Oral Interview With
Richard Vincent
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Dick Vincent is a 30-year employee with the Department of Fish, Wildlife and Parks.

AW: Dick, let's start by where you were born and where you grew up.

DV: I was born in Bozeman in 1940 and grew up in the Gallatin Valley. My father decided to take up mining and moved over to the Deer Lodge valley and we lived in the Garrison area from 1948 through 1958 when I graduated from high school. I lived there another year and then decided to go to school. So basically, if there's such a thing as a native Bozeman area person.

AW: You went back to Bozeman for school then?

DV: Right, I started school in 1959 after being out of school for a year. Graduated in 1963 with a bachelor's degree at that time it was Montana State College.

AW: And how did you get started working for the Montana Fish Wildlife and Parks?

DV: The first time I started to work was in 1960. I worked as a summer laborer in Glasgow for Cliff Hill, the manager of that area. I also worked in region two and region one the first three or four years when I was going to school. I worked there in the summers.

AW: I guess I can remember you as a summer employee when I was the fish manager in Missoula. You went back to school for your master's then?

DV: Yeah, I went back to school in 1964. I skipped a year between Master's and Bachelor's

program. Graduated in 1966 with a master's degree and started with the department.

AW: Your job, first permanent job was in Bozeman?

DV: Yeah, the first permanent job was actually stationed in Bozeman. I've been in Bozeman my entire career. Bud, who was the district manager at that time, hired me to work on large rivers to develop electrofishing gear and fish population estimate techniques.

AW: I remember that myself as well. I was chief of fisheries at the time and up until this time every region had experimented with their own method of trying to shock large rivers. It was a sideline for each fish manager and none of them had come up with a good solution. Finally decided that it should be a primary job of one person and that was you.

DV: Right, basically, that's how we started all the fish population estimates in the region, by experimenting with various electrofishing gear, boats, electrodes, and population type estimate systems. The first estimates, quite frankly, in 1966, were just experiments to see if we could do such a thing.

AW: You changed the gear and the method too. I remember at that time we walked back and forth between 300 - 600 foot sections of stream with electrodes. You changed the whole idea for big rivers.

DV: Yeah, basically, we went to, rather than a vacuuming system, where you just electrofished everything out, we went to a mark and recapture system, which involved long sections of river. In many cases like the Madison and the Yellowstone, three to four miles of river were actually electrofished and estimates made on very long sections of rivers. Made by the mark and recapture, where fish were marked and then over a period of a week or so you returned and did more recapturing and marked and got the estimates. And frankly that was sort of the beginning, as I understand it, in Montana, of estimates in general and particular in large rivers where we had little or no data. Most of the data we had prior to that was much like Art described where we had a count more than an estimate of the number of fish. You were restricted to areas that you could walk.

AW: And your estimate was for that piece of stream? Now your method didn't use block nets?

DV: No block nets. In fact, we used the concept that you use along the section, the edge affect of a fish escaping either up the start of the section or out the end of the section was minimal. So you really didn't worry about that. Whereas with the method where you extracted all the fish or did a fish count, you did a block. It would lower your estimate. This technique discounted that because the edge affect was so small in relation to total population. The few that would escape were of little or no importance.

AW: You developed the gear and the method that changed our whole picture?

DV: Interesting enough, I suspect there were a lot of embarrassing statements made about the fishery in a river when you really don't know what's in there. You hear a lot of complaints or compliments on how good or bad a fishery is. If you don't know what's in it sometimes your guess isn't much better than the fisherman. So these techniques and estimates gave us the ability to have some real insight into what was going on. We started looking at the Madison River on three different aspects. First what effect river flows had on wild populations. I think that most biologists first thought that poor flows meant poor fish populations. But we were probably not able to document that without this technique. On the Madison we did so, and my memory serves me right, about 1968, Bud Gaffney and myself sat down with some information with the president of the Montana Power Company, which operated reservoirs on the Madison system. We illustrated to them that if they would change their flow regime we might well see improved trout population throughout the entire river. What we were seeing with the fish population estimates, when the power company stored water too early, like February, March or April, prior to snowmelt runoff period, they'd often dewater the river up to 50 percent resulting in heavy losses of brown trout and rainbow trout. And we felt significant losses of adult trout. We asked them if given this small piece of information if they wouldn't readjust their flows. I think, frankly without estimates and without this information they probably wouldn't have been very benevolent, but they were.

AW: I remember the meeting and I was quite impressed with how cooperative they were. It was your data that did it.

DV: I felt our data, if we were relying on just what we thought, was not much better than what many anglers believed. I think I remember a statement such that well, data will fly, but opinions don't.

AW: You also had good information on the quality of the SCS snow surveys. I remember you showed the company that it wasn't asking them to give up water; in most years it was just a question of storing at different times. They didn't have to lose any power generation.

DV: Yes, actually as it turns out, not only was that true but they were actually able to do a better job to manage the system. Often in years where they looked out the window and said well there's not enough snow, we'll hold water, it turns out that looking out the window wasn't very accurate and they would over-hold. Then they'd have to spill huge amounts later in the spring and then often vice versa was true, it looked good from the operator's viewpoint out the window but actually there wasn't much water and it was a shortfall. I think we provided them an avenue for a better management of their system. They didn't lose anything, quite frankly and I think that was the convincing factor to them.

After that occurred then you found some other things that began to amaze us. As I remember about the fish populations of the Madison.

DV: Right. We figured after we got the good water flows everything would be fine and the populations of the river would respond. But interestingly enough that wasn't totally true. The area from Madison Dam to the mouth actually did respond quite well to improved flows. I think populations increased nearly 50 percent. But the area that was most popular to anglers which was from Ennis Dam upward to Hebgen showed little improvement except for very small fish. It did show improvement but these small fish never manufactured big fish so we were puzzled as to why good flows really helped the lower river but had no real affect on the heart of the river, which was the middle Madison. So we proceeded to continue to gather information and quite frankly, we looked at various factors like maybe the middle river was over-fished versus the lower river; maybe there was a pollutant; maybe there were some other factors controlling the middle river that we weren't aware of; quite frankly it came down to one factor. The middle river was heavily stocked by the put and take type of fishery or catchable fishery whereas the lower river being it wasn't as interesting to anglers wasn't stocked; and we posed a theory that stocking of catchable rainbow trout could be harmful to wild trout populations. Thus we set up a study and that study involved not stocking about a 10-mile section of the Madison River near Varney Bridge. And conversely stocking a section of the small spring creek where we had more population data and which hadn't been stocked for a long period of time, to see how the population with stocking compared to the no stocking in the Varney section of the Madison River.

AW: An experiment set up to test your hypothesis on one part of the river you'd think wouldn't cause any great controversy, but that idea was wrong, wasn't it?

DV: Yeah, I never realized if you set around today whether you stock a water or don't stock a water and then look back 20-25 years, how controversial it was just experimentally not stock 10 miles of a river. It was unbelievable; the reaction by the public was more than I thought it might be. There were people that would take all means to protest what you were doing. Often an electrofishing crew would stay in a small town like Ennis and West Yellowstone and we were unwelcome visitors, quite frankly, just because we were doing such a study. Our tires would be messed with, our boat trailers would be messed with, and verbally abused various times at various places.

AW: Hard to have a public meeting when you're trying to live in that community and do your work.

DV: Right. Actually whether you were eating a meal or playing pool in a bar in the evening, whatever your occasion was to be in the community, you were not welcome.

AW: Planting catchables was so ingrained in the public at that time; of course, we had pushed it that way 10 years earlier when hatcheries planted small fish everywhere and realized it was ineffective, we decided if we were going to plant anything it has to be a catchable size. So we pushed the hatcheries into it and people were happy and couldn't believe anything was

wrong with it. I was amazed that they would object at that point. You weren't saying this was the solution, you were saying we want to find out.

DV: Right. We weren't pointing fingers. We were just trying to find out what the cause of the low population was.

AW: It was controversial enough from my opinion as fisheries chief at that time the permission to stock the Varney section had to come from the fish and game commission. There was something we were not allowed to do ourselves, publicly controversial. At one point I was asked by one commissioner if it didn't work will you quit. It's an example of that the public didn't understand what they were asking.

DV: I think many of the public perceived we were trying to prove a point. Actually what we were doing was try to find out what the problem was. We had to eliminate one factor that clearly stood out as a highly possible problem. In order to find this out we had to go through the study. It amazed me; people didn't want to tell you anything. I remember motel owners and people in restaurants and gas stations thought they would be out of business in no time. They feared if we quit stocking even small sections, the public would no longer come in.

AW: They were afraid they were going to get hit in the pocket book.

DV: The meetings were wild, just living in Ennis during the week was wild. Meetings were almost to the point of violent at times, certainly abusive as far as verbal abuse goes. At times I've seen people, depending on their viewpoint, and what the people running the meetings wanted the viewpoint to be, you could get tossed out of the meeting if your viewpoint was incorrect in their minds.

AW: We were finally allowed to do the studies?

DV: It was a very interesting study and I had a feeling about the study but obviously until you run it through you have no idea what will happen. The study involved six total years of information: six years of no stocking on O'Dell Creek and six years of stocking and the converse on the Varney section of the Madison. Interesting enough, when we quit stocking the Madison, populations of wild trout, both rainbow and brown just started to explode. Numbers of larger brown trout and rainbow trout increased 200 to 400 percent within three years after stocking ceased. On the converse with O'Dell Creek where we stocked, populations were halved within two to three years. Based on that information, it was pretty obvious that stocking of catchables didn't have a place in wild trout management. I think that

probably led to the '73 or '74 action by the Commission to limit stocking of catchables to streams that weren't self-sustained as far as wild trout were concerned.

AW: Yeah, even with the six years of data that you had it wasn't easy to sell the commission. I can remember commission meetings in the Ennis area where locals just flat out didn't believe the data and would say that the Madison was a dying river and there's no fish in it because you aren't stocking it.

DV: Yeah, it actually polarized the whole community. There were those who believed it strongly and those who believed just as strongly the other way. It was all a lie and the data was wrong and information was fixed; there was an agenda to get rid of hatchery fish and none of the above obviously was true. Quite frankly I think it even polarized some professional people to some degree.

AW: Yeah, there were people who didn't believe it, thinking the researcher was getting the wrong information. It was breaking new ground.

DV: I think some of the reasons the information wasn't gained is that, I've always felt Montana was a leader in the fish population estimation program, and truthfully, without those estimates you wouldn't know the population was good, bad or indifferent. I'd even heard people say, the Madison is fine, there's plenty of fish in there. Based on count it was hard to tell if that was true or incorrect. When the estimates started coming in this all unfolded and frankly this information couldn't be obtained by previous methods. That's why it probably was a little hard to believe.

AW: Right. It was brand new information. Back now to the gear, your efforts resulted in the first variable pulsing gear. You couldn't buy one anywhere. You had to develop it.

DV: I have an uncle who is an electronic person, so I thought I might utilize any avenue I can to develop new shocking, electrofishing gear. So I took to him the idea of what could we do with electricity to improve it. He came up with some of these ideas of pulsing and half pulsing and actually built electrofishers for a while and sold them. But as soon as the excitement of developing them went out, he quit. He became bored with building things.

AW: Now companies like Fisher and others--.

DV: Yeah, now companies actually make money on these electrofishers. I don't think my uncle has built one for 20 years.

AW: Was Fisher the name of the one your uncle built?

DV: Yeah. He was developing them and he became bored with production. He just liked to

invent.

AW: Well he did a good job as far as fisheries is concerned.

DV: I think the thing that was really interesting in the whole process was perception of the public, that if you can't stock fish you can't have fish. That was ingrained thought in their minds. Many of the people in the guiding business and all the support industries in Ennis near the river really felt that without stocking there would be nothing. You couldn't support a fishery on just wild fish alone. People wouldn't come here. One thing that has been shown since 1974 is that, yes, they will and they have come in increasingly large numbers. In fact, I suspect if you walk into the town of Ennis today and suggested stocking fish you would be equally unwelcome as I was when I suggested the converse.

AW: I believe you are right. There was an article in a national magazine about the manager of the federal hatchery at that time a fellow named Bill Baker as the man who made the Madison.

DV: Right. It's just amazing how the public will move along but they are very slow at accepting new ideas. Certainly the new idea of wild trout management, as far as these people were seeing. They saw all the fish that were being stocked and felt that without the Ennis hatchery and without catchables it'd be a dead town. I remember quite a few individuals in town who swore that this program would be the end of town and the fishery of the Madison. And at public meetings, I've had numerous times where people get up and admit that this is the best thing that every happened to Ennis and the Madison River to go back to wild fish. But the whole program couldn't work without the basic data and the basic water flows. All along most biologists felt that if you had good habitat and water everything would work out in the end. I think that's pretty well proven down the road.

AW: That certainly was proved at the Madison what you did. Well, were there other phases of your work you'd like to add?

DV: Yeah, I've got something sort of from my mid-days, if you want to put it that way. Right after we finished most of this work you obviously get into the next phase, which ends up being special regulations. Prior to 1975 or 1976, special regulations in the sense of reducing limits or the type of gear you could use was pretty minimal or nonexistent in Montana. And throughout the U.S. probably with some exceptions. About that time there were a lot of complaints in the Madison like, well we have lots of fish but we'd like bigger fish now. Again, we thought, they really don't know what they're talking about. Our estimates show a lot of fish around and definitely an improvement over what it was during the stocking years. What are you guys complaining about? So, we decided we had better look at things and do some estimates in the areas they were complaining about. To see if the populations looked okay or not. Some of the early findings in '75 or '76 found that yes, in fact, fisherman were having an impact on larger fish; we found during the summer periods from May, June, July and August, 70 percent of the larger fish, fish over 10 inches, were actually being removed

or something happening to them. They weren't there by fall and we felt these were extravagant mortality rates. We devised a unique study in which we actually closed six miles of the Madison River to fishing; just shut it down. At the time we proposed that I remember thinking about it quite a bit. I walked into the office one day, Leroy Ellig was the regional supervisor at the time and Ron Marcoux was the fish manager and I walked back to the coffee room and sort of threw it at them blindly and I remember Marcoux's reaction. Something like, you've got to be out of your mind to try something like that. Ellig had the same reaction, but he thought, you know, that isn't such a bad idea, why don't we try it. We sat down and Ron had opened up and came around; he thought maybe it wasn't such a bad opportunity to find out a lot of different things; one, what was the potential of the river; we just walked away from it and looked at it as a fishery without man's influence; were anglers the true culprit of large mortalities in the summer and second, we could get, if we tried a new regulation, would it approach no fishing at all. We could look at no fishing and try to impose a regulation that would mock it as close as possible. So the thing had a lot of potential and the next step was to sell it to the public. I was surprised, after the first round proposing no stocking study I was a little hesitant. It was so, even by '75 the no stocking was starting to get popular because the proof of good fishing is by fishing; people were starting to catch fish and saying that the river was better than it's ever been; so the credibility of the department had risen a number of levels; they bought into it rather easily. I think in 1977 we closed it and reopened it in 1984. During those years of closure some interesting things occurred; one, we found that the population from over-fishing can rebound in two years; so it isn't a catastrophe by any means to over-fish a stream; the population is very resilient, had good reproduction; we did come up with some different twists in regulations after the study. We found that basically catch and release at that point in time and with that fishing pressure mocked no fishing at all. Probably we could have gotten by with some keeping of fish but we decided not to do that. Over a period of years, the no fishing section looked much like the year we fished with catch and release. The downside of this whole study and I regret parts of the special angling regulations today, because if I look back at 30 years since I've been on the Madison River the thing that sticks in people's mind the most besides no stocking is special regulations. The thing that sticks in their mind the least is better flows. That gravels me. I've seen books written by numerous guides and outfitters that the Madison was made by catch and release fishing and that's full of crap as far as I'm concerned. Fishing regulations is a nice tool but they don't have much to do with population densities. In fact, total biomass today is no better than it was prior to catch and release. All it did is rearrange biomass into sizes that anglers like better. It had little to do with carrying capacity of the stream or anything. The flows was the item and it's forgotten. That may come back to haunt us.

AW: I think in the future maintaining flows will be easier to get people to go with than special regulations.

DV: Right, I think there's still too many professional fishermen, if you want to call them that.

They believe all streams can be saved if they are in trouble, with special regulations. I see this time and time again that they need to look at the root of the problem, which is habitat, whether water or channels. That's been the minus to the whole area of special regulations. It clouded people's minds as to what is the real important issue. I still think people buy closure as important, but we just get constant requests, if they see something going bad whether drought or catastrophe then if we close it everything will be fine. We've run studies where that didn't help at all. The habitat was the bottom line and without the good habitat no improvement in population was found.

AW: To continue Dick, you were growing up near the Clark Fork in the early '50s; I think we have similar ideas of what the river looked like. Can you tell us what folks in Garrison thought about fishing the Clark Fork in '54?

DV: Like I mentioned earlier, I grew up fishing the Madison River and when we moved over to Garrison in the early '50s one of my major disappointments was being confronted with the Clark Fork River. The river basically was an ugly mess as far as water; it was yellow, the local joke was that if you were a fisherman on the Clark Fork you obviously had to be from some other state or some other area. Only a fool would fish the river, there's nothing in it. During my high school years, I had a high school teacher who was interested in fishing and he also taught chemistry and various science classes. We did some projects with water quality in the river and found a lot of arsenic and copper in the river. You could throw tin cans in the water in Garrison and they'd come back and they'd be copper plated. There was one company, the tin can express, they'd have these truckloads of cans and they would take them up near Warm Springs near Butte and dump them in the river and come back later and collect the cans, which were now copper plated. They did a fairly good business that way, around '54, '55, '56.

AW: And that's before the Anaconda Company put in their precipitator. That's probably where the company got their idea.

DV: I expect it was. Somewhere about '57 and '58 the company started extracting their own copper. We could see noticeable improvements in the river and actually there were some trout that could be caught in the Garrison area. I wouldn't say there were huge amounts but you could go fishing in the river. I don't ever remember fishing the river prior to '57.

AW: By '59 or '60 you could do that?

DV: Yeah, in fact it was fair considering what you had in the area. Before that no one fished that, no one, except an occasional non-resident just passing through and honestly didn't know. The color was bad but the habitat was nice. The color was a yellowish color all the time.

End of Tape.

Transcribed by Margie Peterson
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