

AgriSuccess

JOURNAL



8 seconds

The time it takes to know your GST refund

Use AgExpert Analyst, Canada's leading agricultural software, to track your income and expenses and — with just a few clicks — it can complete your GST return.

Start 2008 off right by setting up your books with AgExpert Analyst software now.

Your software includes a training DVD, Quick Start Guide, online reference manual and unlimited toll-free calls to our Product Support Centre. **Only** \$399

You could win



Buy AgExpert Analyst on or before March 31, 2008 and you're eligible to win an Arctic Cat 700 Diesel ATV.

Buy early and be eligible for more great prizes.

ATV sponsored by Arctic Cat. Prize may not be exactly as shown.

To find out more, call AgExpert at 1-800-667-7893 or visit www.AgExpert.ca/dyff



presents

AgExpert
Management Software

Canadä

Advancing the business of agriculture

In this issue

12 Dairy contrast: expand or specialize?

Regardless of your enterprise, you'll be able to relate to this story.





4 | Your money

Conservation easements, fertilizer buying decisions and high speed Internet access.



5 | The big picture – Farm expansion: understanding your limits

There are barriers to farm growth – both external and internal.



6 | Young farmer profile – Building on business planning strengths

Kristen Ego and Gary MacPhail of Orillia, Ont. have jumped into agricultural production, and they have a plan.



7 | Connect with consumers – Satisfying the thirst for knowledge

A one-of-a-kind farm education centre aims to link producers and consumers.



8 | Right size your farm

Size matters, but not necessarily for the reasons most people assume.



14 | Planning to succeed – One size does not fit all in farming's future

Small farms need large farms and vice versa.



15 | Safety on the farm – Dust off your lungs

Rather than automatically wearing a mask, try to control dust at its source.



16 | The cutting edge – DNA bar-coding is new defence against pests

The day is coming when producers will have portable DNA bar-coding machines to accurately identify any insect pest.

AgriSuccess

November/December 2007

Editorial board Lyndon Carlson Derwin Arnstead Brenda Frank Roger Shier Lane Stockbrugger Chris Shauf Rob Schmeichel Adrienne Gagnon

Editor

Kevin Hursh

Grant Hesje

Associate editor

Allison Finnamore

Graphic designer

Wendy Bachelu

Production manager

Nadine Frank

Contributing photographers Greg Huszar

Cover photo

Greg Huszar

Subscription information

Change of address or questions: Phone: 1-888-332-3301 E-mail: info@AgriSuccess.ca For undeliverable mail, please return to: 1800 Hamilton Street, P.O. Box 4320, Regina, SK S4P 4L3

AgriSuccess Journal is published bi-monthly by Farm Credit Canada.

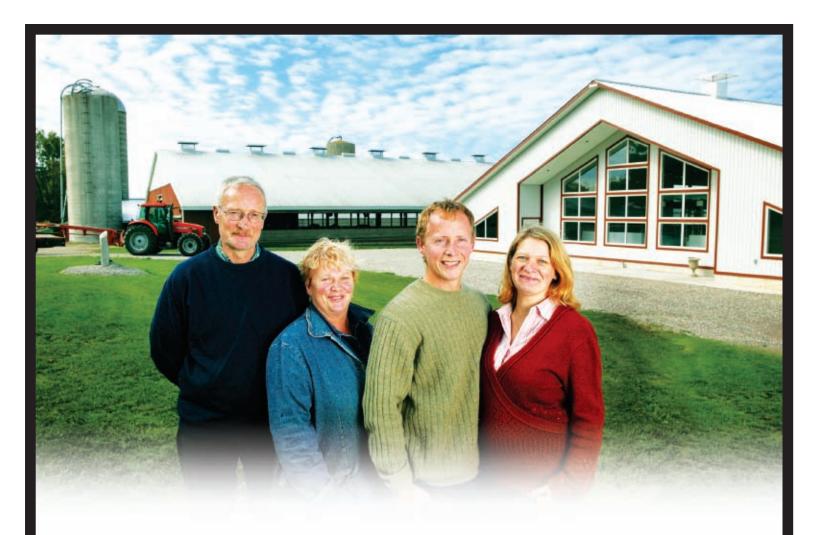
AgriSuccess is committed to advancing management practices that lead to success in Canadian agriculture. Farm Credit Canada believes in this success and proudly brings you AgriSuccess.

www.fcc.ca www.AgriSuccess.ca

On the cover:

Clarke and Nancy Gourlay operate Little Qualicum Cheeseworks in Parksville, British Columbia.

Cette publication est également offerte en français.



Reason #1: Protect your family

Reason #2: Protect your business

Reason #3: See reasons 1 and 2

Getting loan life and accident insurance just makes sense

Wouldn't it be good to know you did everything possible to protect your family and your business if something happened to you? Loan life and accident insurance from FCC Agri-Assurances is a good supplement to term insurance or other insurance you already hold. You can choose the coverage you want, so you only pay for what you need.

Approval often happens right away (wow). And coverage is available for up to four people on one loan. Another economical option is payment protection, which covers future loan payments for a set period. It gives your family and those involved in your business time to make important decisions without worrying about making payments. After that, regular payments resume.

Talk with your Relationship Manager today about adding or updating your coverage. Call 1-800-387-3232 or visit www.fcc.ca





Letter from the editors



FROM KEVIN HURSH AND ALLISON FINNAMORE

♥ ize is a critical issue for any farm operation. That's why we've decided to tackle the topic in this edition of AgriSuccess Journal.

On average, farms have continually increased in size. Twenty years ago in the hog industry, if you had two hundred or so sows it was a significant operation. Today, hog production is dominated by farms with 500 or even 5,000 sows. Producers have typically got out or got big.

Dairy operations with more than 500 cows are increasingly common. While Prairie grain farms run the gamut of small to very large, it's commonplace to see operations that are three to five thousand acres. Some are 10,000 or even 20,000 acres.

What are the factors encouraging larger production units? Does a farm have to continually grow to remain viable? Are there other alternatives? Where will it all stop?

Despite the rush to get bigger, there are producers finding success with smaller production units servicing more specialized markets. What are the secrets of this approach?

In the farm press, the issue of farm size typically surfaces as a policy or ethical debate. We'll leave that discussion for others, sticking instead to business issues. Of course, your business should meet your personal goals and objectives and ideally these will be tied into a succession plan, so the topic is still broad.

We haven't come up with any magic answers, but hopefully you find the information thought-provoking and useful. Let us know what you think, and please pass along any ideas you might have for future stories.

Our two feature stories and two of our recurring columns deal with farm size considerations, but there's a wide array of other farm management topics that we also hope you enjoy.

To contact us, you can e-mail info@AgriSuccess.ca or call 1-888-332-3301.

AgriSuccess Journal is a magazine dedicated to helping producers advance their management practices by providing practical information, real-life examples and innovative ideas that foster personal solutions.

Them John allism Finnamore

This month's contributors

Kevin Hursh, Editor

Kevin is a consulting agrologist, journalist and broadcaster based in Saskatoon, Sask. He also takes an active role in the management and operation of a grain farm

Allison Finnamore, Associate Editor Allison specializes in cultivating words. Based in New Brunswick, she has written about agriculture for 15 years, contributing to publications nationwide and working with industry to promote farming. She is a past president of the Canadian Farm Writers' Federation.

Owen Roberts

Owen, a native of Mitchell's Bay, Ont., teaches agricultural communication at the Ontario Agricultural College. University of Guelph and is director of research communications for the university. He is also a freelance iournalist and broadcaster

Peter van Dongen

Peter is an agricultural journalist and communications consultant based on Vancouver Island. Born and raised on a dairy farm, Peter is a professional agrologist with work experience on many different types of farm operations.

Hugh Maynard

Hugh is a specialist in agricultural communications based in Ormstown, Oue. A graduate in farm management from Macdonald College (McGill University), Hugh is a seasoned farm journalist and

Anne Howden Thompson

Anne Howden Thompson is a professional freelance journalist specializing in agriculture. Raised on her family's dairy farm in Ontario, she has always maintained an active involvement in many facets of agriculture.

D. Larraine Andrews

Larraine is a freelance journalist who lives in High River, Alta. She grew up on a large grain farm at nearby Vulcan and has written for a number of agriculture related publications.

The editors and journalists who contribute to AgriSuccess Journal attempt to provide accurate and useful information and analysis. However, the editors and FCC/AgriSuccess cannot and do not quarantee the accuracy of the information contained in this journal and the editors and FCC/AgriSuccess assume no responsibility for any actions or decisions taken by any reader of this journal based on the information provided.

The views expressed in this journal are those of the authors and do not necessarily reflect the opinion of the editor or FCC/AgriSuccess.

Conservation easements receive favourable tax treatment

BY D. LARRAINE ANDREWS

conservation easement is a legal agreement between a landowner and a qualified conservation organization such as Ducks Unlimited Canada. Under the agreement, the landowner voluntarily gives up or donates some of the rights (but not the title) attached to the land in order to preserve an area that has ecological significance.

Normally, the value of the right given up is treated as a sale for tax purposes and taxed as a capital gain. Recent changes to the tax treatment

of ecological gifts means that such gains are now exempt for tax purposes.

The donor still qualifies for a donation receipt for the value of the rights that have been given up, as long as the recipient organization is a qualified recipient.

Most provinces have specific legislation that enables the use of a conservation easement. For more information contact Ducks Unlimited at 1-800-665-3825, or check the website at www.ducks.ca.

High-speed Internet access for rural areas

BY ANNE HOWDEN THOMPSON

Large pockets of the country have been unable to tap into the high-speed Internet highway, but there are some new tools in the networking toolbox that may fit the bill.

Two of the newest to hit the market are the pluggable and portable options available from both Bell Canada and Rogers Cable Communications Inc.

They use the Inukshuk network, a cutting-edge wireless broadband network built by Rogers and Bell Canada that does not require line-of-sight to capture a signal.

The new systems are touted as plug-and-play because each of them is easily self-installed. Installation is as simple as connecting the small, wireless modem to the computer and a power source.

The companies are continuing to expand their coverage areas, and by the end of 2008 the network footprint is expected to reach more than two-thirds of all Canadians, including 50 unserved rural and remote

Anyone interested in these new services should contact the respective companies: Bell Canada (www.highspeedunplugged.sympatico.ca or 1-866-875-9591); Rogers (www.rogers.com/portable or 1-866-579-7215); or Inukshuk network (www.inukshuk.ca).

Buying fertilizer early usually pays

BY KEVIN HURSH

GF Brokerage and Consulting of Saskatoon examined summer-to-spring price comparisons for both urea and phosphate fertilizer for the past eight years.

On urea, there was just one year when the price declined heading into spring. That was the spring of 2006. The previous fall, energy prices had skyrocketed due to hurricane damage in the Gulf of Mexico.

In the spring of 2007, the price rise on urea was more than \$200 per tonne. Producers who bought early saved a lot of money.

On phosphate fertilizer, the numbers in the report show higher prices every spring for the last eight years, although sometimes the price difference was relatively small.

Cash flow, storage issues and income tax considerations all figure into fertilizer purchasing decisions, but many analysts expect fertilizer prices will increase going into spring 2008.



Farm expansion: understanding your limits



n average, farms continue to get larger across Canada and around the world. The economics behind it seem pretty clear, but where will the trend stop? What are the practical limits to farm size?

Labour can be a major limiting factor to expansion. If you can't find the human resources or if managing employees

There's tension in many farm communities over farm size.

doesn't appeal to you, there's a limit on how much you can grow. Having five or seven or 12 kids to work on the farm is not as common as it used to be.

Many producers are hands-on folks. They want to be involved

with production, rather than just have a managerial role. That too is a growth-limiting factor.

With intensive livestock operations, having enough land to utilize the manure is a size barrier. Transporting manure is expensive, so you need a land base in reasonable proximity to the facilities. Beyond a certain size of hog operation or cattle feedlot, it makes sense to establish a second location.

In some areas, farm expansion is limited by urban encroachment. To grow much larger, the operation would have to relocate to somewhere more rural.

New technology has been a driving force in expanding field crop production. The technology allows one or two people to seed and harvest more acres than ever before. The biggest air drills for seeding crops are now over 80 feet. Combine headers are 40 feet wide and more.

A lot of grain farms are sized around how much one piece of seeding equipment can cover in the spring. What are the limits to equipment size? Building seeders, combines and sprayers that can still be safely transported down the road to get to the next field is a real barrier to future growth of both equipment and farms.

Connection with customers is a limit to farm size. If consumers increasingly want to know where their

food comes from and if they are willing to pay for certain production practices, more farms will be able to thrive without such a push to economies of scale.

Sometimes it's subtle and sometimes it's overt, but there's tension in many farm communities over farm size. It may be just envy, but large operations are often under the microscope. Everyone watches to see what they do, and there's coffee shop discussion about their latest venture or purchase.

So far in the history of agriculture, the trend to larger farms has bucked all of the above barriers, even the social stigma. There's still a wide range from small to mega, but the average farm size continues to increase year after year.

Here's something to consider: an average-sized farm today would have been stigmatized as a mega-farm just a few decades ago. If you're worried about what your friends and neighbours may think about your farm expansion, just give it some time and your farm won't look so big anymore. �



Building on business planning strengths

BY ANNE HOWDEN THOMPSON

go's Nurseries Ltd. of Coldwater, Ont., is a shining example of planning on the farm. Owned by Kristen Ego and her husband Gary MacPhail, the couple have reduced the water and fertilizer use in their operation by converting to drip irrigation systems. They also use enhanced riparian buffers and windbreaks and have improved recycling of greenhouse and nursery plastic.

The couple clearly has a business eye trained on environmental and economic benefits

Having a plan and reviewing it regularly are critical in today's business climate.

Kristen's parents, Laury and Lorraine Ego, established the family's farm market and nursery business near Orillia, Ont., in 1975. Over the next two decades the businesses flourished, with the nursery enterprise growing substantially with Kristen's return to the farm after earning her bachelor

of science in agriculture at the University of Guelph.

She has worked full-time on the family's operation since then, and Gary joined them in spring 2004. Last fall the couple put their money on the line and bought into the business.

A pillar of the Ego-MacPhail transition was the development of a succession plan. Although Kristen admits it is "harped to death" at farm meetings, she says having a plan and reviewing it regularly are critical in today's business climate. The plan ensured everyone's needs were addressed, like Kirsten's parents' continued but reduced involvement in the business.

The couple bought the family's nursery operation, allowing for a manageable debt load and the time to develop a cash flow. They continue to help with the family's farm market operation.

At first blush the business may not have changed much with the transition, but Kristen and Gary are already making their imprint. Technological investments have been made in the office to assist with management

duties and on the ground to assist with irrigation systems. While the Ego family does well with direct marketing, Kristen and Gary want to explore the wholesale market. The couple also chose to outsource some services, such as website design, to build on the strength of other service professionals and ease the family's workload.

And, the family capitalizes on the strengths of its own team members.

MacPhail, who has an economics degree, abandoned a career in corporate real estate in Toronto to help Kristen pursue her dream. He brings the corporate mindset for structure and accountability to the farm business table. Job descriptions have been developed for the couple's four full-time, seven seasonal full-time and seven seasonal part-time staff, giving staff members expectations and empowerment. Performance incentive bonuses have also been introduced.

There is no denying the obvious enthusiasm the couple brings to their farm operation, but it is tempered by the recognition of the practical realities of farming. They did their research. They sought advice, often from several sources. And they have a plan.

Learn more about the Ego-MacPhail operation at www.egosgardencentre.com. �



Evolving your business

Satisfying the thirst for knowledge



BY ALLISON FINNAMORE

uenching consumers' thirst for knowledge on how their food is grown is a tall order - of course most agriculture producers are willing to explain the intricacies of the food they produce, but the process can be complicated and effective communication can be daunting. Besides, time doesn't always allow for in-depth conversations with consumers.

Consumer interest about where food comes from seems to be reaching a peak. But the thirst remains, despite the shortfalls. When the eagerness for learning is strong, consumers will seek out the answers. Having a reliable source at the ready is a definite advantage to the agriculture industry.

Increasingly, farm organizations, research centres, individual producers and universities are finding ways to offer education opportunities to consumers, whether with agri-tourism initiatives, farm markets or direct sales or educational opportunities.

One of the newest projects is at the University of Manitoba, where what's being billed as a one-ofa-kind farm education centre is under construction.

The Glenlea Farm Education Centre will be an interactive facility with hands-on displays showcasing modern livestock and food production from farming practices to retail sales. Visitors will be able to check out a tractor equipped with a global positioning system and drive through virtual fields of livestock and grain farms with stops at feed bins and hay bales. Using weather equipment, they'll visit real and virtual crops and examine soil profiles.

Swine production, from conception to finishing, will be viewed by the public through a glass window, and a demonstration transport truck will be onsite to show how animals are moved about off-farm. At a mock supermarket, visitors can scan food and be virtually introduced to producers, processors and marketers. The hands-on food preparation area will highlight food safety.

The Glenlea Farm Education Centre will be an excellent example of taking consumers through the entire process of food production - truly a field-to-fork experience. At a time when food safety is gaining increased public awareness and consumer interest about where food comes from seems to be reaching a peak, it serves the agriculture industry well to satisfy the consumer's eagerness to learn.

Dr. Emőke Szathmáry, president and vice-chancellor of the University of Manitoba, says the centre will have an essential responsibility in the industry, calling the project and the university a "community educator." It will also help highlight research at the university.

"The Glenlea Farm Education Centre is now set to become an engaging outreach venue on modern agricultural practices and the important research being done at the university," Szathmáry says.

Producers are expected to gain another benefit, aside from consumer education. The centre's officials say the inclusion of a bio-secure airspace will give producers a bird's-eye view of research going on in the swine barn. Research on technologies in grain and cattle production will also be readily accessible.

It isn't easy to find engaging ways to respond to consumer demand to learn about agriculture, but concentrated efforts like the Glenlea Farm Education Centre make valuable contributions to farming. These projects effectively satisfy the consumer's craving for agriculture knowledge and understanding.

Information on the Glenlea Farm Education Centre is available online at www.umanitoba.ca/afs/ncle.

8 | AgriSuccess Journal Feature

Right size

BY KEVIN HURSH

t may seem counterintuitive, but large farms don't necessarily have the lowest cost per unit of production. Nor do they necessarily have the highest profit per unit. Smaller operations producing for the same markets often have lower costs and higher profitability.

So why the rush to get bigger? And why do so many people relate large farms with an increased likelihood of profitability?

Make no mistake. There are many factors beyond profitability per unit that are encouraging larger farms.



Let's use the example of a cow-calf operation that makes \$150 per cow after all expenses are considered. With 100 cows, the profit is \$15,000 a year. While this per-unit profit may be among the best in the business, it doesn't add up to a lot of money to pay living expenses.

If this operation wants to make enough money from beef cows to provide a decent family income, more cows will be needed. And what about money for capital costs? Maybe that old baler needs to be replaced. And what if a son or daughter wants to join the operation? That too may encourage a larger production base.

So even though small and mid-sized farm operations may be profitable, there's still a market bias toward expansion. Plus, there are a number of advantages to being bigger.

Size matters

- · Large farms can sometimes purchase their inputs at lower prices due to volume discounts.
- · Larger operations are more likely to seek professional advice on production practices and marketing.
- The operators of large farms are less likely to have off-farm employment. That means they can devote more attention to areas like marketing and human resource development.
- · Larger operations are more likely to have one or more full-time employees, and that may provide the owner with a better lifestyle.

"Sweet spots"

A farm isn't like a factory and biggest isn't always best, says Terry Betker, director of practice development in agriculture for Meyers Norris Penny out of Winnipeg.

"There are sweet spots," Betker says, referring to the scale of farm operations. "Some guys get bigger and their costs actually go up. It's important to be right-sized."

Grain producers are sometimes advised to rent more land so they can spread their fixed costs, such as machinery, over more acres. Betker says this is a simplistic approach that may not work in practice.

Obtaining more land may be a viable option, but only if the farm has enough equipment and sufficient human resources to handle more acres. Otherwise, overhead costs may grow even faster than the land base.

"Many farms outgrow their management ability," Betker observes. In other words, you need to get good before you get big.

A different business structure

Saskatoon farm management advisor Myron Teneycke brought his farm near Young, Sask., and two other area operations into a business structure designed to capture efficiencies. When Teneycke learned that ambitious local producer Barry Shouse wanted to expand his operation and Calgary entrepreneur and lawyer Ron Russell had unexpectedly found himself in control of his family farm, Teneycke saw the potential.

The three farms are now being operated as STR Joint Venture. There were formal planning sessions and a business plan was developed.

"People have tried to do this kind of thing in different ways," Teneycke notes, "but they've seldom made it work."

With three partners, there's business and legal expertise and someone who's exemplary at day-to-day operations and management. There's also more liquidity, a common obstacle.

At 8,000 acres, the farm is big, but still not as large as some grain farms on the prairies.

"We should be 20 per cent larger," Teneycke admits. Two seeding outfits are being used and they should be capable of seeding 10,000 acres each spring. In this case, more land could potentially add to the efficiency.

The joint venture has only been running for a year, but it does appear to be a way to gain efficiencies and synergies, without the traditional form of expansion.

Choose your battle

Whether you have a small, medium or large farm, there may be times when you can't pencil in a profit no matter what you do and no matter how efficient you are.

10 | AgriSuccess Journal Feature

At the start of the decade, Jelmer Wiersma's parents had a dairy operation in Nova Scotia. Jelmer wanted to expand, but he found the province's dairy quota prices were too high to make his expansion feasible. As everyone knows, if it doesn't work on paper, it's unlikely to work in practice.

After crunching numbers and evaluating options, Wiersma came up with an entirely different plan. "We found it was better to move to Saskatchewan and go into poultry. It was much more economically viable at the time."

Wiersma and his family made the move in 2003, and they now run both chicken and turkey operations that he describes as "just a bit larger than average."

From a management point of view he's comfortable with the scale of the operations, but he says expansion isn't out of the question.

While it required a major change in location and even a change in the type of production, the new venture has done well. The commonality was supply management where it's easier to predict returns and you can have more confidence in projections.

Know your numbers

"There's no one right calculation that tells you how your farm is doing," notes Terry Betker of Meyers Norris Penny. He says gross revenue, the cost per unit of production, the margin per unit of production and return on equity are among the measures that should be examined.

While operating costs are easy to come up with, it's important to understand your fixed costs. Financing, human capital and marketing are the other important components of any business strategy.

Examining your operation on a number of levels is key to making decisions on expansion, contraction and succession. While professional help is available to crunch and analyze the numbers, your personal goals and objectives and those of your family are a vital part of determining the right size for your farm. •

The commodity rut

Discussions over the most efficient and effective farm size usually have the underlying assumption that everyone is producing for commodity markets. An increasing number of producers are rejecting that approach.

Scott Dingwell, a hog producer on Prince Edward Island, believes the future for small to medium-sized farm operations lies in higher value markets rather than the regular commodities.

"The cost of feed is higher on the Island and this certainly isn't where capital would flow to build new hog barns," Dingwell says. He points out that pork production not only has to compete with other regions of Canada, it also has to be competitive with pork from low-cost areas of the United States and even emerging producers like Brazil and Chile.

Together with other P.E.I. producers, Dingwell has thrown his energy into producing, processing and marketing omega-3 pork at premium prices.

"We are positioned to focus on niche markets. We are small farms with access to local grain and we have more control over the value chain," Dingwell explains.



She is a leader

The FCC Rosemary Davis Award honours women who are leaders in Canadian agriculture – producers, agribusiness operators, teachers, veterinarians, researchers, you name it. If you see yourself or someone else in this light, please apply or nominate online at www.FCCRosemaryDavisAward.ca before January 21, 2008. The winners will receive an all-expense paid trip to the 2008 Athena International Conference in Chicago. Go ahead. See for yourself how completely amazing you are. Proudly presented by Farm Credit Canada.

1-888-332-3301 www.FCCRosemaryDavisAward.ca e-mail: prixrosemaryaward@fcc-fac.ca



The FCC Rosemary Davis Award



Canadä

12 | AgriSuccess Journal Feature

Dairy contrast: expand or specialize?

BY PETER VAN DONGEN

he 2006 Census of Agriculture merely confirmed what many producers already knew: farms in this country are becoming fewer in number and bigger in size. Perhaps nowhere was this bigger-is-better trend more evident than in the dairy industry, which maintained the same level of milk production despite a 20 per cent reduction in the number of farms. But is getting bigger the only option?

"There's no doubt we're seeing huge changes," says Jim Langelaan, plant manager for Unifeed Limited, a feed mill in Chilliwack, B.C. "Some dairies are getting really big, and pretty well all of them are expanding a little bit."

You can still find the odd herd with 25 to 30 cows, but

Is getting bigger the only option?

at the other extreme, some dairies across the country are now milking over 1,000 cows. Langelaan sees the biggest growth in herds expanding into the 200 to 300 cow range — a fact he attributes

to a combination of demographics and economics.

Many dairy farms in Canada were established by immigrants who arrived in the early 1950s, Langelaan observes. Those farms have since been passed on to the next generation, who are now 45 to 50 years old. Those with no children interested in taking over the farm are selling out to take advantage of high quota values, while those who do have children interested in farming are expanding to take advantage of operational efficiencies.

"It wasn't many years ago that you could make a living with 50 cows," Langelaan says. He's a former producer himself, and a 14-year veteran of the feed industry. While a producer with no debt load could still make a living with 50 cows, he says that would be difficult for a producer carrying any sort of debt load.

Do the math and it's easy to see the benefits of expanding. With size and efficiency the name of the game, many large producers are installing larger, modernized parlours, which

significantly reduce the manpower required to produce a litre of milk. In addition, larger producers are in a better position to negotiate volume discounts on inputs like feed, fertilizer and seed.

"There is also big debt load," Langelaan points out. "If you're smart and you've got the right advisors, I think expansion is beneficial, otherwise these guys wouldn't be doing it."

Clarke Gourlay sees it differently. Along with his wife Nancy and his three sons, the agribusiness entrepreneur operates Little Qualicum Cheeseworks (www.cheeseworks.ca) in Parksville, B.C. In their case, the plan all along was to stay small and carve out a niche producing artisan cheeses on Vancouver Island. When they first started production on a leased farm in 2001, they had just four cows and trucked the milk to a rented cheese plant an hour away.

The Gourlays have since purchased a 68-acre farm and constructed an on-farm cheese plant and retail store. As first-generation farmers with no farming background, they financed the business through the sale of some rental properties. From day one, neither Clarke nor Nancy has had any off-farm income, and the operation now includes 10 additional full- and part-time employees.

Through the B.C. Milk Marketing Board's Cottage Industry Program, all of their milk production is processed into cheese and sold either wholesale or direct to consumers at two local farmers markets and their on-farm store. They produce up to 100 kilograms of cheese per day during their mid-summer peak.

Because the Gourlays are essentially disconnected from the commodity market, they enjoy a great deal of flexibility in how and when they produce. Two of their primary management strategies include seasonal milking – they peak at 50 cows in mid-August and drop to just 10 in the winter – and pasturing the herd for up to eight months of the year using rotational grazing.

"There's very little advantage to us growing beyond where we are now," Gourlay admits, basing this assessment on the high costs of purchasing quota and expanding the cheese plant, and the need to wholesale product further from the farm. Instead, he says, the real opportunities lie in increasing their retail cheese sales and diversifying into other complementary enterprises like a fruit winery and agri-tourism.

"I think there is great potential in small, niche production," Gourlay asserts, "and two things make it possible: one is

value-added and the other is retail. Both are critical. I don't think you can be small in a commodity-based market, so if we were selling milk, we would have a tough time."

Big or small, commodity or niche, figuring out the right size for your farm operation requires much more than plugging some numbers into a computer spreadsheet and waiting to see what it spits out. Ultimately, the farm is a means to an end. Determining the right size for you starts with clearly determining what you are trying to achieve. .



One size does not fit all in farming's future



BY HUGH MAYNARD

s farms have grown in size, "big is bad, small is beautiful" has become the perception of agriculture. Many of the socio-economic and environmental issues related to farming have been attributed to larger farms, such as environmental degradation and rural decline. The benefits of small farms are portrayed by some as the best way to counter these outcomes and make Canadian agriculture more sustainable.

The problem is this: in 21st-century Canada, it isn't easy to make a living with a small farm. Many producers hold at least a part-time job off the farm in order to earn a decent income. Small may be beautiful, but not at the going price.

So, rather than speak of only one size of farm when looking at the future of farming, we should be looking

We should be looking at strategies that include both small and large farms.

at strategies that include both small and large farms, because each of these classes of farms is tied to the continued existence of the other.

Large farms provide custom operations that small farms can no longer afford or that must comply with new regulations, as well as serve as local points for supplies and services that

might otherwise be unavailable. Small farms provide large farms with seasonal and experienced labour that is very difficult to find through regular employment channels, and contribute to the maintenance of the local socio-economic infrastructure.

The two types of farms are also complementary in terms of the space that they occupy in the agricultural landscape. Large farms generate the volume of agricultural produce that fulfils the needs of expanding domestic and export markets. Smaller farms are more likely to target niche and local markets while continuing to generate family income through off-farm sources.

Thus, strategies that focus on the complementary existence of small and large farms would be most beneficial when talking of agricultural sustainability. Luc Robitaille of Mont-St-Grégoire, Que., owns a typical hog farm with 1,500 acres of crop land providing feed for 5,000 feeder hogs and 1,200 sows. He is, however, the pivot man for 57 other farms connected through strategic alliances that include a further 10,000 acres of crops, a feed mill, an abattoir, and the sharing of a multitude of technical and professional resources. Some of the participating farms have shares in the various operations, some just purchase services, and others have contracts - each unto their own.

The notion of exchange and/or co-operation between farmers in order to provide greater critical mass in terms of production and processing capacity has been part of farm operations and management for the longest time. The benefits that can accrue by expanding the range of these types of working relationships between farmers on a strategic basis will provide space for all, big farm or small. ❖



Dust off your lungs



ust is an inevitable reality of many activities on the farm. Fortunately, our bodies come equipped with natural defence mechanisms that prevent large dust particles from being inhaled into our lungs - coughing and sneezing being two examples. However, many dust particles produced on the farm are small enough to evade our natural defences. These particles are inhaled deep into our lungs, potentially leading to short and long term health effects such as asthma, nose and eye infections, chronic bronchitis and Farmer's Lung.

According to the Canadian Centre for Health and Safety in Agriculture in Saskatoon, 12 kilograms, or 27 pounds,

Twenty-seven pounds of dust is emitted every time a ton of grain is handled.

of dust is emitted every time a ton of grain is handled. About 40 per cent of those particles are small enough to be inhaled into the lungs. In hog and poultry barns, 80 to 90 per cent of the dust can be inhaled into the lungs, with the highest dust levels produced during feeding,

feed grinding and moving or handling animals.

For many of us, the default response when working in a dusty environment is to don a mask or respirator of some sort. It's a good practice, but experts say the use of a mask should come only as a last resort. Rather, the most effective way to reduce the risk of inhaling dangerous dust particles is to control the dust at its source.

The centre recommends a five-step approach to controlling dust hazards on your farm. The idea is to start with the most effective method of control - elimination - and then carry on down the list. Let's explore this approach using an actual example from your farm. For starters, think of the activity on your farm that exposes you or an employee to the most dust.

Elimination: Can you eliminate the source of the dust? This is not always a feasible option, but is worth considering. If you or a member of your operation is facing a severe respiratory illness, the answer might be to simply stop producing a specific crop or type of livestock.

Substitution: Is it possible to replace the product or process you are using with another one that reduces your exposure? For example, livestock producers might switch from chopped feed to a pelleted feed to reduce dust during feeding.

Engineering: Can you improve the design of your buildings or equipment? Extending the spouts on feed chutes and setting up your barn to allow for easier cleaning are among many options to help reduce dust.

Safe work practices: Can you change the procedure you use to perform the task? This might be as simple as using a fork to spread open bales, rather than doing it with your hands.

Personal protective equipment: If you've exhausted all other options and there is still a dust hazard, what equipment is required to protect your lungs and eyes from exposure? There are many different types of dust masks and respirators. Talk to your local supplier to make sure you have the right equipment and it is properly fitted.

Conveniently, this approach – often referred to as the hierarchy of control – doesn't apply to dust alone. You can use these same questions to address many different hazards on the farm. .



DNA bar-coding is new defence against pests



OWEN ROBERTS

ou're walking through your field doing some routine scouting when you spot an insect pest you're not really familiar with. You whip out your portable DNA bar-coder, give it an on-the-spot DNA test, make a positive identification and prepare a control strategy.

This brave new world is not far away, thanks to the efforts of a team of 35 scientists hunkered down at the

A familiar agriculture application for portable DNA bar-coding will likely be international border crossings.

new \$4.2-million Biodiversity Institute of Ontario at the University of Guelph. Under the leadership of Prof. Paul Hebert, they've developed a new DNA bar-coding technology to almost instantly access biological information on any of the 10 million animal species on Earth. That technology will ultimately make its way to a hand-held, pocket-sized device, available to farmers and others

who need quick and accurate field-level assessments of pests.

Hebert was pivotal in developing DNA bar-coding four years ago. It involves analyzing a snippet of an organism's DNA in the lab (or eventually, in the field) and establishing a unique DNA barcode for that species. That code can then be quickly compared electronically to a computerized catalogue of other barcodes. If there's a match, the identity is affirmed or a relationship can be established with other species.

In the early days of bar-coding, Hebert and company were able to process about 75,000 samples a year in his lab. But with beefed-up scientific equipment at the new institute, which opened in May, that number will shoot up to a half-million.

Many species - most, actually - have yet to be identified. Using conventional methods such as comparing size, shape and colour, researchers have named 1.2 million species over the past 200 or so years. But that leaves

about eight million species still to go, creating the potential for a lot of "Eureka!" moments all over the world. It also underlines the need for research to establish the wide-ranging computerized catalogue of life.

Besides use in the field, a familiar agriculture application for portable DNA bar-coding will likely be international border crossings. There, inspection officials could use DNA scanners to identify insects or plants that might turn into invasive species. Currently, if insect larvae are found in an agriculture-related shipment of goods coming across the border, inspectors must send tissue samples to specialists for analysis. These specialists are often required to rear the insects to adulthood to make a positive identification. While that process is taking place, it's not unusual for perishable commodities to expire, leaving the shipment to be rejected - even if it turns out the pest is not a candidate for quarantine.

Other uses abound. How about being able to scan problematic pet food to quickly figure out what's in it? Or scanning animal feed to make sure its contents are all federally approved? Or scanning soil for its contents, to help with precision applications of key fertilizer ingredients?

As Hebert says, the land is ripe with active, living organisms that both help and hinder production. What an advantage it would be to know exactly what's there, to be able to scan for biological activity.

This will all take time. Hebert estimates the hand-held device is about 10 years from hitting the market. And he says another decade after that will be needed to catalogue all species on earth.



Canadian farmland values reach highest average in five years

Canada's average farmland values continue to rise, with the largest jump in average value occurring during the past six months. The average value of Canadian farmland increased 3.6 per cent between January and July 2007.

"This is the highest increase since 2002, and significantly higher than the previous reporting period, which saw a 2.5 per cent increase during the last half of 2006," says Rémi Lemoine, FCC Vice-President, Credit Risk.

The primary reasons for this upward trend, and especially strong first half of 2007, include optimism in the grain sector and a stabilized post-BSE beef sector.

"We're also seeing large producers expanding their operations, which is driving prices higher," says Lemoine, adding non-agricultural buyers are also influencing the prices in many parts of the country.

"In many areas, urban residents are purchasing property for the rural lifestyle rather than for agricultural purposes. While this is driving the price of land up, it is also making more land available to rent for farmers and ranchers," Lemoine explains.

FCC released its comprehensive Fall 2007 Farmland Values Report in October. This online report

highlights the changes in agriculture land value twice yearly, and contains 10 years of trend information. It is valuable to FCC customers who are considering selling or buying land.

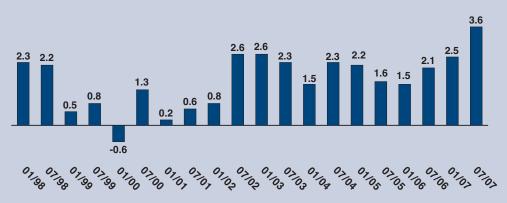
"The Farmland Values report has been a source of information that has helped Canadians make business-related decisions for the past 20 years. The report provides provincial information on recent changes in agricultural land values and their evolution over the last decade," says Lemoine. "Farmland Values is one of many ways that FCC helps primary producers and others involved in agriculture to grow and prosper."

Eight out of the 10 Canadian provinces experience growth in their farmland values. This growth is consistent with an upward trend that began in 2002. None of the provinces showed a decrease.

The Farmland Values Report is available online at http://www.fcc-fac.ca/en/Products/Property/ property_e.asp.

FCC customers who are registered to use our Online Services can access other valuable information including loan details and farmland property for sale. To register for FCC customer Online Services go to https://www.fcc-fac.ca/FCCApp/fcc/en/ registration/FCCRegisterInfoPage.html.

Canada Semi-annual % change in farmland values



Analysis Dates



Fast forward your future

Keeping the farm in the family is a dream for the Berkans. Now they're making it happen with the Accelerator Loan.

With as low as zero per cent down, full payment flexibility and free access to AgExpert farm management accounting software and tools, it's the ideal way for young buyers to get their dream off the ground.

For sellers, the Accelerator Loan offers guaranteed payment, possible tax benefits, payments over time and a free farm management workshop to help make the transition easier.

Whether it's your family farm or one down the road, see how the Accelerator Loan can work for you. Visit www.fcc.ca or call 1-888-332-3301.



Canadä

Return undeliverable copies to:

Farm Credit Canada 1800 Hamilton Street Regina, SK S4P 4L3 Publications Mail Agreement No.40069177