he's watching a football game. She's standing there in her apron with her hands crossed like this, hanging out to a wooden spoon or something and says, "When we got married, I thought you said I would be marrying a surgeon, not a sturgeon," or something. "I thought you said you were a surgeon."

KSK: [laughter]

RB: That is what it is, I think a sturgeon head.

KSK: Did you ever spear one?

RB: No. I've been out there a couple times, but I've never seen one. I'm usually too busy working. So, I don't get a chance to go.

KSK: I cannot imagine going out there for 55 years. "That guy's dad," right? That is what he said?

RB: Yes.

KSK: [laughter]

RB: So, I've always pretty much had a passion for the fish. It's always been really interesting. I had never dreamed in my wildest dreams I would be working with them like this.

KSK: Really?

RB: No.

KSK: So, it seems like there is nothing else you would rather be doing. Are you pretty happy with -

RB: Oh, yes.

KSK: It seems like a dream job for you.

RB: It is. It's definitely a great job. There are only twenty-five species of sturgeon in the world and there's only so many populations and there's only so many jobs where you can actually work to manage a viable fishery with sturgeon. When you start narrowing wildlife down, this is almost a unique job in the world. There are only a couple other places where they have fisheries and this type of a management program and good quality [inaudible]. It's really unique. There are probably not even six positions like this in the world. So, I feel very fortunate. Especially very fortunate to have had such great predecessors, Dan Folz, and others who really laid the groundwork for what we have today.

KSK: 10:50 a.m. traffic radio [laughter]. Did you know right from the start that you were going to have to figure out a way to get the public involved in a good way?

RB: Well, definitely, yes. Because in our business and managing resources, we're not just doing it for the resource. The only reason we're really doing it, or are able to do it, is because people have an interest in the resources and they're willing to put money into that interest either by buying licenses or some other tax. You have to have a political support to have a program. So, you better involve these people somehow in the program, so they have some ownership in it. Otherwise, you won't have your support. Now, that doesn't mean you have to give away the farm if they want more fish. But I've found that the vast majority of people if you give them good information and give them a solid process where they can be genuinely involved in that process, that nine times out of ten they'll come to a very good conclusion or decision about what's the best thing to do.

KSK: I think I have especially seen that in Wisconsin.

RB: Well, really?

KSK: To me it seems like Ducks Unlimited has always been -

RB: Yes, Ducks Unlimited.

KSK: Things like that.

RB: Turkey Federation and Whitetails Unlimited. Yes, there are a lot of groups. Although there are probably groups like that all over the place, but I think what's key here is that we actively engage those groups in the management program. It may not even be in all of our management programs in our agency, but we've worked really hard in our fisheries programs to engage these people to make them a partner in what we do, a true partner. Because that word is tossed around a lot by politicians and administrators. A true partner. I even hate to use it because it's overused. But the people know that they have a voice. But they also know that personally that how I approach it, if somebody is just screaming that they want this or that, I'm not just going to bend over and say, "Well, go ahead and you can have this," or knuckle under. But there's not a good scientific reason or a sound information behind the decision. So, I figured that's what I get paid to do, is to gather the data, provide tabulation and analysis and my interpretation of the data. Provide that same data and analysis to our Sturgeon Advisory Committee. Then we collectively come to a decision about what issue are we dealing with, what options or solutions do we have and how do we proceed? You're not always going to agree all the time. But we've always been able to come to an agreement on the best course of action. So, even though some may not like little parts of it or whatever.

KSK: I think overall though, I have always felt like people in Wisconsin ensure [laughter] there are always exceptions. But a lot of people in Wisconsin get the idea that sturgeon, deer, whatever, it is a public resource. That it is their right to be able to have a share of that public resource. But damn it, they want to make sure that it is going to be there for them. They do not want somebody else to take it away from them or from their kids later on. They want it to be there. So, as much as they love fishing or hunting, I think that they can get that idea that something has to be done, otherwise it is going to be gone.

RB: Even in my career or in my lifetime, I've seen an evolution of attitude by sportsmen, hunters, anglers, harvesters from an attitude of it's my God-given right to go out and harvest whatever I want. Which I believe the foundation for that attitude was from the years when they actually could do that for free. So, the years where it wasn't legal, it's what they needed to do to survive. To the point where they didn't need it to do it to survive anymore, but they had been doing it, or their fathers had been doing it, and they felt like they still had the right to do it. To the point now where those people are told not to do that anymore and there's a new attitude where they realize that they just can't do this kind of thing. Or the resource can't tolerate that kind of exploitation or pressure and they are concerned about the future. It's just in my lifetime I've seen that whole thing. There's a lot more stewardship now, like you just said, as a resource.

KSK: Because they want to be able to keep hunting and fishing.

RB: They want their kids to be able to do that and their grandkids keep on with those traditions.

KSK: It is a big part of culture in Wisconsin and a lot of places. But it is really.

RB: One of the things that really helps us out in our program too, and you've seen it at every station that we've stopped at, is we work really hard to try to develop really personal relationships with the citizens that we're working with. Not that we're patronizing them, but we're sincerely interested in them, and we take the time to get to know them. We take them out on our survey, so they get to know us. That really means a lot. I don't know if we've ever talked about this satisfaction triangle for public resource management decision making.

KSK: No.

RB: Myself and a number of other people, we actually published a paper on this a number of years ago.

KSK: Really?

RB: The three-sided triangle is a simple model. One side is the substance of what you're making a decision about. The second side of the triangle is process. The third side is relationship. You got to be concerned about all three of those to get to an effective decision that is acceptable to everybody, an acceptable decision. So, the analogy that I use when I talk to groups is if I came home today and I told my wife, "As soon as sturgeon season is over, I'm going up north for 2 weeks. I'm going ice fishing."

KSK: [laughter]

RB: Well, she doesn't really care if I go fishing. She likes to see me do those kinds of things. So, she's not all that concerned about the substance of the decision. The process was terrible.

KSK: [laughter]

RB: The only thing that holds it together is our relationship. So, if you're short on any one of those three, the other two might help you show up. What it often falls back on is the relationship. If somebody trusts you or respects you or knows that you're not shyster or whatever, that will help pull you through on the other two if you're short on the other two. All of the public involvement stuff that we do with the attention to all three of those. But this relationship is one that really is important. It's not a patronizing relationship. It's sincere, true. When you are really interested in that person or what they're doing, you show them that.

KSK: Have you ever had to step in and mend some troubled relationship?

RB: Oh, yes. Like any relationship, you can't just establish it and walk away from it. You got to constantly be paying attention to it. People that you think you've got a good relationship with or that you could weather some tough times, if all of a sudden you don't make contact with them for 6 months or a year or whatever, and then you show up on their doorstep when an issue comes

along, it's like, "Well, where were you when I needed you?" You got to just stop in like when you're stopping in taverns or bait shops or just to BS a little bit with people. Just talk a little bit and find out what's going on and how are things going and problems that you be having and things like that.

KSK: That was the shanty count?

RB: Yes, that's pretty good. Last weekend it was only 3,600. Well, we can go and see what Bob's up to here.

[end of transcript]