

Anne and Eric Nordell, narrators

Anneliese Abbott, interviewer

February 29, 2024

AN = Anne Nordell

EN = Eric Nordell

AA = Anneliese Abbott

AA: This is February 29, 2024, and this is Anneliese Abbott doing an oral history interview with

AN: Anne Nordell

EN: And Eric Nordell.

AA: So Anne and Eric, thank you so much for taking the time to do this interview today!

EN: You're welcome. This is a great project.

AA: So why don't we start, let's have each of you tell me a little about when and where you born, and if you had any connection with agriculture when you were a child.

AN: I was born in New Jersey in 1955. Grew up in the suburbs and had no connection to agriculture as a child. I didn't get exposed to it until I was probably 20, 21.

EN: Yeah, [I was born in 1957] and I grew up outside of Boston, Massachusetts. No exposure to farming, and no one in the family that was a farmer. I did attend a farm camp in Vermont. I was probably 12 at the time, about 1968, '69. This was run, it was called East Hill Farm, and operated as a school in the winter for roughly high school age people. The whole curriculum was based on operating a farm, and then those students served as counselors in the summer for us campers. And that was just a transformational experience for me. My first exposure to organic foods, organic farming, and organic in a much broader sense of how everything is connected together. But most importantly, I just fell in love with farming, and tried to do something related to farming or rural areas probably every summer after that. (2:00)

AA: So then, did either of you go to college?

AN: We both went to college, yes.

AA: So then, where did you go, and what did you study?

AN: I graduated from a state university called William Patterson College in New Jersey. And I studied sociology with a plan to go into social work.

EN: Yeah, and after my exposure to East Hill Farm, I was really divided. My parents were very supportive of getting the best education possible. They both went to Harvard. There was really no clear direction for me to get an education in farming or go that route, so I kind of honored them and followed in their footsteps going to Harvard. I had to figure out some way to make it relevant to me. I actually took a year off, it started out as a summer exchange program to Norway, working on a dairy farm there, and then I extended that for a whole year. That was kind of an opportunity to see if I really wanted to go forward with farming. I figured after surviving a full year in the very Northern Hemisphere on a farm, that I was cut out for this.

I came back, and I was fortunate enough to be able to develop my own concentration. For lack of a better title, I called it “Comparative Agrarian History.” It was just a wonderful opportunity to take courses from all different disciplines and different graduate schools, School of Public Health, Divinity School, Education School, and try to pull it together into something meaningful for me.

During the summer of ’78, I had the opportunity to work on an Amish-Mennonite farm in Lancaster County, and while working there an Old Order Amish farmer approached me about working for him the following summer. And that was such an amazing experience that I kind of pulled that experience together to use as my thesis. (4:43)

AA: What was that like, working on the Amish farm? How did that differ or compare to that farm in Norway you worked at?

EN: Well, they were similar in that they were both dairy farms and both farmed in somewhat of a traditional manner, you might say. Of course, the Amish have a very unique community and religion and worldview. And that differs so much between community and settlement that it’s pretty hard to make generalizations. The reason Jake Herschberger hired me was because he was interested, actually, in transitioning his farm to organic production. At that time, the Amish farmers in Lancaster had largely gone over to the use of herbicides and sprays and conventional fertilizers. So he was definitely an outlier. He wanted someone, a hired hand that actually was supportive of what he was doing. Kind of an odd situation, where he wanted someone who was eager to eat whole, organic foods as a good example for his children. Generally speaking, they don’t want outsider influence. But this was an interesting reversal.

But I think probably the big thing is that the Amish have maintained their tight-knit community, with the farmers all working together, say for thrashing oats or binding corn, different jobs that with small farms and horses made a lot more sense to work together on projects. Barn raisings, all that kind of thing, it was just a wonderful thing to be exposed to. (6:52)

AA: So were other Amish farmers in that community interested in transitioning to organic, or just the one you worked for?

EN: He was the only one that I knew of. I should say, he did have a neighbor, Ike Fisher. I don’t know, you see, there wasn’t an organic market. So when I say “transitioning,” they were doing it just because they thought it was the right thing, not because there was a co-op that they could sell organic milk to. But Ike I think had transitioned his farm, and he also made the leap to doing organic vegetables. I think by the time he did that, there was a market for that.

AA: So do you know what it was that inspired the farmer you worked for to want to convert to organic?

EN: I don't actually know what the original inspiration was, but he was definitely, from a healthy point of view, he wanted to not have to deal with the sprays.

AN: Now the first farmer that Eric worked for was an Amish-Mennonite named Raymond Smoker. He had always been organic. He was middle-aged at the time Eric worked for him, but grew up, his parents were organic farmers. He just never was interested in using chemicals. And Raymond was actually very influential within the Amish community. He was considered kind of a healer for animals and really into natural foods. I think Jacob Herschberger where Eric worked for, who was Amish, was very influenced by him. So it was a good time for people to really rethink how they were farming.

EN: And when Anne uses the term "Amish-Mennonite," this was, as I understand it, a group that split off of the Old Order Amish, I think primarily over the idea of being able to evangelize. The Amish keep to themselves, and their if you want to call it "witness to the world" is just by example. Where many of the Mennonite groups have a much more outward missionary approach to spreading the Word. So Raymond's church became very modern. They didn't stick with horses, necessarily the older ways, but he chose to just because he thought it was the right way to go. So he was kind of an anomaly. And like Anne said, he became a resource for people interested in that kind of thing. (9:42)

AA: So Anne, what got you interested in organic farming?

AN: I got the opportunity to go out to the Pacific Northwest between my junior and senior year of college and work on an organic herb farm. This was started by a man named Lon Johnson that had helped start Celestial Seasonings. At that time there was no organic herbs available on the market. So he had just started this farm, and I had the opportunity to go out and work for a summer. My sister happened to know him. It was just going to be a summer break. And it was life-transforming for me. It was just a wonderful experience to be able to work outside, to work really hard, and to learn about good farming practices. So that was in 1976, I think it was. And then I came back, finished school, and they had asked me to come back and be a part of the farm. So the day after my graduation, I went back to the farm and worked there for six years. (11:02)

AA: And so, Eric, what did you do after working for the Amish farmer?

EN: Right after I graduated from college, I decided to hitchhike across the country, working on as many different farms as possible. I don't remember saying it at the time, but my mother often reminded me that, as I headed out, I said, "Well, now I'm going to get a real education!" It was anything from 2000-acre corn and soybean farms to small strawberry operations. I worked in at least three different Amish communities, helping out during thrashing or corn picking or different community events like that.

I ended up, I didn't realize at the time, at a couple farms that turned out to be pretty big leaders in the organic movement. One was Zinniker Farm, which is, I think, the oldest biodynamic dairy farm [in the country], in Elkhorn, Wisconsin. Also in Wisconsin, I worked for

a couple months with George and Jane Siemon at their dairy farm in Viroqua, Wisconsin. They were farming organically, a horse-powered operation. To bring in cash, they raised tobacco. But they were disappointed, they were making all this effort to farm organically, and they were just selling milk and tobacco into the conventional market. I think that was what motivated George to start the Organic Valley co-op, which is now such an important part to organic dairy and grain and vegetable growers across the country.

I also, in the Northwest, ended up at Cascadian Farm, which at the time they were just experimenting with raspberry jam on a wood cookstove in the back kitchen. And of course, that ended up becoming a national brand, and then eventually bought out. I guess I was almost a year, year and a half into my journey, I ended up at Trout Lake Farm, where Anne hired me. That was, of course, a wonderful experience. And I had the opportunity to marry the boss. (14:06)

AA: So after you got married, how long did you stay there?

AN: We only stayed maybe six months or so, because both of our families were back on the East Coast, Massachusetts and New Jersey, and we thought we might want to be a little closer than 3000 miles away, but not right next door. We actually started out by working with Eric's first farmer, the Amish-Mennonite guy, Raymond Smoker, and we used that as a base for the summer and helped him out while we were looking for farms in the Northeast.

EN: We were looking all over, but almost any place there was good farmland and good markets was high priced. There was either development pressure, or this was second homes for wealthy people coming out of the cities. Raymond had actually helped move an Amish family here to Steam Valley in northcentral Pennsylvania, and he suggested, well, maybe we should check that area out. It was kind of a coincidence, because when we were coming back from looking at farmland in Vermont and New York, we ended up coming through this area without realizing it. We followed these carriage tracks into this driveway, we thought, well, there's a carriage, they must be Amish, it must be good farmland. And it turned out it was the farm operated by the son of the family, Dan Esh and Rebecca Esh, that Raymond had moved to the area. They introduced us to a few people that were interested in possibly selling or knew of farms for sale. And this one here was coming up for auction in the fall, and we said, "Well, we're just going to stop looking. This is good enough." And we came back and got the winning bid.

AN: Relatively good farmland at a very, very reasonable price that we could afford without going into a huge amount of debt.

EN: It's not near a big market, but we thought we could swing it because of Anne's previous experience with medicinal herbs. They could be dried and stored and then shipped to wherever the market was. So that's how we got our beginning.

AA: What year was that?

AN: We bought the farm in the fall of 1982.

AA: And how many acres did you have?

AN: It's about 90 acres, but 30 of it is in woods, and then maybe 25 acres is fairly steep, that we keep in permanent pasture. We have about 10 acres that's enclosed with a deer fence that we manage intensively. It's about 6 acres that we use for vegetables now. (17:44)

AA: What crops do you grow?

AN: Now? Right now we mainly grow, we're in a fairly cool season at high elevation, so we specialize in leafy greens. We do a lot of lettuce, we grow a lot of spinach, we supply restaurants, and we do the salad mix things. We do a fair amount of root crops. We do potatoes, onions, carrots, garlic. We do a small amount of warmer season crops like tomatoes that we have in hoop houses. We do peppers. We do the general vegetable lineup, other than we don't do any melons, watermelons. It's just too cool here.

AA: So how has that changed over the years? Did you grow similar crops at the beginning, or have you kind of shifted?

AN: Oh, we've shifted significantly. As Eric said, we started out thinking we were going to grow medicinal herbs and dry them and ship them to my previous employer. As all plans starting out, things changed, and it didn't work out as well as we hoped. And then we started supplying some wholesalers outside of the area that were sending organic produce to New York City, Washington, DC, Philadelphia, thinking that there really wasn't a market at all for organic produce in our region. We were mainly growing storage crops. A lot of onions, potatoes, carrots, that kind of thing. We also supplied Walnut Acres, which was about an hour and a half from us, mainly growing crops that they were making into soup, like celery, onions, carrots.

EN: And it's probably hard to believe looking back from this vantage point when there is such a large organic market, but at the time it was a big deal if we showed up at the organic co-op with a pickup load of onions. That was huge. The fact that this small farm in northcentral Pennsylvania needed all these markets going into the big cities just to move our stuff, where by the early '90s there was a lot of California organic produce being air flighted in. Everything turned around pretty radically at that time. (20:37)

AA: So how did you change your marketing?

AN: Well, I think while we were still doing some wholesaling, we were also developing markets supplying restaurants in the nearest city, which is Williamsport. At one point we were delivering to eight to ten restaurants and two to three supermarkets. We were also supplying a natural food store in town. And there was a point where we were like, "We should be able to sell more product to local people." There was a farmers' market in Williamsport. Initially, our feeling was we really didn't want to have to be standing out there with our produce and hope that we would sell it. We wanted to already have an order, it comes and it's delivered and we're getting paid. So this was a big leap for us, to say, okay, let's take a risk and try the farmers' market. And over time, it's turned out to be very successful for us. We're doing direct sales, so the prices could be a lot higher. Now about 85 to 89% goes to the farmers' market and 10% goes to two restaurants.

EN: And when Anne said we wanted to get more of our food to local people, when we were selling to the restaurants and the supermarkets, it wasn't labeled or recognized as organic, or even local. On one hand, that was great, that it sold on its own merits and quality, didn't have to have that label. On the other hand, it seemed unfortunate that people didn't realize this was available. So by going to the farmers' market, it was a way to get the word out for people to buy organic if they wanted to. (22:48)

AA: So how long have you been certified organic?

AN: Since 1987.

AA: And who was your original certifier?

AN: NOFA-New York, because at that time Pennsylvania did not have a certifying agency at all.

EN: And one of the places we were moving our produce was to the Finger Lakes Organic Co-op in Trumansburg, New York. They required us to be certified by NOFA-New York so that all of their growers were under the same certifier.

AA: You mentioned that you were members of NOFA-New York also. Do you want to say anything about that?

AN: Well, as I said, there wasn't any real organization yet in Pennsylvania. So NOFA-New York was having annual conferences at Cornell University, so in our early years that was one of our ways getting educated. We were going to their conferences and meeting a lot of other organic farmers. It was a really good outlet for us.

EN: Yeah, we're kind of out in the middle of nowhere in terms of organic community. It's not like being near, say, Madison, Wisconsin or Ithaca, New York. But we kind of lucked out in the fact that at that time NOFA-New York was holding their conferences in Ithaca, which is only two hours away. And then when the PASA conference started in State College, that was only about an hour and a half away. So we kind of had the best of both worlds. Now, both conferences have moved farther away. NOFA-New York is either in Saratoga Springs or Syracuse, that's three or four hours away. PASA conferences are held in Lancaster, which is three hours away. So it's not nearly as—selfishly—handy for us. (24:52)

AA: How did you make the decision to farm with horses instead of tractors?

EN: Probably my first reason to even think about farming with horses was under the influence of Wendell Berry's books, *The Unsettling of America*, *The Gift of Good Land*, where he outlined many of the reasons for the way draft horses could be beneficial to farming. Back then, we were in the first energy crisis, so horses made a lot of sense in terms of not being dependent on fossil fuels, being able to raise your own, in a sense, solar-powered fuel. They reproduce themselves, very renewable in that sense.

AN: Provide fertility.

EN: That was a big thing for us, is they would provide the manure that we could compost and use on the vegetable fields. More of a self-sufficient system. And less concerns with compaction to the soil. Those are sort of the philosophical reasons I was drawn towards it, but it was after having the opportunity to farm with horses that I just fell in love with it. I can't imagine doing it any other way, and I think that for farming to be sustainable you have to do something that sustains your interest. On that very core level, it's very meaningful. (26:37)

AA: What crop rotations have you used over the years?

EN: You know, that kind of ties into the horse farming aspect, in that traditional horse farming was revolving around field crops. Rotations, of course, were important not only for building up the soil and rotating plant families and helping with weed management, but also a way to diversify labor over the whole year. With horses you can't just go out and plow up the whole farm. You need to pace things over the course of the season. All of those things really, in a sense, influenced us as we made the transition to growing vegetables, which neither of us had a background in. But we kind of used those central tenets of rotating between row crops, in this case the vegetables, and small grains and sod. But instead of raising small grains and hay to sell, we just substituted with cover crops. So we eventually ended up with a rotation where we were alternating between a year of vegetables and a year of cover crops, so in any given year half of the market garden was in cover crops and half in vegetables. So when Anne said we have six acres under cultivation, it's actually just three in vegetables in any given year. And then we have another third of an acre close to our house where we have access to water for irrigating, where we rotate portable hoop houses with cover crops as well. (28:40)

AA: So what are some of the weed control methods you've developed?

AN: Well, in the fallow year when we have cover crops, we actually do two cover crops, working one under, doing a fallow part where we're controlling weeds a year ahead of time, and then we're doing another crop that competes with any kind of weed pressure. That was in our early years, and the weed pressure has been reduced so much that we don't really have to do much of a fallow period in between those two cover crops. So our weed control happens a full year ahead. We do very, very little hand weeding in our cash crops. We might have a little chickweed or something like that, but very, very little. It happens during the cover crop year.

EN: And when Anne refers to the bare fallow, you might think of it as performing a series of stale seedbeds, where you're intentionally creating conditions for weeds to germinate before they get established, then doing a light cultivation to kill them and repeating the process to slowly flush weed seeds out of the soil and reduce the weed seed bank in the process. (30:05)

AA: You mentioned composting your manure. What system do you use for that?

EN: Well, you know, it was a little of a struggle starting out, figuring out a way to compost horse manure, because in our experience it always got extremely hot and kind of burned out. We just ended up with a lot of ash. It's a very coarse material, particularly when it's well-bedded with straw. We tried all sorts of different ways to control the process better, and it was actually reading

about this farmer in West Virginia, Jim Chojnacki, in the *Small Farmers Journal*, where he was using pigs to compost the manure. We thought, “Why not?” And the first thing we found was that, as we put the horse manure into the pig pen, which was about, we have three of these pens or bins in the barn, right next to the horse stables, they’re about 9 by 15 feet. Pigs took a lot of interest in the manure. That’s their nature, investigating it for any grain that may be in it. In the process they would pack it down so that it didn’t overheat. And then we used Jim Chojnacki’s method of injecting corn into the manure. We just took an iron rod, poked a hole, at this point the manure pack was about two and a half, three feet deep. The pig roots their way to the bottom of the hole looking for the corn and turn it over in the process. It saved us a lot of work, it made great compost, it was a lot of fun. And we did that for probably 25 years.

I should say, another reason we got into using the pigs is that we, in the off season, helped out at a soup kitchen in town, St. Anthony’s Center. They had lots of canned goods donated, but not much in the way of meat. They were particularly interested in pork, and we said, “Well, we will be willing to raise the pigs.” There was a place that was willing to donate the pigs, and we got area farmers interested in donating corn and feed for the pigs. There was a butcher connected with St. Anthony’s who was willing to volunteer his time to butcher the pigs. So it was kind of a community charitable project. That’s what got us into it, and we continued doing that all this time. But 25 years in, the butcher was old enough he wanted to retire. We were using organic corn, because we didn’t want to be bringing chemical corn, GMOs, onto the farm, but right at that time it was getting very expensive.

So for a variety of reasons, we decided to put that on hold and see if we could figure out another way to compost. And what we came up with is kind of a low-temperature no-turn system, which works very well, but it’s actually fairly labor-intensive. It involves initially segregating the urine-soaked bedding from the manure solids, and then re-integrating that to finish the composting. We’re actually doing a lot more work for doing something that doesn’t require turning, but it’s been an okay alternative. I guess that’s what we’ll do going forward. (34:23)

AA: So where do you apply your composted manure in your crop rotation?

EN: Well, since initially using the pigs, of course they’re always adding their own manure to it. So we could never use it as qualified NOP compost. In other words, it didn’t meet the guidelines for so many days at a certain temperature to be used either for certified organic or later on to meet the food safety regulations. Even though it was composted, we handled it as if it was raw manure. And this really wasn’t much of a burden for us, because we were doing this anyway. We had this fallow year where we were growing the cover crops, we intentionally applied a compost to the cover crops either before incorporating them or before planting them, so that in a sense the compost and the cover crops are working together and we can amplify their soil-building effect. So we make a point of not applying it in the spring, and we weren’t doing that anyway, before spring vegetables. We can apply early in the spring for fall vegetables. (35:54)

AA: Is there anything else you want to say about your farming methods?

EN: I would say in terms of influences, it was not only the farms that I worked on around the country, but it was also learning from our neighbors, many of whom still practice or remember practicing traditional rotations. Like the COWS rotation, I don’t know if you’re familiar with

that, where you're rotating between corn, oats, wheat, and sod. You have this alternation between row crops, solid-seeded small grains, sod crops, and interspersing a bare fallow period. Then we had, actually one of the Amish neighbors was a biological farmer, not an organic farmer, but he was very interested in minimizing chemical inputs and doing the best for the soil life. He was actually farming, he and his family, three farms at the time, which is a lot more land than one family would normally do. They switched from the moldboard plow to an offset disc with nine horses, which not only was good for aerobic decomposition, keeping the residues at the surface, but allowed them to cover a lot more ground at the time.

That was one of many influences on us trying to reduce tillage. When I say reduce tillage, I mean reducing the depth of tillage. We're primarily incorporating the cover crops and compost into the top few inches of the soil. That's not only for what we hope is better for biological activity and breakdown, but since we're not irrigating, we found it was a much better way to preserve moisture for planting vegetables than, say, moldboard plowing.

AN: One of the other things we learned from some of our older neighbors is that at one point in the history of this area they grew peas for the cannery. And the farmers really noticed their soil getting much more mellow after the pea crop was harvested. So it was this whole conversation with our older farmers about incorporating legumes with our small grains. There was another farmer who would plant oats, and his last pass he would plant his shell peas with the oats, using the oats as a trellis instead of having to use a wire trellis. Which we thought was just a great idea. So we did that for years. And because of that influence from those guys, we often grow peas and oats together as a cover crop.

EN: And when we used to grow peas for sale, we harvested them off of an oat-pea trellis. And in terms of the summer fallow, that was also an outgrowth of your experience, Anne, at Trout Lake Farm.

AN: Yes, out at Trout Lake we had a four-year rotation. We would have perennial herbs like peppermint in for four years, and then we would rotate that with a hay crop of red clover and grasses. And then after that, we would plant rye as a cover crop, and then bring it back into production, in four years' time.

EN: The medicinal herbs, they have to be completely free of weeds or foreign material. Out there in Washington, they were at a scale where they had mechanized the harvest, using combines to harvest forty acres of peppermint at a time. You couldn't be sorting the weeds out at harvest time, so part of the rotation and using a summer bare fallow was to really get weed pressure down before planting a crop. (40:38)

AA: So you mentioned that you helped found PASA [Pennsylvania Association for Sustainable Agriculture, now Pasa Sustainable Agriculture]. Can you tell me more about that?

AN: Well, it was really the brainchild of this guy named Tim Bowser, who was just really visionary, really wanted to create an organization for Pennsylvania. We happened to know him a couple years prior, and we were on this steering committee to get an organization going with a number of people. One of the ideas that came out of that steering committee was to have a conference, "Farming for the Future." I think it was in 1992. It was a great group of people. It

was really diverse. They had a lot of people from Penn State who were professors, Carolyn Sachs, who was in women's studies, there was Dorothy Blair, who was a nutritionist, there were insect people, Herb Cole, Les Lanyon. They were all Penn State professors who were really interested in sustainable agriculture. And I think Tim Bowser had been at Penn State, so he knew all these people. He was a real networker. There was another guy named Lamont Garber, who went to Penn State with Tim, who was at the Chesapeake Bay Foundation at the time. And they brought in people from Rodale, from Walnut Acres, and we all would just kind of brainstorm at the steering committee. And I guess the conference was the kind of culmination. And then after that, there was another meeting, which was very successful to actually form an organization.

EN: And I think one of the things that Tim was very interested in was making this a big umbrella organization rather than narrowly an organic organization. In fact, at one of the steering committee meetings he brought in Judy Greene from Cornell. I think she ended up doing a small farms systems project there. She was also instrumental in starting NOFA-New York. She brought the perspective, NOFA-New York really served its purpose at the time of getting organic off the ground, but now you, here in the early '90s, have an opportunity to create a much broader organization that could help a lot of other movements get started. I think the steering committee thought that was a great idea. We approved it, and that was the direction we went. Instead of, like NOFA-New York started a certifying agency, which helped us out, PASA said, "We're not going to start one, but we will help one get going." So they provided space for Pennsylvania Certified Organic to get off the ground. Likewise, rotational grazing was kind of coming on the scene, so it became a big springboard for that. And eventually that spun off into their own grazing conferences. Likewise, with CSA, working together with the Biodynamic Association out of Kimberton. It was a lot more networking, joining hands, to get things going.

I think there was also a very conscientious effort, at least initially, to bring farmers from all walks of life. And this was, I think, primarily through on-farm research. We had an on-farm demonstration committee. And I was just amazed, I think our first meeting we had thirty people. Rodale and PDA and others were kind of providing leadership for it, but it was primarily farmers on this advisory committee designing and volunteering to do on-farm research. It was grain farms, livestock farms, vegetable farms, a very diverse group. Brian Petrucci from American Farmland Trust, who was also an early organizer for PASA, they helped do the original funding for this and then published these booklets with research reports. From my point of view, that was really what PASA was all about. Of course, everyone has a different impression of PASA, because it is such a diverse organization.

That focus kind of faded out over the years, for different reasons. And then in the last maybe eight years, it has reemerged again in terms of the PASA benchmarking projects. They brought together farmers—we actually weren't involved in it at the time, in that aspect of it—to kind of brainstorm on what were the most important things for PASA to focus on. What came to the top were soil health, financial health, and nutrient density. Thanks to Franklin Egan, who was the research director, we got these benchmarking studies off the ground. One was a soil health benchmark study. It started out with vegetable farmers and rapidly involved pasture and row crop farmers. In fact, I think row crop farmers are now the largest group. Financial benchmark study for diversified vegetable farms. And then a nutrient density study, which was kind of adjunct to the soil health study. So this again is bringing all different types of farmers together with a research focus. (47:49)

AA: So can you tell me more about your writing that you've done?

EN: Yeah. It's interesting, the Old Order Amish farm I worked on, they subscribed to this big brown magazine called the *Small Farmers Journal*. And it was just a great resource for anyone wanting to get into horse-powered farming. The publisher/editor was Lynn Miller, based out in Sisters, Oregon. I had a wild idea of condensing my senior thesis about working with the Amish in Lancaster and submitting it to the *Small Farmers Journal*. And it was not only accepted, but Lynn Miller was kind of ecstatic about it, and I guess it got a lot of interest. And wow, we actually got a check in the mail for this! I never dreamed of being able to write and make a little money. It never turned into a really income-generating profession, but that wasn't the intent, but a little something to do in the off season. We continued writing off and on about what we were doing here, and also what we saw happening on other horse-powered farms.

We also started speaking at conferences. I think it was maybe 1996 at PASA, we asked someone to video it. This was just an old-fashioned carousel slide presentation, speaking at the front of the room, and then we sold video tapes from that and sent one out to Lynn Miller. And he wrote this really over-the-top review of it, and we started getting in orders from all over the place, and with the orders came questions about how to do this or this and that. We started a column called the "Cultivating Questions" column. We were probably writing three or four times a year over, I don't know, twenty or more years. [We compiled some of these articles into a booklet called "Weed The Soil, Not The Crop" and later posted some of our more recent articles, that were published in Rural Heritage, on our Cover Crops Incorporated blog.] I guess that why, and how we were writing, it was a great excuse for us to also go and visit other farmers, write about what we were doing, incorporate some of the results from research we were involved in. It was very nice the way that worked out.

AN: And Eric, over the years, has been very nice to include my name on the writing. He is mainly the writer, and I am the editor. He used to call me the "slash and burn editor," because there were times when I had to bring it into focus. So that's kind of how things have evolved over the years. He really should get all the credit for writing.

EN: It's the editor that makes all the difference. (51:31)

AA: Now you mentioned that you've partnered with different universities for on-farm research. Can you tell me more about that?

EN: Well, probably the main one, aside from what I mentioned with PASA, which does have some support via the advisory board from Penn State, as well as other organizations, but our farm was selected to be part of the NEON project. NEON is an acronym for the NorthEast Organic Network. It was based out of Cornell. I think it was the brainchild of Anu Rangarajan. It was for the whole Northeast. And it was a multi-faceted project. For example, they got a group of farmers together to brainstorm about crop rotations, and that was turned into a bulletin, available to anyone interested in it. Another component was, I think they called them focal farms, so there were twelve farms around the Northeast, a mix again of vegetable, livestock, and grain. And on each farm, they investigated five crops. And so during the course of the growing season, researchers came out to the farm. They monitored insects, disease, weeds, marketable yields.

Meanwhile, farmers had to keep track of all their operations and labor and inputs for all those crops.

I guess another different way that research developed from this, one was doing nutrient budget studies, looking at how many nutrients were leaving the farm and how many coming in, seeing whether they were balanced or not. There was an economic component headed up by David Conner, an economist who was working at Cornell at the time developing full enterprise budgets for each of those five crops. It was the first time we had ever seen a break-even price for the crops we were growing. It was kind of an eye-opener. I know there were other aspects of it as well.

Then we were asked to be part of the Organic Cropping Systems project, which in my impression was in some ways an outgrowth of NEON. NEON was 2002, 2003, and for this Organic Cropping Systems project, which again was headquartered at Cornell, they wanted, for both grain and vegetables, they wanted to compare four different farm systems and wanted to base one of them loosely off of our farm, alternating vegetables with fallow years and cover crops and comparing that to a more intensive rotation with one or two crops every year, to a somewhat less extensive version of that, to ridge tillage. So you had a reduced tillage treatment as well. So they wanted me and Anne to be on the advisory committee, kind of both overseeing the system based on our farm as well as the overall project. This was a lot of fun for us, very educational, because there were other, primarily New York, farmers on the advisory board, a lot of great brainstorming and sharing.

I think the only kind of unfortunate aspect of it, that we were kind of oblivious to, they just asked us if they could base it off of our farm, but I think because it was coming out of Cornell and NOFA-New York was a partner in it, I think there was a little bit of resentment that a Pennsylvania farm was being featured in this Cornell study. Probably in retrospective it would have been better to have a New York farm. We got a little bit of friction from that. Again, it really wasn't our decision or our idea to begin with, and I think over time that wasn't an issue. But I think it ran for at least eight years, and there was a lot of interesting information coming out of that as well.

I should say, some of the key researchers involved in the project was Laurie Drinkwater, primarily heading up the soil and health and nutrient balancing budget part of the trial. We had Chuck Mohler, a weed ecologist, on weed management. I think Tony DiTommaso was also involved [as well as Brian Caldwell, Abby Seaman, and many others]. I'm not as familiar with the researchers with the grain side. That was held at the Musgrave Experiment Station, while the vegetable project was done at Freeville.

AN: One of the things I think we realized with research that's done at a research facility, it often does not truly replicate what is done on the farm. The management system is different. So you're not seeing maybe thriving cover crops, or the weed control isn't like what you would see on the farm itself. I think we became really convinced of the importance of on-farm research to be done. So the NEON project actually was really helpful because of these researchers coming out and seeing what actually goes on on a farm.

EN: Of course, they can do much more intensive, in-depth laboratory type studies if it's at the research station. So there's tradeoffs either way. (58:33)

AA: So what is your perspective on the relationship between land grant universities in general and organic farming?

AN: It depends. I mean, our experiences with Cornell and Penn State, I think you had a lot of support in a few departments. But overall there was more of just a tolerance, I'd say. Like with Penn State helping getting PASA going, you had a few really dedicated people that were into it. The same at Cornell for the research. But there was a lot more other research that was going on at these research schools that was not geared toward organic. It was kind of just an aside.

EN: You know, I think starting out, we really didn't expect to get answers to questions from the land grant universities, because organic was very new and they weren't up to speed on it. It wasn't a case of like, oh, we were disappointed, or people brushed us off or anything, we just never really went that avenue. We had other ways of getting the information we were looking for. But then certainly these projects that were initiated from the universities were great, and everyone was very supportive and excited about it. That was good.

AA: Has the relationship between the universities and organic farming changed over the years, in your experience?

AN: Yes. I think that organic is much more mainstream, in a sense, and it's to the university's benefit to embrace it. Whereas in our early years, maybe it was just a little bit of a fringe. I think it's changed quite a bit.

EN: And I think there's more overlap between general research and organic research. For example, over the same time you had the development of IPM, reducing insecticides and herbicides, some crossover learning between organic farmers and IPM and vice versa. Cover crops being a big thing. It doesn't matter whether you're organic or conventional. I think it's coming together pretty well. (1:01:35)

AA: So if you were to summarize your philosophy of organic farming, what would that be?

AN: I don't know if we really have a philosophy. We've talked about our farming practices, and I think it's just trying to do good work on your land, and take care of it. And we wouldn't choose to put any chemicals or herbicides or whatever on our land. Just take care of our small place here.

EN: And again, this isn't necessarily unique to organic, but I think organic was kind of the standard bearer for it when chemicals came in in a strong way, is just the idea of an integrated, somewhat self-contained farm. Again, you don't have to be organic to do that, but I think that's one thing that really attracted me to it, and remains a primary interest of mine. When I look at some of the authors or speakers or farms that I've been interested in and that have influenced me, they haven't necessarily been organic farms, they've just been practicing this really fundamental, holistic way of integrating practices. (1:03:13)

AA: So do you have any thoughts you'd like to share about any current trends or controversies in organic agriculture?

AN: Well, probably the biggest one is the NOP rules that allow hydroponics, and the lack of pasture for livestock. I mean, they passed a new rule that requires it, but there is often, people aren't really following the law. So some of the intent of the original organic law has been diluted. We are involved with the Real Organic Project that is trying to educate people on the importance of soil-based agriculture. You can grow it hydroponic, but don't label it organic. It has nothing to do with organic principles, and livestock are meant to be outside eating grass.

AA: So what do you think are the most important aspects of organic farming history to preserve and pass on to future generations?

EN: [Laughs] Next question.

AN: Depends on the future generations. I think it's a really good model for agriculture, and so people who want to continue farming or want to get into farming, it's just that it's an important way of doing things. I think we're coming to a point in our lives when chemical inputs are not solving the problems, and being able to look at a systems approach to things really works.

EN: I guess I'm a hopeless idealist. I'm hoping that future generations are going to have to listen to oral histories about how people farmed conventionally, because no one will remember how to do it. [Laughs]

AA: So is there anything else you want to share before we end the recording?

AN: I think we've said enough.

EN: Just thank you for doing this, Anneliese. I think this is so important. We've enjoyed reading the transcripts of the oral histories you've already completed. So thank you.

AA: You're welcome! And thank you so much for taking the time to do this.

EN: Of course. (1:06:08)