Welcome to the small farms podcast, a production of the small farms program at Iowa State University Extension and Outreach. This is episode three, where I interviewed Dr. Kathleen Delate, an ISU horticulture professor and ISU Extension and Outreach organic agriculture specialist, and talk about growing organically on a small farm. I'm Christa Hartsook, small farms program coordinator, and we hope you enjoy the show. First, let's start off and can you tell me a little bit about organic farming in general? What is it why should we be interested?

Sure, Christa. Thanks for asking. Organic farming in a nutshell is farming without chemicals. But there's a lot more to it than that. On the positive side, you are replacing the chemicals with naturally based inputs. For example, instead of using synthetic fertilizer, you're using compost or manure, or cover crops, or other organically approved fertilizers. For pesticides, you're going to be using preventive techniques like crop rotation. There are also organic compliant treatments available that are based on natural products such as clay based products, or biological controls. So that's in a nutshell, but you can go into a lot more details. And a lot of that information is available on our organic ag webpage at Iowa State University.

And we'll be sure and throw a link up to that too with our podcasts. So I'm assuming then Kathleen, that there are a lot of requirements that a farmer must meet to be organic. Can you tell me a little bit about those?

Sure. So most of the growers I work with are certified organic, because they sell to wholesalers who require a certificate, verifying that all the practices they've used are organic based or...
organic compliant. However, most gardeners are not certified organic, because they don't necessarily sell to big markets that require a certificate, but they could still be considered organic. To be certified organic, you have to have your fields inspected by an inspector from a certification agency. And they have to verify that you have not put any synthetic products on that land for a minimum of 36 months prior to being certified organic. For an organic gardener, it's simply using organic practices, i.e., not using synthetic chemicals and using proper rotations, cover crops, and compost, for example. And you don't necessarily have to be inspected.

Christa Hartsook 02:36
Perfect. Are there new opportunities, or maybe some trends that are coming down the line in organic production versus conventional AG?

Dr. Kathleen Delate 02:45
Well, I'm getting more and more calls from people that are interested in going into organic because the market continues to grow. Last year grew 11.3%. And it's now a $39.1 billion industry. So I think there's a lot more interest in organic these days, consumers are asking questions of how their food is produced and are interested in supporting farmers that use natural methods. So just in general, I think there's a large opportunity for folks to get into organic to meet the current demand because we are not meeting the demand for organic products, especially for example, organic soybeans, they have to import them from India, and China to meet the demand for things like organic soy milk and tofu. So there's a lot of demand for organic vegetables and fruits that's not being met. That, for example, I'll be getting products in from California that are certified organic. So that trend is increasing. As far as technology trends, we are working in this area called Organic No Till where you don't use any synthetic chemicals like a regular no till operation conventional no till operation uses. Instead you plant a cover crop and you crush it with a roller crimper. Although I heard of a farmer the other day, he's just used a stock chopper to crush his cover crop in the spring. And then you plant your vegetables directly into that crushed mulch. And it works really well for vegetables because you can irrigate them with field crops. It's touching data because if you don't get the proper amount of rain, it's not going to work as well.

Christa Hartsook 04:29
But clearly overwhelmed some opportunities for producers to investigate.

Dr. Kathleen Delate 04:33
Absolutely. I hear from stores, for example, that they would carry a lot more local organic products. I heard that Whole Foods For example, Des Moines can't find enough or any organic sweet corn this year from Iowa. And they're interested in getting it from Iowa producers. So if anybody out there wants to investigate that, I would highly encourage it.

Christa Hartsook 04:58
And to go into, for example a store market like that, Kathleen, I'm assuming that they are wanting a certified organic operation.

Yes, that's probably for the most part true. I think Whole Foods does require a certificate. However, I've heard that Hyvee will take products that are organic, but not certified. Okay. And they will just label them as locally grown. Because you can't use the word 'organic' unless you're certified organic.

Yes. Let's say you know, we have somebody that has an interest in the transition process itself. What am I looking at there in terms of timeline requirements while I'm transitioning my fields over?

Right. So it's basically as I said, a three year transition. If you've used chemicals, a lot of folks can go right into organic production if they haven't used any chemicals on a piece of land. If it's been in pasture, for example, where they haven't use chemicals if it's been in CRP where no chemicals of use, it's in your backyard, you don't have any chemicals. You can get certified organic that first year, but otherwise, it is a three year transition from chemical conventional production to organic. And it's really important during that three year period to have your, what's called organic system plan, ie your crop rotations, because the inspector will ask how you are building your soil during that period and beyond. So having a soil building rotation is critical. You must have some lagoons either alfalfa, soybeans count, but they're not they don't add as much nitrogen as things like alfalfa, red clover, white clover, hairy vetch in your crop rotation to help build your soil, and then finding a source of compost or manure. Ideally, you have your own or your neighbors, that's what we use is the manure from down the road. That's the best situation. But if you can't locate local compost or manure, you can always purchase it. You can buy bagged organic compliant manure and compost from most farm and garden shops.

And if I'm looking at going into an organic type of situation, I know there's a cost involved in becoming certified. What is that?

So the cost is, in general, about $150 for the application and the certification, then you're charged based on your acreage. So if you have small acreage, maybe you're gonna pay $300. I think our costs for we have about 20 acres we certify, and that's about $400 a year.
Christa Hartsook 07:31
All right, I know that there are going to be some challenges, you know, when you take this route and you're not using the synthetic products, like we talked, you're gonna obviously have an additional weed pressure, things like that, what kind of challenges should I expect,

Dr. Kathleen Delate 07:45
right, we didn't even talk about weeds because as you improve your soil, the weeds like that improvement in soil too. And that's one thing people are surprised when around the country when they say as your biggest challenge soil fertility no, in Iowa it's weeds, because we have such fertile soil. And we also have fertile weeds. Again, it's a multi pronged approach where you're going to use crop rotations, having a cover crop out there will really help with your weed problems, especially about small grain in it like rye, that actually has some allelopathy that will help prevent weed seeds from germinating. And then compost has been shown to have some allelopathy against weed seeds too. And the tools of the trade basically are tillage for weed management and organic systems, especially large scale organic systems. So we'll use equipment like a rotary hoe, a row cultivator, and some folks also use a flame burner - propane flame burner - it doesn't burn the weeds, it just actually boils the water in the cells of the weeds and the wilt. We've used that several years. So all these products or technologies can be used. There are some organic herbicides, but they're very expensive. So in a small operation, it might be warranted to use them. However, they're mostly citric acid base. However, they work well only on small weeds. So you couldn't go in there and just spray a big thisssel all you saw, I tell people to cut it down, cut it down to the base and then use the product if you're so inclined to use those products.

Christa Hartsook 09:22
Okay, how about neighbor relations, Kathleen? I'm assuming you know, you're obviously going to be more concerned about drift, you know, separation distances, things like that. All right. In Iowa, our certifying agency is the Department of Agriculture is that where people really kind of need to start?

Dr. Kathleen Delate 09:33
Exactly. It's really important to communicate with your neighbors that you are going into organic and let them know that you have to have a minimum of 30 feet between the conventional and organic operation. And then that border you can't sell that if you harvest anything off of there. You can't sell it as organic. And just to let them know when you're going to be planting, probably without exception organic farmers plant later than conventional farmer because they want to avoid the pollination time, it's called the Nick. So there's no cross pollination or contamination from the conventional side. And there have been instances where folks did drift on organic farms that actually happened to me at an Iowa State Farm. And there's a lot of immediate recourse is to contact the pesticide Bureau at IDALS Department of Ag, and they will come out and do an investigation. And chances are, it's going to go the route is gonna go to the organic farmer, because you didn't do anything, you just practice your
organic production, and then we've drifted on, it's definitely worth reporting. You also can put your farm into the sensitive crop directory with IDALS so folks can see, especially with larger operations, where you are if you're organic, and be cautious. And if there's.. in our case, it was a custom applicator. So if there are custom applicators around your area might want to communicate with them too, just by any chance they happen to be coming nearby your organic farm, but know that the state does protect organic farmers very well in this regard if you are drifted on. Actually, there are probably about five agencies that certify in Iowa. IDALS Department of Ag is a really good one. However, there's also folks like the organic Crop Improvement Association OCIA. most that comes from Wisconsin Midwest organic Service Association. So you can get on the web, just type in certification agencies and see which ones fit your needs. They all basically follow the same rules, prices might be a little different. We at IDALS tried to match ours to the general charges. But yes, that would be a good place to start. Maury Wills is head of the program there and just give them a call and say you'd like to get started on an organic and if he can send you any materials. He has a lot on the web, too. We also have a lot on our Iowa State organic webpage too.

Christa Hartsook 12:14
Great. I was just going to ask what kind of resources your program has available here.

Dr. Kathleen Delate 12:19
We do have an organic ag web page. If you go to Iowa State homepage type in organic it's the first hit ISU organic ag web page. And within my web page, I have links to a lot of other organic websites around the country. And also, there's a lot of resources in the value added ag program and small farms sustainability over in the Leopold Center for Sustainable Agriculture, they're.. especially in their local foods program, they're working more and more with getting resources out for organic producers, because it seems to me and I've asked them to do a study on this that majority of people that are going into small scale, local food production are organic.

Christa Hartsook 12:59
Okay, great. Anything else we need to know?

Dr. Kathleen Delate 13:02
Well, I invite everyone to attend our Iowa Organic Conference. We'll be having our 50th anniversary this year. On November 22, and 23rd. In Iowa City. Why Iowa City. People want to know, our biggest supporter is the New Pioneer Food Cooperative in Iowa City. It has probably outside of whole foods as the largest collection of organic foods in the state and they're housed there in Iowa City, they're a big supporter. Also the University of Iowa Office of Sustainability is a huge supporter, and there's just more organic farmers in that area of the state. So that's why we have the conference here in Iowa City

Christa Hartsook 13:42
And registration information available on your site?

Yes, you can just type in Iowa organic conference 2015 You'll be directed to my webpage but also to University of Iowa Office of Sustainability.

Great. Thank you so much, Kathleen. This podcast will be up on our website, www.extension.iastate.edu/smallfarms, along with our acreage living newsletter and some of the links that we mentioned today. Thank you so much for listening.