

Oral History Cover Sheet

Name: Jim Reynolds

Date of Interview: October 21, 2001

Location of Interview: Phone Interview

Interviewer: Mark Madison & Alan Temple

Approximate years worked for Fish and Wildlife Service: 1966-

Offices and Field Stations Worked, Positions Held: Fishery Biologist in limnology program, Great Lakes Fishery Laboratory, Michigan (1966-1972); Cooperative Unit Program at University of Missouri (1972-1978)

Most Important Projects: electrofishing

Colleagues and Mentors: Wendell Ogden, Larry Coles, Ken Carlander (major advisor at Iowa State)

Brief Summary of Interview: Mr. Reynolds talks about early life, going to college, getting married, and how he got started with electrofishing. He mainly talks first getting hired at the Great Lakes Fishery Laboratory in Michigan and working in the Cooperative Unit Program. He also discusses electrofishing and how he got started with that, writing several papers and it, teaching electrofishing courses at the Fisheries Academy, and about electrofishing technology.

MARK: Alright this is looking good. And Jim, usually the first thing we have you do is say and spell your name, and this is for the transcriptionist.

JIM: Okay, my formal name is James B. Reynolds. So that's JAMES, middle initial B as in boy, Reynolds, REYNOLDS. And I go by, informally, people call me Jim.

MARK: Okay. And then the other I have to ask you because you're not here in person to sign a form is are you okay if we do a transcript of this oral history and share it with researchers?

JIM: That's fine, that's the purpose of the whole thing as far as I'm concerned.

MARK: Yeah. I'll mail you a paper form to sign when I mail you the transcript out for you to review, but that's just a formality so we can transcribe it. Now we can get to the real questions, and the first one's an easy one. When and where were you born?

JIM: Okay, well I was born in 1939 in Ypsilanti, Michigan which is near Ann Harbor. And just as a little bit of extra information, my parents were from southwestern Pennsylvania, a city called Washington. And they married right out of high school, and they moved to Michigan so my dad could find work because employment opportunities at that time were much better relative to the automotive industry. My dad actually worked at a number of different jobs, and we remained in Michigan, well I was born there and then my sister was also born there. And then we returned to Pennsylvania when I was about eight years old. And so I sort of consider myself from being from both Michigan

and Pennsylvania even though I was born in Michigan.

MARK: Okay, and what was your post-secondary education?

MARK: I went to school for my bachelor's in wildlife management at Utah State. My parents wanted me to go to Penn State and my grandfather wanted me to go to West Virginia. So I, being a good obedient youth, I went to Utah State. At the time Utah State was one of the few schools in the country that actually had training in wildlife work per say, as opposed to most schools having training in a sort of mix of biology and agriculture. So I went to Utah State; that was 1957 to '61. In '61, by then I was married and had three children, or sorry, I was just married; had been married just a year. We moved to Ames, Iowa and I went to Iowa State for both my master's and my doctorate; I was a student under Kenneth Carlander. And we were there from 1961 to 1966, and the first three of our six children were born in Ames. And then from there, of course, I started my career.

MARK: Okay, let's to there. When did you first start working for the Fish and Wildlife Service?

JIM: Well I was still in graduate school, I was still working on my Ph.D. when I was contacted through my major advisor, Ken Carlander, by a fellow at the Great Lakes Fishery Laboratory in Ann Harbor. And he actually came to Ames to interview me, we just simply didn't; really, people in my time coming out of college really didn't fully appreciate how easy we had it in terms of getting employment. Many times, people coming out with a master's or a

Ph.D. would pick from anything from three to five or six job offers. And that was my case as well. I had three job offers and this fellow came from Ann Harbor and interviewed me and I was most interested in that job because it was a job as a fisheries limnologist and that was very appealing. The other reason, of course, was that it was back in Ann Harbor close to where I was originally from. So in 1966 I joined the staff there and in those days it was part of the Bureau of Commercial Fisheries, which was a sister agency to the Bureau of Sport Fisheries and Wildlife in the Fish and Wildlife Service.

MARK: And what was your first job with them?

JIM: I was classified as a fishery biologist and I was a member of the limnology program at the Great Lakes Fishery Laboratory.

MARK: Now we're going to switch over to the technical end and I'm going to let Alan ask some of these questions because he knows so much more about it than I do.

ALAN: Maybe. Well Jim, here's a good question and I think it's pretty interesting I've never asked you this before. When were you first exposed, maybe that's a bad word, when did you first use electrofishing?

JIM: Well I was introduced to electrofishing as part of a wildlife technique course at Utah State, and that was when I first even knew about electrofishing. And that was a very brief encounter on a single field trip to a stream near Logan, and I hardly even remember it. But then when I ended up

as a master's student at Iowa State, my thesis topic was "The Life History of Small Mouth Bass in the Des Moines River." Which it's a tributary, of course, to the Mississippi and in central Iowa it passed near Ames. And the reason that my advisor wanted me to work on the topic was because the Des Moines River was considered marginal habitat for small mouth bass. He felt it was important to understand the distribution and how small mouth bass got along in such marginal habitat. And our method of choice was electrofishing because there were a couple of students working as a team on the Des Moines River and the single method that would achieve all of the objectives was boat electrofishing. Our boat was a Jon boat and it was a very primitive set up. We had a two kilowatt generator, and then we had the booms were made of 2 x 4 lumber that basically were strapped to the front end of the boat. We used house construction wire that went directly from the generator out along the booms to copper pipes that were hanging off the end of the booms. There was no safety railing, and our safety, there was no control box, the wiring went directly from the two twenty AC output to the water. And our cutoff switch for the power was a piece of rope that went from the generator to the guy that was running the outboard and if we need to cut it off, he grabbed the rope and pull on it and that would cut off the generator.

MARK: Quite a safety device.

ALAN: Yeah, innovative.

JIM: Yeah, I mean, it makes me break out in a cold sweat when I think about it. My father came out to, this is just a little antidote, but my mother and father came

out to visit us, you know they were grandparents. And he happen to come out at a time when the guy I was working with on the river wasn't available and so I asked him to go along. And I put him up in front of the boat with a dip net, and as we were coming down a set of rapids where rocks were jetting out, we just nailed a rock right in the front end of the boat and it just stopped us cold right in the middle of these rapids and my dad flew out over the front end of the boat. And he had enough presence of mind to stick his arms out and catch himself on the booms before he went into the water, and of course by then I had the power cut off and he got back into the boat and he said, "Take me to shore," and he said, "I'm never doing anything with you in the field again." I think he thought he totally failed as a father. [Laughing.]

MARK: Oh, that's a good story Jim.

ALAN: And that's all before Coffelt, I guess, wasn't it?

JIM: Yeah, that would have been in 1961 and 1962, those summers and that was well ahead of any kind of commercial equipment.

ALAN: Yeah. I was thinking [unintelligible@11:11] somewhere around the mid '60's but I don't remember if that's quite right.

JIM: Yeah, that's about right.

ALAN: Wow. Interesting. Everybody's on their own then.

JIM: [Chuckling] Right.

ALAN: I have something similar, but I'll have to tell you that sometime.

JIM: Okay.

ALAN: So then, Jim, when did you first start teaching electrofishing courses of any type and what were kind of the circumstances around that?

JIM: Well I had to think carefully about this, but really the first time I taught an electrofishing course was for the Fisheries Academy, which is the precursor to NCTC, and that was in 1980 at Marquette, Michigan. And it was at the invitation of Wendell Ogden, who I believe was, I don't know what his exact title was but Wendell was the Director or head or Chief of the Fisheries Academy. And he already had a couple of instructors, but one instructor basically had to stop instructing because of other commitments, and these were all employees of the Fish and Wildlife Service and so Wendell contacted me because I had published several electrofishing papers. And what you need to know is that after I left Iowa State and went to the Ann Harbor Lab, I didn't use electrofishing from 1966 to 1972, but in 1972 I joined the Cooperative Unit Program, still with the Fish and Wildlife Service, and I went to the University of Missouri in Columbia and I was there from '72 to '78, and it was there that I really got into electrofishing seriously. And as a result, I had a number of master students do electrofishing studies. And I was one of the few in the U.S. at the time that was actually doing electrofishing studies and that was why Wendell contacted me. Larry Coles was my co-instructor and I didn't know Larry at all, except, of course, got to know him as we taught

that first course. And Larry and I were both very nervous because I had never taught a course before and there was a lot I didn't know about electrofishing. And Larry was nervous because he didn't know who I was and whether I was going to cause him a problem or what. So we were both kind of nervous about each other.

ALAN: [Laughing] That's pretty good. Okay, that's interesting. As Larry found out, you were a problem, I guess Jim.

JIM: Yeah, we've always been a problem for each other.

MARK: Jim, do you know Wendell just lives here with us?

JIM: Is that right?

MARK: He's right here in Shepherdstown. He's very active in the Friends of NCTC, he's a great guy. You know, we've never done an oral history with him; I see him maybe once a week and we'll catch him next after we catch you and Larry.

JIM: Well be sure and give him a fond hello from me; I sort of lost track of him. I knew he was still in the area and the last I heard he was growing grapes and making wine; he had become quite involved in that.

ALAN: Yeah, he was and then I think after retirement that was too much work too.

MARK: He's just going to drink it now.

ALAN: He's just going to drink it, yeah. So he's definitely seen the light [laughing].

JIM: That sounds like Wendell.

ALAN: Yeah, he was astute, definitely. So back at that time, Jim, in 1980, late '70's, early '80's, what was the state of electrofishing as a technology then?

JIM: Yeah, I had to think about that too. Commercial equipment was really just getting started. Even though Coffelt started up in the 1960's, it was a very slow start through the '70's. It wasn't until into the '80's that one started to have a certain amount of choice, but Coffelt was clearly the leading manufacturer; they were best known. And they had several different kinds of backpack and boat units, probably the most, best known, was the so called VVP-15, which was very popular back then. Joe Coffelt was the owner and he was an electronics engineer that got interested in electrofishing and got into it. Also, the University of Wisconsin was developing backpack shockers that were based on prototypes that had been developed by the sea lamprey program of the Fish and Wildlife Service at Marquette, Michigan. They had their own in-house electronic shop and they had built a backpack shocker based on the characteristics of, the life history characteristics, of larva lamprey. And they had been so successful that for [unitnelligible17:33], by sampling larva lamprey in tributary streams, that they contracted the University of Wisconsin; it was their electronics laboratory and a fellow by the name of Burk O'Neill was the person in charge of that lab, and they developed those. So those were the two primary sources of commercial equipment back then. And they were very robust, but had very little in the way of choices; they were solidly built equipment but you didn't have much

choice other than an on/off switch and a voltage control.

ALAN: Did Burke at the University of Wisconsin provide the backpacks to sea lamprey up there do you think, or did they make their own and then said, "Hey, look what we're doing." And got with Burke.

JIM: Well they made their own to start with, and they were quite successful with it. And I think basically they decided to commercially produce.....

End of interview.