

**Chris Rusch 4/17/2015**

Interviewer (I): So just like some easy questions to start off, what is your name?

Chris Rusch (CR): Okay, my name is Chris Rusch, and I've been living in Tiller for 40 years. I moved here right out of college and worked for the Forest Service for 35 years, and bought this property about 1980.

I: So how would you describe, maybe your work in the Forest Service a little bit?

CR: Okay so in the Forest Service, when I first started working in the Forest Service I was in reforestation, and so that entailed being in charge of all the tree planting operations within the district. And, at that time there was a lot of logging going on and the Tiller district was cutting about four thousand acres a year of clearcuts so we had a huge program, and I did all the reforestation planning and operations. And then I moved into, when the clearcutting stopped in pretty much the mid 90s because of the spotted owl and some other changes in management, I went back to school and got a degree in botany. And I became the district botanist and did a lot of work with rare plants and a lot of environmental analysis whenever there was a project in our district I'd do the environmental analysis as to the effects on the rare plants for Tiller. And then in the very end I went back into silviculture again – I was the silviculturist for the district and we did a lot of timber sales but they were... they were new forestry kind of timber sales where it was mostly geared towards restoration. Where we would thin, do a lot of thinning, and planting of riparian zones and things like that. Towards the end of my career.

I: So we do a lot of work with pesticide reform, were you involved with that in any way?

CR: I was in, when I was running the reforestation program in the 70s, the Forest Service did a huge amount of spraying, kind of like it is nowadays with the industrial forests where they

would log, spray, and then go in and plant trees. So, that was in the 70s and it came around early 1980s the Forest Service realized it wasn't going to work to keep on doing that and we, there was an injunction, there were a lot of lawsuits going on, and pretty much the Umpqua National Forest stopped aerial spraying altogether even though it was still legal to spray, I think the forest and the rangers all decided it wasn't worth it with the risk. And so our district stopped spraying in about 1981 even before the whole thing came down to no spraying at all – of herbicides. And for about a year we did some hand applications of herbicides on noxious weeds and things like that and then we even phased that out from about the mid 80s on. So and then another thing that happened to me was about 1980 – I don't know if you can see it but behind us here is industrial forestland. In 1980 I was sprayed with some drift herbicide they sprayed the clearcut with behind me. And that was a Roseburg Forest Products unit. And you know at the time nobody was saying too much about drift, it wasn't really thought to be a problem. But it actually drifted into here and my garden – everything in the garden died that spring and some of the shrubberies died and so I reported it to the Department of Agriculture at the time but nothing was ever done about it. At the time I didn't own the property, I was still renting it and the fellow who owned it didn't want to pursue any lawsuits and so we didn't ever. Yeah and I – the health effects I had from that herbicide application – two by the way, herbicides have changed a lot over time but back then most of the herbicides that were sprayed were tied into the old Agent Orange that was used in Vietnam. So those herbicides that were sprayed on this incident were probably 2, 4, D and 2, 4, 5, T and that is now even banned to be used in the United States. So we don't even use it anymore but I had, the health effects I had was like flu like symptoms, and I had a huge skin rash problems for about a year. Where I would break out into almost, the doctor said it was eczema or

something but I never had those kinds of issues before and so then I always attributed it to the herbicide but that eventually went away. I haven't had any long-term effects – knock on wood – from it, from the incident. And then when I worked for the Forest Service I was not really involved in the spraying operation so thankfully I wasn't exposed too much to herbicides then in my job.

I: Did you do any, you were saying you did risk assessment; did you do any of that relating to herbicides at all?

CR: No, I only did the risk assessments for the endangered plants and things like that, and later in my career. So herbicides were not even used for that. You know I actually had a friend, her name is Norma Grier and she's famous for starting NCAP. And we started a group here, she lived in this area she was a good friend of mine back in the 70s, and we started a group called HEAL – Healthy Environmental Action League. And we would meet in her house and talk about, and we would meet with some other people in the community and I think that was the beginning of the ban on federal forest lands, of banning of herbicides on federal forest lands. And Norma ended up moving up to Eugene and founding NCAP, which I am a proud member of since its' inception. So yeah, I was involved in a lot of those early talks, even though I was working for the Forest Service I would still go to all those meetings. It was a little risky, it was a little risky. I was worried about my job. Now and then I would write letters to the editor with an alias name, I used the name Mary Green – like they wouldn't, you would think they would have picked up that that was an alias. Anyway, I got away with it and I wrote several letters to the editor during that same period regarding the use of these toxic herbicides and the use of Agent Orange because that's what a lot of them were using at the time.

I: So, I guess did any of your coworkers know about your work? Like for pesticide reform? Like in the Forest Service.

CR: In the forest service? No I don't know I don't think so, I had a couple of – maybe a couple of them did, and actually, one woman that I worked with at the Forest Service was friends, also with Norma, so we were in it together. But most people, I didn't talk about it much at work. It was like, a lot of people today even are afraid to report herbicides because they don't want to cause any waves or lose their job or things like that. It's unfortunate that there's that scary thing of going up against the timber industry still.

I: It's interesting you said that, when it did happen, when you guys banned it from Tiller, it happened before it was even became a law. Why is it that it was like, was it easy to do that here, or...? How'd that happen?

CR: I think our ranger, and the ranger on a district is in charge, usually of the operations in that district, and our ranger at the time, I think he saw the risk of continuing to use aerial sprays because of the issues that were coming up, impacts towards wildlife, impacts to habitat, wildlife habitat, and all those kinds of things and he was very sensitive to that. I think he just took the step and said to us in the, in our reforestation shop, that...let's not do aerial spraying anymore. And back then, rangers had that power to do... I don't think now it's... so much... usually it's a whole... regional approach to things now with the way things are in the forest service, and so you would have to have regional buy-in to do something like that. Yeah, I think our ranger probably really took the risk himself by saying let's just start doing something else. And it turned out that, like I said, I did reforestation work for 20 some years without herbicides successfully and our trees, we always grew, we had, we had a lot of field trips, some people

would come to look at the work we were doing in reforestation here. So we developed a contract called a stewardship contract here on our district. And that was really new and it required that the contractor plant good quality trees and monitor them for three years, which is really, unheard of back then. And we found that by doing our contracts that way we would get really successful plantings and really successful reforestation.

I: So I guess it sounds like you guys did a lot of, I mean we've been talking about alternatives to like aerial spraying and it sounds like you guys have been doing that for, decades

CR: Yes, we did a lot of, what we would do is go in and – we called it scalping, we would clear off the area before the tree was planted in about a 24 by 24 inch area before the tree was even put in the ground. That was one method, another one we used, there was paper mulches that would come – it was like a sheet of craft paper, made especially for trees, it had a little slit in the middle, you'd slip it over the tree, anchor it down with slash and rocks, and that worked really successfully. And the tree planters would go ahead and plant the trees in the morning and then put these mulches on in the afternoon. And they worked really good for about three years to keep the vegetation from growing up around the trees. And then in later years when the plantations, when the... plantations were established we did a lot of clearing with chainsaws. We would go in and just clear the brush around the tree, not the whole area but just the, just around the trees for a distance of 3, 4 feet. You know and that creates jobs. This community, when you drove through you said you couldn't hardly tell it was a town but back in the 80s and 90s it was a big town and there were a lot of young people here that were able to get just those kinds of jobs, planting trees and putting mulches and cutting brush and things like that.

I: I think that's one of the main arguments is people say that, you know you have to have aerial spray because the forest lands are so big now that it would be unreasonable to think of doing that individually, like hack and squirt or something when there's like thousands of acres, and people say also that aerial spray is, it makes the Douglas Fir more competitive when it's growing up so what do you think about those two arguments?

CR: Yeah, they are probably. They're valid arguments if you aren't willing to put out the little bit of extra effort, because we, I, like I said, I managed about 3 or 4 thousand acres of clearcuts a year, I guarantee you these timber companies around here don't even do that much... a year, so... And we were able to pull it off successfully using those methods that I said, the mulching, the scalping, the brush cutting. Things like that. And the quality planting, we found that was really important too, where you just don't go in and slap the trees in the ground, and a couple thousand trees a day planting wise. You can't, we would actually require the planters to dig a large size hole, put the tree in and take the time, and cost wise it really wasn't that much of a difference we found out, with the stewardship approach I was talking about earlier. Where the, after the planters plant the trees they also monitor them for three years. And so they would go in and do whatever kind of work they felt was necessary to keep them going. And that worked for us, and I don't see why timber companies can't use that kind of approach, the three – stewardship kind of contract where they hire people to - it's almost like adopting a, adopting an area, a clearcut area and taking care of it for three years. And also, we also found that it was really important to protect from deer browse, and so we developed some of those plastics tubes and things like that to put over the tops of trees to keep the deer from browsing them and that worked pretty good.

I: Well it sounds like you've done a lot of work, just in this issue in general, but as far as like, maybe, like not federal, like as far as like now, like modern day issues, like what's your take, what do you think the future looks like for herbicides and the logging industry.

CR: Mhm. Well I was really disappointed to see that house Bill 613 went down in committee I think that, last week, I was really sorry to hear that. But I'm in a group called SIRCP, the South Umpqua Rural Community Partnership. And this is a group that's involved in, we're doing a lot of restoration work for salmon, and the river, the South Umpqua here, we do a lot of riparian plantings and things like that. Wood in the stream, introducing beavers is one our big things that we're doing. And on the, on the perimeter of that we got involved in this pesticide issue just because it became, it's becoming a problem around here. We had an incident that I spoke about last week at the Town Hall, we had an incident not too far from here. My neighbors came up here because they knew I knew a lot about herbicides, and they came up and said "we just got sprayed." I told them, I went down to their place and I told them what to do. We did all the right things, we reported it to the Department of Forestry, the department of agriculture. We got all of the proper paperwork done, and I spoke to, like I said I spoke to, on the Town Hall this incident, and they did everything right, the timber company had a forester on the site. They monitored the wind they monitored the temperature and everything and yet the helicopter still – and this is a salmon- the unit was on a salmon- and Coho Salmon protected stream, so they were required to have a 60 foot buffer. And the drift actually went through the 60 foot buffer, crossed over the creek, and ended up damaging vegetation on the adjoining properties which were my friends' properties. And so we reported it and they found – Department of Ag came out and they found traces of Atrazine and Clopyralid. And they found traces of both of those herbicides in the

vegetation. So we also have the issue around here with roadside spraying. And a lot of people will, our group is trying to ban together and encourage people to put up signs, no spray signs along the road. And, so that's how I've been involved in that too. We had an incident with the spray crew – the roadside sprays are really, really a problem because they spray in the Spring and a lot of times they spray the road shoulders and the ditches are still full of water and that water goes into the river and it really concerns us. And they say that they're following the labels and yet still I don't know how they can avoid, some of that water that's just in the ditch lines. And so we've gone to our county commissioners and appealed to them to back off on the roadside spraying but we haven't been really very successful yet. So our best bet is really to encourage people to, the county does have a program where you can sign a contract that says that you'll take care of the vegetation on your property, on the road, and then so they won't spray it. They will give you county no spray signs. And that's what we've... been encouraging people to do that. So yeah being available to my community to help when there is a drift incident and dealing with the roadside spray, those are the things I've been involved in most recently.

I: Do you have a specific moment that catalyzed you to get involved?

CR: Probably working with the tree planters and seeing the helicopter, seeing the people with the forest service mixing the herbicides...And I was...I think I realized that spreading poison just wasn't right and then I would have to go out after to see how our trees were doing and often times we would see that you could see the brush being dead and crispy and still smelling of herbicides maybe a month after the application happened and it just turned me off I thought this is not right I think that just being exposed to it in that way. And also during that time tree planters were be also be concerned about being in an area that was sprayed cause sometimes



they would spray the area before we would plant the trees and so I think that a lot of the tree planters themselves were complaining about skin rashes and being sick and attributing it to the herbicide applications and too during that time another thing happened was that trees use to be being treated with Thyram which was a really bad chemical that was banned early on like 1970s the chemical was completely banned but they use to treat trees with it to keep deer and rodents and stuff away from the trees so the tree planters would have the trees in their bags and their arms would hit the tops of the trees and they would be getting huge rashes on their arms from that chemical and so having the knowledge of that whole scenario made me want to live more organically and that's the same time probably I was turned vegetarian when I was a young women and I got into organic eating and so the whole chemical herbicide thing was way out of line with my philosophy of life you know what I mean I think that's probably what did it and being, having, being...subjected to that drift incident I told you about earlier probably was another point in life when I said, 'boy we just gotta ban together and stop this' and Norma probably was a big contributor, mentor for me to make me see some of the incidents that were happening and the risks involved and how to organize she was a really good community organizer and she taught me a lot in that regard of how to organize within a community.

I: What I think is interesting too and what makes you unique out of the people we are interviewing a lot of time people will say there's no science or people talking about it don't have a science background. As someone who has a environmental studies background and botany as well and is a master gardener and master watershed, what do you think about the science of herbicides if you know about human health and if it is...Beneficial, there are a lot of arguments about scientific proof versus anecdotal proof

CR: Right, I think that's true I think honestly I think they really don't know and at our town hall there was a toxicologist from Oregon Health Authority and he was saying that they really don't know the effects of these cocktails that are happening now where they mix three or four different chemicals together and spray them at one time and there isn't any scientific proof to say they're safe because there's just not been the studies and a lot of times you know the studies are done on mice and rats and not on humans not on children and I think that they really don't know some of the science and then there is science like Atrazine for example is what I brought up at the town hall meeting. Atrazine, its well documented that Atrazine is an endocrine disruptor and that it causes hormone imbalance in frogs and fish and then why not in humans you know and they don't really, I don't think they know the level of toxicity of where those kinds of things that kick in. And especially say you live on a place that sprayed year after year for three or four years by the same timber company which happens and so therefore say you have some young children in your household and they're exposed to that with Atrazine three of four years in a row, its just, I don't think there are any studies that have said one way or the other whether its safe more not. So I don't, I don't, I think there are as many studies against it as they are supporting it. And a lot of the studies supporting it are done by the chemical companies themselves and a lot of the studies that show there's a problem with it are University based studies or...foreign, like a lot of studies like that come out of Europe or somewhere like that and people are skeptical because 'Oh they are foreign studies', I don't know. But I know it is banned Atrazine for example is banned in Europe but it is still used in the United States and certainly the European Union has found that there's enough science to ban it.

I: What kind of obstacles have you run into or as someone who works in the Forest Service have you run into any obstacles outside the Forest Service. Did you have any altercations or uncomfortable discussions with people?

CR: Uncomfortable discussions always, even at town hall in Roseburg have half of the people that were there were industry people and the other half were probably opposed to the use of herbicides in the forest and so you know their whole stance is we can't grow... Trees without herbicides and they feel that they are safe and so there's always going to be that kind of conflict I think one time recently I was in a conversation with a forester from a timber company and he said that we're just causing a lot of fear in our communities by bringing, even bringing it up and I thought well gee-whiz this is something people need to know that this is what's happening and this is what's spraying out of the helicopters. There are some people that don't even know what's happening and that's our goal is to bring it to everybody's attention. Education, educate, educate, educate is really important to us but I think the timber industry in Oregon is really powerful and if they want, if they want to continue to use herbicides they're going to find a way to do that. And they have a lot of money behind them they have a lot of lobbying power... They influence, most of the senators in congress out of Oregon are probably funded somehow by the timber industry. So yeah it's a big thing we are up against here I think. If, to oppose it is to oppose them or so they think but it's really not you know, most of us, I think most the people you interview realize that timber is the culture of Oregon and it's here to stay so what I'd like the timber industry to look at other ways to grow trees, especially reconsider spraying near homes, near schools, near any kind of water source and sensitive areas like that. That's what I'd like to see happen.

I: Do you think the start needs to be a compromise or do you think a radical change or movement? What do you think it looks like?

CR: I think it needs to be a compromise I think industry needs to be a good neighbor I think they need to realize that if there is a homestead or school or a, particularly a water stream or spring or something that is a domestic water source they need to be a good neighbors and they need to leave a buffer around those places and like I said the buffers that was in our incident here in tiller was a 60 foot buffer because that was a coho protected stream and yet, and they said everything was done right, the wind, temperature, everything was just perfect for spraying and yet the herbicide drifted through a 60 foot buffer across a 30 to 40 foot stream and into peoples yards...And that's just not right so there needs to be compromise and they need to realize that they need to back off I think from homes and residences and water things like that. I mean after all, all the states surrounding us have stricter rules on buffer zones then Oregon does and so if they can do it why can't the timber industry in Oregon do it too?

I: I think with that too, I think it's interesting, you know, the Senate bill like you said got killed and that was just regulating, creating that buffer zone you know and that was even killed. Do you ever imagine timber without aerial spray what do you think is possible in the long run, do you think buffer zones is a feasible compromise or do you think no aerial spray at all?

CR: I think buffer zones another compromise would be to do it by hand which I've seen done successfully in many places and that's what, you know the Forest Service does a little bit of spraying on noxious weeds particularly some of the real bad invasive weeds just by hand spraying them and I think that's an alternative that they could look at there would be a lot less

chemical applied if they just did that and it be jobs for people too so yeah it would be a good compromise

I: Is it possible to have life without pesticides or herbicides at all do you think just in Oregon?

CR: That's a tough question, I think that we're always gonna have some herbicides around. It would be nice to have life without any herbicides and pesticides...But I think there is always going to be a faction of, particularly in the farming community where they are gonna wanna use herbicides and then and then controlling some of the really invasive weeds that come into Oregon, probably some herbicide use is warranted even in those conditions but just safer applications like I said would be the way to go.

I: Has anything in particular surprised in the process that you've gone through during this process?

CR: Yeah some of the shocking things are like what happened down in Cedar Valley, to me that is shocking where a helicopter actually flew over someone's home and sprayed herbicides going from one place to another...There was an incident here in Roseburg where a logging crew was sprayed because they were in a unit logging adjacent to a unit that was being sprayed and the helicopter came over and actually sprayed them directly. Those are the things that really shock me that a pilot would be that insensitive and that careless to have let that happen.

I: Do you think those kinds of errors, is that on the pilot or is that on the timber industry that hires the pilot?

CR: Both I think are equally guilty of causing harm but I suppose it mostly always goes to, its always the pilot that gets fined in these incidents and the helicopter company that gets fined usually the timber companies aren't held accountable for the drift for these incidents that I just talked about... But they are the ones that hire these companies maybe they should look closer at the track record for these chemical applicators before they hire them too.

I: What advice would you have for people who have been affected?

CR: For people who have been affected by drift? I think they, that's what I think, it's really important for us to educate people so that they know what to do and I think every community should have a go to group or person or couple of people that know who to call the department of Agriculture, Department of Forestry, the Department of Health but there's just so much bureaucratic hurdles to go through to report an incident that it turns people off so, did I answer your question?...

I: Yeah

CR: So I think its good to have at least every community have a few people that know the processes, what to do.

I: So it seems like you have a lot of connections like a group of people.

CR: We do yeah.

I: What do you think of building relationships, I guess community, community involvement, what's the role of that in this whole situation?

CR: I think community groups are really important and in Oregon and these days and so our group of the South Umpqua Community Partnership is a collaborative and we partner with the Tribe with the Forest Service we partner with Ecotrust with their partnership from Umpqua

Rivers I think those kind of community groups are really, really important and I would encourage people, I think communities, all communities need to have a group, or a school to rally around you know I think it makes a stronger community if you do have that. You need to be tolerant, open minded people to be involved in those groups because, you can't be too, too much thinking one way or the other, you need to be open minded but I think that yeah community collaboration is really, really important and the more we have these kinds of issues come up they are better solved that way. With, with, instead of just one person standing up its a group of people 10 or 12 or 20 people together standing up against something or for something too in that regard. Could be, Sometimes we like to support forest service projects and come out and stand up for Forest Service projects in our community here so that they get, things can get done.

I: So we've also kind of notice this trend, our project this term is we are interviewing women who have been leaders in the pesticide reform movement, do you have an opinion, you might not have an opinion, why do you think women are getting involved with this issue?

CR: Oh huh, that's a good question that's an interesting question. I think probably a lot has to do with some of us are mothers and that might be that we have that nurturing gene in us, I don't know why that would be so strong, I think you find that in community groups is a lot of women like PTA for example in schools are all women and maybe we are better at organizing together...Maybe we are more open minded and tolerant whereas men tend to be a little more hard headed with their opinions, haha could that be? So, it could be too that maybe some of us are just real pioneers, I know Norma was in so many ways as a young women and I was one of the first women to work for the forest service back in the early 70s when I first started, as a

matter of fact I was the first women to work in the Tiller ranger district and so maybe some of us are just pioneers at heart and want to see change and are that kind of personality.

I: On that note what is your vision of change?

CR: My vision of change regarding the pesticide issue?

I: Yeah I guess pesticides, and then just timber industry and environment, stuff like that.

CR: My vision would be to do a compromise like I spoke about earlier, I think that baby steps are important and you can't you, can't, effect change radically like pendulum swinging things. And so I think that we should be happy to get some compromises going on. And I would challenge the timber industry to come up with something that is more like, just if they would accept the buffers that are required in Washington, Idaho and California they would get on board with some little change like that that would be a big step in my opinion.

I: Wow, did you guys have any questions?

I: Is there anything you would like to say that we didn't cover?

CR: No I think we covered it