Cooperative farming and seed production can help diversify a farm - in terms of workload, income generation and biodiversity. Dan Brisebois of Tourne-Sol Co-operative farm spoke about this at MOFGA's 2014 Farmer to Farmer Conference.

Brisebois co-authored "Crop Planning for Organic Vegetable Growers," is past president of the Canadian Organic Growers, is a USC Canada board member and serves on the steering committee of the Eastern Canadian Organic Seed Growers Network.

Tourne-Sol Co-operative Farm is a 10-year-old worker co-op run by five owner/farmers and five paid apprentices in Les Cèdres, Quebec, about 45 minutes west of Montreal. The farmers rent (and hope to purchase) about 12-1/2 acres on an organic grain farm – about 7-1/2 acres growing crops for sale and the rest cover cropped.

Initially these growers dreamed of growing all the seeds they would need on the farm. They have come partway at the same time that their organic crop production has grown to supply a 260-member CSA and large farmers' market stall in Montreal with certified organic vegetables, flowers, seeds, seedlings and herbal teas and herb mixes. Seed production now represents 10 percent of The Tourne-Sol farmers, left to right: Frédéric Thériault, Reid Allaway, their gross sales (through their online catalog and at "Seedy Saturdays and Sundays" – like one-day farmers' markets in the winter when a dozen or so seed growers sell to farmers and gardeners) and fulfills up to 30 percent of their on-farm seed needs.

Cooperation Reduces Investment Costs, Enhances Quality of Life

Having a cooperative is one of the things that has enabled the farm to get into seed saving, said Brisebois. Two couples and an individual farm Tourne-Sol: Emily Board, the farm's CSA coordinator and harvest manager; Frédéric Thériault, in charge of farmers' markets, soil fertility and accounting; Reid Allaway, who tends the farm machinery and infrastructure and coordinates the apprenticeship; Renée Primeau, who manages the greenhouses, does the certification paperwork and manages pests; and Brisebois, who manages seed production, the online site and online store and the weekly newsletter. Five apprentices also help spread the workload.

By farming together, these growers are also sharing equipment, such as a wash station and tractors specialized for different tasks, reducing each farmer's An aerial view of Tourne Sol. Photo courtesy of Tourne Sol initial investment costs.



Renée Primeau, Emily Board and Daniel Brisebois. By farming cooperatively, these five can specialize in certain aspects of farming, take vacations, buy less equipment and realize other benefits. Photo courtesy of Tourne Sol Co-operative Farm.



Co-operative Farm.

The co-op also enhances members' quality of life, Brisebois continued. When one or two people farm, they have to think about planting, weeding, bookkeeping, marketing and more. With five managers, each has one-fifth of that responsibility and can do his or her task more effectively and with less stress. Crop management is also divided among the five, so no one person has to master 50 crops. Consequently, each family can take a week off during the growing season, as well as a number of other days off. Each of the five farmers knows everyone else's roles.

"We definitely miss the farmers or apprentices when they're gone," said Brisebois, "but we can pull it off. This was especially valuable when each family had a baby born over the course of one growing season."

The five farmers were friends before they started their co-op and have remained friends, despite challenges.

"First," said Brisebois, "was making everybody feel this was their co-op. The first five years were about empowering the individuals who make up the co-op." This involved dealing with issues of time, money and communication.

Regarding time, said Brisebois, "we initially thought each person would log their time and we would divide up the money that way - but not everybody likes to log hours. So we developed a schedule ... In the summer, everybody worked the same schedule from Monday through Friday, and we rotated the markets on the weekends, and we had a couple of floating hours during the week for administrative tasks and such. In the winter we were all working about the same amount of hours, too. So we divided profit by five. This enabled us to figure out what to do when there was a variation." When one farmer returned to school, they could adjust his pay based on how many hours he was working.

To enhance communication, they have numerous blackboards, weekly schedules, pack lists. "We just make sure everything is visible so that we can plan what we're doing."

Meetings also help – about half a day per month in the summer to talk about administration and about half a day per week in the fall.

At the first fall meeting, they review what they did or did not like over the past year.

Next they look at their holistic vision and try "to step away from being profit-driven to looking at the bigger picture of what we really want to happen and figuring out the stumbling blocks."

At the next meeting they adjust the previous year's budget for the next year.

"Then we meet to talk about human resources," said Brisebois, "How do we want to change our schedules for next year? What kind of wages would we

like to be making? What employees do we need for the next year's estimated work load?" Answers to these questions enable them to estimate how much they will have to make. "Then we develop a marketing plan to determine how to make that money."

Once they know how many CSA shares they want, how much the seed business can grow, and so on, they discuss what they need to grow to meet those goals.

Next is the crop planning meeting, where they discuss big changes to their system that might make a difference. A crop planning committee meets regularly after this, into winter.

Another meeting deals with infrastructure for the coming year and beyond.

At their last meeting they create a final budget for the next year.

"So we've been talking for 40 or 50 hours about the next year," said Brisebois, "and that puts us on a common ground. In the early years, this process wasn't always easy. By now it's starting to become intuitive. This helps build trust and it helps us work together, so these meetings are the core of our farm."

Nonviolent Communication and Holistic Management

They use two communication tools: nonviolent communication and holistic management. The former involves "taking ownership of the way we feel and realizing that it might not be because somebody accidentally mowed a fennel bed that we're upset, but more because someone has been working too long, not eating well, not sleeping well," said Brisebois.

In their third or fourth year they hired a nonviolent communication facilitator for a day-long workshop. "It is great to have a common language to speak together," Brisebois said. "We don't practice this communication by the book, but we can draw upon it when situations are intense."

In their sixth year they trained for six days with holistic management facilitators.

"Holistic management," Brisebois explained, "is a system where you set a holistic goal for your farm, which includes the profit you want but also the quality of life and environment you want ... Any decision you make is tested against this goal. If there's something on your farm or in your life or your business that you're not happy with and it's been going on for six or seven years, why is that? Highlight what you don't like and how you wish things were, and make it happen. This workshop was a switch in the way we did planning."

In the early years, they empowered people and made them feel that the farm was their business, and they focused on profitability so that they would make a living. "In years six through nine," said Brisebois, "we were planning for quality of life, and profit was just a facet of that. All the decisions we make, we're evaluating against this. We want our job to be pleasant. We also want to be able to take a break during the day, eat great food and stay friends."

Eating great food includes a feast the farmers put on for the apprentices in the summer and a monthly farm barbecue for friends and family when they stop work early on a Friday afternoon. "Creating time that we can spend together has really changed our business," said Brisebois.

Now that all five are in their mid-30s and have kids between 2 and 5 years old, the big challenge is building a business that can outlive them, thinking about whether the kids will want to work on the farm, and thinking about the equity they're building in the farm.

Seed on the Farm

Last year Tourne-Sol spent about \$4,000 on seed for the farm. They use 10 to 30 percent of their own seed for sowing (based on dollar sales).

Two benchmarks the farmers use to determine which crops to grow are the amount of space each takes to grow and the amount of time to harvest. "For us," said Brisebois, "seed crops are comparable for both measures to vegetables in profitability. Bulk seed crops sold to other seed companies or to large growers come out at \$25,000 to \$40,000 per acre (and some are much higher), while selling beans or cucurbits may bring \$8,000 or \$10,000 per acre. Also, when you direct-market seed packets, the markup is ridiculous. Once you know what you're doing, seed producing and harvesting is as quick and profitable as dealing with vegetables." However, "there's a lot of learning at the beginning, so don't jump in," Brisebois warned.

Most of their seed work is done with simple tools, such as screening with hardware cloth on frames and winnowing with fans. "It's not a big investment at first," said Brisebois. "We are just beginning to invest in some specialized equipment in order to scale up."

In 2014, 10 percent of their gross sales came from seed production, and their seed production is increasing about 50 percent per year – faster than any other part of their business.

Of the varieties they produce on the farm, 70 percent come from their seed, another 10 percent are produced by a network of local growers, and 20 percent are produced elsewhere.

"Our seed business is probably equal to 60 to 100 CSA shares," said Brisebois. "If we had more CSA shares as opposed to having diversified, we may have had a more profitable or efficient farm. The last three or four years, we've been hard pressed to exceed the 250- or 260-member number. We'd love to have 300 or even more, in addition to the seed business, but we're not getting them. So having the seed business helps us not have all our eggs in the same basket. We can keep expanding our business without having to rely on certain vegetable markets. The seed business extends all across Canada."

Their most ardent CSA members are also vegetable gardeners who buy seeds and seedlings from Tourne-Sol. "So we have more things to sell to the same people.

"Having the seeds forced us to develop the online store," added Brisebois, "and it enabled us to sell more things and be more diversified." They sell, for example, the Crop Planning book, herbs and garlic on their website. (Every year they grow 2,000 more garlic bulbs, and they're still sold out by October.)

More Benefits of Growing Seeds

Growing seed crops adds biodiversity to the farm, also.

"A lot of market crops don't flower," said Brisebois, "so having cut flowers or seed crops brings in more beneficials, more pollinators."

In early spring, when their overwintered salad greens flower and go to seed, they see hummingbirds and butterflies in some of their tunnels. The seed crop "creates a feed source where there may not otherwise be one."

Saving seeds also reduces dependence on others. Tourne-Sol grew a red oakleaf-type lettuce that was well suited to the farm's conditions and the farmers' needs. "One year we ordered it, and a different type of seed arrived – a little more orange, not as red, and it was a lot earlier and it wasn't frost-hardy. The seed company had changed suppliers. We had saved some seed from the original type. Without that, we would have lost the variety from our mix. By saving seed, you guarantee that the varieties you have stay part of your system."

Small growers in the Northeast often are not the market for developing hybrid seeds. "If the primary audiences aren't interested in those [varieties] anymore, they get dropped, and we have to find new varieties," said Brisebois.

Seed adapts to your site, he continued. In a small tunnel on their farm, under row cover, they seeded Brassica rapa species in September and cut salad greens through fall. In winter most of the leaves froze and died back, and then started to grow again in late February and early March, producing salad greens and then seed. Some plants died in winter, so the resulting seed was selected for better winter survival.

"You're getting bioregionally adapted and farm adapted varieties," said Brisebois.

After one year of selecting a turnip variety at Tourne-Sol, the purple color was brighter, more of the turnip was purple, the roots were rounder and the foliage was more vibrant and disease resistant – just from growing out 500 turnips and taking seed from the best 30 or 40. Seed companies may not take such care with crops of low value for them.

Brisebois has been letting Brassica juncea mustards cross for six or seven years and selling the greens as mixed bunches of mustard and in mixed salad greens. "Every year we're seeing more and more traits come out. It's really exciting. This is the seed that makes a resilient system."

Increasing the supply of organically grown seed is also very important, added Brisebois; and growing seed enables farmers to develop relationships with Fedco, High Mowing and other companies.

Finally, Brisebois encouraged salad greens growers, especially, to save their own seed.

"If you're a big salad greens grower and you're spending \$6,000 or \$7,000 on seed – if you're spending \$500 on arugula seed, that might take you one or two hours to generate. You could get one or two cuts for salad mix or bunching and then let it go to seed."

Similarly, from five or six beets, "you can probably get a couple of pounds of seed. You would want a bigger population for the genetics. For some expensive varieties of beets, it could be worthwhile."

For more information, visit www.fermetournesol.qc.ca and www.goingtoseed.wordpress.com.

– Jean English