

Field Day Podcast Episode 14. Aaron Heilers

Jordan Hoewischer Welcome to Episode 14 of the Field Day podcast brought to you by the Ohio Farm Bureau Federation. I'm your host Jordan Hoewischer, director of water quality research for Ohio Farm Bureau. Today's guest is Aaron Heilers. He's the project manager for the Blanchard River Demonstration Farms Network, which is a partnership between Farm Bureau and NRCS, kind of showcasing conservation practices and then you know providing tours and seminars for people on the farms. So we get into kind of a high level discussion about that as we hope that you guys can get into the weeds a little bit with us on future tours and our next one is April 26. You'll be touring all three farms. You get a free bus tour, free lunch and all that good stuff but we really hope to have you out. But in the meantime, here is 26 minutes or so of a little precursor to what you can expect when you come to the farms. Enjoy.

Jordan Hoewischer All right we'll get started here. I'm here with Aaron Heilers...Tell me who you are, what you do, where you come from, all that good stuff.

Aaron Heilers Yeah so Aaron Heilers. I'm the project manager for the Blanchard River Demonstration Farms and have been in that role for about three and a half years now. Before that I worked for about 10 years with the Auglaize County and Miami County Soil and Water Conservation Districts focused on nutrient management and drainage management with those two organizations. And my wife and I live in Shelby County and have a grain operation as well as a wine grape vineyard and we have three children.

Jordan Hoewischer Awesome so admittedly me and Aaron grew up in the same county around each other a lot, 4-H and all the good stuff, maybe some sports here and there. So Aaron's probably even going light on all the things he's involved with the between grapes and kids and politics and runnin' the farms and all this different stuff. He's right, he's into a lot of different things but for today we're talking about the demonstration farms project so tell us a little bit more about it. You know kind of what it is... I'm sure a lot of people have heard certain things about it but just kind of give us the spiel.

Aaron Heilers Yeah so the demonstration farms project is a partnership between the Ohio Farm Bureau and the USDA Natural Resources Conservation Service or NRCS. Those two organizations teamed up a few years ago and started this project. It's actually the second of its kind in the country. The first one is in the Wisconsin/Green Bay area. But this project here in Ohio started in September of 2015 and is scheduled to run for five years. Currently we're in talks of what goes, what's going to happen beyond that. But the funding for the project comes from Farm Bureau through membership dollars but then also through what's called the Great Lakes Restoration Initiative from the federal government. And those dollars is how we zeroed in on the Blanchard Watershed to focus on this project.

Jordan Hoewischer So what are the objectives of the project? I mean obviously, you know, ...we're demonstrating there's certain things on a farm. So what's the overall objective of the project?

Aaron Heilers Yeah so we have three farms in the demonstration farm project but our overall purpose is, once we had those farms established, was to identify traditional and innovative conservation practices that exist out there and implement them on these particular operations and then showcase them and showcase their ability to reduce nutrients coming off the farm landscape. So we're looking at testing basically conservation systems and controlling nonpoint source pollution. And you know as I go around the state

and talk to folks, or people come into the demonstration farms to see what those farmers are doing. We're basically trying to find practices in in three buckets. So farmers can implement practices in the field, they can do things at the edge of the field or they can do things in the stream. And so our goal is to have farmers from around the state be able to come here to these farms and pick and choose practices from each one of those buckets that fit their farming operation. You hear it all the time that not every farm is the same. Different weather, different soils, different management styles. And we want to make sure that we have options available that farmers can find that right practice for their farm and then have scientific data backing it up that it's actually going to reduce nutrient loss from their landscape.

Jordan Hoewischer Yes so you talk about, you know, showing different things, different types of farms, so go through the three farms of the project and kind of tell us why we chose those and kind of the unique certain circumstances with each.

Aaron Heilers When we started the project back in in September of 2015 we worked with the local soil and water and NRCS offices in Hancock and Hardin counties -- a little bit of Putnam County is in the watershed as well -- and try to identify farms that fit, you know, traditional agriculture across northwest Ohio so that we would be representative of how most farms operate and we narrowed our list down from there that had some other criteria of how open the farms could be, how accessible they are to having tours and research take place. Narrowed the search down to three operations. The Kurt, Kellogg, and the Stateler farms and I think we did a pretty good job of having a nice cross-section of traditional agriculture. The Stateler operation is a large wean-to-finish swine operation currently have about 7200 head of hogs on the farm and I think they're farming about 1000 acres of row crops now and so it gives us the opportunity to bring in folks that are not familiar with livestock and how you know today's modern housing is for livestock and they get to go through the barn, they get to see how the animals are raised. They get to see how the nutrients are managed so that's a nice fit for us. The other two farms, Kellogg Farms is about 5000 acres of corn, beans mainly, a little bit of wheat but a large operator in today's world as far as acreage is concerned and then Kurt Farms is about 500 acres roughly of corn and beans and so in today's agriculture a smaller type operation. So we get to touch three different audiences there from a farming perspective and try to make sure that these practices and fit each one of their type of farm.

Jordan Hoewischer Yeah. So I think it's a you know it's a good representation. I mean obviously there's a lot of different segments of farms out there so you know we did the best we can trying to find those. So we'll back, we'll back up to Stateler Farms because obviously manure is a hot and you know hot button issue especially where we're from close to the Great Lakes or Grand Lake St. Marys Watershed and so tell me about some of the things that we're we've been exploring on the Stateler farm.

Aaron Heilers Yeah like you said manure, unfortunately manure and livestock in the western Lake Erie Basin gets a lot of blame for the water quality challenges that they've got up there and the reality of it is is that the actual manure applied to the land in the Western Basin accounts for I think anywhere from 10 to 15% of the phosphorus that's put out there. So they are part of the overall picture but not you know not the the main culprit as they are made out to be. So we're looking at how we can utilize that manure better on the farm. Obviously it has value with the nutrients that are that are in it and we want to make sure that that every farmer is taking into account the value of that manure when they spread it out on the landscape. And so we've got edge of field monitoring on two of their

fields and one of the main things they're going to look at is is the timing of that manure-- when it's put out there and how it's being placed in the soil.

Aaron Heilers If we can protect it from the weather and then looking at some in-season type applications as well. All in the effort to make sure that we're keeping that manure and the nutrients that are in it on the field.

Jordan Hoewischer So the opposite of that you have nutrients there that are coming from commercial fertilizer so just to kind of bounce around...so the opposite of of Statelers with them applying primarily manure, we have the Kellogg Farm which is a larger farm that you mentioned. You know how are they handling their nutrients as compared to what you know a smaller farm would do or one that's handling manure.

Aaron Heilers Yes. Kellogg's again 5000 acres so they are a larger operator. And when we...one of the reasons why we selected their farm is they were transitioning to a strip tillage type operation. So used to be conventional tillage doing a lot of fall tillage coming back in the spring doing a little bit more tillage and they were switching to a strip till where they're actually incorporating the fertilizer in a about a nine-inch band in strips. So they have about a 60-foot wide unit and then doing nine-inch strips of fertilizer placement below the ground and mix it in into the soil profile. That's one of the things that shows a lot of promise in reducing nutrients from going down stream. So it was a natural fit for us to be able to highlight that type of practice. You know they do grid sampling, two and a half acre grid sampling, have their soil test levels within the Tri-State recommended ranges and then are placing in their fertilizer, commercial fertilizer below ground and so it's been a real nice fit to try to showcase that type of practice.

Jordan Hoewischer So yeah it's a great practice so is that What would be the limitations from you know what what are some of the messaging that we're talking to people about using the successes and the limitations of subsurface placement at least with the way that Kellogg's are doing.

Aaron Heilers Cost. That's the biggest thing and a lot of these practices come down to economics and that's one of the main things that we like to talk about as people come through the farms is these practices may be really good at reducing nutrients. But can farmers afford to do them? Can they they manage the type of practice we're asking them to do. And that's the unique thing that we have with the Kelloggs and the Kurt farm and the size discrepancy there is can we make a practice like subsurface placement fit for both type of operations. So the way the Kelloggs do it with a 60 foot wide strip tillage toolbar costs the \$180,000 dollars takes a heck of a big tractor to be able to pull it That's not feasible for a 500 acre farm or somebody that's smaller than that. So what tools are out there that can accomplish the same task. But can be more affordable for that smaller producer and that's the that's one of the things that we want to be able to flush out through this project.

Jordan Hoewischer Yeah so I guess we have some goals for the project. What does success look like for this project? Is it you know extending past five years? Is it making some dramatic conclusions on what works and what doesn't. Or what do you think success looks like, looks like in your mind.

Aaron Heilers Yeah so as the research community will tell you that nothing is ever set in stone. You know it's always preliminary but my goal would be that we have a good sense of direction to go in. I know you talked to Kevin King on a previous podcast and he

discussed you know there's probably directionally correct practices and I would like to see that hopefully those are the right practices. That data continues to bear itself out that that's the direction we need to move in. And then we can you know My main job is to help lift up that work that those folks are doing and highlight it. And I would like to see at the end of this project or maybe as this project continues in a different form that it that we can continue to push that information out and know that it's actually good, solid information that is going to reduce agriculture's footprint on water quality challenge.

Jordan Hoewischer And how are we involving people into this. I mean obviously we're demonstrating something for a certain audience...How do we involve people into the to the project?

Aaron Heilers So we target three different audiences to reach out to, the main one obviously being farmers. So we want to be able to communicate to farmers what these practices are. As we've got going here, you know the first couple of years we're getting the farm set up, getting the edge of field monitoring set up and getting through that first cycle of crop rotation and then starting to make those switches on what type of practices put out there. So from the farming audiences, we're just now getting into reaching out to them to draw them in because we have things that we can actually show them some more hard information that is going to be more useful to them. So we know we can do field days specific to different types of farming audiences whether it's a livestock heavy group or just the typical grain operation. We do tours all the time that we can hit all three farms in one day. So and then I also go out and talk to those type of farm groups at their winter meetings so I just had a couple in the last couple of weeks that an ag retailer might put on or a local soil and water district puts on that I can come share what the farms are doing from that aspect. The other two groups are the nonfarm public and then policy makers and that has been the focus of the first couple of years of getting them out on on the farm, letting them get familiar with what agriculture is doing. I think that's probably the biggest biggest challenge that we face in agriculture is trying to communicate to those folks that they really do want to learn. They just don't have that connection, that touch point with a farmer to ask those questions about why certain things are done the way that they're done. And so we provide that opportunity. Again tours that they can tour all three farms or do one day focused heavily on one certain topic and let them ask their questions. So we do that with community organizations, do a lot of things with schools and FFA students and really try to be open to all types of different perspectives. And then the last one is policy makers and again we want to make sure that policy makers are ultimately the people that are going to write regulations or not write regulations hopefully. And we want to make sure that they're they have good information in front of them of the latest science that's going on out there. And again to have that conversation with farmers about the challenges that farmers face. You know what what potential regulations could look like on their farm operation and just make sure that they have the full picture in front of them before they make any decisions moving forward.

Jordan Hoewischer Yeah I mean you talk about the subsurface place. You know Kevin King who's pretty much the authority of you know what type of nutrients and how they're coming off farm fields and what the solutions are. If he's saying you know hey you know subsurface is the way to go get your nutrients under the ground then a lawmaker decides to say this is what it should be and so this is this is how it's going to be regulated. Knowing how much that costs and what the availability and access for farming is to do that type of practice is key. So you think it's definitely necessary to get people out there to give them that realistic view because you know we're not saying from Farm Bureau's standpoint you know we're not saying we're deniers of our involvement it's about the you know the

nuance, the complexities of of of you know achieving some of the goals that have been set forth so that seems to be kind of the message you when everyone comes out as just kind of the reality of the situation. You talked about students so tell me about how FFA students and FFA classrooms have been involved in the farms thus far.

Aaron Heilers One of the biggest I guess challenges we are that the Farm Bureau especially wanted to have us reach out to was FFA chapters around the state. That was one of our main targets. And that's pretty hard to do. There's a lot of chapters around the state it's a good drive across to get to our farming operations and unfortunately schools face a cutback of the amount of time that kids can be out of the classroom or they can that buses can be on the roads. So we've done a couple of different things in that space. The first thing is an actual on farm FFA Career Day. We've got one coming up here in a couple of weeks. I had one last year was our first one and it was I would say pretty successful. Had a lot of good feedback from the teachers and the students but basically let the kids come out on the demonstration farm the Stateler farm specifically but we worked them through a game scenario that they get to act like the farmer for the day and make simple decisions whether it's soil testing or you know what kind of precision agriculture they want to use and they want to use cover crops but be able to make economic-type decisions but also then see what the impact of those decisions would be on the environment downstream. Just to give them a way to kind of understand a little bit of what's going on in this space but in the meantime the people that they were working with on this game were actual career professionals in agriculture so it might have been folks from Legacy Cooperative or from Ohio State University or the Nature Conservancy or a host of different organizations. Those people were talking with the students and helping them understand what they did on a daily basis to impact agriculture as a potential career path for the kids so that was a really nice event and doing that again here in a couple of weeks. The other things that we've done is create conservation videos. Now that was one of the things that the teachers really said could be useful would be you know Hey we may not be able to come out to the to the farm but give us you know one to two minutes on a conservation practice so that we can kick off a lesson plan. And so you know, you Jordan have been the face of those videos basically. I think we're up to eight now and those are up on our website but have been really well received with the teachers and utilized in the classroom. So those are probably the two biggest things that we've done with FFA students beyond just you know maybe a tour here or there when they're coming through on their way to a national convention or state convention which are there are always options for for teachers and students. But there's been some other kind of unique touch points that we've had.

Jordan Hoewischer Yeah it's been it's been fun and being and involved with the students you know they obviously bring a lot of enthusiasm. And like Aaron said those videos can be found in our website blench.blancharddemofarms.org along with you know a lot of different information on different conservation practices and videos and just kind of a deeper dive into what's going on on the farms. So you know we talked to all these different types of people that come out. Is there anything that kind of pops out that that's really resonating with people that come to the farm any like surprises or any anything that you think is kind of surprising that we've heard from from people coming out.

Aaron Heilers Yeah. The thing that I always reference back to is we had a group out from Toledo that non-farm group that walked through one of the farm operations and we asked them that same question of you know what, what were they surprised to see that day and they their overall takeaway was that that they had no idea how sophisticated agriculture was. And I think that should make us all to kind of take a step back and realize that are we doing a good enough job of getting our message out to folks and having that conversation

because you know what we did that day was show them how the farmer takes soil tests and gets those reports back and how they do yield mapping things that we probably take for granted that these folks had no idea that that most farmers are doing these types of things and yet these are folks that are out there in the community potentially saying things that are negative against agriculture. So I always keep that in the back of my mind when groups come in is that they most likely don't know a lot of the things that we take for granted and that we have to kind of start at the base level and build them up from just a general knowledge standpoint and let them ask questions because you know as I said earlier, they are usually just generally curious about what today's modern farmer is doing.

Jordan Hoewischer Yeah I think. I think that's a good point. I mean I you know things like GPS and soil grid sampling and all that stuff, stuff that's been around for a while is kind of blows people's minds. Every so often so it's interesting to see those reactions. So you know we talked about conservation practices that are kind of been around for a while. We have newer things so what's the kind of the process of implementing projects on the demonstration farms.

Aaron Heilers So if somebody has a new project or a new technology that they want to try to test or showcase on the farms we do have a somewhat formalized process that they can reach out to me, they can get on the website I believe. And we have just a pretty general form to put the idea on paper, answer a few questions and then that comes to me then we reach out to that individual and have them come in and present their information on whatever that technology may be. You know we look at things like you know again how feasible is it for most farmers to implement what they're trying to implement. How is it going to actually impact the downstream water quality and kind of walk through those things with that person. And then if the if that makes sense for that our small technical advisory group will take it to the farmer and see if they are interested in implementing that on their farm. And then you know look at when we can get that implemented on the farming operation. So those are kind of the. If somebody has a really new idea that NRCS doesn't have a current standard for, that's how we walk them through that. Now I didn't mention on the upfront of when we got the farms in place, one of the base things that we did was work NRCS to have conservation plans developed for each of those farming operations and so that's how the rest of the practices came online with the farmers was them sitting down with NRCS and determining which practice could fit. And then developing a schedule of implementation for those particular practices.

Jordan Hoewischer Nice. Yeah we always find it interesting to go through those new proposals on the technical group just to see what kind of interesting things are on the horizon some some are far out there some are pretty practical so we probably had at least two or three new ones that have come through that process that have been implemented on the farm or on the farms or at least are in process to be implemented so we're trying to push the boundaries as much as we can to showcase new stuff that maybe will eventually become an approved practice by you know NRCS or an entity like that. So we're going to wrap up here. What you know we we say we want all these people to come out of the farms. What are some of the opportunities for them to visit the farms. This upcoming you know a few months or so.

Aaron Heilers So we've got a bus tour on April 26 that is open to the public and with three farms that day and we'll have different presenters there along the way that they can talk to the farmers hopefully if depending on the weather where the farmers may be but the farmers are very generous with their times that they'll get off the tractor and come talk to the group for an hour if they need to and discuss their involvement with the project. We

also have a summer field day or a summer bus tour on Aug. 16 and these can be found on the website as well to register for those days. And then we're going to look at a Precision Agriculture Day in July on the Stateler operation to look at some of those things in precision that can be implemented on it in agriculture. So those are a couple of the things that are coming up. We'll also do a fall bus tour as well. And you know if anybody's interested in doing a tour, reach out to me, reach out to a Farm Bureau or NRCS and we can get something set up. We do a lot of tours that are specific for one audience. If they come to me and say hey we've got 20 people we want to walk through the farms, we'll set that up and we'll coordinate the logistics of it make sure that it's a enjoyable day for everybody.

Jordan Hoewischer It sounds good. Again blancharddemofarms.org to find out all that information. There's an events tab, a news tab to see what else has been going on. Is there anything as you wrap up? I know we kind of shorted a pretty long conversation here but we want to save some of it for four tours and stuff but is there anything that you have that you'd want to add in that we've missed?

Aaron Heilers No I just appreciate the opportunity to highlight what we're doing out there. And you know beyond the tours, anybody that's listening you know if you want me to come out and talk about it to your particular group whether it's a you know a small annual meeting for soil and water or a Farm Bureau group or whatever the case may be. I travel all over the state and share the information that we've got to date. So it's if it's research that's going on on the farm, if it's some of the data that's coming out we'd like to make sure that we can spread that message however possible.

Jordan Hoewischer All right that's all we got. And that was Aaron Heilers from the Blanchard River Demonstration Farms Network. If you have any more questions or you want to look up any more information. You know we said it before but the website is blancharddemofarms.org. And if you have any suggestions from me on topics for the future or any questions about any topics we've covered please email me at jhoewischer@ofbf.org or if you have any questions about Farm Bureau. Finally please visit our website and we have a lot of articles and a lot of information there for you are you know even if you're interested in becoming a member. There's all sorts information for you to do that. And that is ofbf.org. Thank you.