

Ecosystem Services and Idaho's Farmers

Interview One

I: All right, let's begin with a little bit of background information. Please tell us a little bit about how you got into the farming business.

R: I grew up in it I guess. My grandpa farmed and then my dad and now I do.

I: And how long have you or your immediate family been farming in this area?

R: You mean like my dad and? I think my dad started in the 1940s. Then I grew up on the farm and I started farming in 1994.

I: What do you grow?

R: Alfalfa and Timothy, which is a type of grass for hay. We have grown other things in the past; but those are the two crops we grow right now.

I: And how many acres do you farm?

R: About 4500.

I: In what ways, if any, has urban expansion or any nearby construction affected you and your farm?

R: We are kind of out and away from all that and so not at all.

I: Do you have any current plans to sell or lease part of your farm in the future?

R: You know, we rotate with some other farmers. They might grow potatoes on our land and we will grow our crops on theirs; but generally no. But you never know. Sometimes we sell land and buy other land. If I were close to a city, sure I would consider it, but we are obviously not.

I: Do you have any idea what you will do with your farm when you stop farming it yourself?

R: I am hoping just to lease it out; probably just keep it. You know, retire and lease it to somebody else in this area.

I: How important would it be to you that your farm remains an agricultural operation?

R: I would like it to stay productive of course if there was another use. Certainly I would not like it to be abandoned and not used for anything. I am open to other uses as well.

I: Have you implemented any conservation practices into your farming operation?

R: Probably one good thing that we do is we grow alfalfa and Timothy and so we do not till the soil nearly as much as anybody else. In fact, we are even starting to rotate. We just planted Timothy last year right into the alfalfa and then we killed the alfalfa and so we did not even till the ground at all. I think in that way we conserve our soil a lot better than most of the people that grow like beets and potatoes. Sometimes in the spring you will see huge dust storms around. You come and look at my fields and nothing is moving. I'd say that is one way. Everybody

wants to take care of their land. That is the one thing I think sometimes maybe people do not realize. It is not productive to not be a steward. It is pretty hard to maintain your business if you do not put back what you take out.

I: What kind of pesticides and/or herbicides do you use on your farm?

R: We use both. We spray for weeds and occasionally we spray for bugs. We generally do not like to spray for bugs because I find when you do that the bad bugs come back and some of the good ones do not. You know what I mean? We always use herbicide for weeds. We have Roundup Ready alfalfa; but we are going to go away from that because we have found with the export market a lot of people do not want it and it is not worth it.

I: How do you make decisions about pesticide and herbicide use and application?

R: I think sometimes you look at the residual. If I know in two years I am going to have a potato farmer come in and plant some potatoes I may go away from a certain pesticide that might cause him problems. Sometimes I might ask them, "Hey don't use this pesticide because it will affect my crop when I plant later." Those are some of the things that you really look at. Some of them if you put on new seeding it really seems to stunt the growth. So we would rather have a few weeds than a higher yield, a little lower quality than use that pesticide. There are always trade-offs. There is never a homerun. It kills everything. It does not hurt the alfalfa. But then the end-buyer does not necessarily want it. So that is a problem.

I: So, the use of GE (genetically engineered – also sometimes referred to as GMO) seeds has been in the news a lot recently, but the coverage only rarely discusses how American farmers are being impacted – either positively or negatively – by this technology. Has the use of GE seeds affected you as a farmer, and if so, how?

R: Yes. You know. The first time they came out we did not do it. At this time we have probably 700-800 acres of GMO alfalfa. For the local market it does not matter. Overseas markets it does. We are finding \$10 to \$20/ton difference in price. Some export buyers will not even look at it.

I: Are there any particular markets that are especially unwilling to consider buying it?

R: Like China, maybe even Japan, mostly overseas. We have never found any problems here. We sell mostly to dairies and we usually export 25% of our crop. That is where we have the push-back. The seed is twice the money and so it is not worth it. For us, we will not be planting it.

I: Even if you get higher yields?

R: We get less for the crops. We do not really get higher yields. It is just handier and there are some other alternatives for weed control with the non-GMO that are working really well. Its advantage is the first year. The first year there are really not great alternatives. But after that, once the alfalfa is established, there are really cheap alternatives to the Roundup. I just think it is market forces. I think any farmer will grow what the market demands. If the market does not

want what you have you better change. The seeds are very expensive. It is not the seed. It is the license. Monsanto charges about double.

I: Are you currently using any genetically engineered seeds?

R: No.

I: What is your opinion of genetically engineered crops?

R: I think as long as there is oversight I do not have a problem with it at all. I think people are paranoid for no reason. I do not think it causes the problems we think. I think there has to be guidelines and oversight and ethics. You do have to have diversity in your plants. If you have just one type of plant, that might work great for so many years until some disease or problem can wipe it out. I do believe in genetic diversity; but I do not have a problem with GMO.

I: Turning now to the subject of environmental change, have you noticed any changes in the environmental conditions in your area that seem beyond normal variation from year to year?

R: I do not think so. I think there are fluctuations in the weather. Right now it has obviously been a weird year. We have had a wet start of the season and now it is just unseasonably hot. No. I do not think so.

I: Have you noticed any persistent changes in the length of your growing season, or the first and last frost dates of the year?

R: I think it is a little longer than twenty years ago. We cut a little earlier to start and in the end we do not quite get the frost as early. That could be just a cyclical thing or maybe I do not know. I am no scientist.

I: So you feel like the last twenty years?

R: People are just planting a little bit earlier. They plant potatoes earlier. Like for us, we harvest a little later. I have noticed that.

I: Do you keep track of when you plant and harvest?

R: We do. We keep a journal when we cut, when we water. We keep track of everything. We have not always done that. You do not think of that when you first get started and then you think I need to keep records and then you can know what is different about this year compared to last year. It is a smart practice. I think any business.

I: Have you noticed any persistent changes in average winter temperatures and average yearly snowfall?

R: No. I mean some years we get quite a bit and some years we do not. I have not seen any winters like when I was about ten, like when we got four or five feet. But I am sure we will. I think the weather is very cyclical. I think there are probably slow changes but we could have a huge winter. I like snow because it gives me irrigation water. Being a hay-grower I do not really like rain. It ruins my crop.

I: So snow a lot in the winter?

R: I love snow.

I: Have you noticed any persistent changes in yearly precipitation?

R: This year we were in trouble. They were starting to get water calls and stuff; but then we got that really wet spring with all the rain. Last year we had the same thing with the wet August. I don't know. Maybe the weather patterns are a little different. It seems like we are getting the same amount of precipitation. But the way we get it may be changing. Usually in August it is not going to rain four inches, never. The wheat sprouted in the heads. It was terrible. This year we had the wet spring; which was fine. I take that over the wet August any day.

I: Do you worry about water availability or maintaining your water rights?

R: Yes.

I: Where and how do you receive your water?

R: We have probably 10% from the canal and the rest is deep well. There is a constant battle with the deep well. We have got the surface water users that are always wanting to slow down our pumping. They think it affects their surface water, the springs. I think the only people that are the winners in this are the lawyers that represent. They have a constant paycheck. Yes. That is a big concern.

I: If you have a certain amount of water allocated to you, about how much of that water do you usually use?

R: With the deep wells, you basically can just pump, as long as you do not pump in a day than you are supposed to. Being alfalfa and Timothy growers we pump a lot of water. We are probably higher water users than a lot of farmers.

I: You have daily regulations?

R: You can only divert so much with your pump. If you divert more than that, you are outside your water right; but we do not have any of those problems. The biggest problem that we have is the State coming in and saying you guys need to dry up so many acres because of the water call in Twin Falls. You figure. We are in a desert and we have millions of dollars in land and irrigation systems. Boy, if I was to have to dry up 10-20% of my land it would be devastating. There are not big margins.

I: That is what you worry about is the State coming in and saying you need to grow less and use less water?

R: Yes. I think that is a worry for most farmers around here. It is not that we do not have the water. Tons of water roll over every spring. It is just storing it and using it and fighting over it. It is nonstop. We have the water in Idaho. We just are not smart enough to figure out how to allocate it. We have way more water than most western states. I think because we do we are not as vigilant about taking care of it.

I: Do you rely on bees to pollinate any of your crops?

R: No. We do a lot of times have beekeepers that will put bees on our farm because the alfalfa has lots of blooms.

I: Have you noticed any changes in bee populations around here recently?

R: I haven't noticed any declines. I know that is a concern but I have not really paid attention.

I: Thinking specifically about changes to the climate, how concerned are you about climate change?

R: That is a tough question. I think that it is hard to know what is cyclical, natural and what we have caused. I do believe the climate changes. You just look back in time. About 8000 years ago there was an Ice Age. I do think climate changes. I think it is inevitable. Whether we cause it or it is natural, it happens and we have to adjust. Whether it is hotter or colder, you may have to grow different crops. To sit there and think: Oh the climate is not going to change, everything is going to stay all the same...It is not going to.

I: There is no way to predict what is going to happen?

R: No. I do think anybody can. Some people will say we had the coldest winter ever, oh, climate change. I agree. It may get colder. It may get hotter. It changes the weather pattern. The rains might change. You have to be adaptive and be able to say this is not working for us now. We have to change. I think there is climate change and I think you have to adapt to it.

I: Do you think that any of the changes to the climate some people are talking about are caused by human activities?

R: I think they could be. I know we have elevated CO2 levels that we did not have before; but a lot of things can do that. I think that is a cause of us burning all the carbon; but I know eons ago there were much greater rates of carbon than there is now and so just. I think we are foolish to think we cannot change the environment with our activities.

I: For you, other than water, since we know that is extremely important, what is the most valuable natural resource for successful farming?

R: Yes, water. We live in the desert and so water. For us, we have some shallow soil and so I think the soil. One thing about the crops that we grow we actually can gain 1-2% of top soil every year because we build topsoil we think; whereas, a lot of the other rotations around here do not. They lose it. Around here it is water and topsoil. Water is number one, without that the best soil around, you can't grow anything.

I: Are you are worried about the health or availability of any natural resources in this area: Soil or other?

R: I would always like to have more farmland. There is land but there is just not the water. I think the biggest worry is just keeping your water. In years past, you would think I've got my water right I'm good. It is not that way anymore. You just have to constantly be worried about

that. It seems like your water is always under attack and I think it is going to get worse. Cities will use more as you get more people in Idaho. I know they are going to demand more water and you are a minority in the population that uses the majority of the water. It is harder to say no you can't have my water when they have a thousand votes and you have one.

I: Who do you worry about coming out regulating or taking away water?

R: It is the state. They are the ones that have sent out letters saying. Until we got letters in the spring we got letters saying there are going to be curtailments. What happens is these guys sue and so the state issues a water call. It is not necessarily the state wants to do it; but they kind of have to.

I: That is how they communicate with you is sometimes a letter?

R: Yes, we get letters. We never get good ones.

I: Do they give you enough time to change your plans in the spring?

R: Sometimes no. This one, they sent out a letter and so you have all these crops in the ground and you have to shut some of your water off by this date.

I: Even after they have been planted?

R: Yes. They don't really. I don't say they don't care. The way the law is they have to say just sorry. You can tell, that is a big concern. Fertilizer is good. Everything. But if you do not have the water nothing else matters.

I: Have you changed any of your farming practices or decisions in recent years, such as the type of crops you are growing, when you plant or harvest your crops, how you manage pests, or other major changes, and if so, why?

R: Yes. We plant the Timothy grass. We only started growing that four or five years ago. We thought it was a better alternative, a better fit than wheat. Same equipment. We do not have to have grain combines or anything like that. We are experimenting with different plant dates and different ways to plant.

I: Why have you made those changes?

R: I think it is just to be efficient. If you can use less inputs to grow your crop or do something to get a better yield. It is all about either cutting your cost or increasing your gross. Those things.

I: What are the biggest challenges you see to farming in southeastern Idaho?

R: Water. I will say we have had a lot more rodent problems in this area in the last few years. We have a lot. I do not know. Maybe it is just a cycle and they are just building, building. That has been an issue that we have never had in the past. I think we have had a few more bugs in the past few years. Maybe that could be the winters. Winters are not as severe, so it does not kill them off as well. That was a thing that we had as an advantage over Twin Falls or Boise. Our

winters were more severe and so we do not usually have the \pests. I think the past few years we have not had quite as cold of winters and I think we are seeing it with more pests.

I: Has that affected your yield or the health of certain crops.

R: Yes, we have had to spray for bugs. We have had to try to get rid of the voles. They have been terrible.

I: They burrow under the dirt, is that what they do?

R: Yes. You will see out in the hayfields you will see a big strip about this big around with just mouse holes all around. They just have a salad there and eat the roots. It has been bad. We have had to treat whole fields, and that is not a very effective treatment. For your other question, maybe the climate has gotten a little warmer so we have a few more pests.

I: How are these challenges different from what they were in the past?

R: In the past we did not have near the tools we have today. They just had to lump it and go, "Well, I guess what will we do?" I think now as problems arise there is more technology. There are more ways to deal with things. We have a lot bigger farms with less people running them and so we have to use tools. We take satellite pictures and see hey there is a problem there. I think technology is a solution to some of the problems that we can deal with where in the past they could not. I always marvel at people who think Oh it was better in the past. It is not. My tractor will drive itself. It is better now. I look at what my dad used to do and there is a reason we do not do that anymore. It was miserable.

I: Do you recall the rabbit years?

R: When I was a teenager, when I was ten or eleven years old. You know what. I have seen more rabbits this year than I have seen in years, so we might be on an up-tick in that. Yes. You see them during the day, quite a few now. That is another thing we might have now.

I: Because you are at the edge of the desert and the rabbits are out in the desert?

R: Yes. There are more now than I have seen in years.

I: What happened during the rabbit years?

R: Just millions, literally millions, you would look out and see millions of them.

I: They would eat leaves or?

R: Yes. Well, like me as a hay farmer I can really be in trouble. They could take down a haystack.

I: That was about the 1970s?

R: About 1980. I was about ten years old.

I: What is your favorite thing about farming in southeastern Idaho?

R: I like farming because it is varied. I do not sit behind a desk all day. I kind of do lots of. I get to be outside and drive around. I am my own boss which is good and bad because when things go on it is on me. It is enjoyable and my kids work with me. I do like that.

I: Where do you go to get news about weather, regulations, or other farming-related information?

R: We use the internet. Since we are hay-growers, we are on several different websites for the weather. We use the National Weather Service or Weather.com or Accuweather. We look at all of them. Sometimes we look at the radar on line and we will see this storm. We are like please go south. I would say technology, internet, Smartphones. They are a very good tool.

I: Are there any websites that you go to look for regulations or any news about regulations?

R: No. Not really. The state is really good about if there is a change they send us a letter. We do go to meetings in the wintertime and they will talk about new things happening and what needs to change. My brother, he is on quite a few committees and stuff, and he goes to those types of things and keeps us abreast.

I: Which regulatory agencies, such as the USDA or other government agencies, have you been in contact with in the last few years?

R: USDA: We have to do crop reports all the time and tell them what we are doing. That is probably the number one. My brother I farm with, he is actually the county committee chairman for the FSA, Farm Service Agency, in Blackfoot, probably them. With pesticides, there are regulations you have to do. A lot of times, even salesmen that we buy them from, they are really up-to-date on what we need to do. So there are lots of resources out there.

I: Have any of them come out to visit or measure anything?

R: Yes, FSA has come out. They might measure how much grain we have stored and different things like that. Occasionally we will get a spot check and they will make sure things are what we said they were.

I: How was that experience for you? For example, was it a positive or negative experience, and why?

R: They have been fine. I have not had anybody that I thought took themselves too seriously. They have been fine. I got audited by the State Insurance Fund on my Workmen's' Comp. The guy was very professional. In general, I think most people realize you are trying to run a business and they try not to be a roadblock to you. I think the guy was pretty good that way.

I: Is there anything that the local, state, or federal government could do or provide for you to help you do your job?

R: Stay out of my business. Ha. Ha. I think the state, and it comes back to water. I just think they need to change the rules and make it a little, use our resources more wisely. I think some people have water rights that are in excess of their needs and so they say well I need my full water right. You're not going to use it. I know, but I still want it. The only reason they do that is so they can come over here and shut us down and there is less competition. I think just

commonsense laws. Just so everyone is getting what they need instead of what they want. That probably does not make sense; but if it takes four-acre feet to grow a crop and your water right says you have eight-acre feet that you are not even going to use but you say you still want it that is not a good allocation of that resource. That is just waste.

I: What does happen when somebody takes more water than they need for the crops they are growing? What happens to that water?

R: It just goes down the river. They sell it or it just goes down the river; but they say I want to have that and they say they want to use it just so they can cause us problems.

I: Is there anything (you are talking about the state) that they could do to help you plan. Since obviously they do not know for sure how much it is going to rain, but you know.

R: I would like to have a longer period where we would know instead of hey, by the way, we might shut you off in a month and a half. You gotta let us know in December what is going on. It is very difficult because you do not know how much rain you're going to have. My idea is they go and audit everyone's crops and on a short drought year they go this is what you need, this is what they need. Let's allocate it according to your needs and then if we run out then we shut people off based on the water rights. Let's make it so no one has to curtail their crop. I think that is a better use of the resource than say you have more than you need. In order for you to get more than you need we are going to have to take some away from this guy. Instead, maybe they could just say we are going to give you plenty to grow your crop but we are not going to give you that excess. That way everybody can grow their crop. Really, as a state for tax revenues, that is the best use of the resource. If the legislature would think of it that way, we are going to get more tax revenue. We are going to have a stronger economy if we allocate this resource efficiently than if we just shut people off. That is, of course, if I was over there. The number one reason they want to shut the water down over here is for less competition and that is not always the best. Less competition is never good.

I: What about other people or organizations in this area, can you think of anything they could do to help you farm?

R: I think education is great. I think a lot of times in the fall and winter we get go to educational stuff. We have even gone overseas. I think education is important. I think if you just sit there and so my dad it this way and so I am going to it does not work. I think constant education. We do go to fertilizer meetings and OTC meetings or grower meetings. I think that is one of the best resources.

I: What kind of organizations organize those?

R: I think a lot of times the state will. Idaho has Idaho Alfalfa/Hay Association and we will go to that and they will bring in educators or researchers from the University of Idaho. I think that is a great resource. I think people underestimate how valuable the universities are. We do not have time to do the studies. They actually do them properly. Sometimes you think, oh this works and you realize it had nothing to do with your success. I think education is really important.

I: Are you using aerial drones or unmanned aircraft systems at all for your farming operations?

R: No. We have used satellites, like satellite images. I have a tablet and I can overlay my satellite image onto my maps. It will record photosynthesis and so I can actually go out on a new seeding field. All the red spots I know I need to go back in and kind of reseed.

I: Which satellites are you using, where are you getting that data?

R: It is just a service I subscribe to. Depending on the rate you subscribe to every so many days or weeks or once a month they will send you images that you can use. I did go to a meeting about drones. It is on the horizon. I can totally see that. There are things. I have flown over my fields in a Cessna with a friend of mine before and you can see stuff. It is a valuable thing. It would be nice. I can totally see us doing that.

I: Are you interested in using drones in the future and if so, how do you think they will be of benefit?

R: If the costs were not too prohibitive. I know they have got some really good ones for about \$10,000. If we could find a use for it I think we would. They are almost self-flying. That would be my worry. You have a \$10,000 thing and you crash it. I think information is really key to know what is going on.

I: Would that be the best benefit of drones that you could imagine?

R: You could see irrigation problems. You could see. You know, you do walk your fields but you just don't see that much. You see like a couple acres out of 160 acre field. If you could just fly over you could say oh there is a problem right there and you can go out visually and inspect it yourself. The drone is not going to identify the problem. It will allow you to go there is something going on right there and so you can just look on your map. Yes, I think it is a good technology.

I: You said there was a meeting about drones? Where was it?

R: I think it was in Aberdeen. I almost think Simplot put it on with a partnership with another company that was kind of coming out with those and they were just talking about where they were with the laws. I know they do not have all the laws sorted out with them. I really see that people will see that around here, will adopt new technology.

I: There is a geosciences professor at Idaho State that is working on a pilot project.

R: Maybe he was there. It might have been him in cooperation with Simplot.

I: Her name is John Doe Professor.

R: I do not remember. It was at the golf course.

I: She is one of the researchers who is working on this National Science Foundation grant in this larger sort of MILES project. So I know she has been working out here. I don't know where she has gone exactly.

R: She might have been there. There were three or four presenters there, about a year ago.

I: It sounds about right. She has been trying them out in fields this summer.

R: I think there is interest as long as the cost/benefit analysis. Everything is so expensive equipment-wise now. A four-wheeler is almost \$10,000.

I: Okay, before we finish here, I would just like to ask you a couple of brief demographic questions. Including yourself, how many people live in your household?

R: Four.

I: In the simplest terms, how would you describe your political views?

R: Independent.

I: Any elaboration on that? Are there specifics.

R: You know, I agree with some of the Republican things and I agree with some of the Democrat things. I am probably a moderate. I do not believe that people should tell me what to do; but I don't believe I should tell other people what to do either. I just think there are too many people politically that just want to force other people to agree with them. It drives me nuts. I am probably not as conservative as a lot of people in this little community. I guess independent.

I: And what is your age?

R: 44

I: Finally, is there anything else you would like to share with us about farming in southeastern Idaho that we have missed?

R: No. It is a good way of life. It can be stressful; but everything is. I remember a guy one time said he wants to find a job that pays really well and he does not have to work a lot of hours and is kind of his own boss. He said when you find that let me know because I want to do that. What is that job?

I: I think it was a pretty thorough interview. All right, thank you very much. We really appreciate the time you have taken to participate in this research. It helps us understand the issues you are facing and how steps could be taken to help you do your work, which is work we know benefits this community and others.