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 Dr. Kathleen Delate ISU Agronomy and Horticulture Professor and ISU Extension and Outreach Organic Agriculture Specialist to talk about organic production. I'm Christa Hartsook, Small Farms Program Coordinator, and we hope you enjoy the show. Kathleen, welcome thanks for being back.

Thank you, Christa. Great to see you.

So let's talk a little bit about organic farming and kind of define that because there's specific rules and regulations regarding that label.

Correct. So in general, organic farming is a systems approach to farming, where you're relying on the farms natural resources to assist you with nutrient management and pest management, as opposed to synthetic inputs. So in organic, you're not allowed to use any synthetic fertilizers like urea, or ammonium nitrate, and you're not allowed to use any synthetic pesticides, you'll instead be using things like resistant varieties, resistant cultivars to help deal with any potential insect pests. No genetically modified organisms are allowed in organic so no Roundup Ready or Liberty Link or any genetically modified crops will be allowed. It's really great to note that organic continues to grow leaps and bounds last year, it grew by 12.4%, from $55 to $62 billion
industry. Now, a lot of this could be attributed to COVID, people were more anxious to know where their food comes from, and a lot of people started searching for organic. So that was really great, that it took off so much in Iowa. We've grown 10% since the last USDA census. So there's now close to 134,000 acres of organic in Iowa, and we have about 800 organic farms that are in the National Organic Program Directory, and it's about $145 million industry in Iowa.

Christa Hartsook 02:31
Pretty significant then, and continuing to grow. I think that was going to be my next question, Kathleen is, are we still seeing those new opportunities for producers to really look at organic production?

Dr. Kathleen Delate 02:43
We are Christa, and just giving you an example of something simple like organic corn and soybeans. This year, the returns are phenomenal. Marketers are paying $33 a bushel for organic soybeans right now, and $9-$10 a bushel for organic corn. There's all kinds of opportunities for producing organic vegetables that's grown also growing in Iowa, and those markets are pretty unique or different than that of corn and soybeans, oats, for example, in that most organic vegetable growers are selling by themselves. They're having CSAs, Community Supported Agriculture Farms, they're selling at farmer's markets, they're doing on-farm sales, and selling to restaurants and institutions. And I think that provides a tremendous opportunity for anybody interested in organic vegetable production.

Christa Hartsook 03:34
Absolutely. So let's talk a little bit about the process itself. Kathleen, you can't just declare 'I'm an organic farm' overnight. What does that transition process look like?

Dr. Kathleen Delate 03:45
So the official transition to be certified organic by the USDA or one of their certifying agencies like Iowa Department of Ag and Land Stewardship, IDALS, is three years from the last application of a prohibited substance, such as a synthetic fertilizer or herbicide, and then the sale of that harvest of that organic crop. Generally you're harvesting and selling in the same year. So if you, for example, have an area of your farm that's never had pesticides, or fertilizers or synthetic fertilizers put on it, for example, a lot of people take hay fields that haven't had inputs, you can take that directly into organic production in other areas, CRP where you haven't applied anything. And you would just need to fill out an affidavit with your certification agency that that area had not had received any synthetic inputs for three years and you could go immediately into certified organic production.

Christa Hartsook 04:44
Okay, so when we're talking organic production, there's obviously some differences. We've mentioned some of the prohibited substances, for example, on organic land. I know there's...
mentioned some of the prohibited substances, for example, on organic land. I know there's obviously some other differences. You're going to be looking at increased mechanical weeding, for example. What are some of those positive and negative aspects of organic production that farmers would see?

Dr. Kathleen Delate  05:07
Sure. Well, as I mentioned earlier, it is a systems approach and it is management intensive. So it is difficult to do, I would say three jobs and farm organically, it will require a lot more of your attention. We like to call it management as opposed to labor because once you obtain those management skills, you're not going to be spending as much time out there. But yes, you mentioned weed management that is critically important to use a systems approach. An example that is using preventive crops like cereal rye as a cover crop can help mitigate weed populations in your succeeding crop. And then using timely weed management where you're getting in there at the first sign of those emerging weeds and hitting them with a rotary hoe or tine weeder, for example. Then following up with row cultivation, and using long term crop rotations have also been shown to help with weed management. So just corn and soybean in a rotation is not allowed in organic, you need a third crop. But having a fourth crop really helps with weed management too. So having corn, soybean, oat, alfalfa, really helps with weed management. So I don't really want to say it's negative, but if you're just starting out, you think it's gonna be the same as conventional farming, you'd be in for a rude awakening that you're going to be spending more time managing your system. It's really good to probably shadow or learn from a neighboring organic farmer and just watch all the operations they go through to make it easier on you as you transition to organic.

Christa Hartsook  06:48
Absolutely. Kathleen, what kind of resources do we have available for producers who are looking to start an organic farm or maybe make that transition over?

Dr. Kathleen Delate  06:57
There are so many resources now Christa. As much as I tell people don't use Google for everything, if you to Google 'organic farming resources,' you'll get probably 500 hits. Of course, we'd like to promote our program here at Iowa State, if you Google 'ISU Organic Ag Program,' you'll get our website and there are lots of resources on there to get you going. Iowa Department of Ag and Land Stewardship, IDALS, as I mentioned has an organic program. They have some great resources there. There's also the Iowa Organic Association which has a good website with information on it. ATTRA, which is a public private agency alternative technology transfer for rural areas. That's a great site to look for organic resources. NRCS, USDA Natural Resource Conservation Service, they have a whole organic page now, which is wonderful, helping you learn about all the programs that you can apply for to get support as you transition to organic, like the Conservation Security Program. Also the EQUIP, Environmental Indicators Program that if you use certain practices that are included in organic, you can use cost share funds from NRCS. They also have direct payments in their organic initiative funds. Last, there's various organic associations that I look at a lot. One of them that I really like is NOFA, and they're the Northern Organic Farming Association, and they have various NOFA branches in
New York, New Jersey, etc. They have great conferences and proceedings from the conferences and they have their websites full of information too. So NOFA New York, NOFA New Jersey, NOFA Maine are great sites to look at too.

Christa Hartsook 08:43
Okay, that's awesome. How about some enterprise budgets? Kathleen, I know we're very big on that within Extension. I have somebody who's considering, you know, a new enterprise looking at that budget and looking at those markets that are available out there. Do we have some resources on that?

Dr. Kathleen Delate 09:00
Yes, we've been really fortunate to work with Dr. Craig Chase from Iowa State who has developed a lot of organic budgets using information from our organic research sites and also from farmers to give some more realistic information. If you Google 'ISU Ag Decision Maker Organic,' that will take you to the five files that are on there, ranging from organic, specific crop budgets like organic corn, for example, and then a whole budget for transitioning to organic and how to take your farm through different scenarios. If you are interested in transitioning, we don't recommend doing it all at once. Dr. Chase has done a really good job of showing the different outputs income you'll receive if you transition starting with corn versus starting with what we recommend is an alfalfa in your first transition years to help build soil fertility.

Christa Hartsook 10:03
Sure that makes sense. Kathleen, you have a conference coming up the Iowa Organic Conference, and we should talk a little bit about that, because that's a great opportunity for somebody interested to learn a little bit more.

Dr. Kathleen Delate 10:15
All right, thank you for bringing it up. While it's our 20th in-person conference, it's our 21st conference, because last year was virtual because of the pandemic. A lot of people think it's the 20th, but it's actually the 21st. It'll be Sunday, November 28th. Mostly, that's for vendors that setup day. Then the full day of breakout sessions and keynotes will be on Monday, November 29th. It will be at the University of Iowa in their Memorial Union in Iowa City. And yes, we have a great lineup - three breakout sessions with fifteen total workshops, ranging from everything from how to transition to organic, soil quality in organic systems, to growing the best organic fruit trees, and integrating livestock on your farm.

Christa Hartsook 11:08
It'll be a really educational event. I want to make sure we highlight your keynote speaker for the day because I was very excited to see her session, given the extreme weather events that we've had over the last several years and just dealing with more and more climate change on
our farms. So I wondered if you could speak to that a little bit.

Dr. Kathleen Delate 11:29
Sure, I'd be happy to. Yeah, we're really excited to have Dr. Jessica Shade. She's the Director of Science Programs at The Organic Center, which is affiliated with the Organic Trade Association out of Washington DC, and she'll be speaking to us about how organic farming can help mitigate climate change. She's done a lot of research herself and compiled a lot of research from different sources looking at the benefits of organic in terms of, for example, carbon sequestration. Some of her research has shown that organic soil amendments which are always used in organic farming instead of synthetic fertilizer, like compost and manure, they can boost carbon sequestration by 24%. So things like that we'll be discussing also how these organic practices, longer rotations, cover crops, conservation tillage, they can also help global warming potential or greenhouse gas emissions. She'll be presenting some of that research too.

Christa Hartsook 12:34
She sounds fascinating and I'm excited to be able to hear her. One of the aspects of your day Kathleen, and I always appreciate and enjoy is just the general networking that happens among Conference attendees. But I know you're going to have a full vendor fair, and probably some other sessions that you might want to highlight and speak to here.

Dr. Kathleen Delate 12:53
Sure. Yeah, thanks for bringing that up. I love the vendor sessions, or the vendor trade show. Right now we have about 30 people registered, I think it's going to be down slightly just because of the pandemic, people are still a little leery about traveling. But it'll be a good showing with those 30 vendors, your group will be there, thank you very much. The vendors will be selling seeds and also a good source of markets. Marketers will be there, we'll also have government agencies to discuss how they can support organic transition, and we'll have a lot of nonprofits too, that are working on increasing land access for farmers or people that want to farm like SILT, Sustainable Iowa Land Trust, for example. So the vendor part is fantastic. Networking is absolutely phenomenal. Just walking around the vendor show and also great lunches and snacks we have are great way to meet people too, during those and then the breakout sessions will allow a lot of time for discussion. A lot of people meet people there that become lifelong friends after it. One thing I did want to mention that is new this year, is that we're going to have a workshop on managing mental challenges with farming. I know that a lot of people through COVID and other crazy things that happened in 2020-2021. This will provide an outlet for them to listen to some consultants that work around the issues of mental health. It'll be a great session. I hope to be there myself because I need it desperately.

Christa Hartsook 14:31
Yeah, mental health is such a huge consideration anymore. So I appreciate that you are highlighting that session and hope that that's well attended. So Kathleen, where can we find more information on the conference itself?
Dr. Kathleen Delate  14:43
So again, just Google 'Iowa Organic Conference 2021.' It should take you right to it. You can also get to it through my web page, ISU Organic Ag Program. It'll be highlighted there and if you have any difficulty finding it, please contact me Kathleen Delate at Iowa State or kdelate@iastate.edu.

Christa Hartsook  15:04
Awesome. Anything else we should highlight today?

Dr. Kathleen Delate  15:06
Well, some people say is this only for farmers and I like to say no, we have something for everyone. Because the sessions on fruit crops and vegetable crops will be good for gardeners and, of course, a horticulturalists. And then there's the environmental sessions to like water weather warnings with Chris Jones from the University of Iowa and Dennis Totti from the USDA Climate Hub that'll be speaking in general about environmental concerns that are going on and what we can do about them.

Christa Hartsook  15:35
Yeah, they're definitely is something for everyone at that Conference. So I appreciate that very much. Kathleen, thanks so much for being on today. We appreciate it.

Dr. Kathleen Delate  15:44
Thank you, I'm glad to talk to you.

Speaker 3  15:46
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