

An Interview with Bonnie Ilhardt

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0:00:04.8 James Wall: Alright, it's still Tuesday, May 24th. We're in Denver, Colorado at the Sonesta Hotel, and we're speaking with Bonnie Ilhardt. I'm pronouncing that right?

0:00:15.2 Bonnie Ilhardt: That's correct.

0:00:17.0 James Wall: And we're interviewing you on behalf of the National Museum of Forest Service History. A few disclaimers to get out of the way. You can pause the interview at any time, take a break. You can end the interview at any time, if you wish to. And the most crucial distinction is that this is not a journalistic interview. This is an oral history interview. So it doesn't become a record until it's archived, essentially. And before we archive it, you'll have a chance to take a look at your footage and let me know what you like, what you don't like. But with that being said, could you tell me when and where you were born?

0:00:49.4 Bonnie Ilhardt: I was born in Duluth, Minnesota.

0:00:52.4 James Wall: Alright. And when you were growing up, were you an outdoor kid?

0:00:57.0 Bonnie Ilhardt: I was. I was what you would call a tomboy. I had an older sister, and we were very different. I liked the outdoor activities and playing in the river that was near our house, fell in a couple of times, just interested in that aspect. Anything outdoors was of interest to me, and sporting activities too.

0:01:19.0 James Wall: And so you moved to Wisconsin, then you made your way to Colorado. It seems like you had moved around a bit.

0:01:26.0 Bonnie Ilhardt: I was never in Colorado.

0:01:28.9 James Wall: Oh, it says that your... Oh, your parents met in Colorado Springs.

0:01:31.0 Bonnie Ilhardt: Yeah, they met in Colorado Springs. But no, I grew up in Eau Claire.

0:01:34.6 James Wall: Eau Claire.

0:01:36.0 Bonnie Ilhardt: And basically went through... Lived there through high school.

0:01:40.0 James Wall: I see. And so what is it like growing up in Wisconsin, in Eau Claire? What type of town was that?

0:01:48.8 Bonnie Ilhardt: I was anxious to leave once I got into high school. I found it... It was a great town, as I look back now. It was a mid-sized town, several high schools, two rivers, kind of booming at the time. In fact, it is a fairly large town around for about 90 miles. 90 miles one way is Twin Cities, and go north to Superior, etcetera. And it had a university, which is always thriving, and it's a well-known university in the system. And just a nice place to live. It's picturesque. It's scenic. The outdoors is in your backyard almost every place you are, a little bit rolling. So it was a good, solid place to grow up, I found.

0:02:36.0 James Wall: I see. So obviously, hydrology was in its infancy as a field of study for

most of the folks that are here, kind of pioneers in that sense. But as far as I understand, you... Wisconsin didn't have a forestry school, that you majored in food microbiology. So it seems like you had a bit of a different route.

0:03:00.9 Bonnie Ilhardt: I did. I did.

0:03:01.9 James Wall: To get here. Could you take me through that?

0:03:03.8 Bonnie Ilhardt: Sure.

0:03:04.3 James Wall: How did you get to hydrology as a profession?

0:03:07.0 Bonnie Ilhardt: Well, it is interesting. Growing up, I thought I wanted to be a veterinarian, had a love of animals, worked in an animal hospital for a while. And my dad passed away when I was in high school, and so I was anxious to get out of school and go to college, and a college away from Eau Claire. I felt it was too cliquey, etcetera. And because I thought I was interested in veterinary medicine, I chose a school that had a good pre-vet program, that then had linkage to the University of Minnesota Vet School. And that happened to be UW River Falls. And so started out there, no interest, no knowledge. I shouldn't say interest, but no knowledge of the Forest Service. I didn't know what the Forest Service was growing up. We visited parks and did a lot of travel north and south and east and west. So anyway, got over to River Falls. It was a smaller college. I'd come from a big high school. And just really enjoyed it, but got to organic chemistry, and we didn't match very well.

0:04:07.9 Bonnie Ilhardt: And because Wisconsin didn't have a veterinary school at the time, a woman, particularly, had to have 4.0 to get in to a vet school. And when I hit organic chemistry, there went my grade point. And then I struggled a little bit. But I liked biology and happened to be steered into a biology major. And so I started focusing on botany, aquatic ecology, limnology, and I was developing an interest in terms of, "Okay, if I'm not gonna go into vet school, what else am I gonna do?" So finished with a biology degree, geography minor. And at the time, Food and Drug Administration was hiring. That's when they were putting all the labeling on our food products. It seems far distance from Forest Service, but anyway. So had a chance to work for the Food and Drug Administration in Minneapolis, and it was just a blast. They hired about 40 of us, some worked in the lab, some are food inspectors. But downtown Minneapolis, in a building with no windows, I knew very soon after starting to work for that, that I was not going to... This was not gonna be a career for me.

0:05:22.8 Bonnie Ilhardt: I enjoyed the microbiology side of it, etcetera. But so then I started talking to people about, "Well, I think I need to go back to graduate school." I had a minor in geography. The professor at UW River Falls, who was head of the geography department, her husband was on the staff of the College of Forestry at Minnesota. Linkage. So they set me up an interview, went over and talked to a number of people at the University of Minnesota School of Forestry, or College of Forestry. Happened to link up with a fellow who was the forest hydrologist, Dr. Arnett Mace. And the more he found out about my background and my interest, he said, "I bet you would like forest hydrology." I said, "What's that?" No clue, absolutely no clue, still. And I said, "Well, if that's the case..." And I was going to apply for graduate school. I said, "I'd like to find out what the Forest Service does." And at that time, they were coming around at universities and hiring summer help.

0:06:22.0 Bonnie Ilhardt: So long and the short, I was hired over in the Huron-Manistee. Left the Food and Drug Administration, started over on the Huron-Manistee as a hydro tech and the hydrologist, Mike Solomon was amazed because I had all the training. I could run water quality samples because I've come out of food and drug. He said, "I've never had to hire somebody that I had to give so little training." I knew how to do all these tests. And it was just a blast that summer. I was over on the Huron side, Mike was on the Manistee side. He basically just let me run the water quality sampling program, the beach sampling, the well sampling, campground surveys on lakes. Just great. Just great. It was a fantastic experience. Had a boat, had a car, had no radio. Anyway, and it was all good. I didn't have... There were no situations there. And I had applied to graduate school and was accepted. So then I left after one summer. I went back to University of Minnesota and it was a real challenge that I'd been outdoors all summer, now I'm downtown St. Paul and urban environment with all these people.

0:07:31.0 Bonnie Ilhardt: It was like... But I really enjoyed the courses. I took most of the forestry courses to classify as a forester and then hydrology, soils, civil engineering, hydrology etcetera. And the Forest Service had said when I left them that summer, they said, "Contact us when you get ready to finish your graduate program and probably we'll have training programs in hydrology." And I focused my graduate work on Lake Minnetonka doing some water quality studies. And so I did, I contact the Forest Service, they came back and said, "We have positions, trainee positions either on the Superior National Forest, Northern Minnesota or Monongahela in West Virginia." And I was dating a fellow who was working for the Minnesota DNR at the time, so I thought, "Well, best not go to West Virginia." So anyway, I accepted and with the training programs, I think our region set it up this way or maybe individual forest. You spent time your first five, six, seven months on a district just learning forest management, which was some of the best experience I ever had. Because you come out of college, I didn't know what the Forest Service was, did, etcetera.

0:08:46.0 Bonnie Ilhardt: Here I'm on a national forest, got to do campground work, got to do timber cruising, got to do recreation trail, got to do sanitary clean-ups and campground. I mean anything and everything other than... and even firefighting. Then hydrology work. The downside of it was, while I was a trainee, the hydrologist on the forest left. So here we are in this big forest, all this water and no hydrology. No hydrologist. And that was the downside of being a trainee. I had nobody to work under necessarily. Which was a struggle for me not knowing... Well, anyway, long and the short, staff officer on the forest said, "Oh Bonnie, we're gonna advertise this job. Why don't you apply for it?" I'm naive, I didn't know anything at that point. Put my application in, was interviewed. About two months later, "Oh congratulations, Bonnie. You're the hydrologist on the Superior." What? I'm like, "Can I say no?" "No, that's not how this process works. And it was... If it weren't for the soil scientist, if it weren't for the staff officer Dick Peterson and Don Prettyman, soil scientist, I would have left multiple times that year. I didn't know what a hydrologist did, let alone be one. How do I even get something typed? What do I do?"

0:10:09.1 Bonnie Ilhardt: And thank goodness, both Dick Peterson and Don Prettyman said, "You've gotta build a program. The forest does not know... Has limited understanding of what a hydrologist does. What are your skills? How can you help them with forest management activities?" And so they were guides, they were mentors and was able to begin to develop some understanding and was able to focus on a couple of different projects. One of the things that had occurred in the past, I think I was the tenth hydrologist or the fifth hydrologist in about ten years on that forest with the Boundary Waters Canoe area, everybody was setting up water quality monitoring programs. We

had a lab in Ely that did water quality testing. A lot of the lake states forests, lots and lots of water, lots and lots of lakes, let's sample, let's collect data da, da, da whatever. I showed up and I had data on, I think it was well over 2,000 lakes on the forest on the Boundary Waters, all looking at what's the impact of recreational use on wilderness lakes? But a lot of them were set up differently because of different interests and different perspectives and different questions that arose. But there was this data, but very little had been done with the data. I was smart enough to figure out that you can't do that.

0:11:33.5 Bonnie Ilhardt: You gotta do something with the data. So at the time, the Forest Service had a research water quality facility in Fort Collins, Colorado. Contacted those folks with the help the regional office and explained the situation to them. Shipped them the data. They looked at it. I went out and spent about a week or so with them doing some analysis. Some of the analysis was beyond my capability. Came back, wrote the report and began to feel more comfortable in who I was and what the position was and getting out with the districts and talking about forest management activities and what were the skills? I think that's the thing that was missing on the forest. They knew a hydrologist could run around with a boat and collected samples, water quality but they didn't understand on what were the skills that hydrologist brought to activities. Should we be clear cutting to the edge of the stream? Should we be clear cutting at steep slope? What are the tradeoffs? What are the risks? What kinds of soils are we dealing? They didn't, and the soils program was quite strong. And so we kind of meshed together and worked together. And like I said, he was a great mentor to me, anyway.

0:12:54.3 James Wall: So there's a sort of continuum for people, the hydrologists, all of them here, where a few, I'll say, I'm not saying most of them, but some of them always had great bosses. Got along with everybody, were welcomed wherever they went. But it seems like for a lot of people they had District Rangers who either hated them or were indifferent or only cared about getting the cut out. And like you said, didn't know what a hydrologist did.

0:13:22.6 Bonnie Ilhardt: Sure.

0:13:23.2 James Wall: Where would you place yourself in these early years of your career on that continuum?

0:13:28.4 Bonnie Ilhardt: Right. [laughter] at the latter, your latter comment. Because we had so many lakes and it was kind of linked, hydrology and water. We had to do beach sampling. We had to do well sampling. And it's real easy to occupy your time doing that, but that doesn't necessarily help you build a program or establish a program. And then I think The Superior is one of the largest in the country. I think it's ranked among the tenth largest, only had one hydrologist.

0:14:00.8 James Wall: Why was there so much turnover with that position?

0:14:03.2 Bonnie Ilhardt: Well, I think because of the Boundary Waters Canoe Area. It was a wonderful opportunity. I mean, given more than 10,000 lakes and wilderness lakes, etcetera, where it had been long, but way a long time ago, it was like an opportunity waiting to happen to go in and sample. And people just really focused, you know, if you're a hydrologist interested in water, where are you gonna focus? You're gonna focus on water. And I think that, never having asked a lot of people back about that, but I think that probably is the case. And then people wanted to move on to other forests. Most of them went from there out west.

0:14:50.3 James Wall: So when you were there, did you have a sense of where you wanted to end up or the type of position you wanted to get to?

0:14:56.5 Bonnie Ilhardt: I don't think I did at the time, because I was still new trying to understand. I think I knew I wanted to go on to another forest and be a hydrologist on another forest, just to gain that breadth of understanding and expand my knowledge. And happened to meet a fellow who became my husband. He was down on the Chequamegon-Nicollet at the time that forest... They were two forests, did not have a hydrologist. They chose not to fill after the one left. And thank goodness talking with the regional office, they were understanding my skills and capabilities. Talked with the two forests and said, "How about if you advertise for a Shared Service Hydrologist?" So I applied and was selected for that position. And so we lived in Park Falls, which was the headquarters for the Chequamegon at the time. And I would spend about, roughly about a week, a month over on the Nicollet side outta Rhinelander. And again, it was establishing the program because the previous hydrologist had collected lots of water quality data. [laughter]

0:16:04.2 James Wall: That seems to be that the—there's an era where there really wasn't a lot of data at all. And so there's a scramble in these decades to get data because it was hard to win arguments without data.

0:16:16.2 Bonnie Ilhardt: That's very true. Yeah.

0:16:17.3 James Wall: And it sounds like you were at the point where, okay, now you have the data.

0:16:21.2 Bonnie Ilhardt: What do we do with it?

0:16:21.8 James Wall: What do we do with all this?

0:16:23.8 Bonnie Ilhardt: Yeah.

0:16:24.0 James Wall: How did you square that circle? Or how do you move forward when you had all this data from this previous individual?

0:16:31.6 Bonnie Ilhardt: Well, like I said, I learned a lot from working with the unit out in Fort Collins in terms of things to look at. And like I said, we had data on over probably 2000 lakes. But because it wasn't collected at the same point, some were outlet, some were inlet, some were surface, some were mid-depth, some were... A lot of that had to be tossed out because it was... You can't... You've gotta analyze live data, you can't be... And you've gotta ask, okay, what is the question? Is the use? People use in the boundary waters having an effect on water quality? Well then what are those parameters you have to look at? So you begin to ask yourself those questions. What is it, what's the major question you're trying to answer? How do I, what kind of data do I need to answer that question? Where do I go to get that kind of data? You have to kind of step yourselves... But it's like, basically scientific principle I think is long and the short of it without going into a lot of detail.

0:17:25.0 Bonnie Ilhardt: And so I did some of that when I was down on the Chequamegon too, helped look at the data. What is it telling us about our beach sampling? What's it telling us about our higher use lakes versus lower use lakes? And, is there a difference in water quality? And what

does that mean to us as land managers? And then building a program where you can go out and I spent time on each, I learned from the Superior. You go out and spend time with the district, you call up the district ranger and say, "I wanna come out, I'm gonna spend a couple of days talking to your people about the kinds of skills that I have, what I can help them with, etcetera. And different from the West, you're not dealing with the steep slopes etcetera, but you've got a lot of small streams. And I think that was the one thing that I think it really struck me and helped me, helped the forest understand that you can have a stream that's about two feet wide.

0:18:24.3 Bonnie Ilhardt: They were looking using leaf on photos. Of course you're not gonna see a small stream like that in a leaf on photos, use leaf off photos, understand where that stream is and where your project is proposed in relation to the stream. You don't necessarily need a 25-foot filter strip adjacent to it, but you don't wanna be screwing it up either. [laughter] You don't wanna be running skidders across of it, etcetera. And so know where your stream is and where it is in relation to what you're proposing. And I think that helped with the forest level of understanding of what's out on the landscape from a water resource. It's not just the lakes, and it's not just the large rivers, but it's these small streams, these areas adjacent to, which we call riparian areas, and I think I was... I knew... Then my husband and I decided we wanted to move on from there and the best place was the regional office where they had two careers, but we did a plan and were selected for positions in the regional office.

0:19:35.6 Bonnie Ilhardt: And the Chequamegon and Nicol let filled right behind the hydrologist position with a candidate that I had recommended, and they had done the same on the superior, which made me feel good, not so much of... But it was, I had helped the forest understand what kinds of skills that person, the person of those background and training could bring, and both of them were much stronger in their quantitative and analytical backgrounds and skills than I was and felt really pleased from that perspective. And so moved on down to the regional office, and at the time I had help from the regional office too in terms of some guidance, etcetera, but the downside of starting when I did was not really having an on-site mentor other than in hydrology and as a forest hydrologist, 'cause I think when I listened to people that they're here and that I've met over the course of years, those that really excelled were those that had some great mentors and good experiences, etcetera. I did but mine was different.

0:20:42.9 James Wall: Yeah. Mentors are a crucial stepping stone. You did mention Dr. Verry, in the regional office. What was that this level of camaraderie at the regional office? How was that different, in other words, than being on the forest in developing a sense of purpose?

0:21:07.2 Bonnie Ilhardt: And that's a good question too. And I knew the kind of help that I had received from the regional office, and you were there to be a coach, a guide, a mentor, trying to spend as much time out on the forest, listening to what they were dealing with. What were their issues, what were their concerns, what were their challenges and how might I, whether I could provide that assistance to them or could I connect them with someone in another region on another forest who was dealing with similar issues. And so it was going out, you're playing a different role. You miss the hands-on but you step back and say, "Okay, my job is to help them be successful. Help them establish their program, help them deal with whatever the challenge or the issue might be." And I love working with people, I have found that that's a strength that I have. And so that's kind of where my niche was, if I had to step up and talk to the Staff Officer for a supervisor, I was able to do that, but it was providing them the resources and the tools and the assistance that they needed to be successful at the forest level, and I felt good about that. I enjoyed that, and so I did a

fair amount of traveling to regions, quite large. And I was traveling probably about a week out of every month, the first three or four years that I was in the regional office.

0:22:38.8 Bonnie Ilhardt: And I was dealing with Watershed Improvement Land Restoration. A lot of the eastern forests were built on acquired lands, abandoned farmlands, abandoned mine lands, lands that nobody else wanted became National Forest land through any different processes. And so it was a lot of land restoration, how do we help heal this land that can eventually produce trees or wildlife etcetera? And then working with research scientists too, I enjoyed. And that's where I met Dr. Elon Verry, he was with the North Central Station and getting to the riparian areas or small areas. And it was kind of a match of my interest from way back when growing up as a kid, I was interested in these small streams and areas, and the difference between if you impact them right to the edge versus those that you don't. And then what kind of stream, stream channels, Rosgen Method. And I actually didn't go through the Rosgen Method until I was in the regional office, so I didn't have a lot of chance to actually practice what Dave talks about in stream types, but it was helping share that information and promote that class too. Working with people. And managing the natural resources too. I like working on the land. It just is. I'm an outdoor person, I enjoy being outside, and I'm sure I would do it all over again if I had to, so. [laughter]

0:24:06.6 James Wall: In that vein, one thing I always ask is, if you could go back in time to when you were first starting out, knowing what you know now, and give yourself a piece of advice about how to survive in this business. What would that be?

0:24:24.6 Bonnie Ilhardt: Ask a lot of questions, and don't be afraid to contact people, not just in the area, on the forest or in the region, but... Who's doing what, where? And don't be afraid to ask questions, you never... You're not gonna fall off a cliff by asking a question. If you don't ask a question, you might, but seek out people and find out who's doing what, where, and learn. Always continue to learn, and I think that's...

0:24:58.5 James Wall: What was your favorite district? Favorite time in your career?

0:25:03.3 Bonnie Ilhardt: It actually was up on the Gunflint District where I was doing a variety of forest man—because I learned about a National Forest. You go to college and you take all these forestry and silviculture and all these courses, but that doesn't help you understand what a National Forest does, and being on a district at the ground level was probably some of the best basic knowledge that I gained and great working with those people. It just, it was enjoyable, I learned a lot in a tremendous steep learning curve, in a small district, good close-knit community, et cetera. And I think that's... I really appreciated that.

0:25:43.9 James Wall: Yeah, what's been the biggest change in the Forest Service from your perspective towards representation and sort of diversifying the workforce, has that changed to any degree? Have there been any hurdles that have been overcome in that sense?

0:26:03.9 Bonnie Ilhardt: I think we've made... As I look back, even when I got ready to retire in 2006. As I look back, we've made tremendous progress. Do we have long ways to go? I think we do. And I think one of the things that I talked about when I would go out and talk with college kids, you need to be very honest with people the kind of work that we do. To bring people from South Carolina up to Northern Minnesota may not be the smartest and best. Be honest about the kind of work we do, the environmental conditions, because we hired... during the time that I... especially

when I was on the Superior, hired women, minorities, they could, they didn't like that kind of environment, and were we honest with them saying, "It's not just, you're not working in a big city."

0:26:52.8 Bonnie Ilhardt: "You're out in the woods, there's bugs, there's bears, there's deer, there's ticks, there's rain," there's whatever, being honest, and making sure that the people that we bring in from wherever, have a full understanding of the kinds of conditions, because I don't think we were necessarily always as truthful, and honest, in bringing. And I think it's a challenge because I have a sister, she wouldn't wanna have worked in the Forest Service. She don't like that kind of work. I've got a lot of friends, they don't like... So it takes a particular type of individual, whether it's a male or a female, or what. That has an interest in the out of doors and the natural resources to wanna work for the Forest Service or the park, you know. It just is, and I think that it's not a large pool of people, but I think if we explain, we're gonna help people understand better what we do.

0:27:49.8 James Wall: Alright, last question, what does the Forest Service mean to you? Now that you look back on this entity. What do you think of it?

0:28:00.3 Bonnie Ilhardt: Well, it was a great career. I would, like I said earlier on, I would do it all over again. I would work for a public agency that manages natural resource, whether it's the state or the federal. We're not making any more land. We're not building anymore land. We need to manage what we have and manage it with the skills and the knowledge of people that are out there. And I just really value having a career on a National Forest. And especially in the East, because a lot of people, they have no clue what I did. You worked where? Are there National Forests in Milwaukee? No, well not exactly. And I think it's an education process, but it's... There, it was best career, like I said.

0:28:41.7 James Wall: Great. Great.

0:28:44.9 Bonnie Ilhardt: It beat Food and Drug Administration, although that gave me some good skills and training and wonderful people, but just having that opportunity, you know?

0:28:51.9 James Wall: Yeah, you took an interesting route, it sounds like you had a really interesting and fun career.

0:28:56.3 Bonnie Ilhardt: Oh, I did, I did. I'd do it all over again, like I said.

0:29:00.3 James Wall: Alright. Well, thanks so much for sitting down with me and sharing your memories.

0:29:00.5 Bonnie Ilhardt: Alright. Thank you.