

farm **to** table

FOLLOWING THE PATH OF CANADIAN FOOD • Vol.1 / No.1 • Spring 2014

Going for growth

A case for gearing up
Canada's agri-food sector



Innovators

Next-generation farmers
shape dynamic industry

Trending

Informed consumers and
the rise of tailored diets





1 in 8 Canadian jobs are in ag and agri-food

Agriculture is important to Canada - it employs over 2.2 million Canadians on farms and in processing plants, boardrooms, laboratories and beyond. It's a major economic contributor to the nation's GDP and the day-to-day lives of people across the country. And, with a global population that will need **70% more food by 2050**, Canadian agriculture will become even more important to our country, and the world.

Agriculture More Than Ever is an industry-driven cause to improve perceptions and create positive dialogue about Canadian agriculture, so the industry can reach its full potential.

Visit AgMoreThanEver.ca to learn more.



The Canadian Federation of Agriculture, Food & Consumer Products of Canada and FCC are proud champions of this cause



Contents

Vol. 1 / No. 1 • Spring 2014

2

Welcome

Messages from **Ron Bonnett**, president of the Canadian Federation of Agriculture, and **Nancy Croitoru**, president and CEO of Food & Consumer Products of Canada.

3

Food trends

By **Jack Shipley**. Paying more attention to how food affects their health, consumers use technology and information to custom design what's on their plates.

4

Staying competitive

Op-ed by **J.P. Gervais**

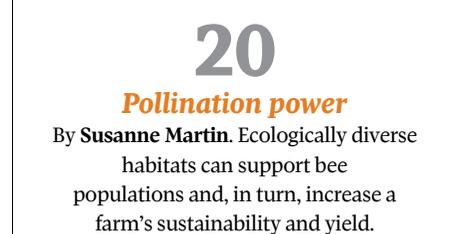
By responding to changing needs and scenarios, Canadian agri-food companies can gain an edge in the domestic and global market.

On the cover:

Raising poultry and growing organic produce, **Lydia Ryall** of Crophorne Farm likes to build direct connections with her customers. Photo by *Debra Stringfellow*.



PHOTOS: BOTTOM LEFT, TOP-CENTER, DEBRA STRINGFELLOW; CENTER-BOTTOM, LAURA BERMAN; ALL-OTHERS, ISTOCKPHOTO.COM



Why food is everyone's business



Ron Bonnett,
President

Canadian Federation of Agriculture

As technology, world markets and consumer preferences have evolved, so has the way farmers do business. Farming has shifted from being more of a lifestyle and sustaining a small radius of people, to businesses contributing to domestic and world markets and integrating the animal welfare, food safety and environmental standards that come with it.

The conventional view of the farmer with a small plot of land and a pitchfork doesn't fit into the reality of the Canadian agricultural landscape anymore. Farms are larger now, more integrated. But big doesn't mean bad. It often means an increase in efficiency and safety. What many don't realize is that most Canadian farms are still family owned and operated.

Canadian agriculture has always been a strong part of our heritage and identity as a nation. For centuries, Canadian farmers have worked hard to produce the food we enjoy. Today, the Canadian brand is known worldwide for its superior quality and standards. We can take pride in the Canadian food and agriculture sectors as incredible innovators, contributors to the economy, job providers and producers of high-quality products.

We see that Canadians want to know more about their food system and what they buy in the grocery store. That is why this publication was an important project for us. Through these pages, we hope to shed light on the farm to table process and players.

We hope to show you who the Canadian farmer is today, and to share with you our reasons why we can be proud of the Canadian brand. ●



Nancy Croitoru,
President and CEO

Food & Consumer Products of Canada

When you think of the facilities where Canada's food and beverages are made, do you imagine them to be like Willy Wonka's chocolate factory?

Well, that is not what today's state-of-the-art food and beverage plants look like. Rather, they are modern, futuristic facilities run by highly skilled workers, using sophisticated machines (even robotics that make muffins) to produce the well-known, trusted brands Canadians consume every day.

What so many of us don't realize – and why this magazine is so important – is that Canada's food and beverage manufacturing industry is a critical engine of our economy, not only providing us with more manufacturing jobs than any other sector in Canada, but providing us with safe, innovative foods that are made in Canada, by Canadians, with ingredients from Canadian farms. Despite the hard knocks manufacturing has taken in the past few years, this is the one sector that continues to grow even in difficult times.

In addition to the close to 300,000 Canadians directly employed in our industry, there are hundreds of thousands of spinoff jobs, including advertising, transportation, farming, finance and legal. All these jobs mean major investments in the economy, which we all benefit from.

Willy Wonka would be amazed by today's industry! My hope is that in the pages ahead you learn more about our sector and how important it is to our economy and our daily lives. And, why food and beverage manufacturing is the sector politicians must back and invest in to ensure we continue to have a safe and home-grown food supply for generations to come. ●

farm to table

Brought to you by the Canadian Federation of Agriculture + Food & Consumer Products of Canada, *Farm to Table* is produced in co-operation with RandallAnthony Communications Inc. and Globe Edge, a division of The Globe and Mail's Custom Content Group.

CANADIAN FEDERATION OF AGRICULTURE

Jessica Goodfellow, Director of Communications

FOOD & CONSUMER PRODUCTS OF CANADA

Adam Grachnik, Senior Director, Communications & Events

EDITORIAL TEAM

Randall Mang, Editor

Susanne Martin, Managing Editor

Scott Laing, Art Director

ADVERTISING SALES

Richard Deacon, National Business Development Manager
rdeacon@globeandmail.com

GLOBE EDGE

Teena Poirier
Director, Client Engagement

Charlene Rooke, Editorial Director

Liz Massicotte, Program Manager

Isabelle Cabral, Production Co-ordinator, The Globe and Mail

Sally Pirri, Director, Production, The Globe and Mail

No part of this magazine may be reproduced without written consent of the Publisher. Views of the writers do not necessarily reflect those of the Publisher.

Canadian Postmaster send address changes to

1385 Bank Street, Suite 425
Ottawa, ON, K1H 8N4

Printing and pre-press by DM Digital +1

SUPPORTERS

The following organizations helped make this edition of *Farm to Table* magazine possible.



Ontario Agricultural College

Trending toward a custom-tailored diet

By Jack Shipley

Never before have Canadians had such a wide variety of food choices. Experts say the information age is a leading force, driving consumer demand and the options presented by food makers.

This trend is reflected in the grocery aisle, where shoppers increasingly find products whose labels reflect a rising preference for tailored formulations – from low fat to gluten free. It is also reflected in food columns, titles of new cookbooks and menu items in restaurants. While some consumer trends are influenced by convenience, pleasure and value, there is a noticeable increase in focus on health and wellness that has Canadians not only watching what they eat but also asking how it's grown and produced.

"Today's consumers are keenly interested in what they are eating and how it affects their health and well-being," says Derek Nighbor, senior vice president of Food & Consumer Products Canada (FCPC).

Recognizing this as more than just a passing fad, growers and producers are responding. Consumers are looking for innovative products, says Nighbor, and companies are adding "healthier for you" options that include smaller portion sizes, lower sodium or trans fat content, or added vitamins, fibre and minerals.

With the ready availability of information comes a greater awareness that food choices vary from person to person – depending for example on age, health, ethnicity and family food attitudes. "We are getting away from the 'eat this, don't eat that' mentality to empowering Canadians to make the right decisions for themselves," Nighbor explains.

Toronto-based futurist Richard Worzel believes the growing knowledge about human genetics will take that trend even further. He predicts that within 10 years, getting our full genetic profile will cost \$100 and take an hour to complete. "That means we're going to rapidly get an incredible amount of information about ourselves and how food affects us."

New technology – scanners, smartphones and the like – will make it easier for consumers to track what food choices are the best fit for their bodies, says Worzel.

As an example of how demographics influence food trends, Worzel mentions the boomer generation. "As our bodies age, they become less resilient, and that means there's less leeway to do [or eat] things that we shouldn't. We're becoming very aware of how that affects our general level of health."

Ken Rubin, vice president of culinary training at online cooking school Rouxbe.com, has also observed a shift toward more nutritious foods. This year, Rouxbe added a plant-based professional certification course to its curriculum, aiming to "train a small army of cooks, instructors, life coaches, health advocates and healthcare professionals, who will help lead industry and wellness change."

Food intolerance and allergies have boosted another market segment, says Rubin, who has studied food trends and food anthropology for over 18 years. "For example, there is strong, compelling data that says there is now more gluten intolerance than in the past," he explains. Rubin sees the demand for gluten-free products as a sign of a growing awareness of how we interact with food – and how food interacts with us. ●

PHOTO: ISTOCKPHOTO.COM



Winds of change

By J.P. Gervais, Chief Agricultural Economist, Farm Credit Canada

As citizens of one of the world's leading agri-food producing nations, all Canadians share a stake in this important sector. Here are five key forces influencing our food growers and manufacturers:

Export markets

While the U.S.'s size and proximity will always make it our most important market, Canada is reaching other key markets. That trend should continue, considering the new free trade agreement with the European Union and ongoing discussions with South Korea and Japan, as well as at the Trans-Pacific Partnership table.

Perhaps the most significant opportunity is the income growth and expansion of the middle class in emerging markets. It's estimated that at the current rate of expansion, the global middle class population will reach 3.3 billion in 2020, up from 1.8 billion in 2009. That presents a real opportunity for food-exporting countries like Canada.

The trade deficit

Recent trade flows with the U.S. haven't been great. In food and beverage trade, we went from a surplus of roughly \$2-billion in 2000 to a deficit of about \$1-billion last year. The strong Canadian dollar in recent years was one factor, but there is more to consider.

Growing to a scale to produce at the lowest possible cost is tougher to do for Canadian food manufacturers than their U.S. counterparts. Over the years, Canadian food processors have invested significantly in product development – with good success. More recently, we've seen a greater focus on developing technology that will make our companies more competitive in the marketplace.

Domestic trends

Canada's changing demographic makeup promises to have a major impact on domestic food demand. Our population is aging fast – and older Canadians have different dietary requirements. Immigration is another key factor. By 2030, new immigrants will make up nearly 80 per cent of Canada's population growth. Food demand will change to reflect that reality. Other social and environmental factors will also come into play. Preferences for healthy eating, concerns about food

safety, and consumers' own personal values are key considerations.

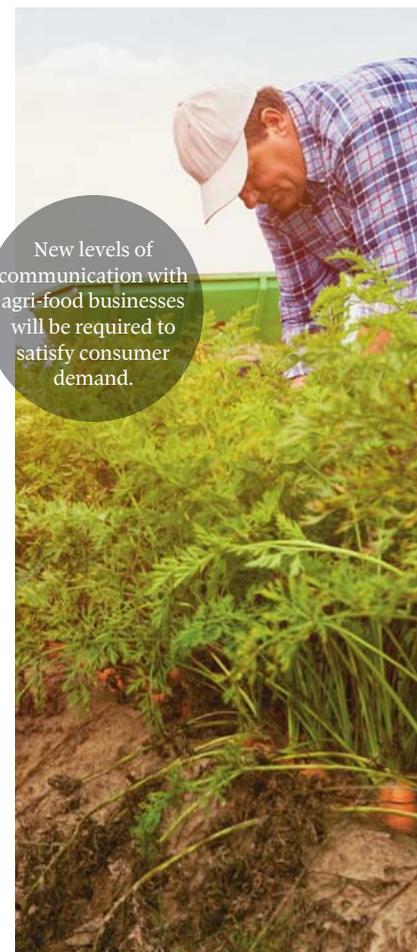
The changing supply chain

One key difference in agriculture today compared to years ago is the supply chain. Recently, we've seen a shift to a "pull model," where consumers express what they want and retailers relay these preferences – all the way to the producer. It involves new levels of communication and coordination, and agri-food businesses will need to lead the charge.

Human capital

Not only will Canada's changing demographic profile affect food choices in the future, it will also affect the operating environment for food manufacturers. An aging population means Canada's workforce will shrink, and businesses will need to compete harder than ever to attract and retain workers. On the other hand, given immigration trends, targeted recruiting efforts in ethnic communities may be an option to fill some of those gaps.

This is also where the discussion on process improvement comes in. Can businesses ramp up capital investments to mechanize? Given the premium on human capital, what other options exist to improve the bottom line? Finding answers won't be easy, but it's critical that we ask the questions. ●



New levels of communication with agri-food businesses will be required to satisfy consumer demand.

Taking stock

Canada's agri-food industry contributions



Canada is the world's largest producer of canola, peas and lentils, and some specialty products like mustard seed and maple syrup.



Canadian farmers produce 2.5 times what Canadians consume, with the total value of agriculture and agri-food production at over \$115-billion

Roughly 6,000 food and beverage processing establishments exist in Canada (as of June 2012). The vast majority (90%) are small businesses with fewer than 100 employees; only 1% are large operations with more than 500 employees.

Agriculture is at the heart of a Canadian agri-food sector that contributes 9% to Canada's GDP, and provides

1 in 7.5 jobs in Canada

(approximately 2.3 million people). 290,000 people are employed directly in food and beverage manufacturing – the highest number of employees in all manufacturing sectors.



Even after accounting for imports, consumption of food generated almost \$100-billion in economic activity in Canada in 2007.



Canadian food manufacturers purchase 35% of Canadian farm production, and produce \$92.9-billion in shipments.

Canadians still enjoy some of the lowest food costs in the world, and we are forecasted to spend only 10.6% of disposable income on food in 2013. The average consumer earned enough income to pay for his/her grocery bill for the year by February 7 this year. This works out to \$3,244 per person.

Approximately 60% of food and beverage manufacturing sales are accounted for by domestically owned firms.



A case for gearing up Canada's agri-food sector

With thriving businesses of every size – from family farms and mom-and-pop operations to endless fields of canola and sophisticated operations that make packaged foods – Canada's agri-food industry is alive and well.

Yet there are some challenges that are holding the sector back.

By Marjo Johnne

In this country of natural abundance, more than 205,000 farms coast to coast produce a wide variety of crops and meat for domestic and international markets. Downstream from the country's farms, an estimated 6,000 food and beverage manufacturers transform raw ingredients into commercial food products, making up the largest manufacturing sector in the country and, with about 290,000 employees, providing the highest number of jobs in manufacturing.

"Our agricultural industry is healthy and growing, and food manufacturing has been surprisingly solid," says Dr. David Sparling, professor and chair of agri-food innovation and regulation at Western University's Ivey Business School in London, Ontario. "I think we're in a pretty good position."

The numbers support Sparling's observations. In 2011 – the most recent year for which statistics are available – total farm sales in Canada grew to \$48.2-billion, up \$2.3-billion from the previous year. In food and beverage manufacturing, the value of shipments in 2011 totalled \$93-billion, about \$3-billion more than in 2010.

Food export levels are also increasing, from about \$35.5-billion in 2010 to more than \$40-billion in 2011. At the same time, overall trade balance in agri-food products continues to grow in Canada's favour, from \$7.4-billion in 2010 to \$9.2-billion in 2011, according to Agriculture and Agri-Food Canada statistics.

This upward trend is welcome news, but it also begs the question: is it good enough? Should Canada be doing more to tap into the full potential of its agri-food assets, which include a wealth of arable land and fresh water, infrastructure, research expertise, and depth of experience?

By all indications, there'll be no shortage of markets for Canada's agri-food products, at least in the foreseeable future. Projections by researchers at the University of Min-

nesota see global food demand doubling by 2050, while the United Nations' Food and Agriculture Organization predicts a 70 per cent increase. Demand for agricultural commodities, such as grains and oilseeds, that have applications in energy and other industrial projects is also expected to grow over the next decades.

For Canada's agri-food industry, this all translates to even greater business opportunities, and a more urgent imperative to address the challenges the sector faces today.

Jim Thorne, president and CEO of Toronto-based Marsan Foods Limited, a manufacturer of frozen entrees, soups and other products, cites rising business costs as among the

To mitigate their high input costs, farmers and food manufacturers need to expand their operations and achieve economies of scale

most significant of these challenges.

"The cost of input for us is extremely high, higher than what our competitors in the U.S. would pay. Our energy costs are also relatively high," he says.

Rising input costs are also a problem for the country's farmers. Sparling, who has co-authored a new report on farm income and investment, says farms are paying more today than they did five years ago for items such as seeds, fuel, fertilizer, livestock and livestock feed, and machinery.

To mitigate their high input costs, farmers and food manufacturers need to expand their operations and achieve economies of scale, says Sparling. He and the report's co-author, Nicoleta Uzea, make a convincing case for this argument, stating that "operating income increases with size – on average the smallest farms lost \$4,871 in 2011, compared to the largest farms that earned \$610,638 in the same year."

growth opportunities

Sparling says that Canada's farming industry has already started scaling up, and with notable results. While there were almost 4,000 fewer farms in 2011 than in 2010, the number of large operations has gone up significantly. In fact, between 2005 and 2011, the number of farms with sales of \$1-million to just under \$2.5-million more than doubled. In the highest revenue class, with \$2.5-million or more in sales, the number of farms increased by 90 per cent.

These million-dollar farms produced more than half of farm sales in Canada in 2011 – for the first time in the country's agriculture history, says Sparling.

While bigger can be better for Canada's agri-food companies, realizing the full benefits of scale requires more efficient operations, says Thorne. Unlike the agriculture sector, which has been investing more and more money each year into sophisticated machinery and other business assets, the country's food manufacturers have fallen behind when it comes to upgrading their manufacturing technology and innovations.

"We need to modernize the technology footprint of the Canadian food manufacturing industry," says Thorne. "We need a program – or a number of programs – that would help support investments in innovation and technology."

Justine Hendricks, vice president of light manufacturing, resources and extractive industries at Export Development Canada, agrees that investing in machines and infrastructure can streamline processes in food manufacturing, boost output and enhance price competitiveness. Without these investments, Canadian food manufacturers will continue to lose out to manufacturers in countries that boast state-of-the-art operations, exacerbating a processed foods trade deficit that has ballooned from about \$1-billion in 2004 to \$6.3-billion in 2011.

Hendricks says the country's food manufacturers also have an opportunity to leverage Canada's reputation for food safety.

"We've seen inquiries from companies in Asia, for example, that are interested in particular food products because of the packaging," she says. "They know that once it leaves Canada, the integrity of the product is intact because of the quality and safety of the packaging."

Jack Greydanus, co-owner of The Enniskillen Pepper Co. Ltd. and Greyda Plains Poultry Ltd. in Petrolia, near Sarnia, Ontario, says a significant threat to Canada's agri-food industry may actually come from its biggest export customer: the United States. Initiatives to get more local food into the U.S. food system, as well as more aggressive campaigns to entice farmers and food manufacturers to set up shop south of the border, could slowly erode Canada's agri-food industry.

Still, Greydanus remains optimistic. With the current global trend towards obesity, he foresees greater consumer demand for healthy, high-quality food. And Canadian agri-food producers are ready to meet that demand.

"We've got the capacity and we've got great products," he says. "I think the opportunities are there." ●

Agriculture and agri-food GDP has grown

1.4%
annually since 1997, despite a global economic downturn that saw many other sectors stagnate and falter.

The food and beverage manufacturing industry is the largest manufacturing industry in Canada in terms of value of production, with shipments worth \$92.9-billion – it accounts for

16%
of total manufacturing shipments and for 2% of the national GDP.

Exports of manufactured food and beverage products were worth

\$24.6-billion
in 2012 (an increase of 5.6 per cent from 2011) and reached 185 countries.

Approximately **25%** of food and beverage shipments were exported – with the largest share of exports going to the United States.

Source: Agriculture and Agri-Foods Canada



Cultivating a food and beverage cluster in the Greater Toronto Area

A strong urban core plus good connections to nearby rural agricultural and food production sites have placed the Greater Toronto Area (GTA) among the three largest food and beverage clusters in North America, together with Chicago and Los Angeles.

Currently, 75 per cent of agricultural production in the rural area surrounding Toronto is processed locally and there is potential for significant growth for the sector.

To develop this cluster, Food & Consumer Products Canada is leading efforts with the Toronto Region Board of Trade, industry and other stakeholders. Priorities include the regulatory environment, the labour pool and infrastructure.

Efforts such as building capacity for food production in the GTA and across the country are envisioned to contribute to Canada's economic growth and food security.

PHOTO: ISTOCKPHOTO.COM

We create chemistry that brings consumers closer to producers



Today's consumers are interested in learning about the food they eat. Now more than ever, consumers are seeking a connection with food's production. BASF is committed to the long-term sustainability of Canadian farming and believes there's an opportunity to help connect the grower and the consumer.

Last year, BASF invited five urban consumers to speak openly with Canadian farmers in Alberta, Saskatchewan, Manitoba and Ontario. They had the opportunity to talk openly and one-on-one with growers on their farms, and ask them whatever questions they had. The questions and answers might surprise you.

Watch the conversations at agsolutions.ca/sustainability.

BASF
The Chemical Company

It's a Big Deal

As a specialty lender with a portfolio that tops \$26 billion, we know how deals get done.

We finance businesses that enhance Canadian agribusiness and agri-food:

- food processors and manufacturers
- wholesalers and distributors
- equipment manufacturers and dealers

What can you finance?

- real estate
- equipment and inventory
- business expansion and construction
- diversification
- cash flow



“We chose FCC because of their flexibility.”

Vincent Messier-Lemoyne, Financial Director, Courchesne Larose

“FCC is key to our company growing.”

Meb Gilani, President, Gilani Group



Work with Canada's fastest growing agribusiness and agri-food lender.

fccfinancing.ca

1-855-230-6821



Unscripted

A frank conversation about food safety and traceability

When Torontonian Ron Schlumpf was invited to visit a Canadian grower to learn where his food is coming from, he jumped at the chance. He brought along a list of questions for Dan Ronceray, who operates a large commercial farm in Somerset, Manitoba.

What is your grain? Where does it end up and what is it used for?

Depending on the year, some seasons won't give us quality wheat. We'll do our best to grow a crop [but if] the weather doesn't cooperate and the conditions won't fall into place, you get feed wheat. Otherwise our good quality wheat, which is what we strive to grow, typically goes to flour mills. That gets turned into flour for breads and cakes.

Whom do you view as your customer?

Our grain is a worldwide commodity. What we're producing

any question with quality, it doesn't enter the food chain at all. Food safety is a number-one priority for everyone, from the producer all the way down to the consumer.

One of the things we're seeing a little bit of in Ontario is the concept of "terroir", where as a consumer, if you're buying flour, you will know which farm it came from and which field, and what the growing conditions were. Is there any concept of that here?

As far as wheat and canola production goes, this is not coming into play. With a farm that will produce thousands of tons of wheat a year, it'd be very difficult to label all that. But typically producers meet the consumers' needs in order to produce a quality product for them, so if that's where things are headed, we're not afraid of it. We have nothing to hide. We produce a good crop and quality products, and if [consumers] need to know every step of the way, I'm happy to open my farm to show them how we do it.

Since his visit, Schlumpf reports that the conversation with Ronceray has opened his eyes to the fact that farmers play the role of entrepreneurs and business managers in a "sophisticated and competitive" industry.

"What I learned has reaffirmed for me the importance of understanding as much as possible the context in which food is grown and finds its way to my table," says Schlumpf.

Although he went away reassured that stringent regulations ensure a high level of food quality and safety, Schlumpf believes tracing our food as much as possible is a good idea so consumers can understand how farming practices impact "the local ecology, the economic viability of the farm and the quality of life of farmers, their families and communities."

View this entire conversation and others online at agsolutions.ca/sustainability.



Dan Ronceray (left) and Ron Schlumpf talking food in Somerset, Manitoba.

and what we're selling goes everywhere. We may not be an international company, but we produce international food.

How do I as a consumer know that the products that I'm consuming are safe since I don't know what kind of pesticides [or herbicides] you've used?

All processing companies have strict guidelines they follow and criteria that need to be met. When they take in this grain, they'll test it, they'll make sure that it's pesticide-free to an extent. They want to make sure that there's no residue on it. If there is, they reject it and it's not used for human consumption, it's not used for livestock consumption. If there's



3 jobs exist for every food & agriculture graduate in Ontario

There have never been more career opportunities in food and agriculture. Discover the options through programs at the Ontario Agricultural College, University of Guelph. Visit us on campus, attend a career event and feed your interest in food.

Feed your interest in food.

www.uoguelph.ca/oac/outreach

Five tips for reducing food waste

By Brenda Bouw

Of the \$27-billion of food that is wasted each year, half comes from households, according to an estimate by Statistics Canada.

That problem is not only costing us money, but is also wasting energy and, in turn, impacting the environment, says Ralph Martin, professor and Loblaw Chair in Sustainable Food Production at the University of Guelph's department of plant agriculture.

Consider the amount of water and fuel used to produce and ship food to stores, and eventually our tables. While more municipalities are composting food scraps, those programs also require money and energy to run.

"Reducing food waste is about food awareness," says Martin, who offers some tips to help households reduce the amount of food they throw out:

1. Manage leftovers. Not everything you can't eat for dinner needs to be destined for the garbage bin or composter. Martin urges Canadians to think about ways to spice up leftovers for another meal.

2. Shop more to waste less. It sounds counterintuitive, but Martin says shopping more gets people into the habit of eating

the food they purchase sooner, before it expires. Less shopping can lead to over-buying of food and increasing the chance it won't be consumed.

3. Get a smaller fridge. Most families opt for big fridges to stuff in as much food as possible. Martin's research has found that food often gets forgotten in the back of a big fridge and eventually expires. Smaller fridges allow people to get a better view of what's inside and eat it ahead of the best-before date.

4. Family planning. Martin recommends including kids in the decisions on what to put on the grocery list. Giving them choices of what they want to eat for the coming days will make it easier to plan meals in advance.

5. Buy less to save more. It's human nature to buy more of something if it's on sale, including food. The problem is when it doesn't get eaten. "If we buy too much just to get a better price, and we end up throwing it out, we haven't saved anything," Martin says. "It actually costs us more." ●

Reducing food waste can be good for a family's as well as a company's budget.



Connecting waste reduction and profitability

Ensuring a sustainable agri-food industry is critical to the world's future, but sustainability will be unattainable unless the industry is viewed as an integrated system, says Dr. Martin Gooch, CEO of VCM International, a consulting firm that helps businesses improve their profitability and competitiveness.

According to researchers, the world generates 1.2 to 2 billion tonnes of food waste annually and between 30 and 50 per cent of all food produced is wasted along the value chain. In 2010, it was estimated that Canada wastes \$27-billion worth of food every year.

"We use finite resources to produce food, much of which is shipped halfway around the world merely to be wasted or thrown away," says Dr. Gooch.

"While no one goes out to purposely waste food, attitudes of perceived abundance and affluence have led to wasteful behaviour becoming part of our psyche."

He believes three things must occur to reduce food waste.

Objective action-focused research is necessary to identify what's happening and why.

An increase in consumer awareness and education can help people know how to buy, handle and store food correctly and understand the true cost of waste. And proving the connection between reducing waste and profitability will allow producers to base their decisions less on volume-related metrics and more on eliminating hidden costs and identifying missed opportunities.

— Chris Freimond

PHOTO: ISTOCKPHOTO.COM

Canadians enjoy one of the safest, most abundant food supplies in the world.

Modern agricultural solutions play a big role in making that possible.

Farmers grow better and higher yielding crops thanks to pesticides and plant biotechnology that protect crops from being damaged or destroyed by insects, weeds or disease. Higher yields mean:



Lower costs at the grocery store: the average Canadian family saves close to 60% on food



Less land is needed for farming: this leaves existing wilderness protected, and more land for recreation and wildlife habitat



A stronger economy: Canadian agriculture generates more than \$70 billion in economic activity



To learn more, go to www.croplife.ca and follow us on twitter @croplifecanada



Today's young farmers: Redefining 'biodynamic'

By Lori Bamber

California's current record-breaking drought is a keen reminder of just how much Canada's future food security depends on the efforts of Canadian farmers – so it is heartening to see the passion, commitment and ingenuity that the newest generation of farm families brings to the table.

Google Vancouver-area farmer Lydia Ryall, for example, and you'll find she's something of an Internet celebrity, the subject of articles in the National Post, on the website of Oxfam Canada as well as many local and farm publications. Recently named the 2014 B.C./Yukon Outstanding Young Farmer at the BC Agriculture Council's annual gala, Ryall owns and operates Crophthorne Farm, a 10-acre certified organic operation on Westham Island.

Although she grew up in farming, Ryall's management practices are sourced in a completely modern worldview. "We direct-market the majority of our crops, so we have a website (www.crophthornefarm.com) and a Facebook page. We're on Twitter. Our customers are looking for a direct connection to us," she explains.

In addition to pasture-raised poultry, Crophthorne grows a wide diversity of organic produce, from rainbow carrots to kale and salad greens, eggplants and tomatoes.

Belying the common myth that farming is a relatively low-skilled occupation, Ryall has a Bachelor of Science in agriculture from the University of Lethbridge and a diploma in agriculture production from Olds College. She is a director of the Delta Farmers Institute and the Lower Mainland Horticulture Improvement Association.

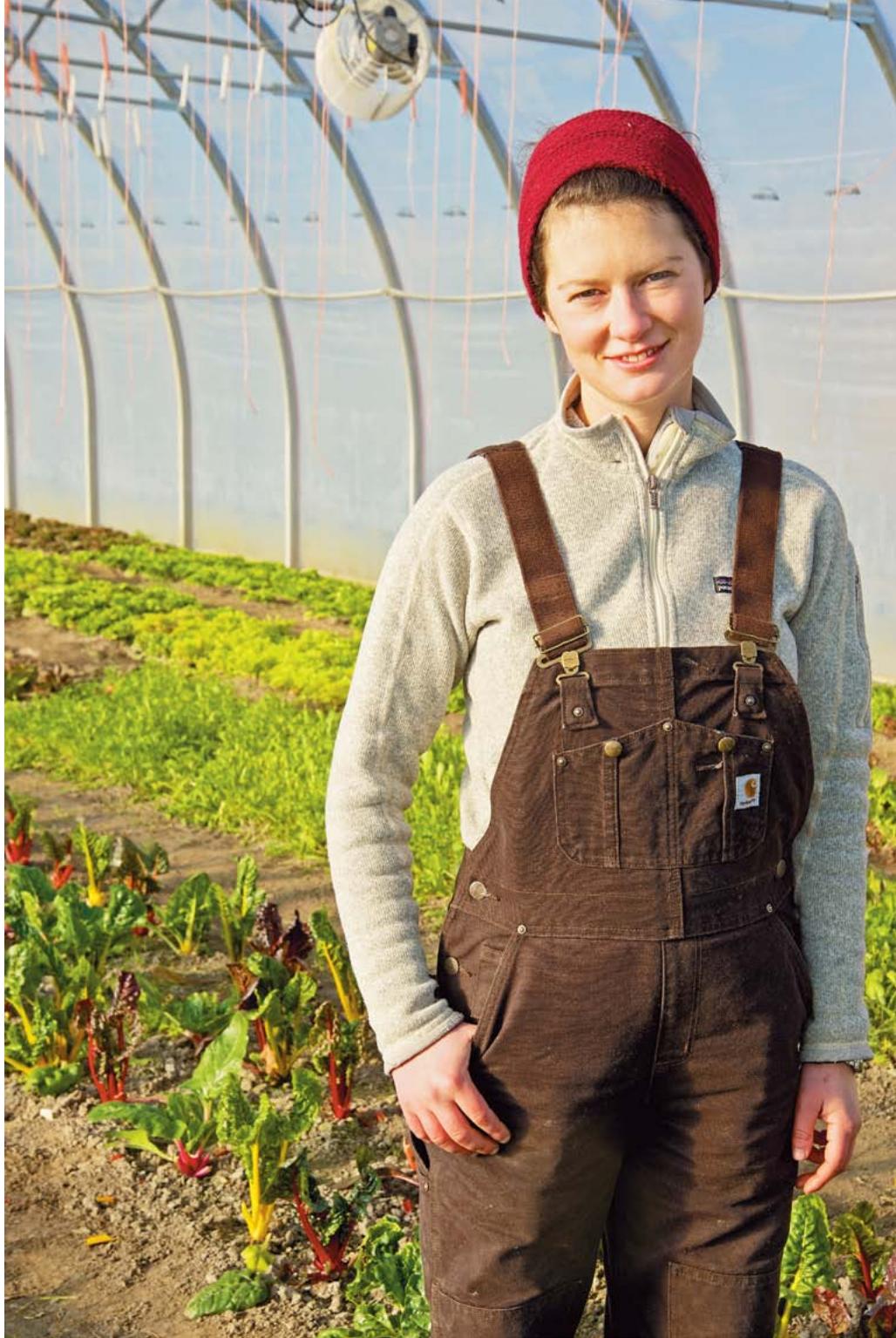
"Some knowledge may be passed on between generations, but there is always innovation, new technology we can use to become more efficient," she says.

In addition to mastering the skills of marketing, growing, mechanics and husbandry, "we have a strong focus on our employees," says Ryall. "We want the farm to be an enjoyable place to work. When you think of farming, you don't necessarily think of the HR side of things, but it's extremely important to our business.

Although her parents are now retired from farming, they continue to be mentors, and Ryall enjoys farming alongside her sister and family. "Farming can be stressful at times, but when you have little kids running around, it lightens up any situation. I'm proud we're providing healthy food choices to our local community and beyond. I can't imagine doing anything else."

"Agriculture is such a fascinating, vibrant industry," says Jake Leguee, who farms about 10,000 acres in southeastern Saskatchewan with his wife, older sister and parents. The Leguee family grows grain, oilseeds and special crops, including durum, canola, spring and winter wheat, soybeans, peas, lentils and flax.

"It's also an entrepreneurial industry," adds Leguee. "Maybe I'm a little biased, but I believe there's no better way to live your life."



PHOTOS: DEBRA STRINGFELLOW; TOP RIGHT, BOTTOM RIGHT, HERRLE'S COUNTRY FARM MARKET



According to the last census, Canada has **205,730** farms.

98% are family farms.

Almost **25,000** farm operators are under the age of 35.

An average farmer produces **300%** more food today than in 1950.

Sources: Food & Consumer Products of Canada and the Canadian Federation of Agriculture



Consumers increasingly want to know where their food comes from and how it is grown – Canadian farmers are responding, often establishing a direct connection with the help of new technology.

Farming is the only business in the world that ties together the complexities of biology, chemistry, marketing, finance, engineering, math and mechanics, he notes. "It may sound daunting, and it is, but it is also incredibly rewarding.

"Mother Nature isn't always kind, but there's no experience quite like planting that seed, giving it everything you can and watching it grow and flourish, until you're finally able to harvest and see what your whole year's work has produced."

Leguee joined the farm full time after graduating with a degree in agronomy (crop science) and agricultural business from the University of Saskatchewan in 2010. While he puts his education to good use identifying the best crops to grow, he laughs when he says that the "single most important thing I learned in university was how to use Microsoft Excel. We need to know where our profitability line is and figure out our cash flow a year or more in advance, especially with margins getting tighter.

"Because ultimately, as much as we love to farm, we can't do it if we can't make some money at it, right?"

Both young farmers credit their university years – as well as social media – with helping them develop a strong support network. "Everybody wants to see everybody else succeed," says Leguee.

Leguee blogs at www.southsaskfarmer.com, and says that sharing knowledge "allows us to try things we never would have imagined before and alerts us to potential issues. If there's a disease coming across Saskatchewan, I'm alerted to it on Twitter, in real time, so that I can actually do something about it in advance."

Leguee and Ryall are part of a new generation of Canadians who are passionate about agriculture. "We're seeing a resurgence of interest in farming, partly because of the local food movement," says Lenore Newman, the

Canada Research Chair in Food Security and Environment at the University of the Fraser Valley.

But the cost of land stands in the way of many young would-be farmers, she says. "It's crushing. In this region, farmland runs as much as \$100,000 an acre. There's nothing you can grow that can possibly return that."

It's essential that land-use policies protect farmland, she says. "We've been importing food since the country began, but basing a food system largely on imports means being at the mercy of the global market. We may not go hungry without these local farms, but our food will be a lot less interesting and a lot more expensive."

Local farming contributes to our culture as well as to our dinner tables, says Newman. "Here in Vancouver, we enjoy all this fresh produce – it makes our food culture rich and also supports tourism, a giant industry. That starts to fray if people can't get into farming."

Newman sits on the board of Vancouver Farmers Markets, and reports that the markets bring in a lot of money to the city each year and are a popular tourist draw. "But we sometimes struggle to find enough farmers."

The large-scale commodity farming practiced by grain and beef farmers in the interior of the country is very healthy, she reports. "Large-scale farming is very efficient. But with the smaller farms in and around cities, you want variety. We're seeing a lot of innovation: value-added products such as distillation of fruit wines, agro-tourism and the establishment of overseas markets."

While policy leadership is needed to protect farmland around cities, post-secondary institutions also have an important role to play in equipping the next generation of farmers for their very important roles, says Newman. "Society has an image of farming as a laid-back lifestyle, but these young farmers are CEOs in a very dynamic industry." ●

Tweets from the farm



Whose mouth doesn't start to water looking at a photo of a ripe strawberry or a bundle of leafy green arugula? No wonder photos and tweets featuring farm fresh seasonal produce, and ways to incorporate the offerings into dinner menus, are growing in popularity.

Bringing his smartphone to work, Trevor Herrle-Braun regularly sends out such temptations via his social media channels. The operations manager of Herrle's Country Farm Market in St. Agatha, Ontario, keeps his over 7,000 Twitter followers informed with regular "TractorTweets" about what's happening on the family farm.

Trevor sees mobile technology as a means to promote the brand while keeping marketing dollars in the family. He is not alone. According to a study by the Ontario Ministry of Agriculture and Food, of those farmers surveyed, 69 per cent reported owning a smartphone (March 2012).

As Canadian farmers grow more tech-savvy, the rapid adoption of mobile technologies is changing the way farming industries operate and share their bounty.



PHOTO: ISTOCKPHOTO.COM

Strategic Insights

Experts at your Service | Advocacy in Action | Proven Results

Food & Consumer Products of Canada (FCPC) is the country's largest industry association representing the dynamic companies that manufacture and distribute the vast majority of food, beverage and consumer goods found in stores across the country. Our members include small and large, multi-national and Canadian-owned companies in rural and urban communities across the country.

FCPC is committed to creating an environment where our members can compete, innovate and grow while enriching the lives of Canadians. We provide marketplace insights and strategic advice, and we advocate on behalf of members on industry matters impacting their businesses.

GET IN TOUCH WITH US:

info@fcpc.ca

www.fcpc.ca

[@fcpc1](https://twitter.com/fcpc1)



FCPC
Food & Consumer
Products of Canada





By supporting bees, Cathy and Bryan Gilvesy make their ranch more sustainable.

The cattle and the bees

By Susanne Martin

The number of blossoms on the Y U Ranch in Ontario has multiplied over the last decade, providing sustenance for the wild bees that share the habitat with the Texas Longhorns raised by Cathy and Bryan Gilvesy.

The efforts to support bees with a shift to native vegetation and pollinator hedgerows were consequences of the couple's desire to make their farm more resilient and sustainable. It also earned them the 2013 Canadian Farmer-Rancher Pollinator Advocate Award for their significant contribution to cultivating natural ecosystems and protecting pollinators.

"We've devoted half our arable land to tall prairie grasses that have an enormous amount of flowers," Bryan explains. "These grasses are deep-rooted and diverse."

Native to Ontario yet only found on a few preserved tracts of land, prairie grasses flourish in the heat. That makes them a viable alternative to the more commonly

used European grasses that grow dormant in temperatures over 30 degrees. In drought conditions, when many farmers have to bring in feed, the cattle at Y U Ranch simply move to prairie grass pastures.

From cultivating prairie grasses came a greater awareness of the plight of bees. "We learned that native bees were in trouble, partly because of the reduced resources of nectar

and pollen due to the prevalence of monoculture crops," Bryan says. To help counteract that trend, the Gilvesys installed hedgerows with bee nesting structures.

Hedgerows protect the land against wind erosion, and by using native flowering trees and shrubs, the Gilvesys provided more food sources for wild bees.

"In addition to producing healthy grass-fed beef, our goal is to nourish the environment," Bryan says. "We like to push the margins of sustainability for Y U Ranch as far as possible." ●

What's the buzz?

When it comes to growing crops, less can be more if you enlist the help of wild bees. A study in northern Alberta found that canola farmers who'd left one-third of their land as unmanaged habitat within bee flight of their crop made more than double the profit of their counterparts who farmed 100 per cent of the land, says bee biologist Mark Winston, author of the upcoming book *Bee Time: Lessons from the Hive*.



Confirming that improved wild bee habitat can lead to increased yields for crops that require pollination, the study presents an alternative option at a time when beekeeping has become more difficult and expensive due to the Colony Collapse Disorder that has decimated managed honeybee colonies by one-third annually since 2006. "Enhancing the population of wild bees can give farmers a sustainable solution," says Winston.

production
urban agriculture food safety
economy nutrition
environment sustainability
policy health



LET'S TALK

JOIN THE DIALOGUE ON AN INDUSTRY THAT AFFECTS ALL CANADIANS. We are the Canadian Federation of Agriculture – the unified voice of Canada's farmers for over 78 years. We believe that working together is the only way we will maintain a sustainable, Canadian food supply and a vibrant agriculture industry.

CONNECT WITH US!

WWW.CFA-FCA.CA @CFAFCA



PHOTO: LAURA BERMAN



Growing today
for tomorrow.

Farming, the
biggest job
on earth.

The population is increasing, but farmland isn't. So the pressure is on for farmers to maximize yields and produce high-quality crops to meet the needs of a growing planet. This is why BASF is working with farmers to create chemistry that will increase the yield and quality of crops. With help from BASF, it's in the farmers' hands.

To learn more about BASF's commitment to sustainable agriculture, check out our videos at agsolutions.ca/sustainability.

 **BASF**

The Chemical Company