



Inside the Lentil Underground: An Interview with David Oien



The CEO of Montana-based Timeless Food talks about organic farming and how it ties in with the International Year of Pulses.

By **Dario Bard**

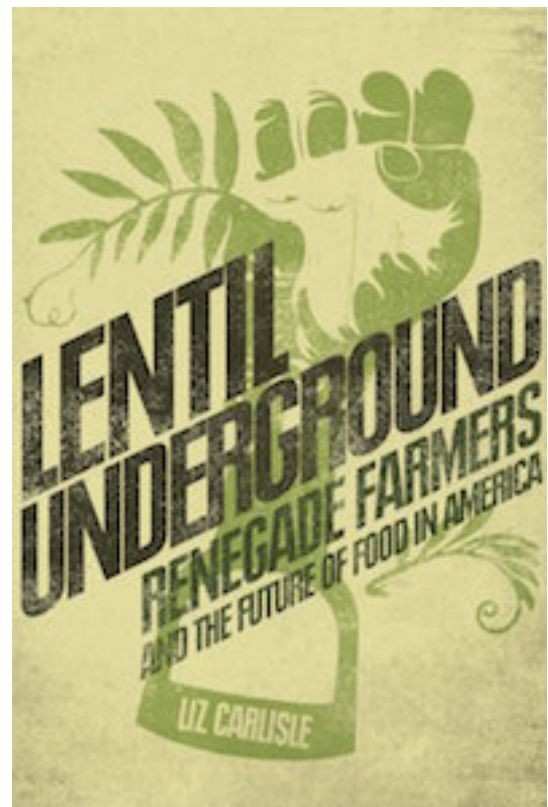
When David Oien abandoned his graduate studies at the University of Montana and returned to his family's homestead near the City of Conrad, he faced the two options all rural Montanans faced when they came of age: either work on the family farm or move away to a distant city. The year was 1976 and for many in Oien's shoes, the family farming option did not offer much of a future.

By then, the Big Ag model was firmly entrenched in the Montana landscape, with wheat and barley fields extending on and on as far as the eye could see, and small- and mid-sized farmers, like Oien's dad, caught in the commodity trap.

The trap worked like this. In order to cash in on government subsidies, farmers dedicated all of their farmland to growing a major commodity crop. Over time, this **monoculture approach** required more and more inputs, such as synthetic fertilizers and chemical herbicides and pesticides, in order to produce high enough yields to give a farmer even a chance of making ends meet. It was a system that kept farmers with one eye on the weather forecast and the other on commodity prices, because a bad year production-wise or sales-wise could force them to take on debt and start them down the road to bankruptcy.

But Oien had come home with some radical New Age ideas about **sustainable farming**. The first thing a farmer had to do, he maintained, was to take care of the earth, and the earth would then give back to the farmer. The key, he believed, was to include nitrogen-fixing plants, such as pulses, into a crop rotation. Oien soon found others among his peers who shared these ideas, and in 1987 they founded **Timeless Food**, a company focused on organic specialty crop production.

Since then, Timeless Food has grown into a million-dollar business thanks to contracts with major retailers, including Trader Joe's and Whole Foods, as well as gourmet restaurants like ShowThyme. This success attracted the attention of journalist Liz Carlisle, whose masterful 2015 book, **Lentil Underground**, relates the growth of Montana's organic farming movement.



But perhaps more importantly, Timeless Food showed desperate family farmers a way out of the commodity trap. And it starts with pulses.

IFT: How did you turn your organic farming ideas into a million-dollar business?

Oien: In the '80s and '90s, interest in growing pulse and specialty crops on the part of Montana farmers was primarily driven by our ability to provide high value markets for farmers who would otherwise grow conventional commodity crops and take whatever price big grain companies offered them.

When we started Timeless Food, back in 1987, it was the cusp of the development of the organic market. Demand for certified organic crops really took off in the mid-'90s. By then, we were lucky enough to have the supply so that we could take advantage of it. That's because our focus has always been to help maintain the model of family farming in an environmentally responsible way. We've literally mentored farmers through their transition from conventional farming to organic farming.

So basically, Timeless Food has served as a channel to create value-added markets for farmers who were interested in farming organically and farming crops that they probably hadn't farmed before. Specifically, our focus is really the pulse crops and the heirloom grains. We don't do what other people do; we don't do wheat, we don't do barley, we don't do alfalfa. We sell to people interested in good nutritious food grown in an environmentally responsible way.

We've been fortunate enough to be part of the organic food movement and to also ride the wave of growing consumer demand and interest in higher nutrition, not only in the U.S. but also globally.

IFT: Timeless Food started out as a seed company, right?

Oien: Yes, we started out as Timeless Seeds, selling seed to grow soil-building cover crops for organic farmers. But that wasn't a business model that was working back in the '80s because there weren't that many organic farmers and not all that great an understanding of the value of cover crops. But when the organic market started getting legs, we expanded our focus beyond seed to certified organic food grade crops. So our business model changed to growing food for specialty markets rather than growing seed for farmers.

We still provide seed to growers, of course, but we don't require that they buy seed from us. We actually encourage them to save their own seed and build their own seed base. The idea is that over time, through natural selection, that seed adapts to each farm's own particular environment and soil type.

Our philosophy is that farmers are really the best judges of what seeds and management practices

work best on their farms. All we require is that, if they are going to contract with us, they use varieties that we can sell in the marketplace and also that they use high quality seed.

IFT: What are the requirements for a food crop to be certified organic?

Oien: In order to label a crop organic, it has to be grown, processed and handled according to USDA guidelines that specify what can and can't be used in the production and the processing, and what crop rotations are needed.

So every year, all the farms and our processing facility are inspected by a third-party independent auditor. Basically, the inspector comes in, walks the fields, walks our plant, examines all the processes, and verifies that they meet the requirements set down by the USDA. Everything has to be documented, from where the seed was purchased, how much was planted and where, what kind of crop rotations were used, and so forth. Very detailed records are kept. Basically there is an audit trail that goes from the store shelf all the way back to the particular farmer who grew that crop and where the seed came from. That's all part of the organic verification system.

Now, to become organic and certified, any given field has to go through a three-year transition from the last time that prohibitive substances like synthetic fertilizers and toxic chemicals were applied to it. This is verified during the annual inspection. Then, once a field is certified, the farmer has to maintain the integrity of the organic status. Most organic farmers leave a buffer zone between an organic and a non-organic neighbor in order to avoid the drift of forbidden substances. Because, for instance, if during an inspection, herbicide damage is spotted on the crop in the first 50 feet of the field, the farmer may be required to harvest the crop in the first 100 feet of the field separately and sell it as a conventional crop. Then that portion of the field is not allowed into the organic certification program for another three years.





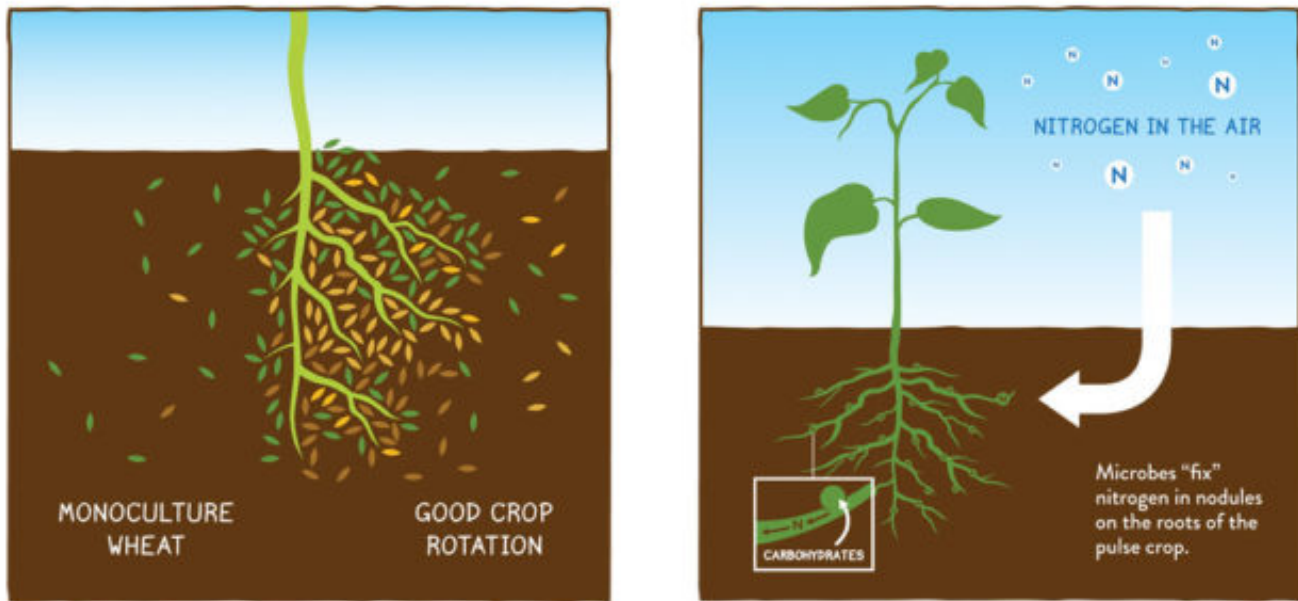
IFT: You mentioned crop rotations. What is a typical rotation on an organic farm?

Oien: Well, it varies from growing region to growing region, and even then from farm to farm. In the case of Timeless Food, most of our growers are located in the Northern Great Plains. It is a semi-arid environment with a short growing season, cool temperatures and so forth. So up here the basic rotation would be a four-year rotation on any given field. So you might start the first year with a cover crop that you till into the ground to provide carbon; pulses would be in that cover crop to provide nitrogen. The next year you might go with a cereal grain, which can't make its own nitrogen, so it needs all those nutrients. The following year you would plant pulse crops that had the ability to capture atmospheric nitrogen and fix it in the soil. And the last year you would go with a crop that is different from a pulse or a cereal grain. So it might be a forage crop that is cut for hay, or it might be a crop like buckwheat or an oilseed crop like flax or sunflower.

The basic principle is to build the soil and also provide a diversity of plant species and plant architecture so that disease and pest cycles are broken. Because for instance, the pests and diseases that attack wheat, don't attack lentils, and the ones that attack lentils won't attack oil seeds. So with that sort of crop rotation, you eliminate the need for outside inputs to rescue the crop.

Conventional farmers in this area in particular have been growing wheat after wheat after wheat for almost a hundred years. That builds up the disease and pest pressures that thrive in a wheat environment. And so farmers use chemicals to treat the symptom, but they ignore the root cause, which is monocropping.

Crop diversity solves the problem. A lot of organic farmers companion plant more than one crop in a field, and then harvest both crops and separate them out after harvest. That's one strategy. Another strategy is to just rotate crops. That diminishes the problem dramatically.



IFT: And what is the biggest challenge of going organic?

Oien: The transition from conventional to organic farming is tough. During that time, farmers are not allowed to use any fertilizers and chemicals for three years. So they will probably see their yields decline and at the same time they are missing out on the premiums organic crops command because their fields are not yet certified organic, and so they have to go with conventional prices. Organic prices can be 50% to even 300% over commodity prices. So the transitioning farmer is caught in that no-man's land for the first three years.

The other thing is that if the soil was depleted from years of conventional farming, it is going to show. Farmers need to anticipate the transition. If they were growing wheat for decades, that probably means there are a lot of cereal grain diseases and insect pressures that they should expect. So they should consider growing a pulse crop that is able to fix nitrogen and start rebuilding that soil. And maybe they shouldn't plan on harvesting that crop. You know, the first few years, the best thing to do may be to plow that crop back into the ground.

We advise our farmers to plant cover crops for the first year or two. The first thing is to build the soil. If you have healthy soil, you'll have healthy productive plants, and that will be healthy food that comes off that field.

It's a learning curve. You can learn some of it out of a book and some of it from your neighbors, but most of it is learned from the school of hard knocks. The legal transition is three years, but any honest organic farmer will tell you it's going to take 10 or 20 years to get the hang of organic farm management. Farming is always unpredictable, even in a conventional controlled system. Well, an

organic, biological system has a lot more going on; it's much more complex.

IFT: Can you give me a sense of the scope of the Timeless Food operation?

Oien: We usually contract with about two dozen growers. The smallest farm we work with is in the neighborhood of 800 acres. We have a few that are more than 5,000 acres, but I would say the majority are in the 1,000 to 2,000-acre range. Altogether, our growers represent something like 50,000 to 70,000 acres. We don't contract all of the production that comes off that land. We are not the only buyer, nor do we want to be. Our message is that diversification is important. It is important for the planet, for the farm, and for people's bank accounts. So we encourage our growers to have a number of buyers for a number of different crops so they can weather a bad year on organic lentils or wheat or what have you. You want a diversified market base to make your farm sustainable economically over the long haul.

So Timeless Food is still a pretty small operation. Most of what we sell is such a specialty item that we want to give our farmers the security that they do have a market before they plant it. We usually harvest 2 million to 3 million pounds of pulse crops and heirloom grains. We also do some spot market buys. But we don't encourage speculative planting of our products because there is not a whole lot of market for it beyond Timeless Food.

Most of our business is domestic, but we do export anywhere in the neighborhood of 10% to 15% of production. We've been exporting to Asia for 20 years, and we also export to Canada and Europe.

Every year, we are seeing 20% to 25% growth in acres planted to organic lentils. That is probably a reasonable growth curve to meet the long term market demand. This year, we are looking to increase lentil seeding by 70% to 80%.

Of course, Timeless Food is not the only game in town. Farmers are growing organic lentils in Turkey and starting to do so in India. Canada has always grown more organic lentils than the U.S. And currently, some of the bigger pulse companies are looking at growing crops organically.

We are not big enough to play with the big boys, so our focus is always going to be high quality, personal relationships and unique varieties. That's our little niche.

IFT: The USDA is projecting that this year Montana's lentil plantings will be up 113% over last year, and 400% over what they were in 2014. What do you think is behind this lentil boom?

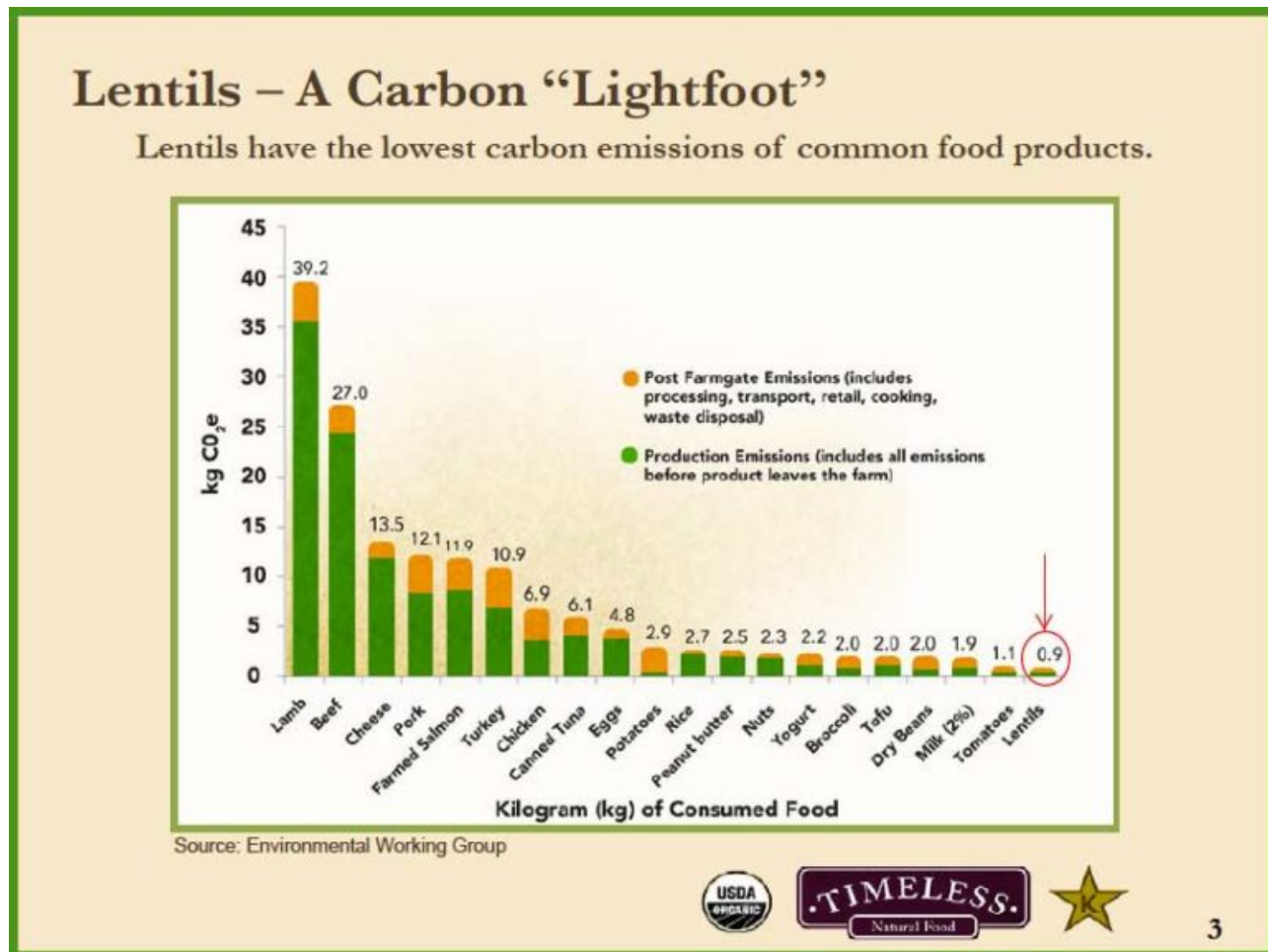
Oien: What is driving the increase in lentil plantings in Montana is that two years ago, conventional wheat was at US\$ 8 to US\$ 10 a bushel. This year, it's at US\$ 4 a bushel. People are planting more lentils because they are going broke with these wheat prices.

You see, conventional commodity markets have these hills and valleys, where prices are up one year, then down the next. The organic market doesn't work that way. I've been in this business 30 years and we never paid our growers less in a current year than we did in a previous year. Often, we pay more per pound than we did the previous year. Part of that has to do with the market growing and absorbing that price, but another part of it is that the four of us who founded Timeless Food are all farmers. We know what it takes to keep food on the table and a farm in business. Price stability and market predictability are big factors in that regard. That is our business model. If we had the opportunity to be ten times as large but it meant contracting with 50 farmers one year and 10 the next because of some price fluctuation or market unpredictability, we wouldn't do it. We started out as four guys trying to convert their farms to organic farming and now our company helps support 24 farmers. We didn't get here playing the hills and valleys. We did it with a long term stable strategy and a commitment to building a community that is viable and resilient.

Another point on this is that although lentil acres have now grown to the point where they are on the radar, they are still a very small blip compared to wheat. There is a huge opportunity for conventional farmers to diversify their rotations, but it has to be driven by the market, obviously. If the market is there, farmers will grow it. If it's not, we can't expect them to. Consider that the average consumption of wheat in the U.S. is 170 pounds per person per year. For lentils, it's 10 ounces. So there is a huge growth opportunity for pulse crops and the pulse industry.

Certainly, the **International Year of Pulses** is going to help us increase consumption. Already it is starting to raise awareness among consumers and also food manufacturers about the nutritional value that pulse crops can contribute. That is going to have a very positive long term impact on the pulse industry and on the opportunity for farmers to grow pulses.

I think it will also further the organic movement because once consumers become aware of the health benefits of eating pulses, many of them are going to take it to the next level, which would be buying organic products rather than conventional products. That is going to be driven to some degree by concerns for human health. Organics surveys have basically verified that personal health is the number one reason people buy organics. But the health of the planet and the health of the farming community also rank high. So although **International Year of Pulses** does not focus on organics, it certainly is going to be very beneficial because its messages in terms of the health of individuals, the planet and the farming community are all part of the organic movement's message as well.



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IFT: Organic farming also ties in with the International Year of Pulses’ focus on sustainability. But the theme area there is Productivity and Environmental Sustainability. With growing global concern about feeding the world’s burgeoning population, how does organic food production fit in?

Oien: Generally speaking, organic lentil yields are probably in the neighborhood of 80% of conventional lentil yields. But to some degree its specious to argue that we have to increase yields to support a growing human population and that in that respect organic farming doesn’t cut it. The vast majority of corn and soybeans that are grown don’t go to feed people. They are instead used for fuel or to feed livestock. Also, something like 40% of the crops that are harvested for human consumption are wasted somewhere along the process. There is an amazing amount of inefficiency in the handling, transportation and other links of the supply chain. Food even gets thrown out at grocery stores because of a slight blemish or because it has been sitting on a shelf too long.

The point is, are we actually asking the right question? Is the question: How do we grow more food? Or should it be: How do we make sure that the food we currently grow actually gets onto people’s plates? Maybe we don’t need higher yields and GMOs. Maybe we need to ask how we can do it better rather than how we can do more of the poor job we are doing at present.

Network Nodes



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