

Whole Farm Conservation Best Practices Manual

📅 Thu, 7/15 2:16PM ⏱ 11:50

SUMMARY KEYWORDS

practices, manual, iowa, conservation practices, cover, conservation, farm, iowa state university, liz, guide, harvest, recommendations, resources, soil, farmers, extension, crops, service, rain, talk

SPEAKERS

Speaker 3, Christa Hartsook, Liz Ripley

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- C** Christa Hartsook 00:15
Hello, and welcome to the Small Farms Podcast, a production of the Small Farms Program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life. In this episode, I visit with Liz Ripley, Conservation and Cover Crops Outreach Specialist for Iowa Learning Farms at Iowa State University to talk about the Whole Farm Conservation Best Practices Manual. I'm Christa Hartsook, Small Farms Program Coordinator. And we hope you enjoy the show. Liz, welcome. Thanks for being on.
 - L** Liz Ripley 00:48
Absolutely. Thanks for having me.
 - C** Christa Hartsook 00:50
So let's start out by telling folks a little bit about the Whole Farm Conservation Best Practices Manual.
 - L** Liz Ripley 00:56

Yes, so it is a mouthful, but it contains a lot of information. So we are really excited to have it available for folks to explore different conservation practices that might be suitable for their farm. So it began in 2019, where the conservation learning group, which is a collaborative team at Iowa State that aims to increase overall sustainability of agricultural and natural systems for multiple generations to come. And we brought together a group of leading scientists and technical specialists from Iowa for a series of what we call conservation summits. And so the goal was to build consensus on these best management practices so that we had a unified message for landowners and farmers as they're exploring and considering these options for their farm. And so it's meant to be a one stop shop with a lot of great information and resources in there that can compliment any of the technical advice that they're getting from the local NRCS office or extension office, or one of the many other conservation programs and services that are out there.



Christa Hartsook 01:59

So Liz, this really sounds like a great idea and a great way for everyone to get one cohesive message. I'm assuming that was a little bit of the origination for this manual.



Liz Ripley 02:10

Yeah, so we'd heard from farmers and landowners that recommendations for different practices had varied depending on the organization that was providing the information. And so that's the main impetus for getting this group together was to really figure out well, what is our message so that, you know that confidence in practice selection is really important to making sure that it's implemented as successfully as possible. We don't want to set someone up for failure, or feel like they're getting conflicting information from these different resources. So it did bring together many of the players from across the state that are providing that information to really hammer in on what is our message? What do we want to recommend? So it was built on that consensus, and it did take four of what we called the summit's of bringing people together to really hammer out these details and end up with this manual that we have today.



Christa Hartsook 03:03

So what was involved in the creation of the guide list? I'm assuming you kind of evaluated every conservation practice out there.



Liz Ripley 03:09

Yeah, so we decided to focus on a variety of conservation practices, kind of grouped into

two categories of infield practices and edge of field practices. So we've focused on for the infield, common practices for those that are, you know, one to three years into adding these conservation practices on their land. So how do we make it successful for that one to three years of experience or even no years of experience, so we focus on different reduced tillage, like no till and strip till, cover crops, and extended rotation for infield practices. On the edge of field side, we have wetlands, saturated buffers, bioreactors, controlled drainage, and prairie strips. So trying to set folks up for the best success in those early years of adoption so that they will continue them well into the future.

C Christa Hartsook 04:03

That makes total sense. Can you talk to me a little bit then about the process, a landowner would go through, you know, if they were really trying to evaluate different practices for their farm? I'm assuming there are some decision tools that could help.

L Liz Ripley 04:15

Yeah, actually, the manual is got some great decision trees. So they are again, grouped in field, edge of field. And they're meant to be easy to follow decision trees, answering yes or no questions, that help guide those using the decision trees to the best recommendations based on their condition. So again, this is designed for those with zero to three years of experience. So they're pretty basic in the recommendations. And so as they become more comfortable and confident in these conservation practices, certainly there are ways to expand and vary these. But keeping that in mind, we wanted to make it as straightforward as possible for those one to three year experience, folks. Yeah, that

C Christa Hartsook 04:56

Yeah, that makes sense. So the guide then, Liz, how is this broken down into practices themselves. I'm assuming it talks a little bit about what your overall conservation goal might be for the practice?

L Liz Ripley 05:07

Yeah. So there's some handy visuals at the very start of the guide, but actually used almost like a speedometer or gas gauge to kind of figure out what are your resource concerns? So are you focused on soil health? Are your concerns related to nutrient loss? Are you worried about habitat, and so we have different measurements of how each of the practices covered in the manual help address those different resource concerns. And then also our level of confidence. So one outcome of these summits as well identified

areas where more research is needed to better be able to answer those questions. So folks can take a quick look at that page five, kind of help them figure out what are they most concerned about on their farm? And then focus on those practices later in the manual.

C Christa Hartsook 05:51

Absolutely. Are there other ways then to find information, Liz, in terms of how these practices have been put into play?

L Liz Ripley 05:59

Yeah, so our website, iowalearningfarms.org, we have a whole list of farmer partners that are utilizing various conservation practices on their farms, and have agreed to be resources in their community. So you're welcome to check those out, find someone near you know, many of the partners that help pull together this manual also have some great networks. So Practical Farmers of Iowa, Iowa State University Extension and Outreach, your local USDA NRCS Service Center can help kind of direct you to maybe someone if you're looking for a local resource. We also have a lot of great resources available on our website, that go into a little more detail on each of these practices. So whether that's cover crops or tillage, print materials, we have DVDs, how to guides, we've got a whole series of webinars covering a bunch of these practices, and even our virtual field days that we've been hosting this summer, can help address some of those maybe advanced concerns about these practices as well.

C Christa Hartsook 06:51

Absolutely. Liz, I know you mentioned that this was a whole group that really came together to kind of build this manual and make sure we were giving good cohesive recommendations to folks, do you want to talk a little bit about the partners involved?

L Liz Ripley 07:04

Absolutely. Thank you for for asking. This was a very much collaborative effort. So the Iowa Learning Farms Team was part of it, but also representatives from Iowa State University Extension and Outreach, the USDA Natural Resources Conservation Service, so your local NRCS office, we have representatives from the USDA Agricultural Research Service that are based here at Iowa State, Practical Farmers of Iowa, Iowa Soybean Association, Iowa Agriculture Water Alliance, and the Soil and Water Conservation Society. And I have to give a shout out to this entire grant that made this manual possible is funded by the NRCS USDA grant program. So I want to thank them for providing the

resources to get everybody together to build this consensus and ultimately create this manual.



Christa Hartsook 07:48

Absolutely. So Liz, let's let's talk a little bit we're going to we're going into the fall season here. Is fall a good time for somebody to get this manual and then really still have time to put some of these practices into place?



Liz Ripley 07:59

Absolutely. So the two that I would focus on this fall would be looking at maybe either no till or strip till especially ahead of soybeans. The no till front and strip till for corn. So now is about the time you'd be making those decisions for next year's crop, but also cover crops. So as we saw in 2012, another dry year here in Iowa, there's a potential for a lot of nutrient flushing, when the rains do come either this fall or the spring. So by getting a cover crop out there, whether it's oats or cereal rye, it can do a lot of good and helping take up some of that nitrogen that the corn didn't take up during its growing season and prevent it from being flushed later next spring when we get those rains to replenish the soil. So with these dry soil conditions, one thing that the manual does is also kind of address those questions of what are your soil conditions and the recommendations are getting that seed in the ground. So whether that's drilling it post harvest, or getting some sort of broadcast with incorporation, vertical tillage system after harvest, to really get good seed to soil contact, aerial application, and highway interceding is still very much a possibility. But taking into account the long term forecasts when it comes to rain is that those without the incorporation do need rain to really get them jump started and going in this fall.



Christa Hartsook 09:17

And I'm assuming we're a lot of areas of the state we're going to be looking at an earlier harvest time anyway just due to the dry conditions so we'd have extra time to get those cover crops on.



Liz Ripley 09:27

Absolutely. So with harvest probably starting here yet in late September, even mid September in some places, that does create good what we call a growing degree day window for those cover crops to get them in the ground and really give them a good head start this fall before we get a killing frost that would terminate the oats, which is a winter kill species, but also get a really good start on any cereal rye that will survive and then be

there in the spring to also help protect that soil. And regardless of you know when harvest is happening and what your soil conditions are, one thing you can always do is schedule an appointment to visit your local USDA service center to talk to them about a potential edge of field practice, if that would work on your farm, they have rolling applications for a lot of those practices, if you're considering them and wanting some maybe cost share to help offset the cost of implementation. You can go in at anytime, right now they're scheduling appointments. So give them a call to set up your appointment and get in there and ask them about whether or not those practices would work on your farm.

C Christa Hartsook 10:28

It's a great advice out there. Liz, we've talked a lot about the guide itself, and practices and things that are covered underneath there, we're gonna have a lot of people wanting to know where they can get it and how much is this would cost?

L Liz Ripley 10:40

So it is available, it is a free download from the ISU Extension store. So all you need to do is search Iowa State University Extension store. And in there, you can search the Whole Farm Conservation Best Practices Manual for that free download. You can also order it, we just pay shipping, the manual itself is free just offset the shipping costs. So you're welcome to get those copies there. They're also copies being distributed to all the USDA local service centers so you can ask them about their copies and see if they're available to check out or at least take a look at while you're visiting their office.

C Christa Hartsook 11:11

That sounds great. Is there anything else we need to cover Liz?

L Liz Ripley 11:15

So I would just recommend that you know we've got some great webinars that cover a lot of these materials. So feel free to check those out. They're available on our website, iowalearningfarms.org, and consider implementing one of these practices on your farm this year and growing it from there.

C Christa Hartsook 11:30

Liz, thanks so much for being on. We appreciate it.



Liz Ripley 11:32

Absolutely. Thanks for having me.



Speaker 3 11:33

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