Smoothing out the rough edges of organic conversion

A project was set up in 1988 by the Union de producteurs agricoles (UPA), Quebec's general farm organization, to facilitate the conversion to organic practices of 25 dairy farms northeast of Montreal. Of the original participants, 23 have stayed in the program and four intend to be, or have become, certified organic. The Sylvestres of St-Viateur, have counted themselves in amongst the final four.

by Chantal Foulds

There is no lack of labour at the Sylvestre's farm; Jean-Claude, with his 3 sons Daniel, Michel and Jean, manage the 37 cow dairy herd on 550 acres of land near St. Viateur, located on the north shore of the St. Lawrence, half way between Montreal and Trois Rivieres. All four men participate equally in the fieldwork and in the barn, and making it a real family farm, only Michel's wife works outside. Their roles differ when it comes to paperwork and marketing, for which most of the responsibility falls to Daniel.

The 550 acres are broken down as follows: 150 ac of hay, 250-300 ac of cereals, 60 ac of mixed grain and 50 ac of specialty crops such as oilseed radish, buckwheat and pulses.

In 1988, they cut out all synthetic herbicide and commercial fertilizer inputs because they were tired of "boosting" the system. Daniel says it was possible to do it in one year because they had a large acreage of excellent quality hay fields that were due to be ploughed under. There was little quackgrass, thereby enhancing the fertilizer value of the ploughed-in hay stand, and reducing the risk of perennial weed infestations in the following year's cereal crop.

He recalls there were very few weed problems in the first year cereals. Only in one field of mixed grain did mustard become a problem, but not so much that it couldn't be harvested. "The field was located close to the road, so of course everybody passing by judged organic techniques by what they saw there". In that same year they won a regional prize for the best winter and spring wheat fields.

Presently the fields are cropped with three years of hay, followed by four or five years of cereals. After the third year of hay, winter or

spring wheat is grown, depending how good the drainage in that particular field is. Alsike clover is underseeded at 3 kg/ha. Oats and mixed grain follow in years two and three of the rotation. Daniel finds that the mixed grain is too dense to permit underseeding of a hay stand. Depending on the needs of the farm, buckwheat or a pulse crop is grown in the fourth year. And, finally, winter or spring wheat is grown in the last year, with forage underseeded in the wheat crop. Overall, there is fall ground cover in only two or three of the five years in cereals, one aspect Daniel feels could be improved.

In the entire seven or eight years of the rotation, composted manure is applied only once, when the last year hay stand is ploughed under, at a rate of six tonnes per acre. To make the compost, manure is windrowed in the spring and turned with a Sittler compost turner once after about 6 weeks. If they could not borrow the Sittler from a local farm organization, Daniel says they probably would not turn the manure, it would just be too much work.

Contrary to many who believe in fallowing the third year hay stand before planting cereals, Daniel says they can get away with simply ploughing the alfalfa because the hay stand is in for only three years and there isn't much quackgrass. Therefore, four weeks of cultivation is not necessary. As well, their plough was modified to have longer blades that completely turn the sod under.

Current practice is that sod should not be completely turned under because it creates anaerobic conditions that result in improper decomposition. The Sylvestre's avoid this problem by ploughing shallow, up to a depth of six inches, and by keeping the soil in good shape, which allows for good circulation of air throughout the plough layer.

Daniel believes forage and grain production should be as diversified as possible. Their mixed grain is composed of 10% wheat, 10% barley, 60% oats, 10% peas and 5% buckwheat. Just as diversified is the forage mixture of 30% alfalfa, 10% red clover, 10% white clover, and 50% of timothy, brome, orchard grass and perennial ryegrass. He finds he has no problem underseeding the forage in the wheat; this is because he relies on compost, a "softer" form of fertilization which relies on the microbial processes for nutrient release over a longer period of time as compared to commercial fertilizer. This favours the establishment of the underseeding rather than the wheat.

What are the major changes that have occurred since the Sylvestres turned to organic farming? Daniel feels that their net return is better. Production is slightly lower in the barn (6,500 kg milk/year before vs. 6,000 kg milk/year now), but they're spending a lot less on inputs. They no longer buy $10,000/year worth of concentrates and visits from the veterinarian are few and far between. On average there are three or four cows who won't come into heat right away, but the Sylvestres prefer to give these cows a rest (a couple months with hay) rather than to cull them. Daniel feels that through better herd selection, especially for large conformation, the herd average should go up. "Because we feed a large quantity of roughage, the bigger the cow the better. But this is going to take a few years to develop."

As well, learning to market their organic grains has been a whole new task. "It's difficult to find buyers, and then when you've found them, to get them to honour their commitments. We're looking into forming a producer's group for organic grains to better insure our markets."

The Sylvestres have many projects for the years to come. They feel they have learned to manage the fields well without chemical inputs. The next step is to reduce inputs in the barn by practicing preventative medicine with the dairy herd. Daniel is following courses on homeopathic remedies and hopes to put them into practice soon.

In addition, they'd like to install a sophisticated system for germinating cereals before they are fed to the cattle. Germinated cereals are reputed to have a better feed quality. In Europe systems have been built to regulate misting on the cereals, thereby reducing the labour requirements.