

Abby Morrison:

Hello, and welcome to this special episode of Field, Lab, Earth where we're focusing in on practical transitions from conventional to organic farming. This episode is part of a four-part podcast miniseries with a five-part companion webinar series, and is hosted by Dr. Erin Silva, an Assistant Professor in the Department of Plant Pathology at the University of Wisconsin-Madison. You can find more information about these series and related resources, as well as how to get Continuing Education units for listening, in our show notes or on our website, fieldlabearth.libsyn.com. That's Libsyn, spelled L-I-B-S-Y-N. Today's topic is the organic system's mindset. Our regular programming will resume on March 4th with a special two-part episode. Thank you to NCR-SARE, the North Central Region Sustainable Agriculture Research and Education Program, for their support of this episode. Let's talk about farming.

Erin Silva:

Welcome to today's podcast on transitioning to organic agriculture. I'm Erin Silva, an Associate Professor and State Extension Specialist in Organic Agriculture at the University of Wisconsin-Madison. And I'm here today with Tom Frantzen. Tom Frantzen farms organically with his wife Irene in New Hampton, Iowa, and Tom has been a leader in organic agriculture in the upper Midwest, serving as a frequent speaker and mentor to the organic community. We are happy to have Tom join us today to talk about the systems-based mindset that is required for a successful transition to organic production, as well as long-term success as an organic farmer. Welcome, Tom.

Tom Frantzen:

Yeah, very glad to be here.

Erin Silva:

To start off, can you tell me a bit about your journey to organic agriculture? What motivated you to start farming organically and what brought you to become an organic farmer?

Tom Frantzen:

Yeah. I live where I was born. I'm the youngest of six. My parents and grandparents on both sides were farmers who farmed within a very few miles of here. I had argued that on both sides, my descendents were real ethically and conservation and community-minded people, so there was kind of a mindset, probably, that goes into the tradition of both my mother and father's side that will go way back. I started farming in 1974. Irene and I got married in 1976. My father had recognition for conservation features. He had adapted a farm that would... He had a plaque he got from the Soil Conservation Service in the 1950s. Those parts of discussions about community and conservation and agriculture were pretty much ingrained in a certain extent way from the beginning.

Tom Frantzen:

But what my parents and grandparents did not have was the influence that we would come into, and that is the movement. And one of the ones that really was one that really changed our farm was the Land Stewardship Project and the Practical Farmers of Iowa. And those associations might've had some of the risks of the 1970s, but mostly it was the 1980s when those associations came to be. And they would have a big influence on us, because then we could associate with other people who were in somewhat like-minded thinking, or were willing to challenge what they saw or they thought that was not right with the world around them.

Tom Frantzen:

So that would become a major influence. We started going to some of the meetings. We were trying to farm. According to the 1980s, they were very difficult times financially, so we were doing what we could to reduce cost of production, and the Land Stewardship Project had sponsored some meetings. But one of the meetings that really was a very influential one is that they had Allan Savory who founded the holistic management concept, and Allan is British Rhodesian. And that Allan Savory as a speaker... And that meeting was in [inaudible 00:04:23] I'm going to guess probably 1982, early 1980s, something like that. I'm just picking that date off the top of my head.

Tom Frantzen:

But what I remember is probably 75 farmers being there, and about 72 or three of them would have thrown Allan Savory in the Mississippi River because he challenged how they were thinking and how they're making decisions. And at one point in time in the discussion he called them a bunch of arrogant tinkers, which got them really pretty angry, but there was at least two of us for that meeting and maybe three that thought that what Savory was saying was really correct. And Allan's basic message was that you can't make good decisions unless they are rooted in your goals, and your goals need to be rooted in your personal values. That was really a mindset-changing message from Allan Savory, and it would begin us really on a path to farming in a different way.

Erin Silva:

I've had other organic farmers recommend that I look into Allan Savory as well, so that's interesting that his message and his approach has definitely impacted organic farmers and the way they approach their production and management on their operations, not only from more of a practical standpoint of what they're doing in the field, but overall that mindset that you need to be successful to farm organically in the long-term.

Tom Frantzen:

We took the course. We've had several courses in holistic management, but in the basic course, one of the things you have to do is you have to define what you want out of life and what really is the value to you and what is it. And then you start to look for the conflicts you have with what you're doing and what your values are. And when we did that, we came across things that we were doing that were, especially for me personally, that were very much in conflict with what I wanted out of life. And that confrontation is not necessarily fun, but I think long-term it's very constructive.

Erin Silva:

Wow. Can you describe to us a little bit more about your farming operation, what sorts of crops you grow, what livestock are on your farm?

Tom Frantzen:

Sure. Yeah. We own 320 acres. We don't rent any acres, so we own that 320. Been here my entire life. We transitioned to organic in the 1990s. Were 100 percent certified organic by the year 2000. We have a little less than 50 beef cows, and we retain the calves from those cows and feed those calves out organically to slaughter, maintaining pasture access for them. We have about 40 brood sows, and we farrow those litters of pigs from those sows usually about twice a year and feed the pigs out to slaughter here on the farm. That includes winter farrowing on our son's acreage which is a few miles away from

here. We've had the farrow-to-finish operation, and actually pasture farrowing would date back on this farm all the way the 1930s, so the farm has had sows off the pasture for a very long time.

Tom Frantzen:

The beef cow herd was added to the farm when we transitioned inorganically because the beef cows really take a crop rotation, but that's one of the best things that we have going for us. The basic crops we grow, again, all organic are corn and soybeans, small grains, hay in pasture. And now this year we've just planted our fourth planting of a new crop, and that is hybrid rye. And this is a crop that was developed in Europe that we have now put into our crop rotation, and it has really has then a game changer in our opinion. We're growing rye, hybrid rye for grain, corn, soybeans, usually oats, and then hay in pasture, and pretty much in that same sequence.

Erin Silva:

Well, that's interesting to hear the value of livestock in the operation and how that relates to, I imagine, not only helping with the fertility management directly through the manure, but also integration of legumes and the ability to develop a more diverse crop rotation that helps with weeds and with the ability to add in cover crops to the rotation.

Tom Frantzen:

It really does. My mindset is rooted very soundly in the fact that I just love my cows, and I give them a fresh strip of grass every day to the entire grazing seasons. Very compatible relationship with the animals. But that actually came out of the holistic management. Some of the ways we were housing animals was absolutely a conflict with my values. We really had that with hogs, because we had hogs in slab floors and with confinement facilities for some years here and that's all gone now. But the cows and the hogs, the way they are housed now don't conflict with our values, but they really add to what this farm produces. It produces grains and it produces forages, and some years those are forages are not real good and some years they're pretty good. And the grains, the same thing. Some years the quality is up and down, but most all of them other than the soybeans are fed to the livestock, and then the livestock are a fundamental value added.

Tom Frantzen:

The cow herd we switched about four years ago to fall calving. We don't calve in the spring now. Most of the calves are born starting in July and through about, now, probably about October is about the end of our calving season. And then the cows stay with the calves over the wintertime. The mother cows stays with the cows in wintertime, which is a large change for the farm, but it integrates well in what we are doing and with our crop rotation and with the forages embedded and that are produced here.

Erin Silva:

You've talked about values-oriented decision-making, but I've also heard you talk about discipline and the long-term anchoring that is necessary for an organic farmer to be successful. Can you talk a little bit more about those aspects?

Tom Frantzen:

Yes. I think discipline is essential. In first place, it takes discipline to be able to sit down with a group of people, hopefully it's your family, and have these discussions and start this discussion about what you

want out of life and what really is important. I think a lot of people would rather walk a gang plank out into a pool of sharks then sit down with their family and talk to them about what really is important, which is kind of a tragedy because without that discussion you don't expose what really are people's desires. That discipline is important and it's served us very well. We laid out in the original crop rotation with some suggestions from Ron Roseman, who's even a longer-term organic farmer, a good friend of mine from Harlan, Iowa, but we stick with that crop rotation. We ran into some difficulties once and changed it and made even things even worse, so that crop rotation basically is very good.

Tom Frantzen:

But a year I'd like to focus on is 2009. 2009 in here in this area was a very bad crop year weather-wise. Everything went wrong. In fact, we were so wet so long and so moldy, I remember that now, I had an extensive argument with Federal Crop insurance agent that our crop, when we tested it for toxins, because of the mold should have been destroyed out in the field and plowed down. And they refused to, because they said it might be full of mold but the owner of it would still buy that moldy corn, which is kind of a sad state of affairs. But believe me, '09 was a rough year market-wise for both the livestock and the crops, but we did not change our game plan. We did not change it at all. We maintain the status quo.

Tom Frantzen:

2010 was an excellent year and we had excellent years since then, and if we would have jumped ship or made some drastic changes and not had the discipline to stay the course, we would not have enjoyed the long-term benefits. I'll give you a specific example. One of those years in there, I can remember a buyer calling me up and offer me \$17 a bushel for organic corn. I did have some to sell them and I did sell some corn, but that did not mean I planted the entire farmed organic corn the next year, nor did we change our farming systems. We just took advantage of the fact that that price at that time was good, might've made some ration changes here, allowed us to sell some of that higher-value product, but we do not make changes for short-term. We focus on the long-term, because sometimes repeating grains that people argue are a lot more valuable if they were sold, but I said the value is in our livestock and our diversified rotation and our diversity.

Erin Silva:

I've seen that too, and that organic really takes a need to shift away from that temptation to make those decisions on more of an annual mindset, and really see how decisions over a five, six, seven-year period work together to make organic successful. It's that holistic strategy of the rotation and how animals are integrated in that you're able to achieve your fertility management and weed management and production goals, but those temptations to make those annual shifts... Granted, sometimes the weather can make you do that, but really making those shifts with the vision of how this fits into your longer-term goals and strategies.

Tom Frantzen:

Yeah, it's real important. It's also important, and I think some of us it's second-nature to us, but a lot of farmers I don't think it is, to open yourself up to the world around you because we're shaped by the people around us. We have three children and they're all grown, and our son is involved with us here on the farm. We have two daughters. But we always told them as they were growing up that if you lie around with the goats, after a while you're going to smell like one. And what that goat statement really means is that you are shaped by the people you associate with. And to new people into organic, they

have to have, and possibly it is the discipline, to break out of that local mode and just start associating with people who have been down this road before, understand techniques and practices and concepts and the open sharing, which is so common in the organic community. And I don't think that's very common in the rest of the world that people share ideas as much, but that really influences people and it influences operations and it helps them out.

Tom Frantzen:

Because there's plenty of struggles, but the worst struggle is to take it all on yourself. Plus you don't get the excitement that comes from new concepts. One of the most out-of-place worst statements I've heard recently is that organic farming is old-fashioned farming like grandpa used to do, and it really is a slur and I've heard it come from some fairly well-placed people. It is so ridiculous, because it shows that they are not paying attention to the evolution in organic farming which is actually very rapid. There are many, many concepts, everything from weed control to crop genetics that are developing very well, are changing organic agriculture a lot, but you have to break out of the local mindset. You have to go to conferences and read and find out what's going on and talk to different people, and there is just a lot happening.

Erin Silva:

I couldn't agree more. I think sometimes farmers say that with a sense of pride, and there certainly is pride in that long family history of farming. But I couldn't agree more that this is just an incredibly exciting time to be involved in organic with new science and tools and equipment and the knowledge that's being generated, not only by universities and crop consultants and others working in the field, but by farmers. Organic farmers are just such amazing innovators, trying new things and as you say, learning from each other and sharing that knowledge. Organics is really moving forward in some really progressive, exciting ways.

Tom Frantzen:

Yeah. I'll give you a very specific example. Researchers in Eastern Europe went into, and I think the correct word is the genome, but they went into the collection of what is in the rye genetics. And rye is different from oats, wheat, and barley, because those are self-pollinated crops rise. Rye is an open-pollinated crop, so they very deliberately did this in rye. And they were able to establish a male and a female line of rye plants, and then start a cross-breeding program and start to select for characteristics that they wanted in the rye plants. What they created was exactly where corn was in the 1930s. This is the very origin of hybrid seed corn was the 1930s. Now we have hybrid rye. These breeders took a plant that is, and they open-pollinated most of them, are about six feet tall. They like to lodge. They bred for a plant that now fully mature is a little over three feet tall and stands like a fence post. Because the plant only has about that much of height in it, it spends the rest of the energy on seed head development.

Tom Frantzen:

They about doubled the zygote. If that doesn't get you excited, we got a crop that stands and a crop that yields a lot more than the open-pollinated varieties. Plus they selected four varieties that have very heavy pollen canopy, which greatly reduced the ergot contamination problem which is so serious in rye. Now, the exciting thing here is that... And I farm in Northeast Iowa where we have not had to my knowledge a successful winter grain crop. [inaudible 00:19:12] they've never had any success with winter wheat, winter oats, or winter barley here, but now we got winter rye and we planted our fourth

crop here last week. This crop is planted in September. The plant, in fact, rye is starting to come up already, will be grass green by the middle of October.

Tom Frantzen:

There is no activities all winter, all spring out there, all through the summer. We'll harvest this crop in July. That's a grain crop for our livestock, plus it produces the bedding crop. We will very likely frost seed red clover into this rye, or next summer we will kill and plant a nitrogen-fixing cover crop, graze it with our stock cow herd, then next year we go to corn and then beans and then oats and then hay in pasture. And the rye overwhelms weeds, even really, really tough weeds like giant ragweed. Here's an example of scientists taking genetics that exists, creating breeding programs that didn't exist before, creating plants that can really influence farming operations, and now this is available. So, things to be excited about.

Erin Silva:

Yeah, definitely. The discussion that we were having a bit ago about some of the essential aspects of farmer mindset to transition to organic, it reminded me of a quote that you gave at the OGRAIN Conference this past January from Charles Darwin. And I believe the quote was "A survival has nothing to do with power, speed, or size, but everything to do with our ability to adapt to change." Can you talk a little bit more about what that means?

Tom Frantzen:

Oh yeah, sure. I read that a few years ago and it really struck me. Here, Darwin is making these observations from what he's seen in the tremendous work he did on genetics and evolution, so here you're a person that really is observing things. What he's saying is that how change is so important for survival. Well, let's take a look at a real obvious example. The dinosaurs ruled the earth for hundreds of millions of years. Off the top of my head, I think it was like 165 million years, a longer time period than we and human beings can even begin to imagine. They're very large, very powerful. They obviously, you got in the road of them, you'd just be gobbled up and there's no question.

Tom Frantzen:

I mean, what would ever take them out? I mean, disease? What's going to take dinosaurs out? Well, climate change takes them out. We get struck by a meteor so big and so bad that the climate in the world goes into horrid disruption, and if you can't flex to that, you're going to die. And that's what happened to every creature that was over 70-some pounds. They couldn't adapt to the changing world around them and they weren't going to be able to survive. The reason I was struck by this is that a lot of people look at what's going on in the world around us, especially all the trends too, such huge sizes of operations in agriculture and they say, "Well, it's going to be nothing but the big and the powerful, and they have all the answers." And I'm going, "You know, I think really they're more like dinosaurs."

Tom Frantzen:

They are very powerful. If you stand in front of them, you'll get run over, but our world changes very rapidly and it can be into even higher speed rates of change, which is hard to live. But you've got to be able to adapt to those changes for agriculture, provide the function, or providing food and fiber for our population, so flexibility and the ability to survive the changing times is extremely important.

Erin Silva:

Awesome. Great insight. A foundational principle and one of the fundamental components of the organic regulation is soil stewardship. And I know that's a concern of farmers that are thinking of transition to new organic, that they've done conventional no-till, and that, like you had mentioned, that they see organic as potentially going a step backwards to the way their grandfather was doing it. But organic farmers do pay very, very careful attention to soil stewardship and building their soil health. Can you describe a bit more of your approaches, your systems-based approaches that you've adopted for soil stewardship on your farm?

Tom Frantzen:

Yes, I can, and I'll tell a very specific story. And it actually ends up is I'd have to call kind of a public discussion. We have about, oh, 20 to 30 acres of conservation reserve areas in here, CRP plantings. We've had them for quite a while. And an agent from the Department of Agriculture was here, probably from our local County offices probably three or four years ago, just looking at either the tree stands or wherever it was, just making some inspection in the CRP acres. And anyway, we were driving around the farm, and for a very long time, because we're solid manure, I was stacking our manure into a sheet composting. But I'm not proud to say this, it was a hundred yards from the upper east fork of the Wapsipinicon River.

Tom Frantzen:

I argued it doesn't flood where the stack pad was, but they'd look at me and they'd say, "You know, that pad doesn't really belong there." And they weren't in my face about it, but the truth is that we sat and looked at it and said, "You know, the truth of the matter is that this really doesn't belong here. This is not good. I think we can do a lot better." Now, that's one thing to say that, but we didn't stack manure because we didn't want to spread the dirt. We needed to stack from there because we only spread manure in times of the year when the soil is biologically active. We won't haul on frozen ground, we won't haul in the snow, and we have no place to go with it. In this discussion that followed, we decided to apply for an equip CarShare on a storage pad here on the farm here at the home place that would store a year's supply of manure. And this I think was easily the largest, most expensive building project, single project we ever had in the entire farm.

Tom Frantzen:

But it took a full two years of the application process and the review process, and this was a competitive grant. I had to score points in regards to my farming practices if this project was going to be viewed as a good place to spend public tax dollars on, so I really had to show that this was a worthwhile project. Oddly enough, the hybrid rye came along about the same time. So I took a report that I put together to our local farm service agency and I showed them that our new crop rotation, which is rye, corn, beans, oats, hay pasture, that's 72 months. And I showed him that in those 72 months, we are keeping the soil covered, I believe, 85 percent of the time.

Tom Frantzen:

And so along with the Haynes test, we looked at soil cover, we looked at soil agristruature, we looked at when we were disturbing the soil. Because it's a lot different if you're disturbing the soil in September than it is in April, and especially if you disturb in September and cover with the rye crop the very next month. We looked at all of those, and when they got done my evaluation went to almost to the top of

the stack. I scored so many points with this concept of organic farming that has an integrated crop rotation that does do some disruptive tillage but also has hay pasture and no-till integrated in with it as well. And so our project was approved, it was constructed a year ago, and it's working very, very well. But that was reviewed by different people and when they came back, they said, "Yes, you are doing what you're saying you're doing."

Erin Silva:

Have to admit, impressed hearing about your farming operation in the past, and this goes back again to that really strategic long-term systems-based approach that there are occasionally phases where you need to do more aggressive operations on the soil with respect to tillage. But when you look over the course of your rotation, there is also times depending on the crop sequence where you do minimal or no tillage. It certainly is, as well as come back and immediately get that soil covered again. I think you have some great examples in your rotation of how you balance that need that organic has to come in occasionally and do some soil disturbance, but also look at minimizing tillage and eliminating tillage at some points in the rotation and building soil at the same time.

Tom Frantzen:

Yeah, it's very true. I think if you take a bird's eye view of our farm... And that's kind of what the storm systems have to deal with is they deal with the farm from above. Really, it does. If you take a look at a bird's eye view of the farm, we're 85 percent of the time 100 percent covered, and sometimes it's closer to 100. But most of the time, most of the farm has a very effective cover. But that also includes the fact that we have conservation reserve next to the riparian areas, and we have shelter belts around the outside of the farm. And that's a public partnership, which includes the fact that there is hunting for people who like to hunt. It's a diversified strategy that protects resources, but at the same time allows us to make a living.

Erin Silva:

This podcast series is focused on critical aspects that must be considered by both farmers and crop consultants and professionals working with farmers to the transition to organic management. I'm wondering if you could tell me two things. One is one of the most critical factors that have helped you to be successful in your transition, and the other is, and I don't want to call it a mistake or a regret, but maybe some particular challenge that you faced and overcame, but in hindsight wished you had some knowledge to make that issue easier to overcome.

Tom Frantzen:

I think that's a great topic. Out of holistic management, you really see that the people responsible for decision-making are the people with the resources and the local situation. And hopefully this crowd has people who are like crop consultants, because a crop consultant has good information, but it is not his responsibility to make the decisions for the farmer, nor should it. He's a source of information, and the farmer has to understand what's the value to him and then compare the source of information versus the farmers' personal values. I think it's very unfair for farmers to say, "Well, a consultant told me I'm supposed to do this." That's not good decision-making. That actually is running away from the responsibility of saying that there's a lot of sources of information out here. He's one. He might be right. He might not be right. He might be right, but it doesn't fit in this situation. I'll listen to him, but really the responsibility is ours. And that, I think, really answers the first part of your question that serves us best is that we're the responsible party here.

Tom Frantzen:

When I make mistakes around here, I get to pay for it, but I really don't turn around and say, "Oh, it's his fault. He told me to do something else." That really helps. Over the years, because we have livestock, I had to learn that I need to look for information from many sources, and sometimes it's from sources that I don't want to listen to, and sometimes I got to face the brutal truth on things. Of all the mistakes we made here, I did not address the severity of what ragweed can do on an organic farm. I was trying to, I think, just trying to ignore it, and that problem grew from bad to worse.

Tom Frantzen:

Finally, I really had to deal with it. Then we put a strategy in place and took the resources it took, and where five years ago things look very bad, today things actually look very, very good. Not paying attention to some things I should have been is one of the bigger mistakes, but at the same time, understanding that outside source of influences may or may not have viable information for good decision-making.

Erin Silva:

And those are some good points. And I think that kind of goes to the tension of needing that long-term commitment and dedication and vision in organic, but still realizing when you need to adapt and readjust and make a change to the system, and trying to find the balance between the two can sometimes be a challenge, particularly to a new organic grower. Last question. In your decades of experience as a organic farmer, what are some of the key traits that you've seen to allow farmers to be successful organic producers?

Tom Frantzen:

A, I would say develop a good relationship with other organic farmers. Take the time to go to... There's a super group that meets at the [inaudible 00:33:09] in Lansing that Gary Welsh is in, the Welsh Farm in Lansing, probably the oldest organic farm in Iowa, and Gary kind of spearheads that. But there's probably 30 to 50 farmers that show up three or four times a year for totally informal meetings. But those things are terribly important, because that's where ideas and support come from. People cannot, I think, survive in the situation with the mindset of, "I'll do it myself." You have to be responsible for your actions, but also be willing to accept, listen to, and be a part of a network of sharing. That is probably the most important thing, but that's where we came from, where we got holistic management from. That's the origin of the Practical Farmers of Iowa, the Land Stewardship Project, organic conferences. I mean, that really is the way they work, and it's probably the most important part of this entire movement.

Erin Silva:

Awesome. Great advice and great wisdom. And we appreciate you so much, Tom, sharing all your experience today and all your knowledge. This has been great to hear about your farm and what it takes to be successful as an organic farmer.

Tom Frantzen:

Well, it's a lot of fun.

Erin Silva:

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Well, thank you again, and stay tuned for more podcasts in our series Transitioning to Organic Production.

Abby Morrison:

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Abby Morrison:

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