



Vineyard manager Scott Jones of Southbrook Vineyards in Ontario's Niagara region.

GLENN LOWSON/THE GLOBE AND MAIL

JORDANA DIVON

SPECIAL TO THE GLOBE AND MAIL

PUBLISHED SEPTEMBER 11, 2013

UPDATED MAY 11, 2018

PUBLISHED SEPTEMBER 11, 2013

This article was published more than 6 years ago. Some information in it may no longer be current.

 0 COMMENTS  SHARE

Each week, we seek out expert advice to help a small or medium-sized firm overcome a key issue.

Buoyed by the spirit of enterprise, Southbrook Farms owner Bill Redelmeier and his wife, Marilyn, purchased 74 acres of land eight years ago in Niagara-on-the-Lake, Ont., with plans to transform it into the country's first certified biodynamic winery. They doubled their land to 150 acres in 2008.

A step above organic, biodynamic farming is a holistic method of agriculture, codified by Austrian philosopher Rudolf Steiner, that seeks to create a self-sufficient system that "exists in harmony with the planet."

This means adhering to a rigorous set of standards. As proprietor of Southbrook Vineyards, Mr. Redelmeier must ensure that everything from manure to grapes to the glass used to bottle his wine conforms to these standards.

Mr. Redelmeier's gamble appears to be paying off: Southbrook now produces an award-winning product and has expanded its annual output to an expected 15,000 crates by the end of this year, up from 6,000 in 2008.

While those numbers demonstrate notable growth, Mr. Redelmeier says he can't keep up with demand and has had to start turning down orders. The problem, he says, is that he can't acquire enough "inputs" – an organic industry term for resources such as fertilizer, crops or animal feed used for farm production – to grow larger. There simply aren't enough local organic suppliers to meet his needs.

Out in the field, Southbrook's longtime vineyard manager, Scott Jones, confirms a lack of local certified organic manure as one of his key concerns. Southbrook buys such manure from brokers to supplement the compost it is able to cultivate from the hay it uses as winter bedding.

Many farmers use plant-based "cover crop" materials as fertilizer, but animal-based manure remains a more potent and direct source of nutrients.

To qualify as organic, the animals that provide the manure must be pharmaceutical- and steroid-free, consume an organic-based diet, and live in conditions that afford them a fuller range of motion.

But not all manure is created equal. Chicken manure is not suitable, for instance, because of its high nitrogen levels. "So you have this pecking order of preference that's based on the macro-nutrient content, which is cow, then horse, then sheep, then chicken," explains Mr. Jones. He must also ensure that the manure is of a high enough quality, comprised of the correct chemical composition and available at the right time of year for the vine.

As organic manure is still a niche market, and most livestock farmers keep the waste produced by the animals for their own use, Mr. Jones has had to settle for a limited supply of horse manure – his second choice – from a farm farther away, and he says it's still not enough. Shipping the material increases the carbon footprint and "doesn't make me feel so hot," he adds.

There's no guarantee the market will expand any time soon, and Southbrook may remain in a growth holding pattern until it does.

THE CHALLENGE: How can Southbrook continue expanding despite the lack of certified organic manure and other components?

THE EXPERTS WEIGH IN

Christine Brown, nutrient management, field crops, at the Ontario Ministry of Agriculture, food and rural affairs, Woodstock, Ont.

It's going to be really hard for them to talk to a regular dairy farm and persuade them to go organic just for the manure. The cost would be too high. But if they went to a dairy or cattle farm and got them to compost their regular manure under the organic specifications, that might be the best alternative for them.

There's also a list of people from across the province who have taken nutrient management training and are manure brokers already. It's worth investigating. And there are several people who do compost of green bin-type material. Commissioning someone like them already involved in that industry is another alternative. They're looking at doing alternative composting as well and they've got the land base.

Kerry Doyle, manure management specialist at KPD Consulting Inc., Abbotsford, B.C.

The only way to truly ensure that animal manures are biodynamic is to generate the manure on-site via your own animal husbandry using biodynamic principles. This is problematic and difficult at best. Materials and management can be expensive and overwhelming.

Organic dairies are a potential source for manure, but just because the dairy is organic it doesn't necessarily make the manure organic. Chemicals used in foot baths and for cleaning of the milking parlour can end up in the manure system and can contaminate it. A more practical alternative to dairy manure could be beef cattle manure, where cleaning chemicals and other external inputs are less frequently used.

Steve Venables, proprietor, Forbidden Fruit Winery, a certified-organic vineyard in Cawston, B.C.

Conventional agriculture has a whole bunch of stuff they can go buy in a bag. With organic agriculture, ideally, you try to operate your farm as a closed system, recycling the nutrients that are available in the atmosphere and on your land. Our experience in 1974, when we bought the farm, was to bring in manure to spread on our most depleted and eroded hillsides to try and kickstart the soil.

Something that Southbrook may also consider is what we call "cocktail crop" green manures, as opposed to growing any single seed as a manure crop. It's a seed mix with a variety of plants – buckwheat, peas, sunflowers, oats, barley – and can that way enrich the soil better than with any kind of single species of manure crop. [This cover crop] can then be mowed, raked and cut over the alleys between the garden after they've added the right nitrogen mix and whatever else they need to the fertilizer.

THREE THINGS THE COMPANY CAN DO NOW

Consider alternatives

Look for conventional farmers who would be willing to produce and set aside some cow manure or alternative compost that would meet the winery's organic specifications.

Keep it (really) local

Southbrook should consider raising its own cattle, in addition to sheep, to provide a home-grown supply of manure.

Go greener

Explore more plant-based compost options. These can be grown on-site and eradicate the need to source livestock farms.

Facing a challenge? If your company could use expert help, please contact us at smallbusiness@globeandmail.com

Follow us [@GlobeSmallBiz](#) and on [Pinterest](#)

Join our Small Business [LinkedIn group](#)

Add us to your circles

Sign up for our weekly newsletter

Interviews have been edited and condensed.

© Copyright 2020 The Globe and Mail Inc. All rights reserved.

351 King Street East, Suite 1600, Toronto, ON Canada, M5A 0N1

Phillip Crawley, Publisher