

**2012 PEI ACORN Conference**  
**The Rodd Charlottetown – November 22-24th**

**Title : Incorporating Seed Production on Your Farm with Daniel Brisebois of TourneSol Farm:**

**Executive Summary:**

Daniel Brisebois is the president of Canadian Organic Growers and he sits on the Eastern Canadian Organic Seed Growers Network's steering committee. He is co-owner of TourneSol Farm in Les Cèdres, Quebec. In this talk Dan explores saving seed from the perspective of a farmer who plans on keeping the seeds for their own use. He outlines the importance of saving seeds and explains why people save seeds. He also outlines some of the things that should be considered, such as being vigilant about weeding and avoiding overwatering. Cross-pollination is another important consideration because while some plants will not cross-pollinate, others, such as hot peppers and bell peppers, will cross, which will compromise the crop. Certain precautions can be taken to avoid cross-pollination, such as isolation, which is something that they do at TourneSol. Saving seed can be a lot of work but it will slowly get easier and it allows you to save money and it is also a mechanism of saving varieties that are no longer being saved elsewhere.

**Detailed Notes:**

Daniel Brisebois is a graduate of McGill University with a Bachelor of Science degree in Agricultural Engineering. He is currently the president of Canadian Organic Growers and sits on the Eastern Canadian Organic Seed Growers Network's steering committee. He is a co-owner of TourneSol Farm in Les Cèdres, Quebec.

TourneSol Farm consists of five young farmers that met at university and started their own farm together 8.5 years ago. During the peak growing season there are 7-9 people working in the field, working on the 12 acres of their farm that are under production. They sell packaged herbs as well as most of their products at the farmers' market. Seeds comprise 10% of their business and they now have their own catalogue and online seed store. CSA baskets are the foundation of their business, with 6 acres of their twelve being made up of vegetables. Dan keeps a blog about saving seeds: [goingtoseed.wordpress.com](http://goingtoseed.wordpress.com) and he is the co-author of Crop Planning for Organic Vegetable Growers.

During this talk Dan focuses on growing seed from the perspective of saving it for the farmers themselves. He begins by talking about why it is beneficial to add seed crops to your garden. Flowers, for example, create a food source for pollinators and beneficial insects, which will benefit other aspects of your farm/garden. Also, seed crops last a lot longer in the field than vegetable crops do. They leave undisturbed soil, which helps develop the soil habitat. Furthermore, by producing seed crops you are adding a type of organic matter to your soil.

It is important to keep in mind that different varieties come from different places and have a diverse history and background. Red oak leaf lettuce, for example, is a type of lettuce that is held well in the field. TourneSol farm had been sourcing their seed for this lettuce from the same company but the company ended up sourcing the seed from a new supplier, so the seeds were coming from a new strain and were less desirable. Luckily, Dan had been saving these seeds over the years!

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Dan grows some seed crops under their caterpillar tunnel and they keep the crops covered in row cover fabric within this tunnel. The temperature never drops below -9 degrees Celsius in the tunnel. Over time, the seeds they've been saving have been adapting to their farming methods and have become more resilient to the cold. This highlights the fact that saving seeds makes better seed for your farm.

There are many things that must be considered when growing seeds. For example, to grow a seed crop, you have to grow a vegetable crop. Also, while weeding is important for all crops, it is extra important for seed crops since weeds lessen the ventilation available to seed crops, which leads to mould. Also, weeds compete with the crops, which result in a lower seed yield. Another way to ensure the health of your seeds is to avoid overhead watering since too much water will cause mould, which may lead to disease under the leaves.

You also need to have a sense of the plant's genetic makeup. For example, you don't want brassica rapa species to go to flower close to where you're growing other crops because when they go to flower some of them may cross-pollinate.

It is important to note that plants will tell you when they're ready; most plants will turn golden brown and when you run your hands through it the seeds will make a shattering sound and there will be a seed rain on the ground. Be careful when you harvest your seeds and ensure that you let them dry for enough time. The next step is to thresh them to separate the seed from the chaff, and then winnow the seed to get it clean.

Dan proceeded to talk about seed saving on TourneSol Farm, which is 1000 feet long and 700 feet wide. The main field is broken into blocks and each block is 14 beds at ½ acre. They keep full beds with cover crops and rows of seed crop together, with the seed crop along the edges. This allows the crops to be tilled and worked back into the ground. Also, if the seed crops are irrigated, it must be early on in their life. Drip-tape is a good option for seed crops.

TourneSol now has designated areas for seed crops, which are the locations along the edge of the farm. This brings in the pollinators and facilitates the use of an area that would not be able to be used as efficiently for vegetable crops. They also rotate the crops from year to year between cover crops and seed crops.

TourneSol Farm grows many cucurbits (melons, etc.) and you can hand pollinate these, but that is time consuming so instead they grow them under row cover. They also grow some crops in their neighbour's field, which allows them to avoid cross-pollination since it is a 10-15 minute drive on the tractor.

The easiest type of seed to save is the type that already has the seed in the part of the food that you are going to eat (i.e., tomatoes). Peppers, hot peppers, and eggplants are also somewhat easy to save the seeds from, though during the cultivation process you must be sure to keep a couple hundred feet between the hot and sweet peppers. The eggplants and peppers don't usually cross, but hot and sweet peppers could cross, which would be bad for business. On the other hand, you could grow different varieties of squash within this species and they won't cross together, so you can save the seed without any concern. You should only grow one variety of cucumber if you really want to avoid cross-pollination. The tendency for the plants to cross is dependent on the species and variety.

There are some other points that Dan made at this time, such as the fact that you must keep in mind that if you harvest all of the pea crops for fresh crop, you won't have enough to save for seed, so you need to make sure you account for the seeds you want to save. Also, beets do not typically produce reliable beet seed, and they germinate about 60% of the time. Another point that was raised was that dandelion greens could be saved and be put into a mesclun mix.

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Dan then spoke about what seed crops should be grown and first mentioned that it was important to save seeds of varieties that are no longer saved, in order to preserve a larger diversity of varieties! Also, it's hard to get some seed varieties organic, so by growing them on your farm and saving them you can transition them to becoming certified organic. Furthermore, by saving seed over time, the seed becomes more reliable. Also, certain varieties, like golden beet, are quite expensive, so saving seeds reduces the costs significantly. Likewise, buying seeds can become quite expensive, so saving seeds lessens the farm/garden costs significantly.

Saving seed certainly takes time and effort, but it's not tons of work for your own personal use. You must ensure that you plant early enough; otherwise the seed crop doesn't have time to go to flower and then produce seed. Also, while it may seem like a lot of work at first, it becomes part of the normal routine to weed seed crops, just as you weed vegetable crops. Be sure to observe the plants regularly and flag the plants that you have noted for certain characteristics (i.e., slow to germinate, good flavour). If you go through your field every week or two and see which plants you like best, your results will be improved. In reality, the seed harvest is the part of the process that results in the most work and you must ensure that you always harvest seed crops once a week, on a nice sunny day. Seed cleaning can happen in October or November, so harvest time is really the critical variable.

In conclusion, don't begin with too many crops to handle, as since there is always a large learning curve. Also, don't worry too much about cross-pollination and give yourself a place to learn. Don't be over-ambitious, rather learn step-by-step!